CITY OF EASTVALE

REGULAR PLANNING COMMISSION MEETING AGENDA

12363 Limonite Avenue, Suite 900, Eastvale, CA 91752
Regular Planning Commission Meeting: 6:00 PM
Wednesday, May 21, 2025

City Commissioners
Josh Lee, Chair
April Rodriguez-Plott, Vice Chair
Andrea Hove, Commissioner
Trinidad Lomeli, Commissioner
Michael Rochelle, Commissioner

This Agenda contains a brief general description of each item to be considered. Except as otherwise provided by law, no action or direction shall be taken on any item not appearing on the following Agenda. Unless legally privileged, all supporting documents, including staff reports, and any writings or documents provided to a majority of the City Council after the posting of this agenda are available for review at Eastvale City Hall, 12363 Limonite Avenue, Eastvale, CA 91752 or you may contact the City Clerk's Office, at (951) 361-0900 Monday through Thursday from 7:30 a.m. to 5:30 p.m. and available online at www.eastvaleca.gov.

Members of the public can observe the meeting by viewing the live-stream at www.eastvaleca.gov and may provide public comment by sending comments to the City Clerk's Office by email at cityclerk@eastvaleca.gov. Staff will monitor emails to the extent possible during the meeting and provide comments as possible. All comments will be made part of the record. Comments will then be read into the record, with a maximum allowance of 3 minutes per individual comment, subject to the Mayor's discretion to reduce time on public comment. All comments should be a maximum of 500 words, which corresponds to approximately 3 minutes of speaking time. If a comment is received before the agenda item is heard but before the close of the meeting, the comment will all be included as a part of the record of the meeting but will not be read into the record.

If you are a person with a disability and need an accommodation to participate in the City of Eastvale programs, services, activities, and meetings, contact Maricela Mejia at mmejia@eastvaleca.gov or (951)703-4433 at least 72 business hours in advance to request an auxiliary aid or accommodation.

Regular meetings are recorded and made available on the City's website at www.eastvaleca.gov. Meeting recordings are uploaded to the City's website within 24 hours (unless otherwise noted) after the completion of the meeting.

1. CALL TO ORDER

2. ROLL CALL

3. PLEDGE OF ALLEGIANCE

4. ADDITIONS / REVISIONS

The Planning Commission may only add an item to the Agenda after making a finding that there is a need to take immediate action on the item and that the item came to the attention of the agency subsequent to the posting of the agenda. An action adding an item to the agenda requires 2/3 vote of the Commission. If there is less than 2/3 of the Commissioners present, adding an item to the agenda requires a unanimous vote. Added items will be placed for discussion at the end of each section unless otherwise noted.

5. PRESENTATIONS

6. PUBLIC COMMENT

Any member of the public may address the Commission on items within the Commission's subject matter jurisdiction, but which are not listed on this agenda during PUBLIC COMMENTS. However, no action may be taken on matters that are not part of the posted agenda. We request comments made on the agenda be made at the time the item is considered and that comments be limited to three minutes per person with a maximum of six minutes (time may be donated by one person). Please address your comments to the Commission and do not engaged in dialogue with individual Commissioners, City staff, or members of the audience. Blue speaker forms are available at the front table to the entrance of Council Chambers.

7. CONSENT CALENDAR

Consent Calendar items are normally enacted in one motion. The Chair or Commission may remove a Consent Calendar item for separate action. If a member of the public would like to speak on a Consent Calendar item, please complete a blue "Public Comment Form" and submit to the City Clerk prior to the item.

7.1. Planning Commission Meeting Minutes

Submitted by: Jessica Cooper, Senior Management Analyst

RECOMMENDED ACTION(S):

Staff recommends the Planning Commission approve the Planning Commission meeting minutes from April 16, 2025 meeting.

7.2. Public Works Department Update

Submitted by: Jimmy Chung, Public Works Director/City Engineer

RECOMMENDED ACTION(S):

Staff recommends that the Planning Commission receive and file the Public Works Department update.

7.3. Planning Division Update

Submitted by: David Murray, City Planner

RECOMMENDED ACTION(S):

Staff recommends that the Planning Commission receive and file the Planning Division Update.

8. PUBLIC HEARINGS

The public is encouraged to express your views on any matter set for public hearing. It is our procedure to first receive the staff report, then to ask for public testimony, first from those in favor of the project followed by testimony from those in opposition to it, and if there is opposition, to allow those in favor, rebuttal testimony only as to the points brought up in opposition. To testify on the matter, you need to simply come forward to the speaker's podium at the appropriate time, give your name and address and make your statement. After a hearing is closed, you may not further speak on the matter unless requested to do so or are asked questions by the Chair or a Member of the Commission. Public comment is limited to three (3) minutes each with a maximum of six (6) minutes (time may be donated by one speaker.)

8.1. PLN24-20035 Major Development Review – Quarterra Phase B

Submitted by: Jamie K. Cerda, AICP, Principal Planner

RECOMMENDED ACTION(S):

Staff recommends that the Planning Commission take the following actions:

1. Find the project consistent with the Addendum to the Certified Program Environmental Impact Report prepared for the Leal Master Plan, and that all impacts were adequately analyzed pursuant to applicable legal standards in the previously adopted Certified Program Environmental Impact Report and subsequent addenda, in accordance with State CEQA Guidelines Section 15162; and
2. Approve PLN24-20035 a Major Development Review for the master site planning and architecture of Planning Area 4 (PA 4) of the Leal Master Plan to accommodate a proposed 360-unit multiple-family residential community, with associated pool/recreational facility, parking areas, landscaping, and open space amenities, subject to the recommended conditions of approval.

9. COMMISSION BUSINESS

9.1. 2025 First Quarter Economic Development Updates

Submitted by: Alexander Fung, Economic Development Manager

RECOMMENDED ACTION(S):

Staff recommends that the Planning Commission receive and file the report.

10. CITY STAFF REPORTS

11. COMMISSION COMMUNICATIONS

12. ADJOURNMENT

The next regular meeting of the Eastvale Planning Commission is scheduled for Wednesday, June 18, 2025, at 6:00 p.m. at Eastvale City Hall Council Chambers, 12363 Limonite Avenue, Suite 900, Eastvale, CA 91752.

AFFIDAVIT OF POSTING

I hereby certify under penalty of perjury under the laws of the State of California, that the foregoing Agenda was posted at the following locations: City Hall, 12363 Limonite Avenue, Suite 910 and website of the City of Eastvale (www.eastvaleca.gov,) not less than 72 hours prior to the meeting.

_____

Marc A. Donohue, MMC
City Clerk

MINUTES
CITY OF EASTVALE

Planning Commission Regular Meeting
Wednesday, April 16, 2025
Regular Meeting: 6:00 P.M.

Eastvale City Council Chambers
12363 Limonite Avenue, Suite 900
Eastvale, CA 91752

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1. CALL TO ORDER

The regular meeting of the Eastvale Planning Commission was called to order at 6:00 p.m. by Chair Lee.

2. ROLL CALL

Present: Commissioners Hove, Rochelle, and Chair Lee.

Absent: Commissioner Lomeli and Vice-Chair Rodriguez-Plott.

City Staff Present: Community Development Director Gonzalez, Assistant City Attorney Herrington, City Planner Murray, and Senior Management Analyst Cooper were present at Roll Call.

3. PLEDGE OF ALLEGIANCE

Commissioner Hove led the Pledge of Allegiance.

4. ADDITIONS / REVISIONS – None

5. PRESENTATIONS

5.1 Corona-Norco Unified School District Updates

John Vondriska, Corona-Norco Unified School District, presented a PowerPoint presentation and answered related questions.

6. PUBLIC COMMENT – None

7. CONSENT CALENDAR

On a motion by Commissioner Hove and second by Commissioner Rochelle, the Planning Commission voted to approve the Consent Calendar.

7.1 Planning Commission Minutes

The Planning Commission voted to approve the Planning Commission meeting minutes from the March 19, 2025 meeting.

7.2 Planning Division Update

The Planning Commission received and filed the Planning Department Update.

7.3 Public Works Department Update

The Planning Commission received and filed the Public Works Department Update.

8. PUBLIC HEARINGS

8.1 PLN24-20070, PLN24-20071, PLN24-20072, and PLN24-20073 Major Development Reviews of Phase B of the Eastvale Square Development - The New Home Company (CONTINUANCE)

Principal Planner Cerda presented a PowerPoint presentation and answered related questions.

Chair Lee opened the public comment period.

The following individual provided public comment:

- The California Housing Defense Fund, via e-mail

Chair Lee closed the public comment period.

On motion of Commissioner Rochelle and second by Commissioner Hove, the Planning Commission voted unanimously to:

1. Find the project consistent with the Addendum to the Certified Program Environmental Impact Report prepared for the Leak Master Plan, and that all impacts were adequately analyzed pursuant to applicable legal standards in the previously adopted Certified Program Environmental Impact Report and subsequent addenda, in accordance with State CEQA Guideline Section 15162;
2. Approve PLN 24-20070 a Major Development Review for the master site planning and architecture of Planning Area 9 (PA 9) of the Leal Master Plan to accommodate a proposed 51-unit triplex and one (1) 6-plex residential

community, with associated parking areas, landscaping, and open space amenities, subject to the recommended conditions of approval;

3. Approve PLN24-20071 a Major Development Review for the master site planning and architecture of Planning Area 11A (PA 11A) of the Leal Master Plan to accommodate a proposed 91-unit duplex and triplex residential community with associated parking areas and landscaping, subject to recommended conditions of approval;
4. Approve PLN24-20072 a Major Development Review for the master site planning and architecture of Planning Area 11B (PA 11B) of the Leal Master Plan to accommodate a proposed 90-unit, 6-plex and 8-plex residential community with associated parking areas, landscaping, and open space amenities, subject to the recommended conditions of approval; and
5. Approve PLN24-20073 a Major Development Review for the master site planning and architecture of Planning Area 11C (PA 11C) of the Leal Master Plan to accommodate a proposed 63-unit, triplex residential community with associated parking areas, landscaping, and open space amenities in addition to a .23-acre pocket park constructed on Lot C of TTM 38595, subject to the recommended conditions of approval.

9. COMMISSION BUSINESS – None

10. CITY STAFF REPORT

Community Development Director Gonzalez provided updates.

12. COMMISSION COMMUNICATIONS

The Planning Commission provided comments.

ADJOURNMENT – Chair Lee adjourned the meeting at 6:47 p.m. The next regular meeting of the Eastvale Planning Commission is scheduled for Wednesday, May 21, 2025, at 6:00 p.m.

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Jessica Coper, MMC
Senior Management Analyst

CITY OF EASTVALE

AGENDA STAFF REPORT

Planning Commission Meeting
CONSENT CALENDAR
Agenda Item No. 7.2
May 21, 2025

Public Works Department Update

Prepared By:
Jimmy Chung, Public Works Director/City Engineer

Recommended Action(s)
Staff recommends that the Planning Commission receive and file the Public Works Department update.

Summary
The Public Works Department provides monthly updates on residential and commercial development projects, encroachment permits, capital improvements projects including a grant summary.

Background
Not Applicable.

Analysis
Not Applicable.

Environmental
Not Applicable.

Strategic Plan Action - Priority Level: N/A | Target #: N/A | Goal #: N/A
Not Applicable.

Fiscal Impact
Not Applicable.

Prior City Council/Commission Action
Not Applicable.

Attachment(s)
Attachment 1 - PW Project Update List.pdf
Attachment 2 - PW Grants Summary.pdf

EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Capital Improvements Project
PROJECT NAME:	Civic Center Project (Phase 1)
PROJECT DESCRIPTION:	A design build project to construct a Phase 1 of the Civic Center Project, which includes approximately 52,000 square foot City Hall, a 25,000 square foot library, a 20,000 square foot police station with a park and a civic plaza.
PROJECT STATUS:	**Bidding:** project was advertised for bid to prequalified General Contractors on 4/10/2025.
PROJECT SCHEDULE:	Bid Opening: May 2025. Construction Award: June 2025.

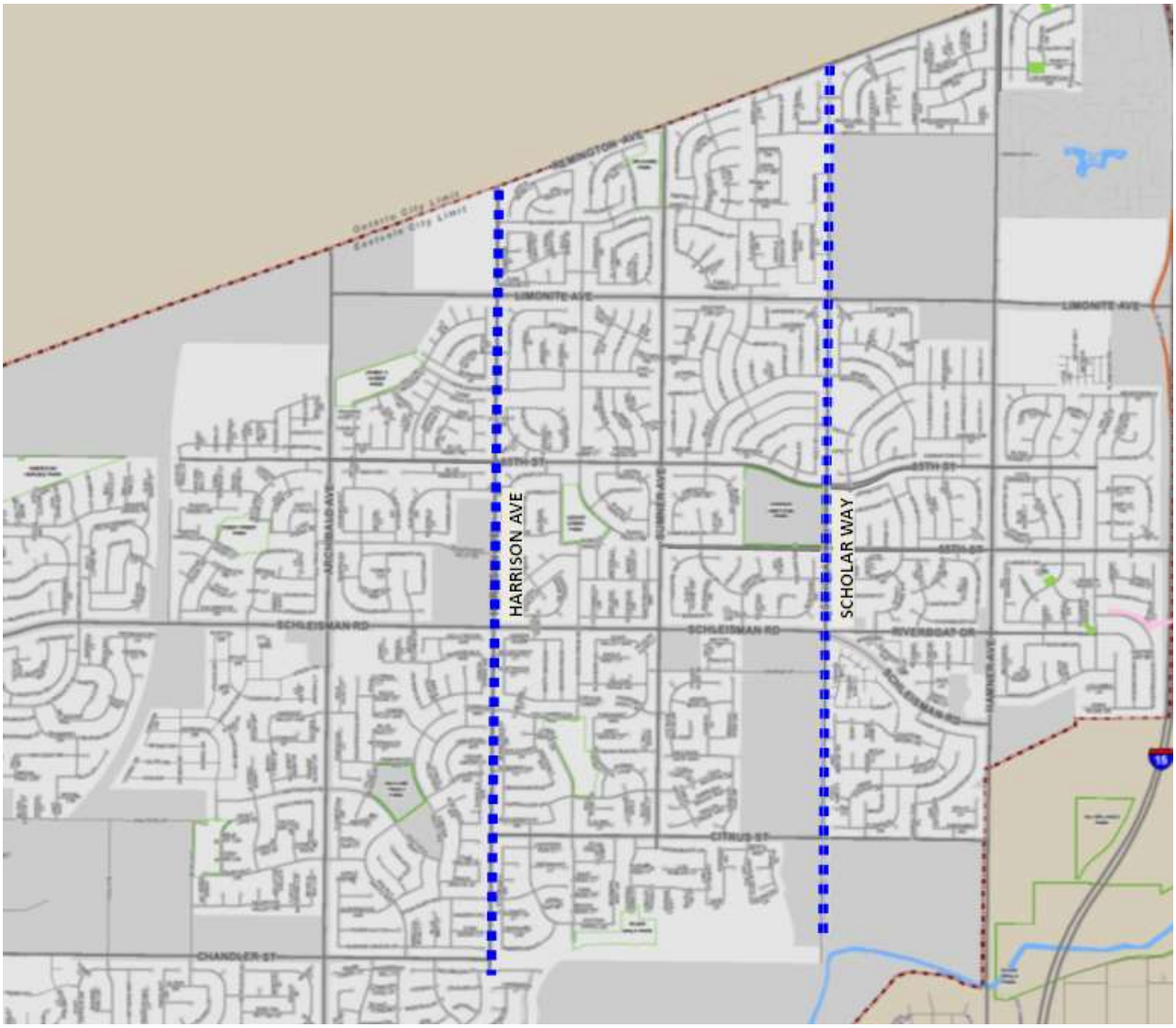
PROJECT RENDERING:



EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Capital Improvements Project
PROJECT NAME:	Improvement of Bike Network Connectivity/ATP Trails
PROJECT DESCRIPTION:	Project will design and construct nearly 5 miles of multipurpose trails running along Scholar Way and Harrison Avenue. The project will provide dedicated space for people to bike and walk from northern City limit to the Santa Ana River Trail on the south.
PROJECT STATUS:	**In Design – Engineering:** Design contract was awarded to Mark Thomas. 75% PS&E (phase 3) was delivered on February 5, 2025 and is being reviewed, and non-infrastructure component of the project (phase 2) which includes public education and engagement is on going.
PROJECT SCHEDULE:	100% PS&E is anticipated to be delivered by June 30, 2025.

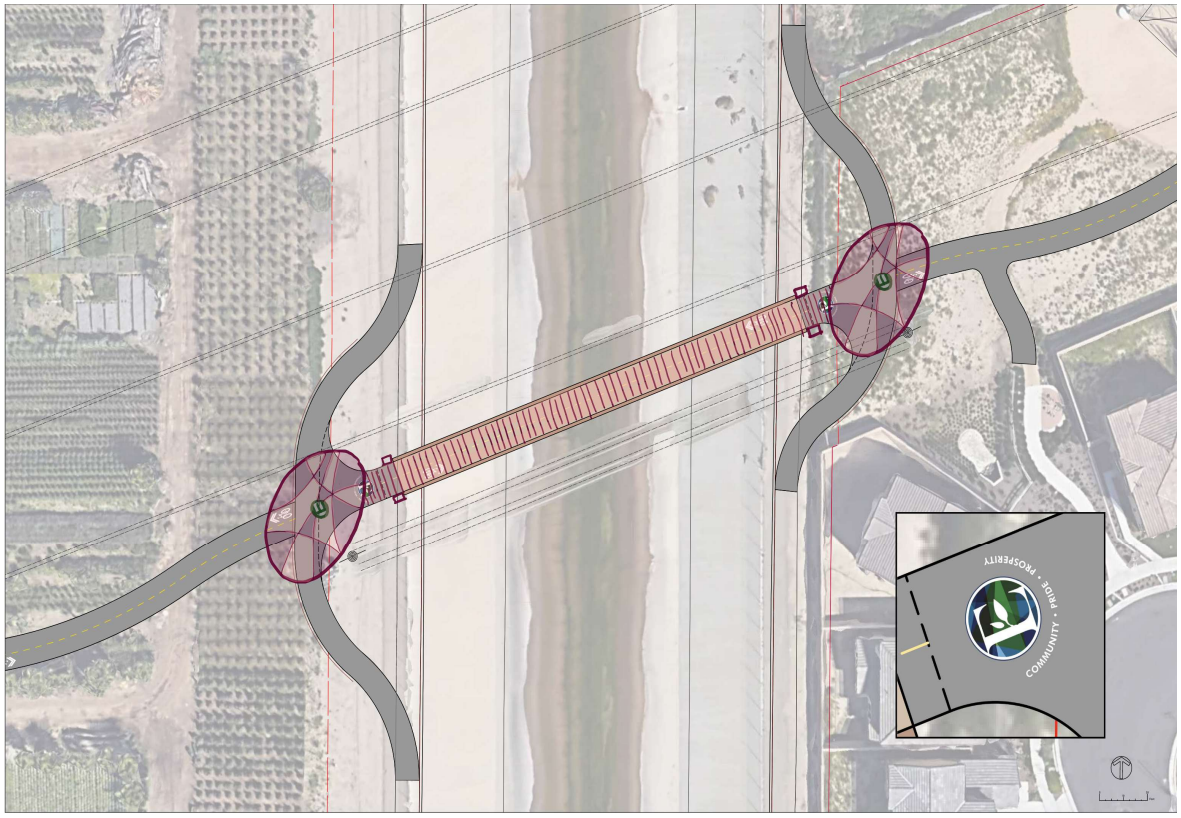
PROJECT MAP:



EASTVALE PUBLIC WORKS
PROJECT UPDATES

PROJECT TYPE:	Capital Improvements Project
PROJECT NAME:	Limonite Gap Pedestrian Bridge
PROJECT DESCRIPTION:	Project will design and install a prefabricated steel fabricated bridge over Cucamonga Creek Channel to close the gap of pedestrian path within the SCE easement.
PROJECT STATUS: :	**In Design – Engineering:** Design contract was awarded to TYLin on April 10, 2024. 65% PS&E was delivered on February 17, 2025 and is being reviewed. Technical studies are being prepared to submit to Caltrans for NEPA EA.
PROJECT SCHEDULE:	100% PS&E is anticipated to be delivered by December 2025.

PROJECT MAP:



EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Capital Improvements Project
PROJECT NAME:	Median Improvement Projects at River Rd, Cantu Galleano Rd, and Archibald Ave
PROJECT DESCRIPTION:	Project will Install landscaped raised medians at River Rd, Cantu Galleano Rd, and Archibald Ave to physically separate opposing traffic streams and help stop vehicles traveling into opposing traffic lanes. The project will be constructed in two phases: Phase 1 will involve the construction of hardscape including curb, gutter, and sleeve for future utilities, and Phase 2 will include the installation of landscaping, monument, and lighting.
PROJECT STATUS:	**In Construction:** The punchlist for Phase 1 has been issued. Phase 2 was advertised on 3/19/2025, with a due date of 4/10/2025.
PROJECT SCHEDULE:	The construction contract for Phase 2 will be awarded in May 2025.

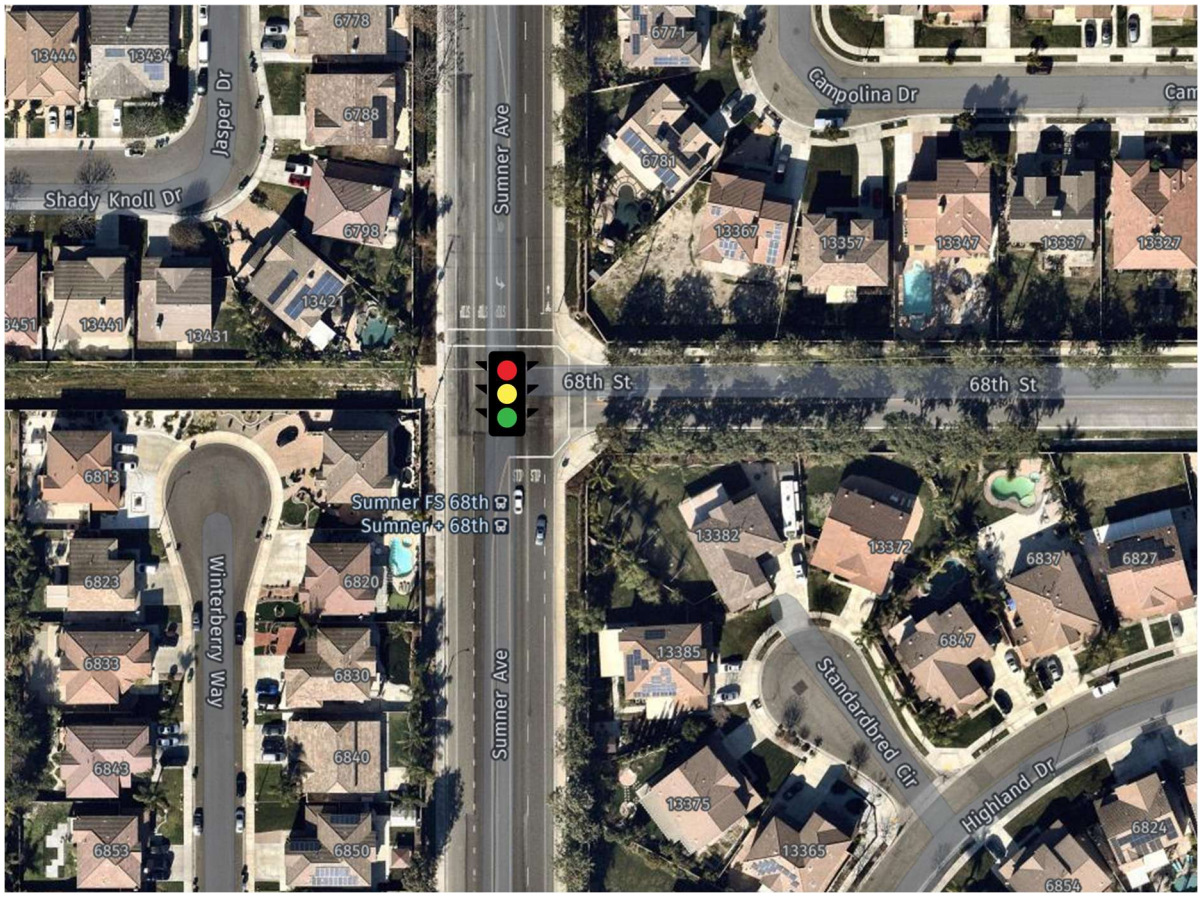
PROJECT IMAGE:



EASTVALE PUBLIC WORKS
PROJECT UPDATES

PROJECT TYPE:	Capital Improvements Project
PROJECT NAME:	Traffic Signal Improvement at Sumner Ave and 68th St
PROJECT DESCRIPTION:	Project will design and install traffic signals at the intersection of Sumner Ave and 68th Street.
PROJECT STATUS:	**In Design – Engineering:** This project has been selected for HSIP Cycle 12 funding. A funding allocation request will be submitted for the PE phase to begin the RFP process for selecting a design consultant.
PROJECT SCHEDULE:	The PE phase must be allocated by 12/31/2025.

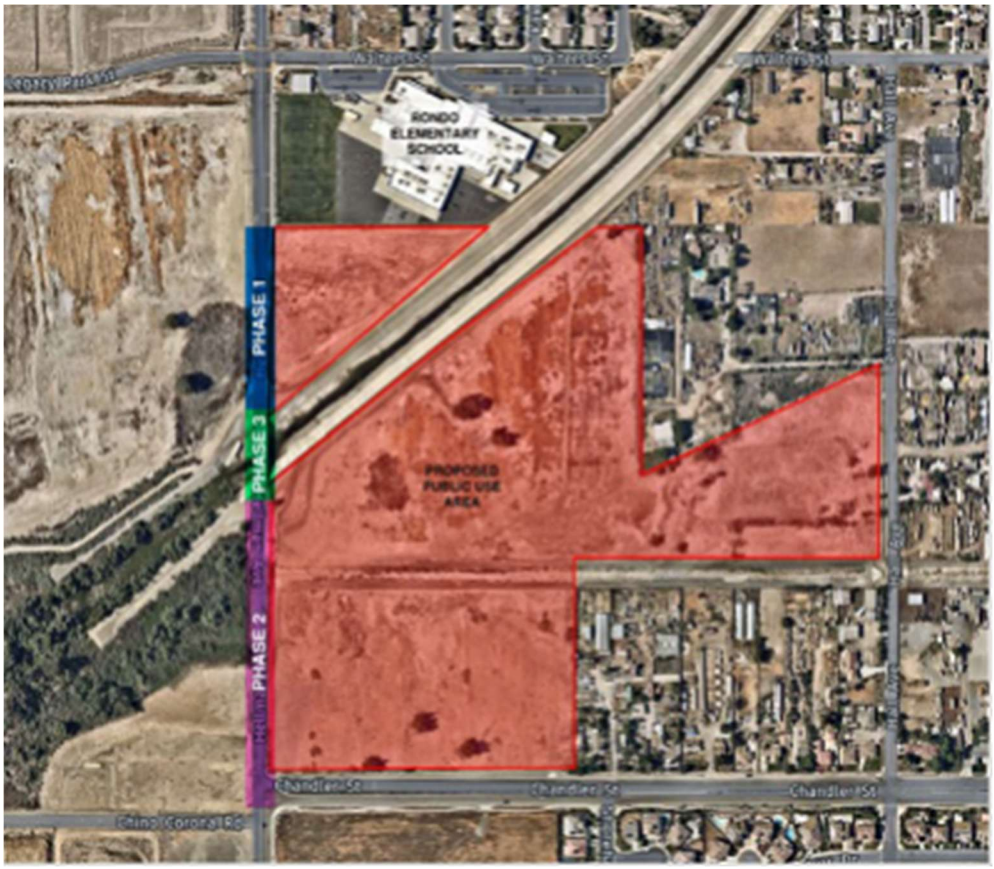
PROJECT IMAGE:



EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Capital Improvements Project
PROJECT NAME:	Hellman Avenue Street Widening and Walters Pedestrian Bridge
PROJECT DESCRIPTION:	The project involves widening Hellman Avenue from Walters Street to River Road to eliminate bottlenecks and improve traffic flow. The scope includes conducting a feasibility study, preparing environmental documents, right-of-way easement documents, and PS&E. The project will be completed in two phases: 1) Widening of Hellman Avenue north of Chandler Avenue, including lot grading south of Rondo Elementary School and bridge widening. 2) Widening of Hellman Avenue from Shortham Street to River Road. The feasibility study will determine the most efficient approach for phasing the project.
PROJECT STATUS:	**In Feasibility Study:** This project is receiving TUMF funding.
PROJECT SCHEDULE:	Construction for Phase 1 is tentatively scheduled for FY 2026-27, with Phase 2 planned for FY 2027-2028.

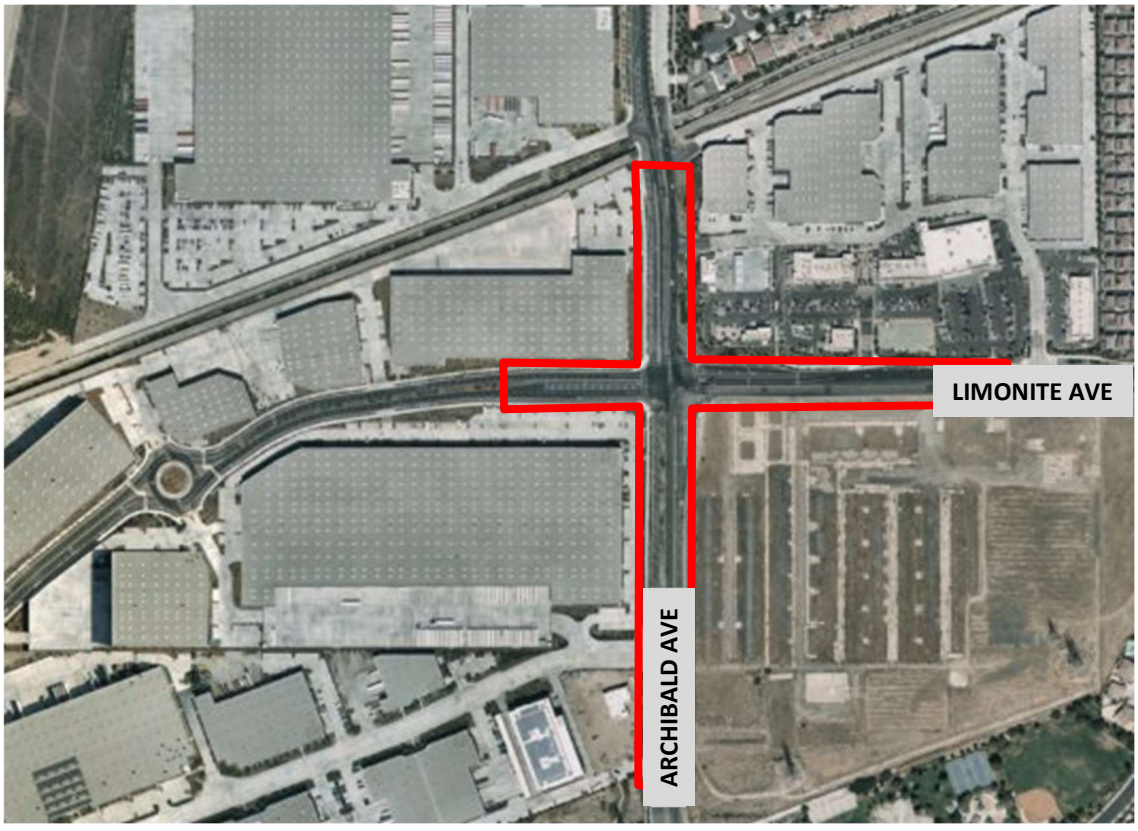
PROJECT IMAGE:



EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Capital Improvements Project
PROJECT NAME:	Archibald Avenue/Limonite Avenue Widening Project
PROJECT DESCRIPTION:	Street widening and safety project for Archibald Avenue from the City of Ontario limits south of the SCE easement, including the intersection at Limonite Avenue and portions of Limonite Avenue east and west of the intersection. The project looks to improve safety and overall circulation in conjunction with the improvements associated with the Homestead and Merge developments, and Limonite Gap Project. Components of the project include, but are not limited to, coordinating with SCE to relocate SCE high-tension support structures.
PROJECT STATUS:	• Installation of new transmission poles is completed. • Existing poles were removed mid-July, allowing the Developers to start coordinating their construction schedules. • Permits have been pulled by Walmart to start the widening work on Archibald and Limonite.

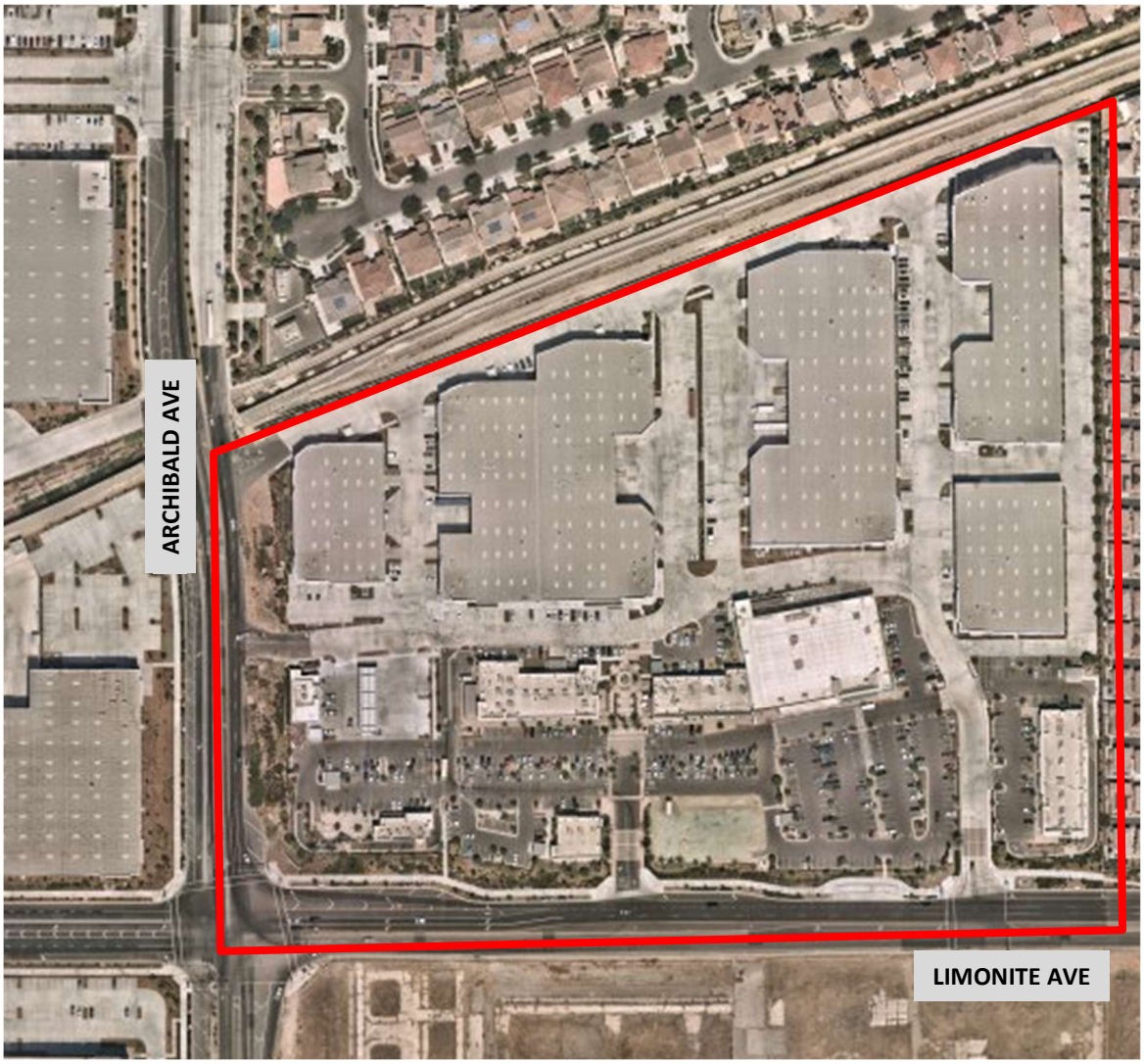
PROJECT MAP:



EASTVALE PUBLIC WORKS
PROJECT UPDATES

PROJECT TYPE:	Commercial Development
PROJECT NAME:	The Merge
PROJECT LOCATION:	Northeast corner of Limonite Avenue and Archibald Avenue
PROJECT DESCRIPTION:	Improvements includes 26 gross acres.
PROJECT STATUS:	Onsite and offsite improvements complete All off-site improvements have been accepted.

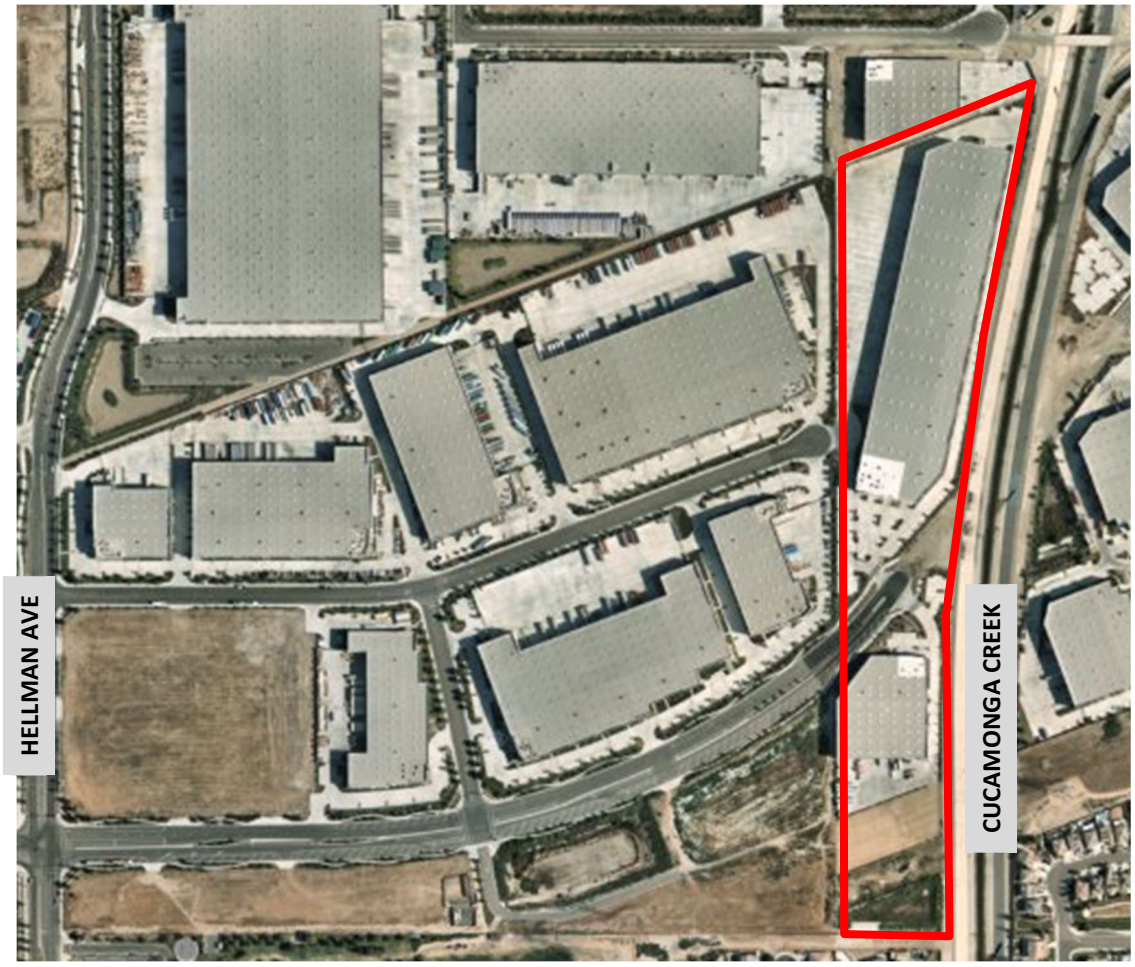
PROJECT MAP:



EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Commercial Development
PROJECT NAME:	The Ranch by Transwestern
PROJECT NUMBER:	PW19-11322
PROJECT LOCATION:	East end of Limonite Avenue west of the Cucamonga Creek
PROJECT DESCRIPTION:	Improvements include 20 gross acres including 2 light industrial warehouses.
PROJECT STATUS:	Onsite and offsite improvements have been completed, the City and Developer are working together to close out the project.

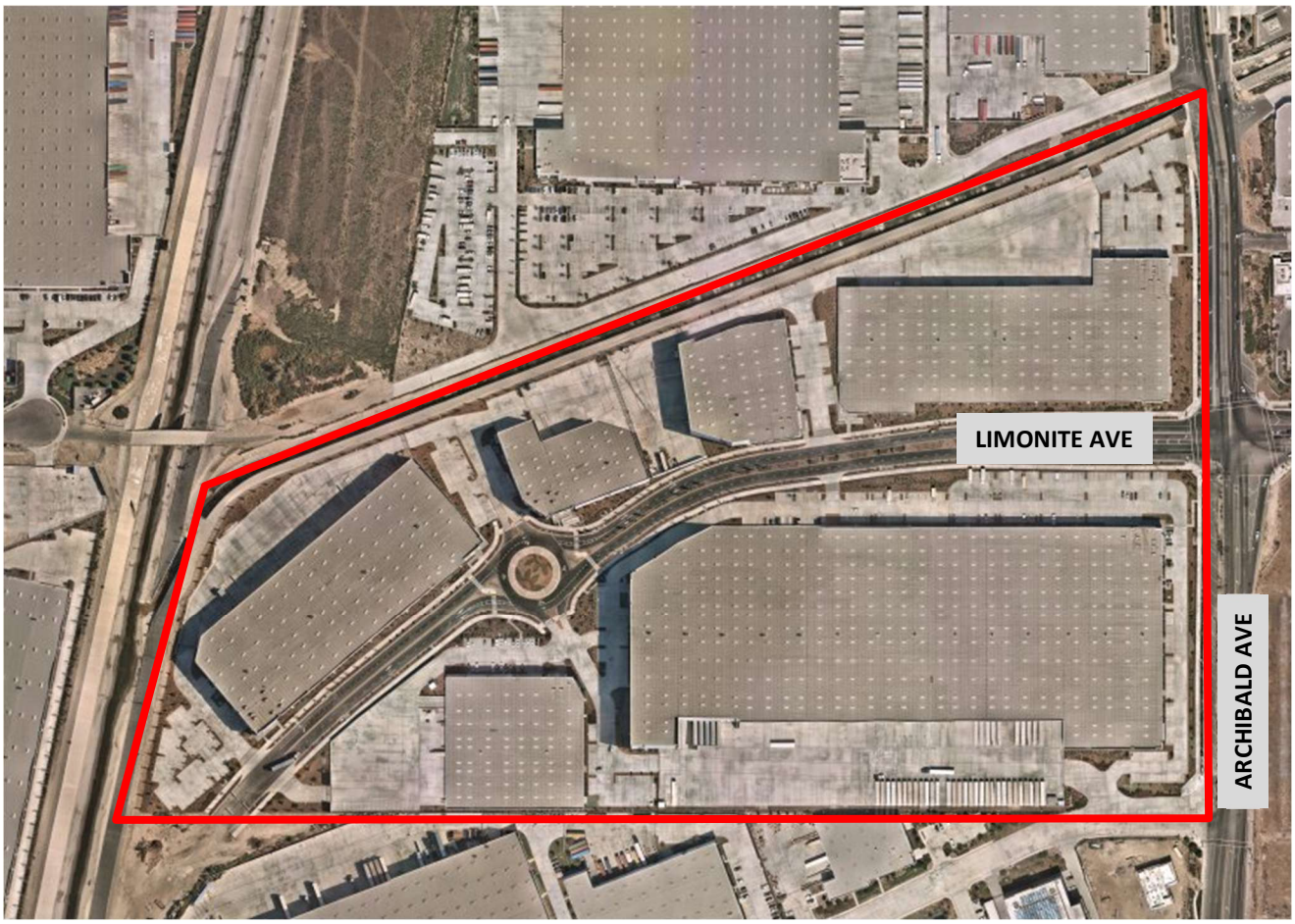
PROJECT MAP:



EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Commercial Development
PROJECT NAME:	Homestead
PROJECT NUMBER:	PW20-10052
PROJECT LOCATION:	Northwest corner of Limonite Avenue and Archibald Avenue
PROJECT DESCRIPTION:	Improvements include 55.86 gross acres consisting of six industrial buildings
PROJECT STATUS:	Onsite improvements complete Developer is also responsible for improvements along Archibald Avenue which are currently underway and in the final stages of approval.

PROJECT MAP:



EASTVALE PUBLIC WORKS
PROJECT UPDATES

PROJECT TYPE:	Commercial Development
PROJECT NAME:	Vantage Pointe Church
PROJECT NUMBER:	PW15-1174
PROJECT LOCATION:	Northeast corner of Archibald Avenue and Prado Basin Park Road
PROJECT DESCRIPTION:	Improvements include development of an approximately 85,000 sq. ft. church which includes a sanctuary, classrooms, cafe, and a bookstore on 10.43 acres.

PROJECT STATUS:

Street widening has been completed. The project is in the closeout stages.

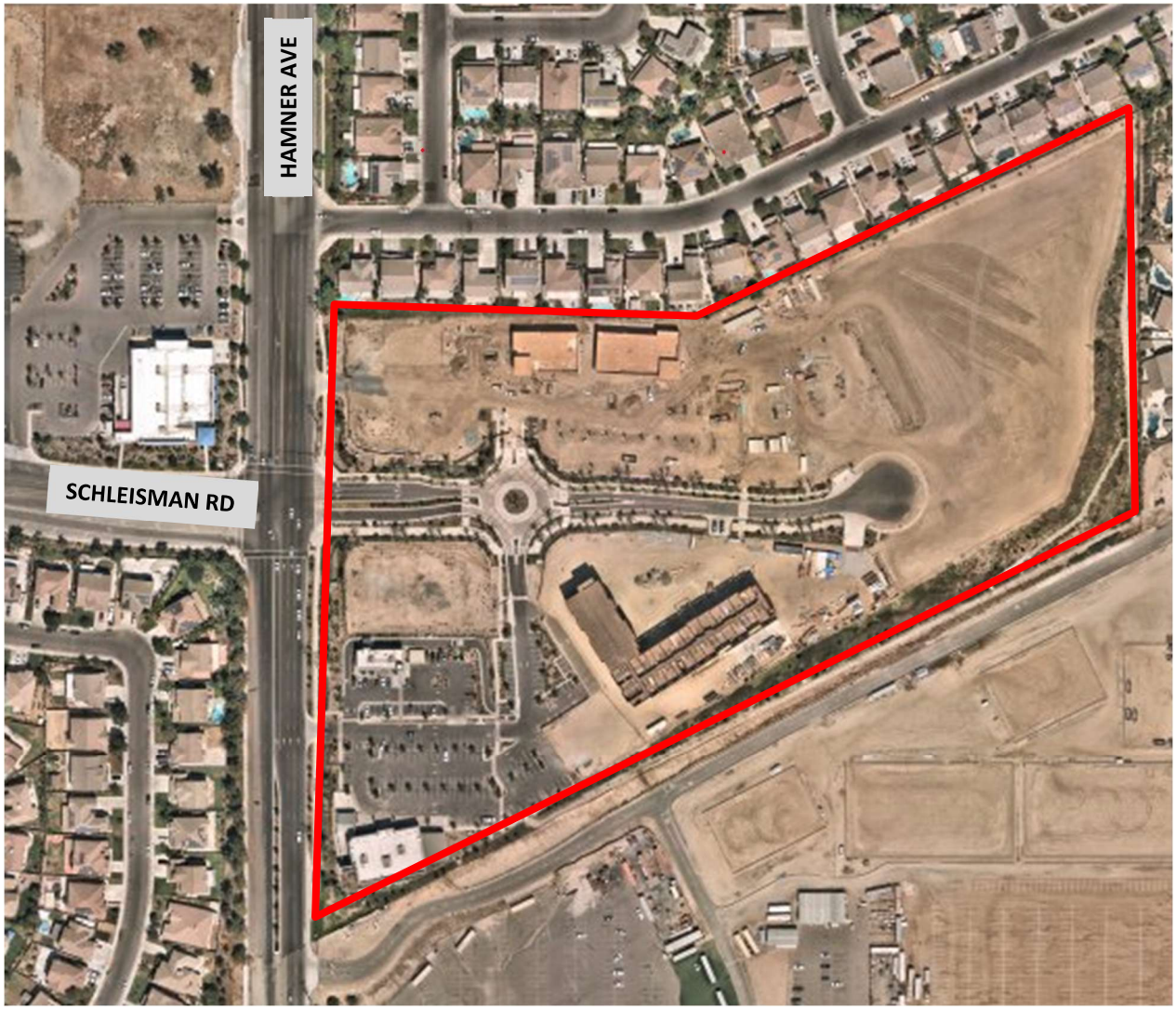
PROJECT MAP:



EASTVALE PUBLIC WORKS
PROJECT UPDATES

PROJECT TYPE:	Commercial Development
PROJECT NAME:	Hamner Place
PROJECT NUMBER:	PW18-10712
PROJECT LOCATION:	East of Hamner Avenue and Schleisman Road
PROJECT DESCRIPTION:	Improvements include 21.48 gross acres.
PROJECT STATUS:	Onsite improvement ongoing Chipotle has applied for a grading permit.

PROJECT MAP:



EASTVALE PUBLIC WORKS
PROJECT UPDATES

PROJECT TYPE:	Commercial Development
PROJECT NAME:	The Ranch (Parcel 14)
PROJECT NUMBER:	PW20-10007
PROJECT LOCATION:	East of Limonite Avenue west of the Cucamonga Creek
PROJECT DESCRIPTION:	Improvements include the development of 61,000 square foot industrial building.
PROJECT STATUS:	Developer has finalized the project.

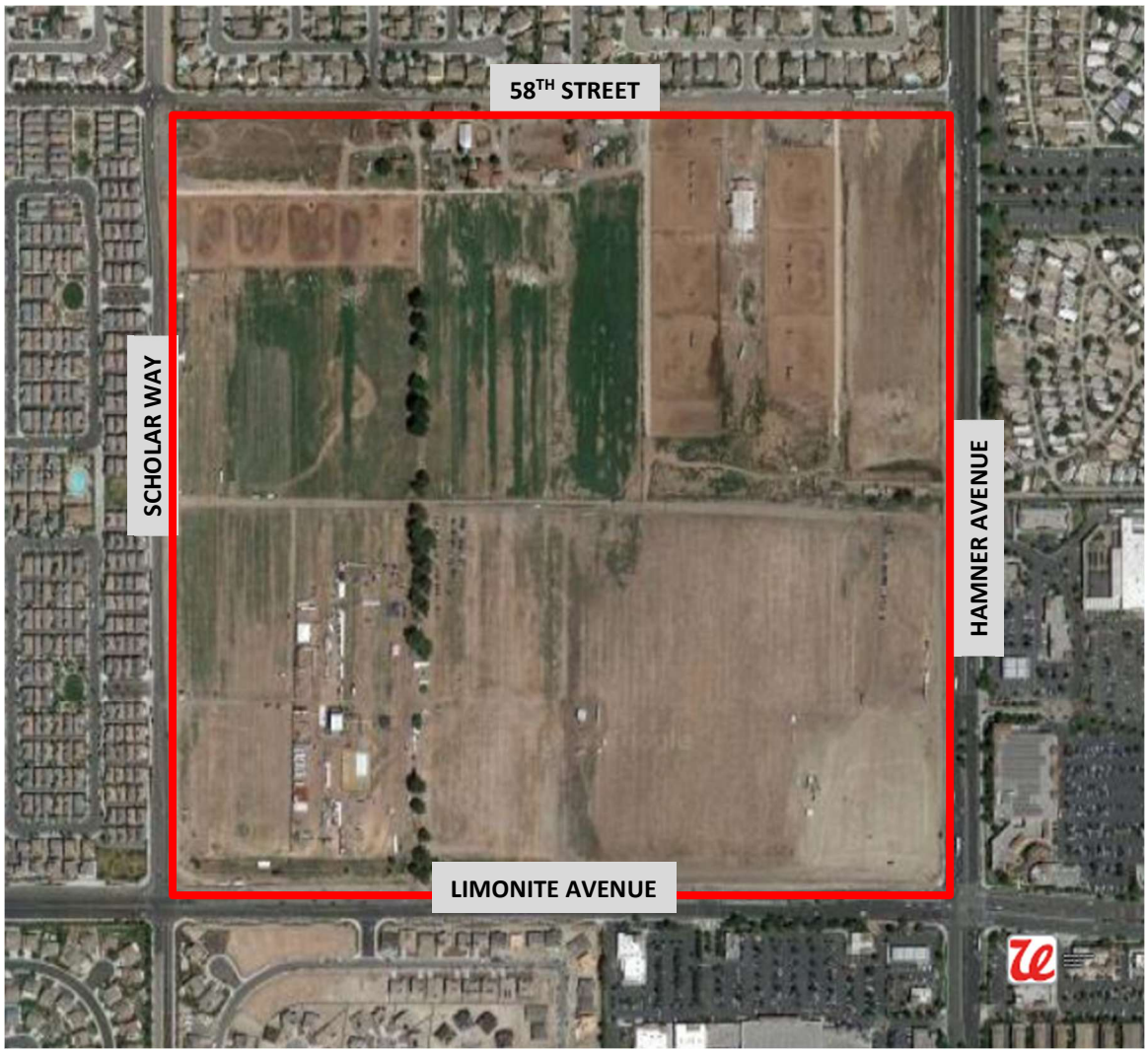
PROJECT MAP:



EASTVALE PUBLIC WORKS PROJECT UPDATES

PROJECT TYPE:	Residential Development
PROJECT NAME:	Eastwalk/ Leal
PROJECT NUMBER:	PW22-1004
PROJECT LOCATION:	Northwest corner of Limonite Avenue and Hamner Avenue
PROJECT DESCRIPTION:	158.6 acre development that will include approximately 2500 residential units as well as plans for future commercial development
PROJECT STATUS:	Developer has obtained precise grading, street, sewer and water, and building permits. Phase A homes are now on sale.

PROJECT MAP:



PUBLIC WORKS GRANTS SUMMARY

GRANTS AWARDED

AGENCY	GRANT NAME	PROJECT NAME	GRANT AWARD	MATCH	DUE DATE	STATUS
California Transportation Commission/California Department of Transportation	ATP: Active Transportation Project Cycle 4	Improvement of Bike Network Connectivity	$ 6,471,000.00	$ 1,620,000.00		Grant request has been approved. The project is currently under design.
USDOT: Department of Transportation	Congressman Calvert: 2023 Transportation and Infrastructure Appropriations Bill	Limonite Gap Pedistrian Bridge	$ 1,600,000.00	$ 400,000.00		This grant is for construction phaseo only. The project is currently under design.
California Department of Resources Recycling and Recovery	CalRecycle Rubberized Pavement (TRP) Grant Program (TRP16-23-0047)	Annual Overlay/Residential Slurry Seal Project	$ 170,586.00		April 1, 2026	
California Department of Transportation	HSIP: Highway Safety Improvement Program Cycle 12	Traffic Signal Improvement at Sumner and 68th	$ 642,402.00	$ 79,398.00	March 31, 2028	Allocation request for PE phase will be submitted.

CITY OF EASTVALE

AGENDA STAFF REPORT

Planning Commission Meeting
CONSENT CALENDAR
Agenda Item No. 7.3
May 21, 2025

Planning Division Update

Prepared By:
David Murray, City Planner

Recommended Action(s)
Staff recommends that the Planning Commission receive and file the Planning Division Update.

Summary
Planning projects are provided in the attached Planning Project Status list. The list provides a brief summary and status of each project. New information is highlighted in yellow. A map identifying the locations of each project is also included.

Background
The purpose of the Planning Division Update is to provide a list of the current status of major projects in the City of Eastvale.

Analysis
Not Applicable

Environmental
The following update requires no environmental review as it is not considered a "project" under the California Environmental Quality Act (CEQA).

Strategic Plan Action - Priority Level: N/A | Target #: N/A | Goal #: N/A
Not Applicable.

Fiscal Impact

The following update has no applicable fiscal impacts.

Prior City Council/Commission Action

Not Applicable.

Attachment(s)

Planning Division Update 5.21.25

CITY OF EASTVALE

Major Projects Summary

May 21, 2025

City of Eastvale Planning Division

CITY OF EASTVALE
12363 Limonite Avenue | Suite 910 | Eastvale, CA 91752
951.361.0900

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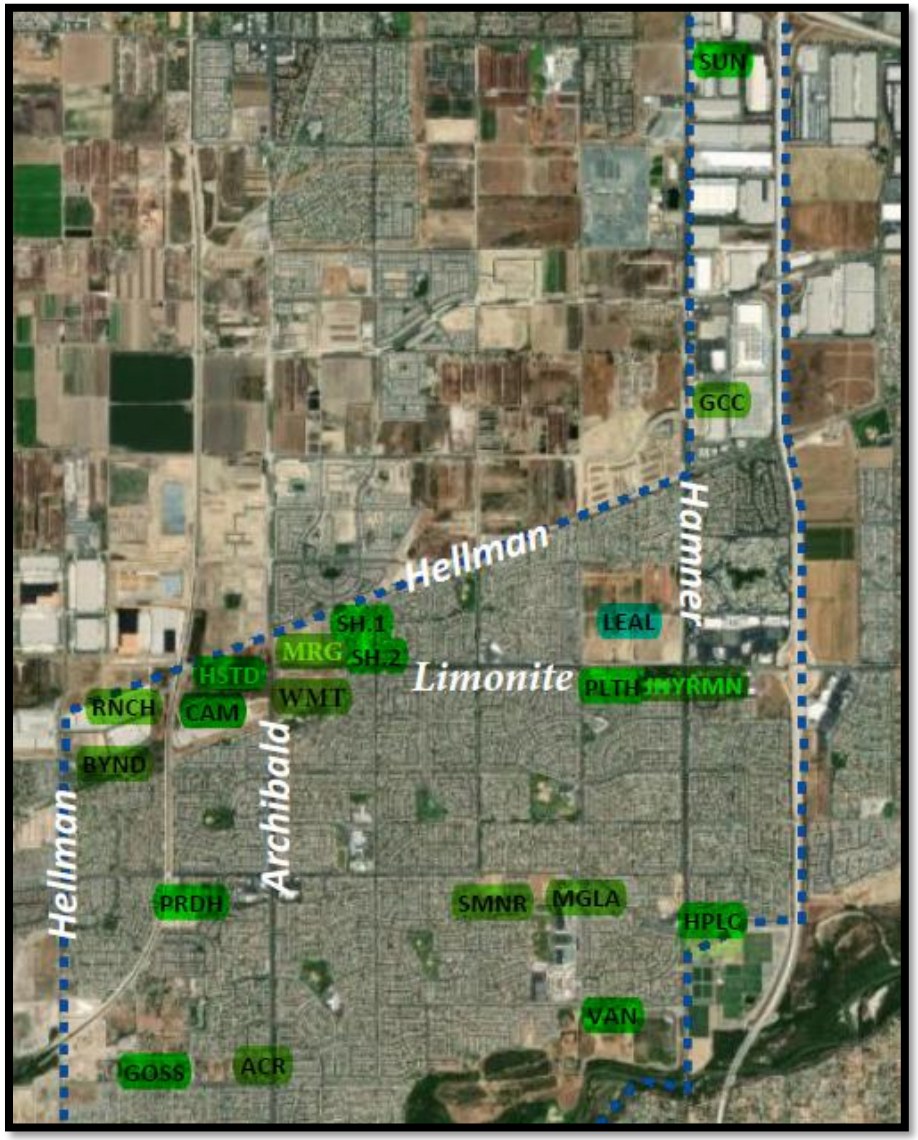

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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In-Process/Review

Sumner Place Residential Development (MAP ID: SMNR)

Project:	Sumner Place Residential Development
Project No.	PLN25-20005_GPA001_DR001_COZ001_ TTM
Project Location:	Southeast corner of Sumner Ave. and Schleisman Rd.; (Assessor Parcel Number: 152-040-01)
Project Description:	**General Plan Amendment** to change the land use designation from Commercial Retail (CR 0.20-0.35 FAR) to Multi-Family-Low-Moderate (MF-LM 20.1-40 du/acre). **Change of Zone** to change the zone from Heavy Agriculture (A-2) to General Residential (R-3). **Major Development Review** for the development of a for-sale town home residential project consisting of 159-units on 7.5 acres. **Tentative Tract Map** for condominium purposes.
Planner:	Allen Lim

Notes:

- Received application on 1.30.25

Project Map:



Current Status:

- On 2.26.2025 an incomplete letter was sent out to the applicant and currently awaiting resubmittal.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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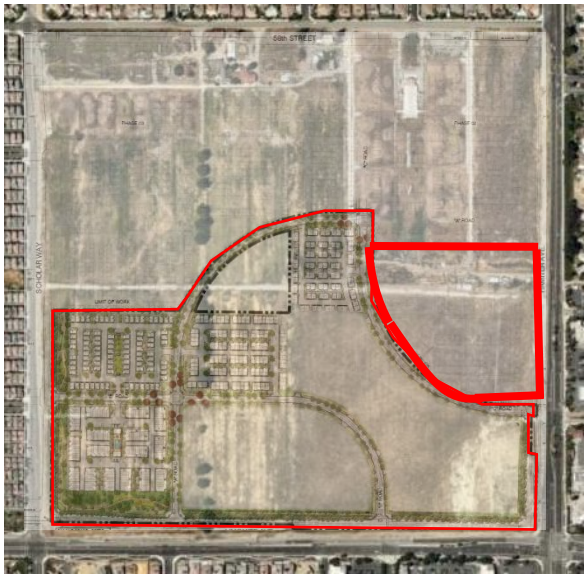
Leal Ranch Residential PA-4 Quarterra Phase II

Project:	Planning Area 4
Project No.	PLN24-20035 DR001
Project Location:	Southwest corner of Limonite Avenue and 58th Street.
Project Description:	**Major Development Review** for the development of 360 multi-family residential units on 10.6 acres within Planning Areas 4 & 10 of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 5.7.24
- An incomplete letter was sent out to the applicant on 6.3.24
- On 7.24.24 the applicant resubmitted to the planning division for review.
- A second incomplete letter was sent to applicant on 8.12.24
- On 10.14.24 the applicant resubmitted to the planning division for review.
- A third incomplete letter was sent to applicant on 11.7.24
- On 12.19.24 the applicant resubmitted to the planning division for review.
- A fourth incomplete letter was sent to applicant on 1.16.25
- On 4.7.25 the applicant resubmitted to the planning division for review.

Project Map:



Current Status:

- The Project was deemed complete and scheduled for Planning Commission date of May 21, 2025

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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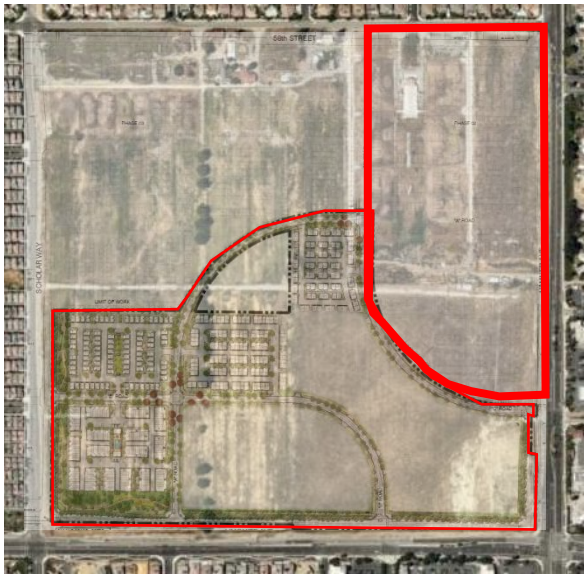
New Home Off-site

Project:	Tentative Tract Map Phase B
Project No.	PLN24-20069 DR004
Project Location:	Southwest corner of Limonite Avenue and 58th Street.
Project Description:	**Major Development Review** to establish the off-site streets and layout of Phase B of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 8.21.24
- On 9.16.24 an incomplete letter was sent out to the applicant.
- On 11.20.24 the applicant resubmitted the project.
- On 12.11.24 a second incomplete letter was sent to the applicant.
- On 1.16.25 the applicant resubmitted the project for plan review.
- On 2.10.25 a third incomplete letter was sent out to the applicant.
- The Project was deemed complete and scheduled for Planning Commission date of March 19, 2025

Project Map:



Current Status:

- On 3.19.2025 the Planning Commission approved entitlements for PLN24-20069 and subject to conditions of approval.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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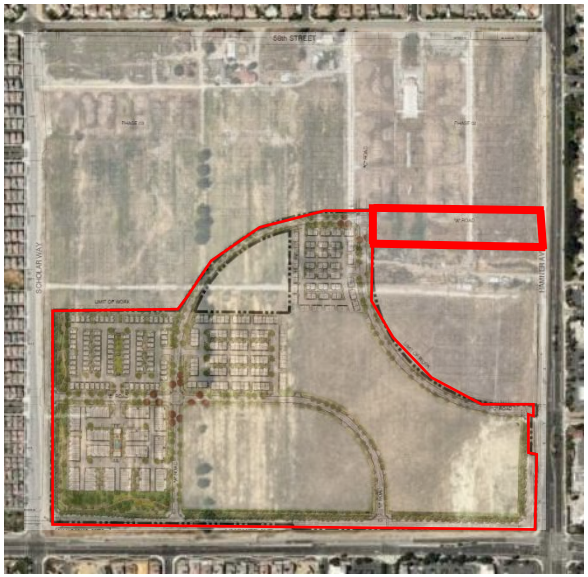
Leal Ranch Residential PA-9

Project:	Planning Area 9
Project No.	PLN24-20070 DR005
Project Location:	Southwest corner of Limonite Avenue and 58th Street.
Project Description:	**Major Development Review** for the development of 90 residential units (triplexes) on Lots 30-36 of TTM 38595 within Planning Area 9 of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 8.21.24
- On 9.16.24 an incomplete letter was sent out to the applicant.
- On 11.20.24 the applicant resubmitted the project.
- On 12.11.24 a second incomplete letter was sent out to the applicant.
- On 1.16.25 the applicant resubmitted the project for plan review.
- On 2.10.25 a third incomplete letter was sent out to the applicant.
- On 2.18.25 the applicant resubmitted the project and is currently under review.
- The Project was deemed complete and scheduled for Planning Commission date of March 19, 2025
- The item was heard by Planning Commission on March 19, 2025 and was continued to the following meeting date of April 16,2025.

Project Map:



Current Status:

- On 4.16.2025 the Planning Commission approved entitlements for PLN24-20070 and subject to conditions of approval.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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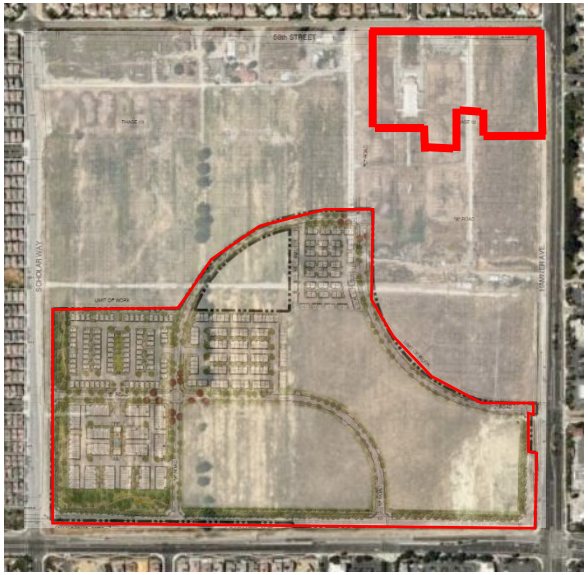
Leal Ranch Residential PA-11A

Project:	Planning Area 11A
Project No.	PLN24-20071 DR006
Project Location:	Southwest corner of Limonite Avenue and 58th Street.
Project Description:	**Major Development Review** for the development of 91 residential units (duplexes and triplexes) on lot 1-9 of TTM 38595 within Planning Area 11A of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 8.21.24
- On 9.16.24 an incomplete letter was sent out to the applicant.
- On 11.20.24 the applicant resubmitted the project.
- On 12.11.24 a second incomplete letter was sent out to the applicant.
- On 1.16.25 the applicant resubmitted the project for plan review.
- On 2.10.25 a third incomplete letter was sent out to the applicant.
- On 2.18.25 the applicant resubmitted the project and is currently under review.
- The Project was deemed complete and scheduled for Planning Commission date of March 19, 2025

Project Map:



Current Status:

- On 4.16.2025 the Planning Commission approved entitlements for PLN24-20071 and subject to conditions of approval.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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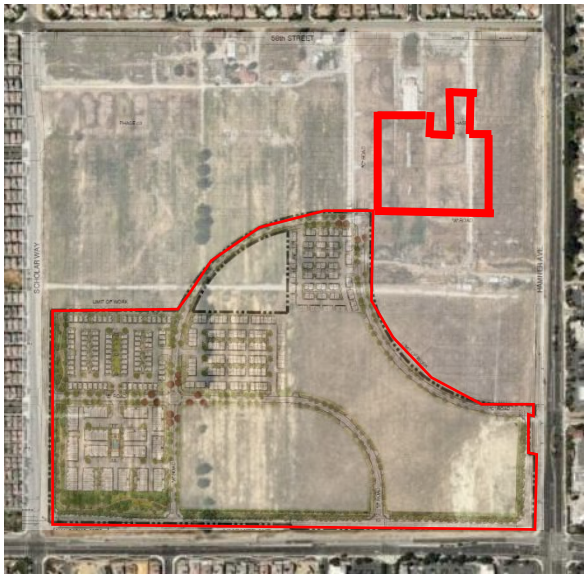
Leal Ranch Residential PA-11B

Project:	Planning Area 11B
Project No.	PLN24-20072 DR007
Project Location:	Southwest corner of Limonite Avenue and 58th Street.
Project Description:	**Major Development Review** for the development of 90 residential units (6-plex and 8-plexes) on Lots 10-18 of TTM 38595 within Planning Area 11B of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 8.21.24
- On 9.16.24 an incomplete letter was sent out to the applicant.
- On 11.20.24 the applicant resubmitted the project.
- On 12.11.24 a second incomplete letter was sent out to the applicant.
- On 1.16.25 the applicant resubmitted the project for plan review.
- On 2.10.25 a third incomplete letter was sent out to the applicant.
- On 2.18.25 the applicant resubmitted the project and is currently under review.
- The Project was deemed complete and scheduled for Planning Commission date of March 19, 2025

Project Map:



Current Status:

- On 4.16.2025 the Planning Commission approved entitlements for PLN24-20072 and subject to conditions of approval.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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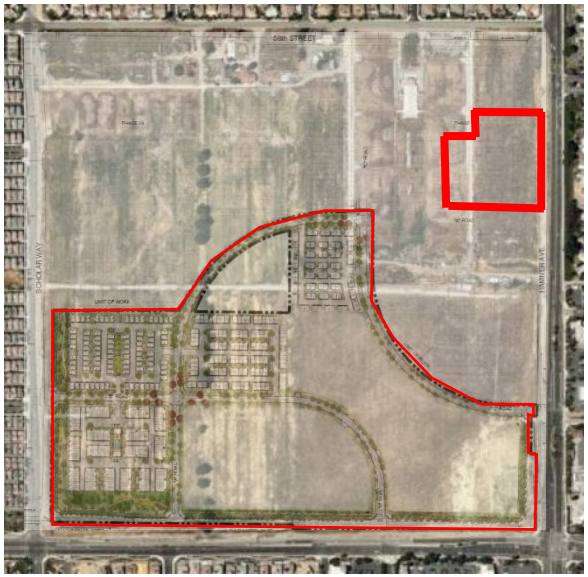
Leal Ranch Residential PA-11C

Project:	Planning Area 11C
Project No.	PLN24-20073 DR008
Project Location:	Southwest corner of Limonite Avenue and 58th Street.
Project Description:	**Major Development Review** for the development of 63 residential units (triplexes) on Lots 19-29 of TTM 38595 within Planning Area 11C of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 8.21.24
- On 9.16.24 an incomplete letter was sent out to the applicant.
- On 11.20.24 the applicant resubmitted the project.
- On 12.11.24 a second incomplete letter was sent out to the applicant.
- On 1.16.25 the applicant resubmitted the project for plan review.
- On 2.10.25 a third incomplete letter was sent out to the applicant.
- On 2.18.25 the applicant resubmitted the project and is currently under review.
- The Project was deemed complete and scheduled for Planning Commission date of March 19, 2025

Project Map:



Current Status:

- On 4.16.2025 the Planning Commission approved entitlements for PLN24-20073 and subject to conditions of approval.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Warmington Residential

Project:	Warmington Residential
Project No.	PLN24-20053 TTM001 DR003 SB330
Project Location:	Northeast corner of Grapewin St. & Archibald Ave.
Project Description:	**Tentative Tract Map** for 76 lots for a single family home community. **Major Development Review** for the development of 76 single-family residential units.
Planner:	Jamie K. Cerda

Notes:

- Received application on 6.27.24
- An incomplete letter was sent to the applicant on 7.10.24 documents were resubmitted
- A second incomplete letter has been sent to applicant on 8.06.24
- A third incomplete letter has been sent to applicant on 10.17.24
- The Project was deemed complete and scheduled for Planning Commission date of March 19, 2025
- The project was heard by the Planning Commission on 3.19.25 meeting and recommended to the City Council for approval.

Project Map:



Current Status:

- The project was heard by the City Council on 4.23.25 where action was to continue the project for the next scheduled City Council date on May 28, 2025.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Cherry Tree Residential

Project:	Cherry Tree Residential
Project No.	PLN24-20092 TTM DR010 and PLN24-20057 SB330
Project Location:	Southwest corner of Walters St. and Selby Ave.
Project Description:	**Vesting Tentative Tract Map** for 39 lots for a single-family home community. **Major Development Review** for the development of 39 single-family residential units, 38 attached ADUs, and 38 detached ADUs.
Planner:	Allen Lim

Notes:

- Received application on 10.28.24
- An incomplete letter was sent to the applicant on 11.26.24
- On 3.3.25 the applicant resubmitted for plan review.
- A second incomplete letter was sent to the applicant on 3.27.25

Project Map:



Current Status:

- On 5.12.25 the applicant resubmitted to the planning division and is currently under review.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Eastvale Care Facility (Selby)

Project:	Eastvale Care Facility
Project No.	PLN24-20047 DR003 CUP003
Project Location:	Southwest corner of Walters St. & Selby Ave.
Project Description:	**Major Development Review** for the development congregate care facility consisting of two single family homes. **Conditional Use Permit** for the allowance of a residential care facility for the elderly for up to 14 persons per home (28 max).
Planner:	Allen Lim

Notes:

- Received application on 6.20.24
- An incomplete letter was sent to the applicant on 7.11.24
- Resubmittal received on 12.30.24

Project Map:



Current Status:

- On 1.28.25 the applicant received an incomplete letter and the planning department is awaiting resubmittal.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Oasis Residential

Project:	Oasis Residential
Project No.	PLN25-20016 TTM002 DR002 SBB330
Project Location:	Southeast corner of Chandler Ave. & Hellman Ave.
Project Description:	**Tentative Tract Map** for 65 lots for a single-family home community and 2 open space lots. **Major Development Review** for the development of 65 single-family residential units.
Planner:	Allen Lim

Notes:

- Received application on 3.19.25

Project Map:



Current Status:

- On 4.17.25 the applicant received an incomplete letter and the planning department is awaiting resubmittal.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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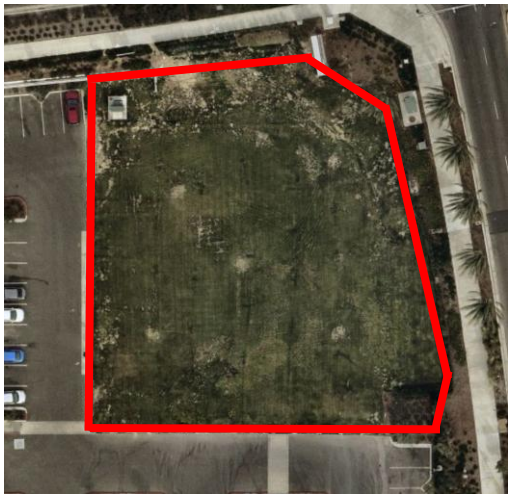
New Restaurant Shell

Project:	Commercial Restaurant Building
Project No.	PLN25-20031 DR003
Project Location:	Southwest corner of Cantu-Galleano Ranch Road. & Goodman Way.
Project Description:	**Major Development Review** for the development of a new restaurant building of 5,780 sq. ft. located on 1.17-acre vacant lot.
Planner:	Steven D. Fowler

Notes:

- Received application on 4.23.25

Project Map:



Current Status:

- The project is currently under review.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Wireless Facility – 7250 Cobble Creek

Project:	Providence Ranch Monopine
Project No.	PLN24-20030 MDR010
Project Location:	Southeast corner of Hallow Brook Way and Westerly Way. East of Cobble Creek
Project Description:	**Minor Development Review** for the development of an unmanned telecom facility consisting of 70 ft. tall monopine 14 panel antennas mounted on the monopine, 35 RRUs mounted behind the antennas, and necessary equipment area.
Planner:	Steven D. Fowler

Notes:

- Received application on 4.30.24
- The project was scheduled for planning commission on 6.19.24.
- On 6.19.24 the planning commission continued the project to a future date.
- A second submittal was submitted for review.
- The project was scheduled for planning commission on 11.20.24.

Project Map:



Current Status:

- On 11.20.24 the planning commission continued the project to a future date. The Planning Division is waiting for a resubmittal.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Approved/ Entitled

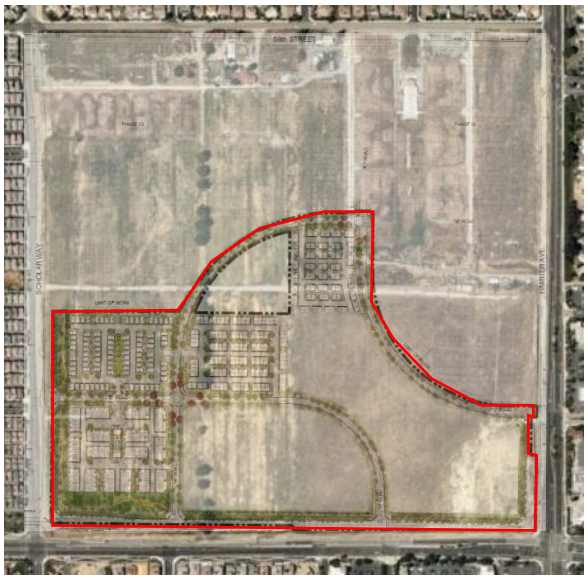
Leal Ranch Residential Phase A TTM (MAP ID: LEAL.1)

Project:	Leal Ranch Residential Tentative Tract Map (Phase A)
Project No.	PLN22-20087 TTM No. 38594
Project Location:	Northwest corner of Hamner and Limonite Avenue, east of Scholar Way, and south of 58th Street.
Project Description:	**Tentative Tract Map** to create 64 lots over 69.8 acres of land to facilitate various site improvements and initiate the residential development of PA-1, PA-6, PA-7A, and PA-8 of the Leal Ranch Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 12.21.22
- Application deemed incomplete by staff on January 12, 2023.
- The project was resubmitted on 06.05.2023 and is under review.
- Application was deemed incomplete on July 3, 2023
- Application deemed complete scheduled Planning Commission date of October 18, 2023
- Planning Commission approval on October 18, 2023
- On October 18, 2023 Planning Commission approved entitlements for PLN22-20087 and is subject to conditions of approval.

Project Map:



Current Status:

- Actively under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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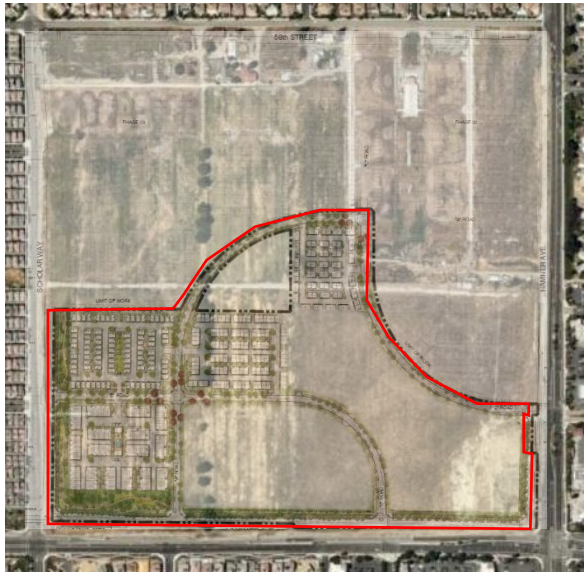
Leal Ranch Residential Overall Phase A DR (MAP ID: LEAL.2)

Project:	Leal Ranch Residential Overall DR (Phase A)
Project No.	PLN22-20088 DR006
Project Location:	Northwest corner of Hamner and Limonite Avenue, east of Scholar Way, and south of 58th Street.
Project Description:	**Major Development Review** for the overall Leal Phase A Residential Development and associated site improvements (PA-1, PA-6, PA-7A, and PA-8)
Planner:	Jamie K. Cerda

Notes:

- Received application on 12.21.22
- Application deemed incomplete by staff on January 12, 2023.
- The project was resubmitted on 06.05.2023 and is under review.
- Application was deemed incomplete on July 3, 2023.
- Application deemed complete scheduled Planning Commission date of October 18, 2023
- Planning Commission approval on October 18, 2023
- On October 18, 2023**,** Planning Commission approved entitlements for PLN22-20087 and is subject to conditions of approval.

Project Map:



Current Status:

- Actively under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Leal Ranch Residential PA-1 Phase A (MAP ID: LEAL.3)

Project:	Leal Ranch Residential PA-1 (Phase A)
Project No.	PLN22-20089 DR007
Project Location:	Northeast corner of Limonite Avenue and Scholar Way.
Project Description:	**Major Development Review** for the development of 168 new residential units within Planning Area 1 of the Leal Master Plan. Plan types will consist of townhomes (10 plex and 11 plex).
Planner:	Jamie K. Cerda

Notes:

- Received application on 12.21.22
- Application deemed incomplete by staff on January 12, 2023.
- The project was resubmitted on 06.05.2023 and is under review.
- Application was deemed incomplete on July 3, 2023
- Application deemed complete scheduled Planning Commission date of October 18, 2023
- Planning Commission approval on October 18, 2023
- On October 18, 2023, Planning Commission approved entitlements for PLN22-20089 and is subject to conditions of approval.

Project Map:



Current Status:

- Models are open to the public.
- Production units are actively under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Leal Ranch Residential PA-6 Phase A (MAP ID: LEAL.4)

Project:	Leal Ranch Residential Planning Area- 6 (Phase A)
Project No.	PLN22-20090 DR008
Project Location:	Northwest corner of Hamner and Limonite Avenue, east of Scholar Way, and south of 58th Street.
Project Description:	**Major Development Review** for the development of 102 new residential units within Planning Area 6 of the Leal Master Plan. Plan types will consist of townhomes (Duplex to 6 plex).
Planner:	Jamie K. Cerda

Notes:

- Received application on 12.21.22
- Application deemed incomplete by staff on January 12, 2023.
- The project was resubmitted on 06.05.2023 and is under review.
- Application was deemed incomplete on July 3, 2023
- Application deemed complete scheduled Planning Commission date of October 18, 2023
- Planning Commission approval on October 18, 2023
- On October 18, 2023, Planning Commission approved entitlements for PLN22-20090 and is subject to conditions of approval.

Project Map:



Current Status:

- Models are open to the public.
- Production units are actively under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Leal Ranch Residential PA-7A Phase A (MAP ID: LEAL.5)

Project:	Leal Ranch Residential Planning Area-7A (Phase A)
Project No.	PLN22-20091 DR009
Project Location:	Northeast corner of Limonite Avenue and Scholar Way.
Project Description:	**Major Development Review** for the development of 94 single family residential units within Planning Area-7A of the Leal Master Plan.
Planner:	Jamie K Cerda

Notes:

- Received application on 12.21.22
- Application deemed incomplete by staff on January 12, 2023.
- The project was resubmitted on 06.05.2023 and is under review.
- Application was deemed incomplete on July 3, 2023.
- Application deemed complete scheduled Planning Commission date of October 18, 2023
- Planning Commission approval on October 18, 2023
- On October 18, 2023, Planning Commission approved entitlements for PLN22-20091 and is subject to conditions of approval.

Project Map:



Current Status:

- Models are open to the public.
- Production units are actively under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Leal Ranch Residential PA-8 Phase A (MAP ID: LEAL.6)

Project:	Leal Ranch Residential Planning Area 8 (Phase A)
Project No.	PLN22-20092 DR010
Project Location:	Northwest corner of Hamner and Limonite Avenue, east of Scholar Way, and south of 58th Street.
Project Description:	**Major Development Review** for the development of 74 single family residential units within Planning Area 8 of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 12.21.22
- Application deemed incomplete by staff on January 12, 2023.
- The project was resubmitted on 06.05.2023 and is under review.
- Application was deemed incomplete on July 3, 2023.
- Application deemed complete scheduled Planning Commission date of October 18, 2023
- Planning Commission approval on October 18, 2023
- On October 18, 2023, Planning Commission approved entitlements for PLN22-20092 and is subject to conditions of approval.

Project Map:



Current Status:

- Models are open to the public.
- Production units are actively under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Leal Ranch Residential PA-2 Quarterra (MAP ID: LEAL.7)

Project:	Leal Ranch Residential PA-2 Quarterra
Project No.	PLN23-20036 DR006
Project Location:	Northeast corner of Limonite Avenue and of Scholar Way. South of 58th St.
Project Description:	**Major Development Review** for the development of 320 new residential units within Planning Area 2 of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on June 9, 2023.
- Application was deemed incomplete on July 3, 2023
- Application was resubmitted on August 31, 2023
- Application was deemed incomplete on September 27, 2023
- Application was resubmitted on November 14, 2023
- Application was deemed incomplete on December 7, 2023
- Application was resubmitted on January 18, 2024
- Planning Commission approval on February 21, 2024
- On February 21, 2024 the Planning Commission approved entitlements for PLN23-20036, with conditions of Approval.

Project Map:



Current Status:

- Construction document have been submitted with the Building Divison and are currently under review.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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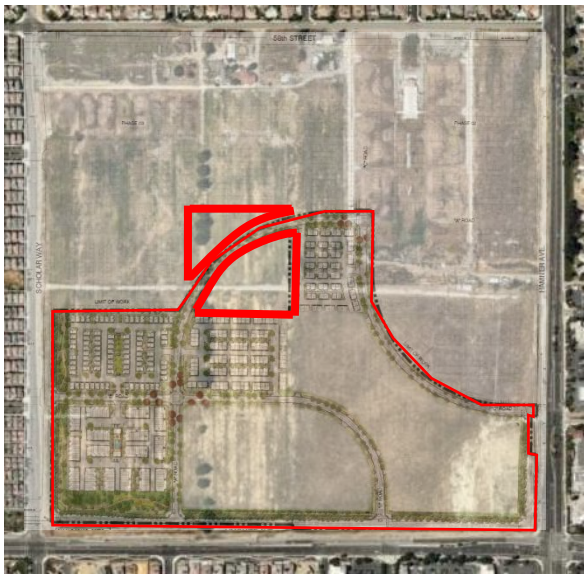
New Home Recreation Center

Project:	New Home Rec Center
Project No.	PLN24-20075 MDR014
Project Location:	Northeast corner of Limonite Avenue and of Scholar Way. South of 58th St.
Project Description:	**Minor Development Review** for the site planning and architecture of the proposed recreation center within the Leal Ranch Master plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 8.21.24
- On 9.18.24 an incomplete letter was sent out to the applicant.
- The project was resubmitted on 10.24.24
- On 11.20.24 an incomplete letter was sent out to the applicant.
- The project was deemed complete and scheduled for planning commission for 2.19.25.
- On February 19, 2025 Planning Commission approved entitlements for PLN24-20075 and is subject to conditions of approval.

Project Map:



Current Status:

- Construction documents have been submitted with the Building Division and Public Works Department.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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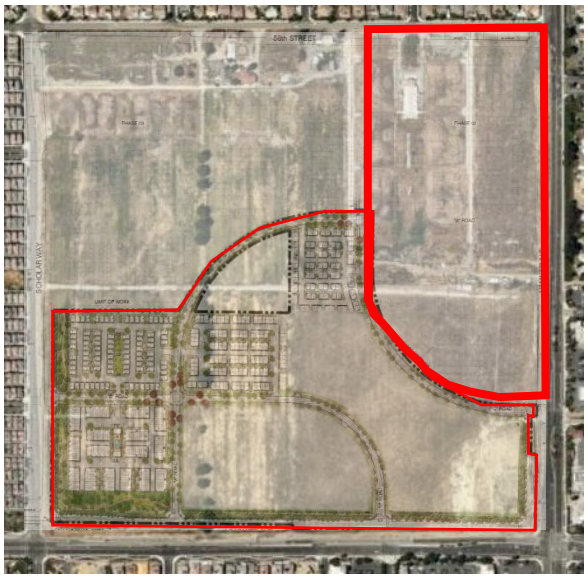
New Home TTM 38595 Phase B

Project:	Tentative Tract Map Phase B
Project No.	PLN24-20074 TTM #38594 PH B
Project Location:	Southwest corner of Limonite Avenue and 58th Street.
Project Description:	**Tentative Tract Map** for the development of an existing lot into 46 total lots for condominium purposes (37 residential, 1 commercial, 3 for open space and 5 for private street purposes) of TTM 38595 within Planning Area 9, 10, 11A, 11B, and 11C of the Leal Master Plan.
Planner:	Jamie K. Cerda

Notes:

- Received application on 8.21.24
- On 9.18.24 an incomplete letter was sent out to the applicant.
- The project was resubmitted on 10.24.24
- On 11.6.24 an incomplete letter was sent out to the applicant.
- The project was resubmitted on 12.11.24
- The project was deemed complete and is currently scheduled for planning commission on 2.19.25

Project Map:



Current Status:

- On February 19, 2025 Planning Commission approved entitlements for PLN24-20074 and is subject to conditions of approval.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

Goodman Commerce Center (MAP ID: GCC)

Project:	Goodman Commerce Center (formally Lewis Eastvale Commerce Center)
Project No.	11-0271 **see related projects below
Project Location:	190 acres +/- fronting on Hamner Ave. north of Bellegrave Ave. and south of Cantu-Galleano Ranch Road
Project Description:	General Plan Amendment, Change of Zone, and Specific Plan to provide a mix of warehousing, light industrial, office, and retail uses. Major Development Review for the development of two industrial buildings of approximately 1,007,705 square feet and 1,033,192 square feet. CEQA: Environmental Impact Report (certified)
Planner:	Allen Lim

Notes:

- Approved by City Council on November 12, 2014

See the following projects for more recent activity at the Goodman Commerce Center Development:

- Project No. PLN17-20033 Retail Building CR-3 – Starbucks & other tenants (GCC.1)
- Project No. PLN18-20014 Retail Building CR-12 – Quick Quack Carwash (GCC.2)
- Project No. PLN18-20042 Retail Building CR-11 – Multi-Tenant (GCC.3)
- Project No. PLN19-20006 Retail Building CR-10- Chick-fil-A (GCC.4)
- Project No. PLN19-20063 Retail Building CR-8 – Altura Credit Union (GCC.5)
- Project No. PLN19-20064 Retail Building CR-6 (GCC.6)
- Project No. PLN20-20018 Retail Building CR-6A, CRA, CR-B, CR-C
- Project No. PLN21-20063 Retail Building CR-1 – Chili's
- Project No. PLN21-20068 Retail Building CR-2 – Olive Garden
- Project No. PLN22-20025 Planning Area-4 Development

Project Map:



Current Status:

- Various buildings complete, operating and under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
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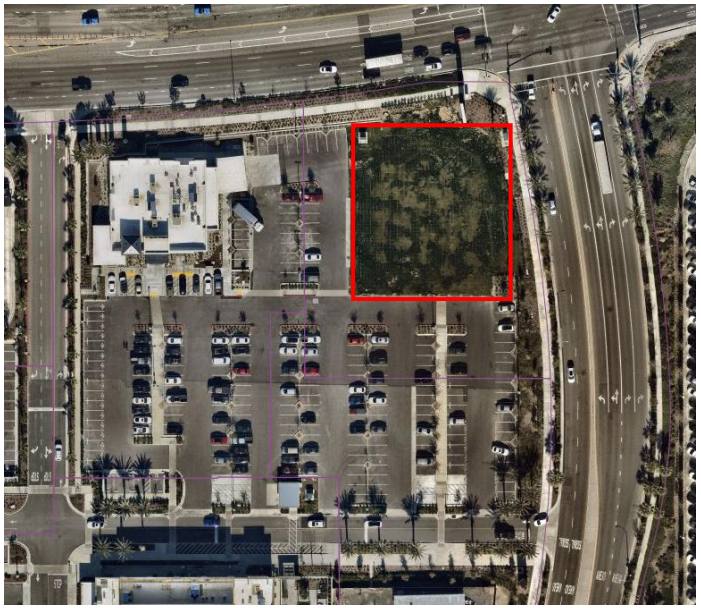
GCC CR-1 DR (MAP ID: GCC.10)

Project:	GCC CR-1 DR
Project No.:	PLN21-20063_DR012
Project Location:	Southwest corner of Goodman Way and Cantu-Galleano Ranch Rd. ; Assessor Parcel Number (APN) 160-510-023
Project Description:	**Major Development Review** for the development of a 5,213 square foot PAD building (CR-1) and 575 square foot outdoor patio for a total of 5,788 square feet for a proposed restaurant building dba Chili's.
Planner:	Jamie K. Cerda

Notes:

- Received application on November 17, 2021.
- On January 19, 2022, PLN21-20063 was approved by the Planning Commission subject to conditions of approval.

Project Map:



Current Status:

- Project on hold per developer.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
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GCC CR-1 Chili's Alcohol CUP and VAR (MAP ID: GCC.13)

Project:	GCC CR-1 Alcohol CUP and VAR
Project No.:	PLN22-20010_CUP002_VAR001
Project Location:	Southeast corner of Hamner Avenue and Cantu-Galleano Ranch Rd.; Assessor Parcel Number (APN) 160-510-023
Project Description:	**Conditional Use Permit** for the on-sale and consumption of beer, wine, and distilled spirits at a 7,757 square foot PAD building (CR-1) restaurant (dba Chili's). **Variance** to request modification to the sign standards to allow four (4) tenant wall signs.
Planner:	Jamie K. Cerda

Notes:

- Received application on March 7, 2022
- On April 20, 2022, PLN22-20012 was approved by the Planning Commission subject to conditions of approval.

Project Map:



Current Status:

- Project is currently on hold per developer.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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GCC Planning Area 4 DR and TPM (MAP ID: GCC.15)

Project:	GCC Planning Area 4 DR and TPM
Project No.:	PLN22-20025 CR-13 and TPM No. 38438, PLN22-20056 DR CR-14, PLN22-20057 DR CR-15, PLN22-20058 DR CR-16, PLN22-20059 DR CR-17
Project Location:	Northeast corner of Hamner Avenue and Goodman Way (Assessor Parcel Number: 160-510-010, -011, -012, -013, -015, -016, and -033)
Project Description:	**Major Development Review (DR)** for development of five (5) business park buildings ranging in size from 40,000 sf to 59,987 sf in Planning Area 4 of the Goodman Commerce Center in Eastvale Specific Plan. **TPM No. 38438:** For the reconfiguration of a 14.4-acre site into five (5) individual parcels.
Planner:	Allen Lim

Notes:

- Received application on April 20, 2022.
- Project was deemed incomplete by Staff on May 19, 2022.
- Received resubmittal on August 8, 2022.
- Project was deemed incomplete by Staff on August 24, 2022.
- Project was deemed complete by Staff on September 28, 2022.
- On October 19,2022, the Planning Commission approved PLN22-20025, -56 through -59 subject to conditions of approval.

Project Map:



Current Status:

- Building Permits issued on November 28,2023 and are currently under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Hamner Place Pad-2 (MAP ID: HPLC.4)

Project:	PAD-2 at Hamner Place
Project No.	PLN24-20019_MDR008_CUP001
Project Location:	Northeast corner of Schleisman Rd. and of Hamner Ave.
Project Description:	New 4,250 sq. ft. multi-tenant shops with pick-up drive-up lane.
Planner:	Allen Lim

Notes:

- Received application on 2.26.24
- On March 21, 2024 an incomplete letter was sent out to the applicant, awaiting resubmittal.
- May 1, 2024 applicant resubmitted.
- June 3, 2024 the application was deemed complete and tentatively scheduled for July planning commission.
- On July 17, 2024 The Planning Commission approved the entitlements for PLN24-20019 and is subject to conditions of approval.

Project Map:



Current Status:

- The Shell for pad 2 and site improvements are currently under review with Building and Public Works Divisions.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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The Ranch (MAP ID: RNCH)

Project:	The Ranch
Project No.	15-0783
Project Location:	Northeast and southeast corners of Hellman and future Limonite (Kimball) Avenues, west of Cucamonga Creek Channel. Moons Site (APNs: 144-010-008-0, 144-101-013-4) and Rodriguez Site (APN: 144-010-009-1)
Project Description:	• Specific Plan Amendment to modify boundaries for Planning Areas 1 through 6, land use designation for Planning Area 5, and revisions to allowable uses. No revisions to Planning Areas 7 through 9. • Major Development Review for six (6) industrial buildings totaling 985,000 square feet on six (6) parcels. • Tentative Parcel Map No. 36787 to subdivide approximately 97 gross acres into 14 legal parcels. CEQA: EIR Addendum
Planner:	Allen Lim

Notes:

- Approved by City Council on December 9, 2015.
- February 19, 2016, a new owner purchased the six (6) industrial lots.
- Monument Sign approved on February 1, 2018.
- See the following projects for more recent activity at The Ranch:
  - Project No. PLN18-20007: Eastvale 88,000 square-foot Warehouse building in Planning Area 3. (RNCH.1)
  - Project No. PLN18-20050: Howard Industrial -Major Development Review, Tentative Map for Planning Areas 7, 8 and 9 (RNCH.2)
  - Project No. PLN19-20034: Transwestern – Major Development Review, Amendment to Tentative Parcel Map for Planning Areas 7, 8, and 9 (RNCH.3)
  - Project No. PLN19-20035: Summit Development – Major Development Review for Planning Area 6 (RNCH.4)

Project Map



Current Status:

- Approved.
- Continue discussing potential development for commercial portion.
- Construction of six industrial/warehouse buildings are completed.
- A resolution for the Final Cancellation of the Williamson Act Contract for the Rodriguez Site was adopted by City Council meeting on July 24, 2019.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
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Beyond Food Mart at The Ranch (MAP ID: RNCH.5)

Project:	Beyond Food Mart Major Development Review and Conditional Use Permit(s)
Project No.	PLN21-20014_DR002_CUP003
Project Location:	Northeast corner of Hellman Ave. and Limonite Ave. at The Ranch Specific Plan (Assessor Parcel Number: 144-010-077)
Project Description:	**Major Development Review,** for the construction of a new 7,150 square-foot Beyond Food Mart with a single lane drive-through operation, a 5,177 square-foot canopy, and a 2,312 square-foot drive-through carwash **Conditional Use Permit,** for the operation of automobile service station with concurrent off sale of beer and wine (Type 20) **Conditional Use Permit,** for the operation of a C-Store with a drive-through **Conditional Use Permit,** for the operation of a drive-through carwash
Planner:	Allen Lim

Notes:

- Received application on 3.17.21
- On November 17, 2021, the Planning Commission approved project PLN21-20014, subject to conditions of approval.

Project Map:



Current Status:

- The Building Permits have been issued and is currently under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
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The Ranch TPM No. 38114 (MAP ID: RNCH.6)

Project:	The Ranch TPM No. 38114
Project No.	PLN22-20009_TPM38114
Project Location:	Northeast corner of Limonite Avenue and Hellman Avenue; Assessor Parcel Number (APN) 144-010-077
Project Description:	**Tentative Parcel Map** to subdivide one (1) 10.68 acres into two (2) individual parcels.
Planner:	Allen Lim

Notes:

- Received application on March 2, 2022
- On May 18th, 2022, the Planning Commission approved project PLN22-20009, subject to conditions of approval.
- On November 17, 2021, the Planning Commission approved project **PLN21-20014.**

Project Map:



Current Status:

The Building Permits of PLN21-20014 have been issued and is currently under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

Hotel Suites (HPLC.1)

Project:	Hotel - Staybridge Suites at Hamner Place
Project No.	PLN19-20023
Project Location:	Southeast corner of Hamner Avenue and Schleisman Road; (Assessor Parcel Number: 152-050-050)
Project Description:	**Major Development Review** for a hotel and a banquet facility and a **Conditional Use Permit** for the sale of alcohol for on-site consumption.
Planner:	Allen Lim

Notes:

- Received application on June 6, 2019.

See the following project for more information:

- PLN17-20015: Hamner Place (former Polopolus Property)
- Approved by Planning Commission on June 19, 2019.
- Building plans received for review on January 30, 2020.

Project Map:



Current Status:

- The Staybridge Suites has obtained Certificate of Occupancy and is fully operational.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Hamner Place Retail Suites D.R (HPLC.3)

Project:	Hamner Place Retail Suites – Major Development Review (DR)
Project No.	PLN19-20053
Project Location:	Southeast corner of Hamner Avenue and Schleisman Road; (Assessor's Parcel Number: 152-060-003)
Project Description:	**Major Development Review** for a multi-tenant building to include retail suites and a potential restaurant. The restaurant is proposed to be 5,910 square feet and the shops portion of the building is 2,270 square feet for a total building floor area of 9,190 square feet.
Planner:	Allen Lim

Notes:

- Received application on November 21, 2019.
- On December 18, 2019, the Planning Commission approved project PLN19-20053 subject to conditions of approval.

Project Map:



Current Status:

- The Building is currently operational.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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The Merge (MAP ID: MRG)

Project:	The Merge Retail and Industrial Center
Project No.	PLN18-20026
Project Location:	Northeast corner of Limonite Avenue and Archibald Avenue; APN: 164-010-019-6
Project Description:	**Major Development Review**, **Tentative Parcel Map**, and **Variance** for the development of a retail and light industrial center on an approximately 26-acre site, and various **Conditional Use Permits** for certain uses.
Planner:	Allen Lim

Notes:

- Received application on May 24, 2018; Development plans received on June 26, 2018.
- Draft Environmental Impact Report (EIR) available for a 45-day public review period from September 18, 2018, to November 2, 2018.
- Condition Use Permits application submitted on October 1, 2018.
- November 21, 2018, Planning Commission recommended approval of all applications, plus added new conditions for the Major Development Review application.
- December 12, 2018, City Council certified the EIR and approved all applications as recommended by the Planning Commission including the new conditions recommended by the Planning Commission, plus the Council added one new condition for the Major Development Review. January 9, 2019, City Council conducted second reading of ordinance for Change of Zone.
- Construction building plans for industrial buildings 1-6 approved by Planning 11.25.19
- Sprouts (Major 1) is completed and in operation 10.28.20

Project Map:



Current Status:

- The Merge Industrial and Retail have completed construction.
- Pad 2 is currently under Tenant Improvements with the Building Division.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Walmart (MAP ID: WMT)

Project:	Walmart – Eastvale Crossings
Project No.	PLN12-0051, PLN21-20021_DR002 (Ref. PLN12-0051)
Project Location:	Southeast corner of Limonite and Archibald Avenues (APN 144-030-039)
Project Description:	General Plan Amendment, Change of Zone, Major Development Review, five Conditional Use Permits, Tentative Tract Map No. 35061, and Variance for the development of a 177,000 +/- sq. ft. retail store and several outparcels on 24.78 acres. CEQA: Environmental Impact Report (certified) **Major Development Review** for the construction of a Walmart gasoline service station with an ancillary 1,620 square foot convenience store located on Parcel 2 of Tentative Tract Map No. 35061
Planner:	Jamie K. Cerda

Notes:

- City Council approval on April 26, 2017.
- Project was reviewed by the Riverside County Airport Land Use Commission and received a conditional finding of conformance with the Chino Airport Land Use Compatibility Plan.
- Public review of DEIR available from September 27 to November 17, 2016.
- On March 15, 2017, the Planning Commission reviewed and recommended approval of the project to City Council.
- City Council public hearing on April 12, 2017, with a staff recommendation to continue the hearing to April 26, 2017.
- City Council approval on April 26, 2017. Notice of Determination recorded on April 27, 2017.
- Waiting for applicant to submit construction plans.
- Extension of Time (PLN19-20052) has been approved by the Planning Commission on 1.15.2020
- Extension of Time (PLN19-20052) has been approved by the Planning Commission on 1.15.2020
- Extension of Time (PLN21-20021 MDR002) has been approved by the planning department on 11.02.2021.
- Minor Development Review (PLN22-20012 MDR002) has been approved by the planning department on 1.24.2023
- Extension of Time (PLN22-20017 EOT 001) has been approved by the planning department on 10.20.2021
- On April 26, 2023, the City Council approved Final Map TR35061.

Project Map:



Current Status:

- The site is actively under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Mister Carwash (MAP ID: WMT)

Project:	Mister Car Wash
Project No.	PLN24-20024_DR001_CUP002
Project Location:	Southeast corner of Limonite Ave. and of Archibald Ave. (APN:144030039)
Project Description:	New 5,435 sq. ft. building with 3 queuing lanes funneling into a 130' tunnel which leads out to 26 vacuum stalls.
Planner:	Steven D. Fowler

Notes:

- Received application on 3.25.24
- On April 23, 2024 an incomplete letter was sent to the applicant
- On June 11, 2024 resubmittal was received.
- On July 10, 2024 an incomplete letter was sent to the applicant
- On August 20, 2024, the Planning Division deemed the project complete
- On September 18, 2024 the Planning Commission approved project PLN24-20024, subject to conditions of approval.

Project Map:



Current Status:

- Building Division has construction plans ready to issue.
- Public Works department is currently awaiting submittal for grading.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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McDonanlds (MAP ID: WMT)

Project:	McDonalds
Project No.	PLN24-20089_DR009
Project Location:	Southeast corner of Limonite Ave. and of Archibald Ave. (APN:144030039)
Project Description:	New 4,375 sq. ft. building with drive thru lane.
Planner:	Steven D. Fowler

Notes:

- Received application on 10.15.24
- An incomplete letter was sent out to the applicant on 11.14.24
- On 1.6.25 the project was resubmitted for second round of review.
- The Project was deemed complete and scheduled for the 2.19.25 planning Commission.

Project Map:



Current Status:

- On February 19, 2025 Planning Commission approved entitlements for PLN24-20089 and is subject to conditions of approval.
- Currently awaiting construction documents to be submitted with the Building Division and Public Works Department .

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Better Buzz (MAP ID: WMT)

Project:	Better Buzz
Project No.	PLN24-20091_MDR015
Project Location:	Southeast corner of Limonite Ave. and of Archibald Ave. (APN:144030039)
Project Description:	New 1,770 sq. ft. building with patio and drive-thru
Planner:	Steven D. Fowler

Notes:

- Received application on 10.28.24
- On 11.21.24 an incomplete letter was sent out to the applicant.
- On 1.21.25 the applicant resubmitted the project for second round of review.
- The Project was deemed complete and scheduled for the 2.19.25 planning Commission.

Project Map:



Current Status:

- On February 19, 2025 Planning Commission approved entitlements for PLN24-20091 and is subject to conditions of approval.
- Currently awaiting construction documents to be submitted with the Building Division and Public Works Department.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Dunkin Donuts and Carwash DR and CUP (MAP ID: DUNK)

Project:	Dunkin Donuts and Carwash DR and CUP
Project No.	PLN21-20030_DR_003_CUP_007 Dunkin Donuts and PLN21-20060_DR006_CUP011 American Express Carwash
Project Location:	Northwest corner of Schleisman and Hamner Ave.; Assessor Parcel Number (APN) 152-341-017
Project Description:	**Major Development Review (DR):** For the development of a 3,400 square foot multi-tenant building where 1,600 square feet will be for a Dunkin Donuts with a drive-through and outdoor patio and where 1,800 square feet will be for a bistro with an outdoor patio. (PLN21-20030) **Major Development Review (DR)**: for the development of a 5,113 square foot car/truck wash with 18 vacuum stalls. (PLN21-20060) **Conditional Use Permit (CUP):** To allow the operation of a drive-through for the proposed coffee shop. (PLN21-20030) **Conditional Use Permit (CUP)**: To allow the operation of a drive-through for the proposed car/truck wash use. (PLN21-20060)
Planner:	Jamie K. Cerda

Notes:

- Received application on 5.26.21
- Applicant has provided updated submittal package 5.9.22
- On July 20, 2022 the Planning Commission approved project PLN21-20030 and PLN21-20060, subject to conditions of approval.
- The building division has approved constructions plans.

Project Map:



Current Status:

- All-American Carwash is currently under constructions.
- Dunkin Donuts have pulled permits currently awaiting to being construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Archibald and Chandler Retail (MAP ID: ACR)

Project:	Archibald and Chandler Retail Center
Project No.	PLN23-20018 TPM #37653, PLN23-20019 MDR004 CUP002, PLN23-20020 MDR005 CUP003, PLN23-20020 MDR006
Project Location:	Northwest corner of Archibald and Chandler; (Assessor Parcel Numbers: 144-130-004, 144-130-011, 144-130-012, 144-130-013)
Project Description:	**Tentative Parcel Map (37653)** to parcelize a 2.71-acre site into three (3) parcels. **Minor Development Review** for a commercial development on a 0.81-acre parcel comprised of a 3,500 square feet sit-down restaurant (Zendejas) **Minor Development Review** for a commercial development on a 1.18-acre parcel a 3,598 square feet drive-through carwash (Quick Quack Express Carwash) **Minor Development Review** for a commercial development on a 0.75-acre parcel with a 950 square feet drive-through coffee shop (Dutch Bros). **Conditional Use Permit** for the operation of a drive-through coffee shop. **Conditional Use Permit** for the operation of a drive-through carwash.
Planner:	Allen Lim

Notes:

- Received application on 04.11.23
- On 5/9/2023 comments were returned to the applicant.
- On July 27, 2023 the project was resubmitted.
- On August 24, 2023 a correction letter was sent out to the applicant.
- Application deemed complete scheduled Planning Commission date of October 18, 2023.
- The item was continued to the November 15, 2023 Planning Commission.
- The Item was continued to the December 20,2023 Planning Commissio**n**.
- On December 20, 2023, the Planning Commission approved entitlements for PLN23-20018 TPM #37653, PLN23-20019 MDR004 CUP002, PLN23-20020 MDR005 CUP003, PLN23-20020 MDR006

Project Map:



Current Status:

- Awaiting submittal of Final parcel map to Public Works Department.
- Quick Quack has submitted for grading to public works and construction documents to building division.
- Dutch Bros has submitted for grading to public works and construction documents to building division.
- Overall site grading has been submitted to public works.
- Zendejas has submitted construction documents for plan check with the building division.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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951.361.0900

Magnolia Ranch

Project:	Magnolia Ranch (Woodside)
Project No.	PLN23-20043 DR005
Project Location:	Southwest of Schleisman Rd. and Scholar Way. North of Orange St.
Project Description:	**Development Review** for the development of 41 traditional single-family homes on lots of a minimum 55' x 90 (4950 SF)
Planner:	Jamie K. Cerda

Notes:

- Application submitted on July 6, 2023.
- Application was deemed incomplete on July 6, 2023
- Application deemed complete scheduled Planning Commission date of October 18, 2023
- On October 18, 2023 Planning Commission approved entitlements for PLN23-20043 and is subject to conditions of approval.

Project Map:



Current Status:

- Building plans were issued on 2.13.2025 and the project is currently under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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951.361.0900

St. Oscar Romero Modular Buildings

Project:	St. Oscar Romero's Modular Buildings
Project No.	PLN23-20038 MDR008
Project Location:	Northwest corner of Chandler St. and of Selby Ave. North of Retriever St.
Project Description:	**Minor Development Review** for the development of 2 temporary 1,059 square feet (total of 2,118 square feet) Modular Office Building with accessible stairs, ramps, restrooms, parking and connected walkway.
Planner:	Steven D. Fowler

Notes:

- Application submitted on July 6, 2023.
- Application was deemed incomplete on July 6, 2023
- Application was deemed incomplete on July 24, 2023
- Application was resubmitted on August 21, 2023
- Application was deemed complete on September 7, 2023.

Project Map:



Current Status:

- Building Division has issued permits for construction and is currently under construction.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

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Future

The Leal Plan (MAP ID: LEAL)

Project:	Leal Master Plan
Project No.	Special Project
Project Location:	160 acres ± at the northwest corner of Hamner and Limonite Avenue, east of Scholar Way, and south of 58th Street.
Project Description:	This Master Plan describes the community's vision for the project area, identifies appropriate land uses, and includes the development standards that are necessary to achieve the vision, defines the character of the project's development, lists the steps involved with the development process, and provides the project's implementation plan. CEQA: EIR
Planner:	Jamie K. Cerda

Notes:

- In September 16, 2016, the Planning Commission reviewed and recommended approval to City Council. May 2017 – City has been asked by property owner's representative to postpone action on the project while issues related to the estate of Brad Leal are resolved August 30, 2017 – City met with Leal family and prospective developer to discuss processing and timing.
- City Council Approved Master Plan and Final Environmental Impact Report on December 13, 2017.
- Adopted by City Council on December 13, 2017.
- Staff continues to coordinate with the property owners as they seek a developer(s) for the site.
- Planning Commission recommend approval to City Council on April 26, 2022
- On May 11, 2022, the City Council approved the Leal Masterplan Amendment (PLN21-20039) and related entitlements (DA, TTM 382290, DR PLN22-20020)
- On May 25, 2022, the City Council approved the second reading of the ordinances for the Leal Master Plan Amendment (PLN21-20039) and Development Agreement (PLN22-20039).
- On August 24, 2022**,** Lot Line Adjustment (2022-001) was recorded with the Assessor-County Clerk Recorder.

Project Map:



Current Status:

- Construction documents are currently under review for phase A of Leal Master Plan. Awaiting submission of entitlements application for phase B.

1. New projects are added to the bottom of the list as they are submitted.
2. Projects that have been completed for more than one year are removed from this list.
3. Highlighted Text =Updated Information

CITY OF EASTVALE

AGENDA STAFF REPORT

Planning Commission Meeting
PUBLIC HEARINGS
Agenda Item No. 8.1
May 21, 2025

PLN24-20035 Major Development Review – Quarterra Phase B

Prepared By:

Jamie K. Cerda, AICP, Principal Planner

Recommended Action(s)

Staff recommends that the Planning Commission take the following actions:

1. Find the project consistent with the Addendum to the Certified Program Environmental Impact Report prepared for the Leal Master Plan, and that all impacts were adequately analyzed pursuant to applicable legal standards in the previously adopted Certified Program Environmental Impact Report and subsequent addenda, in accordance with State CEQA Guidelines Section 15162; and
2. Approve PLN24-20035 a Major Development Review for the master site planning and architecture of Planning Area 4 (PA 4) of the Leal Master Plan to accommodate a proposed 360-unit multiple-family residential community, with associated pool/recreational facility, parking areas, landscaping, and open space amenities, subject to the recommended conditions of approval.

Summary

The applicant (Quarterra Multifamily Communities, LLC.) is requesting approval of a Major Development Review (DR) application for the master site planning and architecture of Planning Area 4 (10.6 acres) of the Leal Master Plan, located at the northwest corner of Limonite and Hamner Avenues, to accommodate a proposed 360-unit multiple-family residential community, with associated pool/recreational facility, parking areas, landscaping and open space amenities. The request is consistent with the General Plan, Leal Master Plan, applicable Zoning Code regulations, and required findings.

Background

Since the adoption of the City's first General Plan in 2012, the 158.6 acre former dairy and agricultural site located north of Limonite Avenue, south of 58th Street, west of Hamner Avenue, and east of Scholar Way, commonly referred to as "The Leal Property," has been identified as the centerpiece of Eastvale's future downtown, encouraging a mix of uses including retail, residential, civic, and recreation/entertainment.

Beginning in 2013, City Council initiated a long-range planning process for the property culminating in the adoption of the Leal Master Plan in 2017. On May 11, 2022, an amendment to the Leal Master Plan (LMP) was approved by City Council to refine land use and zoning designations, establish a project-wide land use, circulation, and infrastructure plan, determine project-wide development standards, design guidelines, and site characteristics. The LMP amendment allowed a maximum of 2,500 residential units and up to 595,000 square feet of commercial development. In addition, City Council approved a Development Agreement (DA) between the City and The New Home Company (TNHC) designating a 16-acre area to develop under a future Option Agreement (OA) for the development of a city hall building, outdoor amphitheater, civic park, police station, public library, hotel, office uses, and a variety of restaurants and retail uses totaling 495,000 square feet, inclusive of the total commercial development allowed by the LMP amendment. To initiate development on the site, the City Council also approved Tentative Tract Map 38290 (A Map) for the creation of 14 buildable lots, 19 lots for infrastructure purposes, trails, and open space, as well as a Major Development Review (MDR) to facilitate the development of the LMP.

On October 18, 2023, TNHC received Planning Commission approval to subdivide 69.8 acres of Tentative Tract Map 38290 (A map) to create 65 buildable lots and 19 lettered lots for condominium, multi-family residential, commercial, civic, open space, and public right-of-way purposes (B map). Additionally, TNHC received DR approvals for the Eastvale Square residential communities PA 1, PA 6, PA 7A, PA 8 along with the overall site and landscape design of the public spaces within Phase A of Eastvale Square.

The applicant (Quarterra Multifamily Communities, LLC.) entered into a purchase and sale agreement with TNHC to sell PA 2 (10.41 acres) and PA 4 (10.6 acres) of the 158.6-acre project site to the applicant for a subsequent multi-family residential development.

On February 24, 2024, Quarterra Multifamily Communities, LLC. Received approval from the Planning Commission for the master site planning and architecture of PA 2 of the Leal Master Plan to accommodate a proposed 320-unit multiple-family residential community, with associated pool/recreational facility, parking areas, landscaping, and open space amenities.

At this time, the applicant is request approval from the Planning Commission for the master site planning and architecture of PA 4 of the Leal Master Plan to accommodate a proposed 360-units multiple-family residential community, with associated pool/recreational facility, parking areas, landscaping and open space amenities. Pursuant to Section 120.02.010 of the Eastvale Zoning Code, DR approval by the Planning Commission is required for the new construction of multifamily residential buildings or structures with twenty (20) or more units.

Location

The overall Leal Master Plan site is located north of Limonite Avenue, south of 58th Street, west of Hamner Avenue, and east of Scholar Way. More specifically, the proposed project is located within PA 4 of the Leal Master Plan (APN: 164-030-044). The project site is shown on **Attachment 1**.

Analysis

General Plan and Zoning Consistency

The subject property is classified as the Downtown West Policy Area in the Land Use Element of the Eastvale General Plan 2040. The LMP Amendment approved in 2022 provided the next stage in refinement of the development plan and thus refined the proposed land use mix, intensities and established the zoning for the site. The LMP Amendment includes two residential land use categories, Medium-Density and High-Density. The two residential land use types include density ranges provided in dwelling units per acre and a general description of the type of residential projects associated with each residential category. The LMP Amendment distinguishes between the two residential densities by location.

The High-Density Residential land use area is located within the Downtown area (i.e., PA 2 and PA 4) and consists of either vertical or horizontal mixed use and primarily consists of multiple-family residential. A maximum of 700 dwelling units are planned within the approximate 21 residential acres of Downtown equating to a density of approximately 33.33 dwelling units per acre, consistent with the High-Density Residential category (22-40 dwelling units per acre). Specific to the proposed project, PA 4 has a proposed density of 33.96 dwelling units per acre (360 units ÷ 10.6 acres) in accordance with the General Plan and LMP.

Further, the subject property was identified in the 6th Cycle 2021-2029 Housing Element and Implementation Programs, certified on June 21, 2022, by the State Department of Housing and Community Development (HCD), as a site to support Regional Housing Needs Assessment (RHNA) housing growth targets. The Housing Element allocated 2,500 units within the Leal Master Plan and were assumed to include both single-family detached and attached, and multiple-family residential housing to promote diverse and dynamic neighborhoods. The residential product types were designed to range from Medium Density (14-21 units per acre) to High Density (20-40 units per acre). Therefore, the proposed project is consistent with the High Density designation of the Leal Master Plan and the General Plan.

Major Development Review (MDR)

To safeguard and enhance the appearance and quality of development in Eastvale, Section 120.02.010 of the Eastvale Zoning Code requires DR approval for any new multifamily residential building or structure with twenty or more units. This scope of review is outlined in the aforementioned code section, and includes, but is not limited to, exterior design, materials, textures, colors, as well as ensuring the proposed structures will properly relate to the site and the surrounding area.

Additionally, the LMP Amendment (Chapter 2 - Project Character) identifies required development standards and key architectural and site design elements that should be considered in all residential areas within the LMP community. These requirements and guidelines are intended to establish a diversified, yet cohesive level of quality in home design that reflects the character of the surrounding environment while allowing for flexibility in design. Pursuant to Section 120.02.010 of the Eastvale Zoning Code, the applicant is requesting approval of the site planning and architectural

design of PA 2 within Phase A of the Eastvale Square community.

Staff has reviewed the proposed project for compliance with the applicable development standards and required findings for a Major Development Review as set forth in Section 120.02.010 (C)(6) of the Eastvale Zoning Code as well as the LMP Amendment. As proposed, the project complies with both regulating documents.

Architecture and Treatments
As depicted on the site plan (**Sheet A1.1 of Attachment 4**), the project includes twelve (12) three-story buildings with eight (8) different building types for a total of 360 units and one 7,556 square foot community recreation and leasing office building. The site is bound by Planning Area 9 to the north, Lot 36 to the South, Hamner Avenue to the east, and Premier Place to the west.

In terms of architecture, the applicant is proposing a contemporary agrarian architectural style for the project. Agrarian architecture takes cues from the layout and scale of a farmstead. Typical elements include a rectangular shape designed primarily for functionality, a mix of materials, specifically natural materials such as wood and stone, heavy use of windows to ensure that the building is filled with natural light, and large expansive porches. The project proposes a contemporary interpretation of this style.

The architectural style incorporates a gable roof, organizing the scale and massing of the apartment buildings, allowing for a more contemporary roof pitch that sets the tone for contrasting white and gray walls. The simplified rectangular massing displays surfaces finished with stucco, vertical board and batten siding, and horizontal cement fiber siding. The building elevations include ample use of windows and include decorative wood and metal balcony railings along with metal awnings at building entrances. All elevations have been designed to create variation and visual interest with the use of various materials and colors. Buildings provide transitional spaces such as porches and covered entries and are accentuated with a minimum of three materials and three colors. Overall, staff is supportive of the proposed elevations as the design meets the minimum standard of design as set by the LMP.

Unit Size per Plan Type
The applicant proposes a total of seven (7) different unit types as described in the following table:

Table 1: Unit Summary

PLAN	LIVING AREA SQUARE FOOTAGE	NO. OF BEDROOMS	NO. OF BATHROOMS	PRIVATE OPEN SPACE	NUMBER WITHIN PROJECT
A1	700 sq. ft.	1	1	61 sq. ft.	54
A2	825 sq. ft.	1	1	53 sq. ft.	114
A1A	842 sq. ft.	1	1	61 sq. ft.	45
B1	1,053 sq. ft.	2	2	64 sq. ft.	108
B2	1,061 sq. ft.	2	2	51 sq. ft.	24
C1	1,414 sq. ft.	3	2	58 sq. ft.	9
C2	1,309 sq. ft.	3	2	54 sq. ft.	6

Residential units range in size from 700 to 1,309 square feet and consist of one, two, and three-bedrooms. The allocation of units by bedroom count includes 59 percent one-bedroom, 37 percent two-bedroom, and 4 percent three-bedroom. The proposed project offers a highly sought after housing product not currently found within the city and fulfills the City's strategic plan goal to diversify the housing stock with more options for residents. Additionally, the project is consistent with, and implements, the 6th Cycle 2021-2029 Housing Element and Implementation Programs. As such, staff supports the applicant's request.

Community Recreation
To serve residents, a 7,556 square foot community recreation and leasing building is also proposed as part of the project. The building is situated at the community entrance accessed via Premier Place and includes a leasing office, fitness center, mailroom, co-working space, clubhouse, and restroom facility for the adjacent pool and spa. The building, like the residential units, exhibits a contemporary agrarian architectural style with simplified rectangular massing, surfaces finished with stucco, vertical board and batten siding, and horizontal cement fiber siding. The building elevations also include ample use of windows, and metal awnings at building entrances. In addition to the community recreation and leasing building, residents have outdoor recreational amenities such as a pool, spa, outdoor cabanas, barbeques, a double-sided fireplace and table games such as foosball.

Access and Parking
The main entry driveway is proposed to take access from Premier Place, aligning with a future Downtown/Civic Center driveway for the outdoor amphitheater parking lot. This main entry features a motor court with vehicular gates, call box, accent trees and decorative paving. A secondary driveway located south of the main driveway also is proposed to take access from Premier Place with a vehicular gate, accent trees and decorative paving.
The site plan provides a total of 631 parking spaces. Parking is provided within 223 garage spaces, 155 uncovered standard surface spaces, 91 tandem parking spaces, and 162 carport spaces. Pursuant to Condition No. 6 and 7 of the Leal Master Plan Major Development Review approved in May 2022 (PLN22-20020) applicants are required to provide a site-specific parking study and parking management plan to demonstrate how the proposed development can adequately accommodate the parking demand on-site and how parking will be continually managed to ensure parking issues do not occur as a result of the development. To satisfy this condition, the applicant provided a Parking Conformance Letter (**Attachment 5**) prepared by Kimley-Horn, demonstrating the proposed project exceeds both the adopted parking ratios in the Leal Master Plan and the City of Eastvale Municipal Code.

In the Parking Conformance Letter, parking rates were gathered and analyzed from comparable multi-family developments approved within the last four (4) years to determine appropriate parking rates for the proposed project. Comparable developments were determined by similarities in product type, regional location, and adjacency to similar uses to the proposed project. By applying the filtering criteria outlined, the comparable multi-family developments assisted in crafting the parking ratios provided below.

Table 2: Parking Provided Per Leal Master Plan (**Amendment 1**), demonstrates that the project provides an excess of 136 parking spaces, which is 27 percent more parking than is required per the approved Leal Master Plan parking ratios. Further, Table 3: Parking Provided Per Eastvale Municipal

Code demonstrates that the project provides an excess of 26 parking spaces or 4 percent above the city-wide multi-family requirements.

*Table 2: Parking Provided Per Leal Master Plan (**Amendment 1**)*

DWELLING UNIT TYPE	NUMBER OF UNITS	LEAL MASTER PLAN PARKIG RATE	REQUIRED PARKING	PROVIDED PARKING RATE	PARKING PROVIDED	SURPLUS/DEFICIT PARKING
1- Bedroom	213	1.25	267	1.35	288	21
2- Bedroom	132	1.5	198	2.27	300	102
3-Bedroom	15	2.0	30	2.88	43	13
Total	360	n/a	495	n/a	631	136

Table 3: Parking Provided Per Eastvale Municipal Code

DWELLING UNIT TYPE	NUMBER OF UNITS	LEAL MASTER PLAN PARKING RATE	REQUIRED PARKING	PROVIDED PARKING RATE	PARKING PROVIDED	SURPLUS/DEFICIT PARKING
1 -Bedroom	213	1.25	267	1.35	288	21
2- Bedroom	132	2.25	297	2.27	300	3
3- Bedroom	15	2.75	41	2.88	43	2
Total	360	n/a	605	n/a	631	26

As reflected in *Table 2* and *Table 3* above, the proposed parking ratios are higher than the parking requirements of both the Leal Master Plan and the Eastvale Municipal Code. In the past, the City has stressed the importance of ample parking to ensure parking issues do not occur as a result of the development. As such, staff recommends the proposed parking ratios to ensure adequate parking is provided.

To further ensure sufficient parking is provided and maintained on-site, the applicant has prepared a robust parking management plan (**Attachment 5**). The parking management plan requires all residential parking to be located on-site and assigned within lease agreements. The 631 parking spaces will include both residential and guest spaces. All residential parking will be secured parking protected by two access gates. Resident parking spaces are assigned, with the guest parking clearly identified. Additionally, all tandem garages spaces are assigned to two and three-bedroom units only to ensure that two separate units are not beholden to one another. Parking management is enforced by the applicant's regional manager, who works with on-site staff to adhere to company-wide parking management standards.

Parking agreements are included in all lease agreements to ensure compliance from all residents and guests. All vehicles parked on the project site are required to abide by a series of rules which include

but are not limited to:

- Requiring all vehicles to be registered with management, this includes rental/borrowed and guest/visitor vehicles when parked on-site;
- Requiring all vehicles to be currently registered with the Department of Motor Vehicles and insured;
- Prohibiting the parking, storage, or driving of a commercial vehicle, RV, boat, trailer, ATV, golf cart, or similar vehicle on-site, parking in designated stalls or subject to tow; and
- Requiring all garages to be used for the sole purpose of housing parked vehicles (i.e., not for storage purposes).

On-site management and third-party security will monitor surface parking and perform garage audits to ensure that assigned garages are not being used for storage purposes and that all vehicles are complying with the terms of the parking agreement. Staff has included compliance with the parking management plan, as stipulated in the Parking Conformance Letter (**Attachment 5**) as a condition of approval.

It should be noted, residential collector streets "A, " "B, " and "C," now referred to as Civita Parkway, Bootsma Boulevard, and Premier Place, as well as the private recreation/park parking areas will include signage prohibiting overnight parking (10:00 p.m. to 6:00 a.m.) by any vehicle, including authorized guest and resident vehicles. Violators will be subject to citation and/or towing.

Finally, the City Traffic Engineer and Riverside County Fire Department have reviewed the site plan and neither party found hazardous design features or other on-site circulation constraints proposed.

Landscape and Wall Plan

The preliminary landscape plan depicts the project as fully enclosed through a combination of both a six foot (6') high split face block wall and a five foot (5') high tubular steel fence. Fencing along the eastern boundary of the site consists of six foot (6') split face block, consistent with the fencing proposed by The New Home Company, along Hamner Avenue, immediately to the north of the project site. The remainder of the site is proposed to include five foot (5') high tubular steel fencing with several small segments along Premier Place (western boundary) and portions of the northern site boundary where a combination retaining wall/tubular steel fence is proposed.

Staff is generally supportive of the proposed wall and fence plan. However, staff recommends that the applicant enclose and screen the southern boundary of the site with a six foot (6') split face block wall due to the unknown future development potential of the mixed-use Lot No. 36 of Tentative Tract Map 38595. Currently, the 1.72-acre lot located directly south of the project site has no future development plans; however, it falls within the Mixed-Use land use category of the Leal Master Plan. In the event the lot is developed in the future with a commercial use or parking structure, it is in the best interest of the future residents of the proposed project that the shared property line be fully screened to mitigate any land use impacts that may be associated with the future use. As such, staff has included a condition requiring the southern site boundary be enclosed with a six foot (6') high split face block wall, consistent with the proposed fencing along the eastern boundary.

Additionally, two vehicular access gates can be found off Premier Place with decorative concrete

pavers and accent planting. Internal to the project site is also a five-foot high glass fence to enclose the outdoor pool and spa amenities.

In terms of landscaping, the applicant proposes to heavily landscape the site with a variety of both accent and screen trees, shrubs and hedges, and groundcovers. The planting legend references *Holly Oak, Australian Willow, Chinese Flame, Fruitless Olive,* and *King Palm*, among others. Statement landscaping can be found at each of the vehicular access points with internal paseos decoratively planted. Given the proposed project is a small portion of the overall Leal Master Plan, the City's Landscape Architect has reviewed the proposed planting plan and found it to be consistent with the landscaping entitled previously as part of TNHC's Phase 1 Eastvale Square development and currently proposed as part of TNHC's Phase 2. Further, all landscaping within the project is proposed to be constantly maintained by the project's property management to ensure long-term viability.

In general, staff believes that the proposed preliminary landscape plan is satisfactory and consistent with the vision identified in LMP. Standard conditions have been included requiring the applicant to submit a final landscape and irrigation plan to the City Landscape Architect for review and approval.

Public Hearing Notification and Comment

The applicant's request requires a 10-day public hearing notification period for property owners and commercial tenants within a 600-foot radius of the project site. A notice of public hearing (**Attachment 8**) was published in the Press Enterprise on May 11, 2025, and mailed to property owners and commercial tenants on May 8, 2025, for the Planning Commission meeting on May 21, 2025. A map showing the properties that received notification is included as **Attachment 9** to this staff report.

Environmental

An Addendum to the previously certified PEIR for the Leal Master Plan (State Clearinghouse No. 2015031028) for up to 2,500 residential units and 595,000 square feet of commercial space including a hotel, a civic center (City Hall, Library, Police Station) and Fire Station, (the "Project") was approved by the City Council on May 11, 2022. The Addendum was prepared in accordance with the requirements of CEQA and found the proposed project would not exceed the previously analyzed development in terms of size or intensity of use. Development of the proposed project would remain consistent with the analysis of the Certified Final PEIR and would not require a change to the site's land use designation or zoning. Therefore, staff has determined the project is within the scope of the Leal Master Plan PEIR and Addendum pursuant to CEQA Guidelines Section 15168 and no additional environmental analysis is necessary. Applicable mitigation measures included in the Addendum to the Leal Master Plan PEIR would be required for the development of the proposed project, however a Notice of Determination shall be filed following any action taken on the project.

Strategic Plan Action - Priority Level: N/A | Target #: B | Goal #: E

Diversify the housing stock with more options.

Fiscal Impact

Processing the proposed applications will have little to no fiscal impact on the City as the project is funded by the applicant.

Prior City Council/Commission Action

With the adoption of the first Eastvale General Plan in 2012, the City Council designated the Leal property as a future planning area, with a vision of a mix of retail, residential, and civic uses. In 2013, City Council authorized the preparation of the Leal Master Plan (LMP) and Environmental Impact Report.

On December 13, 2017, with the completion of the Final Environmental Impact Report, City Council acted to certify the Final Program Environmental Impact Report (PEIR) and amend the Land Use chapter of the Eastvale General Plan to reflect the Leal Master Plan, adopt the Leal Master Plan, and amend the Zoning Map to rezone the Leal Master Plan area to "Leal Master Plan."

A special joint workshop between the Planning Commission and City Council was held on March 16, 2022, to discuss proposed amendments to the Leal Master Plan and an Addendum to the certified PEIR. Then after the recommendation of the Planning Commission on April 25, 2022, the City Council at their regularly scheduled May 11, 2022 meeting, adopted an Addendum to the Certified PEIR, an amendment to the Leal Master Plan, establish a project-wide Land Use, Circulation, and Infrastructure Plan, determine project-wide development standards, design guidelines, and site characteristics, approve Tentative Tract Map 38290 (A map) for the creation of 14 developable lots, 19 lots for infrastructure purposes, trails, and open space, approve a Major Development Plan Review to facilitate the development of 2,500 residential units and 595,000 square feet of commercial development including a hotel, civic center (City Hall, Library, Police Station) and a Fire Station as well as approved a Development Agreement between the City and The New Home Company.

On October 18, 2023, TNHC received Planning Commission approval to subdivide 69.8 acres of Tentative Tract Map 38290 (A map) to create 65 buildable lots and 19 lettered lots for condominium, multi-family residential, commercial, civic, open space, and public right-of-way purposes (B map). Additionally, on October 18, 2023, TNHC received DR approvals for the 438 residential units within Eastvale Square residential communities PA 1, PA 6, PA 7A, PA 8 along with the overall site and landscape design of the public spaces within Phase A of Eastvale Square.

On February 24, 2024, Quarterra Multifamily Communities, LLC. Received approval from the Planning Commission for the master site planning and architecture of PA 2 of the Leal Master Plan to accommodate a proposed 320-unit multiple-family residential community, with associated pool/recreational facility, parking areas, landscaping, and open space amenities.

Lastly, on February 19, 2025, TNHC received Planning Commission approval to subdivide 39.15 acres of Tentative Tract Map 38290 (A map) to create 36 buildable lots, and 8 lettered lots for condominium, multifamily residential, commercial, open space, and public right-of-way purposes for Phase B (TTM 38595) of the Eastvale Square development (B map).

Attachment(s)

Attachment 1 - Project Locator Map
Attachment 2 - Leal Master Plan Amendment No. 1
Attachment 3 - Addendum to the Certified PEIR
Attachment 4 - Development Plans
Attachment 5 - Parking Conformance Letter

Attachment 6 - Resolution MDR (PA-4)
Attachment 7 - COA (MDR)
Attachment 8 - Public Hearing Notice
Attachment 9 - 600' Radius Map

Attachment 1: Locator Map



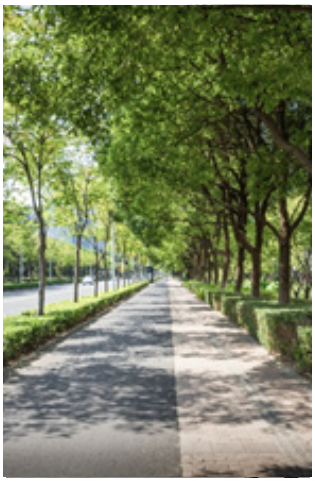
LEAL

MASTER PLAN

AMENDMENT #1

ADOPTED MAY 25, 2022




CITY OF EASTVALE

LEAL MASTER PLAN AMENDMENT #1

May 2022

CITY OF EASTVALE

Eastvale City Council
Mayor Clint Lorimore
Mayor Pro Tem Todd Rigby
Council Member Brandon Plott
Council Member Christian Dinco
Council Member Jocelyn Yow

Eastvale Planning Commission
Chair Houston Laney
Vice Chair Kevin Mensen
Commissioner Josh Lee
Commissioner Andrea Hove
Commissioner Michael Rochelle

Executive
Henry Garcia, Interim City Manager
Gina Gibson Williams, Community Development Director
Erica L. Vega, City Attorney

Planning
Gustavo Gonzales, Planning Manager
Jamie Cerda, Senior Planner
Allen Lim, Assistant Planner

Engineering
Jimmy Chung, City Engineer
Cassandra Sanchez, Principal Civil Engineer
Dahi Kim, Senior Engineer

Consultant
Peter Minegar, MBI
Mark Teague, Placeworks
Robb Steele

DEVELOPER
A.J. Jarvis, The New Home Company
Matt Gibson, The New Home Company
Peter Carlson, Carlson Strategic Land Solutions
John Moreland, KTGY
Xiaofan Li, KTGY
Doug Staley, Hunsaker & Associates
Joey Valadez, Hunsaker & Associates
Sarah Kleinberg, Jackson Tidus

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1 INTRODUCTION AND VISION

1.1. BACKGROUND AND PURPOSE

In the City of Eastvale, a recently incorporated and rapidly growing city in northwestern Riverside County, the Leal property holds significance as one of two major undeveloped pieces of land in the city. The idea of planning for the site's development originated in the 2012 Eastvale General Plan. The Land Use Chapter of the General Plan adopted at that time supported the development of a mixed-use project on the site in cooperation with the property owner and/or the developer.

City of Eastvale Demographics

Eastvale offers the developers of the Leal Master Plan excellent opportunity to serve an affluent and growing population. Current projections for 2018 show the following:

	Eastvale	10-Mile Radius
Population	68,706	1,070,150
Average Household Income	$130,730	$90,507
Average Annual Increase in Household Income 2013-2018	0.94%	3.47%

Eastvale is the most diverse high-income city in California, with a population that includes 40 percent Latino residents, 9 percent black, 24 percent Asian and 24 percent white.

In 2013, the City of Eastvale City Council initiated a long-range planning process for the property. The effort was born out of the desire to create the mixed-use town center project on the site and to safeguard against unsatisfactory development taking the project's place. The Leal Master Plan is the product of this planning process and is a critical step toward bringing unique, regionally significant development to the site. In December of 2017, the City of Eastvale adopted the initial Leal Master Plan. The multiple step process was established in the original Master Plan. This Leal Master Plan is the first amendment to the initial Master Plan as contemplated in the development process.

1.1.1. What Is a Master Plan?

This Master Plan is a long-range planning document that documents how the site will be developed. This Master Plan describes the community's vision for the project area, identifies appropriate land uses, includes the development standards that are necessary to achieve the vision, defines the character of the project's development, lists the steps involved with the development process, and provides guidance on implementation of the plan.

The adoption of this Master Plan represents the second step in planning for the site's development. This document establishes general parameters for development of the Leal property (and the process for defining more specific standards tailored to the ultimate project to be proposed by the property owner/developer). Subsequent development plans will provide precise

development plans for each planning area, facilitating the actual construction of developments.

Note to the Reader: See Chapters 4 and 5 of this Master Plan for detailed information on required future submittals.

Implementation of this Master Plan will ensure that desirable, high-quality development is constructed on the site in an orderly and cohesive fashion. All development occurring on the site is required to comply with this Master Plan.

1.1.2. Community and Stakeholder Input

The original adopted Leal Master Plan was created and adopted in a public forum. The document represents a blending of the City's goals, the owner's ambitions, and the public's aspiration for the property. The participants' contributions to the project are as follows:

1.1.2.1. City Council and Planning Commission

Throughout the planning process, staff was provided with input from the City Council and Planning Commission on important aspects of this Master Plan. Ultimately, the Planning Commission and City Council were responsible for selecting the Master Plan Amendment's overall concept and the land use program and for reviewing and approving the final Master Plan Amendment.

1.1.2.2. Property Owner

Before and during the preparation of this Master Plan, City staff met regularly with the Leal family who has for decades owned the property and the property owner's development representatives. These meetings helped establish the vision for the property and the legacy that the family hopes to leave in the form of the proposed new development.

1.1.2.3. Public Outreach

The preparation of the original Master Plan included a significant online public outreach campaign, including a website dedicated to the project and numerous postings on the City's social media outlets.

The project website provided background information on the

Big Ideas for the Leal Property

When the City asked for "big ideas" and themes for the project site, residents provided thousands of responses, mostly via social media. The following were the top listed categories:

- Lifestyle Centers
- Downtown
- Indoor Regional Mall
- Amusement
- Arts/Cultural
- Concerts/Special Events Venue
- Hospital/Medical Center
- Civic Uses
- 1950s Main Street
- University or Community College
- Sports/Recreation
- Hotel/Resort
- Giant Cow Statue

project and the property, as well as City and project-related documents, and kept the public apprised of upcoming meetings. The website also featured an interactive section that allowed users to share their input on important aspects of the project.

Initially, participants were asked to submit their suggestions for "big ideas" and "themes" for the project site. Residents responded to the City's call for ideas, submitting thousands of comments. Subsequently, an online poll was created to see which of the ideas held the greatest level of support in the community. Of the nearly 2,000 survey responses received, the three most popular categories were:

- Lifestyle Centers
- Downtown
- Indoor Regional Mall

1.2. OBJECTIVES

The General Plan goal of bringing a mixed-use development to the site will be realized through the adoption and the implementation of the Leal Master Plan. This Master Plan seeks to achieve the following objectives:

- Facilitate transformation of the project area into Eastvale's Downtown.
- Encourage a mix of uses, including retail, experiential uses, office, civic, residential, and recreation/entertainment, that respond to market demand.
- Create a Downtown Village destination in Eastvale to meet the needs of patrons from the community and the region.
- Include heavily landscaped spaces, further reinforcing Eastvale's Tree City USA designation.
- Implement high-quality architecture and design that creates a sense of place and enhances the aesthetic and visual quality of the neighborhood.
- Design the site in an efficient fashion that perpetuates a compact, urban form of development.
- Provide safe and entertaining gathering places for Eastvale residents.
- Develop the site in an orderly, comprehensive, and cohesive manner that avoids the piecemeal development of the site with a mix of incompatible uses that do not relate to one another.
- Expand the city's economic base by generating substantial property and sales tax revenue.
- Provide employment opportunities for residents, improving the city's jobs/housing balance and reducing vehicle miles traveled.
- Provide the infrastructure necessary to meet project needs in an efficient and cost-effective manner.
- Provide medium- and high-density housing opportunities.
- Provide ample access for pedestrians, bicyclists, and automobiles throughout the site.

1.3. VISION

The City envisions the project area emerging as the City's Downtown and a destination within the region. The area will be anchored by a downtown village and surrounded by a mixture of complementary office, civic, residential, and recreation/entertainment uses. All aspects of the project will exhibit the hallmarks of thoughtful, high-quality design and landscape.

Note to the Reader: For more information on the vision and the quality of the project's design, refer to Chapter 2, Project Character.



1.4. LOCATION

The project area encompasses the Leal property, an approximately 160-acre landholding that (as of 2014) included one of the city's last operating dairies and a horse farm.

Shown in Figure 1.1: Regional Context Map, the project area is in the northeastern section of Eastvale, approximately one-half mile from the Interstate 15/Limonite Avenue interchange, and south of State Route 60. The site is bounded by 58th Street to the north, Hamner Avenue to the east, Limonite Avenue to the south, and Scholar Way to the west, as shown in Figure 1.2: Local Context Map. The project area is situated immediately west and north of existing commercial and retail developments and is south and east of established and newly developed residential neighborhoods of varying densities.

1.5. RELATIONSHIP TO OTHER DOCUMENTS

1.5.1. General Plan

The Leal Master Plan implements the City of Eastvale General Plan. The land uses permitted by this Master Plan are consistent with the goals, policies, and general land uses described in the General Plan.

1.5.2. Municipal Code

This Master Plan functions as the zoning document for the project area, except as discussed below.

This Master Plan incorporates zoning provisions that vary from, and supersede, those included in the City of Eastvale Zoning Code and introduces additional provisions not found in the Zoning Code. For these development standards, the Master Plan distinguishes between those provisions that apply to the entire project area and the provisions that only apply to individual land uses.

This Master Plan references regulations in the Eastvale Zoning Code. Where the Zoning Code is referenced, the Zoning Code in place at the time of a development project's submittal will be used.

Where this Master Plan is silent on any issue, the applicable standard in the Eastvale Zoning Code will be used.

Figure 1.1: Regional Context Map

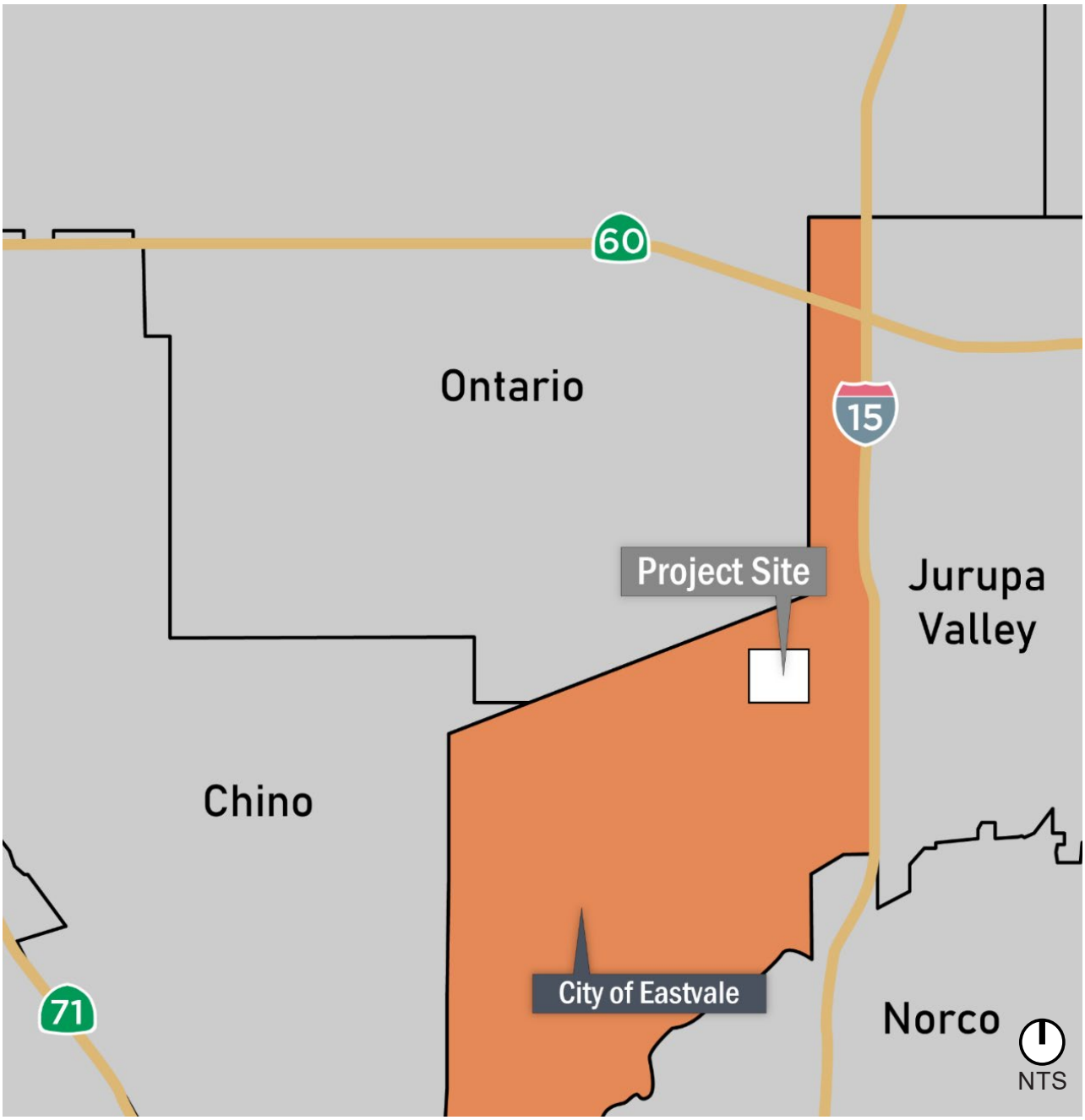
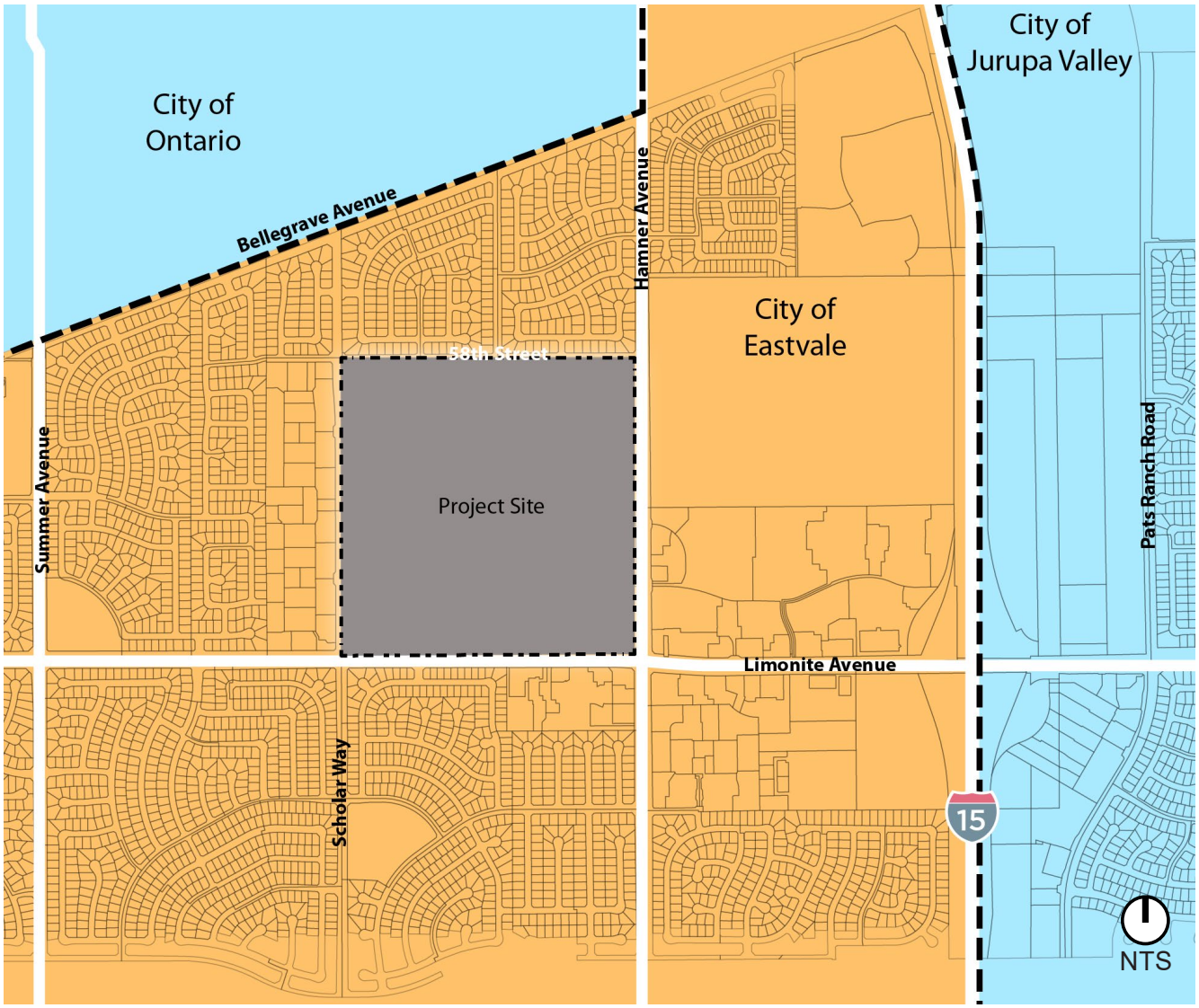


Figure 1.2: Local Context Map



1.6. PLAN ADMINISTRATION

1.6.1. Use of This Master Plan

This Master Plan will be used as the basis for establishing standards of development and evaluating proposed development projects for the Leal property and is intended to be used by a broad range of persons, including:

- The City Council and Planning Commission in decision-making activities.
- City staff in evaluating project consistency with the standards set forth in this Master Plan.
- The development community in preparing development proposals.
- Residents and citizens seeking to understand the vision for the Leal property and the type of development which may occur.

1.6.2. Interpretations of the Master Plan

The City of Eastvale Planning Department is responsible for the administration, implementation, and enforcement of this Master Plan. The Community Development Director or their designee is responsible for making determinations of consistency with this Master Plan as follows:

1.6.2.1. Determination of Intent

Whenever the Community Development Director determines that an ambiguity exists in how a particular standard or regulation applies, or a formal request for an interpretation is made by an applicant, property owner, or interested party, the Community Development Director or their designee will prepare an official interpretation of intent in accordance with the procedure set forth in Eastvale Zoning Code Section 1.5.1 (Official Zoning Interpretation).

1.6.2.2. Determination of Similar Land Use

Recognizing that every conceivable land use cannot be identified in this Master Plan and anticipating that new land uses will evolve over time, the Community Development Director or their designee has the authority to approve uses when their operation, impacts, and scale are similar to those land uses listed in this Master Plan.

Determinations of similar land use will be made pursuant to Section 1.5.1 (Official Zoning Interpretation) of the Eastvale Zoning Code.

1.6.2.3. Amendments to the Master Plan

Over time, various sections of this Master Plan may need to be revised, as economic conditions or City needs dictate. The policies presented in this Master Plan contain some degree of flexibility, but any Master Plan amendments must be judged by relatively fixed criteria. Minor modifications to the plans, guidelines,

regulations and standards contained in this Master Plan may be approved at the discretion of the Community Development Director or their designee as described in Section 5.4.1. Major modifications that do not meet the criteria for minor modifications described in Section 5.4.1 shall require a formal amendment to the adopted Master Plan. Major modifications are described in Section 5.4.2.

Amendments to this plan may be initiated by a developer, any individual property owner, or the City, in accordance with the Eastvale Zoning Code.

1.6.2.4. Actions Which Are Not Amendments to this Master Plan

The following are **not** considered amendments to this Master Plan:

- Determinations of similar use, as discussed in this chapter.
- Minor modifications to the Master Plan, as outlined in Chapter 5 of this Master plan.

2 INTRODUCTION AND VISION

2.1. INTRODUCTION

The City's vision for the Leal Master Plan area is a development that provides employment, retail, public uses, entertainment, and housing in a carefully laid out environment designed to create a memorable and enjoyable experience for both visitors and residents. The City and community expect that development of the Leal property will be of the highest quality, both in design and construction.

The envisioned level of quality is reflected in other regionally significant projects in Southern California, such as Downtown Claremont, downtown Temecula, and downtown Brea. All of these developments are noteworthy for their focus on creating a vibrant and attractive experience for visitors, incorporating vertical development (multiple stories) into a village setting, and for their attention to detail in a variety of features.

This Chapter expresses the City's vision for the Leal Master Plan. The expected level of quality is shown as it should be expressed in various aspects of the project, including:

- Site design
- Circulation
- Architecture
- Landscaping
- Public Spaces
- Buffers/Adjacencies
- Street Furnishings
- Thematic Features
- Signage

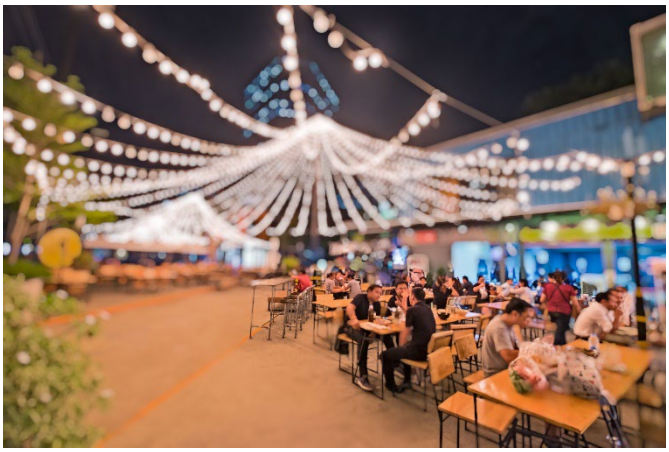
2.2. PROJECT CHARACTERISTICS

Attention to detail and incorporation of high-quality materials is a key aspect of developing high quality projects. While the examples provided on the following pages focus on distinguishing characteristics within the Downtown concept, all portions of the project will be required to achieve a similar level of quality and attention to detail.

2.2.1 Site Design

The following principles accompany the vision for Leal Master Plan to form the foundation for the planning and design of the community.

- Create a magical destination.
- Provide energy, vitality and create a central gathering place within the City.
- Public and private spaces are designed to enhanceand complement one another.
- Along retail corridors, wide sidewalks and shaded paseos lined with street trees and outdoor seating create an inviting environment for both window shopping and socializing, focusing on the human scale and experience.
- Diversify Eastvale's economy by providing a range of uses within close proximity to each other.









2.2.1 Site Design

Effective site design facilitates access and mobility and integrates building design and orientation, private space, and public space to create a vibrant destination. The following bullets describe the site design vision.

- Downtown will provide opportunities for retail commercial and office uses, as well as central gathering places for residents to interact and connect. This commercial/retail hub should be visually prominent, as it is strategically located at the intersection of Limonite and Hamner Avenue to capture visibility and attract shoppers and direct visitors to this destination center.
- Downtown will be surrounded by higher density neighborhoods that gradually transits to lower density neighborhoods.
- A village green located adjacent to the Downtown will provide a wide variety of active and passive recreation amenities.
- Neighborhoods will be designed to connect to open space and park amenities, shopping, public and civic facilities, and recreational facilities via streets, paseos and pedestrian trails.
- A community wide linear park system will provide focus on community connections and pedestrian experience.
- Wide sidewalks and shaded paseos lined with trees and outdoor seating create an inviting environment both in the Downtown and residential areas.
- Public and private spaces are designed to enhance and complement one another.
- The project is integrated into the surrounding environment to provide for multiple points of access.
- On-street parking, landscaped bulb-outs, and special paving treatments provide convenient access in an aesthetically pleasing manner.
- Parking is conveniently located to destinations and should be tucked away or integrated into parking structures so as not to dominate the experience.










ICE CREAM



2.2.2 Circulation

A carefully devised circulation network allows pedestrians, bicyclists, automobiles, and delivery vehicles to operate without conflict.

- Entries and gateways into the project are distinct and identifiable.
- Circulation patterns are simple and obvious.
- Paving and landscaping materials distinguish the types of circulation routes.
- Plant and material selection along circulation routes are used to identify distinct districts within the overall project.

The Leal Master Plan has six major points of access: two points of access from Limonite Avenue, two points of access from Hamner Avenue, one point of access from 58th Street, and one point of access from Scholar Way, as shown in Figure 3.1, Land Use Plan.

In addition to these major entry points, secondary access may be provided from the major streets surrounding the project as part of subsequent Major Development Review for the Planning Areas.

All of the project's access points will provide an opportunity to create a sense of arrival by creating entryway statements or gateways with landscaping, signage, and buildings. See Section 4.3.3 in Chapter 4 for the design standards for the major entry points.

An internal circulation system is established and shall be designed to be consistent with Chapters 4 and 5 of the Design Standards and Guidelines for residential and nonresidential site and street design.

Pedestrian paths and bicycle lanes identified on circulation cross sections on Section 6.2 shall be designed to comply with the following:

- Pedestrian and bicycle access shall be provided along all major roadways and internally within each development to allow connectivity from the streets to the businesses and residences.
- Pedestrian and bicycle connections shall be provided from the street to the interior of the development that minimize conflicts with vehicular traffic.
- Sidewalks shall be shown on each street section.
- Pedestrian and bicycle access shall be consistent with Chapters 4 and 5 of the Design Standards and Guidelines for residential and nonresidential site design.

2.2.2 Circulation

















2.2.3 Architecture

The Leal Master Plan is designed to include distinctive, identifiable neighborhoods of a walkable size and scale with an appropriate mix of housing types. This section provides the framework for high quality design and expresses the desired character of future development.

Community-wide Residential Development

This section identifies key architectural and site design elements that should be considered in all residential areas within the Leal Master Plan community. These guidelines intend to establish a diversified, yet cohesive level of quality in home design that reflects the character of the surrounding environment while allowing for flexibility in design.

Architecture Forward Design

- Within the Downtown, buildings fronting onto the street shall be designed so that active and articulated architecture visually dominates the street and allows for direct views of the street and outdoor living space to enhance the sense of security. This can be achieved by orienting doors and windows toward the streets and public areas.
- Garages shall be set behind the front face of the building or be oriented to alleys or motorcourt drives to minimize the visual dominance of garages along the street.

Building Siting and Orientation

- In general, buildings shall be located and oriented to define public streets and primary open space areas, as appropriate to the product type.
- Front entries shall face the streets, courtyards, paseos, or open spaces.
- Units shall be sited and design so that each building shall have roof exposure to the south or east, or a portion of the roof with a flat roof.
- Unit entries shall not be provided on 58th Street, Hamner Avenue, or Limonite Avenue.

Corner Lot Buildings

- Corner lots for single-family detached homes generally have wider than minimum required side setbacks from the adjacent public rights-of-way as compared to interior side setbacks (refer to product-specific standards in Chapter 4, Development Standards). This additional setback area is intended for landscaping and/or single-story architectural elements such as porches and courtyards.
- To respond to adjacent streets and intersections appropriately, buildings on corner lots shall be designed for a two-sided corner exposure, addressing the increased public visibility by allowing for architectural enhancements on the side elevation facing the street.

- Corner lot buildings shall feature enhanced elevations that provide a similar level of detail on the street side as the front elevation. Enhancements may include.
    - Wrap-around porches or courtyards
    - Principal window treatments
    - Roof plane breaks
    - Accent colors, materials and detailing
    - Garage access from the side street for conventional single-family homes

Building Form, Massing and Articulation

- Building massing (three-dimensional form of a building, referring to the perception of the general shape and form, and size) along the street shall be varied to create a quality streetscene.
- To reflect a variety of forms and create massing breaks, use horizontal and vertical offsets, such as interconnection and lapping of building forms and heights.
- Plane offsets cantilevered upper floors and varied roof forms are encouraged to avoid large expanses of flat, monotonous walls and roofs in alleys and motorcourts.
- To add interest to building facades, building articulations such as roof overhangs, balconies, and projections should be used in the design of building frontages.
- For attached residential buildings, break down the scale of the buildings into smaller elements through varied building massing and forms, such as varying setbacks on building elements/facades, varying roof lines and directions, incorporating single-story elements or open balconies that provide negative space at prominent corners, utilizing shed roof forms and trellis elements, etc.
- To prevent long expanses of blank walls, walls shall be articulated at least every 20 feet horizontally on each floor. Articulation shall mean a change in material, massing break of at least one foot (1'), or including a window, projecting porch, balcony (recessed or projecting), or other decorative element (e.g. decorative attic vent).

Colors and Materials

- Building materials and colors shall be appropriate to the overall neighborhood design theme and relate to the selected architectural style. Frequent changes in materials shall be avoided.
- Provide a variety in texture and color to allow for diversified expressions of individuality on building elevations, while maintaining visual cohesiveness throughout the community.

- Where color or material changes occur on the building, such changes shall only occur at inside corners or wrapped to appropriate termination points where they provide a finished appearance from the street.
- Color and materials should wrap columns and posts in their entirety.
- Exposed gutters and downspouts must be colored to match or complement the surface to which they are attached.
- Colors shall be neutral tones or muted colors complementary to the chosen architectural style and compatible with the character of surrounding development. Reserve bright or dark colors for trim or accents only.

Roofs

- Select simple and efficient roof forms, pitches and materials that are consistent with the architectural style of the building. Consider roof forms in relationship to the building mass to improve massing relief along public streets and on other publicly visible elevations.
- Varied roof forms, offsets and materials consistent with the architectural style of the building are encouraged to create variation in the skyline and diversity in the streetscene.
- Flat roofs with parapets or decorative cornices are permitted where appropriate to the architectural style of the building.

Mechanical Equipment

- All exposed air conditioning/heating equipment, soft water tanks, and pool and spa equipment shall be hidden from view in vaults, wells, enclosures, behind walls/fences or screened by landscape. Enclosures shall be constructed similarly and finished to match the building or material which they are attached.

Trash Enclosures

- Areas provided for trash and recycling bins shall be concealed from public view.
- Where trash and recycling material collection facilities are shared by several units/buildings, the collection facilities shall be screened by architectural enclosures. The screening enclosure materials and colors shall be similar or complementary to the exterior materials and colors used on the adjacent principal buildings.













Detached Residential Development Design Guidelines and Standards

- Side entries are allowed to give the product design greater flexibility and varies the curb appeal.
- For rear loaded and detached cluster homes, front yard and common area landscaping will be provided by the builders.
- Provide visual harmony by applying a common family of details throughout the cluster complex.
- Provide paving within the courtyards to enhance their use and identity as pedestrian entries to the homes.
- Individual unit entries of cluster homes shall be clearly discernible from the courtyard or access drive.
- Where a central courtyard is provided for detached cluster homes, living space windows shall orient toward the courtyard.
- Provide a minimum of three (3) floor plans in each Planning Area.
- There shall be a minimum of three (3) elevations for each floor plan, for a minimum total of nine elevations.
- No more than two buildings in a row may be plotted with the same elevation style.
- The same plans may be plotted adjacent to each other or across from each other, provided they have different elevation styles.
- Detached cluster units with front facades bordering streets I, E, F, H & G shall have their entries oriented to these streets.










53-59



Attached Residential Development Design Guidelines and Standards

Attached residential buildings tend to have larger building masses. As such, attached residential design should be carefully considered to convey a sense of human scale. Building typology and chosen architectural style should reflect the building's location within the community, and all buildings should exemplify quality design.

Townhomes and Attached Motorcourt Homes

- Where attached residential buildings are located adjacent to single family detached homes, minimize impacts on the adjoining residences with a sensitive transition in scale, massing and height, and design the transition to ensure resident privacy.
- Design the front elevation of attached residential buildings to clearly delineate individual units as a way of breaking up mass.
- Articulate the front building facades to promote individual unit identity by incorporating overhangs, recesses, porches, glazed doors, accent materials and colors, etc., consistent with the architectural style of the building.
- External unit and building entries shall be designed in a manner that is clearly visible to pedestrian and/or vehicular approaches.
- Rear facades along alleys, driveways, or visible from backbone streets shall not be void of articulation. These elevations shall include massing breaks and/or architectural details (i.e. shutters, gable vents), as appropriate to the architectural style of the building.
- Attached residential buildings sited adjacent to lower-density residential neighborhoods should be sensitive to the scale of those neighborhoods. Step down building heights to match the adjacent buildings as a transition to lower adjacent development heights.
- When located next to open space or a paseo, arrange groups of attached residential buildings so that the buildings front onto paseos or the open space. In the event that fronting onto these open spaces is not feasible, the residential buildings shall front onto a courtyard, pathway, or other gathering space that would directly connect to the open space or paseo.

Apartment/Flats

- Building configuration shall form adequately-sized courtyards and gathering spaces, where applicable. Accessible from inside the building or from external pedestrian pathways, courtyards or gather spaces should feature enhancements such as trellises, shade trees, or outdoor furniture.
- Step down corners and ends of multi-family buildings over two-stories in height at highly visible locations, softening the building edges and enhancing the streetscene.
- Provide pedestrian-oriented elements and details on facades facing public sidewalks. Elements such as balconies and awnings can add visual interest and richness to the street environment.

- Transitional spaces such as porches, covered entries or stoop entries shall be provided for ground floor units facing public street. Where common building entries are provided, they should be well defined along the street and/or parking lot edges.
- Arrange attached residential buildings and site landscaping in such a way that they screen parking areas from public view and minimize the impact of parking lots and garages on the public streetscape.
- Parking lots shall be broken up into smaller segments by landscaped islands, but should remain connected to facilitate internal circulation for a common complex.
- Provide a minimum of two (2) unit plans for each building, and a minimum of two (2) building plans (with the ability to add elements to corner units as necessary) in each Planning Area.
- Residential development adjacent to internal Street E, F, G, H and I shall include a primary pedestrian entry along this street frontage facing either the street or a courtyard or a paseo that is accessible by the residents.
- All primary entrances for multi-family dwellings shall provide unit identification.
- ... Exterior elevations shall include at least three (3) materials that accentuate or correspond to variations in building massing and plane changes, but not having too many different materials to avoid a chaotic appearance. Glazing (windows) and accent materials such as shutters and railings may count towards this requirement.













Downtown District Design Guidelines and Standards

The Downtown District will function as a vital commercial center for the City. Appropriate land uses for these areas include residential, commercial, retail services, restaurants, offices, paseos, recreational facilities, community venues, and civic facilities. The mixed- use areas are a place for working, shopping, dining and gathering. Businesses will be situated along the street and provide convenient access for vehicles, pedestrian walkways and landscape areas.

General Criteria

- Buildings shall front onto a street or spine, which may be designed either as a vehicle free zone or in such a manner as to allow for use by both pedestrians and motor vehicles. When vehicles are allowed, design features shall be incorporated to define pedestrian movement through changes in paving materials or grade, articulated walks with landscaping, or overhead structures.
- Both vertical (different uses within the same building, with commercial or office uses located on the ground floor and with office or residential uses located above) and horizontal (single-use buildings located side-by-side or adjacent to each other on a development site) mixed-use are encouraged in the Downtown District. The mix of land uses may be, but are not limited to, commercial mixed with residential or mix of uses of retail, restaurant, office, and civic uses.
- Vertical mixed-use projects are encouraged for 3-story and higher buildings, such as first floor retail with office or residential uses above. Visually, this arrangement divides the façade into two basic parts: the upper façade and the storefront.
- Large monolithic buildings, such as movie theaters and cultural venues, must be set back from a street designated for pedestrian activity and lined with smaller businesses in front to create a more appealing streetscene.
- Plaza areas in mixed-use settings are encouraged and may include seating, fountains, and landscaping.
- Open views into the retail space at the storefront level will enhance the pedestrian experience by providing a visual connection to the use inside the building. On upper levels, windows should continue the aesthetics of the building while serving the occupants' need for privacy.
- Primary entrances into retail buildings shall be clearly marked and provide a sense of welcome and convenient access into the building interior.
- Corner buildings shall be designed with enhanced treatments. These treatments may include: larger building element at the corner, more ornamentation than adjacent buildings, or a plaza to define the space. In addition, corner buildings typically have both primary and secondary façades that relate to the streets on which they front.
- The ground floor of the commercial component of a mixed-use building shall have a finished ceiling height of a minimum of 12 feet.

Building Form, Massing, and Articulation

- Iconic buildings in the Downtown District are encouraged and may include architectural features such as bell or clock tower or similar statements.
- Architecture shall address public areas with high quality materials and should contain architectural elements and other detail relating to the human scale.
- Groups of buildings shall be arranged in clusters around elements such as pedestrian walkways or landscaped areas.
- Retail and restaurant buildings with facades parallel to the street with covered pedestrian arcades are encouraged. Long unarticulated facades shall be avoided along the primary pedestrian corridor.
- No building wall facing a public street should extend more than 25 feet vertically or horizontally without a visual break created by a minimum 1 foot architectural/massing offset. (See graphic footnote 1 in below)



1 *For buildings with 100' or greater of street-frontage, plane breaks at least every 25 feet include glazing and provide adequate articulation.*

2 *A minimum of 30% of exterior walls on ground-floor facing the street shall include windows, doors, or other openings.*

- Within PA3 and PA5, the ground floor shall incorporate abundant glazing. At least thirty (30) percent of the exterior walls on the ground floor facing the identified pedestrian corridor shall include glass windows, glazed doors, or other openings, as illustrated in below. Percentage of fenestration shall be calculated based on the length of the facade frontage and the floor-to-ceiling height of the ground floor, excluding the areas for parking garage ingress/egress. (See graphic footnote 2, above)
- Adjacent to Streets H or G within Planning areas 2, 3, 4 and 5, at least 50 percent of the building (commercial, civic, or residential) shall be located within the 0 to 15 feet of the right-of-way from Streets H and G. The other 50 percent may be

reserved for expanded outdoor dining opportunities, courtyards, paseos, or driveways connecting to surface lots behind the building. Parking lots are not allowed between the building and the street along these corridors.

Materials and Colors

- A mixture of high-quality materials in highly visible locations and in varying quantities have a large impact on the perceived quality of the area.
- Colors should be carefully chosen to complement the architectural style or tenant of each building.
- Exterior elevations shall include at least three (3) materials that accentuate or correspond to variations in building massing and plane changes, but not having too many different materials to avoid a chaotic appearance. Glazing (windows) and accent materials such as shutters and railings may count towards this requirement.
- Colors shall be neutral tones or muted colors complementary to the chosen architectural style and compatible with the character of surrounding development. Reserve bright or dark colors for trim or accents only.

Services, Utilities, and Storage

- Service, loading, and storage areas should be located away from the streets and activity area. When service areas are not able to be located away from streets or activity areas, screening elements such as walls, fences, architectural treatments, landscaping, or similar screening element shall be incorporated. In all cases, the screening shall be integrated into the design and not appear as an afterthought.





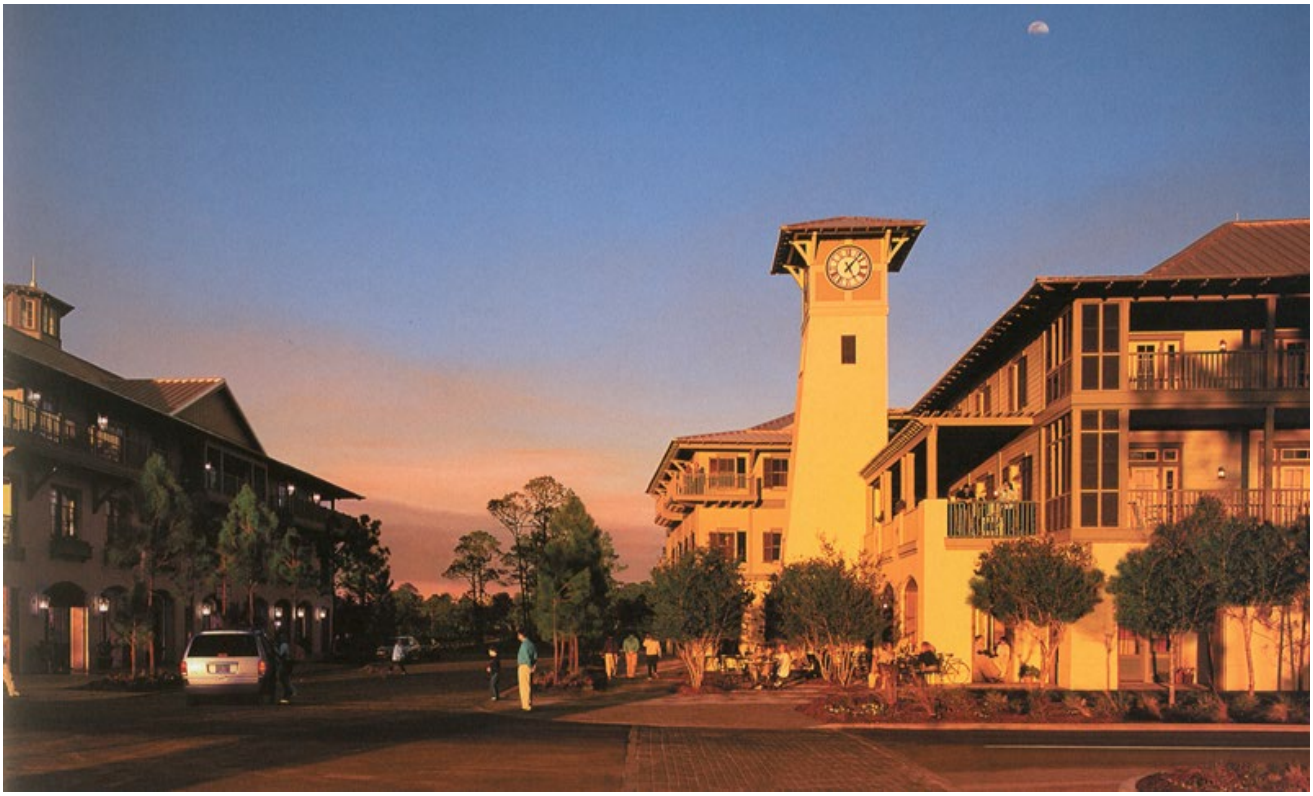

PARKING


Canyon Rose
OPEN









2.2.4 Landscape

Landscaping can have a significant visual impact on a project through the quality of landscaping materials selected and the how landscaping is integrated throughout the project site. Landscaping both visually ties a project together and identifies distinct districts.

The City of Eastvale has been proudly designated as a "Tree City USA" by the Arbor Day Foundation by providing commitments to installing and maintaining an urban forest. The City and this Master Plan continues this commitment to provide an urban forest to improve the visual appeal, increase property values, reduce home colling costs, and remove air pollutants. The following landscape guidelines are required for the Master Plan:

- To create an urban forest as quickly as possible, fast-growing tree species appropriate to the area and climate shall be used.
- Trees shall be planted as soon as practicable in project phasing to encourage more mature tree growth once buildings are occupied.
- The project should have a consistent plant palette, though variations may occur from street to street.
- Streets, promenades, public plazas, and smaller open spaces should have distinctive planting and landscaping treatments, making them unique and enjoyable pedestrian experiences.
- Plants are selected for specific purposes to enhance the project experience.
- Plant and material selection along circulation routes are used to identify distinct districts within the overall project.
- Streets designated as "Enhanced Parkways' on Figure 3.2: *Open Space/Parks* shall include a double-row planting of trees where the trees are planted at an average of least 20 feet on center. This requirement does not include intersecting streets or driveways. Special exceptions may be made for portions of the right-of-way that include utilities that preclude the planting of trees and for visibility of non-residential buildings.
- Surface parking lots shall have a minimum 6-foot wide landscape buffer from all street rights of way, measured from property line. Curbs and parking overhangs may be included within this required buffer.
- Where pedestrian circulation crosses a vehicular travel zone, a change in material, color, or grade is required.
- Landscape must permit adequate sight distance for vehicular and non-vehicular circulation.
- All new landscape areas must have irrigation installed.
- No plants from the California Invasive Plant Council List shall be planted.

2.2.4 Landscaping









2.2.5 Public Spaces

Public spaces bring people together and allow for community events such as concerts, markets, exhibits, and celebrations.



- Public spaces reflect the needs of the community and project.
- Furniture, signage, paving materials and patterns, colors, landscaping, and other design features of the public space are used to create a sense of place and purpose.
- Surrounding buildings and uses are designed to interact with the public space and vice-versa.
- Common outdoor open space in the form of a pocket park, plaza, courtyard, garden, play area or outdoor amenity should be provided. Common outdoor open space must have a minimum dimension of 15 feet in all directions.
- In the Downtown District, the sidewalk along the designated pedestrian corridor shall have a minimum clear width of 10 feet (illustrated below). The sidewalk may



2.2.5 Public Spaces



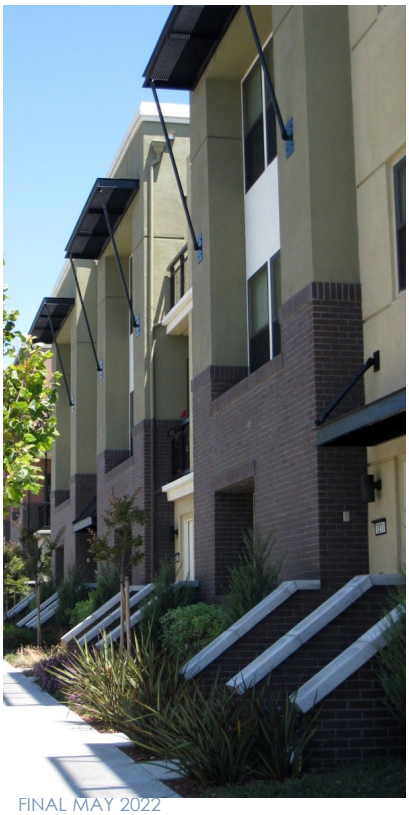


2.2.6 Buffers & Adjacencies

The need to create buffers and address adjacencies between uses also provides an opportunity for continuation of the project theme and elevation of the quality of development.

- Freestanding and retaining walls shall have a minimum 30-inch planter on each exposed side of the wall to allow for the planting of shrubs, flowers, and/or groundcovers to help conceal the wall. Private yards for single-family and multi-family dwellings, open fencing (e.g. tubular steel), and enclosed private areas (e.g. pool deck) are not subject to this guideline.
- Landscaping shall be used as a transition between public and private space.
- Planters matching the theme of the project and planted with colorful flowers are used to separate vehicle and foot traffic and add to visual appeal of the project.







2.2.6 Buffers & Adjacencies





2.2.7 Screens, Fences, & Walls



Screens, fences, and walls act as buffers between land uses, distinguish private space from public space and provide privacy.

- Fences and walls incorporate the project theme and add to the overall visual continuity of the project.
- Landscaping is effectively employed to screen undesirable uses from sight.







2.2.7 Screens, Fences, & Walls







2.2.8 Street Furnishings



Street furnishings shall reflect and complement the overall character of the project and provide consistency between distinct districts, creating an enjoyable and memorable experience.

- Benches and other features are designed to reflect the project theme.
- Tree grates and other project features incorporate the project logo.
- Trash receptacles, newspaper kiosks, light fixtures all feature similar design aesthetic and accent details.
- Bicycle racks are designed for form and function.









2.2.8 Street Furnishings















2.2.9 Thematic Features

Thematic elements incorporated into various design features have a significant impact on establishing a sense of place and identity for a project.

- Project logo may be incorporated into street furnishings, walkways, and signage.
- Artwork/mural on walls within the Downtown District is allowed. Utility boxes may be wrapped with art to provide visual interest on utilitarian infrastructure and may be permitted throughout the entire Master Plan area.
- Material selection and special paving patterns for public spaces shall continue the project theme.
- Project themes are incorporated into building design to reinforce project identity.



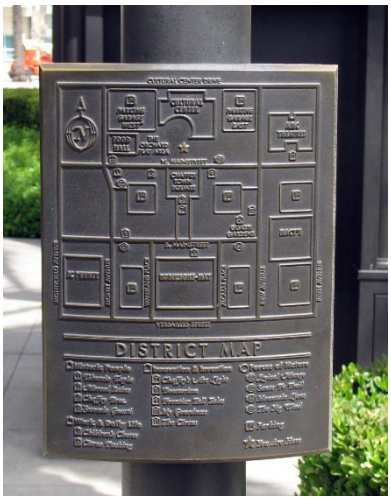




2.2.9 Thematic Features











2.2.10 Signage

Signage plays a significant role in the visual quality of a community. Signs announce one's arrival at a distinct location, direct the flow of traffic, and provide information to the community through a variety of sign types, which are coordinated around a common theme.

General Signage Guidelines

- Signs shall be limited to a maximum of three (3) colors unless the use of corporate color schemes or logos dictates the use of more than three (3) colors. There should be a significant contrast between lettering colors and background colors for legibility.
- Signs for the Downtown District shall be enhanced, including halo-lit, reverse halo-lit, externally illuminated, non-illuminated, or other acceptable "high-quality" design acceptable to the City and approved through a comprehensive sign program.
- Sign conduits, transformers, junction boxes, etc. must be concealed from view.
- No sign shall be placed in such a manner that visibility of signs on an adjacent property is obscured.
- Signs should not extend above the eave line or parapet of the buildings on which they are located, except where such signs form an integral part of the building.
- Select sign colors and materials that contribute to legibility and design integrity.
- The sign copy shall be appropriately sized for the sign structure or wall. Signs should not be too large to overwhelm the elevation, nor should they be too small to be illegible. Sign shall not be more than 80 percent of the width of the unit frontage to which is attached.
- The sign structure shall be consistent with the architectural style of the building that it is placed on or close to.
- Signage may move or rotate, but the mechanism for moving or rotating shall not be visible.
- The use of propellors, flags, or noise-creating devices as part of a permanent sign shall not be allowed.
- The use of light-reflecting materials, messages appearing for less than 30 seconds, or flashing/moving lights is prohibited.

Major and Minor Tenant Identification

The purpose of these signs is to identify major and minor tenants within the Master Plan area. There are typically three (3) different types of signs utilized for tenant identification:

- Monument sigs.

- Walls signs.
- Projecting signs.

Monument Sign Guidelines

- Use a consistent color scheme and design on all free-standing signs within the Downtown District.
- Signs shall be constructed of permanent, durable materials.
- Monument signs should be designed with the width of the base of the sign equal to or more than the width of the sign face.
- Plastic is prohibited except for use for the sign copy. Exterior grade acrylic (e.g. plexiglass) is acceptable.

Wall and Projecting Sign Guidelines

- Locate signs as close to the customer entrance as possible.
- Raceways and sign supports shall not be visible.
- Internally illuminated box signs and banners used as permanent signs are prohibited.
- Projecting signs shall be placed perpendicular to the building wall and should not extend above building eave of a sloped roof or highest point on a flat roof.
- Projecting signs shall be attached to the building fascia or canopy with an attractive and decorative support.
- Exterior signs shall be constructed of permanent and durable materials.
- Creative signage designs and techniques are encouraged.

Changeable Signage

The purpose of changeable signage is to create excitement and provide a visually interesting commercial area. Two (2) styles of this signage used in within the Downtown District to achieve this goal are "pageantry" and "marquee signs."

Pageantry

Pageantry includes flags, pole-mounted banners, kiosks, canopies, lights, directories, ground-mounted graphics, wrapped utility boxes, or other similar, temporary or permanent (but changeable) elements. The intent is to allow regular changes to the pageantry elements in terms of color, design, and other visual content so the pageantry signage can always look current. The intent of pageantry is to help advertise for special events such as fairs, public gatherings, concerts in the park, farmer's markets, etc. and to allow for a variety of different methods to advertise community events within the plan area.

Guidelines for pageantry include:

- Pageantry may be located in any portion of the Downtown District. Pageantry may be placed on street lights and over the public rights-of-way, provided applicable permits have been obtained from Public Works.
- Air-inflated signs, moving signs, paper, cardboard, Styrofoam, stickers, and decals are not acceptable forms of pageantry (directories and kiosks excepted).
- Pageantry shall not include flashing, flickering, rotating, or moving lights.
- Temporary promotional advertising (banners) is not considered to be pageantry.
- Kiosks and directories should provide vertical breaks in the sign structure.
- Individual panels shall be recessed, framed, or treated to avoid a flat appearance of the sign face.

Marquee Signs

Marquee signs are typically used to provide information about current showings or events for theaters and live entertainment uses. Guidelines for marquee signs include:

- Marquee signs may project or be integrated into the building to promote enhanced articulation.
- Plain, rectangular marquee signs without any articulation are discouraged.
- Marquee signs may be manual or electronic.
- Marquee signs may include advertisements.

Directional Signage

The purpose of directional signage is to direct the flow of vehicular and pedestrian traffic within the Mixed-Use District.

Directional and Wayfinding Signs

Directional and wayfinding signs are typically horizontal signs with tenant names and directional arrows. Guidelines for directional/wayfinding signs include:

- Directional and information signs shall be attractive, clear, and consistent in theme, location, and design.
- Place directional signs at strategic locations throughout the Downtown district, providing directions to key destinations and facilities such as parking facilities for automobiles and bicycles, transit stops, and walking and bicycling routes to nearby parks, plazas, neighborhoods, shopping, civic and other destinations.
- The project name may be located on the sign in a smaller, more understated manner to not detract from the wayfinding.
- Directional and signs with exposed Unistrut supports shall be avoided.
- The placement of directional signs shall not limit sight lines.

- Wayfinding signs may be co-located with other streetscape furniture in the Downtown district, such as light standards and transit shelters, where possible, to enhance visibility and reduce visual clutter in the public realm.
- Provide consistency between wayfinding/information signs and street furniture throughout the Downtown district. This can include customized poles and mounts for regulatory signs and lighting fixtures, and an area logo, font, and color scheme.
- Elements such as pole banners or decorative paving elements can serve as public art, branding, and wayfinding.

Temporary Signage

The purpose of temporary signage is to inform the public of a special event of limited duration, such as a grand opening. The duration and requirements for Temporary Signs shall adhere to the provisions within Section 5.7 of the EMC. The guidelines below apply to temporary signage:

- Temporary signage should not be affixed onto the roof of a building, a window or landscape area.
- Temporary signage material should consist of vinyl, nylon, canvas, or cloth.
- Temporary signage should be well maintained.


CITY
HALL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TO PARKING
PASEO
ROUTE 66
WEST


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THEATRE SQUARE


CULTURAL CENTER
FOODHALL
AMC THEATRES
RESTROOMS
CULTURAL CENTER
AMC THEATRES
MACY'S
RESTROOMS
SEPHORA


AMERICANA
DIRECTORY


ELEVATION 66
brewing company




BANANA REPUBLIC
MAINSTREET


RANCHO VICTORIA
CAFES


Elevator & Stairs
East Terrace

3 LAND USE PROGRAM

3.1. INTRODUCTION

On December 13, 2017, the City of Eastvale City Council adopted a General Plan Amendment to change the land use designation for the Leal Property from Business Park, High Density Residential, and Medium Density Residential to "Leal Property" or as shown on the General Plan Land Use Map, the "Leal Policy Area." As part of this General Plan Amendment, the City Council adopted Policy LU-8.1, which is a land use table that specifies permitted land uses and development intensities. This chapter further describes the land use program for the Leal Master Plan and its consistency with General Plan Policy LU-8.1. The land use program establishes the types and intensity of development allowed within the Leal Master Plan. A land use map specifying locations for these uses is provided in Figure 3.1, Land Use Plan. Access roads showing in the Land Use Plan are described in Section 2.2.2, Circulation Plan.

Concurrent with the City Council's adoption of a General Plan Amendment in 2017 for the Leal Property, the City Council certified an Environmental Impact Report (EIR) (State Clearinghouse No. 2015031028). The adoption of this Master Plan Amendment was accompanied by an Addendum to the Leal Master Plan EIR, which provides further detailed environmental review of the land use program. The environmental analysis presented in the Addendum to the Leal Master Plan EIR determined that to avoid new or more severe significant impacts, the maximum development intensity on the Leal Property is 2,500 residential units and 595,000 square feet of general commercial, office, and civic center uses. Since that land use limitation has been established by the environmental analysis, this Master Plan Amendment incorporates that limitation as the maximum permitted land use intensities.

Figure 3.1: Land Use Plan



3.2. LAND USE TYPES AND DEVELOPMENT POTENTIALS

The City of Eastvale General Plan Policy LU-8.1 references a land use table that has been summarized as follows:

Table 3-1:General Plan Land Use Table

Land Use Type	Minimum/ Maximum Permitted	Details
Lifestyle Center	325,000 SF to 1,300,000 SF	Standard and mixed-use retail
General Commercial	Up to 225,000 SF	"Big Box" Retail
Commercial Office	Up to 920,000 SF No Minimum	
Hotel	Up to 450 rooms No Minimum	Permitted in Lifestyle and General Commercial
Civic Center	Not Specified	Permitted anywhere on Project
Residential Medium Density (14 – 21 du/ac)	No Minimum No Maximum	Single Family Attached, condominiums, townhomes,
Residential High Density (22 – 40 du/ac)	Minimum 500 du Maximum 660 du	Townhomes, condominiums, stacked flats, and apartments

This land use table was incorporated into the General Plan as a general guide to the development of the Leal Property, recognizing that further development planning and detail would occur subsequent to the General Plan Amendment. The Leal Master Plan Amendment provides the next stage in refinement of the development plan and thus refines the proposed land use mix of uses and intensities.

General Plan Policy LU-8.1 includes two residential land use categories, Medium-Density and High-Density. The two residential land use types include density ranges provided in dwelling units per acre and a general description of the types of residential products associated with each residential category.

The Leal Master Plan Amendment distinguishes between the two residential densities by location. The High-Density Residential is located within the Downtown area and consists of either vertical or horizontal mixed use, and primarily consisting of apartments[1]. Within the approximately 52-acre Downtown, residential uses could occur on approximately 21 acres[2]. The maximum of 660 dwelling units planned within the approximately 21 acres

[1] The Leal Master Plan does not regulate ownership of residential units, therefore, there are no limitations on the number of rental or owned units.

[2] The residential acreage within the downtown includes the aggregate of Planning Areas 2, 4, and 10.

where residential is permitted represents a density of approximately 31.0 dwelling units per acre, consistent with the High-Density residential category within the General Plan. The remaining 1,840 dwelling units allowed on the project site would occur over approximately 87.54 acres[3]. This represents a density of approximately 21 dwelling units per acre, which is within the Medium-Density category.

As shown in Figure 3-1, the project site has been organized into different Planning Areas. The Planning Areas represent specific development areas that would be developed either with commercial, residential or mixed-use developments. Other planning areas have been designed for parks and open space and others for right-of-way. Table 3-2, Land Use Summary by Planning Area, shows detailed information for each planning area within the Leal Master Plan area, including land use category and acreages.

Table 3-2: Land Use Summary by Planning Area

Planning Area (PA)	Land Use Category	Approximate Area (AC)	Minimum Intensity DU/AC or SQFT/FAR	Maximum Intensity DU/AC or SQFT/FAR
2	Mixed Use[4]	12.6	660 DU[5] 102,575 sqft[6]	660 DUs[7] Max 40 du/ac No Max sqft
4	Mixed Use	6.5		
5	Commercial Core	4.6		
10	Mixed Use	4.5		
3	Commercial Core	9.8	None	None
1	Residential	7.3		

[3] The residential acreage within the Medium Density category includes the aggregate of Planning Areas 1, 6, 7, 8, 9, 11, 12, 13, K, and L. The two parks are included in this acreage calculation because they serve those residential planning areas.

[4] Subsurface detention and water quality features may be located in Planning Area 2 or Planning Area 1, or a combination of both.

[5] A minimum density of 660 dwelling units is required within the Mixed Use portion of the Downtown, which equals over approximately 21 acres. The dwelling units may be allocated evenly across each planning area or clustered in one or more planning area provided the net density of any individual project does not exceed 40 dwelling units per acre. Net density is calculated by the number of dwelling units applied to only the acreage of the development less any streets, roads, parks, trails, or common open space.

[6] A minimum FAR of 0.10 is applied to Planning Areas 2, 4, and 10, resulting in a minimum requirement of approximately 102,575 square feet. The minimum square footage requirement is approximate based on project site design and for purposes of calculating the minimum square footage per this section including Table3-1, square footage is calculated based on the gross size of the building, including storage, stairwells, mechanical rooms, etc. The City may administratively reduce this minimum square footage requirement without the need for a Master Plan amendment if the City decides it would like additional commercial square footage under the 595,000 square foot cap on Lot 3 or if specific building design and/or site use warrants less square footage.

[7] A maximum of 660 dwelling units is permitted in the Downtown area for consistency with the General Plan, since General Plan density is calculated by the total number of units applied to the approximately 21 acres of Mixed Use residential area.

Planning Area (PA)	Land Use Category	Approximate Area (AC)	Minimum Intensity DU/AC or SQFT/FAR	Maximum Intensity DU/AC or SQFT/FAR
6	Residential	5.6	20 du/ac[8]	1840 DUs Max 40 du/ac[9]
7	Residential	14.1		
8	Residential	3.9		
9	Residential	4.4		
11	Residential	16.6		
12	Residential	17.3		
13	Residential	13.2		
14	Public Facility	1.2	0.6	
A - D	Right-of-Way	9.4	N/A	
E - I	Internal Streets	13.5	N/A	
J-V	Parks and Trails	14.1	N/A	
Total		158.59		
Maximum Development Intensity[10]		2,500 DU	595,000	

3.2.1. Downtown (DT)

The Downtown District (DT) land use category accommodates a mix of residential uses, commercial and office uses such as retail and restaurants, general commercial and commercial office, civic center, and residential. The vision for a lifestyle center included in the City's General Plan occurs within the Downtown District. The DT category applies to approximately 52 gross acres within planning areas 2, 3, 4, 5 and 10 located to the northwest of the Limonite Avenue/Hammer Avenue intersection, in the southeast corner of the Master Plan area. The Master Plan provides for up to 595,000 square feet of commercial, office and civic uses, under the DT land use category. Approximately 21 acres within the DT area can accommodate residential uses. A minimum of 660 dwelling units is required. The

[8] Within the 87.54 acres of Residential Uses (Planning Areas 1, 6, 7, 8, 9, 11, 12, 13, K, and L), a minimum of 730 dwelling units shall be constructed at a minimum net density of 20 dwelling units per acre. The dwelling units may be allocated within one or more planning areas provided the net density of any individual project does not exceed 40 dwelling units per acre. Net density is calculated by the number of dwelling units applied to only the acreage of the development less any streets, roads, parks, trails, or common open space.

[9] A maximum of 1840 dwelling units is permitted in the Residential Uses area for consistency with the General Plan, since General Plan density is calculated by the total number of units applied to the 87.54 acres of Residential Uses area.

[10] Maximum development intensity was determined through the Leal Master Plan EIR and Leal Master Plan EIR Addendum.

dwelling units may be allocated within one or more planning areas provided the net density of any individual project does not exceed 40 dwelling units per acre.

3.2.2. Residential Uses (RU)

The Residential Uses (RU) land use category applies to planning areas 1, 6, 7, 8, 9, 11, 12 and 13. The Master Plan envisions variation in product types, including both detached and attached residential housing types, within the residential category to promote diversity and dynamic neighborhoods. The appropriate residential product types are discussed in Chapter 4, Development Standards. Within the 87.54 acres of Residential Uses (Planning Areas 1, 6, 7, 8, 9, 11, 12, 13, K, and L), a minimum of 730 dwelling units shall be constructed at a minimum net density of 20 dwelling units per acre. The dwelling units may be allocated within one or more planning areas provided the net density of any individual project does not exceed 40 dwelling units per acre. Net density is calculated by the number of dwelling units applied to only the acreage of the development less any streets, roads, parks, trails, or common open space. A maximum of 1,840 dwelling units[11] is permitted in the Residential Uses area for consistency with the General Plan, since General Plan density is calculated by the total number of units over the 87.54 acres of Residential Uses area.

3.2.3. Public Facilities (PF)

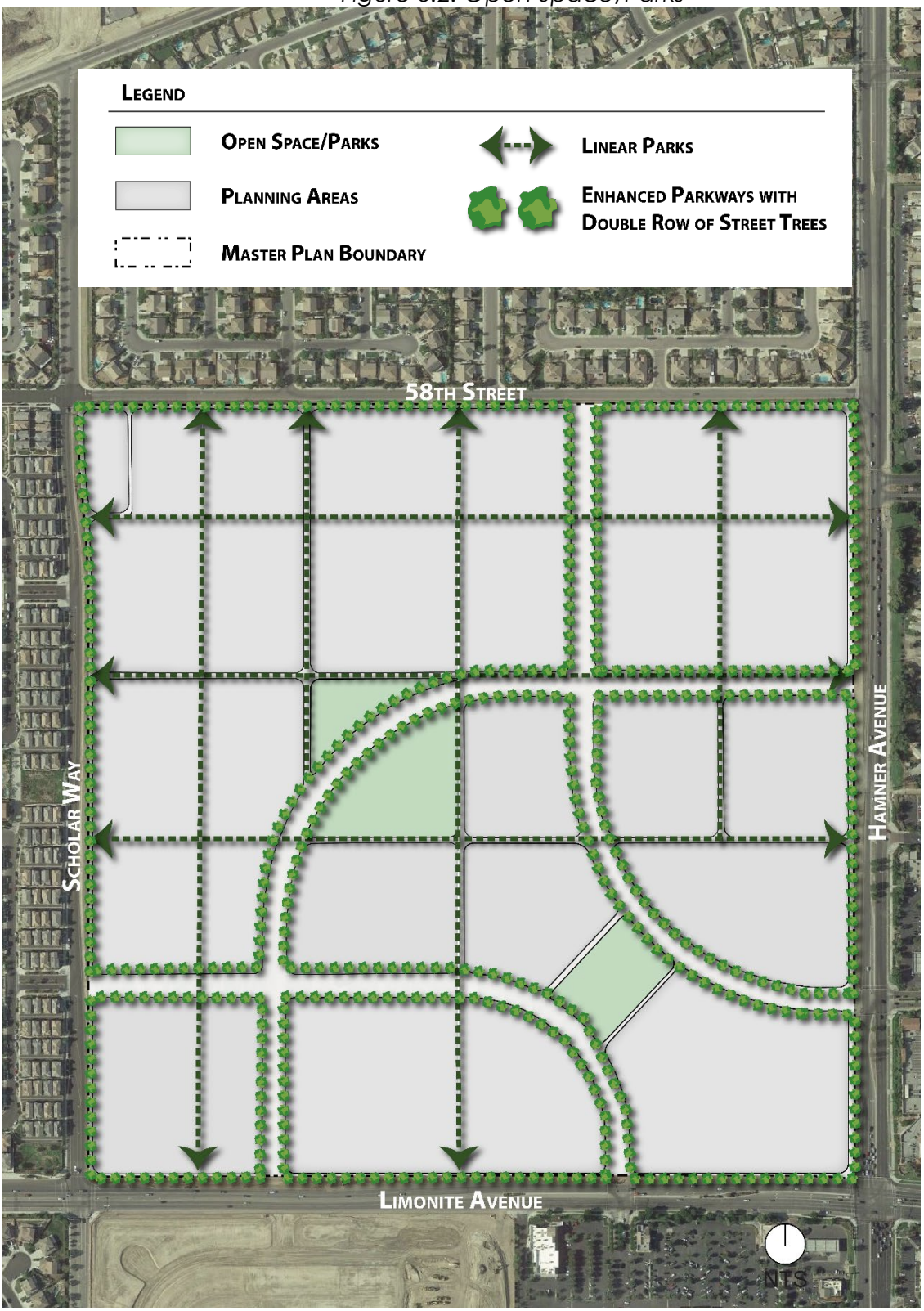
The Public Facility (PF) land use category applies to a 1.2-acre area within planning area 14 located at northwest corner of the Master Plan area. The PF land use designation provides for the development of a fire station.

3.2.4. Parks and Open Space (P/OS)

The Master Plan also provides for compatible recreational uses serving the needs of the residents, such as paseo, parks, recreation facilities and open space, as shown in Figure 3.2, Open Space/Parks Plan, which totals approximately 14.12 acres.

[11] The maximum number of dwelling units of 2,500 was determined by the Addendum to the Master Plan EIR to avoid new or more severe significant impacts. Assuming 660 units are constructed in the DT area, the remaining 1,840 units may be constructed in the RU area.

Figure 3.2: Open Space/Parks



Illustrative purpose only, final design may vary.

3.3. PERMITTED USES

3.3.1. Permitted Uses by Land Use Category

Permitted uses within the Leal Master Plan area are identified on Table 3-3, Permitted Uses. Other use or activity not listed in Table 3-3 may be permitted within the Master Plan area if it is compatible with the intent of the Master Plan and is similar to a permitted use, subject to approval by the Community Development Director or his/her designee.

Table 3-3: Permitted Uses

Permitted (P): Permitted by right
Conditional (C): Permitted upon issuance of a Conditional Use Permit
Not Permitted (blank): Not permitted
Temporary Use (T): Permitted short-term activities

LAND USE	RU	DT	PF	P/OS
Agricultural Workers Housing				
Airports				
Ambulance Services				
Animal Hospitals				
Animal Training				
Apiaries				
Aquaculture				
Art Gallery, Library, Reading Room, Museum		P		
Auction Houses				
Automobile Parts and Supply Stores				
Automobile Service and Repair				
Bail Bonds/Pawnshops				
Banks and Financial Institutions		P		
Barber and Beauty Shops		P		
Bars and Cocktail Lounges		C		
Blueprint and Duplicating Services				
Boat and other Marine Sales and Rental				
Boat Services				
Body and Fender Shops and Spray Painting				
Boutique Wine and Beer Stores (Type 20 ABC Licenses), per Section 3.3.2.5 of the Leal Master Plan		P		

LAND USE	RU	DT	PF	P/OS
Breweries, Wine Blending Businesses, and Distilleries (with a tasting room), less than 1,000 square feet subject to Section 3.3.2.4 of the Leal Master Plan		P		
Breweries, Wine Blending Businesses, and Distilleries (with a tasting room), greater than 1,000 square feet subject to Section 3.3.2.4 of the Leal Master Plan		C		
Breweries, Wine Blending Businesses, and Distilleries (without a tasting room), subject to Section 3.3.2.4 of the Leal Master Plan				
Building Materials Sales Yards				
Building Movers Storage Yard				
Bungalow Courts	P			
Car Washes				
Casinos, including Card Clubs/Rooms				
Cemeteries, Crematories and Mausoleums				
Check-Cashing and Payday Advance				
Cigar, Cigarette and Tobacco Sales				
Cigar, Hookah, and Cigarette Lounges				
Civic Center		P		
Clinics/Office, including Medical, Dental, Chiropractic		P		
Communications and Microwave Installations				
Congregate Care Facilities (7 or more persons)	C	C		
Day Care Centers				
Department Stores				
Discount Stores (i.e., 99 Cents Only Store, Dollar General, Dollar Tree, etc.)				
Drive-In or Drive-Through Operations or Facilities (any use)				
Dwelling, Multiple Family[2]	P	P[1]		
Dwelling, Second Unit[2]	P	P[1]		
Dwelling, Single Family[2]	P	P[1]		
Dwelling, Two Family[2]	P	P[1]		
Emergency Shelters				
Employment Agencies				
Equipment Rental Services				

LAND USE	RU	DT	PF	P/OS
Equipment Sales and Storage				
Establishments with four or more electronic games or coin-operated amusements, or where 50 percent or more of the floor area is occupied by amusement devices, are considered an electronic game arcade as described above; three or fewer machines are not considered a land use separate from the primary use of the site.		C		
Family Day Care, Large	P	P		
Family Day Care, Small	P	P		
Farmers Markets, Carnivals, and other similar temporary events, subject to Eastvale Zoning Code Section 1.5.G, Temporary Events and Permits		T		
Feed and Grain Sales				
Fire and Police Stations		P	P	
Fortune-Telling, Spiritualism, or Similar Activity				
Fraternity and Sorority Houses				
Gasoline Service Stations, with or without the concurrent sale of beer and wine for off-premises consumption				
Golf Cart Sales and Service				
Golf Courses, not including the construction of buildings				
Grocery Stores/Market/Specialty Food Stores		P		
Group Homes (6 or fewer persons)	P	P		
Hardware and Home Improvement Centers				
Hazardous Waste Facilities				
Heliports				
Home Occupations	P	P		
Hospitals				
Hotels		C		
Indoor Amusement/Entertainment Facility: Establishments providing indoor amusement and entertainment services as primary uses for a fee or admission charge, including dance halls, ballrooms, electronic game arcades, dance classes, karate, yoga, etc.		C		

LAND USE	RU	DT	PF	P/OS
Indoor Fitness and Sports Facility: Predominantly participant sports and health activities conducted entirely within an enclosed building. Typical uses include bowling alleys, billiard parlors, ice/roller skating rinks, indoor racquetball courts, indoor climbing facilities, soccer areas, athletic clubs, and health clubs.		C		
Laboratories, Film, Dental, Medical, Research, or Testing				
Liquid Petroleum Service Stations				
Liquor Stores (Type 21 ABC Licenses), subject to Section 3.3.2.5 of the Leal Master Plan				
Live-Work Units, subject to Section 3.4.2.2 of the Leal Master Plan		P		
Lumber Yards, including only incidental mill work				
Massage Parlors, Turkish Baths, or similar personal service establishments				
Medical Marijuana Dispensary				
Meteorological Towers				
Mini Storage				
Mobile Home Sales and Storage, Trailer Sales and Rental House Trailers				
Mobile Home Sales Lot				
Mortuaries				
Motels				
Nurseries and Garden Supply Stores				
Outdoor Commercial Recreation: Facility for various outdoor participant sports and types of recreation where a fee is charged for use (e.g., amphitheaters, amusement and theme parks, golf driving ranges, health and athletic clubs with outdoor facilities, miniature golf courses, skateboard parks, stadiums and coliseums, swim and tennis clubs, water slides, zoos)		C		P
Outdoor Kiosks and Vendor Carts		C		
Parcel Delivery Services				
Petroleum and Bulk Fuel Storage, above ground				
Planned Residential Developments	P	P		

LAND USE	RU	DT	PF	P/OS
Printers or Publishers				
Private Recreation or Event Facilities				P
Professional Offices		P		
Public Infrastructure Facilities, including, but not limited to, drainage, water quality and flood control facilities and public communications facilities	P	P	P	P
Public Recreation, Nonprofit Community Centers and Clubhouses, Social Halls, Parks, Playgrounds, Community Recreation Facilities, Plazas, Trails and Paseos, Community Gardens, Open Space and other similar recreational uses				P
Public Utility Substations and Storage Yards				
Real Estate Offices, Temporary	P	P		
Recycling Collection Facilities				
Religious Institutions	C	C		
Restaurants and other eating establishments with alcoholic beverage consumption (Types 41 and 47 ABC Licenses), subject to Section 3.4.2.3 of the Leal Master Plan		C		
Restaurants and other eating establishments, including fast food restaurants and sandwich shops (excluding drive-through uses), without alcoholic beverage consumption		P		
Restricted Single-Family Residential Subdivisions	P	P		
Retail Sales and Services, <30,001 sq. ft.		P		
Retail Sales and Services, >30,000 sq. ft.				
Sale, Rental, Repair, or Demonstration of Motorcycles, Scooters, and Motorbikes				
Schools, Business and Professional, including Art, Barber, Beauty, Dance, Drama, Music and Swimming		P		
Schools, Private		C		
Senior Housing	P	P		
Sewage Treatment Plants				
Sex-oriented Businesses				
Stations, Bus and Taxi				
Swap Meets				

LAND USE	RU	DT	PF	P/OS
Tattoo Parlors				
Theaters (Live or Cinematic), not including Drive-Ins		C		
Tire Recapping				
Tire Sales and Service, not including recapping				
Tourist Information Centers				
Trailer and Boat Storage				
Travel Trailers and Recreational Vehicle Sales and Service				
Truck and Trailer Sales and Rental				
Truck Service				
Wedding Chapels				
Wireless Communication Facilities, Private	Pursuant to Sec. 4.14 of the EMC			

Note [1]: Residential uses, including live-work, are not allowed in the Planning Area 3 and 5 in Downtown (DT), except as outlined in the Development Agreement.

Note [2]: Residential use types are further defined in Chapter 4.

3.3.2. Standards Related to Specific Uses

The following standards apply to specific uses within the Leal Master Plan. Uses not listed here will be subject to a determination by the Community Development Director.

3.3.2.1. Outdoor Kiosks and Vendor Carts

A. Signage: All signs on outdoor kiosks and vendor carts shall be regulated by Section 4.5, Signage, of this Master Plan.

B. Minor Development Review: Prior to commencement of each outdoor kiosk and vendor cart on public property, the business owner shall obtain approval from the Community Development Director for the size, design, and aesthetic characteristics, to ensure the facility is consistent with the overall characteristic of the development.

3.3.2.2. Live-Work Units

For live-work development in the Planning Areas 2, 4, and 10, the following commercial/residential activities, conducted wholly within enclosed buildings,

shall be permitted, provided the commercial/office uses shall occur in conjunction with residential uses and are not standalone uses:

A. Tailor/Seamstress/Clothing Designer – custom tailoring and sales of apparel in conjunction with tailoring activities, clothing and other sewing products made on the premises

B. Artists and craft/sculpture products, sales galleries, and studios

C. Internet-based commerce (no inventory, no pornography)

D. Office - creative/tech-based offices and services

E. Office - professional offices and services

F. Photographer/photography studios

G. Residential uses in conjunction with office, retail or other work-related uses as permitted herein for live-work development

H. Spas and personal care to include esthetician/body sculpting with proof of training, nail salons and hair salons (for single patron use only and subject to Homeowners Association/Property Owners Association approval)

I. Similar uses permitted by the determination of the Community Development Director.

The property development standards set forth below shall apply to all live-work units within the confines of the Leal Master Plan:

A. Live-work units include the combination of residential living units and workspace of a building for self-employed residents. Ground floor residential living may be permitted in live-work units.

B. Where live-work uses are operated, the workspace shall be limited to a maximum of 50 percent of the entire unit (minus porches and garages).

C. The working area of a live-work unit shall be used exclusively for work activities and not for residential purposes.

D. Storage of hazardous materials necessary for work activities in live-work occupancies may be stored in controlled areas per the current California Building Code used by the City of Eastvale.

E. The residential portion of the live-work unit shall only be occupied by the individual and his/her household that has their professional occupation established in the same unit.

F. Live-work units are single-tenant spaces that include both residential and commercial/office square footage in a single unit providing for a

business to be conducted solely by the resident. In no instance shall the work portion of the live-work unit be sub-leased.

G. Noise levels generated by live-work spaces shall conform to the requirements of the Eastvale Municipal Code for residential use.

H. All signage and lighting shall comply with the requirements of the Leal Master Plan and the Eastvale Zoning Code and must be approved the City of Eastvale.

3.3.2.3. Alcohol Sales with a Bona-Fide Eating Establishment

The sale of beer, wine, or spirits is permitted as an accessory use for any bona-fide eating establishment under a "Type 41 License" or a "Type 47 License" of the California Department of the Alcoholic Beverage Control (ABC) Board.

In addition to the design guidelines and development standards contained in the Leal Master Plan, the following performance standards shall apply to accessory alcohol sales with a bone-fide eating establishment:

A. Food shall be available for purchase at all times during restaurant operating hours.

B. Alcohol sales shall not exceed 50 percent of gross receipts for the establishment.

C. Any sale of spirits for consumption off-premises is strictly prohibited. The consumption of spirits shall be limited to the restaurant area as defined per applicable license from the ABC Board.

D. Beer and wine may be purchased for off-premises consumption; however, the beer and wine sold for off-premises consumption may not be consumed on the premises that it was purchased on.

3.3.2.4. Breweries, Wine Blending Businesses, and Distilleries

Accessory beer, wine, or distilled spirit tastings is permitted within an alcoholic beverage manufacturing facility, provided the area devoted to tastings shall provide parking at the same rate as a restaurant or bar as described in Chapter 4, Table 4-8. The alcohol production area shall provide parking at the same rate as a manufacturing use as described in Chapter 4, Table 4-8. All such uses described within this section shall have an active, valid license from the ABC Board, as applicable.

In addition to the design guidelines and development standards contained in the Leal Master Plan, the following requirements shall apply to craft breweries, wine blending businesses, distilleries, and accessory tasting rooms:

A. A brewery, wine blending, or distillery use with a tasting room equal to or less than 1,000 square feet shall be permitted by right. An accessory

tasting room of more than 1,000 square feet shall be required to apply for a Conditional Use Permit.

B. A brewery, wine blending or distillery use may not exceed production of 15,000 barrels per year.

C. All production activities and on-site storage shall be located completely within the facility. Off-site storage is permitted, provided it meets all applicable provisions of the underlying zone. The display of alcoholic beverages shall be located within the manufacturing area and accessory tasting room facility.

D. The brewery, wine blending, or distillery use and accessory tasting room use shall be allowed to operate and be open to the public during the following hours:

   i. Manufacturing and Operation: 7:00 A.M. to 7:00 P.M. Monday through Saturday; and

   ii. Accessory Tasting Room Open to the Public: 11:00 A.M. to midnight daily, 11:00 A.M. to 1:00 A.M. on Friday and Saturday.

E. Service trucks used for the purposes of loading and unloading materials, ingredients, products, and equipment shall be restricted to the hours of 7:00 A.M. to 6:00 P.M. Monday through Friday and 9:00 A.M. to 6:00 P.M. on Saturday.

F. The consumption, tasting and sales of alcoholic beverages shall be limited to only those products produced on site.

G. Ancillary retail sales shall be limited to only those retail items directly associated with the on-site facility and accessory tasting room.

H. The brewery, wine blending, or distillery use or accessory tasting room shall not charge an admission fee, cover charge or require a minimum purchase.

I. A security plan, including a video surveillance system and exterior lighting plan, satisfactory to the Community Development Director, or his/her designee, shall be submitted to and approved prior to the issuing of a Certificate of Occupancy. The video surveillance system shall be installed to assist with monitoring the property on both the interior and exterior. A Digital Video Recorder (DVR) or similar video-recording device, capable of exporting images in TIFF, BMP, or JPG format shall be used. Recording shall be retained for no less than 30 days. Exterior lighting shall clearly illuminate the common areas surrounding the building including, but not limited to, the entrance and exit doors, as well as the business address.

J. No more than 10 percent of the window display area (including any transparent doors) shall be allowed to bear advertising, signs or any other obstructions. All advertising, signage or other obstructions shall be placed and maintained to ensure a clear and unobstructed view of the establishment's interior. Window signs displaying prices shall be prohibited. No advertising or signage shall be placed in the area above 3 feet or below 6 feet in height of all windows measured from grade.

K. Tours of the brewery, wine blending, or distillery use and accessory tasting room use shall occur on regularly scheduled days and times. The operator shall ensure that tours do not negatively impact adjacent businesses or property owners.

L. The use is not considered a nuisance as defined in the Eastvale Municipal Code;

3.3.2.5. Off-Premises Alcohol Sales

Boutique Wine and Beer Stores may permit the sale of wine and beer for off-premises consumptions under a "Type 20 License" of the ABC Board. General Liquor Stores may permit the sale of general alcohol sales, wine, and beer for off-premises consumptions under a "Type 21 License" of the ABC Board.

In addition to the design guidelines and development standards contained in the Leal Master Plan, the following performance standards shall apply to Boutique Wine and Beer Stores and General Liquor Stores:

A. The use does not result in any adverse effects, jeopardize, or endanger the health, peace, or safety of persons residing, visiting, or working in the surrounding area; The exterior lighting and security measures shall comply with applicable requirements.

B. The use is operated and maintained in a neat, quiet, and orderly condition and operated in a manner so as not to be detrimental to surrounding properties and occupants. This shall encompass the upkeep and maintenance of exterior facades of the building, landscaping, designated parking areas serving the use, fences, and the perimeter of the site, including all public sidewalks, alleys, and parkways;

C. The use is not considered a nuisance as defined in the Eastvale Municipal Code;

D. The exterior lighting and security measures shall comply with applicable requirements (including, but not limited to Sections 120.05.050, Outdoor Lighting; 120.05.080, Neighborhood Preservation Standards; 120.05.060, Off-Street Vehicle Parking as applicable)

E. No more than 10 percent of the square footage of the windows and transparent doors of the premises shall be allowed to bear advertising, signs or any other obstructions including products, shelving, display items

and/or coolers. All advertising, signage, product, shelving, display items and/or coolers shall be placed and maintained to ensure a clear and unobstructed view of the establishment's interior. Window signs displaying prices shall be prohibited. No advertising or signage shall be placed in the area above 3 feet or below six (6) feet in height of all windows measured from grade.

F. A copy of these performance standards, additional City or ABC Board imposed operating conditions, and a 24-hour complaint telephone number shall be posted in a conspicuous and unobstructed place visible from the entrance of the establishment in public view.

4 DEVELOPMENT STANDARDS

This chapter contains the permitted uses and development standards for the Leal Master Plan. Standards not addressed in this chapter are subject to the City of Eastvale Municipal Code in effect at the time of approval of this Master Plan. Additionally, in order to be approved by the City, development will need to comply with the quality expectations and community features identified in Chapter 2 of this Master Plan.

4.1. DEVELOPMENT STANDARDS

4.1.1. Downtown Development Standards

The Downtown (DT) District is envisioned to be the focal point in the City. The intent is to develop an open-air marketplace for retail and specialty uses that are not currently present in Eastvale and in nearby communities (including Live/Work units).

The mix of uses may be horizontal (different uses within a Planning Area separated horizontally) or vertical (different uses within the same building, with commercial or office uses located on the ground floor and with office or residential uses located above). The residential component of this land use district is intended to provide for the development of multi-family residential dwellings in an urban atmosphere.

Minimum and maximum development intensities and densities are outlined in Chapter 3 of this Master Plan.

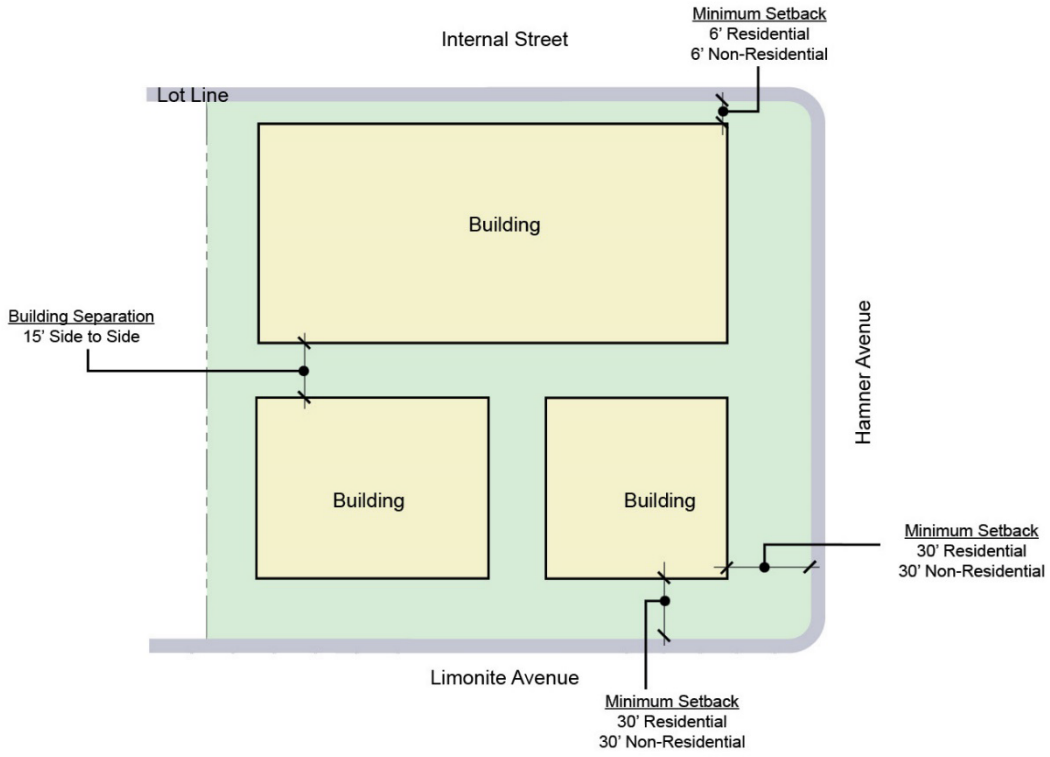
DT District includes planning areas 2, 3, 4, 5 and 10.

Table 4-1 establishes the development standards for the Downtown District. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.1. Residential uses within the Downtown District are subject to the development standards provided in Table 4-1. Where Table 4-1 is silent on a development standard, the development standards presented later in this chapter for specific product types would apply for the project type proposed. If there is a conflict in development standards between Table 4-1 and the development standards for product types, Table 4-1 shall govern.

Table 4-1:Downtown Development Standards

	RESIDENTIAL BUILDINGS	NON-RESIDENTIAL/ MIXED-USE BUILDINGS
Maximum Site Coverage	75%	N/A
Maximum Building Height	65' (4 stories)	
Minimum Building Setbacks From		
Hamner Avenue ROW	30'	30'
Limonite Avenue ROW	30'	30'
Lot Line Along Internal Street	6'	6'
Minimum Building Separation		
Residential - Front to Front (entries) - at open space	20'	N/A
Residential - Side to Side (no entries) - at open space	15'	N/A
Non-Residential/Mixed-Use – Side to Side	N/A	15'

Figure 4.1 Downtown Setback Diagram



4.1.2. Residential Development Standards

The development standards and product types included herein are intended to establish the minimum design parameters. An appropriate mix of building types shall be incorporated into the residential land use and mixed-use districts to avoid monotonous neighborhoods.

Table 3-2 within Chapter 3 establishes permitted uses, including Dwelling – Multiple Family, Second Unit, Single Family, and Two-Family. Those permitted residential land use categories are further defined in this Chapter through the following description of residential product types permitted in the Master Plan area.

Development standards for residential uses within the Downtown District are presented above in Table 4-1. Development standards for residential uses within the Residential Uses District (Planning Areas 1, 6, 7, 8, 9, 11, 12 and 13) are presented below by housing type.

Conventional Single Family Detached Homes typically have street front orientation where primary entries and walks face the street or the side, and have private rear and side yards. Garages are in the front or side and face the street. Resident parking spaces are provided in garages and guest parking spaces are provided in driveways or on local streets.

Zero-Lot Line Homes are designed to fit together along a common property line by providing one home with a deeply recessed garage. Reciprocal use easements are used to maximize the side yard areas. Zero-lot line homes typically have street front orientation where primary entries face the street, and have private rear and side yards. Garages with driveways face the street. Resident parking spaces are provided in garages and guest parking spaces are provided in driveways or on local streets.

Rear Loaded Homes have street-facing primary entries and are designed to take garage access from a shared access drive behind the homes. Private yard space is provided in a side yard, a courtyard behind the front portion of the house or behind the house between a detached garage and the home. Resident parking spaces are provided in garages and guest parking spaces are provided in driveways (18' minimum in length where provided), on the street or in a common parking area. Reciprocal use easements may be used to maximize side yard areas.

Detached Cluster Homes are single-family detached dwellings oriented on a shared access drive. Each cluster module typically consists of 4 to 10 dwelling units. Resident parking spaces are provided in garages and guest parking spaces are provided on the street or in a common parking area. Reciprocal use easements may be used to maximize side yard areas.

Row Townhomes are single-family attached homes with primary entries facing street or common open space. The units have private outdoor living space. Automobile access is via an alley or shared access drive. Resident parking spaces are provided in garages, and guest parking spaces are provided on public or private local streets or in designated parking areas.

Attached Motorcourt Homes are buildings mixed with townhomes and flats. The entries are from the street or common open space. Automobile access is via an alley or shared access drive. Resident parking spaces are provided in garages, and guest parking spaces are provided on public or private local streets or in designated parking areas.

Apartments/Flats are buildings with either walk-up units or flats in multiple story configurations. The entries can either be external from the street or common open space, or internal and elevator served. Resident parking spaces are provided either in garages, surface parking, or in multiple story parking structures. The units tend to be for rent as opposed to for sale.

Detailed design standards per product types are presented below and shown in Tables 4-2 to 4-7.

4.1.2.1. Conventional SFD Residential

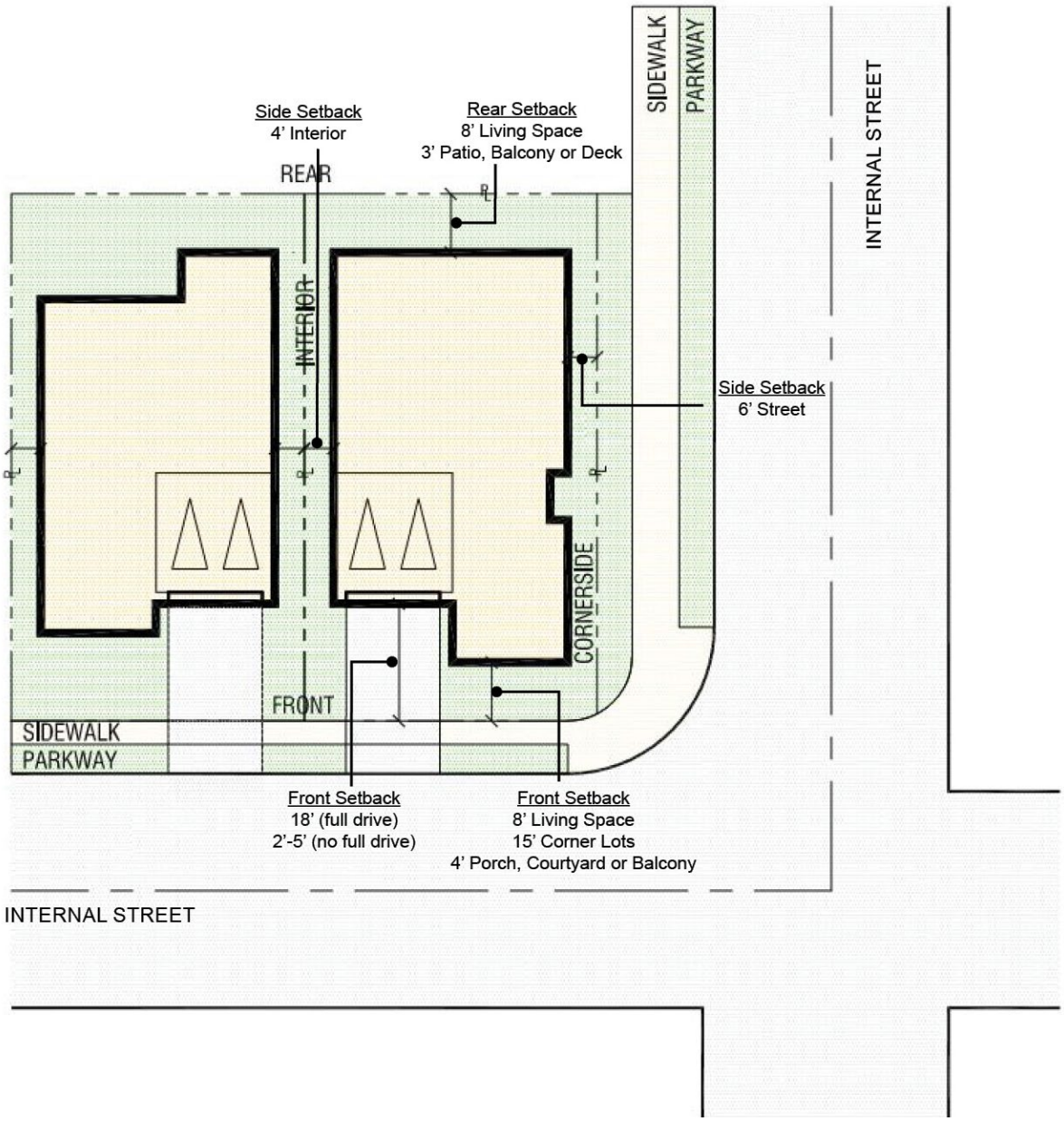
The development standards provided in Table 4-2 have been established to encourage forward-facing living space. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.3. These standards allow for the placement of entries, windows, front porches and living spaces closer to the street to provide more active and visually interesting streetscape.

Table 4-2: Conventional SFD Residential Development Standards

	Conventional SFD Homes
Minimum Lot Size	2,500 sq. ft.
Minimum Lot Width[1]	40'
Maximum Building Coverage	70%
Maximum Building Height	50' (3 stories)
Minimum Front Setback (from Property Line)	
Living Space	8' (15' at the corner lots)
Porch, Courtyard or Balcony	4'
Front Entry Garage	18' (full driveway)/ 2'-5' (no full driveway)
Minimum Side Setback (from Property Line)	
Interior Side	4'
Internal Street Right-of-Way Side	6'
Minimum Rear Setback (from Property Line)	
Living Space	10'
Patio Cover, Balcony or Deck	3'

[1] The minimum lot width for knuckle and cul-de-sac lots shall be the average of the widths measured at the front and rear edges of the lot

Figure 4.3 Conventional SFD Residential Setback Diagram



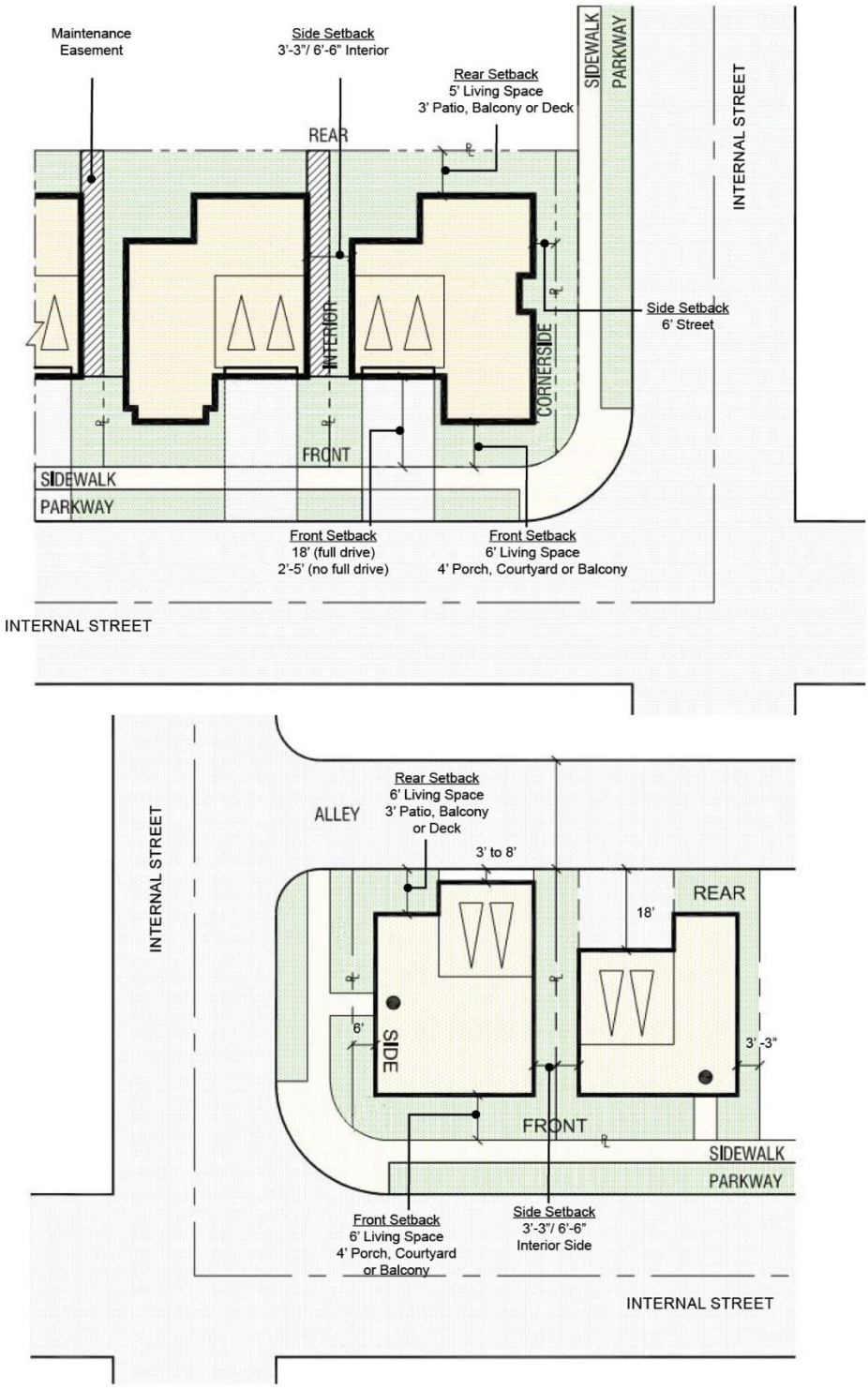
4.1.2.2. Zero-Lot Line and Rear Loaded SFD Residential

Table 4-3 establishes the development standards for front loaded zero-lot line and rear loaded SFD residential development. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.4. Note: Zero-Lot Line Homes may be front or rear loaded. In the event that a rear-loaded Zero-Lot Line Home is proposed, the Rear-Loaded Homes standards shall apply (with a maintenance easement for the side yard).

Table 4-3: Zero-Lot & Rear Loaded SFD Residential Development Standards

	Zero-Lot Line Homes	Rear Loaded Homes
Minimum Lot Size	2,500 sq. ft.	2,000 sq. ft.
Maximum Building Height	50' (3 stories)	50' (3 stories)
Maximum Building Coverage	70%	70%
Minimum Front Setback (from Property Line)		
Living Space	6'	6'
Porch, Courtyard or Balcony	4'	4'
Front Entry Garage	18' (full driveway/2'- 5')	N/A
Minimum Side Setback (from Property Line)		
Interior Side (one side/between buildings)	3'/6'	3'/6'
Internal Street Right-of-Way Side	6'	6'
Minimum Rear Setback (from Property Line)		
Living Space	5'	5'
Patio Cover, Balcony or Deck	3'	3'
Rear Entry Garage Setback (from Access Drive)	N/A	3' to 8' or 18' min.

Figure 4.4 Front Loaded Zero-Lot & Rear Loaded SFD Residential Setback Diagrams



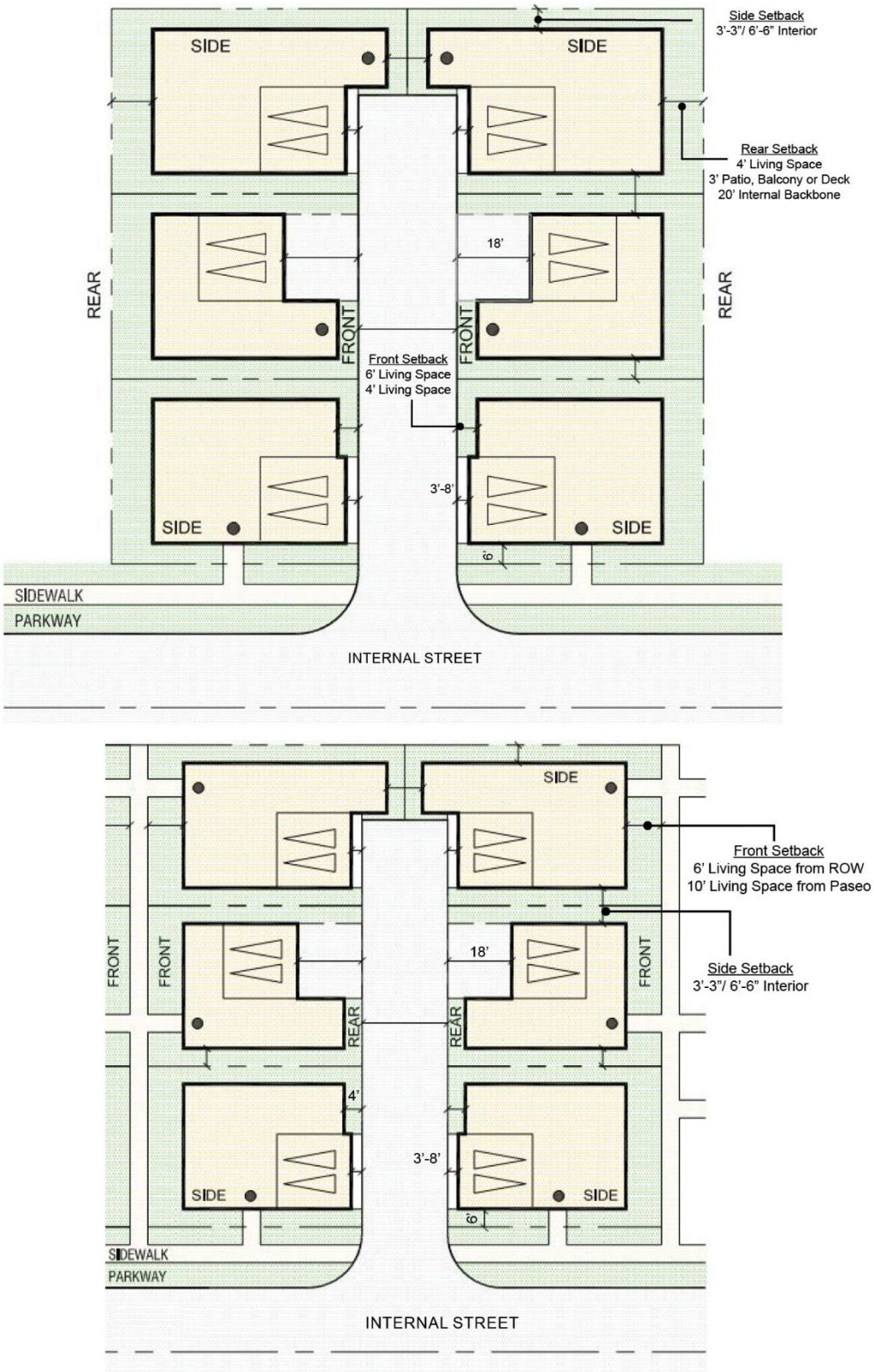
4.1.2.3. Detached Cluster Residential Development

Table 4-4 establishes the development standards for detached cluster residential development. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.5.

Table 4-4:Detached Cluster Home Development Standards

	Front-Loaded Cluster Homes	Rear-Loaded Cluster Homes
Minimum Lot Size	1,500 sq. ft. (or Condo Map)	1,500 sq. ft. (or Condo Map)
Maximum Building Height	50' (3 stories)	50' (3 stories)
Maximum Building Coverage	70%	70%
Minimum Front Setback		
Living Space from Internal Street Right-of-Way	6'	6'
Living Space from Access Drive	4'	N/A
Living Space from Paseo Walkway	N/A	10'
Minimum Side Setback		
Interior Side (one side/between buildings)	3'-3"/6'-6"	3'-3"/6'-6"
Internal Street Side (from internal street right-of-way)	6'	6'
Minimum Rear Setback (from Lot Line)		
Living Space	4'	4'
Patio Cover, Balcony or Deck	3'	N/A
Garage Face from Access Drive	3' to 8' or 18' min.	3' to 8' or 18' min.

Figure 4.5 Detached Cluster Home Setback Diagram



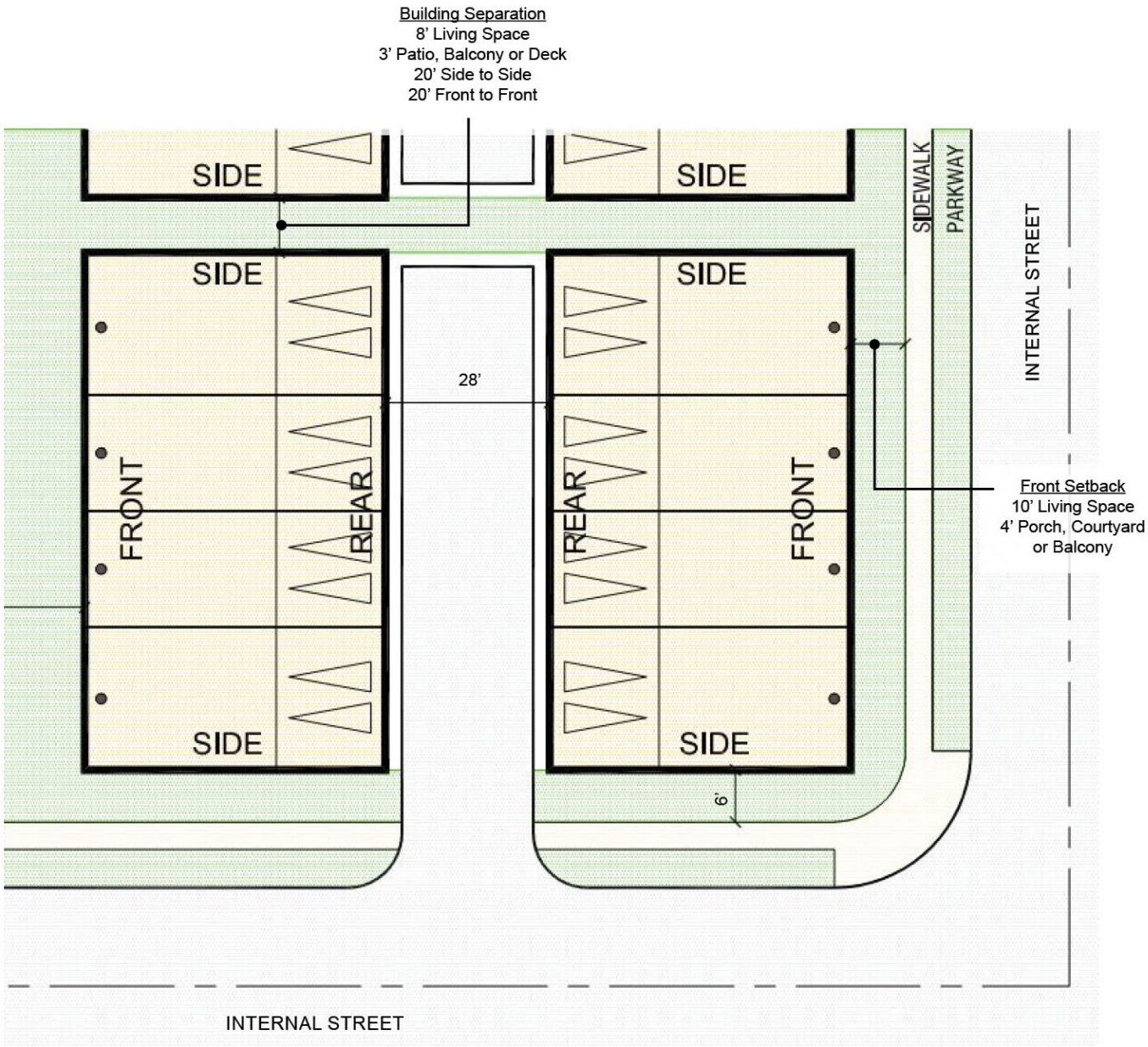
4.1.2.4. Row Townhomes

Table 4-5 establishes the development standards for row townhomes. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.6.

Table 4-5:Row Townhome Development Standards

	Row Townhomes
Minimum Parcel Size	1 ac
Maximum Site Coverage	N/A
Maximum Building Height	50' (3 stories)
Minimum Front Setback (from Internal Street Right-of-Way)	
Front Living Space	10'
Porch, Courtyard or Balcony	4'
Minimum Side Setback (from Internal Street Right-of-Way)	
Street Side	6'
Minimum Building Separation	
Living Space	8'
Patio Cover, Balcony or Deck	3'
Front to Front (entries) - at open space	20'
Side to Side with entries	20'
Garage Door to Garage Door at Alley	28'

Figure 4.6 Row Townhome Setback Diagram



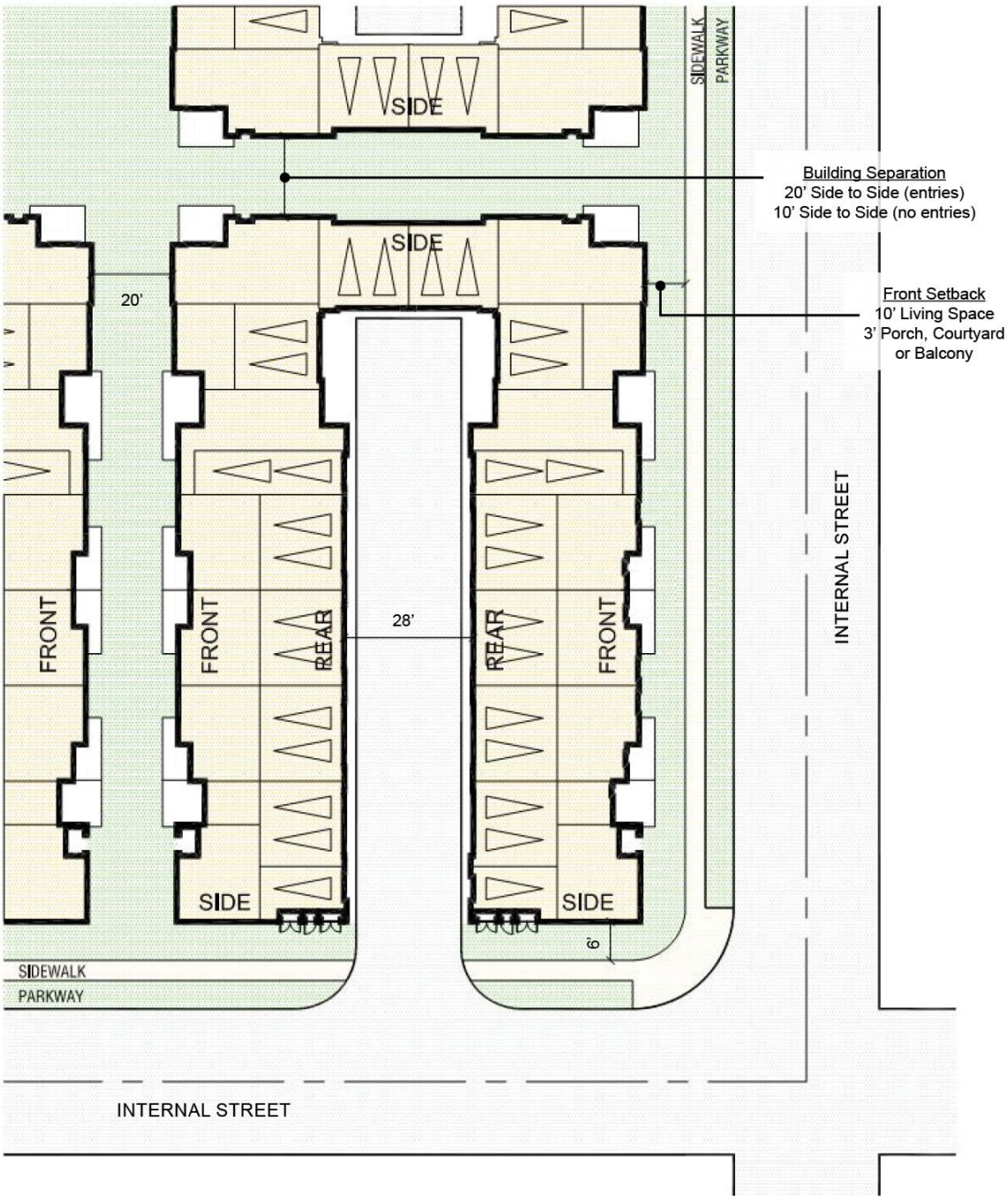
4.1.2.5. Attached Motorcourt Homes

Table 4-6 establishes the development standards for attached motorcourt homes. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.7.

Table 4-6: Attached Motorcourt Home Development Standards

	Attached Motorcourt Homes
Maximum Site Coverage	75%
Maximum Building Height	50' (3 stories)
Minimum Front Setback (from Internal Street Right-of-Way)	
Front Living Space	10'
Porch, Courtyard or Balcony	3'
Minimum Side Setback (from Internal Street Right-of-Way)	
Street Side	6'
Minimum Building Separation	
Front to Front (entries) - at open space	20'
Side to Side (entries)	20'
Side to Side (no entries)	10'
Garage Door to Garage Door at Alley	28'

Figure 4.7 Attached Motorcourt Home Setback Diagram



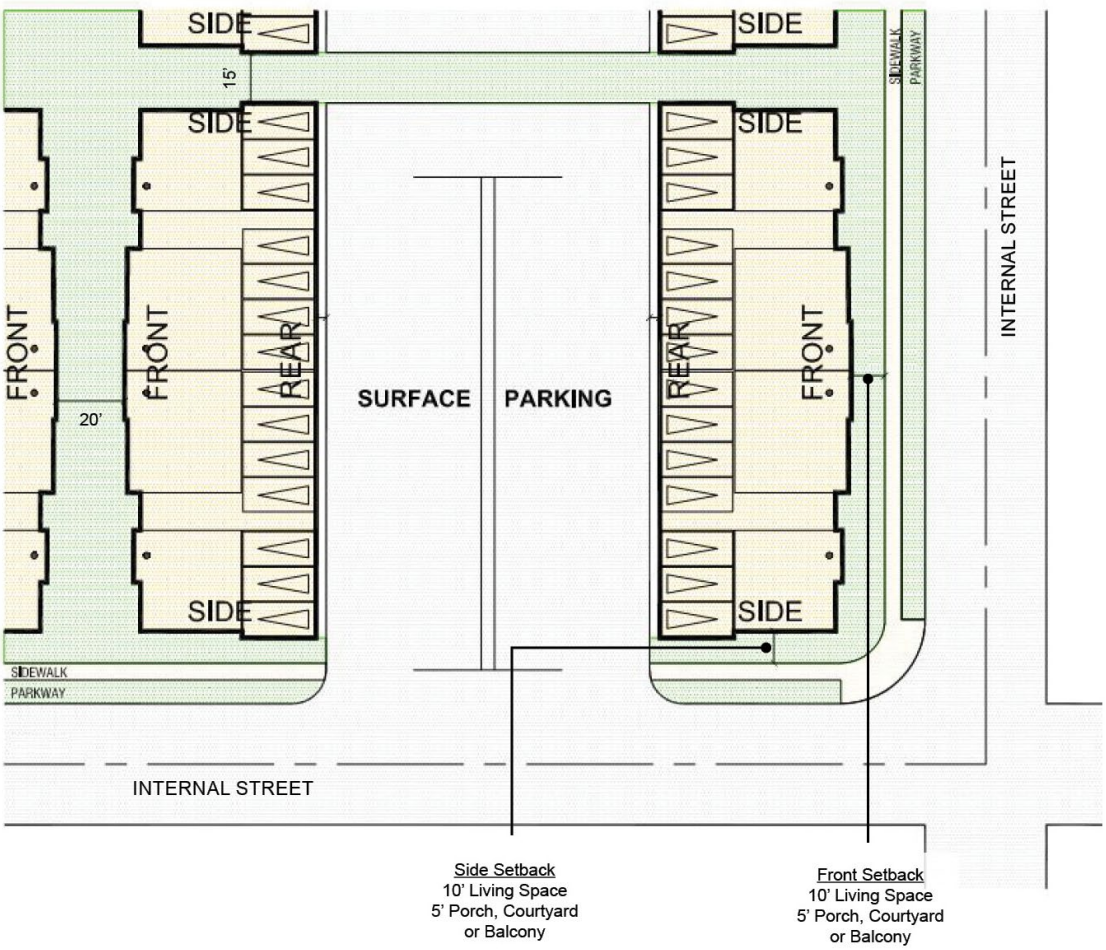
Apartments/Flats

Table 4-7 establishes the development standards for residential apartments/flats. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.8.

Table 4-7: Apartments/Flats Development Standards

	Apartments/Flats
Maximum Site Coverage	75%
Maximum Building Height	65' (4 stories)
Minimum Front Setback (from Internal Street Right-of-Way)	
Front Living Space	10'
Porch, Courtyard or Balcony	3'
Minimum Side Setback (from Internal Street Right-of-Way)	
Living Space	10'
Porch, Courtyard or Balcony	5'
Minimum Building Separation	
Front to Front (entries) - at open space	20'
Side to Side (no entries) - at open space	15'

Figure 4.8 Apartments/Flats Setback Diagram



4.1.3. Public Facility Standards

PA 14 is a public-institutional planning area for a fire station located at the southeast corner of Scholar Avenue and 58th Street.

- Maximum Building Height: None.

4.1.4. Parks and Open Space Standards

The Parks and Open Space (P/OS) District includes Panning Areas J through V. Planning Areas J, K, and L are parks and Planning Areas M through V are trails and open space areas. Planning Area J (PA J) is a village green located between PA 5 and 3, which could be used for community events, such as concerts, movies, art fairs, farmers markets, etc. Planning Area L (PA L) is adjacent to PA 6 and 8 and planned for a community park. Planning Area K (PA K) is adjacent to PA 7 and 12 and is planned as a private recreation facility for the residents of the Leal Master Plan.

- Parking Area Setback from Internal Backbone Street Right-of-Way: 10'
- Building and Structure Setback from Internal Backbone Street Right-of-Way: 6'
- Maximum Building Height: 40' (2 stories); 15' for accessory structure

4.1.5. Allowable Projections and Encroachments

An encroachment is a permitted allowance into a ground-floor or upper-level setback. A projection is an element that is allowed to project above the height limit. In all cases, all encroachments and projections shall comply with the California Building Code (CBC), as well as other applicable codes and regulations such as the American Disability Act. The permitted encroachments and projections are discussed below.

A. Detached accessory buildings, including garages, or parking spaces required in the absence of garages, may occupy not more than 25 percent of a required rear or interior side yard, provided such building is not more than 15 feet in height and the wall of such building or parking space is located not less than 6 feet from the nearest wall of a main building on the same lot or a contiguous lot.

B. A breezeway connecting a main building to another building may be permitted. Such breezeway shall remain open on one side and shall not be considered part of a main building.

C. A covered patio, attached or unattached, which is enclosed on not more than 3 sides may encroach into any setback provided the distance between the property line and the patio at the nearest point is not less than 6 feet.

D. Eaves, cornices, canopies, belt courses, sills, buttresses, bay windows, planter boxes, light fixtures, or other similar architectural features may encroach into any required setback, provided such extensions shall not be nearer than 2 feet to any property line. Where more than one building is located on the same lot or parcel, such features shall not be nearer than 2 feet to a line midway between the main walls of such buildings. Chimneys and fireplaces may encroach into any setback not more than 2 feet, provided such chimneys or fireplaces shall not be nearer than 3 feet to any property line. Where more than one building is located on the same lot or parcel, such chimneys or fireplaces shall not be nearer than 3 feet to a line midway between the main walls of such buildings.

E. Open, unenclosed stairways or balconies not covered by roofs or canopies may encroach into any setback not more than 3 feet.

F. Uncovered porches, platforms, or landings which do not extend above the level of the first floor of the building may encroach into any setback not more than 6 feet; provided, however, an open-work railing, glass or glass like material, no more than 3 ½ feet in height may be installed or constructed on such porch, platform, or landing.

G. Open-work fences, hedges, guard railings, or other landscaping or architectural devices for safety protection around depressed ramps may encroach into any required setback provided such devices are not more than 3 ½ feet in height.

H. Fences and walls, pursuant to Section 5.3 of the Eastvale Zoning Code.

I. Signs may project and/or encroach into any required setback or public right-of-way, subject to applicable requirements in this Master Plan and the Eastvale Zoning Code.

J. Landscape elements such as benches, fountains, and other decorative features may encroach into any setback, provided they do not obstruct any path of travel or intersection visibility requirements per the Eastvale Zoning Code.

K. Mechanical equipment may encroach into any required setback area up to the property line, provided the equipment is screened by landscape or material (e.g. wall) to the maximum extent feasible and allowed by the applicable utility provider.

L. Stairwells, elevator penthouses, mechanical equipment, and roof attachments such as flagpoles, towers, wireless masts, television antennas, and similar diminutive roof attachments, may project above the height limits set forth within the Leal Master Plan, provided such projections shall not exceed 20 feet above the prescribed height limit.

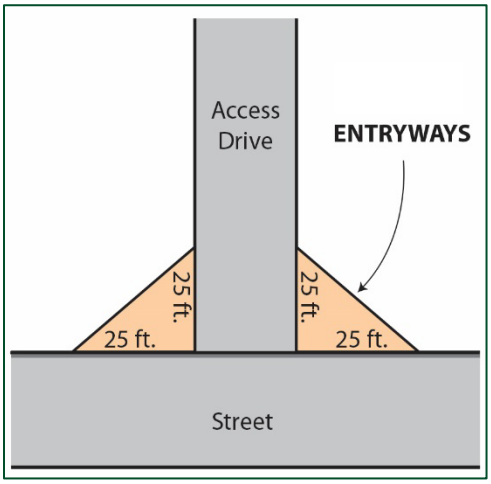
M. Parapets, security railing, and other appurtenances on a flat roof may project above the height limits set forth within the Leal Master Plan,

provided such appurtenances shall not exceed forty-two (42) inches above the prescribed height limit.

4.2. COMMUNITY FEATURES STANDARDS

Community features such as entry monuments, parks, and trails are significant components in the Leal Master Plan. The development and design standards for entryway statements shall be consistent with Chapter 2, Project Character, of this Master Plan and the following:

A. Entryways into the Master Plan shall be identified with special gateway treatments to announce arrival into the project area. The minimum sizes of each are shown in the figures below.



B. Entryway feature treatments may include public art and/or special architectural elements such as sculptures, signage, or enhanced landscaping. All entry points shall be defined through the use of landscaping, trees, and/or architectural elements.

C. Entryway statements shall satisfy the design guidelines provided in the Eastvale Design Standards and Guidelines.

D. Entryways should be designed to provide a clear sense of arrival and set the tone for the overall design quality in Eastvale.

4.3. PARKING

4.3.1. Parking Requirements

Vehicular and bicycle parking shall comply with the parking standards and requirements listed in Table 4-8, *Parking Requirements*, below.

Table 4-8: Parking Requirements

USE TYPE	PARKING REQUIREMENTS
General Commercial/Retail Uses	
General Retail including, but not limited to, neighborhood, community and regional shopping centers, including those with restaurants[1]	4 spaces/1,000 sq ft. of net leasable floor area, except where reduced through a shared parking and/or TDM (see Section 4.3.4)
Professional Business Offices	3 spaces/1,000 sq. ft. of net leasable floor area
Breweries, Wine Blending Businesses and Distilleries	2 spaces/3 employees on the largest shift plus 1 parking space per 100 square feet of tasting area.
Medical Uses	
Medical and Dental Offices, Clinics, and Medical Business Offices	4 spaces/1,000 sq. ft. of net leasable floor area
Civic Uses	
Civic Center, Police Station, Fire Station and the like	3 spaces/1,000 sq. ft. of net floor area. Areas devoted to storage, hallways, restrooms, utility rooms and the like shall not be included within this calculation.
Residential Uses	
Single Family Detached Residential - Conventional SFD, Front-loaded Zero-lot Line SFD, Rear-loaded SFD, and Detached Cluster Homes	1 space/unit within a garage, 1 open space/unit within the lot
Attached Residential - Row Townhomes and Attached Motorcourt Homes	1-bedroom or studio unit: 1.25 spaces/unit 2-bedroom dwelling unit: 1.5 spaces/unit 3+ bedroom dwelling unit: 2.0 spaces/unit
Attached Residential – Apartments and Flats,	1-bedroom or studio unit: 1.25 spaces/unit 2-bedroom dwelling unit: 1.5 spaces/unit 3+ bedroom dwelling unit: 2.0 spaces/unit

[1] For designated outdoor dining areas, no parking spaces are required for the first 500 square feet. Any outdoor dining area that is more than 500 square feet in size shall provide 1 space per 100 square feet for the area beyond 500 square feet.

Residential Units in Mixed-Use Residential Buildings	

Parking requirements for uses not indicated in Table 4-8, *Parking Requirements*, shall be reviewed and approved by the Community Development Director. Uses not specified shall be compared to a similar use or uses that could satisfy the minimum parking demand. When there is no similar use in Table 4-8, *Parking Requirements*, parking requirements found in Section 5.6 of the Eastvale Zoning Code shall apply or a parking study prepared by a firm acceptable to the Community Development Director shall be submitted that provides justification, and data supporting the proposed minimum parking requirement.

Parking may be shared within the Leal Area Master Plan, with some limitations. Figure 4.9, Parking Distribution identifies the location of where parking may be shared for residential and commercial uses within the Master Plan area.

Figure 4.9 Parking Distribution



4.3.2. On-Street Parking

On-street parking spaces immediately adjacent to and on the same side of the street of a property along the internal backbone streets may be counted toward meeting the off-street parking requirement for that property. These spaces may be parallel or angled spaces. With respect to parallel parking spaces that are not marked, each 24-foot length may be counted as one space. No credit is allowed for street frontage where parking is prohibited, such as loading zones and red curb areas.

4.3.3. Tandem Parking

Tandem parking is permitted for both residential and commercial uses within the Leal Master Plan area. Two tandem parking spaces shall have a minimum depth of 36 feet and shall meet the Development Standards for Off-Street Parking Facilities in Section 5.6 of the Eastvale Zoning Code.

4.3.4. Alternative Programs for Parking

Shared parking and other alternative programs for parking may be permitted pursuant to Section 5.6.B of the Eastvale Zoning Code.

A Parking Management Plan/Transportation Demand Management is required for all non-residential uses that increase parking demand by ten (10) parking spaces. The Parking Management Plan/Transportation Demand Management Plan may reduce the overall parking requirements by up to 25 percent, depending on the findings of said plan. This plan shall include at least the following items:

- Information related to carpooling, van pools and staggered work hours.
- Projected effectiveness of carpool, vanpool, staggered work hours or similar transportation programs.
- Proximity to public transportation facilities serving a significant portion of employees and/or customers.
- Shared parking/overlapping parking demands.
- Specific parking management programs increasing parking efficiency, such as valet parking.
- Evidence that employees and/or customers utilize on transportation alternatives on a consistent basis.

4.3.5. Parking Lot Design

The design standards for the parking area shall be consistent with the Eastvale Design Standards and Guidelines and with the following:

A. Parking lots and structures shall be designed to be functionally and visually integrated and connected. Developments on separate parcels shall provide common access and parking areas.

B. All parking areas shall be screened with landscaping and/or decorative walls from all residential developments and pedestrians along the public right-of-way.

C. Parking lots should be visually separated into smaller units with landscaping or low walls however adjacent parking lots shall be connected for vehicle and pedestrian access.

D. Different landscape design should be used to differentiate major access aisles from the rest of the parking area.

E. Common parking areas shall be landscaped with shade trees to create an attractive pedestrian environment.

4.4. SIGNAGE

Except as identified in the Leal Master Plan, signage shall conform to the applicable provisions of Eastvale Zoning Code, Section 5.7, Signs.

Downtown District: A comprehensive Sign Program for the DT District identifying the location and design standards of thematic signage elements, including the sign type, size, material, and illumination, shall receive the Community Development Director's approval prior to the installation of signs. The standards shall include design standards for signs provided in the DT District and a Master Plan Area Map, consistent the signage guidelines included in Section 2.2.10 of the Leal Master Plan.

Residential Use Districts: Signage for the Residential Use (RU) Districts identifying the signage location and design standards, including the sign type, size, material, and illumination, shall receive Community Development Director's approval prior to the installation of signs.

In addition to the sign types listed in Section 2.2.10, Signage, of the Leal Master Plan, the sign standards for the DT and RU Districts shall also address standards for the following, as applicable:

- Grand opening/coming soon signs for commercial and residential development
- For sale/lease signs for commercial and residential development
- Model home signs
- Signs on kiosks

4.4.1. General Sign Standards

The following requirements shall apply to signs within the Leal Master Plan area:

A. All signs and community monumentation in the DT District shall be included as part of an approved Sign Program.

B. Projecting Signs Clearance. A minimum eight (8) feet vertical clearance is required from the bottom of a projecting sign, marquee, blade or awning to the sidewalk or grade immediately below the sign.

C. Moving or Animated Signs. Unless otherwise permitted herein, signs that include, but are not limited to, rotating, flashing, swinging, blinking, strobing, or otherwise changing appearance are prohibited, except for signs that include time and/or temperature that are located at least 100 feet away from a residential land use District. In cases where illuminated signs display temperature and time, said sign shall receive City approval and shall include a mechanism to reduce the brightness of said sign when in proximity to a residential neighborhood. Signs, except for public service time and temperature signs, shall not be flashing, animated, or revolving in nature.

D. Sign Illumination. All signs may be internally or externally illuminated. All direct light rays from all signs shall be confined onto the site on which the sign is located and shall not shine directly upon neighboring property. All exposed raceways are prohibited. Temporary lighting, such as search or flood lights that are used on a permanent basis, are prohibited.

E. Approval of Sign Modifications. The Planning Commission may grant approval of signs that do not comply with the regulations contained in the Leal Master Plan or in the approved Sign Program.

4.4.2. Changeable Signage

A. Pageantry

Pageantry is allowed in the DT District and includes flags, pole-mounted banners, community banners over the right-of-way, kiosks, canopies, lights, directories, ground-mounted graphics, and other similar temporary or permanent (but changeable) elements. The purpose of changeable pageantry signage is to create excitement and provide a visually interesting commercial area. The intent is to allow regular changes to the pageantry elements in terms of color, design, and other visual content so the pageantry signage can look current. Pageantry signage shall comply with the following:

1) No limit on the number of permitted pageantry signs. Maximum sign area per sign face shall be 24 square feet. Maximum height of the sign shall not exceed 20 feet. Minimum setbacks for the freestanding signs shall be the same as the setbacks established for the DT District. Banners over or within the public rights-of-way do not have any size limitation, however, applicable permits from Public Works shall be obtained.

2) Pageantry may consist of murals or other decorative graphics for products sold or offered on or off the premises. All pageantry with off-premises signage must be located within the commercial portion of the project and shall be oriented towards internal uses and shall not be readily visible from properties outside of the Master Plan area.

3) Pageantry may be located in any portion of the DT District, except that pageantry shall not be located at least 20 feet from the curved portion of the street corner to maintain visibility for motorists.

4) Air-inflated signs, moving signs, paper, cardboard, freestanding billboards, styrofoam, stickers, and decals are not acceptable forms of pageantry (directories and kiosks excepted).

5) Pageantry shall not include flashing, flickering, rotating, or moving lights.

6) Temporary promotional advertising (banners) is not considered to be pageantry.

7) Kiosks and directories should provide vertical breaks in the sign structure.

8) Individual panels shall be recessed, framed, or treated to avoid a flat appearance of the sign face.

B. Marquee Signs

The height of manual letters located on a marquee shall be affixed flat to the surface of the sign and shall not have a vertical height of more than 2 feet and shall not extend vertically or horizontally beyond the marquee. An electronic marquee display is permitted, provided that the individual letters shall not have a vertical height of more than 2 feet.

4.4.3. Exempted Signs

The following signs and/or sign structures are exempt from any sign permit requirement as identified in Section 5.7 of the Eastvale Zoning Code; provided, however, that such signs shall comply with all other applicable requirements of the Leal Master Plan and Eastvale Zoning Code.

A. Exempted signs identified in the Eastvale Zoning Code.

B. Temporary contractor's, future development and building sale signs that comply with the provisions in the Eastvale Zoning Code.

C. Public Notices and Signs. Public notices posted pursuant to law, signs erected by governmental agencies and public utilities and warning or information signs required by law for public health and safety.

D. Copy or Message on Changeable Copy Signs. The changing of advertising copy or message on bulletin boards and pageantry, where the basic board or pageantry is permitted under the provisions of this Master Plan, may be changed digitally or manually.

4.5. MASTER PLAN AREA MAPS

Large area maps should be placed at the information booths in the Downtown District. These maps could be combined with local area information/history, advertising, events calendars, etc.

4.6. LANDSCAPING

Landscaping within the Leal Master Plan area shall comply with Section 5.4, Landscaping, General Provisions, of the Eastvale Zoning Code.

5 DEVELOPMENT PROCESS

The goal of the Leal Master Plan is to encourage development of the desired development and level of quality (see Chapter 2, Project Character, and Chapter 3, Land Use Program), while allowing flexibility in the design and implementation of the project. To achieve this, a staged development process has been established which provides for the developer(s) flexibility while this document serves as a guide for the development of the project.

The intent of the staged development process is to allow prospective developers to respond to market demand by first creating a framework of development standards and design guidelines at the time of project conception instead of establishing strict requirements prior to any development being proposed for the Leal Master Plan. In the second phase, an amendment to the Master Plan will be conducted to establish development standards and enhanced guidelines, ensuring that overall design quality meets the City's goals for the project as stated in Chapter 2.

While the City intends to allow flexibility in the project design and layout through implementation of the staged development process, this Master Plan also establishes specific parameters for the design and quality of the project, which must be met by any future development.

Phasing requirements have also been established to ensure that a unifying theme for the Leal Master Plan and comprehensive project-wide plans are developed prior to any development taking place. These phasing requirements will ensure that the City's goal of a comprehensive, high-quality project may be updated.

This chapter establishes the process through which all proposed development is submitted, reviewed, and approved, including requirements for the staged development process and requirements for phasing of developments.

5.1. GENERAL PROVISIONS

The City of Eastvale shall administer the provisions of the Leal Master Plan in accordance with the City of Eastvale General Plan, the City of Eastvale Municipal Code, the Subdivision Map Act, and other applicable State and City regulations. The Master Plan development procedures, regulations, standards, and specifications shall supersede the relevant provisions of the City's Municipal Code, as they currently exist or may be amended in the future. Any development regulation and building requirement not addressed in this Master Plan shall be subject to the City's adopted codes and regulations.

5.1.1. Interpretation

In instances where any section, subsection, sentence, clause, phrase, portion or word contained within this Master Plan is undefined, unclear or vague, then the

Community Development Director, or his/her designee, shall make a determination as to its meaning and intent. The Community Development Director may elect to forward any item to the Planning Commission for final determination. Said determination shall be judged to be final.

5.1.2. Severability

If any section, subsection, sentence, clause, phrase, or portion of this Master Plan, or any future amendments or additions hereto, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Master Plan, or any future amendments or additions hereto. The City hereby declares that it would have adopted these requirements and each sentence, subsection, clause, phrase, or portion or any future amendments or additions thereto, irrespective of the fact that any one or more sections, subsections, clauses, phrases, portions or any future amendments or additions thereto may be declared invalid or unconstitutional.

5.2. STAGED DEVELOPMENT PROCESS SUMMARY

The staged development process has been established for all proposed developments in the Leal Master Plan. The process consists of the following stages:

- Stage 1, Initial Leal Master Plan
- Stage 2, Master Plan Amendment to Create Development Standards and Enhanced Guidelines
- Stage 3, Rough Grading Permit
- Stage 4, Development Plan Review
- Stage 5, Precise Grading and Building Permits

Table 5-1, Staged Development Process, illustrates these steps.

Table 5-1: Staged Development Process

Stage 1: Initial Leal Master Plan (Adopted in 2017)
• Identified Project Objectives and Project Character
• Established Permitted and Conditionally Permitted Uses and Other Development Requirements
• Outlined the Staged Development Review Process
• Amended the General Plan and Zoning Code.
Stage 2: Master Plan Amendment to Create Development Standards and Enhance Guidelines (this document)
• Refine land use and zoning designations within the Master Plan.
• Establish project-wide Land Use Plan, Circulation Plan, and Infrastructure Plans.
• Determine project-wide development standards, design guidelines and project theme.
Stage 3: Rough Grading Permit
• Tentative Tract Map (A Map) will be reviewed and approved to allow to grade the site.
• The site would be cleared and backbone infrastructure such as streets and utilities would be installed.
Stage 4: Development Plan Review
• Submittal of detailed development plans. Development Plans will be reviewed per the Leal Master Plan and the Eastvale Municipal Code, as applicable.
• Any required conditional use permits for specific uses will be reviewed and approved as provided in the Eastvale Municipal Code.
Stage 5: Precise Grading and Building Permits
• Will be reviewed and issued based on the approved Development Plan.
• May occur concurrently with Stage 4.

Stage 1: Initial Leal Master Plan

This first stage in the approval process was completed with the adoption of the Initial Leal Master Plan and the associated General Plan Amendment and Change of Zone. These approvals accomplished the following:

- Identified the project objectives and project character.
- Established permitted and conditionally permitted uses and other development requirements.
- Outlined the staged development review process.
- Created an expanded General Plan policy for the Leal Master Plan and amended the General Plan Land Use Map to show uses consistent with the new Leal Master Plan policy.
- Amended the Zoning Code to provide for the creation and adoption of Master Plans (including this Master Plan) and amended the Zoning Map to reflect the Leal Master Plan.

The Stage 1 process also included the certification of a Final Environmental Impact Report (FEIR), which provided an analysis of the impacts of this Master Plan.

Stage 2: Master Plan Amendment to Create Development Standards and Enhance Guidelines

Stage 2 prepares project-wide development criteria and guidelines which are not included in the Initial Master Plan. The 2022 Amendment conducts this phase. The submittals required in Stage 2 will amend the initial Master Plan to:

- Refine land use and zoning designations within the Master Plan.
- Establish project-wide land use plan, circulation plan, and infrastructure plans.
- Determine project-wide development standards and design guidelines.
- Establish the project theme.
- Refine the permitted and conditionally permitted uses to better reflect anticipated, future development trends.

The submittal of the Stage 2 materials triggered additional environmental review in the form of an Addendum to the Leal Master Plan EIR, which concluded that no new or more severe impacts would occur as a result of the State 2 submittal. The Addendum to the Leal Master Plan EIR prepared for this stage established land use intensity limits within this Master Plan.

Stage 3: Rough Grading Permit

In Stage 3, rough grading permit(s) will be reviewed and issued pursuant to an approved Tentative Tract Map and established grading permit processes in the

City of Eastvale. This phase will consist of clearing the site and installing backbone infrastructure.

Stage 4: Development Review

Stage 4 will consist of the submittal of specific development projects through the Development Review process established in the Leal Master Plan and in the Eastvale Zoning Code, as applicable. During this stage, any required Conditional Use Permits for specific uses will be reviewed and approved as provided in the Eastvale Zoning Code.

Table 5-2, Development Process Approvals, is intended to clarify the process of entitlement through the City of Eastvale for various applications and actions. Table 5-2 applies only to future developments being implemented within the Leal Master Plan area.

Table 5-2: Development Process Approvals

	Action Required By:		
	Community Development Director	Planning Commission	City Council
Development Plan Review and Conditional Use Permits		X	
Master Plan – Interpretations	X		
Master Plan – Minor Adjustments	X		
Master Plan – Amendments		X	X
Tentative Tract Map		X	

The following administrative provisions apply to the implementation of development applications (e.g., Development Plan Reviews) for future developments within the Master Plan area:

A. No vertical development shall occur or building permits issued within the Master Plan area until the proposed development is reviewed by the City's Planning Division and found to be consistent with the adopted Master Plan. Criteria for review and approval of proposed development shall include, but not be limited to, the following:

   i. Conformance with the land use program;

   ii. Conformance with the specific development standards, goals, and policies of the Master Plan; and

B. All Tentative Tract or Parcel Maps shall be consistent with this Master Plan.

Stage 5: Precise Grading and Building Permits

Finally, grading and building permits will be reviewed and issued based on the approved development plans. This process may occur concurrently with Stage 3, pursuant to existing permit processes in the City of Eastvale.

5.3. STAGED DEVELOPMENT PROCESS SUBMITTAL REQUIREMENTS

The following sections describe the items that must be submitted at various points in the development process. Since Stages 1 and 2 were completed with the adoption of the Master Plan and subsequent amendment, no submittal requirements apply and are therefore not shown here.

5.3.1. Stage 1: Initial Leal Master Plan

The Leal Master Plan is the implementing mechanism for the MP (Master Plan) zone district for the Leal property. It sets the vision for development of the project site, assigns a land use program, establishes development standards, and outlines the process by which the property will develop, and the Master Plan will be implemented. As noted above, there are no submittal requirements for Stage 1, which was completed with the adoption of the initial Master Plan.

5.3.2. Stage 2: Master Plan Amendment to Create Development Standards and Enhance Guidelines

The Master Plan Amendment establishes the project-wide development plan components and development standards/enhanced guidelines. As noted above, there are no submittal requirements for Stage 2, which was completed with the adoption of the Master Plan Amendment. Future amendments or adjustments to the Master Plan are discussed in Section 5.4, Master Plan Adjustments and Amendments.

5.3.3. Stage 3: Rough Grading Permits

Submittals of rough grading permits for development within the Leal Master Plan area shall be pursuant to the submittal requirements and procedures established by the City of Eastvale Community Development Department.

5.3.4. Stage 4: Development Review

Each development within the Leal Master Plan must submit a development entitlement application to the City of Eastvale Planning Division for review per the Major or Minor Development Review provisions of the Eastvale Zoning Code (Section 2.1).

5.3.5. Stage 5: Precise Grading and Building Permits

Submittals of precise grading and building permits for development within the Leal Master Plan area shall be pursuant to the submittal requirements and procedures established by the City of Eastvale Community Development Department.

5.4. MASTER PLAN ADJUSTMENTS AND AMENDMENTS

5.4.1. Minor Adjustments to the Master Plan

Minor adjustments to the plans, guidelines, regulations, and standards contained in the adopted Master Plan be approved at the discretion of the Community Development Director, or his/her designee; provided, however, that such deviations are deemed to be in substantial conformance with this Master Plan and are not detrimental to the public health, safety, and welfare. Minor adjustments to the Master Plan must be consistent with the purpose and intent of the originally approved Master Plan. Any decisions made by the Community Development Director may be appealed to the Planning Commission. Decisions of the Planning Commission may be appealed to the City Council. Decisions by the City Council shall be deemed final.

All minor adjustments must comply with the following findings:

A. The total number of dwelling units within the Leal Master Plan area shall not exceed 2,500 dwelling units.[1]

B. The total gross leasable commercial area (office, retail, city hall, library, police station etc.) within the Leal Master Plan shall not exceed 595,000 square feet.[1]

C. The public health, safety, and welfare shall not be jeopardized by the proposed adjustments.

D. No potentially significant environmental impacts are expected to occur as a result of the proposed adjustments, unless if the significant impacts have already been analyzed in a previously environmental document.

E. Substantial conformance to the design guidelines included in Chapter 2, Project Character.

The following modifications constitute "minor adjustments" to the approved Master Plan and may be approved without amending the Master Plan.

A. Slight modifications to the Master Plan area boundaries, as shown in Figure 3.1, Land Use Plan, that respond to more accurate or recent data or actual on-site conditions.

[1] As established by the Leal Master Plan EIR Addendum to avoid new or more severe significant impacts.

B. Minor adjustments to a development standard or intensity limitation not exceeding 20%.

C. Modifications to individual park sizes, provided a total of 14.06 acres is provided for parks or open space.

D. Minor changes to the circulation concept to accommodate actual conditions on-site or modify ingress and egress locations, or to respond to new information that was not available at the time the Master Plan was approved.

E. Minor changes to the design of the street cross sections, provided that the streets have adequate capacity to handle the anticipated volumes of traffic and the design changes are deemed acceptable by the City's Traffic Engineer.

F. Modifications to the Master Plan that allow the Project master developer to move and adjust components of the plan; provided, however, that a plan is submitted to the City and reviewed and approved by the Community Development Director, or his/her designee, and the City Engineer. The plan shall depict the location of all land uses and the relationships of the uses to one another. In evaluating the plan, all of the following conditions must be met for the site plan to be approved:

    i. A maximum of 2,500 dwelling units and 595,000 square feet of commercial gross leasable area (which does not include any civic or public facility uses) shall be allowed within the Master Plan area.[2]

    ii. The land use modifications would not result in any new environmental impacts that were not previously assessed in the approved California Environmental Quality Act (CEQA) documentation for the Master Plan.

G. Minor modifications to the architectural or landscape design guidelines included in Chapter 2. *Project Character*.

H. Minor modifications to the water, sewer, and/or drainage plan(s).

I. Any modifications to the Master Plan phasing.

[2] As established by the Leal Master Plan EIR Addendum to avoid new or more severe significant impacts.

5.4.2. Master Plan Amendments

A. The Project master developer, property owner, or designee shall have the authority to initiate an amendment to the adopted Master Plan at any time. No authorization by City staff, the Planning Commission, or the City Council shall be necessary to initiate a Master Plan Amendment for The Leal Master Plan area. However, the City shall be the approving authority of any requested amendments.

B. Said amendment shall not require a concurrent General Plan Amendment unless it is determined by the City of Eastvale that the proposed amendment would substantively affect the General Plan goals, objectives, policies, or programs for the Leal Master Plan area.

C. All Master Plan Amendments shall be subject to the requirements of CEQA and any applicable City of Eastvale environmental guidelines.

D. The Planning Commission shall review at a noticed public hearing all proposed amendments to the adopted Master Plan. Upon the close of the required public hearing, the Planning Commission shall act by resolution to recommend to adopt, reject, or modify the proposed Master Plan Amendment and forward its recommendation and findings to the City Council for action.

E. The City Council, at a noticed public hearing, shall review the Planning Commission's findings and recommendations. Upon the close of the required public hearing, the City Council shall act by resolution to adopt, reject, or modify the proposed Master Plan Amendment.

F. Prior to approving or conditionally approving any Master Plan Amendment, the Planning Commission and City Council must make the following findings regarding the Amendment:

   i. It is consistent with the goals and policies of the City of Eastvale General Plan;

   ii. It is consistent with the vision, purpose and intent of the Master Plan;

   iii. Results in development of desirable character that will be compatible with existing and proposed development in the surrounding neighborhoods; and

   iv. Respects the aesthetic assets of the community consistent with economic realities.

6 IMPLEMENTATION PLAN

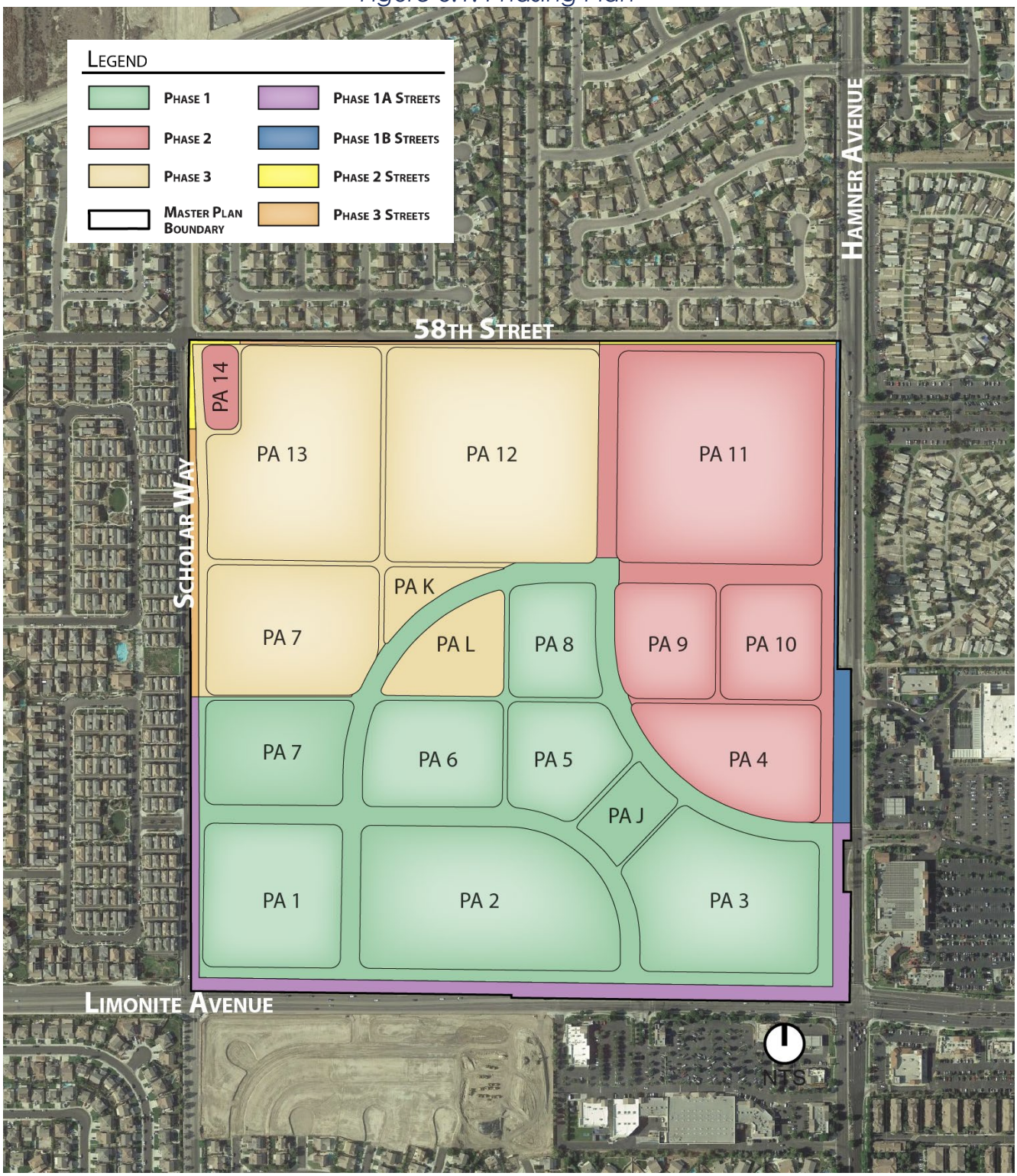
This chapter describes the implementation of this Master Plan, including the phasing of infrastructure and development. Information on the administration of this Master Plan can be found in Chapter 1.

6.1. PHASING

A conceptual Phasing Plan is shown in Figure 6.1. Phasing of the infrastructure as described below shall begin along Limonite Avenue and move north through the project site. The development of uses and the boundaries of each phase will be determined by market forces[1] and the developer(s) of the property, however phasing of residential uses shall be such that several different types of housing shall be offered concurrently.

[1] Since phasing is tied to market conditions, changes to the conceptual phasing plan do not require administrative approval. The Phasing Plan provides information only and is not regulatory. Phasing is at the sole discretion of the developer and may adjust according to market conditions.

Figure 6.1: Phasing Plan



Source: Hunsaker & Associates

6.2. INFRASTRUCTURE COORDINATION

To ensure that infrastructure is developed in a coordinated way and so that all phases of development will have sufficient infrastructure capacity, the following requirements are imposed. Should the project be developed in a single phase, all infrastructure will be installed in the first phase.

The following requirements relate to the coordination of infrastructure with development of uses:

1) Backbone Sewer/Water/Storm Drain Infrastructure – This infrastructure must be developed in conjunction with each phase of development as shown in Figure 6.2. Preparation of an infrastructure plan for backbone water/sewer/drainage infrastructure is a required Stage 3 component (see Chapter 5, Development Process).

   Backbone water/sewer/storm drainage infrastructure includes:

   - Water – Hamner and Limonite Avenues have 30-inch water mains located within the rights-of-way. Water services for the project will use these existing lines to serve the project area.
   - Sewer – Sewer service is available in all of the streets bordering the project (Hamner, Limonite, Scholar, and 58th). Sewer service inside the project area will be built to accommodate development as it proceeds and will all connect to the existing sewer in Limonite.
   - Storm Drainage – These improvements will include water quality and drainage improvements to ensure that stormwater runoff from the site does not degrade downstream environments. Integration of water quality improvements into parks, parkways, and landscaped areas is encouraged throughout the Leal Master Plan.

Figure 6.2: Water Plan



Source: Hunsaker & Associates

Figure 6.3: Sewer Plan

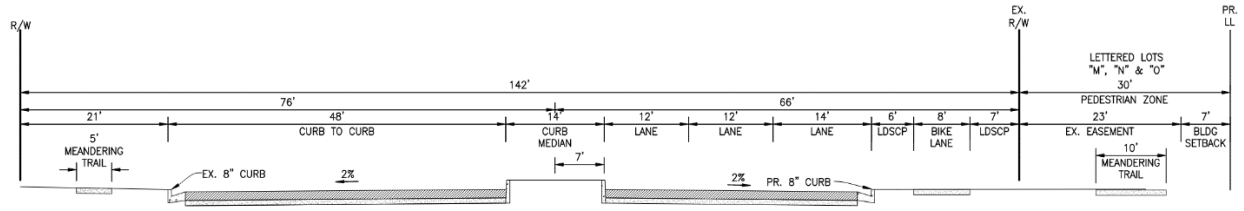


Source: Hunsaker & Associates

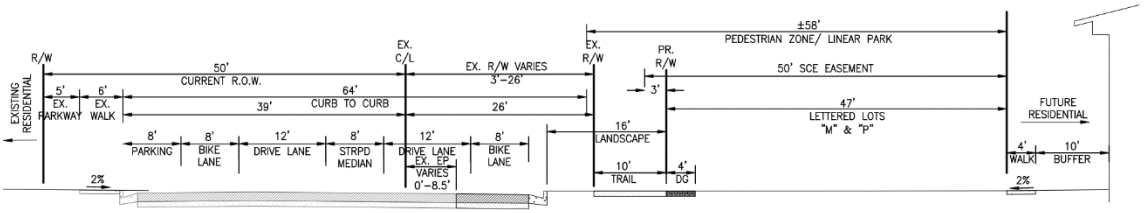
Figure 6.4: Storm Drainage Plan



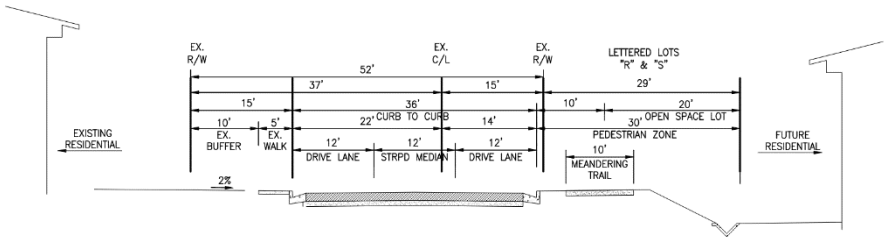
2) External Circulation – Half-width public improvements to Hamner Avenue, Limonite Avenue, Scholar Way and 58th Street shall be constructed with the Phasing Plan as shown in Figure 6.1. Improvements to Scholar Way and 58th Street may be provided in the form of half-width pavement and sidewalks, with the provision that landscaping must be installed at the time that development occurs adjacent to the street. Class I trails are provided on both sides of Limonite Avenue. Class I trails are also provided on one side of Scholar Way, 58th Street and Hamner Avenue. One bike lane is provided on one side of Limonite Avenue. Bike lanes are also provided on both sides of Scholar Way.



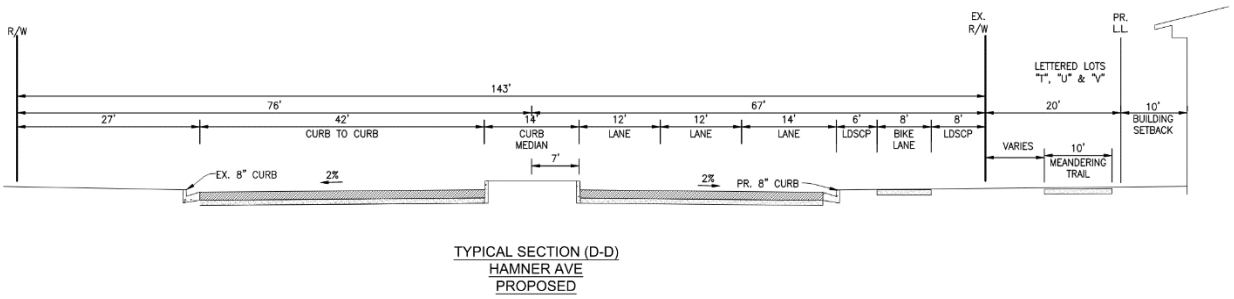
TYPICAL SECTION (A-A)
LIMONITE AVE
PROPOSED



TYPICAL SECTION
SCHOLAR WAY - NO STREET PARKING
BIKE LANE PROPOSED



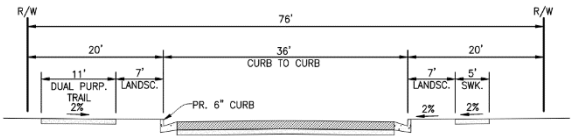
TYPICAL SECTION (C-C)
58TH STREET
PROPOSED



TYPICAL SECTION (D-D)
HAMNER AVE
PROPOSED

Source: Hunsaker & Associates

3) Internal Circulation – Internal roadways within the proposed phase will be constructed to provide adequate ingress/egress to all proposed development in the phase. As needed, roadways in the undeveloped portions of the site shall be constructed to provide adequate emergency access.



TYPICAL SECTION (E-E)
INTERNAL STREET
PROPOSED

Source: Hunsaker & Associates

4) Major/Minor Entries – Major and minor entries shall be developed at the time that a phase containing the entry(ies) is developed. Preparation of a detailed design for both types of entries and a plan for their locations is a required Stage 3 component (see Chapter 5).

5) Signature Iconic Element (Clock-tower, art, etc.) - A unique iconic element such as an art sculpture, mural, clock-tower, or the like that helps define the project and would be unique to the City shall be provided as part of the project. The element shall be located within a publicly accessible space or at a focal point or project entry.

Additional development standards and requirements related to each increment of development are included in Chapter 4, Development Standards, and Chapter 5, Development Process.

6.3. MAINTENANCE

Successful operation of maintenance districts and associations are important in ensuring that the Master Plan area is well-maintained. Maintenance responsibilities for the open spaces, landscape areas, lighting, and common project facilities will be maintained by the homeowner association's property manager.[2] Table 6-1, Maintenance Responsibilities, identifies the maintenance responsibilities for various infrastructure and landscape improvements associated with the project.

Table 6-1: Maintenance Responsibilities

Maintenance Area	City/JCSD	HOA	POA
Internal Streets		X	
Perimeter Right-of-Way	X		
The commercial area, including any parking structures			X
Water System	X		
Sewer System	X		
Internal Storm Drainage Systems		X	
Water Quality Basins		X	
Parks and trails[3]		X	

[2] Funding for private maintenance responsibilities may occur through the homeowner's association, community facilities district, or other maintenance district.

[3] Except for Planning Area J, which will be a City-owned and maintained park.

DRAFT Addendum to the Environmental Impact Report

For the Leal Master Plan

(State Clearinghouse No. 2015031028)

Addendum No. 1

Prepared for:

City of Eastvale

12363 Limonite Avenue, Suite 910

Eastvale, CA 91752

Prepared by:

Carlson Strategic Land Solutions

27134A Paseo Espada, Suite 323

San Juan Capistrano, California 92675

April 2022

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SECTION 1.0 INTRODUCTION

1.1 Background

On December 13, 2017, the City of Eastvale certified an Environmental Impact Report (EIR) (State Clearinghouse No. 2015031028) for the 158.6-acre[1] Project site, adopted a Statement of Overriding Considerations for significant but unavoidable impacts, amended the Eastvale General Plan to incorporate the Leal Master Plan (including amending land use policies and the Land Use Map) and voted to adopt the Leal Master Plan and a corresponding change of zone from heavy agriculture (A-2) to Leal Master Plan. On January 10, 2018, the City held second reading and adopted the Leal Master Plan and change of zone to Leal Master Plan. The Leal Master Plan outlined a multistage planning and development process. The first stage included the adoption of the Leal Master Plan, which identified "the project objectives and specific parameters for the design and quality of overall future development of the project site."[2] Stage 2 of the development process was anticipated to focus on "preparing project-wide development criteria and guidelines that are not included in the Master Plan, creating detailed plans for the first phase(s) of development based on the criteria and guidelines included in the Master Plan."[3] The last development phase outlined in the Master Plan consists of the "submittal of specific development projects through the Development Plan Review process established in the Eastvale Zoning Code."[4]

The proposed Project is defined in Section 1.4 and is being processed through and consists of an amendment to the Leal Master Plan, Tentative Tract Map (TTM), and Development Plan Review (referred to as the "Modified Project"). The Modified Project represents Stage 2 of the development process outlined in the Leal Master Plan.

The Prior EIR analyzed the Leal Master Plan, which is further described in Tables 1 and 2 below and constitutes the "Original Project."

Plans for the Modified Project, as well as the Prior EIR, are available for review on the City's website and in hard copy at:

City of Eastvale City Hall
Contact: Gina Gibson-Williams, Community Development Director
12363 Limonite Avenue, Suite 910
Eastvale, California 91752
Email: ggibson-williams@eastvaleca.gov

[1] The Leal Master Plan EIR identifies the size of the project site as 161 acres. Based on detailed engineering, the actual size of the project site is 158.6 acres.
[2] Leal Master Plan EIR, December 2017, Project Description Page 2.0-2
[3] Leal Master Plan EIR, December 2017, Project Description Page 2.0-2
[4] Leal Master Plan EIR, December 2017, Project Description Page 2.0-2

1.2 Location and Surrounding Land Uses

The Modified Project site encompasses approximately 158.6 acres of former dairy farm in the northern portion of the City of Eastvale. The Modified Project site is bordered by Limonite Avenue on the south, Scholar Way on the west, 58th Street on the north, and Hamner Avenue on the east. The property is addressed as 12741 and 12745 Limonite Avenue, and 12740 58th Street, Eastvale, California. The assessor's parcel numbers are 164-030-010, 164-030-012, 164-030-013, 164-030-014, 164-030-024; 164-030-025. Figure 1 shows the location of the Project site and surrounding land uses. Figure 2 shows the Assessor's Parcel Map.

The Modified Project site is surrounded by the following uses:

South: Residential on the west and Commercial (Cloverdale Marketplace) on the east
West: Residential
North: Residential
East: Residential on the north and Commercial (Eastvale Gateway) on the south

1.3 Modified Project Site Existing Conditions

The Modified Project site is a square shaped approximately 158.6-acre flat property. The site elevation ranges between approximately 683 feet above mean sea level in the northern portion of the site and approximately 660 feet above mean sea level in the southern portion of the site. The Modified Project site has been used previously as a dairy farm, horse ranch, and orchard.

Currently the site is an inactive former dairy farm. Five residential structures exist on the site, as well as a dairy barn, horse barn, and maintenance/repair structure.

Figure 1 also graphically describes the Project location and existing conditions.



Source: Google (2021)

N.T.S.

Figure 1
Aerial View of Project Site and Surrounding Land Uses

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCEL MAY NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES.

SEC. 24 T.2S, R.7W
CITY OF EASTVALE

TRA 027-002

164-03

134-08

24

58TH STREET

(#152880 04-25-00) 889.90 | 430 | (#152880 04-25-00) | (#152879 04-25-00) 1270.89

10
10.97 AC

562 | 295.56 | 51.40 | 265.50 | 838.50

25
28.20 AC M/L

1298.83

12
39.55 AC

30'

AVENUE

1319.80

24
40.00 AC M/L

1320.30 | 1283.30

14
33.73 AC

1045.12

171.70

208.70

13

59.89

47.01

124.51

838.50 | 37 | 481.50 | 990.68 | L=220.11

24 | 19

N89-57-30E

AVENUE

25 | 30

HAMNER

N00-02-30W

R.7W.
R.6.W.

SUMNER AVENUE

VALENCIA ST

PAR 1
1.15 AC

PAR 2
2.34 AC

PAR 3
1.32 AC

PAR 4

PAR 5

PAR 6

PAR 7

PM 243/54-55
123.05 | 188.30 | L= 34.69 | 41.19 | 49.25 | L=84.05 | 138.37 | L=249.63 | 90.10 | 157.98 | 35.70 | 83.59 | 33.58 | 44.36 | 180.69 | 623.92 | 129.73 | 160.36 | 160.27 | 254.94 | N00-05-15W | 59' | 63.87 | 273.38 | 190.46 PM 243/054 | N89-54-28E 627.38 | 87.48 | 40.45 | 57.69 | 117.35 | 93.61 | 44.66 | 64.82 | 44.77 | 74.59 | 121.77 | 163.54 | 76' | 15.61 | N45-08-17E | 29.10 | 160.44

41 | 40 | 35 | 36 | 37 | 39 | 38

LIMONITE

Pg 43 | Pg 69 | Pg 56 | Pg 15 | Pg 13 | Bk 164 Pg 28 | Bk 160 Pg 24 | Bk 164 Pg 42 | Pg 72 | Pg 44 | Pg 03 | Bk 160 Pg 03 | Pg 45 | Pg 71 | Bk 160 Pg 23 | Pg 46 | 03 | Pg 66 | Pg 49 | Pg 65 | Pg 70 | Bk 152 Pg 65 | Pg 22

Data
MB 9/33 SB, 11/42
RS 52/30, RS 57/61

Map Reference
MB 350/51 - 61 TRACT MAP NO. 30633
PM 243/54 - 55 PARCEL MAP NO. 37031

ASSESSOR'S MAP BK164 PG.03
Riverside County, Calif.

BDiaz

Nov 2017

Legend
- Lot Lines
- Right-Of-Way
- Old Lot Lines
- Reference R.O.W
- Other Easements
- Lease Area
- Subdivision Tic Mark

1 " = 400 '

Date	Old Number	New Number
4/22/2004	8	13,ST
4/22/2004	9	14,ST
4/22/2004	11	15,ST
6/25/2004	1	16-17
6/25/2004	2,6,17,020-7	18
6/25/2004	18	19,PGS.42-45
6/25/2004	16	PG.2
11/2/2005	7	20,21
11/2/2005	15	22,23
11/2/2005	20,22	24
11/2/2005	21,23	25
12/28/2005	5	26,ST
4/8/2006	26	27,ST
3/5/2007	3	28,29
3/5/2007	4	30,31
3/5/2007	28,30,020-2	32
3/5/2007	29,31	33
11/1/2011	33	PGS.66,67
11/1/2011	32	PGS.67-69
9/23/2014	27	34,PG.72
9/23/2014	34	PGS. 71,72
10/11/2017	19	35-41

Source: City of Eastvale (04/20/2022)

N.T.S.

Figure 2
Assessor's Parcel Map

1.4 Proposed Modifications

The proposed changes associated with the Modified Project are summarized herein.

Leal Master Plan Amendment
The Modified Project includes an amendment to the Leal Master Plan, which is included in Appendix A to this Addendum. The Leal Master Plan Amendment includes the following primary changes:

- Development Intensities – The Original Leal Master Plan established the following development intensities.

Table 1. Original Leal Master Plan Permitted Development Range

Land Use Type	Minimum/Maximum Range
Lifestyle Center	325,000 to 1,300,000 square feet
General Commercial	Maximum of 225,000 square feet
Commercial Office	Maximum of 920,000 square feet
Hotel	Maximum of 450 rooms
Civic Center	No minimum/maximum
Medium Density Residential	No minimum/maximum
High Density Residential	500 to 660 dwelling units
Other Community Features	To be provided as part of the development of the Project

Source: Leal Master Plan EIR (2017) Table 2.0-2, Page 2.0-4

The Leal Master Plan did not establish a maximum number of dwelling units and no minimum development standards were identified. Therefore, development of the Project site had a wide range of flexibility. Given the wide flexibility, the following land use assumptions were established in the Prior EIR and constitute the Original Project as shown in Table 2.

Table 2. Buildout Assumptions for the Original Project

Land Use
660 multi-family homes (apartments)
1,525,000 square feet of general retail (shopping center)
460,000 square feet of general office
460,000 square feet of medical office
450 hotel rooms
100,000-square-foot civic center

Source: Leal Master Plan EIR (2017) Table 2.0-3, Page 2.0-5

The Modified Project proposes a land use intensity of 2,500 residential dwellings, 595,000 square feet of commercial uses and a fire station. As planned in the Stage 2 sequencing, the Modified Project continues to provide development flexibility to allow for development to occur in accordance with market conditions as part of Stage 3 planning. While no Stage 3 development plans have been prepared, the 2,500 dwelling units and 595,000 square feet of commercial uses have been allocated as shown in the following table for purposes of this Addendum. It is important to note that the following mix of uses is conceptual and may change during the Stage 3 planning processes. Since development of the site could take many years and each planning area requires a separate Stage 3 planning process, development of the Project site could vary from the assumptions provided in the table below. If changes to these assumptions occur in the future, the City is responsible to evaluate those changes and determine if additional environmental review pursuant to CEQA is required. The Modified Project is defined as the buildout assumptions shown in Table 3.

Table 3. Buildout Assumptions for the Modified Project

Land Use
1,840 medium density residential (400 single family detached and 1,440 single family attached)
660 high density residential (apartment units)
390,000 square feet of general retail (shopping center)
65,000 square feet of general office
65,000 square feet of medical office
75,000 square feet civic center (City Hall, Library, Police)
12,200 square feet fire station

The following table compares the development assumptions between the Original Project and the Modified Project.

Table 4. Development Comparison between Original Project and Modified Project

Land Use	Original Project	Modified Project	Difference
Medium Density Residential	0	1,840	+1,840 units
High Density Residential	660	660	no change
Retail (Shopping Center)	1,525,000	390,000	-1,135,000 sf
General Office	460,000	65,000	-395,000 sf
Medical Office	460,000	65,000	-395,000 sf
Hotel	450	0	- 450 rooms
Civic Center	100,000	75,000	- 25,000 sf
Fire Station	0	12,200	+ 12,200 sf

- Site Plan – the Leal Master Plan Amendment includes a site plan for the entire site, specifying backbone streets, development areas, and backbone parks and open space.

- Development Standards – the Leal Master Plan Amendment includes development standards, such as setbacks, height limits, etc., to guide future development.

- Design Guidelines – the Leal Master Plan Amendment includes modifications to the design guidelines.

A hotel was included as part of the Original Project and is still being contemplated in the commercial area. A hotel is a permitted land use and consistent with the General Plan designation. Hotels generally have a conversion of approximately 400 square feet per hotel room. Therefore, if a hotel were included in future development plans, the square footage of the other commercial uses would need to be reduced. One scenario contemplated includes the removal of the medical and general office and a 50,000 square foot reduction of the retail space. In such scenario the overall daily traffic volumes would be reduced by 496 trips compared to the Modified Project analyzed in this Addendum. The peak hour trips for AM and PM would also be reduced by 83 trips and 158 trips, respectively.

Tentative Tract Map (TTM) 38290
TTM 38290, included as Figure 3, proposes 14 numbered lots and 19 lettered lots over the 158.6 acre Modified Project Site. The 14 numbered lots total approximately 121.54 acres of development area. The 19 lettered lots total approximately 37.04 acres of open space, parks, and streets. The following table provides a summary of approximate land use acreages.

Table 5. Summary of Land Use Acreages

Land Use	Acreage (acres)
Development Area	121.54
Streets	22.92
Parks and Open Space	14.12
Total	158.59

TTM 38290 is considered an "A" level tract map. "A" or "B" level map(s) or condominium plan(s) may be prepared for the specific development of each numbered lot. The "B" level mapping would represent Phase 3 of the multistage planning/development process.

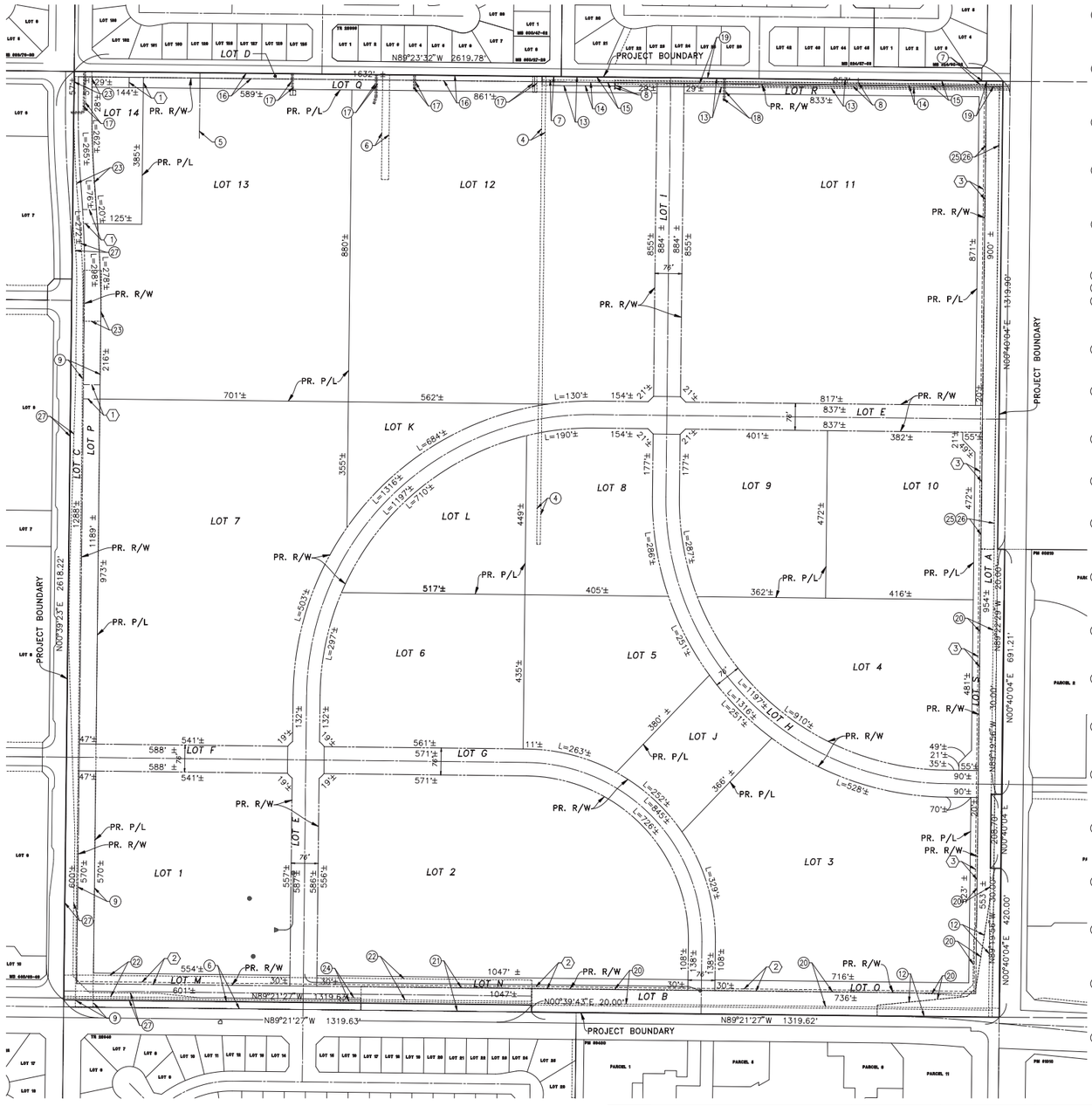
TTM 38290 includes a rough grading plan. An earthwork cut and fill exhibit is included as Figure 4. The following table summarizes the proposed earthwork for the Modified Project.

Table 6. Modified Project Earthwork Summary

	Cut (cubic yards)	Fill (cubic yards)
Raw Earthwork Volume	436,161	289,574
Pad Over-Ex (after organics removal)	651,540	651,540
Pad Over-Ex Shrinkage		97,730
Paved Area Over-Ex (after organics removal)	41,981	41,981
Paved Area Over-Ex Shrinkage		6,300
Fill Shrinkage		65,420
Total	1,129,682	1,152,545

TENTATIVE TRACT MAP NO. 38290

BEING THE SOUTHEAST QUARTER OF SECTION 24, TOWNSHIP 2 SOUTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF EASTVALE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY SECTIONALIZED SURVEY OF THE MAP OF THE JURUPA RANCHO ON FILE IN BOOK 9, PAGE 33 OF MAPS, COUNTY OF SAN BERNARDINO RECORDS, STATE OF CALIFORNIA.



EXISTING EASEMENTS

(4) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
PURPOSE: PUBLIC UTILITIES
RECORDING DATE: APRIL 9, 1953
RECORDING NO.: 17029, BOOK 1459, PAGE 442, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 1, 2 AND 6 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
TO BE QUITCLAIMED

(5) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
PURPOSE: UTILITIES
RECORDING DATE: MAY 29, 1953
RECORDING NO.: 26369, BOOK 1477, PAGE 246, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 5 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
TO BE QUITCLAIMED

(6) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: ARTHUR L. HANSON AND BESSIE L. HANSON
PURPOSE: UTILITIES
RECORDING DATE: JUNE 5, 1953
RECORDING NO.: 27507, BOOK 1479, PAGE 275, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT
A PORTION TO BE QUITCLAIMED

(7) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: GENERAL TELEPHONE COMPANY OF CALIFORNIA
PURPOSE: UTILITIES
RECORDING DATE: MAY 03, 1956
RECORDING NO.: 98, BOOK 1906, PAGE 107, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCEL 1 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.

(8) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
PURPOSE: UTILITIES
RECORDING DATE: OCTOBER 23, 1967
RECORDING NO. 143222, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCEL 1, 2 AND 6 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
TO BE QUITCLAIMED

(9) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
PURPOSE: UTILITIES
RECORDING DATE: OCTOBER 25, 1968
RECORDING NO. 71591, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCEL 7 AND 8 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT.
A PORTION TO BE QUITCLAIMED

(10) INTENTIONALLY LEFT BLANK

(11) INTENTIONALLY LEFT BLANK

(12) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: COUNTY OF RIVERSIDE
PURPOSE: PUBLIC ROAD AND DRAINAGE, INCLUDING PUBLIC UTILITY AND PUBLIC SERVICES
RECORDING DATE: DECEMBER 21, 1998
RECORDING NO. 552204, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 3 AND 4 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(13) MATTERS CONTAINED IN THAT CERTAIN DOCUMENT:
ENTITLED: ACCESS AGREEMENT
RECORDING DATE: APRIL 25, 2000
RECORDING NO. 2000-152877, OF OFFICIAL RECORDS
TO BE QUITCLAIMED

(14) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: COUNTY OF RIVERSIDE
PURPOSE: SLOPE AND MAINTENANCE
RECORDING DATE: APRIL 25, 2000
RECORDING NO. 2000-152878, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 1 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(15) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
PURPOSE: STREET AND UTILITY
RECORDING DATE: APRIL 25, 2000
RECORDING NO. 2000-152879, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 1 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(16) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
PURPOSE: STREET AND UTILITY
RECORDING DATE: APRIL 25, 2000
RECORDING NO. 2000-152873, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 5 AND 8 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(17) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
PURPOSE: UTILITIES
RECORDING DATE: DECEMBER 19, 2000
RECORDING NO. 2000-503785, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 5 AND 8 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT
TO BE QUITCLAIMED

(18) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
PURPOSE: UTILITIES
RECORDING DATE: DECEMBER 19, 2000
RECORDING NO. 2000-503786, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 1 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT
TO BE QUITCLAIMED

(19) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: COUNTY OF RIVERSIDE
PURPOSE: PUBLIC ROAD AND DRAINAGE, INCLUDING PUBLIC UTILITY AND PUBLIC SERVICES
RECORDING DATE: JANUARY 31, 2001
RECORDING NO. 2001-041384, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 1, 5 AND 8 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(20) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: COUNTY OF RIVERSIDE
PURPOSE: PUBLIC ROAD AND DRAINAGE, INCLUDING PUBLIC UTILITY AND PUBLIC SERVICES
RECORDING DATE: JANUARY 15, 2002
RECORDING NO. 2002-025215, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(21) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: COUNTY OF RIVERSIDE
PURPOSE: PUBLIC ROAD AND DRAINAGE, INCLUDING PUBLIC UTILITY AND PUBLIC SERVICES
RECORDING DATE: JANUARY 15, 2002
RECORDING NO. 2002-025216, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(22) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: JURUPA COMMUNITY SERVICES DISTRICT
PURPOSE: PIPELINES, UTILITIES AND ACCESS
RECORDING DATE: OCTOBER 1, 2003
RECORDING NO. 2003-770716, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID PARCEL 7 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT
PORTION TO BE QUITCLAIMED

(23) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY
PURPOSE: PUBLIC UTILITIES
RECORDING DATE: OCTOBER 22, 2004
RECORDING NO. 2004-0836866, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 5, 7 AND 8 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT
PORTION TO BE QUITCLAIMED

(24) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: COUNTY OF RIVERSIDE
PURPOSE: DRAINAGE
RECORDING DATE: JULY 20, 2007
RECORDING NO. 2007-0474701, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF PARCELS 7 AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(25) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: JURUPA COMMUNITY SERVICES DISTRICT OF RIVERSIDE COUNTY
PURPOSE: TO CONSTRUCT, RECONSTRUCT, INSTALL, REPLACE, REMOVE, REPAIR ALTER, OPERATE, MAINTAIN, INSPECT AND UTILIZE A SEWER PIPELINE OF PIPELINES.
RECORDING DATE: APRIL 5, 2012
RECORDING NO. 2012-0154067, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(26) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CHINO BASIN DESALTER AUTHORITY
PURPOSE: TO CONSTRUCT, RECONSTRUCT, INSTALL, REPLACE, REMOVE, REPAIR ALTER, OPERATE, MAINTAIN, INSPECT AND UTILIZE A WATER PIPELINE OR PIPELINES
RECORDING DATE: JULY 3, 2013
RECORDING NO. 2013-0310622, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

(27) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTALS THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF EASTVALE
PURPOSE: PUBLIC ROAD AND UTILITY
RECORDING DATE: OCTOBER 10, 2013
RECORDING NO. 2013-0486886, OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT



VICINITY MAP

NOTES

1. EXISTING LAND USE: VACANT
2. PROPOSED LAND USE: RESIDENTIAL AND COMMERCIAL
3. EXISTING GENERAL PLAN LAND USE DESIGNATION: LEAL POLICY AREA
4. EXISTING ZONING: LEAL MASTER PLAN
5. ASSESSOR PARCEL NUMBERS: 164-030-010, 164-030-012, 164-030-013, 164-030-014, 164-030-024, 164-030-025
6. TOTAL GROSS AREA: 158.58 AC
7. WATER SERVICE PROVIDED BY: JURUPA COMMUNITY SERVICES DISTRICT, 11201 HARREL STREETS, MIRA LOMA, CA 91752, (951)685-7437
8. SEWER SERVICE PROVIDED BY: JURUPA COMMUNITY SERVICES DISTRICT, 11201 HARREL STREETS, MIRA LOMA, CA 91752, (951)685-7437
9. GAS SERVICE PROVIDED BY: SOUTHERN CALIFORNIA GAS COMPANY, 155 S. G STREET, SAN BERNARDINO, CA 92410, (909) 758-8691
10. ELECTRIC SERVICE PROVIDED BY: SOUTHERN CALIFORNIA EDISON, 1351 E. FRANCIS STREET, ONTARIO, CA 91761, (909) 930-8431
11. TELEPHONE SERVICE PROVIDED BY: VERIZON, 1400 E. PHILLIPS BLVD., POMONA, CA 91766, (909)469-2260
12. CABLE PROVIDED BY: AT&T, 1265 N. VAN BUREN STREET, SUITE 180, ANAHEIM, CA 92807, (800) 750-2355
13. REFUSE PROVIDED BY: WASTE MANAGEMENT OF THE INLAND EMPIRE, 800 SOUTH TEMESCAL STREET, CORONA, CA 92878, (951) 280-4500
14. THE PROJECT IS LOCATED WITHIN THE CORONA-NORCO UNIFIED SCHOOL DISTRICT, 2820 CLARK AVENUE, NORCO CA, 92860, (951) 736-5000
15. THE PROJECT SITE IS NOT LOCATED WITHIN A FLOOD ZONE PER FLOOD INSURANCE RATE MAP NUMBERS 06065C0677G & 06065C0681G, EFFECTIVE DATE AUGUST 28, 2008.

PROPOSED EASEMENTS

① 24' FOR INGRESS EGRESS PURPOSES.
② 6' FOR PUBLIC ACCESS AND PARKING.
③ 5' FOR PUBLIC ACCESS AND PARKING.

EARTHWORK SUMMARY

CUT	FILL
1,129,682 CYS	1,152,545 CYS

LOT SUMMARY

NUMBERED LOTS

Lot #	S.F.	Acres
1	315,892.10	7.252
2	550,731.85	12.643
3	426,869.17	9.800
4	279,624.41	6.419
5	198,540.25	4.558
6	244,324.99	5.609
7	613,599.82	14.086
8	171,451.45	3.936
9	191,384.23	4.394
10	195,395.18	4.486
11	724,736.51	16.638
12	754,749.47	17.327
13	574,268.61	13.183
14	53,083.07	1.219
Total	5,294,651.11	121.548

LETTERED LOTS

Lot #	S.F.	Acres
A	139,937.69	3.213
B	147,811.51	3.393
C	84,478.50	1.939
D	38,267.77	0.879
E	246,244.32	5.653
F	44,673.74	1.026
G	113,590.68	2.608
H	115,905.65	2.661
I	67,321.01	1.545
J	89,220.27	2.048
K	68,998.58	1.584
L	153,611.43	3.526
M	44,835.28	1.029
N	31,408.46	0.721
O	32,546.77	0.747
P	84,078.57	1.930
Q	46,663.19	1.071
R	42,155.07	0.968
S	21,801.21	0.500
Total	1,613,549.70	37.042

LEGEND

- RIGHT OF WAY
- LOT LINE
- TRACT BOUNDARY
- EASEMENT
- EXISTING LOT LINE
- TOP/TOE OF SLOPE
- DAYLIGHT LINE
- 107 PROPOSED MAJOR CONTOUR
- 107 PROPOSED MINOR CONTOUR
- EXISTING CURB

DATE 4-15-2022
W.O. 2749-44C
GROSS AREA 158.58±
CONTOUR INTERVAL 1'
NUMBERED LOTS 14
LETTERED LOTS 19

FEET 0 50 100 200
INCHES 0 1/2 1

STATEMENT OF OWNERSHIP

I HEREBY STATE THAT THIS MAP WAS PREPARED UNDER MY SUPERVISION AND THAT THE OWNER OF RECORD HAS KNOWLEDGE OF AND CONSENTS TO THE FILING OF THIS MAP.

DATE 03/10/2021

REGISTERED PROFESSIONAL ENGINEER DAVID L. SMITH NO. 38796 CIVIL STATE OF CALIFORNIA

NO.	DATE	REVISIONS	APPROVED
–	–	–	

DRAWN BY: JV
DESIGNED BY: JV
CHECKED BY: DS

PREPARED FOR:
THE NEW HOME COMPANY
85 ENTERPRISE, SUITE 450
ALISO VIEJO, CA 92656
(949) 382-2766

OWNER:
CRAIG LEAL
12740 58TH STREET
CORONA, CA 92880
(909) 630-4574

PREPARED BY:
HUNSAKER & ASSOCIATES IRVINE, INC.
PLANNING ■ ENGINEERING ■ SURVEYING
Three Hughes ■ Irvine, CA 92618 ■ PH: (949) 583-1010 ■ FX: (949) 583-0759

COVER SHEET
TENTATIVE TRACT NO.38290
City of Eastvale

SHEET
TTM-1

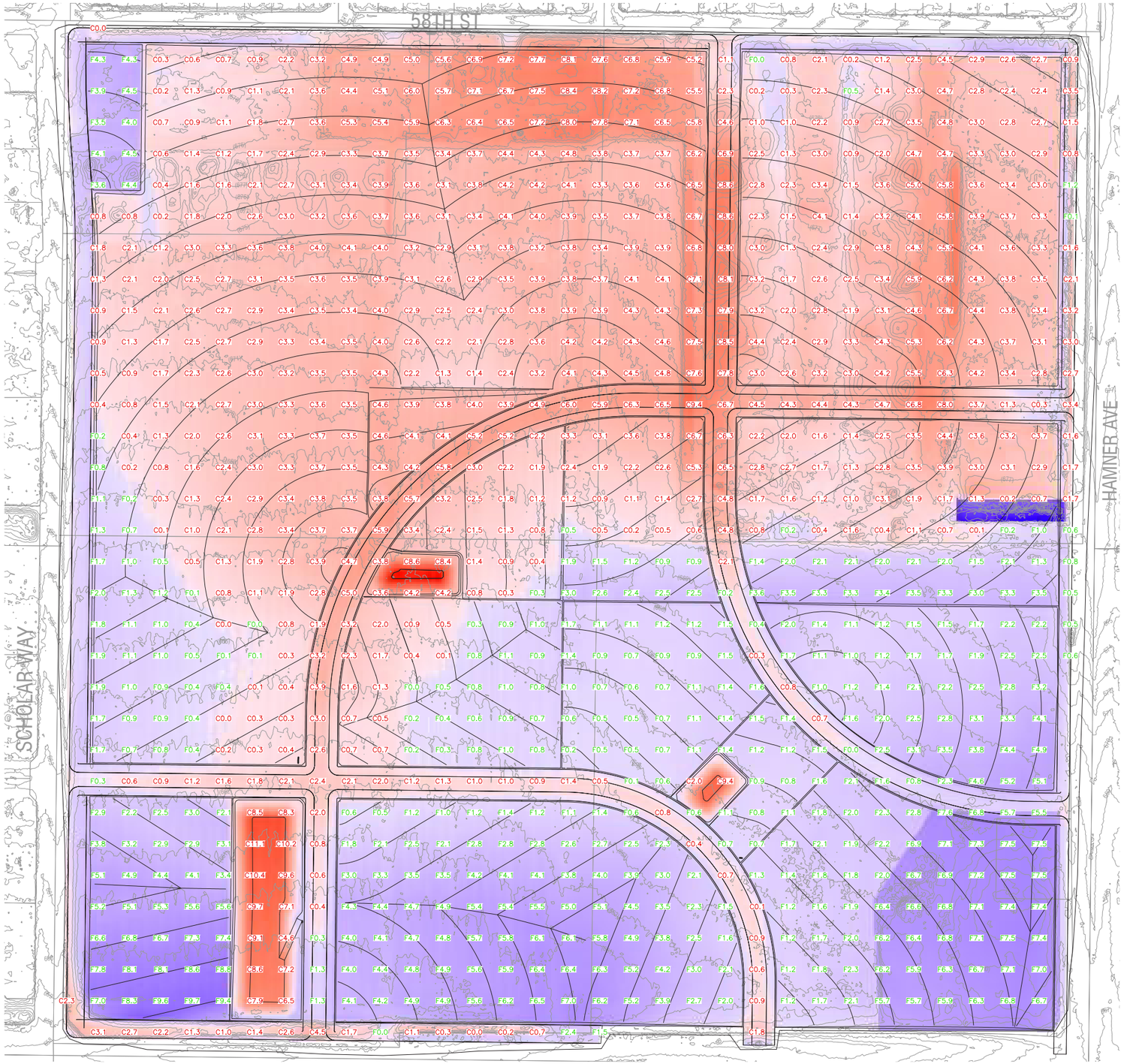
PLOTTED BY: Joey Valadez DATE: Apr. 18, 2022 08:38:52 AM FILE: H:\00750\PLANNING\TTM

W.O. 2749-44C CIVIL MAP(S) TTM

Source: Hunsaker & Associates (04/15/2022)

N.T.S.

Figure 3
Tentative Tract Map 38290



Leal Ranch

TTM vs Flown Topo

Notes

Existing surface is from Inland Aerial flown topo, dated July 29, 2021. Cut and Fill elevation values shown are after organics have been removed.

Proposed surface is TTM grading at time of exhibit.

Adjustments for Soils Conditions

Soil adjustments have been calculated based on LGC soils report titled "Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre Leal Property, City of Eastvale, California", dated June 21, 2021.

Adjustments Made:
1) Top 1 ft of soil, plus deeper areas identified on Fig 2, to be removed and disposed off site.

2) Pad areas to be cut and re-compacted to 5 ft below EG, or 3 ft below FG, whichever is deeper.

3) Paved areas to be cut and re-compacted to 2 ft below EG, or 1 ft below FG, whichever is deeper.

4) Road undercut is 10 inches.

5) 10% to 15% shrinkage on cut. 15% used for numbers below.

Volume

149.68 ac	CUT	FILL
Raw Volume	436,161 CYS	289,574 CYS
Pad Over-Ex (after Organics Removal)	651,540 CYS	651,540 CYS
Pad Over-Ex Shrinkage		97,730 CYS
Paved Area Over-Ex (after Organics Removal)	41,981 CYS	41,981 CYS
Paved Area Over-Ex Shrinkage		6,300 CYS
Fill Shrinkage		65,420 CYS
Total	1,129,682 CYS	1,152,545 CYS
Net Volume		22,863 CYS SHORT

Lower site 0.09 ft to achieve theoretical balance.

Organics Removal Export

Top Organics Remove and Dispose	354,400 CYS EXPORT

SCALE: 1" = 120'

60 120 240 360 480
SCALE: 1" = 120'

HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING ■ ENGINEERING ■ SURVEYING
Three Hughes ■ Irvine, CA 92618 ■ PH: (949) 583-1010 ■ FX: (949) 583-0759

Source: Hunsaker & Associates (11/01/2021)

N.T.S.

Figure 4
Cut and Fill Map

The net volume results in 22,863 cubic yards (cy) short, requiring import of 22,863 cy. The Project site also has 354,400 cy of organics from dairy operations that must be removed. In summary the Modified Project requires:

- 22,863 cy of import
- 354,400 cy of export

TTM 38290 specifies proposed street sections for internal and external streets. Street widening will occur on Limonite Avenue and Hamner Avenue. Both streets are designed with three travel lanes, a median, a bicycle lane, and landscaping with a meandering trail. The perimeter street improvements require dedication of right-of-way and easements. No new traffic signals are proposed on surrounding streets.

The Modified Project includes the provision of water quality and detention facilities. The Project site drains from north to southwest, with a storm drain connection in Limonite near the western boundary of the Project site. The water quality and detention facilities are primarily proposed as underground storage and treatment facilities. The Project site does not have infiltration rates high enough to infiltrate storm water, therefore, the storm flows must be treated and released. During final engineering surface treatment areas, such as bioswales, may be incorporated into the final design.

In addition to the description of the Modified Project above, several standard conditions, regulatory requirements, and commitments made by the Modified Project have been included herein and are referred to as Project Design Features (PDFs). The PDFs for the Modified Project include:

AQ PDF-1 A Construction Management Plan will be prepared that includes the requirements for Air Quality mitigation measures as specified in the Addendum to be submitted to the City of Eastvale for all phases of construction.

AQ PDF-2 The Project commits to following the standard South Coast Air Quality Management District (SCAQMD) rules and requirements with regards to fugitive dust control, which includes, but are not limited to the following:

1. All active construction areas shall be watered two (2) times daily.

2. Speed on unpaved roads shall be reduced to less than 15 mph.

3. Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.

4. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.

5. All operations on any unpaved surface shall be suspended if winds exceed 15 mph.

6. Access points shall be washed or swept daily.

7. Construction sites shall be sandbagged for erosion control.

8. Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).

9. Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.

10. Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.

11. Replace the ground cover of disturbed areas as quickly possible.

12. A fugitive dust control plan should be prepared and submitted to SCAQMD prior to the start of construction.

AQ PDF-3 All construction equipment, to the extent feasible, will have Tier 4 low emission "clean diesel" engines (Original Equipment Manufacturer(OEM) or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest California Air Resource Board (CARB) best available control technology.

AQ PDF-4 Construction equipment will be maintained in proper tune.

AQ PDF-5 All construction vehicles will be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

AQ PDF-6 The Project will minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.

AQ PDF-7 The use of heavy construction equipment and earthmoving activity will be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.

AQ PDF-8 The Project will establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.

AQ PDF-9 Staging areas for the construction equipment will be located as distant as possible from adjacent residential homes.

AQ PDF-10 To the extent possible, the Project will use haul trucks with on-road engines instead of off-road engines for on-site hauling.

GEO PDF-1 The Project will implement the recommendations included in the geotechnical report, "*Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California,"* prepared by LGC Geotechnical, Inc. and dated June 21, 2021.

NOI PDF-1 Prior to the issuance of building permits, the Project will demonstrate that building construction will achieve the minimum interior noise standard of 45 dBA CNEL for all residential units located along arterial roadways and/or adjacent to commercial uses, per the California Building Standards Code. The following noise control measures may be required for dwelling units located near adjacent roadways:

- Install sound barriers (masonry walls or walls with earth berms) between residences and noise sources.
- Install double-paned or upgraded sound transmission class (STC) sound rated windows.
- Provide sound insulating exterior walls and roofing systems.
- Locate and/or design attic vents to minimize sound propagation into each home.
- Provide forced-air ventilation systems.
- Provide the necessary setbacks for dwelling units fronting along major roadways.

NOI PDF-2 The Project will comply with California Title 24 building insulation requirements for exterior walls, roofs and common separating assemblies (e.g. floor/ceiling assemblies and demising walls).

NOI PDF-3 For proper acoustical performance, all exterior windows, doors, and sliding glass doors will have a positive seal and leaks/cracks must be kept to a minimum.

NOI PDF-4 The final building plans will ensure that heating, ventilation, and air conditioning (HVAC) units are not located within an area of the Project site that would contribute to a noise level exceedance at any adjacent property line, per the City of Eastvale Municipal Code requirements. To meet the City's noise standards the following measures should be followed:

- All HVAC equipment shall be shielded or enclosed from the line of sight of adjacent residential uses.
- The combined noise level of all units operating simultaneously shall not exceed the City of Eastvale daytime and nighttime exterior standards at the nearest surrounding property lines.

NOI PDF-5 Future residents, property management personnel, and commercial tenants will be required to comply with the City of Eastvale Municipal Code Noise Regulations, Chapter 8.52, which specify that no person shall create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness.

To help ensure compliance with the City's Noise Regulations, the following recommendations are provided:

- Deliveries, loading and unloading activities, and trash pick-up hours should be limited to daytime hours only (8 a.m. – 10 p.m.).
- Limit engine idling time for all delivery vehicles and moving trucks to 5 minutes or less.

NOI PDF-6 The Project will prepare a construction management plan and obtain a construction work permit from the City of Eastvale prior to starting construction. The construction management plan will ensure all contractors implement construction best management practices to reduce construction noise levels. Examples of best management practices may include the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).
- Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.
- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
- Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

- Provide notifications and signage in readily visible locations along the perimeter of construction sites that indicate the dates and duration of construction activities, as well as provide a telephone number where neighbors can enquire about the construction process and register complaints to a designated construction noise disturbance coordinator.
- Construction activities shall not take place between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and 6:00 p.m. to 7:00 a.m. during the months of October through May.

NOI PDF-7 The Project will not include pile driving or blasting activities during construction. If impact pile driving or blasting is required, a follow-up noise and vibration impact assessment will be conducted prior to start of any activity.

1.5 Prior Environmental Documentation

On December 13, 2017, the City of Eastvale certified an Environmental Impact Report (EIR) (State Clearinghouse No. 2015031028) for the 158.6-acre[5] Project site, adopted a Statement of Overriding Considerations for significant but unavoidable impacts, amended the Eastvale General Plan to incorporate the Leal Master Plan (including amending land use policies and the Land Use Map) and voted to adopt the Leal Master Plan and a corresponding change of zone from heavy agriculture (A-2) to Leal Master Plan. On January 10, 2018, the City held a second reading and adopted the Leal Master Plan and change of zone to Leal Master Plan.

The Prior EIR included two Project alternatives, as follows:

- Alternative 1: No Project

Alternative 1 assumed development consistent with the existing General Plan[6] land use designations, which were Business Park, Medium Density Residential, and High Density Residential.

- Alternative 2: Market Probable Scenario

Alternative 2, Market Probable Scenario, assumes a lower intensity buildout scenario compared to the Original Project. The Market Probable Scenario assumes the same

[5] The Leal Master Plan EIR identifies the size of the project site as 161 acres. Based on detailed engineering, the actual size of the project site is 158.6 acres.
[6] This is a reference from the Prior EIR to the existing General Plan prior to the adoption of the General Plan Amendment which changed the land use designation on the Project site to Leal Property Policy Area.

types of land uses as the Original Project, but with the non-residential uses developed at a lower intensity.

The Leal Master Plan EIR determined the Original Project would cause six (6) significant and unavoidable impacts within the following three (3) topic areas:

- Transportation / Traffic
- Air Quality
- Noise

The City has determined, for reasons specified below, that the revisions proposed as part of the Modified Project would not result in any new or more significant environmental impacts, and thus qualify for an Addendum. The prior environmental documentation, Leal Master Plan Environmental Impact Report (SCH No. 2015031028) is referred to as "Prior EIR" or "EIR" and is available at the City of Eastvale City Hall; contact Gina Gibson-Williams, Community Development Director, at 12363 Limonite Avenue, Suite 910, Eastvale, California 91752.

1.6 Basis for an Addendum

Prior to approval of subsequent actions that constitute a "project" under CEQA, the City is required to determine whether the environmental effects of such actions are within the scope of prior environmental analysis, or whether additional environmental analysis is required. That decision is influenced by whether the subsequent actions require major revisions to the EIR due to new significant impacts or an increase the severity of previously identified significant impacts.

Under CEQA, the lead agency or a responsible agency shall prepare an addendum to a previously-certified EIR if some changes or additions are necessary to the prior EIR, but none of the conditions calling for preparation of a subsequent or supplemental EIR have occurred (Public Resources Code § 21166; CEQA Guidelines §§ 15162, 15163, 15164). Once an EIR has been certified, no supplement or subsequent EIR shall be prepared unless the lead agency or responsible agency determines that one of the following conditions has been met:

(1) Substantial changes are proposed in the project, or substantial changes occur with respect to the circumstances under which the project is undertaken, which require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [*CEQA Guidelines* § 15162(a)(1)&(2)];

(2) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

a) The project will have one or more significant effects not discussed in the previous EIR;

b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative [*CEQA Guidelines* § 15162(a)(3)].

The City has evaluated the potential environmental impacts of the proposed Modified Project against the criteria set forth in CEQA Guidelines §§ 15162, 15163, 15164, and 15168(c). The City, acting as the Lead Agency, has determined that substantial evidence throughout this Addendum supports the determination that the Modified Project would not have any reasonably foreseeable environmental consequences beyond that analyzed in the Prior EIR and its associated administrative record, that none of the conditions listed above trigging preparation of a subsequent or supplemental EIR apply and that an Addendum to the Leal Master Plan Environmental Impact Report (SCH No. 2015031028) is appropriate for the proposed Modified Project and related entitlements, and fully complies with CEQA, as described in Public Resources Code section 21166 and the *CEQA Guidelines*. The Original EIR was prepared as a Program EIR and as such was evaluated pursuant to CEQA Guidelines § 15168(c). The Lead Agency has determined that the effects of the later activity, in this case the Modified Project, were examined in the program EIR (Original EIR) and pursuant to Section 15162 no subsequent EIR is required.

Table 7 summarizes the City's determination that none of the conditions listed above trigging preparation of a subsequent or supplemental EIR apply. The following table provides a summary comparison of impacts for the Original Project and the Modified Project. The summary of comparative impacts shows both construction and operations differences.

Table 7. Impact Comparison Between Original Project and Modified Project

Environmental Issue Area	Original Project	Modified Project[1]	
		Construction	Operations
Aesthetics	Less than Significant Impact with Mitigation	Similar	Similar

Environmental Issue Area	Original Project	Modified Project[1]	
		Construction	Operations
Agriculture and Forestry Resources	Less than Significant Impact	Similar	Similar
Air Quality	Significant and Unavoidable Impact	Similar	Reduced
Biological Resources	Less than Significant Impact with Mitigation	Similar	Similar
Cultural Resources	Less than Significant Impact with Mitigation	Similar	Similar
Energy	Less than Significant Impact	Similar	Reduced
Geology and Soils	Less than Significant Impact	Similar	Similar
Greenhouse Gas Emissions	Less than Significant Impact	Similar	Reduced
Hazards and Hazardous Waste	Less than Significant Impact with Mitigation	Similar	Similar
Hydrology and Water Quality	Less than Significant Impact	Similar	Similar
Land Use and Planning	Less than Significant Impact	Similar	Similar
Mineral Resources	Less than Significant Impact	Similar	Similar
Noise	Significant and Unavoidable Impact	Similar	Reduced
Population and Housing	Less than Significant Impact	Similar	Similar
Public Services	Less than Significant Impact	Similar	Similar
Recreation	Less than Significant Impact	Similar	Similar
Transportation and Traffic	Significant and Unavoidable Impact	Similar	Reduced
Tribal Cultural Resources	Less than Significant Impact with Mitigation	Similar	Similar
Utilities and Service Systems	Less than Significant Impact	Similar	Similar
Wildfire	Less than Significant Impact	Similar	Similar

[1] This table provides a qualitative comparison of impacts between the Original and Modified Projects, including construction and operations for the Modified Project. The following Environmental Checklist in Section 2.0 of this Addendum goes into greater detail and justification of these general conclusions presented in this table.

An addendum does not need to be circulated for public review, but rather can be attached to the Prior EIR (*CEQA Guidelines* § 15164(c)). The City will consider this Addendum and will make a decision regarding the Modified Project [*CEQA Guidelines* §15164(d)].

1.7 Mitigation Measures

The City has determined that no new mitigation measures[7] are required, as documented in detail in Section 2.0 below. The Prior EIR included mitigation measures for development of the Modified Project site to reduce impacts to a level of less than significant. Where noted in Section 2.0 and the table below, certain mitigation measures have been satisfied as part of this Addendum and are shown in light grey format. One mitigation measure has been revised to clarify the results of further analysis. The other measures remain in place and are listed below.

Table 8. Mitigation Monitoring and Reporting Checklist

Aesthetics, Light, and Glare	
MM 3.5.1	Nonglare glass shall be used in all nonresidential buildings to minimize and reduce impacts from glare. Buildings that are allowed to use semi-reflective glass must be oriented so that the reflection of sunlight is minimized. Types of nonglare glass shall be specified on final development plans. *Timing/Implementation:* *Prior to approval of final development plans* *Enforcement/Monitoring:* *City of Eastvale Planning Department*
Air Quality	
MM 3.3.5a	A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for construction activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific construction-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter. If SCAQMD risk thresholds would be exceeded, additional measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and construction schedule. The City shall ensure that construction contracts include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds.

[7] A statement of "No New Mitigation" as used in this Addendum means that there is no new mitigation required due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

	Construction-generated air toxics pollutant mitigation measures may include but not be limited to: 1. Limiting the amount of acreage to be graded in a single day. 2. Restricting intensive equipment usage and intensive ground disturbance to hours outside of hours typically spent at home. 3. Notifying affected sensitive receptors one week prior to commencing on-site construction so that any necessary precautions (such as rescheduling or relocating outdoor activities) can be implemented. The written notification shall include the name and telephone number of the individual empowered to manage construction of the project. In the event complaints are received, the individual empowered to manage construction shall respond to the complaint within 24 hours. The response shall include identification of measures being taken by the project construction contractor to reduce construction-related air pollutants. Such measures may include but are not limited to the relocation of equipment or the rescheduling of construction outside of hours typically spent at home. *Timing/Implementation:* The site-specific air toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities *Enforcement/Monitoring:* City of Eastvale Planning, Building and Safety, or Public Works Departments
MM 3.3.5b	A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for operational activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific operations-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter generated by heavy-duty haul trucks. If SCAQMD risk thresholds would be exceeded, additional mitigation measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and merchandise delivery schedule. The City shall ensure that operations include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds. Operations-generated air toxic pollutant mitigation measures may include but not be limited to: 1. Redesigning the project site plan to locate proposed loading dock facilities as far from sensitive receptors as possible. 2. Posting signage stating the State-mandated prohibition on all project trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle

	Idling Emission Reduction Program. 3. Restricting the number of daily heavy-duty haul truck deliveries. *Timing/Implementation:* The site-specific air toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities *Enforcement/Monitoring: City of Eastvale Planning, Building and Safety, or Public*
Biological Resources	
MSHCP Standard Conditions	*Note: The following discussion highlights the requirements of the MSHCP as they apply to the proposed project. Because the MSHCP has been adopted by the City, it is not necessary to adopt a mitigation measure to enforce its provisions.* The MSHCP requires that projects pay a mitigation fee, perform species-specific habitat assessments and surveys, and be reviewed for consistency with Section 6.1.2–Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool, Section 6.1.3–Protection of Narrow Endemic Plan Species, Section 6.3.2–Additional Survey Needs and Procedures, and Section 6.1.4–Guidelines Pertaining to the Urban/Wildlands Interface of the MSHCP. The following requirements of the MSHCP apply to the proposed project and will be required of all subsequent development plans and/or projects within the Leal Master Plan area: A. The project applicant shall submit fees to the City in accordance with the requirements of the MSHCP Mitigation Fee Ordinance (Chapter 4.62 of the City of Eastvale Municipal Code). B. The project applicant shall assess the proposed project's consistency with Section 6.1.2, Section 6.1.3, Section 6.3.2, and Section 6.1.4 of the MSHCP. C. A qualified biologist shall conduct a burrowing owl habitat assessment. If needed, focused surveys and preconstruction surveys shall be conducted, as well as appropriate avoidance and minimization (Section 6.3.2 of the MSHCP). D. A qualified biologist shall conduct habitat assessments for the required Narrow Endemic Plant Species. If needed, focused surveys and shall be conducted, as well as appropriate avoidance and minimization (Section 6.1.3 of the MSHCP). E. A qualified biologist shall conduct a habitat assessment for Delhi sands flower-loving fly in areas underlain by Delhi soil series (Species-specific Objective 1B). As noted above, because the City has adopted the MSHCP and enforces its provisions, these requirements do not need to be included as mitigation measures.

MM 3.7.1	All construction and clearing activities shall be conducted outside of the avian nesting season (January 15–August 31), when feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusions zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged. *Timing/Implementation:* *Requirements shall be incorporated into all rough and/or precise grading plan documents. The project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.* *Enforcement/Monitoring:* *City of Eastvale Planning Department*
MM 3.7.2	Prior to breaking ground, a qualified biologist shall be retained to determine whether potentially jurisdictional waters are present. If potentially jurisdictional features are identified, the project applicant shall submit a preliminary jurisdictional determination to the US Army Corps of Engineers for verification. The verified delineation will be submitted to the City for its records. *Timing/Implementation:* *Prior to approval of grading permits* *Enforcement/Monitoring:* *City of Eastvale Planning Department*
MM 3.7.3	Projects shall result in no net loss of sensitive habitats, riparian vegetation, and/or federally protected waters through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in Clean Water Act Section 404 and 401 permits and/or a 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided to the City prior to approval of each individual grading permit. *Timing/Implementation:* *Prior to approval of grading permits* *Enforcement/Monitoring:* *City of Eastvale Planning Department.*

Cultural Resources	
MM 3.8.1	A detailed cultural resources field survey of the subject property shall be conducted prior to approval of the project. The cultural resources field survey shall identify any cultural resource finds and will set out measures to mitigate any impacts to any significant resources as defined by CEQA, the California Register of Historical Resources, and/or the National Historic Preservation Act. Mitigation methods to be employed include but are not limited to the following: • Redesign of the development project to avoid the resource. The resource site shall be deeded to the City or a nonprofit agency to be approved by the City for maintenance of the site. • If avoidance is determined to be infeasible by the City, the resource shall be mapped, stabilized, and capped pursuant to appropriate standards. • If capping is determined to be infeasible by the City, the resource shall be excavated and recorded to appropriate standards. *Timing/Implementation: Prior to approval of development plan or project* *Enforcement/Monitoring: City of Eastvale Planning Department*
MM 3.8.2	If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history shall be retained to determine the significance of the discovery. The City shall consider mitigation recommendations presented by a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history for any unanticipated discoveries. The City and the project applicant of the site where the discovery is made shall consult and agree on implementation of a measure or measures that the City deems feasible. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be required to implement any mitigation necessary for the protection of cultural resources. *Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities* *Enforcement/Monitoring: City of Eastvale Planning Department*
MM 3.8.3	If human remains are discovered during any ground-disturbing activities in the project area, all work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and the Riverside

	County Coroner must be notified per California Public Resources Code Section 7050.5 and California Health and Safety Code Section 5097.98. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. *Timing/Implementation: As a condition of project approval and implemented during grading and/or construction activities* *Enforcement/Monitoring: City of Eastvale Planning Department*
MM 3.8.4	Prior to issuance of a grading permit, a certified professional paleontologist will be retained by the developer to provide professional paleontological services, which will include survey, education of construction workers, onsite construction monitoring, appropriate recovery, and reporting. A paleontological monitor shall be present during ground disturbing activities in the eastern half of the Project. The monitor shall work under the direct supervision of a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated competence in paleontological research, fieldwork, reporting, and curation). 1. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols. 2. The paleontological monitor shall be present full-time during ground disturbance in the eastern half of the Project, including but not limited to grading, trenching, utilities, and offsite easements. If, after excavation begins, the qualified paleontologist determines that the sediments are not likely to produce fossil resources, monitoring efforts shall be reduced. 3. The monitor shall be empowered to temporarily halt or redirect grading efforts if paleontological resources are discovered. 4. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area. 5. In consultation with the qualified paleontologist the monitor shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly mapped, documented, removed, and the area cleared. 6. If the discovery is significant the qualified paleontologist shall notify the CLIENT and CITY immediately. 7. In consultation with the CLIENT and CITY the qualified paleontologist

	shall develop a plan of mitigation which will likely include full-time monitoring, salvage excavation, scientific removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find. For the remaining portions of the Project site, if ~~If~~ any paleontological resources (fossils) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, and the City Planning Department shall be immediately notified. At that time, the City will coordinate any necessary investigation of the discovery with a qualified paleontologist. The City shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries of paleontological resources. The City and the project applicant shall consult and agree on implementation of a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be required to implement any mitigation necessary for the protection of paleontological resources.[8] *Timing/Implementation:* *As a condition of project approval and implemented during grading and/or construction activities* *Enforcement/Monitoring:* *City of Eastvale Planning Department*
Hazards and Hazardous Materials	
MM 3.10.2a	Asbestos. Prior to the issuance of any permit for the demolition or alteration of existing structure(s), a letter shall be provided to the Planning Department from a qualified asbestos abatement consultant indicating that no asbestos-containing materials (ACM) are present in the building. If ACMs are found to be present, they will need to be abated in compliance with the South Coast Air Quality Management District's Rule 1403 and all other applicable state and federal rules and regulations. Lead Paint. Prior to issuance of any permit for the demolition or alteration of

[8] The eastern portion of the Project site has a higher potential for paleontological resources than the remainder of the site. Therefore, paleontological monitoring in the eastern portion of the site is required during ground disturbance. The Prior EIR included Mitigation Measure MM 3.8.4, which requires that a qualified paleontologist evaluate any paleontological discoveries during grading. The potential for paleontological discoveries has not changed since certification of the Prior EIR and the limits of disturbance have remained the same. This mitigation measure is being revised in this Addendum to require a qualified paleontologist monitor grading activities on the eastern portion of the site, which is more efficient for grading activities, instead of the requirement to call a monitor to the site to evaluate paleontological resources if found during grading.

	the existing structure(s), a lead-based paint survey shall be performed to the written satisfaction of the Eastvale Building Safety and Inspection Department. Should lead-based paint materials be identified, standard handling and disposal practices shall be implemented pursuant to OSHA regulations. Polychlorinated Biphenyls. Prior to issuance of a demolition permit, a polychlorinated biphenyls (PCB) abatement contractor shall conduct a survey of the project site to identify and assist with compliance with applicable state and federal rules and regulations governing PCB removal and disposal. *Timing/Implementation:* *Prior to the issuance of demolition permit* *Enforcement/Monitoring:* *City of Eastvale Building and Planning Departments*
MM 3.10.2b	Prior to the issuance of any individual grading permit, a Phase I Environmental Site Assessment (ESA) shall be conducted to determine the potential for contaminated soil or groundwater on the site. If the Phase I ESA determines that the potential exists for contaminated soil or groundwater on-site, the project applicant shall conduct a Phase II ESA and shall follow its recommendations to remediate any potentially contaminated soil or groundwater. On-site contaminants must be addressed to the satisfaction of either Cal/EPA or the Riverside County Waste Management Department, with their approval of completion of activities/remedial action plans (RAP) submitted to the Eastvale Department of Building and Construction prior to the issuance of a grading permit. *Timing/Implementation:* *Prior to issuance of individual grading permit* *Enforcement/Monitoring:* *City of Eastvale Building and Planning Departments*
MM 3.10.2c	All trash and debris observed on-site shall be removed prior to construction activities and disposed of at a landfill or approved dumpsite. *Timing/Implementation:* *Prior to construction activities* *Enforcement/Monitoring:* *City of Eastvale Building and Planning Departments*
Noise	
MM 3.6.1	An acoustical assessment shall be prepared that evaluates potential environmental noise impacts associated with the proposed project. Where the acoustical analysis determines that noise levels would exceed applicable City noise standards, noise reduction measures shall be identified and included in the project. *Timing/Implementation:* *Prior to approval of development plan or project* *Enforcement/Monitoring:* *City of Eastvale Planning Department*

MM 3.6.2	A vibration assessment shall be prepared for construction projects that would involve the use of major vibration-generating equipment (e.g., pile drivers, vibratory rollers) within 200 feet of existing structures. Measures to reduce ground vibration levels shall be identified for any potential vibration impacts exceeding a vibration threshold of 0.2 in/sec ppv. *Timing/Implementation: Prior to approval of development plan or project* *Enforcement/Monitoring: City of Eastvale Planning Department*
MM 3.6.3	A construction-related noise mitigation plan shall be submitted to the City for review and approval prior to issuance of a grading permit. The plan shall depict the location of construction equipment and specify how the noise from this equipment will be mitigated during construction of the project. *Timing/Implementation: Prior to issuance of grading permit* *Enforcement/Monitoring: City of Eastvale Planning Department*
MM 3.6.4	The following mitigation measures shall be implemented and specified on all project construction plans: a) *Clearing and construction activities shall be conducted outside of 6:00 p.m. and 6:00 a.m. during the months of June through September, and outside of 6:00 p.m. and 7:00 a.m. during the months of October through May* (Municipal Code Chapter 8.52, Noise Regulation). b) All construction equipment shall be kept properly tuned and use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. c) Construction equipment staging areas shall be centrally located on the project site or located at the farthest distance possible from nearby residential land uses. d) All motorized construction equipment and vehicles shall be turned off when not in use. *Timing/Implementation: During construction activities, noted on all project construction plans* *Enforcement/Monitoring: City of Eastvale Planning Department*
Transportation	
MM 3.2.1a	Fair Share of funding shall be paid for widening Limonite Avenue along the project frontage from two to three lanes in each direction. Funding shall be determined and paid via the Riverside County Transportation Uniform Mitigation Fee (TUMF). Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS D operations and consistent with the Master Plan's infrastructure phasing provisions. *Timing/Implementation: Prior to approval of development plan or project* *Enforcement/Monitoring: City of Eastvale Planning Department*

MM 3.2.1b	A focused traffic study shall be prepared that demonstrates the project's consistency with the transportation impact assessment (TIA) for the Leal Master Plan prepared by Fehr & Peers (2015). The traffic study shall assess the following: • Parking; • Site access and on-site circulation; • Interaction of driveways with adjacent intersections (if appropriate); • Impacts on local intersections; • Impacts to pedestrian, transit, and bicycle facilities; and • Trip generation monitoring study to ensure that, as land develops in the Leal Master Plan area, the total development generates traffic at or below the levels assumed in this Draft EIR. *Timing/Implementation: Prior to approval of development plan or project* *Enforcement/Monitoring: City of Eastvale Planning Department*
MM 3.2.1c	Hamner Avenue shall be widened between Limonite Avenue and Bellegrave Avenue to three lanes in each direction either directly or through fair-share funding as determined by infrastructure and/or facility financing plans approved for the Leal Master Plan. Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS F operations and consistent with infrastructure phasing provisions established as part of Master Plan implementation. *Timing/Implementation: Prior to approval of development plan or project* *Enforcement/Monitoring: City of Eastvale Planning Department*

Source: Final Environmental Impact Report Leal Master Plan EIR SCH No. 2015031028, July 2015.

1.8 Summary of Findings

The Prior EIR concluded impacts from the Original Project would result in the following significant unavoidable impacts:

- Transportation / Traffic
- Air Quality
- Noise

The City of Eastvale has determined that none of the conditions in Section 21166 of the Public Resources Code or Sections 15162, 15163 15164, and 15168 of the State CEQA Guidelines calling for preparation of a subsequent or supplemental environmental impact report have occurred. In accordance with the analysis presented in Section 2.0, and pursuant to Section 21166 of the Public Resources Code and Section 15162, 15164, 15168, and 15183 of the *State CEQA Guidelines*, the City of Eastvale has determined that:

1) The Modified Project does not propose substantial changes that would require major revisions to the previously certified EIR (Prior EIR) due to new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects; and

2) No substantial changes in circumstances have occurred that require major revisions to the previously certified EIR (Prior EIR) due to new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

3) No new information of substantial importance as described in Section 15162 (a)(3) has been identified that shows any of the following: a) The project will have one or more significant effects not discussed in the Prior EIR; b) Significant effects previously examined will be substantially more severe than shown in the Prior EIR; c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or d) Mitigation measures or alternatives which are considerably different from those analyzed in the Prior EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

4) The Original EIR was prepared as a Program EIR and as such was evaluated pursuant to CEQA Guidelines § 15168(c). The Lead Agency has determined that the effects of the later activity, in this case the Modified Project, were examined in the program EIR (Original EIR) and pursuant to Section 15162 no subsequent EIR is required.

1.9 Cumulative Impacts

The Modified Project would not change the permitted land uses, limits of disturbance or location of the Project boundary, extent of construction activities, or increase the intensity of development. The most intense short-term construction impacts entail rough grading. Since the limits of grading and the remedial grading requirements based on existing geologic conditions would remain as analyzed for the Original Project, short-term construction impacts for the Modified Project would be the same or less than the Original Project. For this reason, no new or greater cumulative impacts associated with construction activities would occur from the Modified Project. Since the Modified Project reduces the intensity of development by reducing the amount of trip generation, the long-term operational impacts associated with the Modified Project would be the same or less than analyzed in the Prior EIR and no new or greater cumulative impacts associated with operational activities would occur from the Modified Project.

Therefore, the Modified Project would not cause new or increased cumulative impacts.

SECTION 2.0 ENVIRONMENTAL CHECKLIST

The following is an analysis of the topical categories listed in Appendix G of the CEQA Guidelines. It should be noted that the topical categories in Appendix G have changed since the certification of the Prior EIR. For example, there are new sections for Tribal Cultural Resources, Energy, and Wildfire; the question for paleontological impacts has moved to the geology and soils category; and many categories have revised wording of the significance questions. This Addendum is based on the updated version of Appendix G to provide current analysis. Additionally, the findings for each topical category have been revised to be consistent with subsequent review. The findings are "New Potentially Significant Impact," "New Mitigation is Required," "No New Impact/No Impact," and "Reduced Impact." A finding of "New Mitigation is Required" means that the project has a new potentially significant impact on the environment or a substantially more severe impact than analyzed in the previously approved or certified CEQA document and that new mitigation is required to address the new or substantially more severe significant impact.

2.1 Aesthetics

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion: The Prior EIR determined the Original Project would cause a permanent substantial change in the existing visual character of the Project site from dairy/agricultural to developed uses, but that altering the existing visual character of the site would not necessarily degrade it, as the surrounding area is similarly developed. The Modified Project would also change the visual character of the site from dairy farm to developed uses. While the Modified Project proposes to change the mix and intensity of uses compared to the Original Project, the overall result remains the same that the character of the site would change from dairy farm to a mix of residential and commercial development.

The proposed changes associated with the Modified Project would not change the conclusions in the Prior EIR as there is no new potentially significant impact and previously identified significant impacts are not substantially more severe. The Modified Project would not cause new or increased impacts and impacts are less than significant.

a, b) The Prior EIR determined the Project site does not constitute a scenic vista and is not located near a scenic highway. Furthermore, there are no designated scenic vistas identified in the Eastvale General Plan. The Santa Ana River is identified as a scenic resource; however, the Project site is approximately two miles north of the Santa Ana River. The area surrounding the Project site is currently developed with a mix of residential and commercial uses, similar to the Modified Project.

Therefore, the conclusions presented in the Prior EIR that the Project site does not constitute a scenic vista; does not contain scenic resources; is not located near a scenic highway; and would not block views of a scenic vista, would also apply to the Modified Project.

Therefore, the Modified Project would not cause new or increased impacts and impacts are less than significant.

c) The Prior EIR determined the Original Project would not degrade the existing visual character or quality of the site or surrounding areas. The Leal Master Plan includes design guidelines to ensure the character and quality of development meet the City's goals for Project characteristics and level of quality and is visually compatible with surrounding development.

The Modified Project also includes design guidelines and adds new development standards to guide and regulate future development in greater detail than the Original Project. Furthermore, the Modified Project specifies proposed development intensity and identified the southeast corner of the Project site (Limonite and Hamner) as the Downtown area, which is adjacent to and compatible with surrounding existing commercial development (Eastvale Gateway Center and the Cloverdale Marketplace).

Since the Project site is located within an urbanized area, surrounded by residential and commercial uses, and the Modified Project is consistent with the Leal Master Plan zoning, and no other City regulations govern scenic quality, the Modified Project would have a less than significant impact.

Therefore, the conclusions presented in the Prior EIR remain unchanged as there is no new potentially significant impact and previously identified significant impacts are not substantially more severe. No new or more severe impacts would occur as a result of the Modified Project, and impacts are less than significant.

d) The Prior EIR determined the Project site is located in a suburban setting, surrounded by a developed environment with fixed and mobile sources of exterior light and glare. Fixed sources of light and glare include exterior building-mounted and freestanding light fixtures, illuminated signage on existing land uses, and street lighting along local streets near the Project. Mobile sources of light and glare originate from vehicles along surrounding streets. These existing light sources contribute to moderate levels of nighttime lighting.

Development of the Project site would add nighttime lighting for roadway visibility and safety, and lighting associated with residential and commercial development. The Original Project concluded that consistency with Section 120.05.050, Outdoor Lighting, in Chapter 120.05, Development Standards, of the Eastvale Municipal Code, would reduce impacts from all outdoor lighting fixtures to less than significant.

The Original EIR also determined that development could introduce new sources of glare from windows associated with the proposed non-residential development. Mitigation Measure MM 3.5.1 was included to require future development plans and/or Projects to utilize nonglare glass in all nonresidential buildings to minimize and reduce impacts from glare. With implementation of the mitigation measure, impacts were determined less than significant.

The Modified Project includes a similar mix of uses as the Original Project and both Section 120.05.050 of the Municipal Code and Mitigation Measure 3.5.1 would apply to the Modified Project. Therefore, the conclusions presented in the Prior EIR remain unchanged. No new or more severe impacts would occur as a result of the Modified Project, and impacts are less than significant.

Mitigation Measures: The mitigation measure included in the Prior EIR remains applicable to the Modified Project is shown below.

MM 3.5.1 Nonglare glass shall be used in all nonresidential buildings to minimize and reduce impacts from glare. Buildings that are allowed to use semi-reflective glass must be oriented so that the reflection of sunlight is minimized. Types of nonglare glass shall be specified on final development plans.

Timing/Implementation: *Prior to approval of final development plans*

Enforcement/Monitoring: *City of Eastvale Planning Department*

Conclusion: The changes associated with the Modified Project would not substantially change or increase the visibility of development or substantially change the overall character of the development from the Original Project. The Modified Project would not add new sources of light and glare compared to the Original Project and the Modified Project would have the same level of visual compatibility as the Original Project. Therefore, no changes to the conclusions presented in the Prior EIR are warranted. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with mitigation.

2.2 Agriculture and Forestry Resources

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Discussion: In accordance with State CEQA Guidelines Section 15128, the Prior EIR determined that as a result of the absence of environmental resources or Project characteristics to produce impacts, the potential effect on Agriculture and Forestry Resources was found to be less than significant. The Original Project included a zone

change from Heavy Agriculture (A-2) to Leal Master Plan. In the course of that zone change, the City made findings documenting the rationale for the zone change and the justification for the conclusion that no significant impacts to agricultural resources would occur. The Prior EIR concluded,

> *"However, the City's General Plan and General Plan EIR determined that conversion of agricultural land was a significant and unavoidable impact of land development within the Eastvale city limits. General Plan Policy AQ-39 states that the loss of agricultural productivity on lands designated for urban uses within the city limits is anticipated as a consequence of the city's development.*
>
> *Because this property was designated for development, the conversion of agricultural uses is consistent with the adopted General Plan and General Plan EIR. Therefore, this impact is less than significant."*[9]

The Modified Project would not change the limits of disturbance, which encumbers the entire site, therefore the analysis and conclusions presented in the Prior EIR remain unchanged. Furthermore, no substantial changes in site conditions or substantial changes to the circumstances have occurred that would change the conclusions presented in the Prior EIR.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

a) The Original Project changed the zoning on the Project site from Heavy Agriculture (A-2) to Leal Master Plan. In the course of that zone change, the City made findings documenting the rationale for the zone change and the justification for the conclusion that no significant impacts to agricultural resources would occur. Furthermore, the Prior EIR under Impact 3.9.8 determined that conversion of mapped Farmland was a less than significant impact. The Modified Project would not change the limits of disturbance, which encumbers the entire site, therefore the analysis and conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Original Project changed the zoning on the Project site from Heavy Agriculture (A-2) to Leal Master Plan and no Williamson Act contract applies to the Project site. The Modified Project is consistent with the allowed uses under the Leal Master Plan zoning. No new significant impacts or substantial increase in the severity of significant

[9] Leal Master Plan Draft EIR, July 2015, Section 3.9.8, Page 3.9-6

impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

c) The Project site is currently zoned Leal Master Plan, which designates the site for a mix of residential and commercial uses. The Project site does not contain land zoned as forest land or timberland. The Modified Project is consistent with the allowed uses under the Leal Master Plan zoning conforms to the existing Leal Master Plan zoning. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

d) As discussed above, no land zoned as forest land or timberland exists within the Project site boundaries. Approval of the Modified Project would not result in the loss of forest land or conversion of forest land to other uses. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

e) The Modified Project would not involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest use. The Modified Project would not change the limits of disturbance, which encumbers the entire site. No existing farmland occurs adjacent to the Project site. The Project site itself is no longer productive farmland. The entire Project site is surrounded by existing residential and commercial development. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The Original Project included a zone change from Heavy Agriculture (A-2) to Leal Master Plan. In the course of that zone change, the City made findings documenting the rationale for the zone change and the justification for the conclusion that no significant impacts to agricultural resources would occur. The Modified Project would not change the limits of disturbance, which encumbers the entire site, therefore the analysis and conclusions presented in the Prior EIR remain unchanged. Furthermore, no substantial changes in site conditions or substantial changes to the circumstances have occurred that would change the conclusions presented in the Prior EIR. Therefore, the conclusions presented in the Prior EIR remain unchanged as there is no new potentially significant impact and previously identified significant impacts are not substantially more severe. No new or more severe impacts would occur as a result of the Modified Project, and impacts are less than significant.

2.3 Air Quality

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Discussion: Air Quality impacts are analyzed for both operations and construction. Operational emissions are based on the type and intensity of land use. The Prior EIR analyzed operational emissions from the Original Project land use mix and concluded operational emissions would be significant and unavoidable.

Construction emissions result from construction activities, most notably grading activities since grading tends to produce the greatest amount of daily emissions. The Prior EIR determined construction activities would result in a significant unavoidable impact.

The Prior EIR included two mitigation measures, MM 3.3.5a and 3.3.5b, requiring site specific air toxics pollutant analysis in accordance with South Coast Air Quality Management District (SCAQMD) Final Localized Significance Threshold Methodology for both construction and operational activities.

a) The Prior EIR determined that the Original Project "would not conflict with or obstruct implementation of the 2012 AQMP, as it has been anticipated in the City General Plan... The proposed Master Plan is consistent with the City's General Plan and

thus does not exceed the population or job growth projections used by the SCAQMD to develop the 2012 Air Quality Management Plan. "[10]

Since certification of the Prior EIR, a newer 2016 Air Quality Management Plan (AQMP) has been adopted. The 2016 AQMP is based on development intensities assumed in the City's adopted General Plan, which for this Project site is the Leal Master Plan. Since the Modified Project reduces the overall intensity of development compared to the Original Project, resulting in a reduction in the number of vehicle trips generated by the future development[11] and the Modified Project continues to propose a mix of residential and commercial uses, including developing a "downtown," the Modified Project is consistent with the 2016 AQMP.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Prior EIR analyzed both short-term construction emissions and long-term operational emissions. The Prior EIR determined short-term construction emissions and long-term operational impacts would be significant and unavoidable.

Construction

The Prior EIR determined short-term construction emissions would cause a significant unavoidable impact. The Prior EIR states:

> "Quantifying the air quality pollutant emissions from future, short-term, temporary construction activities allowed under the proposed Master Plan is not possible due to project-level variability and uncertainties related to future individual projects in terms of detailed site plans, construction schedules, equipment requirements, etc., which are not currently determined. However, depending on how development proceeds, construction-generated emissions associated with development of the Master Plan area could potentially exceed SCAQMD thresholds of significance. Therefore, future project-level analyses of air quality impacts, in accordance with California Environmental Quality Act (CEQA) requirements, would be conducted on a case-by-case basis as individual, future development projects allowed under the Master Plan proceed."[12]

The Master Plan, as part of the Stage 2 development planning process, is further defined and detailed than the Original Project. The proposed Tentative Tract Map includes a rough grading concept, and a cut/fill analysis has been performed to

[10] Leal Master Plan Draft EIR, July 2015, Section 3.3, Page 3.3-10
[11] Leal Master Plan Amendment Project Traffic Study, RK Engineering Group, Inc., December 22, 2021
[12] Leal Master Plan Draft EIR, July 2015, Section 3.3, Page 3.3-5

determine earthwork quantities. This information was used to prepare the "*Leal Master Plan Amendment Project Air Quality, Greenhouse Gas and Energy Impact Study*" by RK Engineering Group, Inc., December 22, 2021, which is included in Appendix B.

The Modified Project includes several Project Design Features (PDFs) that have emission reduction benefits.

AQ PDF-1 A Construction Management Plan will be prepared that includes the requirements for Air Quality mitigation measures to be submitted to the City of Eastvale for all phases of construction.

AQ PDF-2 The Project commits to following the standard South Coast Air Quality Management District (SCAQMD) rules and requirements with regards to fugitive dust control, which includes, but are not limited to the following:

1. All active construction areas shall be watered two (2) times daily.
2. Speed on unpaved roads shall be reduced to less than 15 mph.
3. Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
4. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.
5. All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
6. Access points shall be washed or swept daily.
7. Construction sites shall be sandbagged for erosion control.
8. Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
9. Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.
10. Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
11. Replace the ground cover of disturbed areas as quickly possible.
12. A fugitive dust control plan should be prepared and submitted to SCAQMD prior to the start of construction.

AQ PDF-3 All construction equipment to the extent feasible will have Tier 4 low emission "clean diesel" engines (Original Equipment Manufacturer or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest California Air Resources Board (CARB) best available control technology.

AQ PDF-4 Construction equipment will be maintained in proper tune.

AQ PDF-5 All construction vehicles will be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

AQ PDF-6 The Project will minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.

AQ PDF-7 The use of heavy construction equipment and earthmoving activity will be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.

AQ PDF-8 The Project will establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.

AQ PDF-9 Staging areas for the construction equipment will be located as distant as possible from adjacent residential homes.

AQ PDF-10 To the extent possible, the Project will use haul trucks with on-road engines instead of off-road engines for on-site hauling.

The most notable PDF applied to the Modified Project that was not applied to the Original Project is the use of Tier 4 low emission "clean diesel" engines (AQ PDF-3). The Original Project did not mandate the use of all Tier 4 engines allowing grading activity to rely on Tier 3 engines, which emit more emissions than Tier 4 engines.[13]

The Air Quality study calculated construction emissions as summarized in the following table.[14]

[13] Leal Master Plan Draft EIR, July 2015, Section 3.3, Page 3.3-5
[14] Table 16 from "Leal Master Plan Amendment Project Air Quality, Greenhouse Gas and Energy Impact Study," prepared by RK Engineering Group, Inc., dated December 22, 2021

Table 9. Regional Construction Emissions[14]

Maximum Daily Emissions (lbs/day)[1]						
Activity	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Demolition	0.59	4.80	24.46	0.05	2.32	0.49
Site Preparation	1.66	49.77	31.79	0.24	14.65	6.20
Grading	2.98	94.62	53.41	0.45	16.97	5.81
Building Construction	12.89	40.14	145.48	0.49	41.49	11.45
Paving	1.19	1.24	17.78	0.02	0.21	0.08
Architectural Coating	73.82	1.31	22.10	0.06	7.11	1.91
Maximum[1]	**73.82**	**94.62**	**145.48**	**0.49**	**41.49**	**11.45**
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes both on-site and off-site project emissions.

As shown in the prior table, construction activities are anticipated to be less than SCAQMD thresholds. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project.

Operations

The Prior EIR determined long-term operational emissions would cause a significant unavoidable impact. The Prior EIR states:

> "…buildout of the Master Plan, assuming the most conservative land use potential, would result in emissions in excess of SCAQMD thresholds for criteria air pollutants and precursors for which the SoCAB is in nonattainment."[15]

The Modified Project, prepared as part of the Stage 2 development planning process, provides greater detail and definition than the Original Project, as shown in Table 3 and the Leal Master Plan Amendment (Appendix A). Similar to the Original Project, the Modified Project allows for flexibility of land uses and establishes specific land use intensities provided development is consistent with the plans and specifications included in the Leal Master Plan Amendment. The air quality analysis provided below is based on the land use intensities established for the Modified Project in Table 3.

The following table summarizes regional operational emissions from the Modified Project.[16] As shown, operational emissions from the Modified Project remain under

[15] Leal Master Plan Draft EIR, July 2015, Section 3.3, Page 3.3-8

SCAQMD thresholds of significance and less than the Original Project. The reason for this change is the reduced level of development intensity presented in the Modified Project compared to the Original Project.

Table 10. Regional Operational Emissions[16]

Maximum Daily Emissions (lbs/day)[1]						
Project Emissions	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Mobile Sources	105.36	84.22	788.32	1.58	179.11	48.35
Energy Sources	1.52	13.01	5.80	0.08	1.05	1.05
Area Sources	85.70	37.63	221.51	0.24	4.00	4.00
Total Project Emission	**192.58**	**134.86**	**1015.62**	**1.90**	**184.15**	**53.40**
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	Yes	Yes	Yes	No	Yes	No
LEAL Master Plan 2015 EIR	268.32	258.6	1,200.15	4.94	326.66	92.99
Exceeds 2015 EIR Levels (?)	**No**	**No**	**No**	**No**	**No**	**No**
Change in Emission Levels	-75.74	-123.742	-184.53	-3.0393	-142.5076	-39.5922
Percentage Change	**-28%**	**-48%**	**-15%**	**-62%**	**-44%**	**-43%**

[1] Maximum daily emission during summer or winter; includes both on-site and off-site project emissions.

Therefore, the Modified Project would not cause new or increased operational impacts to occur.

Cumulative

Air pollution is largely a cumulative impact. Therefore, by SCAQMD policy, if a Project's individual emissions exceed significance thresholds, the project's impacts would be cumulatively considerable. If a project's individual emissions do not exceed significance thresholds, the project's impacts would not be cumulatively considerable.

The Prior EIR concluded the Original Project would cause a significant and unavoidable cumulative impact because individual construction and operational emissions would exceed significance thresholds. The individual construction and operational emissions for the Modified Project are less than the Original Project. Since the Modified Project would not increase the amount of daily nonattainment pollutant emissions as discussed in above, no new significant impacts or substantial increase in

[16] Table 18, from "Leal Master Plan Amendment Project Air Quality, Greenhouse Gas and Energy Impact Study," prepared by RK Engineering Group, Inc., dated December 22, 2021

the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary.

c) The Prior EIR determined Project construction would emit localized pollutants through the on-site use of heavy-duty construction equipment as well as fugitive dust from demolition and ground-disturbing activities on site. These localized emissions could expose nearby sensitive receptors to substantial pollutant concentrations. Similarly, long-term Project operations would emit pollutants that could result in local Carbon Monoxide (CO) hotspots.

The Air Quality Study for the Modified Project calculated Localized Construction Emissions for the Modified Project. The Prior EIR included a requirement for Localized Construction Emissions as Mitigation Measure 3.3.5a, which this analysis satisfies. As shown in the following table, Localized Construction Emissions would be below the SCAQMD thresholds of significance.

Table 11. Localized Construction Emissions[17]

Maximum Daily Emissions (lbs/day)[1]				
Activity	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
On-site Emissions	3.30	33.00	7.72	3.95
SCAQMD Construction Threshold[2]	235.0	1,461.0	10.0	6.9
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes on-site project emissions only.
[2] Reference 2006-2008 SCAQMD Mass Rate Localized Significant Thresholds for construction and operation. SRA-22, Corona/Norco, 4-acre site, receptor distance 25 meters.

A CO hot spot is a localized concentration of carbon monoxide (CO) that is above the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. The Prior EIR conducted a CO hot spot analysis and determined emission levels would be below the California Ambient Air Quality Standards (CAAQS) levels.[18] Since the Modified Project would generate approximately 27,764 fewer daily vehicle trips, it can also be concluded that no new CO hotspots would occur as a result of the Modified Project.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Mitigation Measure 3.3.5.b. would remain applicable.

d) The Prior EIR determined short-term odors can occur during construction, both during grading and painting of structures. Long-term operational odors commonly

[17]Table 17, from "Leal Master Plan Amendment Project Air Quality, Greenhouse Gas and Energy Impact Study," prepared by RK Engineering Group, Inc., dated December 22, 2021.
[18] Leal Master Plan Draft EIR, July 2015, Table 3.3-5, Page 3.3-12

occur from land uses such as, agricultural uses (farming and livestock), chemical plants, composting operations, dairies, fiberglass molding facilities, food processing plants, landfills, refineries, rail yards, and wastewater treatment plants. Since the construction operations would remain similar to the Original Project, and the Modified Project does not contain any new odor producing land uses, the Modified Project would not cause new significant impacts or substantial increase in the severity of significant impacts and no new mitigation is necessary. Impacts would be less than significant.

Mitigation Measures: Mitigation Measures MM 3.3.5b remains applicable to the Modified Project.

MM 3.3.5a A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for construction activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific construction-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter. If SCAQMD risk thresholds would be exceeded, additional measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and construction schedule. The City shall ensure that construction contracts include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds. Construction-generated air toxics pollutant mitigation measures may include but not be limited to:

1. Limiting the amount of acreage to be graded in a single day.

2. Restricting intensive equipment usage and intensive ground disturbance to hours outside of hours typically spent at home.

3. Notifying affected sensitive receptors one week prior to commencing on-site construction so that any necessary precautions (such as rescheduling or relocating outdoor activities) can be implemented. The written notification shall include the name and telephone number of the individual empowered to manage construction of the project. In the event complaints are received, the individual empowered to manage construction shall respond to the complaint within 24 hours. The response shall include identification of measures being taken by the project construction contractor to reduce construction-related air

pollutants. Such measures may include but are not limited to the relocation of equipment or the rescheduling of construction outside of hours typically spent at home.

Timing/Implementation: *The site-specific air toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities*

Enforcement/Monitoring: *City of Eastvale Planning, Building and Safety, or Public Works Departments*

MM 3.3.5b A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for operational activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific operations-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter generated by heavy-duty haul trucks. If SCAQMD risk thresholds would be exceeded, additional mitigation measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and merchandise delivery schedule. The City shall ensure that operations include all identified measures and that the measures reduce the health risk below SCAQMD risk thresholds. Operations-generated air toxic pollutant mitigation measures may include but not be limited to:

1. Redesigning the project site plan to locate proposed loading dock facilities as far from sensitive receptors as possible.

2. Posting signage stating the State-mandated prohibition on all project trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle Idling Emission Reduction Program.

3. Restricting the number of daily heavy-duty haul truck deliveries.

Timing/Implementation: *The site-specific air toxics pollutant analysis and any necessary modeling shall be completed prior to grading permit issuance, and measures implemented during construction activities*

Enforcement/Monitoring: *City of Eastvale Planning, Building and Safety, or Public Works Departments*

Conclusion: The Modified Project would cause similar daily emissions from construction activities and less operational emissions as a result of approximately 27,764 fewer daily vehicle trips, compared to the Original Project. Therefore, no changes to the conclusions presented in the Prior EIR are necessary. Mitigation Measure MM 3.3.5b required by the Prior EIR remains applicable to the Modified Project. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary.

2.4 Biological Resources

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion: The Prior EIR performed a records search and determined no previously recorded sensitive biological resources have occurred on the Project site. The Project site is disturbed and was previously used as a dairy farm. No surveys for sensitive species were conducted as part of the Prior EIR and mitigation measures were added requiring future surveys. The Prior EIR concluded that with mitigation, all potential biological impacts would be reduced to less than significant.

The potential for biological impacts depends on the area of impact and the condition of the Project site. The Modified Project would not change the limits of disturbance, which encumbers the entire site, and the condition of the Project site remains

essentially unchanged from the time of the Prior EIR. Therefore, the analysis and conclusions presented in the Prior EIR remain unchanged.

In support of this Addendum, a Biological Assessment was conducted for the Modified Project. That assessment, "*Biological Assessment of the Leal Property*," prepared by Carlson Strategic Land Solutions, March 2021, is included as Appendix C. The Biological Assessment included a field survey on June 9, 2021, to map vegetation communities and conduct a jurisdictional delineation. Focused burrowing owl surveys and narrow endemic plant surveys were conducted on June 16, June 23, July 1, and July 13, 2021. Furthermore, a Delhi Sands Flower Loving Fly Assessment was performed on June 18, 2021.

No special status species were observed on-site and none are expected to occur given current site conditions and habitat type. The vegetation communities mapped on the Project site are as follows:

Table 12. Vegetation Communities Observed[19]

Vegetation Community	Acreage within in the Project Site
Ruderal	96.82
Historical Dairy Farm	25.82
Disturbed/Developed	37.87
TOTAL	160.0

The Project site is located within the Western Riverside Multiple Species Habitat Conservation Program (MSHCP) boundaries. However, the Project site is not located within any MCHCP Criteria Areas, Cell Groups, or Subunits, and the Project site is not located in survey areas for Amphibians, Mammals, or Special Linkage areas. The Project site is subject to Riparian and Riverine Areas pursuant to MSHCP Section 6.1.2, Narrow Endemic Plants (Survey Area 7) pursuant to MSHCP Section 6.1.3, Urban/Wildlands Interface guidelines pursuant to MSHCP Section 6.1.4, and Western Burrowing Owl overlay pursuant to MSHCP Section 6.3.2.

The field surveys conducted as part of the Biological Assessment satisfy several of the prior mitigation measures, as described below. Project site conditions have remained very similar to that analyzed in the Prior EIR. There is no evidence of changes that could result in occupation by special status species or riparian/wetland habitats that would be subject to state and federal permits, and the analysis and conclusions presented in the Prior EIR remain valid.

[19] Table 2, from "Biological Assessment of the Leal Property located in the City of Eastvale," prepared by Carlson Strategic Land Solutions, dated November 2, 2021.

a) The Biological Assessment determined no previously recorded sensitive biological resources (i.e., special-status species populations, sensitive habitats, or jurisdictional features) occur on the Project site or within the Study Area. Furthermore, no sensitive biological resources, including, special-status species populations, sensitive habitats, or jurisdictional features occur on the Project site.

The Project site does not contain any suitable habitat for special status species or sensitive species, nor were any observed on-site during recent surveys. The Modified Project would include the removal of non-native and ruderal species; therefore, impacts would not be considered a significant impact and no mitigation is required.

The Modified Project would cause the disruption and removal of ruderal and developed habitat and the loss and displacement of non-sensitive common wildlife species. Due to the level of existing disturbance from the historical use as a dairy farm, human activity on-site and within the vicinity (e.g., nearby development), these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds. Therefore, impacts to common wildlife species would not be considered a significant impact and no mitigation is required.

The Prior EIR identified a potential for impacts to nesting birds. The Project site consists of suitable habitat for nesting, foraging, and/or wintering avian species. While none of the common species carry a Federal or State listing as threatened or endangered, they are all protected under the Migratory Bird Treaty Act (MBTA) during breeding season. Therefore, a pre-construction survey is required in compliance with the MBTA. Implementation of Mitigation Measure MM 3.7.1 from the Prior EIR would reduce potential impacts to the avian species to a less than significant level if nesting individuals are present.

The biological evaluation of the Project site provides greater site-specific detail and analysis than the information presented in the Prior EIR, but this is not a substantial change with respect to the circumstances under which the Modified Project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. The Modified Project would not change the limits of disturbance, which encumbers the entire site, and the existing site conditions of a dairy farm remain consistent with that analyzed in the Prior EIR. Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with implementation of Mitigation Measure 3.7.1 as presented in the Prior EIR.

b, c) Based on the field surveys and focused surveys conducted as part of the Biological Assessment of the Modified Project, no sensitive plant communities or habitats occur on the Project site. Sensitive habitats include those that are of special

concern to resource agencies and those that are protected under the MSHCP, CEQA, Section 1600 of the California Fish and Game Code, and Section 404 of the Clean Water Act.

Furthermore, the Biological Assessment included a formal jurisdictional delineation on the Project site. Based on those results, no jurisdictional features were identified on the Project site subject to Section 1602 of the California Fish and Game Code and the Porter Cologne Act, as regulated by the California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB), and no jurisdictional non-wetland or wetland waters regulated under Section 404 of the Clean Water Act were identified on the Project site.

The Biological Assessment has determined that no sensitive biological resources or jurisdictional features occur on the Project site; therefore, no impacts would occur. Mitigation Measures 3.7.2 and 3.7.3 included in the Prior EIR have been fulfilled by the Biological Assessment.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant and Mitigation Measures 3.7.2 and 3.7.3 presented in the Prior EIR have been fulfilled.

d) The Project site has been disturbed by development and intense historical dairy and agricultural uses and is unlikely to facilitate local wildlife movement. In addition, the Project site is completely surrounded by dense urban development, further impairing wildlife movement.

The Project site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and marginal movement habitat for reptile, bird, and mammal species), however, the Project site provides little to no function to facilitate wildlife movement on a regional scale. Furthermore, the site is not identified as a Special Linkage area within the MSHCP. Movement on a local scale likely occurs with species adapted to urban environments due to the surrounding development and disturbances in the vicinity of the site. Implementation of the Modified Project would not change the lack of wildlife movement across the Project site nor the classification of the Project site in the MSHCP that the Project site is not a Special Linkage area or integral to wildlife movement.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

e) As indicated in the Prior EIR, "The City of Eastvale has no policies or ordinances relating to biological resources."[20] Therefore, the Project site is not subject to any local policies, such as a tree preservation ordinance, and no impacts would occur and no mitigation is required. No change in conclusion from what was analyzed in the Prior EIR would occur.

f) As analyzed in the Prior EIR, and applicable to the Modified Project, the Project site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) and is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits. Furthermore, the Project site is not located in survey areas for Amphibians, Mammals, or Special Linkage areas. The Project site is subject to Riparian and Riverine Areas pursuant to MSHCP Section 6.1.2, Narrow Endemic Plants Overlay, pursuant to MSHCP Section 6.1.3, Urban/Wildland Interface pursuant to Section 6.1.4, and Western Burrowing Owl overlay pursuant to MSHCP Section 6.3.2.

The Biological Assessment determined no previously recorded sensitive biological resources (i.e., special-status species populations, sensitive habitats, or jurisdictional features) occur on the Project site or within the Study Area. Furthermore, no sensitive biological resources, including i.e., special-status species populations, sensitive habitats, or jurisdictional features occur on the Project site. The MSHCP includes standard measures, some of which apply to the Modified Project as documented in the Biological Assessment. The Biological Assessment provides greater site-specific detail and analysis than the information presented in the Prior EIR, but the assessment and compliance with the MSHCP are not new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR.

Suitable habitat for burrowing owl, white-tailed kite, grasshopper sparrow, and mountain plover exists within the Study Area. These animal species are all covered under the MSHCP. With the City's participation and implementation of the MSHCP, any direct and indirect impacts to sensitive species would be less than significant with the payment of the mitigation fee and compliance with all applicable requirements of the MSHCP. This provides full mitigation under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the California Endangered Species Act (CESA) for impacts to MSHCP covered species and habitats. Compliance with the MSHCP and payment of MSHCP fees are not new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would

[20] Leal Master Plan Draft EIR, July 2015, Page 3.7-7

occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: Several measures have already been satisfied and are shown in light grey format. The mitigation measures applicable to the Modified Project are listed below.

MSHCP Standard Condition: *Note: The following discussion highlights the requirements of the MSHCP, which are standard requirements applicable to project sites within the MSHCP boundaries. Because the MSHCP has been adopted by the City, it is not necessary to adopt a mitigation measure to enforce its provisions.*

The MSHCP requires that projects pay a mitigation fee, perform species-specific habitat assessments and surveys, and be reviewed for consistency with Section 6.1.2–Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool, Section 6.1.3–Protection of Narrow Endemic Plan Species, Section 6.3.2–Additional Survey Needs and Procedures, and Section 6.1.4–Guidelines Pertaining to the Urban/Wildlands Interface of the MSHCP.

The following requirements of the MSHCP apply to the proposed Project and will be required of all subsequent development plans and/or projects within the Leal Master Plan area:

A. The Project applicant shall submit fees to the City in accordance with the requirements of the MSHCP Mitigation Fee Ordinance (Chapter 4.62 of the City of Eastvale Municipal Code).
B. The project applicant shall assess the proposed project's consistency with Section 6.1.2, Section 6.1.3, Section 6.3.2, and Section 6.1.4 of the MSHCP.
C. A qualified biologist shall conduct a burrowing owl habitat assessment. If needed, focused surveys and preconstruction surveys shall be conducted, as well as appropriate avoidance and minimization (Section 6.3.2 of the MSHCP).
D. A qualified biologist shall conduct habitat assessments for the required Narrow Endemic Plant Species. If needed, focused surveys and shall be conducted, as well as appropriate avoidance and minimization (Section 6.1.3 of the MSHCP).
E. A qualified biologist shall conduct a habitat assessment for Delhi sands flower-loving fly in areas underlain by Delhi soil series (Species-specific Objective 1B).

As noted above, because the City has adopted the MSHCP and enforces its provisions, these requirements are fully enforceable under the City's Code as standard conditions.

MM 3.7.1 All construction and clearing activities shall be conducted outside of the avian nesting season (January 15–August 31), when feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.

If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the Project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusions zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged.

Timing/Implementation: *Requirements shall be incorporated into all rough and/or precise grading plan documents. The Project applicant's construction inspector shall monitor to ensure that measures are implemented during construction.*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.7.2 Prior to breaking ground, a qualified biologist shall be retained to determine whether potentially jurisdictional waters are present. If potentially jurisdictional features are identified, the project applicant shall submit a preliminary jurisdictional determination to the US Army Corps of Engineers for verification. The verified delineation will be submitted to the City for its records.

Timing/Implementation: *Prior to approval of grading permits*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.7.3 Projects shall result in no net loss of sensitive habitats, riparian vegetation, and/or federally protected waters through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in Clean Water Act Section 404 and 401 permits and/or a 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided to the City prior to approval of each individual grading permit.

Timing/Implementation: *Prior to approval of grading permits*

Enforcement/Monitoring: *City of Eastvale Planning Department*

Conclusion: A Biological Assessment of the Modified Project determined impacts to biological resources would be less than significant with mitigation incorporated. Mitigation Measures 3.7.2 and 3.7.3 presented in the Prior EIR have been fulfilled. Mitigation Measure 3.7.1 remains applicable as presented in the Prior EIR to reduce impacts to nesting birds to less than significant. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Mitigation Measure 3.7.1 remains applicable to the Modified Project.

2.5 Cultural Resources

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion: The Prior EIR conducted a records search and determined that no designated or previously identified cultural resources, such as prehistoric sites, historic sites, historic buildings/structures, and isolated artifacts, occur on the Project site. However, the Prior EIR indicated that a formal analysis had not been conducted and whether cultural resources or human remains are present could not be determined.[21] Mitigation Measure 3.8.1 required that future development plans and Projects prepare site-specific cultural resource field surveys and studies.

A site-specific cultural resources study has been prepared for the Modified Project. The report, "*Cultural and Paleontological Resources Assessment, October 2021,*" prepared by Duke CRM is included in Appendix D. The study included a records search and intensive pedestrian field survey of the site on June 17 and 18, 2021.

a) The Prior EIR concluded that while there are no designated or previously identified cultural resources, the Project area had not been formally evaluated for the cultural resources and as a result it was unknown at the time whether cultural resources or human remains were present onsite. As a result, Mitigation Measure 3.8.1 was required within the Prior EIR, which included a detailed, site-specific cultural resource field survey to identify any cultural resources onsite. As part of the Modified Project a Cultural and Paleontological Resources Assessment was prepared (Appendix D) and included both a records search and field survey, which satisfies this mitigation measure. The records search identified two previously recorded cultural resources with ½ mile of the Project site. The resource located off the Project site consists of historic debris, which would not be impacted by the proposed Project. The second result of the records search is the Leal Property itself. A thorough assessment of the Leal Property, including the structures on the property, determined that Property is not

[21] Leal Master Plan Draft EIR, July 2015, Section 3.8.5, Page 3.8-3

eligible for the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or local designation. Additionally, the field survey did not identify any cultural resources on the Project site. Based on the low sensitivity for cultural resources occurring on the Project site, no archaeological monitoring is required during ground disturbing activities.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project. Mitigation Measure MM 3.8.1 has been satisfied and no new mitigation is necessary. While determined to be highly unlikely, Mitigation Measures MM 3.8.2 and MM 3.8.3 would remain applicable to the Modified Project. Impacts would remain less than significant with mitigation.

b) Archaeological record surveys were conducted as part of the Prior EIR and as part of the Cultural and Paleontological Resources Assessment prepared for the Modified Project. Furthermore, an extensive pedestrian field survey of the Project site took place over two days for the Modified Project. No archaeological resources were identified on the Project site from the records search or the field surveys. The Cultural Resources Assessment for the Modified Project concluded that a low sensitivity exists for archaeological resources to occur on site and therefore, no archaeological monitoring is required during site disturbance activities, such as grading.

The Modified Project would not change the limits of disturbance, which encumbers the entire site, therefore the analysis and conclusions presented in the Prior EIR remain unchanged. Mitigation Measure MM 3.8.1 has been satisfied and no new mitigation is necessary. While determined to be highly unlikely, Mitigation Measures MM 3.8.2 and MM 3.8.3 would remain applicable to the Modified Project. Impacts would remain less than significant with mitigation.

c) The Prior EIR did not identify any evidence suggesting the Project site was used in the past for human burials. The Modified Project would not change the limits of disturbance, which encumbers the entire site, therefore the analysis and conclusions presented in the Prior EIR remain unchanged. Because existing laws and regulations would ensure that impacts on any buried human remains would be reduced to a level below significance, the Modified Project's impact related to the potential of encountering human remains would be less than significant.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: Mitigation Measure MM 3.8.1 has already been satisfied and is shown in light grey format. The mitigation measures applicable to the Modified Project that remain in place are listed below.

MM 3.8.1 A detailed cultural resources field survey of the subject property shall be conducted prior to approval of the project. The cultural resources field survey shall identify any cultural resource finds and will set out measures to mitigate any impacts to any significant resources as defined by CEQA, the California Register of Historical Resources, and/or the National Historic Preservation Act. Mitigation methods to be employed include but are not limited to the following:

- Redesign of the development project to avoid the resource. The resource site shall be deeded to the City or a nonprofit agency to be approved by the City for maintenance of the site.
- If avoidance is determined to be infeasible by the City, the resource shall be mapped, stabilized, and capped pursuant to appropriate standards.
- If capping is determined to be infeasible by the City, the resource shall be excavated and recorded to appropriate standards.

Timing/Implementation: *Prior to approval of development plan or project*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.8.2 If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts) are discovered during grading or construction activities in the Project area, work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history shall be retained to determine the significance of the discovery.

The City shall consider mitigation recommendations presented by a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history for any unanticipated discoveries. The City and the Project applicant of the site where the discovery is made shall consult and agree on implementation of a measure or measures that the City deems feasible. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The Project applicant shall be required to implement any mitigation necessary for the protection of cultural resources.

Timing/Implementation: *As a condition of project approval and implemented during grading and/or construction activities*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.8.3 If human remains are discovered during any ground-disturbing activities in the Project area, all work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and the Riverside County Coroner must be notified per California Public Resources Code Section 7050.5 and California Health and Safety Code Section 5097.98. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *As a condition of project approval and implemented during grading and/or construction activities*

Enforcement/Monitoring: *City of Eastvale Planning Department*

Conclusion: The Modified Project would not change the limits of disturbance compared to the Original Project and no conditions or circumstances have changed relative to historical, archaeological, or tribal cultural resources on the Project site. Therefore, the analysis and conclusions presented in the Prior EIR remain unchanged for the Modified Project. The Prior EIR identified Mitigation Measures MM 3.8.1 through 3.8.4 to reduce impacts associated with archaeological and paleontological resources to less than significant. Mitigation Measure MM 3.8.1 has been satisfied and is no longer applicable, and Mitigation Measures MM 3.8.2 and 3.8.3 remain applicable to the Modified Project. Mitigation Measure 3.8.4 has been revised and is presented in Section 2.7 Geology and Soils, consistent with the revisions to CEQA Guidelines Appendix G.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and impacts remain less than significant with mitigation as presented in the Prior EIR.

2.6 Energy

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Discussion: Since preparation of the Prior EIR, CEQA Guidelines Appendix G has been revised to include a specific section on Energy. The Prior EIR analyzed potential impacts associated with energy consumption in the Utilities section. A Project-specific energy analysis was prepared for the Modified Project. The analysis is included in "*Air Quality, GHG, and Energy Impact Study*", prepared by RK Engineering Group, Inc., dated December 22, 2021, is included in Appendix B. The Prior EIR concluded the increase in energy consumption from the Original Project would be less than significant. No changes to the conclusions presented in the Prior EIR would occur for the Modified Project as confirmed by the Energy Study.

a, b) The Energy Study for the Modified Project quantified projected energy use of electricity, natural gas, and petroleum. The Energy Study determined the Modified Project would not cause a wasteful, inefficient, or unnecessary consumption of energy resources with implementation of the mandatory requirements of California's Building Energy Efficiency Standards (Title 24, Part 6) and Green Building Standards (CALGreen, Title 24, Part 11). California's building energy efficiency standards are some of the strictest in the nation and the Project's compliance with California's building code will ensure that wasteful, inefficient or unnecessary consumption of energy is minimized. The building standards code is designed to reduce the amount of energy needed to heat or cool a building, reduce energy usage for lighting and appliances and promote usage of energy from renewable sources.

Additionally, the Modified Project would not obstruct or conflict with renewable energy plans. Future occupants of the Modified Project will purchase electricity through Southern California Edison which is subject to the requirements of California Senate Bill 100 (SB 100). SB 100 is the most stringent and current energy legislation in California; requiring that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The Energy Study prepared for the Modified Project provides greater site-specific detail and analysis than the information presented in the Prior EIR, but the assessment and compliance with energy standards and regulations are not new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. The changes associated with the Modified Project would not cause wasteful, inefficient, or unnecessary consumption of energy resources or obstruct renewable energy plans. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.7 Geology and Soils

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:	☐	☐	☒	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Discussion: The analysis presented in the Prior EIR was based on a review of published information, surveys, and reports regarding regional geology and soils. Information was obtained from private and governmental agencies and Internet websites,

including the Natural Resources Conservation Service (NRCS), the California Geological Survey (CGS), and the US Geological Survey (USGS).[22]

A site-specific geotechnical evaluation was prepared for the Modified Project. The report, "*Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California,"* prepared by LGC Geotechnical, Inc. and dated June 21, 2021, and *"Geotechnical Responses to City Reviewer Geotechnical Review Comments dated February 16, 2022 for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California,"* prepared by LGC Geotechnical, Inc. and dated April 5, 2021, is included in Appendix E.

a- i) As indicated in the Prior EIR, the Project site is not located within a State of California Alquist-Priolo Earthquake Fault Zone. The Geotechnical Evaluation prepared for the Modified Project confirmed this conclusion and determined that no faults were identified on the Project site as part of the site evaluation. The Modified Project does not change the Project boundary or the conclusion that the potential for rupture of an earthquake fault is less than significant. Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

a – ii) The Project site would be subject to strong ground shaking, as is most of Southern California. The Prior EIR concluded that impacts would be less than significant. The Modified Project does not change the limits of disturbance or the underlying geology. The Modified Project is subject to California Building Code (CBC), which establishes seismic standards for new construction. Furthermore, the Geotechnical Evaluation report evaluated seismic characteristics of the Project site and found no unique conditions, new information, or changes in circumstances pertaining to seismic impacts that were not known or could not have been known with the exercise of reasonable diligence at the time of the Prior EIR.

The Modified Project includes a Project Design Feature (PDF), which is a component of the Modified Project's Project Description, that incorporates the recommendations presented in the Geotechnical Evaluation report. Many of these recommendations require compliance with adopted standards and codes. Some of the recommendations provide greater site-specific details and analysis than the information presented in the Prior EIR, but these recommendations are not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. With

[22] Leal Master Plan Draft EIR, July 2015, Section 3.9.4, Page 3.9-2

incorporation of the geotechnical recommendations, impacts from ground shaking would be less than significant.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

a-iii) The Prior EIR concluded based on Map My County[23], the Project site is located in an area mapped as having "moderate" and "high" liquefaction potential and concluded the potential impact is less than significant. The Geotechnical Evaluation prepared for the Modified Project determined that site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet. Records indicate groundwater levels recorded in the area are at depths greater than 100 feet below the ground surface. However, isolated layers are susceptible to dry sand seismic settlement. Total dynamic settlement is estimated to be on the order 0.5-inch or less. Differential settlement is estimated as half of the total settlement over a horizontal span of 40 feet, which would be minimal.

The Geotechnical Evaluation provides greater site-specific detail and analysis than the information presented in the Prior EIR, but this is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

a-iv) The Prior EIR determined that given the flatness of the Project site, there is no potential for landslides to occur on or near the Project site. The Geotechnical Evaluation for the Modified Project confirms that conclusion. Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) As analyzed in the Prior EIR, the loss of topsoil or soil erosion can occur with any development of the Project site regardless of design. The design revisions associated with the Modified Project would not substantially increase the risk of topsoil loss or erosion. As indicated in the Geotechnical Response dated April 5, 2022 (Appendix E), "The proposed grading activities that will be part of the development of the subject site will include removal of the topsoil across the site and replacement with engineered fill material. The proposed grading plan does not have any natural or

[23] Leal Master Plan Draft EIR, July 2015, Section 3.9.3, Page 3.9-3

steep slopes that would be subject to excessive erosion. The ground surface at the completion of grading will be engineered fill with typical site drainage and typical slope inclinations." During construction, the Modified Project site is subject to the requirements of a National Pollutant Discharge Elimination System (NPDES) General Construction Permit, which requires Best Management Practices (BMPs) to prevent erosion or soil loss during construction.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

c) The stability of the geologic unit underlying the Project site was analyzed in the Prior EIR and impacts were determined to be less than significant. The Geotechnical Evaluation provides a site-specific evaluation and determined the near-surface loose and compressible soils are not suitable for development in the present condition given the quantity of organic rich soils. The Geotechnical Evaluation provides greater site-specific detail and analysis than the information presented in the Prior EIR, but this is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR.

Total organic carbon content generally greater than 2 percent is not suitable for compacted fill soils. From a geotechnical perspective, onsite soils are anticipated to be suitable for use as general compacted fill provided the high organic content soils (soils with organic content greater than 5 percent) are removed from the site and the remaining soils with organic content between 2 and 5 percent are blended and mixed with "clean" soils and screened of construction debris and any oversized material (8 inches in greatest dimension). Therefore, as described in the Project Description and included in Project Design Feature PDF GEO-1, the top layer of organic materials must be removed from the Project site, resulting in approximately 354,400 cubic yards of export. With implementation of the PDFs, the Project site would be suitable for development.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

d) The Prior EIR concluded that based on literature and mapping, the on-site soils would not have a high expansion potential. The Geotechnical Evaluation prepared for the Modified Project includes a more detailed site-specific analysis and concludes based on laboratory testing that site soils are anticipated to have "Very Low" expansion potential.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

e) No septic tanks or alternative wastewater disposal systems were proposed with the Original Project. The Modified Project also does not propose the use of septic systems. Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

f) The Cultural and Paleontological Resources Assessment prepared for the Modified Project determined the Project site includes areas of high sensitivity for paleontological deposits (*Cultural and Paleontological Resources Assessment, October 2021,* prepared by Duke CRM; Appendix D). While no paleontological resources were identified on the Project site during the field surveys, multiple fossil localities have been documented with three miles of the Project site. The eastern portion of the Project site has a higher potential for paleontological resources than the remainder of the site. Therefore, paleontological monitoring in the eastern portion of the site is required during ground disturbance. The Prior EIR included Mitigation Measure MM 3.8.4, which requires that a qualified paleontologist evaluate any paleontological discoveries during grading. The potential for paleontological discoveries has not changed since certification of the Prior EIR and the limits of disturbance have remained the same. This mitigation measure is being revised in this Addendum to require a qualified paleontologist monitor grading activities on the eastern portion of the site, which is more efficient for grading activities instead of the requirement to call a monitor to the site to evaluate paleontological resources if found during grading. Therefore, no change in analysis from the Prior EIR would occur and Mitigation Measure MM 3.8.4 remains applicable to the Modified Project as modified.

Therefore, the conclusions presented in the Prior EIR remain unchanged. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with implementation of the following mitigation measure as presented in the Prior EIR.

Mitigation Measures: The mitigation measure applicable to the Modified Project, which was previously included within the Cultural Resource Section, remains in place, however this mitigation measure has been modified to require paleontological monitoring during ground disturbing activities. The revised language is in underline and strike-through format as shown below.

MM 3.8.4 Prior to issuance of a grading permit, a certified professional

paleontologist will be retained by the developer to provide professional paleontological services, which will include survey, education of construction workers, onsite construction monitoring, appropriate recovery, and reporting.

A paleontological monitor shall be present during ground disturbing activities in the eastern half of the Project. The monitor shall work under the direct supervision of a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated competence in paleontological research, fieldwork, reporting, and curation).

1. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.

2. The paleontological monitor shall be present full-time during ground disturbance in the eastern half of the Project, including but not limited to grading, trenching, utilities, and offsite easements. If, after excavation begins, the qualified paleontologist determines that the sediments are not likely to produce fossil resources, monitoring efforts shall be reduced.

3. The monitor shall be empowered to temporarily halt or redirect grading efforts if paleontological resources are discovered.

4. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.

5. In consultation with the qualified paleontologist the monitor shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly mapped, documented, removed, and the area cleared.

6. If the discovery is significant the qualified paleontologist shall notify the CLIENT and CITY immediately.

7. In consultation with the CLIENT and CITY the qualified paleontologist shall develop a plan of mitigation which will likely include full-time monitoring, salvage excavation, scientific removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

For the remaining portions of the Project site, if ~~If~~ any paleontological resources (fossils) are discovered during grading or construction activities in the Project area, work shall be halted immediately within 50 feet of the discovery, and the City Planning Department shall be immediately notified. At that time, the City will coordinate any necessary investigation of the discovery with a qualified paleontologist.

The City shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries of paleontological resources. The City and the Project applicant shall consult and agree on implementation of a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The Project applicant shall be required to implement any mitigation necessary for the protection of paleontological resources.

Timing/Implementation: *As a condition of project approval and implemented during grading and/or construction activities*

Enforcement/Monitoring: *City of Eastvale Planning Department*

Conclusion: A site-specific Geotechnical Evaluation report was prepared for the Modified Project. The Geotechnical Evaluation provides greater site-specific detail and analysis than the information presented in the Prior EIR but not new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. The additional analysis performed for the Modified Project introduces additional evidence in the record that impacts remain as described in the Prior EIR and less than significant. Therefore, no changes to the conclusions presented in the Prior EIR are warranted No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with mitigation incorporated.

2.8 Greenhouse Gas Emissions

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☒

Discussion: The Prior EIR analyzed Greenhouse Gas (GHG) emissions from the Original Project by quantifying emissions of metric tons (MT) of Carbon Dioxide (CO_2) equivalents (CO_2e) from construction and operations. The Prior EIR relied on the California Emissions Estimator Model (CalEEMod) version 2013.2.2 computer program developed by the South Coast Air Quality Management District (AQMD). The Prior EIR determined the Original Project would generate 105,649 CO_2e metric tons (MT) per year. The analysis took credit for State-led GHG reduction measures, such as low carbon fuel standards and green building code standards. The reduction dropped CO_2e emissions to 77,375 MT per year[24]. The Prior EIR concluded that emissions from the Original Project represented a 26.7 percent reduction from Business as Usual, greater than the threshold of significance of 21.7 percent, resulting in a less than significant impact.

An analysis of the GHG emissions for the Modified Project is included in the report, "*Leal Master Plan Amendment Project Air Quality, Greenhouse Gas, and Energy Impact Study,*" prepared by RK Engineering Group, Inc. and dated December 22, 2021, included in Appendix B. The GHG Study determined the Modified Project would generate approximately 32,220 MT CO_2e per year. Compared to the Original Project with CO_2e emissions of 77,375 MT per year, the Modified Project (32,220 MT CO_2e per year) would reduce GHG emissions by 45,155 MT CO_2e per year, which represents an approximately 58% reduction in GHG emissions.

a) The Prior EIR determined the Original Project would generate 77,375 MT CO_2e, which represented a 26.7% reduction from Business as Usual, which is a greater reduction than the 21.7% threshold of significance. By comparison, the Modified Project would generate approximately 32,220 MT CO_2e per year, which is 45,155 MT

[24] The 77,375 MT CO_2e emissions per year are 2035 levels. The GHG Study prepared by RK Engineering Group (Appendix B) used 2020 emission levels of 74,317 MT CO_2e per year in Table 20 for comparison with the Modified Project emissions. Since 2020 emission levels have passed, this Addendum relies on the 2035 emission levels for comparison.

CO_2e per year less than the Original Project, which represents an approximately 58% reduction in GHG emissions. Therefore, the Modified Project would generate less GHG emissions than the Original Project.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The project will be required to comply with the mandatory requirements of the latest 2019 California Building Standards Code, including Title 24, Part 11, CALGreen and Title 24, Part 6, Energy Code. The purpose of the building standards is to reduce negative impacts on the environment through improved planning and design, energy efficiency, water efficiency and conservation and material and resource conservation. The California Building Standards were developed to help meet the requirements of the Global Warming Solutions Act (AB 32). As part of the latest Energy Code requirements, the project will be required to include rooftop solar panels, community solar panels, and/or other sources of on-site renewable energy capable of meeting the required California Energy Code Energy Design Rating. Therefore, by complying with the City's GHG reduction policy the project would not conflict with an applicable plan, policy, or regulation for the purpose of reducing the emissions of greenhouse gases.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The Modified Project would reduce the amount of GHG emissions by approximately 58% compared to the Original Project and remain consistent with State policies for the reduction in GHG emissions. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.9 Hazards and Hazardous Materials

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excess noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Discussion: The Prior EIR evaluated the Project site as a former dairy farm and agricultural use and concluded that the Project site was suitable for development with a mix of residential and commercial uses. The Prior EIR also concluded that the existing buildings on the Project site may contain asbestos, lead paint, or polychlorinated biphenyls (PCB) and that demolition of the existing structures could expose the environment or humans to hazardous materials. Mitigation Measures MM 3.10.2a, 3.10.2b, and 3.10.2c were included to reduce all impacts related to potential hazardous building materials on-site to less than significant.

The Modified Project includes two site-specific analysis of the Project site. The first study is a "*Phase I Environmental Site Assessment"* prepared by Hillmann Consulting, March 23, 2022, and included in Appendix F.1. The second study, also prepared by Hillmann Consulting is a "*Limited Phase II Subsurface Investigation Report"* dated March 23, 2022, and included in Appendix F.2.

The Phase I Environmental Site Assessment identified five Recognized Environmental Conditions (RECs) on the Project site as follows:

REC #1 There is a possibility for elevated methane gas in soil vapor at areas where livestock wastes accumulated.

REC #2 A historical 550-gallon gasoline underground storage tank (UST) is considered to be a REC due to the possibility for undocumented spills to have occurred.

REC #3 Maintenance and repair of farm equipment and vehicles appears to have been conducted for an extended period of time in an area of the northern portion of the Property, which could have resulted in undocumented spills.

REC #4 The Property was utilized as orchards since approximately 1931 to 1950s, resulting in the potential for residual pesticide concentrations in shallow soils due to historic application of pesticides.

REC #5 The presence of discarded/abandoned drums due to the unknown content and possibility of undocumented chemical spills/releases.

In response to the RECs identified as part of the Phase I Environmental Site Assessment, a Limited Phase II Subsurface Investigation of the Project site was conducted. The Phase II investigation included 96 near surface soil samples and methane testing. The results of the analysis conclude:

- Soil samples detected low levels of 4,4'-dichlorodiphenyldichleorethylene (DDE) and 4,4'-dichlorodiphenyltrichoroethane (DDT), which did not exceed the applicable screening levels for residential applications. DDT was a common pesticide once widely used in the past for insect control for agriculture purposes. DDE is a breakdown product of DDT.

- Soil sample analysis for heavy metals identified low background levels of metals, which did not exceed the applicable screening levels for residential applications.

- Soil gas sampling determined no detectable concentrations of petroleum hydrocarbons or volatile organic compounds (VOC), and no heavy metal concentrations exceeding residential screening levels.

- One sample had benzene concentrations that slightly exceed proposed residential screening levels (if they were to be adopted) but given the depth of the sample (14 feet) and consideration for attenuation provided by new construction, these very low concentrations do not pose a significant environmental or human health concern for the proposed residential use.

- Methane testing identified three samples out of fifteen with detectable concentrations of methane. The methane distribution was determined to not be widespread and the areas that were investigated were still covered with animal waste. The treatment for the areas with detectable methane includes removal of animal waste (organics), which is planned as part of the Project Description and PDFs.

The Phase I and Phase II assessments provide greater site-specific detail and analysis than the information presented in the Prior EIR, but this is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. The Prior EIR evaluated the site as a former agricultural use being converted to allow a mix of uses including residential and commercial. The Modified Project would not change the limits of disturbance, which encumbers the entire site, or the existing site conditions.

a) The Original Project included the same project boundaries and a mix of commercial and residential land uses. The Modified Project would change the intensity of certain land uses but retain the same mix of land uses. The Prior EIR concluded that neither commercial nor residential development is expected to involve the routine transport, use, or disposal of hazardous materials in significant quantities.[25] The same conclusion would apply to the Modified Project because of the same mix of residential and commercial land uses.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Prior EIR determined construction activities could release hazardous materials into the environment, such as petroleum-based fuels or hydraulic fluid used for construction equipment. These materials are routine in construction projects and the risk would apply similarly to the Modified Project. Given the age of the structures on site, a possibility exists for asbestos and/or lead paint to occur within the construction materials used in the structures. The Prior EIR included three mitigation measures to reduce impacts to less than significant. Mitigation Measure MM 3.10.2a requires

[25] Leal Master Plan Draft EIR, July 2015, Section 3.10.5, Page 3.10-3

testing for asbestos, lead paint, and polychlorinated biphenyls (PCB) prior to demolition of the existing structures on site. This mitigation measure would apply to the Modified Project and reduce impacts to less than significant.

Mitigation Measure MM 3.10.2b requires preparation of a Phase I Environmental Site Assessment prior to grading. A Phase I has been prepared for the Modified Project and is included in Appendix F.1. A portion of this mitigation measure has been satisfied, however compliance with the recommendations from a Phase II assessment remains a requirement.

Mitigation Measure MM 3.10.2c requires all trash and debris be removed from the Project site and disposed of properly. This mitigation measure would apply to the Modified Project and reduce impacts to less than significant.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with implementation of mitigation measures.

c) The Project site is located within 0.20 miles of Harada Elementary School. The Prior EIR concluded:

> "However, as described in response to Threshold 1, hazards to the public or to the environment through the routine use, handling, transport, and storage of hazardous materials would be subject to federal, state, and local health and safety requirements. The storage, handling, and disposal of hazardous materials are regulated by the EPA, OSHA, and the Fire Department. Therefore, the proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials."[26]

The Modified Project proposes the same mix of residential and commercial uses as the Original Project. Therefore, there is no change in the potential for release of hazardous materials during construction or operation of the Modified Project. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

d) The Phase I Environmental Site Assessment prepared for the Modified Project determined the Project site is not included on a list of hazardous materials sites and does not pose a risk to the public. Recent site inspections confirm no change in conditions would alter that conclusion presented in the Prior EIR. Therefore, no new

[26] Leal Master Plan Draft EIR, July 2015, Section 3.10.3, Page 3.10-6

significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

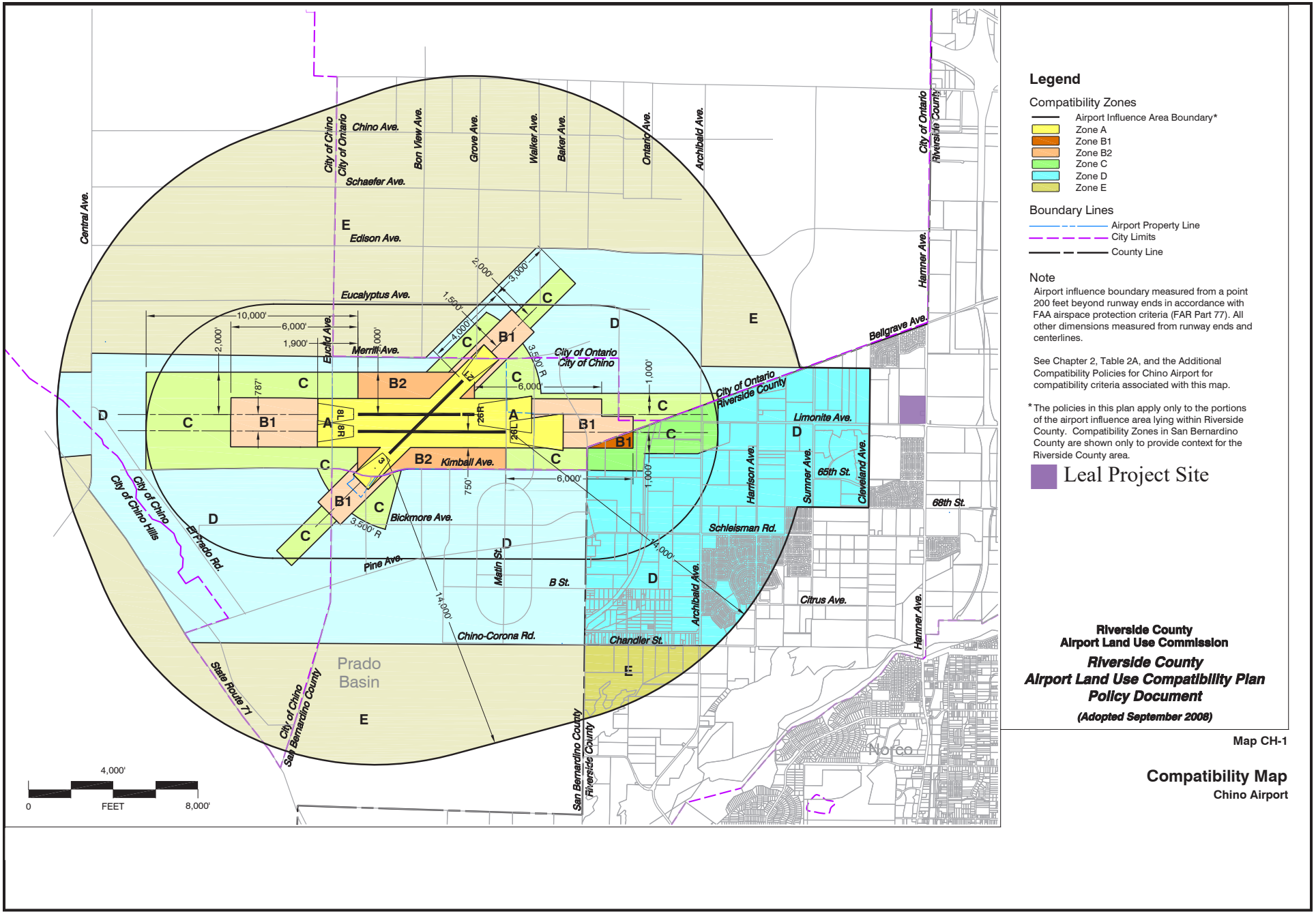
e) The Project site is not located in an airport land use plan (see Figure 5) or near a private or public airstrip. The Modified Project would not change these findings. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

f) The Prior EIR concluded the Original Project would not impair the City's ability to implement its emergency response plan or use its emergency evacuation routes. The Modified Project includes less intensive development than the Original Project. As shown in Section 2.17, the Modified Project would reduce trip generation by 27,764 average daily vehicle trips, thereby reducing the number of potential vehicles on local roadways that may be used by emergency vehicles or for evacuation in the event of an emergency. The Modified Project would improve the surrounding circulation system with additional travel lanes on Limonite and Hamner and the Modified Project would contribute to fewer local roadway trips than the Original Project. The Modified Project would complete street improvements on all four surrounding streets. Therefore, as a result of the Modified Project proposing less intensive development than the Original Project and proposing to complete the surrounding street system, no new impacts would occur, and the conclusions presented in the Prior EIR remain unchanged.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

g) The Prior EIR concluded the Project site is not designated as a fire hazard severity zone. Since there are no changes to the boundaries of the Modified Project, the conclusions in the Prior EIR remain applicable. Furthermore, the California Department of Forestry and Fire Protection (CalFire) website was reviewed; and no change of fire hazard severity designation has occurred on the Project site since the Prior EIR was prepared and adopted[27]. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

[27] CalFire (California Department of Forestry and Fire Protection). 2022. Cal Fire website. http://www.fire.ca.gov/.



Source: Meet&Hunt (June 2008)

N.T.S.

Figure 5
Airport Land Use Plan Map

Mitigation Measures: The measure that has already been satisfied is shown in light grey format. The mitigation measures applicable to the Modified Project that remain in place are listed below.

MM 3.10.2a Asbestos. Prior to the issuance of any permit for the demolition or alteration of existing structure(s), a letter shall be provided to the Planning Department from a qualified asbestos abatement consultant indicating that no asbestos-containing materials (ACM) are present in the building. If ACMs are found to be present, they will need to be abated in compliance with the South Coast Air Quality Management District's Rule 1403 and all other applicable state and federal rules and regulations.

Lead Paint. Prior to issuance of any permit for the demolition or alteration of the existing structure(s), a lead-based paint survey shall be performed to the written satisfaction of the Eastvale Building Safety and Inspection Department. Should lead-based paint materials be identified, standard handling and disposal practices shall be implemented pursuant to OSHA regulations.

Polychlorinated Biphenyls. Prior to issuance of a demolition permit, a polychlorinated biphenyls (PCB) abatement contractor shall conduct a survey of the Project site to identify and assist with compliance with applicable state and federal rules and regulations governing PCB removal and disposal.

Timing/Implementation: *Prior to the issuance of demolition permit*

Enforcement/Monitoring: *City of Eastvale Building and Planning Departments*

MM 3.10.2b Prior to the issuance of any individual grading permit, a Phase I Environmental Site Assessment (ESA) shall be conducted to determine the potential for contaminated soil or groundwater on the site. If the Phase I ESA determines that the potential exists for contaminated soil or groundwater on-site, the project applicant shall conduct a Phase II ESA and shall follow its recommendations to remediate any potentially contaminated soil or groundwater. On-site contaminants must be addressed to the satisfaction of either Cal/EPA or the Riverside County Waste Management Department, with their approval of completion of activities/remedial action plans (RAP) submitted to the Eastvale Department of Building and Construction prior to the issuance of a grading permit.

Timing/Implementation: *Prior to issuance of individual grading permit*

Enforcement/Monitoring: *City of Eastvale Building and Planning Departments*

MM 3.10.2c All trash and debris observed on-site shall be removed prior to construction activities and disposed of at a landfill or approved dumpsite.

Timing/Implementation: *Prior to construction activities*

Enforcement/Monitoring: *City of Eastvale Building and Planning Departments*

Conclusion: A site-specific Phase I Environmental Site Assessment and a Limited Phase II Subsurface Investigation were prepared for the Modified Project. Those studies provide greater site-specific detail and analysis than the information presented in the Prior EIR. The additional analysis performed for the Modified Project introduces additional evidence in the record that impacts remain as described in the Prior EIR and less than significant with mitigation incorporated. The information provided is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. Therefore, no changes to the conclusions presented in the Prior EIR are warranted. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with mitigation.

2.10 Hydrology and Water Quality

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Discussion: The analysis in the Prior EIR determined the Original Project would have less than significant hydrology and water quality impacts. The Project site is located in Flood Hazard Zone X according to the Federal Emergency Management Agency

(FEMA) Flood Insurance Rate Maps (FIRM)[28]. Flood Zone X indicates the site is subject to minimal risk of flooding.

Two site-specific technical studies were prepared for the Modified Project. One report is titled, "*Preliminary Hydrology Analysis for Leal Ranch (Tentative Map No. 38290)*" prepared by Hunsaker & Associates Irvine, Inc., and dated November 29, 2021 (Appendix G). The second report is the "*Preliminary Water Quality Management Plan (PWQMP) for Tentative Map No. 38290*," prepared by Hunsaker & Associates Irvine, Inc., and dated November 29, 2021 (Appendix H).

The Modified Project proposes a series of storm drains to convey runoff from the Project site to an existing storm drain system within Limonite Avenue. This drainage pattern is consistent with the Eastvale Master Plan of drainage. The Modified Project also includes improvements, including catch basins within 58th Street, Hamner Avenue, Limonite Avenue, and Scholar Way. Catch basin laterals are proposed to join the existing storm drains within those perimeter streets. The Modified Project also includes two (2) water quality basins and one combined water quality/detention basin. These basins may be located either on the surface or buried beneath the surface. Current plans show these facilities buried beneath the surface, allowing for parks, parking lots, or other improvements on the surface above these facilities.

The proposed underground detention basin is currently sized approximately 360 feet long, 120 feet wide, and 6 feet deep. These dimensions may vary as long as equivalent storage is provided. Since the Original Project and Modified Project would convert the Project site from primarily pervious surface to largely impervious (80%), the detention basin is necessary to reduce peak storm flow rates to existing storm drain design flows.

The 100-year storm event is the major storm event used to size storm drain facilities. During a 100-year storm event, storm flow of 252 cubic feet per second (cfs) would flow into the detention basin and flows of 82 cfs would flow out of the basin. The detention provided by the basin allows the runoff from the Modified Project to be less than the existing storm drain design flow rate, as shown in the following table.

Table 13. Existing Storm Drain Design Flow Rate[29]

Node	Flow without Detention (cfs)	Flow Reduction from Detention (cfs)	Flow after Detention (cfs)	Existing Storm Drain Design Flow Rate (cfs)
75	322.0	170.1	151.9	160.0

[28] FEMA (Federal Emergency Management Agency). 2021. Flood Insurance Rate Map (FIRM) Panel 06065Co681G and 06065CO677G. Visited December 2021. http://msc.fema.gove/portal.
[29] Table 2, from "Preliminary Hydrology Analysis for Leal Ranch (Tentative Map No. 38290)," prepared by Hunsaker & Associates Irvine, dated November 29, 2021.

The PWQMP identified potential treatment options for runoff prior to discharge from the Project site in accordance with the Regional Water Quality Control Board Order No. R8-2010-0033 (MS4 Permit). The Original Project and Modified Project would change the existing Project site from largely pervious to a mix of 80% impervious and 20% pervious. As such, the Modified Project is required to treat runoff from the Project site. The MS4 Permit requires projects implement Low Impact Development (LID) principles to the extent feasible. The primary LID principle each Project must analyze is infiltration. Infiltration testing was conducted, and the infiltration rates do not meet minimum standards, therefore, infiltration cannot be relied upon as the primary treatment option. The Modified Project proposes biotreatment/bioretention basins that will allow for incidental infiltration. The biotreatment/bioretention basins rely on proprietary treatment of flows prior to discharge into the storm drain system off the Project site.

a) Short-term water quality requirements apply during construction and long-term water quality requirements apply for the built condition. The Prior EIR analyzed both conditions and determined impacts would be less than significant. During construction water quality impacts could occur from surface water pollutants such as sediment, oil, grease, and trash. Since the development area is greater than 1 acre, a Stormwater Pollution Prevention Plan (SWPPP) must be prepared to identify the best management practices (BMPs) to be implemented during construction. Implementation of the SWPPP would reduce impacts to less than significant. The Modified Project includes the same amount of grading area as the Original Project and would also be subject to a SWPPP. Therefore, the analysis and conclusions presented in the Prior EIR remain unchanged for the Modified Project.

A Preliminary Water Quality Management Plan (PWQMP) was prepared for the Modified Project. The Modified Project relies on two underground biotreatment/bioretention basins that rely on proprietary treatment systems. An example of proprietary treatment system is a modular wetland, which has been accepted by most agencies. The Project site does not qualify to rely on infiltration as the primary source of treatment, however, the treatment basins will allow for incidental infiltration.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Prior EIR determined the Original Project would have a less than significant impact on groundwater recharge. Percolation tests were performed as part of the PWQMP for the Modified Project, which determined that existing percolation rates do not meet the minimum standards to rely on infiltration. Furthermore, the Geotechnical Study for the Modified Project determined that existing groundwater levels are greater than 100-feet below the ground surface (*Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal"*

Property, City of Eastvale, California, prepared by LGC Geotechnical, Inc; Appendix E). The low infiltration rates and low groundwater depth both indicate that the Project site is not substantially contributing to groundwater recharge.

Therefore, the analysis presented in the Prior EIR would apply to the Modified Project because the conditions remain the same. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

c.i, c.iv) The Modified Project would not change the drainage patterns as analyzed in the Prior EIR for the Original Project. Runoff from the Project site continues to flow from north to south, collecting in the southwestern portion of the Project site near Limonite Avenue. No stream or river is located on the Project site. Storm flows are primarily captured in streets or sheet flow over vegetated land. The Modified Project includes details of a storm drain system that would collect surface flows in catch basin inlets in the streets and convey flows via a storm drain system under on-site roadways to an underground detention vault located southwest portion of the Project site.

The Modified Project would increase the amount of impervious surface compared to existing conditions. This increase in impervious surface would increase the amount of runoff, however, through the Project design, peak discharge from the Modified Project would be less than the existing condition and less than the design flows of the existing storm drain in Limonite Avenue. By containing the runoff within proposed and existing storm drains, the Modified Project would not cause erosion or siltation on or off the Project site. The Hydrology Study for the Modified Project provides greater site-specific detail and analysis than the information presented in the Prior EIR, but this is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR.

Therefore, the analysis and conclusions presented in the Prior EIR remain unchanged and no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

c.ii - c.iii) As described above, the Modified Project includes a large subsurface detention basin to restrict peak flows during a 100-year storm event. The detention basin would outlet flows less than the design flows of the existing storm drain in Limonite Avenue. Therefore, the Modified Project would not create or contribute runoff water that would exceed the capacity of the existing stormwater drainage systems. Also as previously described, the Modified Project includes two biotreatment/bioretention facilities designed to treat initial storm flows to meet applicable local and state water quality requirements. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with

the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

d) The Original Project boundary is not located within a FEMA designated 100-year flood zone. The Modified Project does not change the Project boundary and is therefore also located outside of a FEMA designated 100-year flood zone. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

The Original Project site is located over 30 miles from the Pacific Ocean and not located near a large body of water, therefore, the Project site is outside of a tsunami inundation area and not at risk of impacts from a seiche. The Modified Project does not change the Project boundaries and is therefore located outside of a flood zone, and tsunami and seiche inundation area, and therefore not at risk of discharging pollutants during a flood, tsunami or seiche. Furthermore, areas disturbed by grading and construction for the Modified Project would be either paved or landscaped with vegetation to control surface erosion. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

e) The Original Project boundaries are not located within a sustainable ground water management plan. The Modified Project does not change the Project boundaries and is therefore also located outside of a sustainable ground water management plan. The Project site is subject to the Regional Permit issued by the Regional Water Quality Control Board (MS4) and a PWQMP has been prepared to show how the Modified Project will comply with the MS4 requirements. Percolation tests were performed as part of the PWQMP for the Modified Project, which determined that existing percolation rates do not meet the minimum standards to rely on infiltration. Furthermore, the Geotechnical Study for the Modified Project determined that existing groundwater levels are greater than 100-feet below the ground surface. The low infiltration rates and low groundwater depth both indicate that the Project site is not substantially contributing to groundwater recharge.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The Modified Project includes a site-specific hydrology study and preliminary water quality management plan that confirm the analysis and conclusions presented in the Prior EIR. The information provided in the hydrology study and PWQMP is not a substantial change with respect to the circumstances under which the

project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. The Modified Project would reduce peak stormflow discharge below the design flow of the existing storm drain in Limonite Avenue and include water treatment measures consistent with the MS4 requirements. Therefore, the analysis and conclusions presented in the Prior EIR remain unchanged for the Modified Project. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.11 Land Use and Planning

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Discussion: On December 13, 2017, the City of Eastvale certified an Environmental Impact Report (EIR) (State Clearinghouse No. 2015031028) for the 158.6-acre[30] Project site, adopted a Statement of Overriding Considerations for significant but unavoidable impacts, amended the Eastvale General Plan to incorporate the Leal Master Plan (including amending land use policies and the Land Use Map) and voted to adopt the Leal Master Plan and a corresponding change of zone from heavy agriculture (A-2) to Leal Master Plan. On January 10, 2018, the City held the second reading and adopted the Leal Master Plan and change of zone to Leal Master Plan. The Leal Master Plan outlined a multistage planning and development process. The first stage included the adoption of the Leal Master Plan, which identified "the project objectives and specific parameters for the design and quality of overall future development of the project site."[31] Stage 2 of the development process was anticipated to focus on "preparing project-wide development criteria and guidelines that are not included in the Master Plan, creating detailed plans for the first phase(s) of development based on the criteria and guidelines included in the Master Plan."[32] The last development phase outlined in the Master Plan consists of the "submittal of specific development projects through the Development Plan Review process established in the Eastvale Zoning Code."[33]

The Modified Project consists of an amendment to the Leal Master Plan, Development Agreement, Tentative Tract Map (TTM), and Major Development Review. This represents Stage 2 of the development process outlined in the Leal Master Plan. The Leal Master Plan Amendment provides a Project-wide site plan and identifies

[30] The Leal Master Plan EIR identifies the size of the Project site as 161 acres. Based on detailed engineering, the actual size of the Project site is 158.6 acres.
[31] Leal Master Plan EIR, December 2017, Project Description Page 2.0-2
[32] Leal Master Plan EIR, December 2017, Project Description Page 2.0-2
[33] Leal Master Plan EIR, December 2017, Project Description Page 2.0-2

permitted development intensities and development standards. The TTM creates both numbered lots for development areas and lettered lots for streets, parks, and open space.

a) The Prior EIR determined the Original Project would not physically divide an existing community. The Modified Project provides additional planning detail on future development of the Project site, consistent with the original Leal Master Plan. The boundaries of the Project site remain unchanged and the type of future development continues to provide a mix of residential and commercial uses.

Therefore, the Modified Project would not physically divide an existing community and no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Original Leal Master Plan did not establish a maximum number of dwelling units and no minimum development standards were identified. Therefore, development of the Project site had a wide range of flexibility. Given the wide flexibility, the Original Project established the following land use assumptions that were used in the Original Leal Master Plan EIR.

Table 14. Buildout Assumptions for the Original Project

Land Use
660 multi-family homes (apartments)
1,525,000 square feet of general retail (shopping center)
460,000 square feet of general office
460,000 square feet of medical office
450 hotel rooms
100,000-square-foot civic center

The Modified Project proposes a land use intensity of 2,500 residential dwellings, 595,000 square feet of commercial uses and a fire station. As planned in the Stage 2 sequencing, the Modified Project continues to provide development flexibility to allow for development to occur in accordance with market conditions as part of Stage 3 planning. While no Stage 3 development plans have been prepared, the 2,500 dwelling units and 595,000 square feet of commercial uses have been allocated as shown in the following table for purposes of this Addendum. It is important to note that the following mix of uses is conceptual and may change during the Stage 3 planning processes. Since development of the site could take many years and each planning area requires a separate Stage 3 planning process, development of the Project site could vary from the assumptions provided in the table below. If changes to these assumptions occur in the future, the City is responsible to evaluate those changes and determine if additional environmental review pursuant to CEQA is required.

Table 15. Buildout Assumptions for the Modified Project

Land Use
1,840 medium density residential (400 single family detached and 1440 single family attached)
660 high density residential (apartment units)
390,000 square feet of general retail (shopping center)
65,000 square feet of general office
65,000 square feet of medical office
75,000 square feet civic center (City Hall, Library, Police)
12,200 square feet fire station

The following table compares the development assumptions between the Original Project and the Modified Project.

Table 16. Land Use Comparison Table

Land Use	Original Project	Modified Project	Difference
Medium Density Residential	0	1,840	+1,840 units
High Density Residential	660	660	no change
Retail (Shopping Center)	1,525,000	390,000	-1,135,000 sf
General Office	460,000	65,000	-395,000 sf
Medical Office	460,000	65,000	-395,000 sf
Hotel	450	0	- 450 rooms
Civic Center	100,000	75,000	- 25,000 sf
Fire Station	0	12,200	+ 12,200 sf

Therefore, the Modified Project is consistent with adopted plans and policies governing the Project site. Furthermore, as analyzed in the Prior EIR and applicable to the Modified Project, the Project site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP); however, is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits and is not located in survey areas for Amphibians, Mammals, or Special Linkage areas. As analyzed in Section 2.4, Biological Resources, the Project is consistent with the MSHCP and does not provide suitable habitat for sensitive species. Furthermore, as analyzed in the Prior EIR and applicable to the Modified Project, the Project site is not subject to any local policies, such as a tree preservation ordinance.

The conclusions presented in the Prior EIR remain unchanged and no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The Modified Project is consistent with the City's General Plan land use designation, density limit, and policies. The Modified Project is also consistent with the existing Zoning for the Project site as it continues to contain a mix of residential and non-residential uses. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. No impacts would occur.

2.12 Mineral Resources

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

Discussion: In accordance with State CEQA Guidelines Section 15128, the Prior EIR determined that as a result of the absence of environmental resources or Project characteristics to produce impacts, the potential effect on Mineral Resources was found to be less than significant. The Modified Project would not change the limits of disturbance, which encumbers the entire site, therefore the analysis and conclusions presented in the Prior EIR remain unchanged. Furthermore, the site-specific geotechnical analysis evaluated the Project site's soil conditions and found no mineral resources that would be a value to the region (*Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California,* prepared by LGC Geotechnical, Inc; Appendix E).

Therefore, the Modified Project would not create any new or greater significant impacts.

a) Consistent with the findings in the Prior EIR, no known mineral resources are located on the Modified Project site, which is further evidenced by the fact that during extensive geologic subsurface exploration across the entire Project site, no mineral resources were observed. The Project site is mapped Mineral Resource Zone (MRZ) - 3 by the California Department of Conservation[34]. MRZ-3 identifies areas containing mineral deposits, the significance of which cannot be evaluated from available data, however, the extensive geologic subsurface exploration across the entire Project site confirmed no mineral resources are located onsite. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

[34] California Department of Conservation. 2022. California Department of Conservation Mineral Lands Classification website. https://maps.conservation.ca.gov/mineralresources/.

b) The Eastvale General Plan designates the Project site for Leal Master Plan, permitting future development of residential and commercial uses. Therefore, no loss of mineral resources identified on any City land use maps would occur as a result of the Modified Project. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project. No new mitigation is necessary and impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The Modified Project would not change the analysis or conclusions found in the Prior EIR and no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.13 Noise

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Discussion: The Prior EIR analyzed potential construction, operation, and vibration noise associated with development of the Original Project and determined impacts associated with a substantial permanent increase in ambient noise levels would be significant and unavoidable, even after implementation of mitigation measures.

A Project-specific noise study was prepared for the Modified Project. The study, "*Leal Master Plan Amendment Noise Impact Study*" prepared by RK Engineering Group, Inc. on December 21, 2021, is included in Appendix I. The Noise study analyzed impacts associated with construction and operation of the Modified Project as presented in the Project Description.

The Modified Project includes the following Project Design Features (PDFs) that are recognized for reducing noise levels. The PDFs include:

NOI PDF-1 Prior to the issuance of building permits, the Project will demonstrate that building construction will achieve the minimum interior noise standard of 45 dBA CNEL for all residential units located along arterial roadways and/or adjacent to commercial uses, per the California Building Standards Code. The following noise control measures may be required for dwelling units located near adjacent roadways:

- Install sound barriers (masonry walls or walls with earth berms) between residences and noise sources.

- Install double-paned or upgraded STC sound rated windows.
- Provide sound insulating exterior walls and roofing systems.
- Locate and/or design attic vents to minimize sound propagation into each home.
- Provide forced-air ventilation systems.
- Provide the necessary setbacks for dwelling units fronting along major roadways.

NOI PDF-2 The Project will comply with California Title 24 building insulation requirements for exterior walls, roofs and common separating assemblies (e.g. floor/ceiling assemblies and demising walls).

NOI PDF-3 For proper acoustical performance, all exterior windows, doors, and sliding glass doors will have a positive seal and leaks/cracks must be kept to a minimum.

NOI PDF-4 The final building plans will ensure that HVAC units are not located within an area of the Project site that would contribute to a noise level exceedance at any adjacent property line, per the City of Eastvale Municipal Code requirements. To meet the City's noise standards the following measures should be followed:

- All HVAC equipment shall be shielded or enclosed from the line of sight of adjacent residential uses.
- The combined noise level of all units operating simultaneously shall not exceed the City of Eastvale daytime and nighttime exterior standards at the nearest surrounding property lines.

NOI PDF-5 Future residents, property management personnel, and commercial tenants will be required to comply with the City of Eastvale Municipal Code Noise Regulations, Chapter 8.52, which specify that no person shall create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness.

To help ensure compliance with the City's Noise Regulations, the following recommendations are provided:

- Deliveries, loading and unloading activities, and trash pick-up hours should be limited to daytime hours only (8 a.m. – 10 p.m.).
- Limit engine idling time for all delivery vehicles and moving trucks to 5 minutes or less.

NOI PDF-6 The Project will prepare a construction management plan and obtain a construction work permit from the City of Eastvale prior to starting

construction. The construction management plan will ensure all contractors implement construction best management practices to reduce construction noise levels. Examples of best management practices may include the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).
- Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.
- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
- Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.
- Provide notifications and signage in readily visible locations along the perimeter of construction sites that indicate the dates and duration of construction activities, as well as provide a telephone number where neighbors can enquire about the construction process and register complaints to a designated construction noise disturbance coordinator.
- Construction activities shall not take place between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and 6:00 p.m. to 7:00 a.m. during the months of October through May.

NOI PDF-7 The Project will not include pile driving or blasting activities during construction. If impact pile driving or blasting is required, a follow-up noise and vibration impact assessment will be conducted prior to start of any activity.

With implementation of the PDFs, the Modified Project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of City standards. The Modified Project would generate approximately 27,764 fewer average daily trips than the Original Project, resulting in less traffic noise contribution to the surrounding roadways than previously analyzed in the Prior EIR. Lastly, the Modified Project has reduced the amount of commercial land use in favor of a greater amount

of residential use, which is generally considered a more compatible land use with the surrounding community from a noise standpoint.

a) The Noise Study prepared for the Modified Project analyzed noise impacts from long-term operations of the proposed development and short-term construction noise impacts. The Modified Project would generate approximately 27,764 fewer average daily trips than the Original Project, resulting in less operational traffic noise contribution to the surrounding roadways than previously analyzed in the Prior EIR. Furthermore, the Modified Project would not cause a significant impact associated with a change in roadway noise levels as shown in the following table.

Table 17. Roadway Noise Impact Analysis (dBA CNEL)[1] Existing Year Conditions[35]

Roadway[2]	Segment	CNEL at the Nearest Façade			
		Existing Without Project	Existing with Project	Change as a Result of Project	Significant Impact?[3]
Limonite Avenue	Archibald Ave to Harrison Ave	68.2	69.0	0.8	NO
Limonite Avenue	Harrison Avenue to Scholar Way	69.7	70.3	0.6	NO
Limonite Avenue	Scholar Way to Hamner Avenue	69.0	71.3	2.3	NO
Limonite Avenue	Hamner Avenue to I-15 Ramps	70.8	72.2	1.4	NO
Limonite Avenue	I-15 Ramps to Wineville Avenue	70.8	71.3	0.5	NO
Hamner Avenue	Citrus Street to Schleisman Rd	68.7	69.4	0.7	NO
Hamner Avenue	Schleisman Road to 68th Street	65.1	66.2	1.1	NO
Hamner Avenue	68th Street to 58th Street	67.4	67.8	0.4	NO
Hamner Avenue	Limonite Avenue to 58th Street	66.3	69.4	3.1	NO
Hamner Avenue	58th Street to Bellgrave Avenue	66.3	69.4	3.1	NO
Scholar Way	Limonite Avenue to 58th Street	57.8	59.2	1.4	NO
Scholar Way[5]	58th Street to Bellgrave Avenue	54.4	57.0	2.6	NO

[1] Exterior noise levels are calculated at 5 feet above ground level.
[2] Noise levels are calculated approximately 100 feet from the centerline of the subject roadway.
[3] A significant noise impact would occur when project operational activities cause an increase in ambient noise levels of 5 dBA or more and the resulting noise level exceeds 60 dBA CNEL/Ldn.

The land uses proposed as part of the Modified Project are compatible with surrounding land uses and none of the land uses are considered substantial noise generators. Furthermore, future tenants within the commercial areas would be subject to the City's noise ordinance, which places limits on noise generated from stationary

[35] CNEL = Community Noise Equivalent Level, dBA = decibels A ;Table 8, from "Leal Master Plan Amendment Noise Impact Study," prepared by RK Engineering Group, Inc., dated December 21, 2021.

uses. The proposed Project includes several Project Design Features that would further reduce operational noise levels, as follows:

NOI PDF-1 Prior to the issuance of building permits, the Project will demonstrate that building construction will achieve the minimum interior noise standard of 45 dBA CNEL for all residential units located along arterial roadways and/or adjacent to commercial uses, per the California Building Standards Code. The following noise control measures may be required for dwelling units located near adjacent roadways:

- Install sound barriers (masonry walls or walls with earth berms) between residences and noise sources.
- Install double-paned or upgraded sound transmission class (STC) sound rated windows.
- Provide sound insulating exterior walls and roofing systems.
- Locate and/or design attic vents to minimize sound propagation into each home.
- Provide forced-air ventilation systems.
- Provide the necessary setbacks for dwelling units fronting along major roadways.

NOI PDF-2 The Project will comply with California Title 24 building insulation requirements for exterior walls, roofs and common separating assemblies (e.g. floor/ceiling assemblies and demising walls).

NOI PDF-3 For proper acoustical performance, all exterior windows, doors, and sliding glass doors will have a positive seal and leaks/cracks must be kept to a minimum.

NOI PDF-4 The final building plans will ensure that heating, ventilation, and air conditioning (HVAC) units are not located within an area of the Project site that would contribute to a noise level exceedance at any adjacent property line, per the City of Eastvale Municipal Code requirements. To meet the City's noise standards the following measures should be followed:

- All HVAC equipment shall be shielded or enclosed from the line of sight of adjacent residential uses.
- The combined noise level of all units operating simultaneously shall not exceed the City of Eastvale daytime and nighttime exterior standards at the nearest surrounding property lines.

NOI PDF-5 Future residents, property management personnel, and commercial tenants will be required to comply with the City of Eastvale Municipal Code Noise Regulations, Chapter 8.52, which specify that no person shall create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness.

To help ensure compliance with the City's Noise Regulations, the following recommendations are provided:

- Deliveries, loading and unloading activities, and trash pick-up hours should be limited to daytime hours only (8 a.m. – 10 p.m.).

- Limit engine idling time for all delivery vehicles and moving trucks to 5 minutes or less.

Therefore, no new significant impacts or increase in severity of impacts would occur from long-term operation of the Modified Project.

The Noise Study prepared for the Modified Project analyzed potential construction noise impacts. The Noise Study analyzes potential noise impacts during all expected phases of construction, including, demolition, site preparation, grading, building construction, paving, and architectural coating. Noise levels are calculated based on an average distance of equipment over a 1-hour period to the nearest adjacent property. Demolition activities are expected to occur at approximately 50 feet from the nearest existing residential uses to the north. Therefore, noise levels from demolition activities are analyzed at 50 feet. Noise levels from all other construction activities are conservatively estimated from 200 feet, whereas, in reality, the degree of construction noise will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties.

The proposed Project includes several Project Design Features that would further reduce construction noise levels, as follows:

NOI PDF-6 The Project will prepare a construction management plan and obtain a construction work permit from the City of Eastvale prior to starting construction. The construction management plan will ensure all contractors implement construction best management practices to reduce construction noise levels. Examples of best management practices may include the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).

- Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.

- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.

- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.

- Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible.

- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

- Provide notifications and signage in readily visible locations along the perimeter of construction sites that indicate the dates and duration of construction activities, as well as provide a telephone number where neighbors can enquire about the construction process and register complaints to a designated construction noise disturbance coordinator.

- Construction activities shall not take place between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and 6:00 p.m. to 7:00 a.m. during the months of October through May.

NOI PDF-7 The Project will not include pile driving or blasting activities during construction. If impact pile driving or blasting is required, a follow-up noise and vibration impact assessment will be conducted prior to start of any activity.

The following table summarizes construction noise levels and documents that construction noise would not cause a significant impact.

Table 18. Project Construction Noise Levels[36]

Phase	Equipment	Quantity	Equipment Noise Level (dBA Leq)	Combined Noise Level (dBA Leq)
Demolition[2]	Concrete/Industrial Saw	1	74.8	84.6
	Excavators	3	76.7	
	Rubber Tired Dozers	2	77.7	
Site Preparation[1]	Rubber Tired Dozers	3	65.6	75.6
	Tractors/Loaders/Backhoes	4	68.0	
Grading[1]	Excavators	2	64.7	76.2
	Graders	1	69.0	
	Rubber Tired Dozers	1	65.6	
	Scrapers	2	67.6	
	Tractors/Loaders/Backhoes	2	68.0	
Building Construction[1]	Cranes	1	60.6	74.2
	Forklifts	3	59.0	
	Generator Sets	1	65.6	
	Tractors/Loaders/Backhoes	3	68.0	
	Welders	1	58.0	
Paving[1]	Pavers	1	62.2	67.3
	Paving Equipment	1	61.0	
	Rollers	2	61.0	
Architectural Coating[1]	Air Compressors	1	61.6	61.6
Worst Case Construction Phase Noise Level – Leq (dBA)				84.6
FTA Construction Noise Criteria (General Assessment)				90.0
Noise level exceeds FTA criteria?				**NO**

[1] Construction Noise Levels are analyzed at 200 feet

[2] Demolition noise levels are conservatively analyzed at 50 feet. Noise level does not take into account of existing six (6) foot wall along residential uses to the north.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts were originally determined to be significant and unavoidable, however subsequent analysis prepared for the Modified Project with implementation of Project Design Features determined impacts are less than the Original Project and less than significant.

The Prior EIR included Mitigation Measures MM 3.6.1 and 3.6.3, which requires a Project-specific acoustical assessment and a construction-related noise mitigation plan, respectively. Mitigation Measure MM 3.6.1 and Mitigation Measure MM 3.6.3

[36] dBA Leq = Equivalent Continuous Level ;Table 11, from "Leal Master Plan Amendment Noise Impact Study," prepared by RK Engineering Group, Inc., dated December 21, 2021.

have been satisfied with the Project specific Noise Analysis prepared for this Addendum (Appendix I). The Prior EIR included Mitigation Measure MM 3.6.4, which includes several requirements very similar to the PDFs included in the Project Description. Mitigation Measure 3.6.4 would continue to apply to the Modified Project.

b) The Prior EIR concluded the Original Project would have a less than significant impact from groundborne vibration with implementation of Mitigation Measure MM 3.6.2, which requires preparation of a vibration assessment for construction activities. The Noise Study prepared for the Modified Project (Appendix I) includes a groundborne vibration assessment of the Modified Project, which satisfies Mitigation Measure MM 3.6.2. The construction of the proposed Project is not expected to require the use of substantial vibration inducing equipment or activities, such as pile drivers or blasting. The main sources of vibration impacts during construction of the Project would be the operation of equipment such as bulldozer activity during demolition, scrapers and loading trucks during grading and excavation, and vibratory rollers during paving. Based on standard construction equipment, vibration impacts would be less than significant as shown in the following table.

Table 19. Construction Vibration Impact Analysis[37]

Construction Activity	Distance to Nearest Structure (ft)	Duration	Calculated Vibration Level - PPV (in/sec)	City of Eastvale Vibration Threshold- PPV (in/sec)	Significant Impact
Large Bulldozer	100	Continuous/Frequent	0.019	0.0787	NO
Vibratory Roller	100	Continuous/Frequent	0.046		NO
Loaded Trucks	100	Continuous/Frequent	0.017		NO
Caisson Drilling	100	Continuous/Frequent	0.019		NO

The Noise Study prepared for the Modified Project provides greater site-specific detail and analysis than the information presented in the Prior EIR, but this is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. Therefore, the analysis and conclusions presented in the Prior EIR remain unchanged for the Modified Project and no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant. Mitigation Measure MM 3.6.2 requiring preparation

[37] PPV = peak particle velocity; Table 13, from "Leal Master Plan Amendment Noise Impact Study," prepared by RK Engineering Group, Inc., dated December 21, 2021.

of a vibration assessment has been satisfied and is no longer applicable to the Modified Project.

c) The Modified Project site is not located near a public or private airport or airstrip; therefore, the Modified Project would not alter the analysis or conclusions presented in the Prior EIR. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: Several mitigation measures have already been satisfied and are shown in light grey format. The mitigation measures applicable to the Modified Project that remain in place are listed below.

MM 3.6.1 An acoustical assessment shall be prepared that evaluates potential environmental noise impacts associated with the proposed project. Where the acoustical analysis determines that noise levels would exceed applicable City noise standards, noise reduction measures shall be identified and included in the project.

Timing/Implementation: *Prior to approval of development plan or project*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.6.2 A vibration assessment shall be prepared for construction projects that would involve the use of major vibration-generating equipment (e.g., pile drivers, vibratory rollers) within 200 feet of existing structures. Measures to reduce ground vibration levels shall be identified for any potential vibration impacts exceeding a vibration threshold of 0.2 in/sec ppv.

Timing/Implementation: *Prior to approval of development plan or project*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.6.3 A construction-related noise mitigation plan shall be submitted to the City for review and approval prior to issuance of a grading permit. The plan shall depict the location of construction equipment and specify how the noise from this equipment will be mitigated during construction of the project.

Timing/Implementation: *Prior to issuance of grading permit*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.6.4 The following mitigation measures shall be implemented and specified on all project construction plans:

a) Clearing and construction activities shall be conducted outside of 6:00 p.m. and 6:00 a.m. during the months of June through September, and outside of 6:00 p.m. and 7:00 a.m. during the months of October through May. (Municipal Code Chapter 8.52, Noise Regulation).
b) All construction equipment shall be kept properly tuned and use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
c) Construction equipment staging areas shall be centrally located on the Project site or located at the farthest distance possible from nearby residential land uses.
d) All motorized construction equipment and vehicles shall be turned off when not in use.

Timing/Implementation: *During construction activities, noted on all project construction plans*

Enforcement/Monitoring: *City of Eastvale Planning Department*

Conclusion: A Project-specific Noise and Vibration Study was prepared for the Modified Project, including Project Design Features. This Study provides greater site-specific detail and analysis than the information presented in the Prior EIR but this is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR. The additional analysis performed for the Modified Project introduces additional evidence in the record that impacts from the Modified Project would be less than the Original Project and less than significant. Therefore, where the Prior EIR had concluded a significant unavoidable impact, the analysis of the Modified Project documents that impacts would be less than significant. Mitigation Measure MM 3.6.4 from the Prior EIR remains applicable and Mitigation Measures 3.6.1, 3.6.2, and 3.6.3 have been satisfied by the Noise Study prepared for the Modified Project. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts from the Modified Project would be less than significant with mitigation.

2.14 Population and Housing

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
POPULATION AND HOUSING. Would the project:				
d) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☒	☐
e) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Discussion: The Prior EIR concluded:

> "…that while the proposed Leal Master Plan would facilitate growth on the project site, the growth would be an implementation of the long-range planning process for the project site as envisioned in the City's General Plan. The project would be consistent with the City's General Plan policies and goals intended to promote smart growth. The project requires no mitigation measures to conclude that no impact would occur or impacts would be less than significant and less than cumulatively considerable."[38]

The Original Leal Master Plan allows for residential medium density (14–21 units per acre) with no minimum or maximum and residential high density (22–40 units per acre) with a minimum of 500 dwelling units and a maximum of 660 dwelling units. The Modified Project proposes residential development up to 2,500 dwellings units, which is consistent with the flexibility and mix of uses specified in the Original Leal Master Plan and General Plan.

The State Legislature has declared that California has a housing crisis, and the Legislature has taken steps to encourage the production of additional housing. Through California Government Code Section 65584, the State and Southern California Association of Governments (SCAG) determines a Regional Housing Needs Assessment (RHNA), which is a number of dwelling units local jurisdictions must accommodate through zoning and policies. The City of Eastvale has a RHNA of 3,028 dwelling units from 2021 to 2029. The Modified Project is one component of the City's ability to reach its RHNA target.

[38] Leal Draft Master Plan EIR, July 2015, Section 3.12.1, Page 3.12-1

The Project site has several houses owned by one landowner who is voluntarily selling the property. Therefore, no residents would be unwillingly displaced. Therefore, the Modified Project would not displace people or housing, or induce substantial unplanned population growth or create a need for replacement housing. The analysis and conclusions presented in the Prior EIR remain unchanged for the Modified Project.

a) The Modified Project would provide population growth consistent with the Original Leal Master Plan analyzed in the Prior EIR. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Project site has several houses owned by one landowner who is voluntarily selling the property. Therefore, no residents would be unwillingly displaced. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The analysis and conclusions presented in the Prior EIR remain unchanged. The Modified Project provides residential housing consistent with the Original Leal Master Plan and consistent with the City's General Plan and its policies. Population growth is not unplanned and growth anticipated as a result of the Master Plan is an implementation of the long-range planning process for the site as envisioned in the City's General Plan. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.15 Public Services

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
PUBLIC SERVICES.				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☒	☐
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

Discussion: The Prior EIR analyzed impacts on public services including, fire protection, police protection, schools, parks, and other public facilities, and concluded impacts would be less than significant. In general, the potential for impacts to public services is based on population growth. The larger the population increase, the more demand is generally placed on public services. The number of residential dwelling units identified in the Modified Project is consistent with the Original Leal Master Plan, but greater than analyzed in the Prior EIR.

a) The analysis and conclusions presented in the Prior EIR remain unchanged as follows:

i) Fire Protection: The Prior EIR stated that the Project site would be served within standard response times by existing stations. At the request of the City and not in order to reduce response times to the Project site, the Modified Project includes dedication of 1.22 acres at the corner of Scholar Way and 58th Street for a new fire station. The City has funding to construct the fire station, resulting in greater fire protection services and lower response times to the Project site than analyzed in the Prior EIR. The Original Project planned for 100,000 square feet of civic center uses and the Modified Project proposes approximately 75,000 square feet of civic center uses, consistent with the Original Leal Master Plan. The proposed fire station is approximately 12,200 square feet and combined with the other proposed civic center uses remains less than the 100,000 square feet analyzed in the Prior EIR.

The Project site is not located in a high fire hazards area and the Modified Project is not gated, thereby allowing for unrestricted emergency access. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

ii) Police Protection: The Riverside County Sheriff's Department (RCSD) provides police protection services to the City of Eastvale. Police response times do not come from a fixed location, like a fire station, because RCSD is continuously on patrol throughout the City. The Prior EIR indicated that the City of Eastvale is served by approximately 18 patrol officers operating from the Jurupa Valley Station[39]. At the request of the City, the Modified Project includes a proposal to dedicate several acres of land to the City for the construction of a new Civic Center campus, which would include City Hall, a Library, and a Police Station. While police services would continue to be provided by RCSD, a new Police Station in the City would serve as the law enforcement headquarters for the City instead of deputies stationed at the Jurupa Valley Station. The Modified Project would dedicate the land for the Police Station and the City has funds to construct and operate the facility. The Original Project planned for 100,000 square feet of civic center uses and the Modified Project proposes 75,000 square feet of civic center uses, consistent with the Original Leal Master Plan.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

iii) Schools: The Prior EIR determined student generation from the Original Project would constitute a less than significant impact. Furthermore, Pursuant to Government Code Section 65996, mitigation of impacts on school facilities is limited to the imposition of statutory school fees. The Modified Project would cause an increase in student enrollment in the Corona-Norco Unified School District (CNUSD). The Prior EIR indicates that enrollment at Harada Elementary School exceeds capacity and enrollment at Eleanor Roosevelt High School is projected to exceed capacity in 2024. According to CNUSD facilities staff, enrollment within CNUSD is declining within the center of the District in the Corona and Norco areas, and increasing in the perimeter of the District, in Eastvale and the Temescal Valley. The CNUSD is analyzing the additional students from the Modified Project and considering whether potential changes to school attendance boundaries would be necessary.[40]

Given the payment of school fees pursuant to Government Code Section 65996 and the ability of CNUSD to adjust attendance boundaries as necessary, no new significant impacts or substantial increase in the severity of significant impacts would occur with

[39] Leal Draft Master Plan EIR, July 2015, Section 3.13.2, Page 3.13-3
[40] Personal Communication with CNUSD facilities staff on December 2, 2021

the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

iv) Parks: The Prior EIR concluded that future development on the Project site would be required to comply with City standards including General Plan Policy OS-6, which states that new residential developments would be required to, at a minimum, provide parks consistent with the Quimby Act (California Government Code Section 66477), through land dedication, fees in lieu, or on-site improvements . The Modified Project is subject to the City's policies and regulations, similar to the Original Project and therefore, would not change the conclusions presented in the Prior EIR. Furthermore, the Modified Project has identified approximately 14 acres of parkland, for which the construction and operation of has been analyzed in this Addendum. At the time of the Stage 3 planning process, that amount of park acreage will be assessed against the City's Quimby Act requirement and if a shortfall exists, additional parkland may be added on-site to the Modified Project and/or park fees will be paid.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

v) Other Public Facilities: Other public facilities include libraries and government offices. The Prior EIR determined that impacts to Other Public Facilities from the Original Project would be less than significant. The Modified Project proposes to dedicate land to the City for civic center uses including a new Library and City Hall. This dedication of land would allow the City to expand City Hall and provide a state of the art library within the City. The Original Project planned for 100,000 square feet of civic center uses and the Modified Project proposes 75,000 square feet of civic center uses, consistent with the Original Leal Master Plan.

Therefore, no new impacts or intensification of impacts to other government facilities would occur as a result of the Modified Project and impacts are less than significant.

Mitigation Measures: No mitigation required.

Conclusion: No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.16 Recreation

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion: The City of Eastvale General Plan Policy OS-6 states that new residential developments would be required to, at a minimum, provide parks consistent with the Quimby Act (California Government Code Section 66477), through land dedication, fees in lieu, or on-site improvements. The Modified Project provides approximately 14 acres of parkland for which the construction and operation of has been analyzed in this Addendum. At the time of the Stage 3 planning process, that amount of park acreage will be assessed against the City's Quimby Act requirement and if a shortfall exists park fees will be paid. Therefore, the Modified Project would not cause any new or more intense impacts on recreation facilities as compared to the Prior EIR.

a) The Prior EIR concluded that future development on the Project site would be required to comply with City standards including General Plan Policy OS-6, which states that new residential developments would be required to, at a minimum, provide parks consistent with the Quimby Act (California Government Code Section 66477), through land dedication, fees in lieu, or on-site improvements. Since the Modified Project would continue to satisfy local park code requirements through the provision of park acreage and/or payment of park fees, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Prior EIR concluded that future development on the Project site would be required to comply with City standards including General Plan Policy OS-6, which states that new residential developments would be required to, at a minimum, provide parks consistent with the Quimby Act (California Government Code Section 66477), through land dedication, fees in lieu, or on-site improvements. The Modified Project does not trigger the need to construct new or expand existing park or recreation facilities beyond the Project boundaries because the local park code requirement would be satisfied by the creation of on-site parks and/or payment of park fees. The Modified Project currently proposes approximately 14 acres of new on-site parkland.

Since the Modified Project would continue to satisfy local park code requirements, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The analysis or conclusions presented in the Prior EIR remain unchanged for the Modified Project. The Modified Project will comply with the City's local park code requirement through provision of approximately 14 acres of on-site parkland and/or payment of in-lieu fees, which offsets any increase in demand for park or recreation facilities associated with the Modified Project. Therefore, no additional demands on recreation would be created as part of the Modified Project, and no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.17 Transportation/Traffic

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Discussion: The Prior EIR included a Traffic Impact Analysis (TIA) prepared by Fehr and Peers for the Original Project. The TIA determined that with implementation of mitigation measures, traffic volumes from the Original Project would result in direct significant and unavoidable impacts to three roadway segments and cumulatively significant and unavoidable impacts to four roadway segments.

It should be noted that at the time the Prior EIR was prepared, traffic analysis and impacts were based on how roadway intersections and segments function. Traffic studies used a volume to capacity (V/C) methodology to calculate the level of service (LOS) of intersections and roadway segments. Following certification of the Prior EIR, the State Legislature adopted Senate Bill 743 (SB 743), which revised the CEQA Guidelines to add Section 15064.3, removing roadway function as the basis for analysis and replacing it with an analysis of vehicle miles traveled (VMT).[41] The premise is the fewer vehicle miles traveled the less impact would occur to the roadway network. Automobile delay, as described by LOS or similar measures of vehicular capacity or traffic congestion, is no longer considered a significant impact on the environment under CEQA under Public Resources Code section 21099 and case law. (Citizens for Positive Growth & Preservation v. City of Sacramento (2019) 43 Cal.App.5th 609).

[41] The adoption of guidelines for analyzing and evaluating the significance of data does not constitute new information if the underlying information was otherwise known or should have been known at the time the EIR was certified. *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301

A traffic study was prepared for the Modified Project titled, "*Leal Master Plan Amendment Project Traffic Study*," by RK Engineering Group, Inc., and dated November 17, 2021 (Appendix J). Since the Prior EIR was based on a LOS analysis, the Traffic Study for the Modified Project includes a LOS analysis for informational purposes and for the City's discretionary review and approval process, as well as a VMT analysis to be consistent with the current CEQA Guidelines. The Traffic Study for the Modified Project relied on the development mix presented in the Project Description.

Trip generation is the number of vehicle trips generated on a daily (24 hour) basis. The trip generation for each land use is obtained from the Institute of Traffic Engineers (ITE), which is the industry standard. The following table shows a comparison of the trip generation for the Modified Project compared to the Original Project. As shown in this table, the Modified Project reduces the number of daily vehicle trips by 27,764.

Table 20. Modified Project Net Trip Generation Compared to Leal Specific Plan TIA[42]

Land Use	AM			PM			Daily
	In	Out	Total	In	Out	Total	
Modified Project	765	1,066	1,831	1,726	1,605	3,331	36,652
Leal Specific Plan TIA (Fehr & Peers, May 12, 2015)	2,120	911	3,030	2,569	3,740	6,309	64,416
Net Difference	**-1,355**	**155**	**-1,200**	**-842**	**-2,136**	**-2,978**	**-27,764**

The Modified Project would also generate 1,200 fewer AM peak hour trips and approximately 2,978 fewer PM peak hours trips compared to the Original Project.

The Original Project analyzed the buildout of Limonite Avenue and Hamner Avenue both to six lanes. That requires the addition of a travel lane on westbound Limonite Avenue between Hamner Avenue and Scholar Way, and the addition of a southbound travel lane on Hamner Avenue between 58th Street and Limonite Avenue.

The analysis included in the Modified Project Traffic Study does not assume additional travel lanes on Limonite and Hamner. Instead, the Traffic Study assumes two travel lanes and a third drive isle associated with on-street parking for both of the Limonite and Hamner roadway segments.[43] This would reduce each segment by one travel lane compared to what was analyzed in the Prior EIR.

[42] Table 4-3, from "Leal Master Plan Amendment Project Traffic Study," prepared by RK Engineering Group, Inc., dated November 17, 2021.

[43] An early design of the Modified Project proposed two westbound lanes on Limonite with on-street parking and two southbound lanes on Hamner with on-street parking. Shortly before publication of this Addendum the Modified Project was revised to eliminate on-street parking from both Limonite and Hamner and provide three travel lanes on westbound Limonite and three travel lanes on southbound Hamner. Since this late project revision adds more roadway capacity, similar to the Original Project, the

The Modified Project Traffic Study documents within Tables 6-1 and 6-2 that in the existing plus Project conditions and in the cumulative conditions, the Modified Project with two travel lanes on Limonite and Hamner would have a reduced volume to capacity ratio than the Original Project. The result of this study is that the reduction in the trip generation associated with the Modified Project is sufficient to improve the function of Limonite and Hamner with only two travel lanes on each roadway segment, compared to the Original Project. Therefore, the traffic impacts would remain significant and unavoidable, however the Modified Project would reduce the intensity of the impact.

It should be noted that the Modified Project does not propose only two travel lanes on Limonite and Hamner as analyzed in the Traffic Study. As shown on Tentative Tract Map No. 38290, both segments of Limonite and Hamner include three travel lanes, a median, and an access road serving on-street diagonal parking. The Traffic Study analyzed the "worst-case scenario" of only two travel lanes. The Modified Project as proposed with three travel lanes will only improve traffic conditions compared to the Original Project and represented in the TIA for the Modified Project.

Following certification of the Prior EIR, SB 743 was adopted, which changed how traffic is analyzed. Instead of V/C and LOS, traffic analysis in CEQA is now based on VMT. The City's VMT Guidelines state:

> "Residential and office projects located within a low VMT-generating area, as identified in the WRCOG screening tool, may be presumed to have a less than significant impact. In addition, other employment-related and mixed-use land use projects may be screened if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area"

Based on the Western Riverside Council of Governments (WRCOG) VMT screening tool, the Project is located in a low-VMT area because both the residential home-based VMT and home-based work VMT for this area are less than the City of Eastvale city-wide average. Furthermore, the Project consists of residential, employment and retail uses similar in nature to the existing land uses surrounding the site (which also consist of residential and commercial uses). Therefore, the Project would be expected to exhibit similar VMT patterns as the existing uses and utilization of the WRCOG screening maps is appropriate for screening purposes. Lastly, the Modified Project also includes an extensive network of sidewalks and trails to promote and encourage non-motorized mobility, which further reduces VMT.

Leal Master Plan Amendment Project Traffic Study was not updated with the additional travel lanes because the Traffic Study analysis a more conservative and constrained roadway network. The revisions to the Modified Project provide greater roadway capacity, which would further reduce traffic impacts.

A comparison of VMT generated from the Modified Project to the Original Project was performed using CalEEMod. The analysis determined the Modified Project would generate less VMT than the Original Project as shown in the following table.

Table 21. Comparison of VMT from the Modified Project to the Original Project[44]

Scenario	Total Annual VMT (CalEEMod)
Current Project	68,221,050
2015 Project	150,029,705
Delta	-81,808,655

a) The Prior EIR analyzed consistency with adopted plans and policies through a LOS analysis of roadway segments and intersections. The Prior EIR concluded the Original Project would result in significant unavoidable impacts after mitigation because several intersections with operate at deficient LOS standards in conflict with the City's plans and policies.

The Modified Project would reduce trip generation by approximately 27,764 daily trips compared to the Original Project. The Traffic Study for the Modified Project determined that the Modified Project would continue to cause intersections to operate at deficient LOS compared to City policies, however the Modified Project would cause a less intensive significant impact than the Original Project.

The Prior EIR included three mitigation measures, which were part of the original LOS analysis and remain applicable to the Modified Project even though the CEQA Guidelines have changed to a VMT metric. Mitigation Measure MM 3.2.1a and 3.2.1c require the widening of Limonite and Hamner to three lanes, respectively. These two mitigation measures remain applicable to the Modified Project and have been incorporated into the Modified Project design as shown on TTM 38290. Mitigation Measure MM 3.2.1b requires a focused traffic study for the proposed Project. This mitigation measure has been satisfied by the Traffic Study prepared for the Modified Project.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain significant and unavoidable with mitigation incorporated.

[44] "Leal Master Plan Amendment Project Traffic Study," prepared by RK Engineering Group, Inc., dated November 17, 2021

b) The Western Riverside County Council of Governments (WRCOG) has developed a screening tool for VMT analysis. Based on the WRCOG screening tool, the Project site is located within a low VMT generating zone. Land use projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. Utilizing the WRCOG Screening Tool, the Modified Project is located within a low-VMT generating zone based on residential home-based VMT and home-based work VMT. As a result, the Modified Project is exempt from further VMT analysis and the Project consists of residential, employment and retail uses similar in nature to the existing land uses surrounding the site (which also consist of residential and commercial uses). Therefore, the Project would be expected to exhibit similar VMT patterns as the existing uses and utilization of the WRCOG screening maps is appropriate for screening purposes. Lastly, the Modified Project also includes an extensive network of sidewalks and trails to promote and encourage non-motorized mobility, which further reduces VMT. Refer to Attachment A of Appendix J. Therefore, the Modified Project is consistent with CEQA Guidelines Section 15064.3.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would be less than significant.

c) The Prior EIR determined the Original Project would not increase hazards because of design or incompatible uses. The Modified Project relies on roadway networks consistent with City standards and similarly proposes a mix of land uses. Furthermore, the Traffic Study prepared for the Modified Project did not identify any hazardous design features. Additional engineering details will be added during the Stage 3 planning process and those engineering details will be reviewed and checked against adopted standard plans and design criteria for roadway design.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

d) The Modified Project is surrounded by four City streets all of which provide emergency access. The Modified Project proposes to improve all four perimeter roadways to City standards. The Modified Project also proposes to dedicate 1.22 acres for a future fire station.

The Modified Project includes less intensive development than the Original Project by reducing trip generation by 27,764 average daily vehicle trips. The Modified Project would improve the surrounding circulation system with additional travel lanes as contemplated in the Original Project and the Modified Project would contribute to fewer local roadway trips than the Original Project helping to improve emergency access and circulation in the area. The Modified Project would complete street improvements on all four surrounding streets as proposed under the Original Project.

Therefore, as a result of the Modified Project proposing less intensive development than the Original Project and proposing to complete the surrounding street system, no new impacts would occur, and the conclusions presented in the Prior EIR remain unchanged.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: Several measures have already been satisfied and are shown in light grey format. The mitigation measures applicable to the Modified Project that remain in place are listed below.

MM 3.2.1a Fair share of funding shall be paid for widening Limonite Avenue along the Project frontage from two to three lanes in each direction. Funding shall be determined and paid via the Riverside County Transportation Uniform Mitigation Fee (TUMF). Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS D operations and consistent with the Master Plan's infrastructure phasing provisions.

Timing/Implementation: *Prior to approval of development plan or project*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.2.1b A focused traffic study shall be prepared that demonstrates the project's consistency with the transportation impact assessment (TIA) for the Leal Master Plan prepared by Fehr & Peers (2015). The traffic study shall assess the following:

- Parking;
- Site access and on-site circulation;
- Interaction of driveways with adjacent intersections (if appropriate);
- Impacts on local intersections;
- Impacts to pedestrian, transit, and bicycle facilities; and
- Trip generation monitoring study to ensure that, as land develops in the Leal Master Plan area, the total development generates traffic at or below the levels assumed in this Draft EIR.

Timing/Implementation: *Prior to approval of development plan or project*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.2.1c Hamner Avenue shall be widened between Limonite Avenue and Bellegrave Avenue to three lanes in each direction either directly or through fair-share funding as determined by infrastructure and/or facility financing plans approved for the Leal Master Plan. Project plans and/or phasing shall establish the timing of this improvement to ensure it is in place prior to LOS F operations and consistent with infrastructure phasing provisions established as part of Master Plan implementation.

Timing/Implementation: *Prior to approval of development plan or project*

Enforcement/Monitoring: *City of Eastvale Planning Department*

Conclusion: The changes associated with the Modified Project would reduce trip generation by approximately 27,764 average daily trips. Level of service impacts would remain significant and unavoidable; however, the Modified Project would reduce the severity of the significant impact. As evaluated again the new SB 743 standards, the Modified Project is consistent with CEQA Guidelines section 15064.3 and impacts would be less than significant. The Prior EIR included three mitigation measures. Mitigation Measure MM 3.2.1a and 3.2.1c require the widening of Limonite and Hamner to three lanes, respectively. These two mitigation measures remain applicable to the Modified Project. Mitigation Measure MM 3.2.1b requires a focused traffic study for the proposed Project. This mitigation measure has been satisfied by the Traffic Study prepared for Modified Project and is therefore no longer applicable.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain significant and unavoidable.

2.18 Tribal Cultural Resources

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☒	☐

Discussion: Since preparation of the Prior EIR, CEQA Guidelines Appendix G has been revised to include a specific section on Tribal Cultural Resources.[45] The Prior EIR analyzed potential impacts associated with tribal cultural resources in the Cultural Resources section. The Prior EIR concluded that potential impacts to cultural resources would be less than significant with mitigation. No changes to the analysis or conclusions presented in the Prior EIR would occur for the Modified Project.

Notification pursuant to State Bill (SB) 18 and Assembly Bill (AB) 52 was distributed to the Native American Heritage Commission and local tribes as part of the Prior EIR. SB 18 requires local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving

[45] The adoption of guidelines for analyzing and evaluating the significance of data does not constitute new information if the underlying information was otherwise known or should have been known at the time the EIR was certified. *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301

traditional tribal cultural places. The Final Tribal Guidelines recommend that the Native American Heritage Commission (NAHC) provide written information as soon as possible but no later than 30 days after receiving notice of the Project to inform the lead agency if the proposed Project is determined to be in proximity to a traditional tribal cultural places (TTCP) and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. Per SB 18, the law requires a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCP prior to the adoption, revision, amendment, or update of a City's or County's general plan.

AB 52 took effect July 1, 2015 and incorporates tribal consultation and analysis of impacts to tribal cultural resources (TCR) into the CEQA process. It requires TCRs to be analyzed like any other CEQA topic and establishes a consultation process for lead agencies and California tribes. A significant impact on a TCR is considered a significant environmental impact, requiring feasible mitigation measures.

Consultation with the Soboba Band of Luiseno Indians occurred on May 21, 2015. The Prior EIR concluded that a potential for archaeological and paleontological resources exists and included mitigation measures to reduce impacts to a less than significant level.

The potential for tribal cultural resource impacts depends on the area of impact and the condition of the Project site. The Modified Project would not change the area of impact or grading limits compared to the Original Project. Furthermore, Project site conditions for tribal cultural resources have not changed since preparation of the Prior EIR. Therefore, the analysis and conclusions presented in the Prior EIR remain valid and unchanged.

a, b) During preparation of the Prior EIR, the City consulted with the Native American Heritage Commission in accordance with AB 52 and SB 18. No additional consultation has occurred. The Prior EIR conducted archaeological record surveys, which did not identify known tribal, cultural, or paleontological resources on the Project site. However, since site-specific surveys were not conducted as part of the Prior EIR, the Prior EIR included several mitigation measures and determined impacts would be less than significant with implementation of the mitigation measures.

This Addendum includes preparation of the Cultural and Paleontological Resources Assessment prepared for the Modified Project (*Cultural and Paleontological Resources Assessment, October 2021,* prepared by Duke CRM; Appendix D), which included additional record searches and an extensive pedestrian field survey of the Project site over two days on June 17 and June 18, 2021. No archaeological resources were identified on the Project site from the records search or the field surveys. The Cultural and Paleontological Resources Assessment concluded that a low sensitivity exists for

archaeological resources to occur on-site and therefore, no archaeological monitoring is required during site disturbance activities, such as grading.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Several of the mitigation measures included in the Prior EIR have been satisfied with the detailed Cultural and Paleontological Resources Assessment prepared for the Modified Project. Impacts would remain less than significant with mitigation.

Mitigation Measures: Several measures have already been satisfied and are shown in light grey format. The mitigation measures applicable to the Modified Project that remain in place are listed below.

MM 3.8.1 A detailed cultural resources field survey of the subject property shall be conducted prior to approval of the project. The cultural resources field survey shall identify any cultural resource finds and will set out measures to mitigate any impacts to any significant resources as defined by CEQA, the California Register of Historical Resources, and/or the National Historic Preservation Act. Mitigation methods to be employed include but are not limited to the following:

- Redesign of the development project to avoid the resource. The resource site shall be deeded to the City or a nonprofit agency to be approved by the City for maintenance of the site.
- If avoidance is determined to be infeasible by the City, the resource shall be mapped, stabilized, and capped pursuant to appropriate standards.
- If capping is determined to be infeasible by the City, the resource shall be excavated and recorded to appropriate standards.

Timing/Implementation: *Prior to approval of development plan or project*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.8.2 If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts) are discovered during grading or construction activities in the Project area, work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history shall be retained to determine the significance of the discovery.

The City shall consider mitigation recommendations presented by a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history for any unanticipated discoveries. The City and the Project applicant of the site where the discovery is made shall consult and agree on implementation of a measure or measures that the City deems feasible. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The Project applicant shall be required to implement any mitigation necessary for the protection of cultural resources.

Timing/Implementation: *As a condition of project approval and implemented during grading and/or construction activities*

Enforcement/Monitoring: *City of Eastvale Planning Department*

MM 3.8.3 If human remains are discovered during any ground-disturbing activities in the Project area, all work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and the Riverside County Coroner must be notified per California Public Resources Code Section 7050.5 and California Health and Safety Code Section 5097.98. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed.

Timing/Implementation: *As a condition of project approval and implemented during grading and/or construction activities*

Enforcement/Monitoring: *City of Eastvale Planning Department*

Conclusion: The Modified Project would not change the limits of disturbance or grading, which encumbers the entire site, therefore the analysis and conclusions presented in the Prior EIR remain unchanged. Mitigation Measure MM 3.8.1 has been satisfied and no new mitigation is necessary. While determined to be highly unlikely, Mitigation Measures MM 3.8.2 and MM 3.8.3 would remain applicable to the Modified Project. Impacts would remain less than significant with mitigation.

2.19 Utilities and Service Systems

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion: The Prior EIR determined impacts from the Original Project on utility and service systems would be less than significant. The following site-specific utility studies were prepared for the Modified Project.

- "*Sewer System Development Analysis*" prepared by Hunsaker & Associates Irvine, Inc. dated December 6, 2021, is included in Appendix K.
- "*Water Supply Assessment*" dated December 2021, prepared by Kimley Horn is included in Appendix L.
- "*Preliminary Hydrology Analysis for Leal Ranch (Tentative Map No. 38290)*" prepared by Hunsaker & Associates Irvine, Inc., and dated November 29, 2021 (Appendix G).
- "*Preliminary Water Quality Management Plan (PWQMP) for Tentative Map No. 38290*," prepared by Hunsaker & Associates Irvine, Inc., and dated November 29, 2021 (Appendix H).

These studies provide greater site-specific detail and analysis than the information presented in the Prior EIR, but this is not a substantial change with respect to the circumstances under which the project is undertaken or new information that was not known and could not have been known with the exercise of reasonable diligence at the time of the Prior EIR.

a, c) The Prior EIR concluded sufficient capacity exists for wastewater treatment from the Original Project and impacts would be less than significant. The Project site lies within the jurisdiction of Jurupa Community Services District (JCSD) for wastewater treatment. In August 2021, JCSD provided a preliminary hydraulic analysis of the existing sewer system to that would be impacted by the Modified Project. The analysis determined the maximum average daily sewer generation from the Modified Project without causing downstream sewer capacity issues or requiring upsizing of sewer lines. The analysis determined a maximum of 555,000 gallons per day (gpd) from the Modified Project could be accommodated within the existing sewer infrastructure without impacts. The Modified Project is estimated to generate 544,710 gpd, or 1.85% less than the maximum allowed average sewer flows from the Project site.

The Prior EIR also determined that expanded water facilities would not be required. JCSD provides domestic water and service connection points are located within the existing surrounding streets. Sufficient pressure and storage capacity exist such that no additional facilities would be required to serve the Modified Project.

As detailed in Section 2.10, storm water flows to the southwest portion of the Project site. Existing storm drain facilities exist within Limonite Ave. The Modified Project includes a subterranean detention and water quality treatment basin that will reduce peak period discharge rates to existing levels and meet the water quality standards. No new off-site storm drain or water quality infrastructure is required.

According to the Prior EIR, "Southern California Edison (SCE) currently provides electrical service to the Master Plan area and Southern California Gas Company provides natural gas service; properties surrounding the project site have already been developed and are served by existing SCE and Gas Company infrastructure. Per discussions with SCE staff, implementation of the proposed project would not be expected to require the construction of any off-site transmission or distribution infrastructure (Ditta 2015)."[46] The Modified Project would rely on electrical and natural gas service from existing facilities in surrounding streets. The existing above-ground electrical lines along Limonite would be placed underground. No additional off-site improvements are anticipated.

[46] Leal Draft Master Plan EIR, July 2015, Section 3.13.2, Page 3.13-10

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

b) The Original EIR concluded, "Furthermore, the JCSD has demonstrated capacity in its water supply and wastewater treatment systems to accommodate growth in the city, including the proposed project and future development would obtain a water/sewer availability letter from the JCSD and pay any district fees and facilities charges in order to fund any off-site improvements."[47]A Project level water supply analysis was prepared for the Modified Project. The Modified Project is of sufficient size that in accordance with Senate Bill (SB) 610 a Water Supply Assessment (WSA) is required. Appendix L includes the WSA prepared for the Modified Project.

JCSD is the water supplier for the Project site and prepared a 2020 Urban Water Management Plan (UWMP) for its service area. The UWMP analyzes growth assumptions and determines if sufficient domestic water is available to serve the growth assumptions in wet years and dry years.

The WSA relied upon duty factors supplied by JCSD in the UWMP to calculate Project Water Demand as shown in the following table.[48]

Table 22. Project Water Demand[49]

Land Use Category	Duty Factor (gpd/ac)	Area (ac)	Demand (gpd)	Demand (AFY)
Residential	3,600	82.23	296,021	331.59
Mixed Use (Residential)	3,600	14.21	51,151	57.30
Mixed Use (Commercial)	2,000	14.21	51,151	57.30
Commercial Retail	2,000	11.02	22,040	24.69
Open Space Recreation	2,000	7.16	14,312	16.03
Roadway	0	29.76	0	0
Total	--	**158.58**	**411,940**	**461.43**

The 2020 UWMP assumed future growth on the Project site and projected a water demand of 505 acre feet per year (AFY) for the Project site. Based on Table 2-2 and 2-3 from the WSA, the Modified Project will generate a water demand of approximately 461 AFY, less than the 505 AFY assumed in the 2020 UWMP.

The Prior EIR calculated a potable water demand for the Original Project. These estimates are found in Tables 3.13-1 and 3.13-2 of the Prior EIR. The projected water

[47] Leal Draft Master Plan EIR, July 2015, Section 3.13.5, Page 3.13-9
[48] Water Supply Assessment, Kimley Horn, December 2021, Table 2-2, Page 6
[49] gpd/ac = gallons per day per acre; ac=acres; gpd = gallons per day; AFY = acres feet per year. Table 2-2, from "Eastvale Leal Property Water Supply Assessment," prepared by Kimberly Horn, dated December 2021.

demand for the Original Project was 734 AFY or 470,320 gpd. In both cases the potable water demand is less for the Modified Project compared to the Original Project. Furthermore, the WSA determined that sufficient water supplies are available to service this project during normal, dry, and very dry years.

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

c) The Prior EIR determined, "The JCSD has a 3.25 million gallons per day (mgd) capacity right, although the ultimate estimated flow rate from the JCSD to the plant is projected to be 5.7 mgd, based on the projections in the 2007 Master Sewer Plan Addendum. This represents an increase of 2.45 mgd and would still be below the operating capacity of 8.0 mg. The JCSD has a proposed project in its 20-year Capital Improvement Program to obtain additional treatment capacity at the WWTP (JCSD 2011, p.57). As of 2007, the plant was not operating at capacity (treating approximately 5.5 mgd), and the JCSD obtaining additional treatment capacity to accommodate growth in its service area would not necessarily result in expansion of the WWTP. Potential impacts resulting from additional treatment capacity would be subject to CEQA review if necessary."[50]

As demonstrated in the "*Sewer System Development Analysis*" prepared by Hunsaker & Associates Irvine, Inc. dated December 6, 2021, and included in Appendix K, JCSD determined the maximum allowed average daily flows from the Project site would be 555,000 gpd, which accounts for transmission pipe capacity and treatment capacity. The Modified Project is planned to generate 544,710 gpd or 1.85% less than the maximum allowed sewer flows from the site.[51]

Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

d – e) The Prior EIR determined impacts from solid waste would be less than significant since each of the landfills serving the Project site have remaining capacity over 179 million cubic yards.[52] The Modified Project proposes less development intensity, likely resulting in equal or less solid waste generation. Furthermore, the Modified Project would be required to comply with applicable waste reduction regulations found in AB 939, the Green Building Code, and the Eastvale Municipal Code, which apply restrictions to solid waste disposal. Therefore, no new significant impacts or substantial

[50] Leal Draft Master Plan EIR, July 2015, Section 3.13.5, Page 3.13-8 and 9
[51] "*Sewer System Development Analysis*" prepared by Hunsaker & Associates Irvine, Inc. dated December 6, 2021, Page 2
[52] Leal Draft Master Plan EIR, July 2015, Section 3.13.6, Page 3.13-9

increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: Additional Project-specific analysis of utility systems was performed for the Modified Project. This analysis provides evidence supporting the conclusions presented in the Prior EIR. The Prior EIR determined impacts for the Original Project would be less than significant. Based on the more detailed analysis and less intensive development associated with the Modified Project, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.20 Wildfire

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
WILDFIRE. Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☒	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Discussion: Since preparation of the Prior EIR, CEQA Guidelines Appendix G has been revised to include a specific section on Wildfire.[53] The Prior EIR analyzed potential impacts associated with wildfires in the Hazards and Hazardous Materials and Public Services sections. The Prior EIR concluded that potential impacts from wildfires would be less than significant. No changes to the analysis or conclusions presented in the Prior EIR would occur for the Modified Project.

The Project site is designated a Local Responsibility Area (LRA), which means the City of Eastvale is responsible for fire protection services[54]. The City of Eastvale contracts with Riverside County for fire protection. The Project site is not located in a fire hazard severity zone[54]. The Project site is completely surrounded by development and no wildland areas are within close proximity to the Project site[54].

[53] The adoption of guidelines for analyzing and evaluating the significance of data does not constitute new information if the underlying information was otherwise known or should have been known at the time the EIR was certified. *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301

[54] CalFire (California Department of Forestry and Fire Protection). 2022. CalFire website. http://www.fire.ca.gov/.

a) The Prior EIR concluded the Original Project would not impair the City's ability to implement its emergency response plan or use its emergency evacuation routes. The Modified Project includes less intensive development than the Original Project. As shown in Section 2.17, the Modified Project would reduce trip generation by 27,764 average daily vehicle trips. The Modified Project would improve the surrounding circulation system with additional travel lanes as contemplated in the Prior EIR and the Modified Project would contribute to fewer local roadway trips than the Original Project. The Modified Project would complete street improvements on all four surrounding streets. Therefore, because of the Modified Project proposing less intensive development than the Original Project and proposing to complete the surrounding street system, no new impacts would occur, and the conclusions presented in the Prior EIR remain unchanged.

b) The Prior EIR determined, "The project site is not designated as a fire hazard severity zone within the Local Responsibility Area (LRA) for Eastvale (Cal Fire 2015). Therefore, no impact would occur."[55] The Project site is not located in a fire hazard severity zone[56]. The Project site is generally flat, completely surrounded by development and no wildland areas are within close proximity to the Project site per the California Depart of Forestry and Fire Protection (CalFire) website. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

c) No infrastructure that could exacerbate wildfire is proposed as part of the Modified Project. The Original Project included underground utility lines in the streets, as is proposed with the Modified Project. Underground utility lines do not pose a risk of starting or exacerbating a wildfire. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

d) The Project site is generally flat with no slope areas or areas that could cause mudslides. The Project site currently drains from north to south. The southern boundary of the Project site is Limonite Avenue, a six-lane arterial roadway with a 14-foot wide median. Storm flows will be collected in storm drains within the Project site and connected to an existing storm drain in Limonite Avenue. The Hydrology Study for the Modified Project prepared by Hunsaker & Associates Irvine, Inc. (Appendix G), documents that post-development flows would be captured in a detention basin and metered out into the existing storm drain. If runoff was to exceed the storm drain system, flows would be captured in Limonite Avenue. Downstream flooding as a result

[55] Leal Draft Master Plan EIR, July 2015, Section 3.10.6, Page 3.10-7
[56] CalFire (California Department of Forestry and Fire Protection). 2022. CalFire website. http://www.fire.ca.gov/.

of runoff or drainage changes is not anticipated. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

Mitigation Measures: No mitigation required.

Conclusion: The Modified Project is not located in a fire hazard severity zone. The Project site is completely surrounded by development and no wildland areas are within close proximity to the Project site. The Modified Project would not conflict with or impede implementation of the City's emergency response plan nor cause significant risk as a runoff, post-fire slope instability, or drainage changes. Therefore, no new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant.

2.21 Mandatory Findings of Significance

Issues:	New Potentially Significant Impact	New Mitigation is Required	No New Impact/No Impact	Reduced Impact
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) The Modified Project would not change the biological conclusions included in the Prior EIR. The Modified Project would not change the limits of disturbance, which encumbers the entire site, and the condition of the Project site remains essentially unchanged from the time of the Prior EIR. The Modified Project would not cause impacts to sensitive species or habitats. The Prior EIR determined impacts to biological resources would be less than significant with mitigation. A Biological Assessment of the Modified Project determined impacts to biological resources would be less than significant with mitigation incorporated. Mitigation Measures 3.7.2 and 3.7.3 presented in the Prior EIR have been fulfilled. Mitigation Measure 3.7.1 remains applicable as presented in the Prior EIR to reduce impacts to nesting birds to less than significant. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with implementation of Mitigation Measure 3.7.1.

The Modified Project would also not change the conclusions presented in the Prior EIR regarding impacts to major periods of California history or prehistory. The Modified Project would not change the limits of disturbance compared to the Original Project

and no conditions or circumstances have changed relative to historical, archaeological, or tribal cultural resources on the Project site. Therefore, the analysis and conclusions presented in the Prior EIR remain unchanged for the Modified Project. The Prior EIR identified Mitigation Measures MM 3.8.1 through 3.8.4 to reduce impacts associated with archaeological and paleontological resources to less than significant. Mitigation Measure MM 3.8.1 has been satisfied and is no longer applicable, and Mitigation Measures MM 3.8.2 and 3.8.3 remain applicable to the Modified Project. Mitigation Measure 3.8.4 has been revised, which requires that a qualified paleontologist evaluate any paleontological discoveries during grading. The potential for paleontological discoveries has not changed since certification of the Prior EIR and the limits of disturbance have remained the same. This mitigation measure is being revised in this Addendum to require a qualified paleontologist monitor grading activities on the eastern portion of the site, which is more efficient for grading activities instead of the requirement to call a monitor to the site to evaluate paleontological resources if found during grading. Therefore, no change in analysis from the Prior EIR would occur and Mitigation Measure MM 3.8.4 remains applicable to the Modified Project as modified. No new significant impacts or substantial increase in the severity of significant impacts would occur with the Modified Project and no new mitigation is necessary. Impacts would remain less than significant with implementation of mitigation measures.

b) The Modified Project would not change the permitted land uses, limits of disturbance or extent of construction activities, and the condition of the Project site remains essentially unchanged from the time of the Prior EIR. The Project site is surrounded by urban development and represents one of the last remaining undeveloped areas of the City and the General Plan calls for a mix of uses. The Modified Project reduces development intensity which would in turn reduce the number of average daily vehicle trips by approximately 27,764 trips as compared to the Original Project. Therefore, the short-term construction impacts and long-term operational impacts would remain consistent with the analysis provided in the Prior EIR. There would be no changes to the analysis or conclusions regarding cumulative impacts as a result of the Modified Project. The findings of significance presented in the Prior EIR would remain without change and without intensification as a result of the Modified Project.

c) The Master Plan and Original Project contemplated refinement when additional Project-specific details became available and contemplated flexibility to address future market demand. The Modified Project is consistent with the Original Project, the City's General Plan, the City's Zoning Code, and the vision of future development on the Project site. As under the Original Leal Master Plan, the Modified Project's growth would be an implementation of the long-range planning process for the project site as envisioned in the City's General Plan. The Prior EIR determined the Original Project would cause six (6) significant and unavoidable impacts within the following three (3) topic areas: Transportation/ Traffic, Air Quality, and Noise. Throughout the analysis in

this Addendum, evidence has been provided that while those significant and unavoidable impacts would remain, the Modified Project would not cause new impacts or more severe impacts to human beings, either directly or indirectly.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino,(1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

SECTION 3.0 SOURCES

Carlson Strategic Land Solutions. Biological Assessment of the Leal Property located in the City of Eastvale. March 25, 2022.

Duke CRM. Cultural and Paleontological Resources Assessment. October 2021.

Hillmann Consulting. Phase I Environmental Site Assessment. March 23, 2022.

Hillmann Consulting. Limited Phase II Subsurface Investigation Report. March 23 2022.

Hunsaker & Associates Irvine, Inc. Preliminary Hydrology Analysis for Leal Ranch (Tentative Map No. 38290). November 29, 2021.

Hunsaker & Associates Irvine, Inc. Preliminary Water Quality Management Plan (PWQMP) for Tentative Map No. 38290. November 29, 2021.

Hunsaker & Associates Irvine, Inc. Sewer System Development Analysis. December 6, 2021.

Kimley Horn. Water Supply Assessment. December 2021.

LGC Geotechnical, Inc. "Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California. June 21, 2021. Geotechnical Responses to Comments April 5, 2022.

RK Engineering Group, Inc. Leal Master Plan Amendment Project Air Quality, Greenhouse Gas and Energy Impact Study. December 22, 2021

RK Engineering Group, Inc. Leal Master Plan Amendment Noise Impact Study. December 21, 2021.

RK Engineering Group, Inc. Leal Master Plan Amendment Project Traffic Study. November 17, 2021.

Appendix A

LEAL MASTER PLAN AMENDMENT #1

APRIL 2022

CITY OF EASTVALE

Eastvale City Council
Mayor Clint Lorimore
Mayor Pro Tem Todd Rigby
Council Member Brandon Plott
Council Member Christian Dinco
Council Member Jocelyn Yow

Eastvale Planning Commission
Chair Houston Laney
Vice Chair Kevin Mensen
Commissioner Josh Lee
Commissioner Andrea Hove
Commissioner Michael Rochelle

Executive
Henry Garcia, Interim City Manager
Gina Gibson Williams, Community Development Director
Erica L. Vega, City Attorney

Planning
Gustavo Gonzales, Planning Manager
Jamie Cerda, Senior Planner
Allen Lim, Assistant Planner

Engineering
Jimmy Chung, City Engineer
Cassandra Sanchez, Principal Civil Engineer
Dahi Kim, Senior Engineer

Consultant
Peter Minegar, MBI
Mark Teague, Placeworks

DEVELOPER
A.J. Jarvis, The New Home Company
Matt Gibson, The New Home Company
Peter Carlson, Carlson Strategic Land Solutions
John Moreland, KTGY
Xiaofan Li, KTGY
Doug Staley, Hunsaker & Associates
Joey Valadez, Hunsaker & Associates
Sarah Kleinberg, Jackson Tidus

1 INTRODUCTION AND VISION

1.1. BACKGROUND AND PURPOSE

In the City of Eastvale, a recently incorporated and rapidly growing city in northwestern Riverside County, the Leal property holds significance as one of two major undeveloped pieces of land in the city. The idea of planning for the site's development originated in the 2012 Eastvale General Plan. The Land Use Chapter of the General Plan adopted at that time supported the development of a mixed-use project on the site in cooperation with the property owner and/or the developer.

City of Eastvale Demographics

Eastvale offers the developers of the Leal Master Plan excellent opportunity to serve an affluent and growing population. Current projections for 2018 show the following:

	Eastvale	10-Mile Radius
Population	68,706	1,070,150
Average Household Income	$130,730	$90,507
Average Annual Increase in Household Income 2013-2018	0.94%	3.47%

Eastvale is the most diverse high-income city in California, with a population that includes 40 percent Latino residents, 9 percent black, 24 percent Asian and 24 percent white.

In 2013, the City of Eastvale City Council initiated a long-range planning process for the property. The effort was born out of the desire to create the mixed-use town center project on the site and to safeguard against unsatisfactory development taking the project's place. The Leal Master Plan is the product of this planning process and is a critical step toward bringing unique, regionally significant development to the site. In December of 2017, the City of Eastvale adopted the initial Leal Master Plan. The multiple step process was established in the original Master Plan. This Leal Master Plan is the first amendment to the initial Master Plan as contemplated in the development process.

1.1.1. What Is a Master Plan?

This Master Plan is a long-range planning document that documents how the site will be developed. This Master Plan describes the community's vision for the project area, identifies appropriate land uses, includes the development standards that are necessary to achieve the vision, defines the character of the project's development, lists the steps involved with the development process, and provides guidance on implementation of the plan.

The adoption of this Master Plan represents the second step in planning for the site's development. This document establishes general parameters for development of the Leal property (and the process for defining more specific standards tailored to the ultimate project to be proposed by the property owner/developer). Subsequent development plans will provide precise

development plans for each planning area, facilitating the actual construction of developments.

Note to the Reader: See Chapters 4 and 5 of this Master Plan for detailed information on required future submittals.

Implementation of this Master Plan will ensure that desirable, high-quality development is constructed on the site in an orderly and cohesive fashion. All development occurring on the site is required to comply with this Master Plan.

1.1.2. Community and Stakeholder Input

The original adopted Leal Master Plan was created and adopted in a public forum. The document represents a blending of the City's goals, the owner's ambitions, and the public's aspiration for the property. The participants' contributions to the project are as follows:

1.1.2.1. City Council and Planning Commission

Throughout the planning process, staff was provided with input from the City Council and Planning Commission on important aspects of this Master Plan. Ultimately, the Planning Commission and City Council were responsible for selecting the Master Plan Amendment's overall concept and the land use program and for reviewing and approving the final Master Plan Amendment.

1.1.2.2. Property Owner

Before and during the preparation of this Master Plan, City staff met regularly with the Leal family who has for decades owned the property and the property owner's development representatives. These meetings helped establish the vision for the property and the legacy that the family hopes to leave in the form of the proposed new development.

1.1.2.3. Public Outreach

The preparation of the original Master Plan included a significant online public outreach campaign, including a website dedicated to the project and numerous postings on the City's social media outlets.

The project website provided background information on the

Big Ideas for the Leal Property

When the City asked for "big ideas" and themes for the project site, residents provided thousands of responses, mostly via social media. The following were the top listed categories:

- Lifestyle Centers
- Downtown
- Indoor Regional Mall
- Amusement
- Arts/Cultural
- Concerts/Special Events Venue
- Hospital/Medical Center
- Civic Uses
- 1950s Main Street
- University or Community College
- Sports/Recreation
- Hotel/Resort
- Giant Cow Statue

project and the property, as well as City and project-related documents, and kept the public apprised of upcoming meetings. The website also featured an interactive section that allowed users to share their input on important aspects of the project.

Initially, participants were asked to submit their suggestions for "big ideas" and "themes" for the project site. Residents responded to the City's call for ideas, submitting thousands of comments. Subsequently, an online poll was created to see which of the ideas held the greatest level of support in the community. Of the nearly 2,000 survey responses received, the three most popular categories were:

- Lifestyle Centers
- Downtown
- Indoor Regional Mall

1.2. OBJECTIVES

The General Plan goal of bringing a mixed-use development to the site will be realized through the adoption and the implementation of the Leal Master Plan. This Master Plan seeks to achieve the following objectives:

- Facilitate transformation of the project area into Eastvale's Downtown.
- Encourage a mix of uses, including retail, experiential uses, office, civic, residential, and recreation/entertainment, that respond to market demand.
- Create a Downtown Village destination in Eastvale to meet the needs of patrons from the community and the region.
- Include heavily landscaped spaces, further reinforcing Eastvale's Tree City USA designation.
- Implement high-quality architecture and design that creates a sense of place and enhances the aesthetic and visual quality of the neighborhood.
- Design the site in an efficient fashion that perpetuates a compact, urban form of development.
- Provide safe and entertaining gathering places for Eastvale residents.
- Develop the site in an orderly, comprehensive, and cohesive manner that avoids the piecemeal development of the site with a mix of incompatible uses that do not relate to one another.
- Expand the city's economic base by generating substantial property and sales tax revenue.
- Provide employment opportunities for residents, improving the city's jobs/housing balance and reducing vehicle miles traveled.
- Provide the infrastructure necessary to meet project needs in an efficient and cost-effective manner.
- Provide medium- and high-density housing opportunities.
- Provide ample access for pedestrians, bicyclists, and automobiles throughout the site.

1.3. VISION

The City envisions the project area emerging as the City's Downtown and a destination within the region. The area will be anchored by a downtown village and surrounded by a mixture of complementary office, civic, residential, and recreation/entertainment uses. All aspects of the project will exhibit the hallmarks of thoughtful, high-quality design and landscape.

Note to the Reader: For more information on the vision and the quality of the project's design, refer to Chapter 2, Project Character.



1.4. LOCATION

The project area encompasses the Leal property, an approximately 160-acre landholding that (as of 2014) included one of the city's last operating dairies and a horse farm.

Shown in Figure 1.1: Regional Context Map, the project area is in the northeastern section of Eastvale, approximately one-half mile from the Interstate 15/Limonite Avenue interchange, and south of State Route 60. The site is bounded by 58th Street to the north, Hamner Avenue to the east, Limonite Avenue to the south, and Scholar Way to the west, as shown in Figure 1.2: Local Context Map. The project area is situated immediately west and north of existing commercial and retail developments and is south and east of established and newly developed residential neighborhoods of varying densities.

1.5. RELATIONSHIP TO OTHER DOCUMENTS

1.5.1. General Plan

The Leal Master Plan implements the City of Eastvale General Plan. The land uses permitted by this Master Plan are consistent with the goals, policies, and general land uses described in the General Plan.

1.5.2. Municipal Code

This Master Plan functions as the zoning document for the project area, except as discussed below.

This Master Plan incorporates zoning provisions that vary from, and supersede, those included in the City of Eastvale Zoning Code and introduces additional provisions not found in the Zoning Code. For these development standards, the Master Plan distinguishes between those provisions that apply to the entire project area and the provisions that only apply to individual land uses.

This Master Plan references regulations in the Eastvale Zoning Code. Where the Zoning Code is referenced, the Zoning Code in place at the time of a development project's submittal will be used.

Where this Master Plan is silent on any issue, the applicable standard in the Eastvale Zoning Code will be used.

Figure 1.1: Regional Context Map

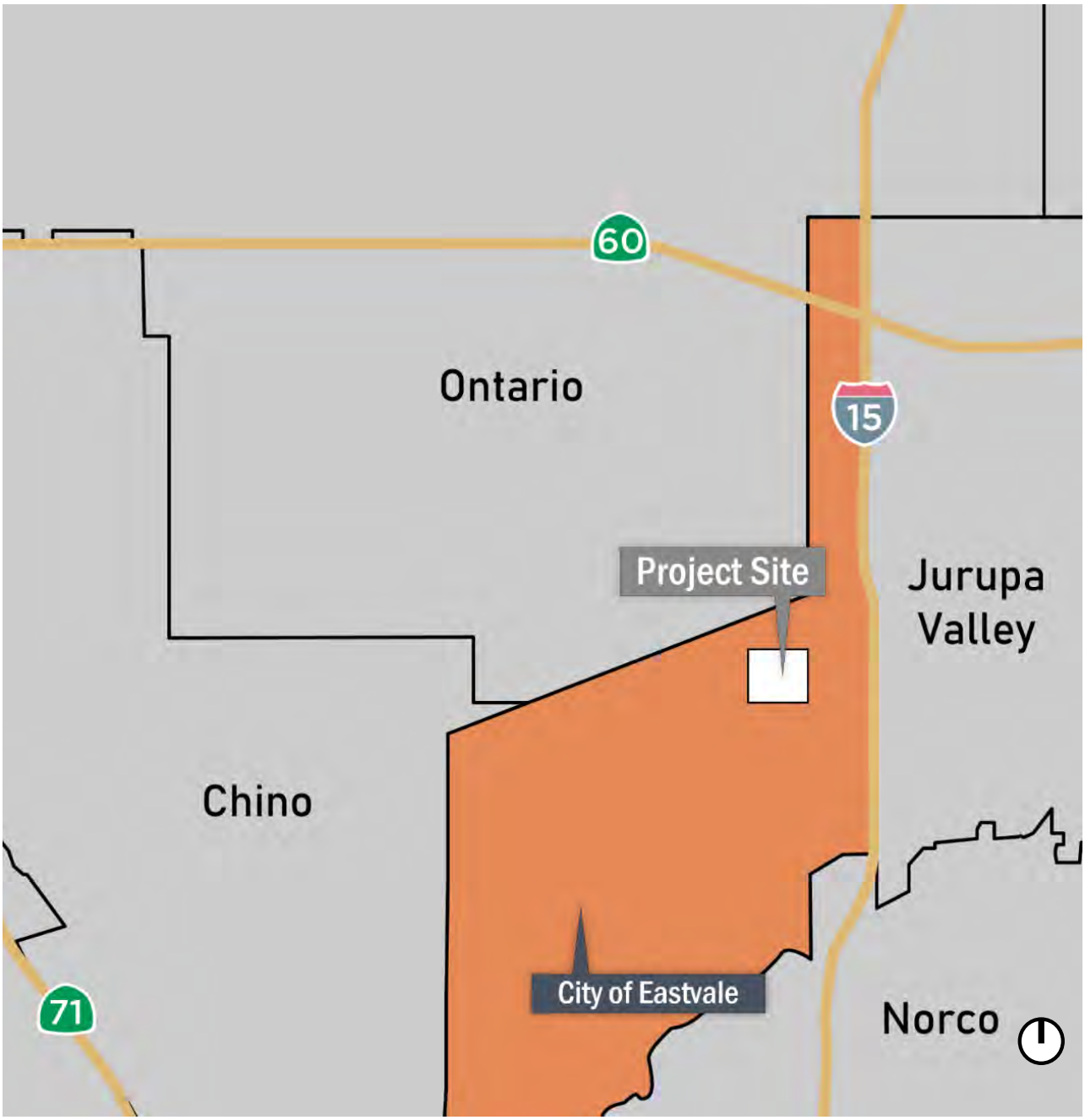
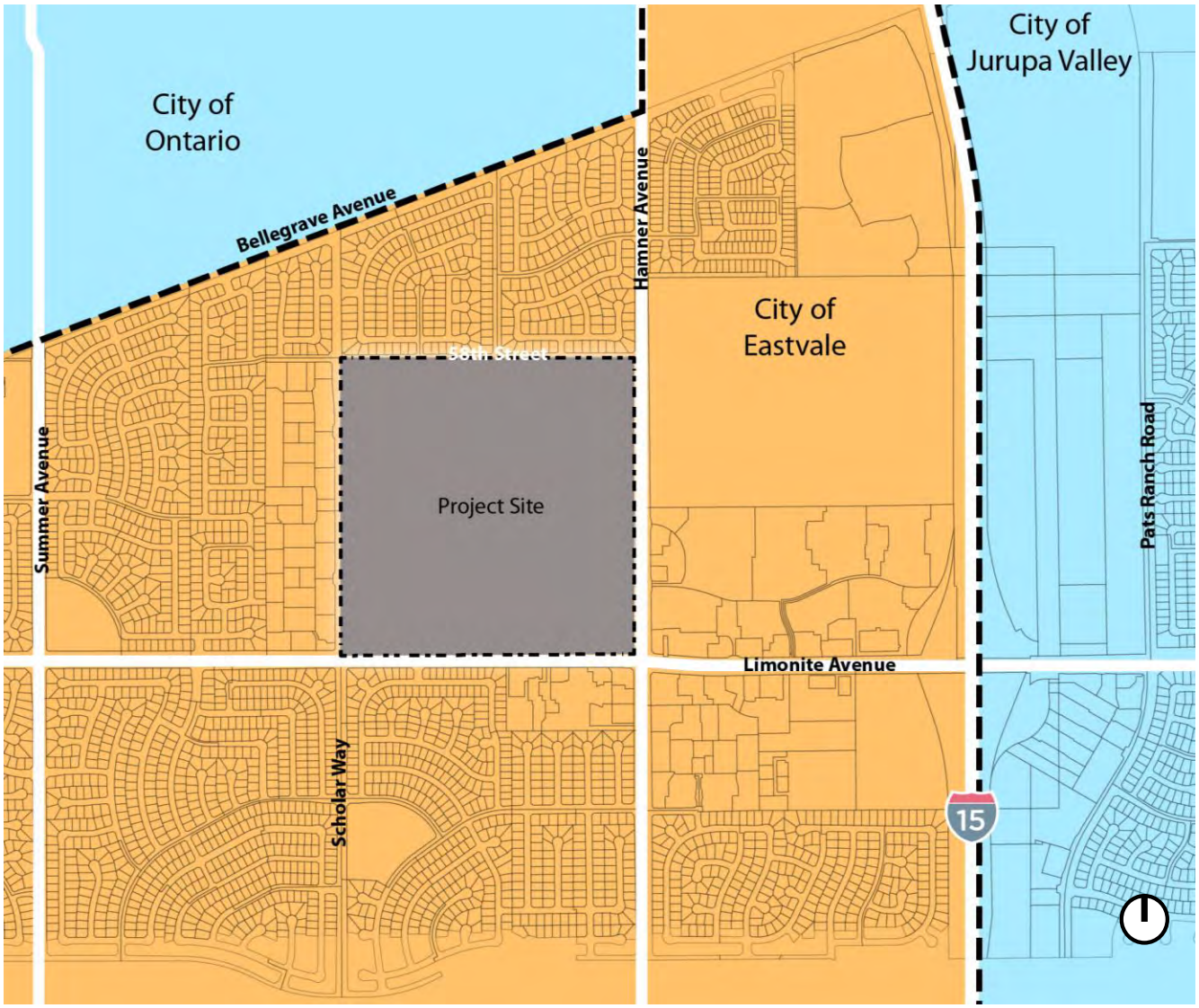


Figure 1.2: Local Context Map



1.6. PLAN ADMINISTRATION

1.6.1. Use of This Master Plan

This Master Plan will be used as the basis for establishing standards of development and evaluating proposed development projects for the Leal property and is intended to be used by a broad range of persons, including:

- The City Council and Planning Commission in decision-making activities.
- City staff in evaluating project consistency with the standards set forth in this Master Plan.
- The development community in preparing development proposals.
- Residents and citizens seeking to understand the vision for the Leal property and the type of development which may occur.

1.6.2. Interpretations of the Master Plan

The City of Eastvale Planning Department is responsible for the administration, implementation, and enforcement of this Master Plan. The Community Development Director or their designee is responsible for making determinations of consistency with this Master Plan as follows:

1.6.2.1. Determination of Intent

Whenever the Community Development Director determines that an ambiguity exists in how a particular standard or regulation applies, or a formal request for an interpretation is made by an applicant, property owner, or interested party, the Community Development Director or their designee will prepare an official interpretation of intent in accordance with the procedure set forth in Eastvale Zoning Code Section 1.5.1 (Official Zoning Interpretation).

1.6.2.2. Determination of Similar Land Use

Recognizing that every conceivable land use cannot be identified in this Master Plan and anticipating that new land uses will evolve over time, the Community Development Director or their designee has the authority to approve uses when their operation, impacts, and scale are similar to those land uses listed in this Master Plan.

Determinations of similar land use will be made pursuant to Section 1.5.1 (Official Zoning Interpretation) of the Eastvale Zoning Code.

1.6.2.3. Amendments to the Master Plan

Over time, various sections of this Master Plan may need to be revised, as economic conditions or City needs dictate. The policies presented in this Master Plan contain some degree of flexibility, but any Master Plan amendments must be judged by relatively fixed criteria. Minor modifications to the plans, guidelines,

regulations and standards contained in this Master Plan may be approved at the discretion of the Community Development Director or their designee as described in Section 5.4.1. Major modifications that do not meet the criteria for minor modifications described in Section 5.4.1 shall require a formal amendment to the adopted Master Plan. Major modifications are described in Section 5.4.2.

Amendments to this plan may be initiated by a developer, any individual property owner, or the City, in accordance with the Eastvale Zoning Code.

1.6.2.4. Actions Which Are Not Amendments to this Master Plan

The following are **not** considered amendments to this Master Plan:

- Determinations of similar use, as discussed in this chapter.
- Minor modifications to the Master Plan, as outlined in Chapter 5 of this Master plan.

2 INTRODUCTION AND VISION

2.1. INTRODUCTION

The City's vision for the Leal Master Plan area is a development that provides employment, retail, public uses, entertainment, and housing in a carefully laid out environment designed to create a memorable and enjoyable experience for both visitors and residents. The City and community expect that development of the Leal property will be of the highest quality, both in design and construction.

The envisioned level of quality is reflected in other regionally significant projects in Southern California, such as Downtown Claremont, downtown Temecula, and downtown Brea. All of these developments are noteworthy for their focus on creating a vibrant and attractive experience for visitors, incorporating vertical development (multiple stories) into a village setting, and for their attention to detail in a variety of features.

This Chapter expresses the City's vision for the Leal Master Plan. The expected level of quality is shown as it should be expressed in various aspects of the project, including:

- Site design
- Circulation
- Architecture
- Landscaping
- Public Spaces
- Buffers/Adjacencies
- Street Furnishings
- Thematic Features
- Signage

2.2. PROJECT CHARACTERISTICS

Attention to detail and incorporation of high-quality materials is a key aspect of developing high quality projects. While the examples provided on the following pages focus on distinguishing characteristics within the Downtown concept, all portions of the project will be required to achieve a similar level of quality and attention to detail.

2.2.1 Site Design

The following principles accompany the vision for Leal Master Plan to form the foundation for the planning and design of the community.

- Create a magical destination.
- Provide energy, vitality and create a central gathering place within the City.
- Public and private spaces are designed to enhance and complement one another.
- Along retail corridors, wide sidewalks and shaded paseos lined with street trees and outdoor seating create an inviting environment for both window shopping and socializing, focusing on the human scale and experience.
- Diversify Eastvale's economy by providing a range of uses within close proximity to each other.









2.2.1 Site Design

Effective site design facilitates access and mobility and integrates building design and orientation, private space, and public space to create a vibrant destination. The following bullets describe the site design vision.

- Downtown will provide opportunities for retail commercial and office uses, as well as central gathering places for residents to interact and connect. This commercial/retail hub should be visually prominent, as it is strategically located at the intersection of Limonite and Hamner Avenue to capture visibility and attract shoppers and direct visitors to this destination center.
- Downtown will be surrounded by higher density neighborhoods that gradually transits to lower density neighborhoods.
- A village green located adjacent to the Downtown will provide a wide variety of active and passive recreation amenities.
- Neighborhoods will be designed to connect to open space and park amenities, shopping, public and civic facilities, and recreational facilities via streets, paseos and pedestrian trails.
- A community wide linear park system will provide focus on community connections and pedestrian experience.
- Wide sidewalks and shaded paseos lined with trees and outdoor seating create an inviting environment both in the Downtown and residential areas.
- Public and private spaces are designed to enhance and complement one another.
- The project is integrated into the surrounding environment to provide for multiple points of access.
- On-street parking, landscaped bulb-outs, and special paving treatments provide convenient access in an aesthetically pleasing manner.
- Parking is conveniently located to destinations and should be tucked away or integrated into parking structures so as not to dominate the experience.










ICE CREAM



2.2.2 Circulation

A carefully devised circulation network allows pedestrians, bicyclists, automobiles, and delivery vehicles to operate without conflict.

- Entries and gateways into the project are distinct and identifiable.
- Circulation patterns are simple and obvious.
- Paving and landscaping materials distinguish the types of circulation routes.
- Plant and material selection along circulation routes are used to identify distinct districts within the overall project.

The Leal Master Plan has six major points of access: two points of access from Limonite Avenue, two points of access from Hamner Avenue, one point of access from 58th Street, and one point of access from Scholar Way, as shown in Figure 3.1, Land Use Plan.

In addition to these major entry points, secondary access may be provided from the major streets surrounding the project as part of subsequent Major Development Review for the Planning Areas.

All of the project's access points will provide an opportunity to create a sense of arrival by creating entryway statements or gateways with landscaping, signage, and buildings. See Section 4.3.3 in Chapter 4 for the design standards for the major entry points.

An internal circulation system is established and shall be designed to be consistent with Chapters 4 and 5 of the Design Standards and Guidelines for residential and nonresidential site and street design.

Pedestrian paths and bicycle lanes identified on circulation cross sections on Section 6.2 shall be designed to comply with the following:

- Pedestrian and bicycle access shall be provided along all major roadways and internally within each development to allow connectivity from the streets to the businesses and residences.
- Pedestrian and bicycle connections shall be provided from the street to the interior of the development that minimize conflicts with vehicular traffic.
- Sidewalks shall be shown on each street section.
- Pedestrian and bicycle access shall be consistent with Chapters 4 and 5 of the Design Standards and Guidelines for residential and nonresidential site design.

2.2.2 Circulation

















2.2.3 Architecture

The Leal Master Plan is designed to include distinctive, identifiable neighborhoods of a walkable size and scale with an appropriate mix of housing types. This section provides the framework for high quality design and expresses the desired character of future development.

Community-wide Residential Development

This section identifies key architectural and site design elements that should be considered in all residential areas within the Leal Master Plan community. These guidelines intend to establish a diversified, yet cohesive level of quality in home design that reflects the character of the surrounding environment while allowing for flexibility in design.

Architecture Forward Design

- Within the Downtown, buildings fronting onto the street shall be designed so that active and articulated architecture visually dominates the street and allows for direct views of the street and outdoor living space to enhance the sense of security. This can be achieved by orienting doors and windows toward the streets and public areas.
- Garages shall be set behind the front face of the building or be oriented to alleys or motorcourt drives to minimize the visual dominance of garages along the street.

Building Siting and Orientation

- In general, buildings shall be located and oriented to define public streets and primary open space areas, as appropriate to the product type.
- Front entries shall face the streets, courtyards, paseos, or open spaces.
- Units shall be sited and design so that each building shall have roof exposure to the south or east, or a portion of the roof with a flat roof.
- Unit entries shall not be provided on 58th Street, Hamner Avenue, or Limonite Avenue.

Corner Lot Buildings

- Corner lots for single-family detached homes generally have wider than minimum required side setbacks from the adjacent public rights-of-way as compared to interior side setbacks (refer to product-specific standards in Chapter 4, Development Standards). This additional setback area is intended for landscaping and/or single-story architectural elements such as porches and courtyards.
- To respond to adjacent streets and intersections appropriately, buildings on corner lots shall be designed for a two-sided corner exposure, addressing the increased public visibility by allowing for architectural enhancements on the side elevation facing the street.

- Corner lot buildings shall feature enhanced elevations that provide a similar level of detail on the street side as the front elevation. Enhancements may include.
    - Wrap-around porches or courtyards
    - Principal window treatments
    - Roof plane breaks
    - Accent colors, materials and detailing
    - Garage access from the side street for conventional single-family homes

Building Form, Massing and Articulation

- Building massing (three-dimensional form of a building, referring to the perception of the general shape and form, and size) along the street shall be varied to create a quality streetscene.
- To reflect a variety of forms and create massing breaks, use horizontal and vertical offsets, such as interconnection and lapping of building forms and heights.
- Plane offsets cantilevered upper floors and varied roof forms are encouraged to avoid large expanses of flat, monotonous walls and roofs in alleys and motorcourts.
- To add interest to building facades, building articulations such as roof overhangs, balconies, and projections should be used in the design of building frontages.
- For attached residential buildings, break down the scale of the buildings into smaller elements through varied building massing and forms, such as varying setbacks on building elements/facades, varying roof lines and directions, incorporating single-story elements or open balconies that provide negative space at prominent corners, utilizing shed roof forms and trellis elements, etc.
- To prevent long expanses of blank walls, walls shall be articulated at least every 20 feet horizontally on each floor. Articulation shall mean a change in material, massing break of at least one foot (1'), or including a window, projecting porch, balcony (recessed or projecting), or other decorative element (e.g. decorative attic vent).

Colors and Materials

- Building materials and colors shall be appropriate to the overall neighborhood design theme and relate to the selected architectural style. Frequent changes in materials shall be avoided.
- Provide a variety in texture and color to allow for diversified expressions of individuality on building elevations, while maintaining visual cohesiveness throughout the community.
- Where color or material changes occur on the building, such changes shall only occur at inside corners or wrapped to appropriate termination points where they provide a finished appearance from the street.

- Color and materials should wrap columns and posts in their entirety.
- Exposed gutters and downspouts must be colored to match or complement the surface to which they are attached.
- Colors shall be neutral tones or muted colors complementary to the chosen architectural style and compatible with the character of surrounding development. Reserve bright or dark colors for trim or accents only.

Roofs

- Select simple and efficient roof forms, pitches and materials that are consistent with the architectural style of the building. Consider roof forms in relationship to the building mass to improve massing relief along public streets and on other publicly visible elevations.
- Varied roof forms, offsets and materials consistent with the architectural style of the building are encouraged to create variation in the skyline and diversity in the streetscene.
- Flat roofs with parapets or decorative cornices are permitted where appropriate to the architectural style of the building.

Mechanical Equipment

- All exposed air conditioning/heating equipment, soft water tanks, and pool and spa equipment shall be hidden from view in vaults, wells, enclosures, behind walls/fences or screened by landscape. Enclosures shall be constructed similarly and finished to match the building or material which they are attached.

Trash Enclosures

- Areas provided for trash and recycling bins shall be concealed from public view.
- Where trash and recycling material collection facilities are shared by several units/buildings, the collection facilities shall be screened by architectural enclosures. The screening enclosure materials and colors shall be similar or complementary to the exterior materials and colors used on the adjacent principal buildings.













Detached Residential Development Design Guidelines and Standards

- Side entries are allowed to give the product design greater flexibility and varies the curb appeal.
- For rear loaded and detached cluster homes, front yard and common area landscaping will be provided by the builders.
- Provide visual harmony by applying a common family of details throughout the cluster complex.
- Provide paving within the courtyards to enhance their use and identity as pedestrian entries to the homes.
- Individual unit entries of cluster homes shall be clearly discernible from the courtyard or access drive.
- Where a central courtyard is provided for detached cluster homes, living space windows shall orient toward the courtyard.
- Provide a minimum of three (3) floor plans in each Planning Area.
- There shall be a minimum of three (3) elevations for each floor plan, for a minimum total of nine elevations.
- No more than two buildings in a row may be plotted with the same elevation style.
- The same plans may be plotted adjacent to each other or across from each other, provided they have different elevation styles.
- Detached cluster units with front facades bordering streets I, E, F, H & G shall have their entries oriented to these streets.










53-59



Attached Residential Development Design Guidelines and Standards

Attached residential buildings tend to have larger building masses. As such, attached residential design should be carefully considered to convey a sense of human scale. Building typology and chosen architectural style should reflect the building's location within the community, and all buildings should exemplify quality design.

Townhomes and Attached Motorcourt Homes

- Where attached residential buildings are located adjacent to single family detached homes, minimize impacts on the adjoining residences with a sensitive transition in scale, massing and height, and design the transition to ensure resident privacy.
- Design the front elevation of attached residential buildings to clearly delineate individual units as a way of breaking up mass.
- Articulate the front building facades to promote individual unit identity by incorporating overhangs, recesses, porches, glazed doors, accent materials and colors, etc., consistent with the architectural style of the building.
- External unit and building entries shall be designed in a manner that is clearly visible to pedestrian and/or vehicular approaches.
- Rear facades along alleys, driveways, or visible from backbone streets shall not be void of articulation. These elevations shall include massing breaks and/or architectural details (i.e. shutters, gable vents), as appropriate to the architectural style of the building.
- Attached residential buildings sited adjacent to lower-density residential neighborhoods should be sensitive to the scale of those neighborhoods. Step down building heights to match the adjacent buildings as a transition to lower adjacent development heights.
- When located next to open space or a paseo, arrange groups of attached residential buildings so that the buildings front onto paseos or the open space. In the event that fronting onto these open spaces is not feasible, the residential buildings shall front onto a courtyard, pathway, or other gathering space that would directly connect to the open space or paseo.

Apartment/Flats

- Building configuration shall form adequately-sized courtyards and gathering spaces, where applicable. Accessible from inside the building or from external pedestrian pathways, courtyards or gather spaces should feature enhancements such as trellises, shade trees, or outdoor furniture.
- Step down corners and ends of multi-family buildings over two-stories in height at highly visible locations, softening the building edges and enhancing the streetscene.
- Provide pedestrian-oriented elements and details on facades facing public sidewalks. Elements such as balconies and awnings can add visual interest and richness to the street environment.

- Transitional spaces such as porches, covered entries or stoop entries shall be provided for ground floor units facing public street. Where common building entries are provided, they should be well defined along the street and/or parking lot edges.
- Arrange attached residential buildings and site landscaping in such a way that they screen parking areas from public view and minimize the impact of parking lots and garages on the public streetscape.
- Parking lots shall be broken up into smaller segments by landscaped islands, but should remain connected to facilitate internal circulation for a common complex.
- Provide a minimum of two (2) unit plans for each building, and a minimum of two (2) building plans (with the ability to add elements to corner units as necessary) in each Planning Area.
- Residential development adjacent to internal Street E, F, G, H and I shall include a primary pedestrian entry along this street frontage facing either the street or a courtyard or a paseo that is accessible by the residents.
- All primary entrances for multi-family dwellings shall provide unit identification.
- ... Exterior elevations shall include at least three (3) materials that accentuate or correspond to variations in building massing and plane changes, but not having too many different materials to avoid a chaotic appearance. Glazing (windows) and accent materials such as shutters and railings may count towards this requirement.













Downtown District Design Guidelines and Standards

The Downtown District will function as a vital commercial center for the City. Appropriate land uses for these areas include residential, commercial, retail services, restaurants, offices, paseos, recreational facilities, community venues, and civic facilities. The mixed- use areas are a place for working, shopping, dining and gathering. Businesses will be situated along the street and provide convenient access for vehicles, pedestrian walkways and landscape areas.

General Criteria

- Buildings shall front onto a street or spine, which may be designed either as a vehicle free zone or in such a manner as to allow for use by both pedestrians and motor vehicles. When vehicles are allowed, design features shall be incorporated to define pedestrian movement through changes in paving materials or grade, articulated walks with landscaping, or overhead structures.
- Both vertical (different uses within the same building, with commercial or office uses located on the ground floor and with office or residential uses located above) and horizontal (single-use buildings located side-by-side or adjacent to each other on a development site) mixed-use are encouraged in the Downtown District. The mix of land uses may be, but are not limited to, commercial mixed with residential or mix of uses of retail, restaurant, office, and civic uses.
- Vertical mixed-use projects are encouraged for 3-story and higher buildings, such as first floor retail with office or residential uses above. Visually, this arrangement divides the façade into two basic parts: the upper façade and the storefront.
- Large monolithic buildings, such as movie theaters and cultural venues, must be set back from a street designated for pedestrian activity and lined with smaller businesses in front to create a more appealing streetscene.
- Plaza areas in mixed-use settings are encouraged and may include seating, fountains, and landscaping.
- Open views into the retail space at the storefront level will enhance the pedestrian experience by providing a visual connection to the use inside the building. On upper levels, windows should continue the aesthetics of the building while serving the occupants' need for privacy.
- Primary entrances into retail buildings shall be clearly marked and provide a sense of welcome and convenient access into the building interior.
- Corner buildings shall be designed with enhanced treatments. These treatments may include: larger building element at the corner, more ornamentation than adjacent buildings, or a plaza to define the space. In addition, corner buildings typically have both primary and secondary façades that relate to the streets on which they front.
- The ground floor of the commercial component of a mixed-use building shall have a finished ceiling height of a minimum of 12 feet.

Building Form, Massing, and Articulation

- Iconic buildings in the Downtown District are encouraged and may include architectural features such as bell or clock tower or similar statements.
- Architecture shall address public areas with high quality materials and should contain architectural elements and other detail relating to the human scale.
- Groups of buildings shall be arranged in clusters around elements such as pedestrian walkways or landscaped areas.
- Retail and restaurant buildings with facades parallel to the street with covered pedestrian arcades are encouraged. Long unarticulated facades shall be avoided along the primary pedestrian corridor.
- No building wall facing a public street should extend more than 25 feet vertically or horizontally without a visual break created by a minimum 1 foot architectural/massing offset. (See graphic footnote 1 in below)



1 *For buildings with 100' or greater of street-frontage, plane breaks at least every 25 feet include glazing and provide adequate articulation.*

2 *A minimum of 30% of exterior walls on ground-floor facing the street shall include windows, doors, or other openings.*

- Within PA3 and PA5, the ground floor shall incorporate abundant glazing. At least thirty (30) percent of the exterior walls on the ground floor facing the identified pedestrian corridor shall include glass windows, glazed doors, or other openings, as illustrated in below. Percentage of fenestration shall be calculated based on the length of the facade frontage and the floor-to-ceiling height of the ground floor, excluding the areas for parking garage ingress/egress. (See graphic footnote 2, above)
- Adjacent to Streets H or G within Planning areas 2, 3, 4 and 5, at least 50 percent of the building (commercial, civic, or residential) shall be located within the 0 to 15 feet of the right-of-way from Streets H and G. The other 50 percent may be reserved for expanded outdoor dining opportunities, courtyards, paseos, or

driveways connecting to surface lots behind the building. Parking lots are not allowed between the building and the street along these corridors.

Materials and Colors

- A mixture of high-quality materials in highly visible locations and in varying quantities have a large impact on the perceived quality of the area.
- Colors should be carefully chosen to complement the architectural style or tenant of each building.
- Exterior elevations shall include at least three (3) materials that accentuate or correspond to variations in building massing and plane changes, but not having too many different materials to avoid a chaotic appearance. Glazing (windows) and accent materials such as shutters and railings may count towards this requirement.
- Colors shall be neutral tones or muted colors complementary to the chosen architectural style and compatible with the character of surrounding development. Reserve bright or dark colors for trim or accents only.

Services, Utilities, and Storage

- Service, loading, and storage areas should be located away from the streets and activity area. When service areas are not able to be located away from streets or activity areas, screening elements such as walls, fences, architectural treatments, landscaping, or similar screening element shall be incorporated. In all cases, the screening shall be integrated into the design and not appear as an afterthought.








OPEN









2.2.4 Landscape

Landscaping can have a significant visual impact on a project through the quality of landscaping materials selected and the how landscaping is integrated throughout the project site. Landscaping both visually ties a project together and identifies distinct districts.

The City of Eastvale has been proudly designated as a "Tree City USA" by the Arbor Day Foundation by providing commitments to installing and maintaining an urban forest. The City and this Master Plan continues this commitment to provide an urban forest to improve the visual appeal, increase property values, reduce home colling costs, and remove air pollutants. The following landscape guidelines are required for the Master Plan:

- To create an urban forest as quickly as possible, fast-growing tree species appropriate to the area and climate shall be used.
- Trees shall be planted as soon as practicable in project phasing to encourage more mature tree growth once buildings are occupied.
- The project should have a consistent plant palette, though variations may occur from street to street.
- Streets, promenades, public plazas, and smaller open spaces should have distinctive planting and landscaping treatments, making them unique and enjoyable pedestrian experiences.
- Plants are selected for specific purposes to enhance the project experience.
- Plant and material selection along circulation routes are used to identify distinct districts within the overall project.
- Streets designated as "Enhanced Parkways' on Figure 3.2: *Open Space/Parks* shall include a double-row planting of trees where the trees are planted at an average of least 20 feet on center. This requirement does not include intersecting streets or driveways. Special exceptions may be made for portions of the right-of-way that include utilities that preclude the planting of trees and for visibility of non-residential buildings.
- Surface parking lots shall have a minimum 6-foot wide landscape buffer from all street rights of way, measured from property line. Curbs and parking overhangs may be included within this required buffer.
- Where pedestrian circulation crosses a vehicular travel zone, a change in material, color, or grade is required.
- Landscape must permit adequate sight distance for vehicular and non-vehicular circulation.
- All new landscape areas must have irrigation installed.

  No plants from the California Invasive Plant Council List shall be planted.

2.2.4 Landscaping









2.2.5 Public Spaces

Public spaces bring people together and allow for community events such as concerts, markets, exhibits, and celebrations.



- Public spaces reflect the needs of the community and project.
- Furniture, signage, paving materials and patterns, colors, landscaping, and other design features of the public space are used to create a sense of place and purpose.
- Surrounding buildings and uses are designed to interact with the public space and vice-versa.
- Common outdoor open space in the form of a pocket park, plaza, courtyard, garden, play area or outdoor amenity should be provided. Common outdoor open space must have a minimum dimension of 15 feet in all directions.
- In the Downtown District, the sidewalk along the designated pedestrian corridor shall have a minimum clear width of 10 feet (illustrated below). The sidewalk may incorporate pedestrian-friendly amenities



2.2.5 Public Spaces



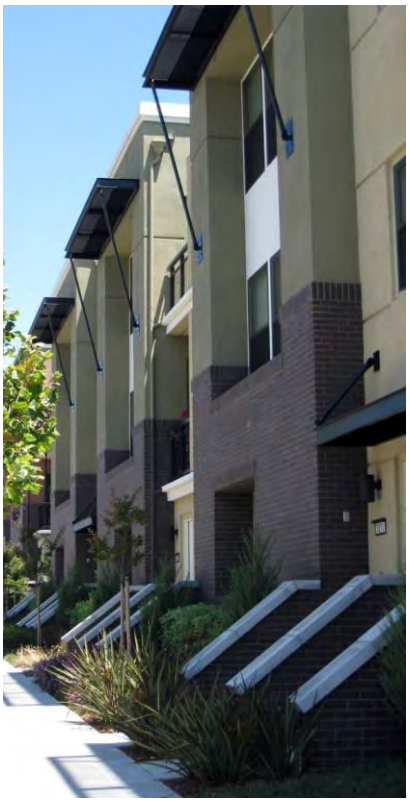


2.2.6 Buffers & Adjacencies

The need to create buffers and address adjacencies between uses also provides an opportunity for continuation of the project theme and elevation of the quality of development.

- Freestanding and retaining walls shall have a minimum 30-inch planter on each exposed side of the wall to allow for the planting of shrubs, flowers, and/or groundcovers to help conceal the wall. Private yards for single-family and multi-family dwellings, open fencing (e.g. tubular steel), and enclosed private areas (e.g. pool deck) are not subject to this guideline.
- Landscaping shall be used as a transition between public and private space.
- Planters matching the theme of the project and planted with colorful flowers are used to separate vehicle and foot traffic and add to visual appeal of the project.





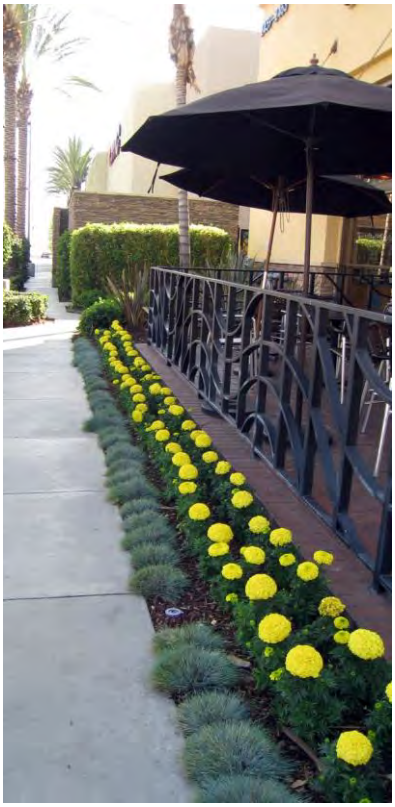


2.2.6 Buffers & Adjacencies





2.2.7 Screens, Fences, & Walls



Screens, fences, and walls act as buffers between land uses, distinguish private space from public space and provide privacy.

- Fences and walls incorporate the project theme and add to the overall visual continuity of the project.
- Landscaping is effectively employed to screen undesirable uses from sight.







2.2.7 Screens, Fences, & Walls





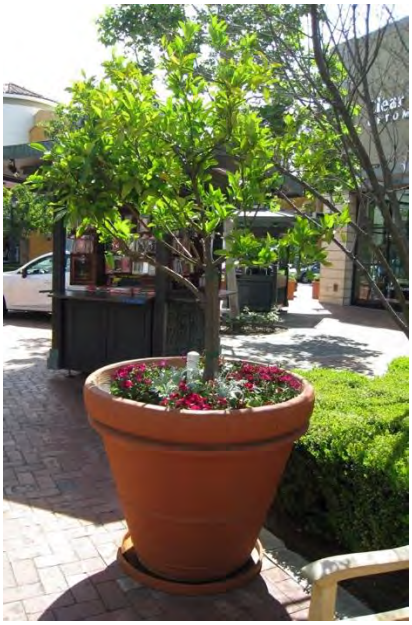


2.2.8 Street Furnishings



Street furnishings shall reflect and complement the overall character of the project and provide consistency between distinct districts, creating an enjoyable and memorable experience.

- Benches and other features are designed to reflect the project theme.
- Tree grates and other project features incorporate the project logo.
- Trash receptacles, newspaper kiosks, light fixtures all feature similar design aesthetic and accent details.
- Bicycle racks are designed for form and function.









2.2.8 Street Furnishings















2.2.9 Thematic Features

Thematic elements incorporated into various design features have a significant impact on establishing a sense of place and identity for a project.

- Project logo may be incorporated into street furnishings, walkways, and signage.
- Artwork/mural on walls within the Downtown District is allowed. Utility boxes may be wrapped with art to provide visual interest on utilitarian infrastructure and may be permitted throughout the entire Master Plan area.
- Material selection and special paving patterns for public spaces shall continue the project theme.
- Project themes are incorporated into building design to reinforce project identity.





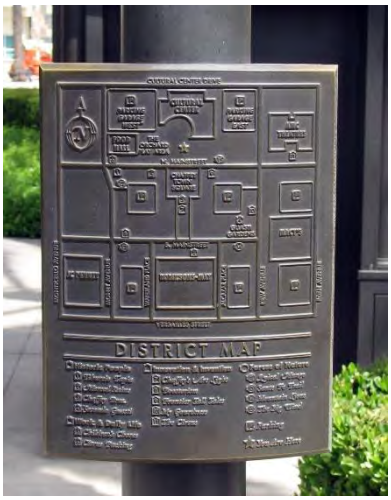


2.2.9 Thematic Features











2.2.10 Signage

Signage plays a significant role in the visual quality of a community. Signs announce one's arrival at a distinct location, direct the flow of traffic, and provide information to the community through a variety of sign types, which are coordinated around a common theme.

General Signage Guidelines

- Signs shall be limited to a maximum of three (3) colors unless the use of corporate color schemes or logos dictates the use of more than three (3) colors. There should be a significant contrast between lettering colors and background colors for legibility.
- Signs for the Downtown District shall be enhanced, including halo-lit, reverse halo-lit, externally illuminated, non-illuminated, or other acceptable "high-quality" design acceptable to the City and approved through a comprehensive sign program.
- Sign conduits, transformers, junction boxes, etc. must be concealed from view.
- No sign shall be placed in such a manner that visibility of signs on an adjacent property is obscured.
- Signs should not extend above the eave line or parapet of the buildings on which they are located, except where such signs form an integral part of the building.
- Select sign colors and materials that contribute to legibility and design integrity.
- The sign copy shall be appropriately sized for the sign structure or wall. Signs should not be too large to overwhelm the elevation, nor should they be too small to be illegible. Sign shall not be more than 80 percent of the width of the unit frontage to which is attached.
- The sign structure shall be consistent with the architectural style of the building that it is placed on or close to.
- Signage may move or rotate, but the mechanism for moving or rotating shall not be visible.
- The use of propellors, flags, or noise-creating devices as part of a permanent sign shall not be allowed.
- The use of light-reflecting materials, messages appearing for less than 30 seconds, or flashing/moving lights is prohibited.

Major and Minor Tenant Identification

The purpose of these signs is to identify major and minor tenants within the Master Plan area. There are typically three (3) different types of signs utilized for tenant identification:

- Monument sigs.

- Walls signs.
- Projecting signs.

Monument Sign Guidelines

- Use a consistent color scheme and design on all free-standing signs within the Downtown District.
- Signs shall be constructed of permanent, durable materials.
- Monument signs should be designed with the width of the base of the sign equal to or more than the width of the sign face.
- Plastic is prohibited except for use for the sign copy. Exterior grade acrylic (e.g. plexiglass) is acceptable.

Wall and Projecting Sign Guidelines

- Locate signs as close to the customer entrance as possible.
- Raceways and sign supports shall not be visible.
- Internally illuminated box signs and banners used as permanent signs are prohibited.
- Projecting signs shall be placed perpendicular to the building wall and should not extend above building eave of a sloped roof or highest point on a flat roof.
- Projecting signs shall be attached to the building fascia or canopy with an attractive and decorative support.
- Exterior signs shall be constructed of permanent and durable materials.
- Creative signage designs and techniques are encouraged.

Changeable Signage

The purpose of changeable signage is to create excitement and provide a visually interesting commercial area. Two (2) styles of this signage used in within the Downtown District to achieve this goal are "pageantry" and "marquee signs."

Pageantry

Pageantry includes flags, pole-mounted banners, kiosks, canopies, lights, directories, ground-mounted graphics, wrapped utility boxes, or other similar, temporary or permanent (but changeable) elements. The intent is to allow regular changes to the pageantry elements in terms of color, design, and other visual content so the pageantry signage can always look current. The intent of pageantry is to help advertise for special events such as fairs, public gatherings, concerts in the park, farmer's markets, etc. and to allow for a variety of different methods to advertise community events within the plan area.

Guidelines for pageantry include:

- Pageantry may be located in any portion of the Downtown District. Pageantry may be placed on street lights and over the public rights-of-way, provided applicable permits have been obtained from Public Works.
- Air-inflated signs, moving signs, paper, cardboard, Styrofoam, stickers, and decals are not acceptable forms of pageantry (directories and kiosks excepted).
- Pageantry shall not include flashing, flickering, rotating, or moving lights.
- Temporary promotional advertising (banners) is not considered to be pageantry.
- Kiosks and directories should provide vertical breaks in the sign structure.
- Individual panels shall be recessed, framed, or treated to avoid a flat appearance of the sign face.

Marquee Signs

Marquee signs are typically used to provide information about current showings or events for theaters and live entertainment uses. Guidelines for marquee signs include:

- Marquee signs may project or be integrated into the building to promote enhanced articulation.
- Plain, rectangular marquee signs without any articulation are discouraged.
- Marquee signs may be manual or electronic.
- Marquee signs may include advertisements.

Directional Signage

The purpose of directional signage is to direct the flow of vehicular and pedestrian traffic within the Mixed-Use District.

Directional and Wayfinding Signs

Directional and wayfinding signs are typically horizontal signs with tenant names and directional arrows. Guidelines for directional/wayfinding signs include:

- Directional and information signs shall be attractive, clear, and consistent in theme, location, and design.
- Place directional signs at strategic locations throughout the Downtown district, providing directions to key destinations and facilities such as parking facilities for automobiles and bicycles, transit stops, and walking and bicycling routes to nearby parks, plazas, neighborhoods, shopping, civic and other destinations.
- The project name may be located on the sign in a smaller, more understated manner to not detract from the wayfinding.
- Directional and signs with exposed Unistrut supports shall be avoided.
- The placement of directional signs shall not limit sight lines.

- Wayfinding signs may be co-located with other streetscape furniture in the Downtown district, such as light standards and transit shelters, where possible, to enhance visibility and reduce visual clutter in the public realm.
- Provide consistency between wayfinding/information signs and street furniture throughout the Downtown district. This can include customized poles and mounts for regulatory signs and lighting fixtures, and an area logo, font, and color scheme.
- Elements such as pole banners or decorative paving elements can serve as public art, branding, and wayfinding.

Temporary Signage

The purpose of temporary signage is to inform the public of a special event of limited duration, such as a grand opening. The duration and requirements for Temporary Signs shall adhere to the provisions within Section 5.7 of the EMC. The guidelines below apply to temporary signage:

- Temporary signage should not be affixed onto the roof of a building, a window or landscape area.
- Temporary signage material should consist of vinyl, nylon, canvas, or cloth.
- Temporary signage should be well maintained.


CITY
HALL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TO PARKING
PASEO
ROUTE 66
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THEATRE SQUARE


CULTURAL CENTER
FOODHALL
AMC THEATRES
RESTROOMS
CULTURAL CENTER
AMC THEATRES
MACY'S
RESTROOMS
SEPHORA


AMERICANA
DIRECTORY


ELEVATION 66
brewing company




BANANA REPUBLIC
MAINSTREET


RANCHO VICTORIA
CAFES


Elevator & Stairs
East Terrace

3 LAND USE PROGRAM

3.1. INTRODUCTION

On December 13, 2017, the City of Eastvale City Council adopted a General Plan Amendment to change the land use designation for the Leal Property from Business Park, High Density Residential, and Medium Density Residential to "Leal Property" or as shown on the General Plan Land Use Map, the "Leal Policy Area." As part of this General Plan Amendment, the City Council adopted Policy LU-8.1, which is a land use table that specifies permitted land uses and development intensities. This chapter further describes the land use program for the Leal Master Plan and its consistency with General Plan Policy LU-8.1. The land use program establishes the types and intensity of development allowed within the Leal Master Plan. A land use map specifying locations for these uses is provided in Figure 3.1, Land Use Plan. Access roads showing in the Land Use Plan are described in Section 2.2.2, Circulation Plan.

Concurrent with the City Council's adoption of a General Plan Amendment in 2017 for the Leal Property, the City Council certified an Environmental Impact Report (EIR) (State Clearinghouse No. 2015031028). The adoption of this Master Plan Amendment was accompanied by an Addendum to the Leal Master Plan EIR, which provides further detailed environmental review of the land use program. The environmental analysis presented in the Addendum to the Leal Master Plan EIR determined that to avoid new or more severe significant impacts, the maximum development intensity on the Leal Property is 2,500 residential units and 595,000 square feet of general commercial, office, and civic center uses. Since that land use limitation has been established by the environmental analysis, this Master Plan Amendment incorporates that limitation as the maximum permitted land use intensities.

Figure 3.1: Land Use Plan



3.2. LAND USE TYPES AND DEVELOPMENT POTENTIALS

The City of Eastvale General Plan Policy LU-8.1 references a land use table that has been summarized as follows:

Table 3-1:General Plan Land Use Table

Land Use Type	Minimum/ Maximum Permitted	Details
Lifestyle Center	325,000 SF to 1,300,000 SF	Standard and mixed-use retail
General Commercial	Up to 225,000 SF	"Big Box" Retail
Commercial Office	Up to 920,000 SF No Minimum	
Hotel	Up to 450 rooms No Minimum	Permitted in Lifestyle and General Commercial
Civic Center	Not Specified	Permitted anywhere on Project
Residential Medium Density (14 – 21 du/ac)	No Minimum No Maximum	Single Family Attached, condominiums, townhomes,
Residential High Density (22 – 40 du/ac)	Minimum 500 du Maximum 660 du	Townhomes, condominiums, stacked flats, and apartments

This land use table was incorporated into the General Plan as a general guide to the development of the Leal Property, recognizing that further development planning and detail would occur subsequent to the General Plan Amendment. The Leal Master Plan Amendment provides the next stage in refinement of the development plan and thus refines the proposed land use mix of uses and intensities.

General Plan Policy LU-8.1 includes two residential land use categories, Medium-Density and High-Density. The two residential land use types include density ranges provided in dwelling units per acre and a general description of the types of residential products associated with each residential category.

The Leal Master Plan Amendment distinguishes between the two residential densities by location. The High-Density Residential is located within the Downtown area and consists of either vertical or horizontal mixed use, and primarily consisting of apartments[1]. Within the approximately 52-acre Downtown, residential uses could occur on approximately 21 acres[2]. The maximum of 660 dwelling units planned within the approximately 21 acres

[1] The Leal Master Plan does not regulate ownership of residential units, therefore, there are no limitations on the number of rental or owned units.
[2] The residential acreage within the downtown includes the aggregate of Planning Areas 2, 4, and 10.

where residential is permitted represents a density of approximately 31.0 dwelling units per acre, consistent with the High-Density residential category within the General Plan. The remaining 1,840 dwelling units allowed on the project site would occur over approximately 87.54 acres[3]. This represents a density of approximately 21 dwelling units per acre, which is within the Medium-Density category.

As shown in Figure 3-1, the project site has been organized into different Planning Areas. The Planning Areas represent specific development areas that would be developed either with commercial, residential or mixed-use developments. Other planning areas have been designed for parks and open space and others for right-of-way. Table 3-2, Land Use Summary by Planning Area, shows detailed information for each planning area within the Leal Master Plan area, including land use category and acreages.

Table 3-2: Land Use Summary by Planning Area

Planning Area (PA)	Land Use Category	Approximate Area (AC)	Minimum Intensity DU/AC or SQFT/FAR	Maximum Intensity DU/AC or SQFT/FAR
2	Mixed Use[4]	12.6	660 DU[5] 102,575 sqft[6]	660 DUs[7] Max 40 du/ac No Max sqft
4	Mixed Use	6.5		
5	Commercial Core	4.6		
10	Mixed Use	4.5		
3	Commercial Core	9.8	None	None
1	Residential	7.3		

[3] The residential acreage within the Medium Density category includes the aggregate of Planning Areas 1, 6, 7, 8, 9, 11, 12, 13, K, and L. The two parks are included in this acreage calculation because they serve those residential planning areas.

[4] Subsurface detention and water quality features may be located in Planning Area 2 or Planning Area 1, or a combination of both.

[5] A minimum density of 660 dwelling units is required within the Mixed Use portion of the Downtown, which equals over approximately 21 acres. The dwelling units may be allocated evenly across each planning area or clustered in one or more planning area provided the net density of any individual project does not exceed 40 dwelling units per acre. Net density is calculated by the number of dwelling units applied to only the acreage of the development less any streets, roads, parks, trails, or common open space.

[6] A minimum FAR of 0.10 is applied to Planning Areas 2, 4, and 10, resulting in a minimum requirement of approximately 102,575 square feet. The minimum square footage requirement is approximate based on project site design and for purposes of calculating the minimum square footage per this section including Table3-1, square footage is calculated based on the gross size of the building, including storage, stairwells, mechanical rooms, etc. The City may administratively reduce this minimum square footage requirement without the need for a Master Plan amendment if the City decides it would like additional commercial square footage under the 595,000 square foot cap on Lot 3 or if specific building design and/or site use warrants less square footage.

[7] A maximum of 660 dwelling units is permitted in the Downtown area for consistency with the General Plan, since General Plan density is calculated by the total number of units applied to the approximately 21 acres of Mixed Use residential area.

Planning Area (PA)	Land Use Category	Approximate Area (AC)	Minimum Intensity DU/AC or SQFT/FAR	Maximum Intensity DU/AC or SQFT/FAR
6	Residential	5.6	20 du/ac[8]	1840 DUs Max 40 du/ac[9]
7	Residential	14.1		
8	Residential	3.9		
9	Residential	4.4		
11	Residential	16.6		
12	Residential	17.3		
13	Residential	13.2		
14	Public Facility	1.2	0.6	
A - D	Right-of-Way	9.4	N/A	
E - I	Internal Streets	13.5	N/A	
J-V	Parks and Trails	14.1	N/A	
Total		158.59		
Maximum Development Intensity[10]		2,500 DU	595,000	

3.2.1. Downtown (DT)

The Downtown District (DT) land use category accommodates a mix of residential uses, commercial and office uses such as retail and restaurants, general commercial and commercial office, civic center, and residential. The vision for a lifestyle center included in the City's General Plan occurs within the Downtown District. The DT category applies to approximately 52 gross acres within planning areas 2, 3, 4, 5 and 10 located to the northwest of the Limonite Avenue/Hammer Avenue intersection, in the southeast corner of the Master Plan area. The Master Plan provides for up to 595,000 square feet of commercial, office and civic uses, under the DT land use category. Approximately 21 acres within the DT area can accommodate residential uses. A minimum of 660 dwelling units is required. The

[8] Within the 87.54 acres of Residential Uses (Planning Areas 1, 6, 7, 8, 9, 11, 12, 13, K, and L), a minimum of 730 dwelling units shall be constructed at a minimum net density of 20 dwelling units per acre. The dwelling units may be allocated within one or more planning areas provided the net density of any individual project does not exceed 40 dwelling units per acre. Net density is calculated by the number of dwelling units applied to only the acreage of the development less any streets, roads, parks, trails, or common open space.

[9] A maximum of 1840 dwelling units is permitted in the Residential Uses area for consistency with the General Plan, since General Plan density is calculated by the total number of units applied to the 87.54 acres of Residential Uses area.

[10] Maximum development intensity was determined through the Leal Master Plan EIR and Leal Master Plan EIR Addendum.

dwelling units may be allocated within one or more planning areas provided the net density of any individual project does not exceed 40 dwelling units per acre.

3.2.2. Residential Uses (RU)

The Residential Uses (RU) land use category applies to planning areas 1, 6, 7, 8, 9, 11, 12 and 13. The Master Plan envisions variation in product types, including both detached and attached residential housing types, within the residential category to promote diversity and dynamic neighborhoods. The appropriate residential product types are discussed in Chapter 4, Development Standards. Within the 87.54 acres of Residential Uses (Planning Areas 1, 6, 7, 8, 9, 11, 12, 13, K, and L), a minimum of 730 dwelling units shall be constructed at a minimum net density of 20 dwelling units per acre. The dwelling units may be allocated within one or more planning areas provided the net density of any individual project does not exceed 40 dwelling units per acre. Net density is calculated by the number of dwelling units applied to only the acreage of the development less any streets, roads, parks, trails, or common open space. A maximum of 1,840 dwelling units[11] is permitted in the Residential Uses area for consistency with the General Plan, since General Plan density is calculated by the total number of units over the 87.54 acres of Residential Uses area.

3.2.3. Public Facilities (PF)

The Public Facility (PF) land use category applies to a 1.2-acre area within planning area 14 located at northwest corner of the Master Plan area. The PF land use designation provides for the development of a fire station.

3.2.4. Parks and Open Space (P/OS)

The Master Plan also provides for compatible recreational uses serving the needs of the residents, such as paseo, parks, recreation facilities and open space, as shown in Figure 3.2, Open Space/Parks Plan, which totals approximately 14.12 acres.

[11] The maximum number of dwelling units of 2,500 was determined by the Addendum to the Master Plan EIR to avoid new or more severe significant impacts. Assuming 660 units are constructed in the DT area, the remaining 1,840 units may be constructed in the RU area.

Figure 3.2: Open Space/Parks



Illustrative purpose only, final design may vary.

3.3. PERMITTED USES

3.3.1. Permitted Uses by Land Use Category

Permitted uses within the Leal Master Plan area are identified on Table 3-3, Permitted Uses. Other use or activity not listed in Table 3-3 may be permitted within the Master Plan area if it is compatible with the intent of the Master Plan and is similar to a permitted use, subject to approval by the Community Development Director or his/her designee.

Table 3-3: Permitted Uses

Permitted (P): Permitted by right
Conditional (C): Permitted upon issuance of a Conditional Use Permit
Not Permitted (blank): Not permitted
Temporary Use (T): Permitted short-term activities

LAND USE	RU	DT	PF	P/OS
Agricultural Workers Housing				
Bungalow Courts	P			
Caretakers Unit		P		
Congregate Care Facilities (7 or more persons)	P	P		
Dwelling, Multiple Family[2]	P	P[1]		
Dwelling, Second Unit[2]	P	P[1]		
Dwelling, Single Family[2]	P	P[1]		
Dwelling, Two Family[2]	P	P[1]		
Emergency Shelters				
Family Day Care, Large	P	P		
Family Day Care, Small	P	P		
Group Homes (6 or fewer persons)	P	P		
Home Occupations	P	P		
Live-Work Units, subject to Section 3.4.2.2 of the Leal Master Plan		P		
Planned Residential Developments	P	P	P	P
Restricted Single-Family Residential Subdivisions	P	P	P	P
Senior Housing	P	P	P	P
Banks and Financial Institutions		P		
Barber and Beauty Shops		P		
Bars and Cocktail Lounges		C		

LAND USE	RU	DT	PF	P/OS
Boutique Wine and Beer Stores (Type 20 ABC Licenses), per Section 3.3.2.5 of the Leal Master Plan		P		
Breweries, Wine Blending Businesses, and Distilleries (without a tasting room), subject to Section 3.3.2.4 of the Leal Master Plan				
Breweries, Wine Blending Businesses, and Distilleries (with a tasting room), less than 1,000 square feet subject to Section 3.3.2.4 of the Leal Master Plan		P		
Breweries, Wine Blending Businesses, and Distilleries (with a tasting room), greater than 1,000 square feet subject to Section 3.3.2.4 of the Leal Master Plan		C		
Cigar, Cigarette and Tobacco Sales				
Cigar, Hookah, and Cigarette Lounges				
Clinics/Office, including Medical, Dental, Chiropractic		P		
Day Care Centers				
Department Stores				
Drive-In or Drive-Through Operations or Facilities (any use)				
Farmers Markets, Carnivals, and other similar temporary events, subject to Eastvale Zoning Code Section 1.5.G, Temporary Events and Permits		T		
Fortune-Telling, Spiritualism, or Similar Activity				
Grocery Stores/Market/Specialty Food Stores		P		
Hardware and Home Improvement Centers				
Hotels		C		
Liquor Stores (Type 21 ABC Licenses), subject to Section 3.3.2.5 of the Leal Master Plan				
Massage Parlors, Turkish Baths, or similar personal service establishments				
Medical Marijuana Dispensary				
Motels				
Nurseries and Garden Supply Stores				
Outdoor Kiosks and Vendor Carts		C		
Religious Institutions	C	C	C	C

LAND USE	RU	DT	PF	P/OS
Restaurants and other eating establishments, including fast food restaurants and sandwich shops (excluding drive-through uses), without alcoholic beverage consumption		P		
Restaurants and other eating establishments with alcoholic beverage consumption (Types 41 and 47 ABC Licenses), subject to Section 3.4.2.3 of the Leal Master Plan		C		
Retail Sales and Services, <30,001 sq. ft.		P		
Retail Sales and Services, >30,000 sq. ft.				
Schools, Business and Professional, including Art, Barber, Beauty, Dance, Drama, Music and Swimming		P		
Swap Meets				
Tattoo Parlors				
Theaters, not including Drive-Ins				
Tourist Information Centers				
Wedding Chapels				
Animal Hospitals				
Animal Training				
Apiaries				
Aquaculture				
Auction Houses				
Automobile Parts and Supply Stores				
Automobile Service and Repair				
Bail Bonds/Pawnshops				
Blueprint and Duplicating Services				
Boat and other Marine Sales and Rental				
Boat Services				
Body and Fender Shops and Spray Painting				
Building Materials Sales Yards				
Building Movers Storage Yard				
Car Washes				
Casinos, including Card Clubs/Rooms				

LAND USE	RU	DT	PF	P/OS
Check-Cashing and Payday Advance				
Discount Stores (i.e., 99 Cents Only Store, Dollar General, Dollar Tree, etc.)				
Employment Agencies				
Equipment Rental Services				
Equipment Sales and Storage				
Feed and Grain Sales				
Gasoline Service Stations, with or without the concurrent sale of beer and wine for off-premises consumption				
Golf Cart Sales and Service				
Golf Courses, not including the construction of buildings				
Laboratories, Film, Dental, Medical, Research, or Testing				
Liquid Petroleum Service Stations				
Lumber Yards, including only incidental mill work				
Meteorological Towers				
Mini Storage				
Mobile Home Sales and Storage, Trailer Sales and Rental House Trailers				
Mobile Home Sales Lot				
Parcel Delivery Services				
Petroleum and Bulk Fuel Storage, above ground				
Printers or Publishers				
Professional Offices		P		
Real Estate Offices, Temporary	P	P	P	P
Sale, Rental, Repair, or Demonstration of Motorcycles, Scooters, and Motorbikes				
Sex-oriented Businesses				
Stations, Bus and Taxi				
Tire Recapping				
Tire Sales and Service, not including recapping				
Trailer and Boat Storage				

LAND USE	RU	DT	PF	P/OS
Travel Trailers and Recreational Vehicle Sales and Service				
Truck and Trailer Sales and Rental				
Truck Service				
Airports				
Ambulance Services				
Cemeteries, Crematories and Mausoleums				
Communications and Microwave Installations				
Fire and Police Stations		P	P	
Hazardous Waste Facilities				
Heliports				
Hospitals				
Mortuaries				
Public Infrastructure Facilities, including, but not limited to, drainage, water quality and flood control facilities and public communications facilities	P	P	P	P
Public Utility Substations and Storage Yards				
Sewage Treatment Plants				
Art Gallery, Library, Reading Room, Museum		P		
Community Auction and Sales Yards				P
Fraternity and Sorority Houses				
Indoor Amusement/Entertainment Facility: Establishments providing indoor amusement and entertainment services as primary uses for a fee or admission charge, including dance halls, ballrooms, electronic game arcades, dance classes, karate, yoga, etc.		C		
Establishments with four or more electronic games or coin-operated amusements, or where 50 percent or more of the floor area is occupied by amusement devices, are considered an electronic game arcade as described above; three or fewer machines are not considered a land use separate from the primary use of the site.		C		
Indoor Fitness and Sports Facility: Predominantly participant sports and health activities conducted entirely within an enclosed building. Typical uses include bowling alleys,		C		

LAND USE	RU	DT	PF	P/OS
billiard parlors, ice/roller skating rinks, indoor racquetball courts, indoor climbing facilities, soccer areas, athletic clubs, and health clubs.				
Outdoor Commercial Recreation: Facility for various outdoor participant sports and types of recreation where a fee is charged for use (e.g., amphitheaters, amusement and theme parks, golf driving ranges, health and athletic clubs with outdoor facilities, miniature golf courses, skateboard parks, stadiums and coliseums, swim and tennis clubs, water slides, zoos)		C		P
Private Recreation or Event Facilities				P
Public Recreation, Nonprofit Community Centers and Clubhouses, Social Halls, Parks, Playgrounds, Community Recreation Facilities, Plazas, Trails and Paseos, Community Gardens, Open Space and other similar recreational uses				P
Recycling Collection Facilities				
Schools, Private		C		

Note [1]: Residential uses, including live-work, are not allowed in the Planning Area 3 and 5 in Downtown (DT), except as outlined in the Development Agreement.

Note [2]: Residential use types are further defined in Chapter 4.

3.3.2. Standards Related to Specific Uses

The following standards apply to specific uses within the Leal Master Plan. Uses not listed here will be subject to a determination by the Community Development Director.

3.3.2.1. Outdoor Kiosks and Vendor Carts

A. Signage: All signs on outdoor kiosks and vendor carts shall be regulated by Section 4.5, Signage, of this Master Plan.

B. Minor Development Review: Prior to commencement of each outdoor kiosk and vendor cart on public property, the business owner shall obtain approval from the Community Development Director for the size, design, and aesthetic characteristics, to ensure the facility is consistent with the overall characteristic of the development.

3.3.2.2. Live-Work Units

For live-work development in the Planning Areas 2, 4, and 10, the following commercial/residential activities, conducted wholly within enclosed buildings, shall be permitted, provided the commercial/office uses shall occur in conjunction with residential uses and are not standalone uses:

A. Apparel - custom tailoring and sales of apparel, clothing and other sewing products made on the premises

B. Artists and craft/sculpture products, sales galleries, and studios

C. Internet-based commerce (no inventory, no pornography)

D. Office - creative/tech-based offices and services

E. Office - professional offices and services

F. Photographer/photography studios

G. Residential uses in conjunction with office, retail or other work-related uses as permitted herein for live-work development

H. Spas and personal care to include esthetician/body sculpting with proof of training, nail salons and hair salons (for single patron use only and subject to Homeowners Association/Property Owners Association approval)

I. Similar uses permitted by the determination of the Community Development Director.

The property development standards set forth below shall apply to all live-work units within the confines of the Leal Master Plan:

A. Live-work units include the combination of residential living units and workspace of a building for self-employed residents. Ground floor residential living may be permitted in live-work units.

B. Where live-work uses are operated, the workspace shall be limited to a maximum of 50 percent of the entire unit (minus porches and garages).

C. The working area of a live-work unit shall be used exclusively for work activities and not for residential purposes.

D. Storage of hazardous materials necessary for work activities in live-work occupancies may be stored in controlled areas per the current California Building Code used by the City of Eastvale.

E. The residential portion of the live-work unit shall only be occupied by the individual and his/her household that has their professional occupation established in the same unit.

F. Live-work units are single-tenant spaces that include both residential and commercial/office square footage in a single unit providing for a business to be conducted solely by the resident. In no instance shall the work portion of the live-work unit be sub-leased.

G. Noise levels generated by live-work spaces shall conform to the requirements of the Eastvale Municipal Code for residential use.

H. All signage and lighting shall comply with the requirements of the Leal Master Plan and the Eastvale Zoning Code and must be approved the City of Eastvale.

3.3.2.3. Alcohol Sales with a Bona-Fide Eating Establishment

The sale of beer, wine, or spirits is permitted as an accessory use for any bona-fide eating establishment under a "Type 41 License" or a "Type 47 License" of the California Department of the Alcoholic Beverage Control (ABC) Board.

In addition to the design guidelines and development standards contained in the Leal Master Plan, the following performance standards shall apply to accessory alcohol sales with a bone-fide eating establishment:

A. Food shall be available for purchase at all times during restaurant operating hours.

B. Alcohol sales shall not exceed 50 percent of gross receipts for the establishment.

C. Any sale of spirits for consumption off-premises is strictly prohibited. The consumption of spirits shall be limited to the restaurant area as defined per applicable license from the ABC Board.

D. Beer and wine may be purchased for off-premises consumption; however, the beer and wine sold for off-premises consumption may not be consumed on the premises that it was purchased on.

3.3.2.4. Breweries, Wine Blending Businesses, and Distilleries

Accessory beer, wine, or distilled spirit tastings is permitted within an alcoholic beverage manufacturing facility, provided the area devoted to tastings shall provide parking at the same rate as a restaurant or bar as described in Chapter 4, Table 4-8. The alcohol production area shall provide parking at the same rate as a manufacturing use as described in Chapter 4, Table 4-8. All such uses described within this section shall have an active, valid license from the ABC Board, as applicable.

In addition to the design guidelines and development standards contained in the Leal Master Plan, the following requirements shall apply to craft breweries, wine blending businesses, distilleries, and accessory tasting rooms:

A. A brewery, wine blending, or distillery use with a tasting room equal to or less than 1,000 square feet shall be permitted by right. An accessory tasting room of more than 1,000 square feet shall be required to apply for a Conditional Use Permit.

B. A brewery, wine blending or distillery use may not exceed production of 15,000 barrels per year.

C. All production activities and on-site storage shall be located completely within the facility. Off-site storage is permitted, provided it meets all applicable provisions of the underlying zone. The display of alcoholic beverages shall be located within the manufacturing area and accessory tasting room facility.

D. The brewery, wine blending, or distillery use and accessory tasting room use shall be allowed to operate and be open to the public during the following hours:

   i. Manufacturing and Operation: 7:00 A.M. to 7:00 P.M. Monday through Saturday; and

   ii. Accessory Tasting Room Open to the Public: 11:00 A.M. to midnight daily, 11:00 A.M. to 1:00 A.M. on Friday and Saturday.

E. Service trucks used for the purposes of loading and unloading materials, ingredients, products, and equipment shall be restricted to the hours of 7:00 A.M. to 6:00 P.M. Monday through Friday and 9:00 A.M. to 6:00 P.M. on Saturday.

F. The consumption, tasting and sales of alcoholic beverages shall be limited to only those products produced on site.

G. Ancillary retail sales shall be limited to only those retail items directly associated with the on-site facility and accessory tasting room.

H. The brewery, wine blending, or distillery use or accessory tasting room shall not charge an admission fee, cover charge or require a minimum purchase.

I. A security plan, including a video surveillance system and exterior lighting plan, satisfactory to the Community Development Director, or his/her designee, shall be submitted to and approved prior to the issuing of a Certificate of Occupancy. The video surveillance system shall be installed to assist with monitoring the property on both the interior and exterior. A Digital Video Recorder (DVR) or similar video-recording device, capable of exporting images in TIFF, BMP, or JPG format shall be used. Recording shall be retained for no less than 30 days. Exterior lighting shall clearly illuminate the common areas surrounding the building including, but not limited to, the entrance and exit doors, as well as the business address.

J. No more than 10 percent of the window display area (including any transparent doors) shall be allowed to bear advertising, signs or any other obstructions. All advertising, signage or other obstructions shall be placed and maintained to ensure a clear and unobstructed view of the establishment's interior. Window signs displaying prices shall be prohibited. No advertising or signage shall be placed in the area above 3 feet or below 6 feet in height of all windows measured from grade.

K. Tours of the brewery, wine blending, or distillery use and accessory tasting room use shall occur on regularly scheduled days and times. The operator shall ensure that tours do not negatively impact adjacent businesses or property owners.

L. The use is not considered a nuisance as defined in the Eastvale Municipal Code;

3.3.2.5. Off-Premises Alcohol Sales

Boutique Wine and Beer Stores may permit the sale of wine and beer for off-premises consumptions under a "Type 20 License" of the ABC Board. General Liquor Stores may permit the sale of general alcohol sales, wine, and beer for off-premises consumptions under a "Type 21 License" of the ABC Board.

In addition to the design guidelines and development standards contained in the Leal Master Plan, the following performance standards shall apply to Boutique Wine and Beer Stores and General Liquor Stores:

A. The use does not result in any adverse effects, jeopardize, or endanger the health, peace, or safety of persons residing, visiting, or working in the surrounding area; The exterior lighting and security measures shall comply with applicable requirements.

B. The use is operated and maintained in a neat, quiet, and orderly condition and operated in a manner so as not to be detrimental to surrounding properties and occupants. This shall encompass the upkeep and maintenance of exterior facades of the building, landscaping, designated parking areas serving the use, fences, and the perimeter of the site, including all public sidewalks, alleys, and parkways;

C. The use is not considered a nuisance as defined in the Eastvale Municipal Code;

D. The exterior lighting and security measures shall comply with applicable requirements (including, but not limited to Sections 120.05.050, Outdoor Lighting; 120.05.080, Neighborhood Preservation Standards; 120.05.060, Off-Street Vehicle Parking as applicable)

E. No more than 10 percent of the square footage of the windows and transparent doors of the premises shall be allowed to bear advertising, signs or any other obstructions including products, shelving, display items

and/or coolers. All advertising, signage, product, shelving, display items and/or coolers shall be placed and maintained to ensure a clear and unobstructed view of the establishment's interior. Window signs displaying prices shall be prohibited. No advertising or signage shall be placed in the area above 3 feet or below six (6) feet in height of all windows measured from grade.

F. A copy of these performance standards, additional City or ABC Board imposed operating conditions, and a 24-hour complaint telephone number shall be posted in a conspicuous and unobstructed place visible from the entrance of the establishment in public view.

4 DEVELOPMENT STANDARDS

This chapter contains the permitted uses and development standards for the Leal Master Plan. Standards not addressed in this chapter are subject to the City of Eastvale Municipal Code in effect at the time of approval of this Master Plan. Additionally, in order to be approved by the City, development will need to comply with the quality expectations and community features identified in Chapter 2 of this Master Plan.

4.1. DEVELOPMENT STANDARDS

4.1.1. Downtown Development Standards

The Downtown (DT) District is envisioned to be the focal point in the City. The intent is to develop an open-air marketplace for retail and specialty uses that are not currently present in Eastvale and in nearby communities (including Live/Work units).

The mix of uses may be horizontal (different uses within a Planning Area separated horizontally) or vertical (different uses within the same building, with commercial or office uses located on the ground floor and with office or residential uses located above). The residential component of this land use district is intended to provide for the development of multi-family residential dwellings in an urban atmosphere.

Minimum and maximum development intensities and densities are outlined in Chapter 3 of this Master Plan.

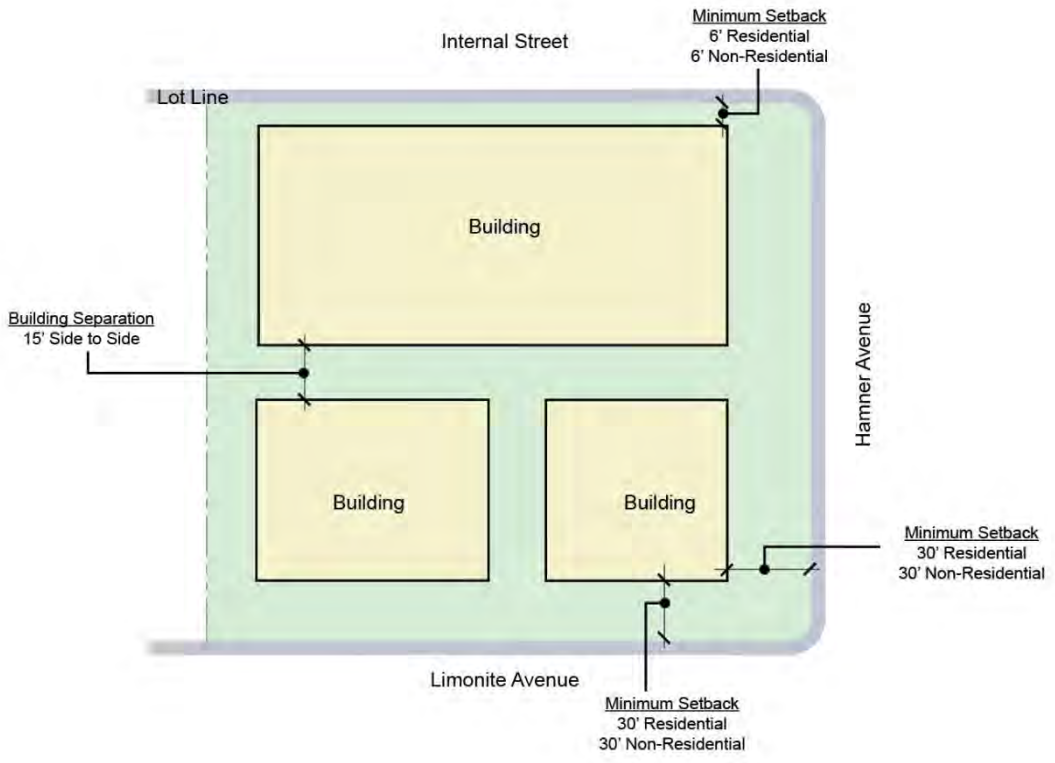
DT District includes planning areas 2, 3, 4, 5 and 10.

Table 4-1 establishes the development standards for the Downtown District. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.1. Residential uses within the Downtown District are subject to the development standards provided in Table 4-1. Where Table 4-1 is silent on a development standard, the development standards presented later in this chapter for specific product types would apply for the project type proposed. If there is a conflict in development standards between Table 4-1 and the development standards for product types, Table 4-1 shall govern.

Table 4-1:Downtown Development Standards

	RESIDENTIAL BUILDINGS	NON-RESIDENTIAL/ MIXED-USE BUILDINGS
Maximum Site Coverage	75%	N/A
Maximum Building Height	65' (4 stories)	
Minimum Building Setbacks From		
Hamner Avenue ROW	30'	30'
Limonite Avenue ROW	30'	30'
Lot Line Along Internal Street	6'	6'
Minimum Building Separation		
Residential - Front to Front (entries) - at open space	20'	N/A
Residential - Side to Side (no entries) - at open space	15'	N/A
Non-Residential/Mixed-Use – Side to Side	N/A	15'

Figure 4.1 Downtown Setback Diagram



4.1.2. Residential Development Standards

The development standards and product types included herein are intended to establish the minimum design parameters. An appropriate mix of building types shall be incorporated into the residential land use and mixed-use districts to avoid monotonous neighborhoods.

Table 3-2 within Chapter 3 establishes permitted uses, including Dwelling – Multiple Family, Second Unit, Single Family, and Two-Family. Those permitted residential land use categories are further defined in this Chapter through the following description of residential product types permitted in the Master Plan area.

Development standards for residential uses within the Downtown District are presented above in Table 4-1. Development standards for residential uses within the Residential Uses District (Planning Areas 1, 6, 7, 8, 9, 11, 12 and 13) are presented below by housing type.

Conventional Single Family Detached Homes typically have street front orientation where primary entries and walks face the street or the side, and have private rear and side yards. Garages are in the front or side and face the street. Resident parking spaces are provided in garages and guest parking spaces are provided in driveways or on local streets.

Zero-Lot Line Homes are designed to fit together along a common property line by providing one home with a deeply recessed garage. Reciprocal use easements are used to maximize the side yard areas. Zero-lot line homes typically have street front orientation where primary entries face the street, and have private rear and side yards. Garages with driveways face the street. Resident parking spaces are provided in garages and guest parking spaces are provided in driveways or on local streets.

Rear Loaded Homes have street-facing primary entries and are designed to take garage access from a shared access drive behind the homes. Private yard space is provided in a side yard, a courtyard behind the front portion of the house or behind the house between a detached garage and the home. Resident parking spaces are provided in garages and guest parking spaces are provided in driveways (18' minimum in length where provided), on the street or in a common parking area. Reciprocal use easements may be used to maximize side yard areas.

Detached Cluster Homes are single-family detached dwellings oriented on a shared access drive. Each cluster module typically consists of 4 to 10 dwelling units. Resident parking spaces are provided in garages and guest parking spaces are provided on the street or in a common parking area. Reciprocal use easements may be used to maximize side yard areas.

Row Townhomes are single-family attached homes with primary entries facing street or common open space. The units have private outdoor living space. Automobile access is via an alley or shared access drive. Resident parking spaces

are provided in garages, and guest parking spaces are provided on public or private local streets or in designated parking areas.

Attached Motorcourt Homes are buildings mixed with townhomes and flats. The entries are from the street or common open space. Automobile access is via an alley or shared access drive. Resident parking spaces are provided in garages, and guest parking spaces are provided on public or private local streets or in designated parking areas.

Apartments/Flats are buildings with either walk-up units or flats in multiple story configurations. The entries can either be external from the street or common open space, or internal and elevator served. Resident parking spaces are provided either in garages, surface parking, or in multiple story parking structures. The units tend to be for rent as opposed to for sale.

Detailed design standards per product types are presented below and shown in Tables 4-2 to 4-7.

4.1.2.1. Conventional SFD Residential

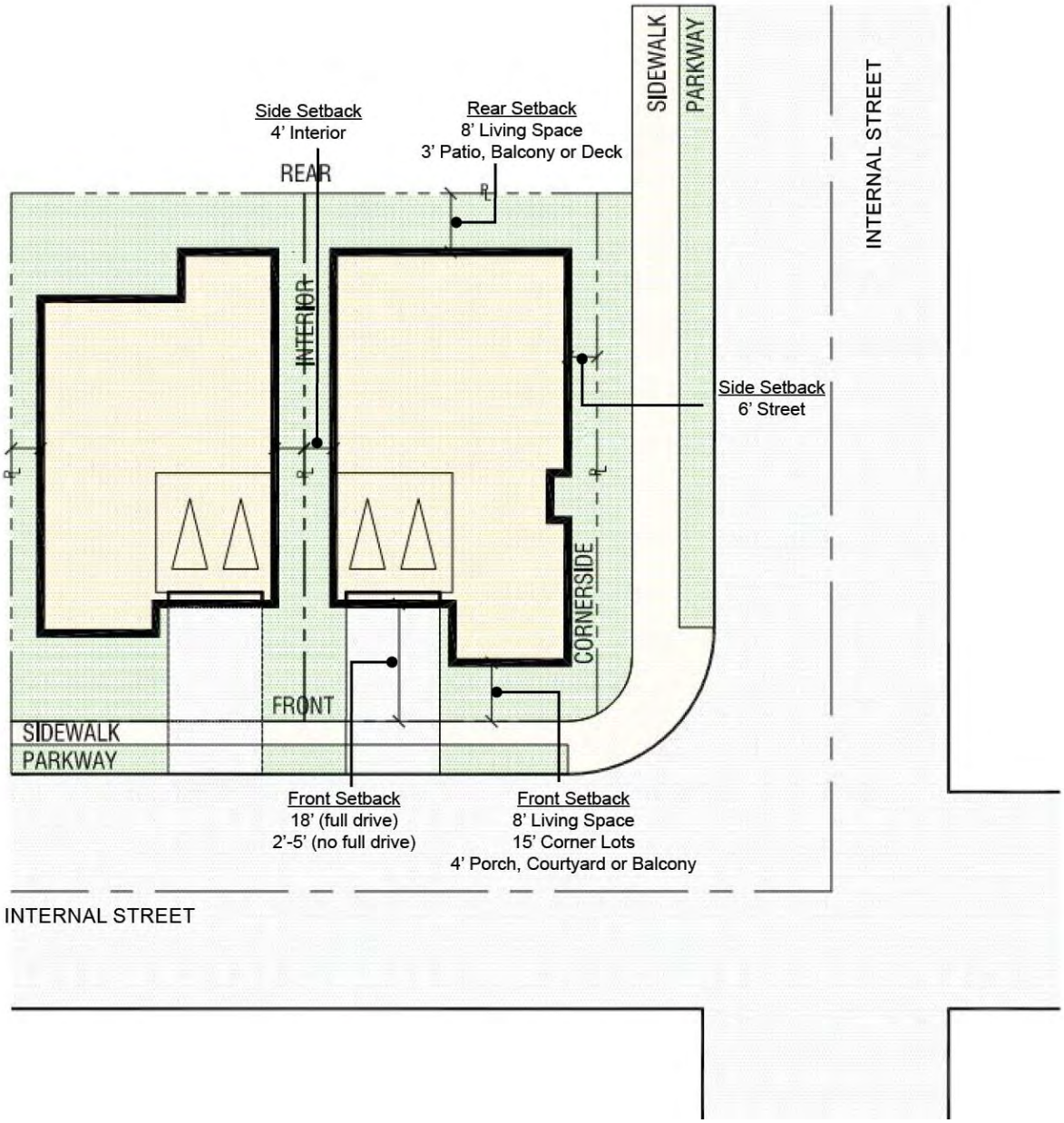
The development standards provided in Table 4-2 have been established to encourage forward-facing living space. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.3. These standards allow for the placement of entries, windows, front porches and living spaces closer to the street to provide more active and visually interesting streetscape.

Table 4-2:Conventional SFD Residential Development Standards

	Conventional SFD Homes
Minimum Lot Size	2,500 sq. ft.
Minimum Lot Width[1]	40'
Maximum Building Coverage	70%
Maximum Building Height	50' (3 stories)
Minimum Front Setback (from Property Line)	
Living Space	8' (15' at the corner lots)
Porch, Courtyard or Balcony	4'
Front Entry Garage	18' (full driveway)/ 2'-5' (no full driveway)
Minimum Side Setback (from Property Line)	
Interior Side	4'
Internal Street Right-of-Way Side	6'
Minimum Rear Setback (from Property Line)	
Living Space	10'
Patio Cover, Balcony or Deck	3'

[1] The minimum lot width for knuckle and cul-de-sac lots shall be the average of the widths measured at the front and rear edges of the lot

Figure 4.3 Conventional SFD Residential Setback Diagram



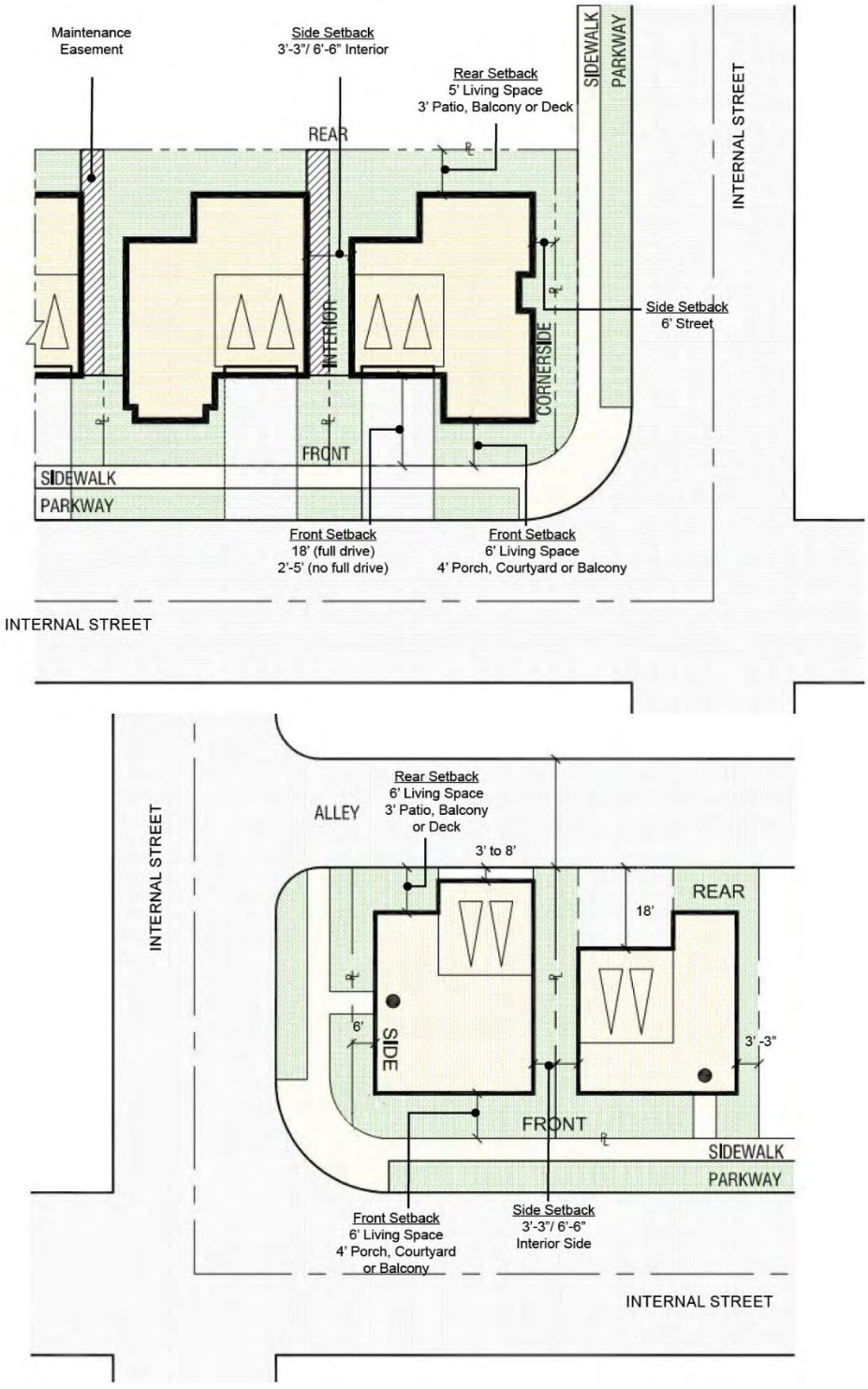
4.1.2.2. Zero-Lot Line and Rear Loaded SFD Residential

Table 4-3 establishes the development standards for front loaded zero-lot line and rear loaded SFD residential development. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.4. Note: Zero-Lot Line Homes may be front or rear loaded. In the event that a rear-loaded Zero-Lot Line Home is proposed, the Rear-Loaded Homes standards shall apply (with a maintenance easement for the side yard).

Table 4-3: Zero-Lot & Rear Loaded SFD Residential Development Standards

	Zero-Lot Line Homes	Rear Loaded Homes
Minimum Lot Size	2,500 sq. ft.	2,000 sq. ft.
Maximum Building Height	50' (3 stories)	50' (3 stories)
Maximum Building Coverage	70%	70%
Minimum Front Setback (from Property Line)		
Living Space	6'	6'
Porch, Courtyard or Balcony	4'	4'
Front Entry Garage	18' (full driveway/2'- 5')	N/A
Minimum Side Setback (from Property Line)		
Interior Side (one side/between buildings)	3'/6'	3'/6'
Internal Street Right-of-Way Side	6'	6'
Minimum Rear Setback (from Property Line)		
Living Space	5'	5'
Patio Cover, Balcony or Deck	3'	3'
Rear Entry Garage Setback (from Access Drive)	N/A	3' to 8' or 18' min.

Figure 4.4 Front Loaded Zero-Lot & Rear Loaded SFD Residential Setback Diagrams



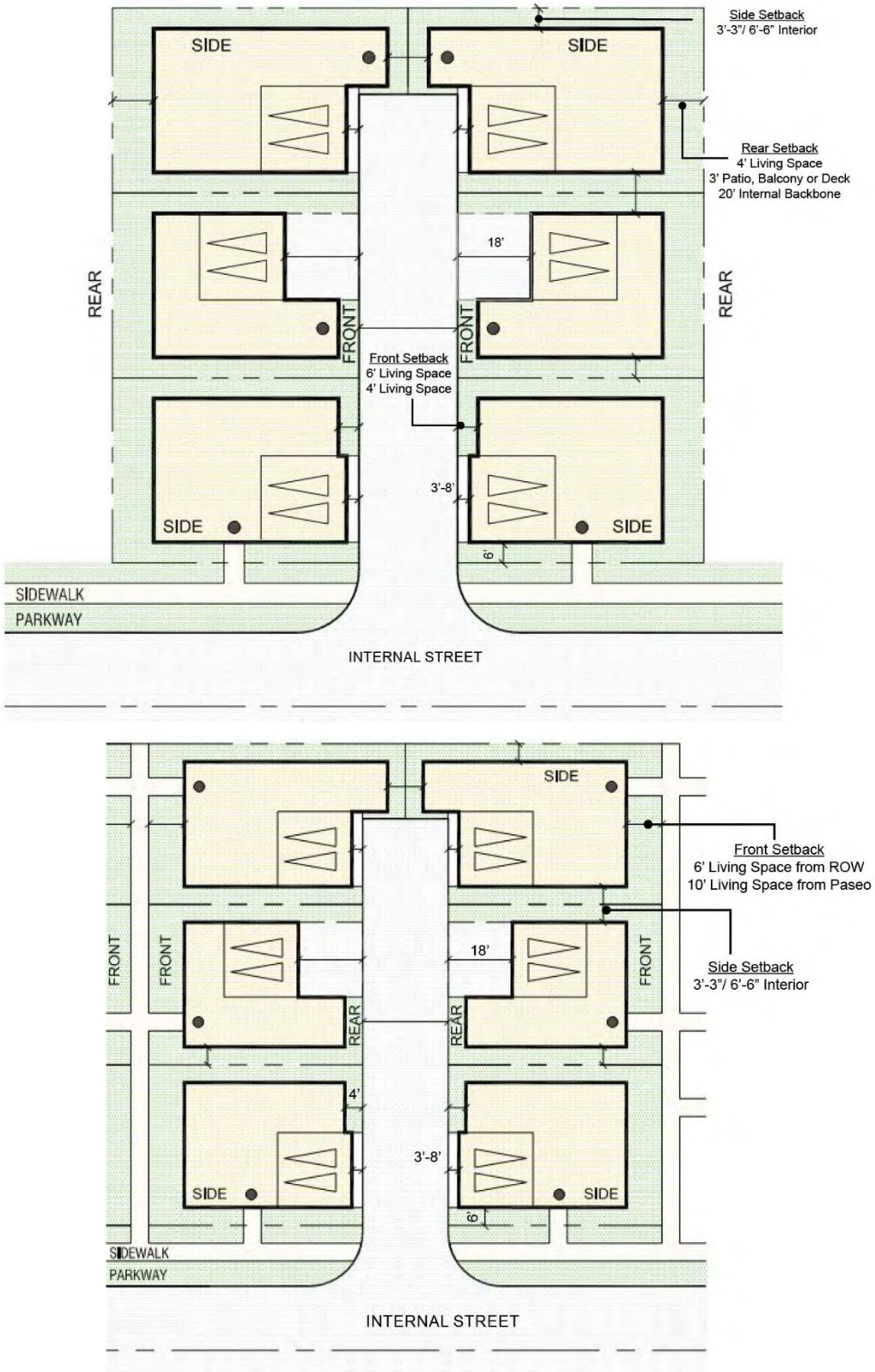
4.1.2.3. Detached Cluster Residential Development

Table 4-4 establishes the development standards for detached cluster residential development. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.5.

Table 4-4:Detached Cluster Home Development Standards

	Front-Loaded Cluster Homes	Rear-Loaded Cluster Homes
Minimum Lot Size	1,500 sq. ft. (or Condo Map)	1,500 sq. ft. (or Condo Map)
Maximum Building Height	50' (3 stories)	50' (3 stories)
Maximum Building Coverage	70%	70%
Minimum Front Setback		
Living Space from Internal Street Right-of-Way	6'	6'
Living Space from Access Drive	4'	N/A
Living Space from Paseo Walkway	N/A	10'
Minimum Side Setback		
Interior Side (one side/between buildings)	3'-3"/6'-6"	3'-3"/6'-6"
Internal Street Side (from internal street right-of-way)	6'	6'
Minimum Rear Setback (from Lot Line)		
Living Space	4'	4'
Patio Cover, Balcony or Deck	3'	N/A
Garage Face from Access Drive	3' to 8' or 18' min.	3' to 8' or 18' min.

Figure 4.5 Detached Cluster Home Setback Diagram



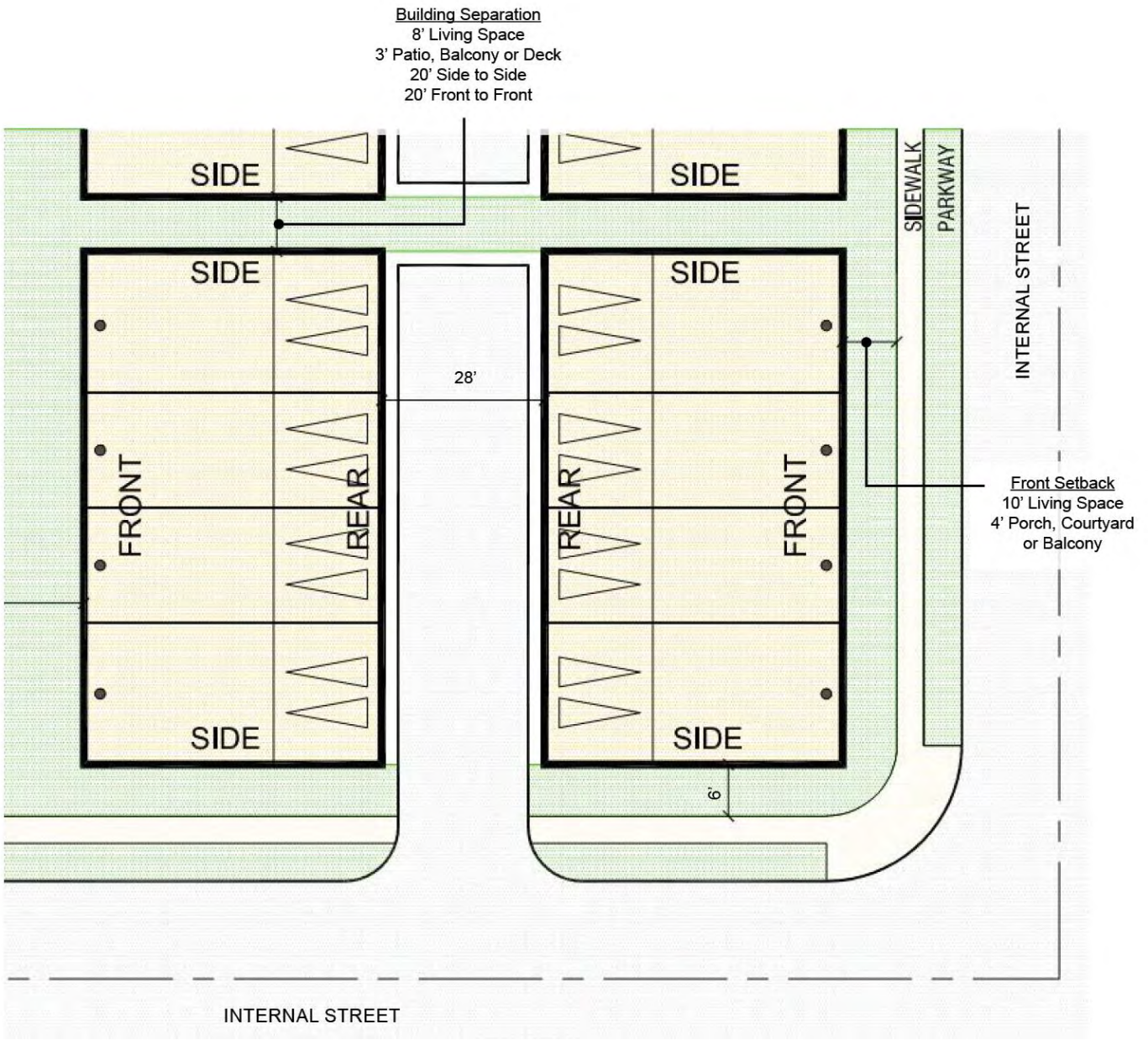
4.1.2.4. Row Townhomes

Table 4-5 establishes the development standards for row townhomes. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.6.

Table 4-5:Row Townhome Development Standards

	Row Townhomes
Minimum Parcel Size	1 ac
Maximum Site Coverage	N/A
Maximum Building Height	50' (3 stories)
Minimum Front Setback (from Internal Street Right-of-Way)	
Front Living Space	10'
Porch, Courtyard or Balcony	4'
Minimum Side Setback (from Internal Street Right-of-Way)	
Street Side	6'
Minimum Building Separation	
Living Space	8'
Patio Cover, Balcony or Deck	3'
Front to Front (entries) - at open space	20'
Side to Side with entries	20'
Garage Door to Garage Door at Alley	28'

Figure 4.6 Row Townhome Setback Diagram



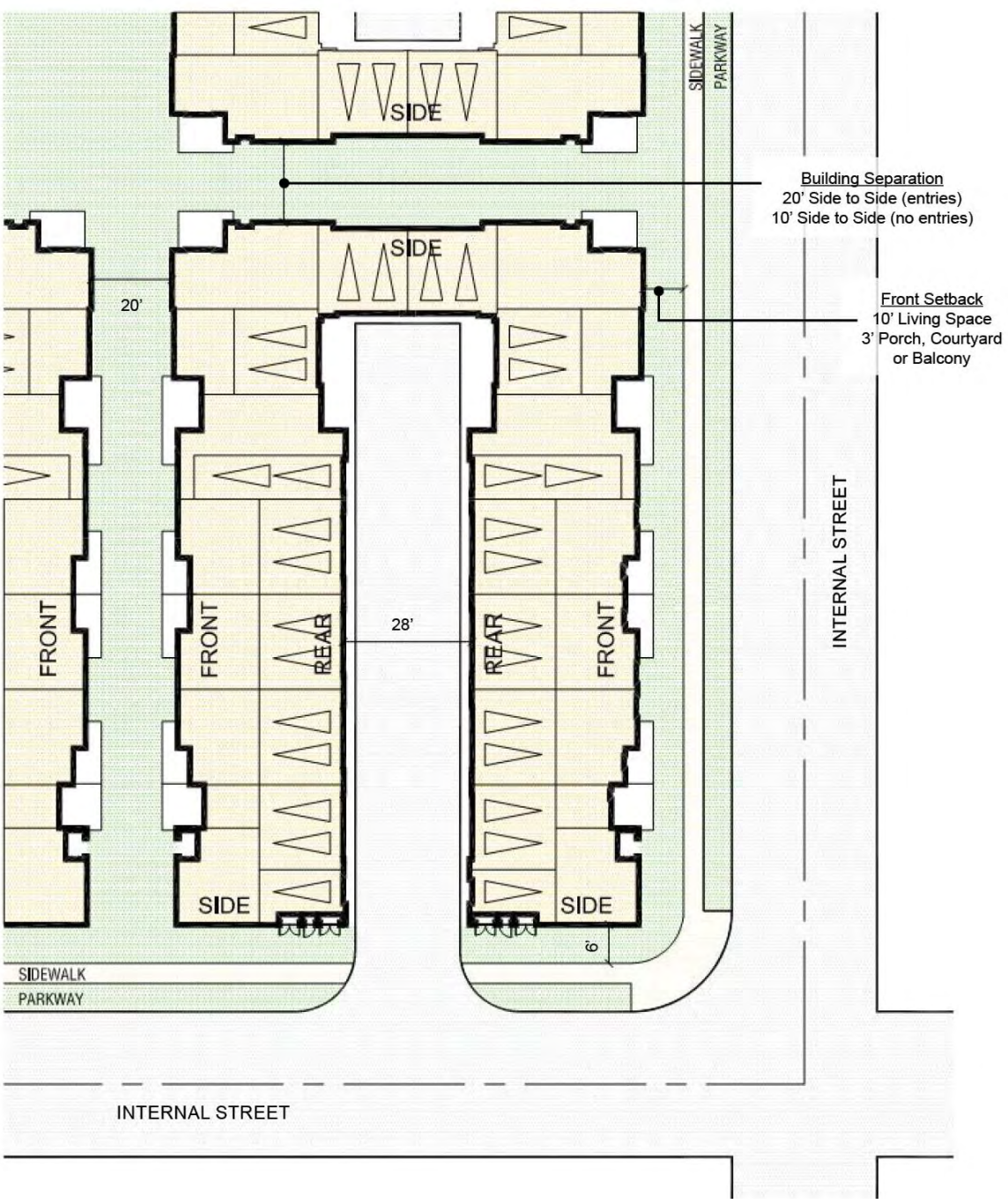
4.1.2.5. Attached Motorcourt Homes

Table 4-6 establishes the development standards for attached motorcourt homes. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.7.

Table 4-6: Attached Motorcourt Home Development Standards

	Attached Motorcourt Homes
Maximum Site Coverage	75%
Maximum Building Height	50' (3 stories)
Minimum Front Setback (from Internal Street Right-of-Way)	
Front Living Space	10'
Porch, Courtyard or Balcony	3'
Minimum Side Setback (from Internal Street Right-of-Way)	
Street Side	6'
Minimum Building Separation	
Front to Front (entries) - at open space	20'
Side to Side (entries)	20'
Side to Side (no entries)	10'
Garage Door to Garage Door at Alley	28'

Figure 4.7 Attached Motorcourt Home Setback Diagram



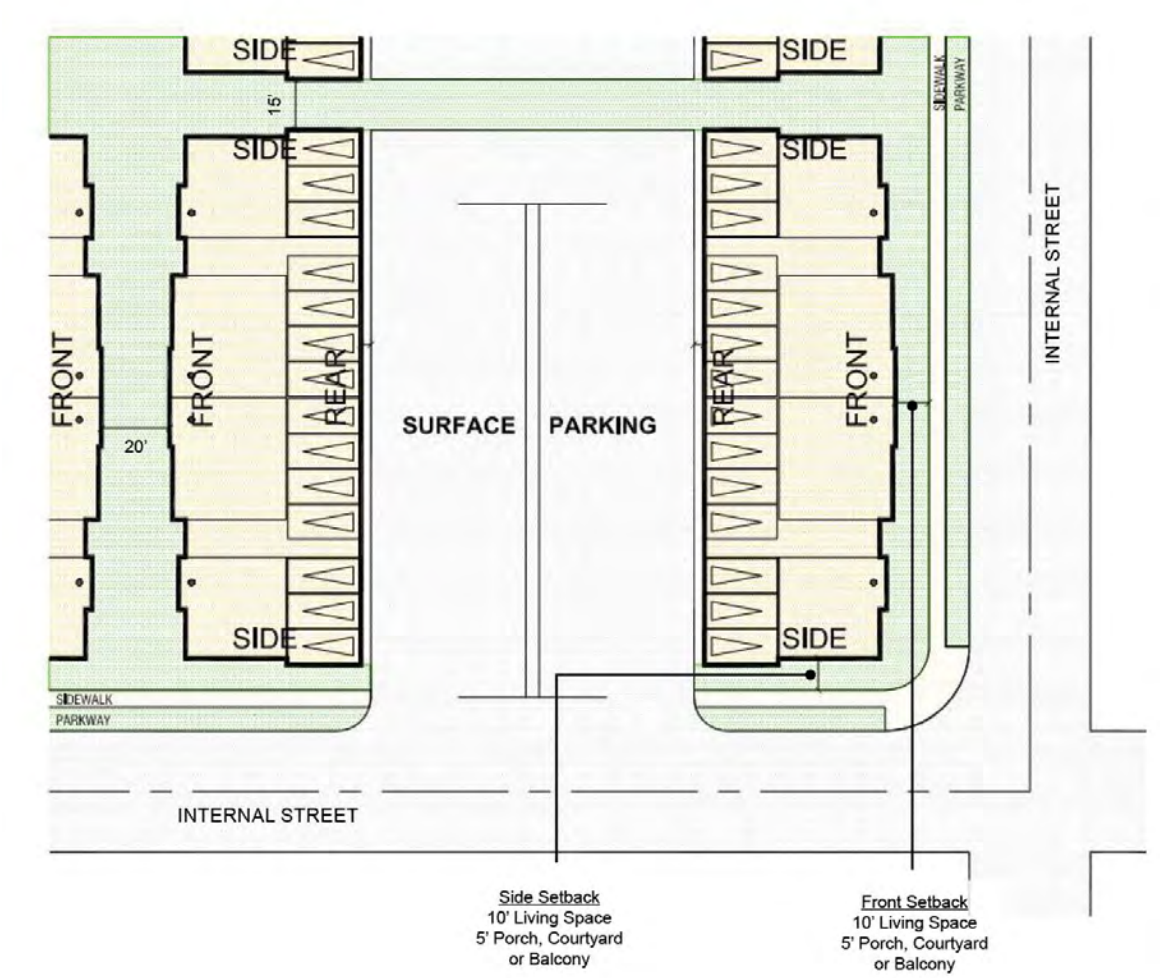
Apartments/Flats

Table 4-7 establishes the development standards for residential apartments/flats. A conceptual plotting example illustrating the setback requirements is shown in Figure 4.8.

Table 4-7: Apartments/Flats Development Standards

	Apartments/Flats
Maximum Site Coverage	75%
Maximum Building Height	65' (4 stories)
Minimum Front Setback (from Internal Street Right-of-Way)	
Front Living Space	10'
Porch, Courtyard or Balcony	3'
Minimum Side Setback (from Internal Street Right-of-Way)	
Living Space	10'
Porch, Courtyard or Balcony	5'
Minimum Building Separation	
Front to Front (entries) - at open space	20'
Side to Side (no entries) - at open space	15'

Figure 4.8 Apartments/Flats Setback Diagram



4.1.3. Public Facility Standards

PA 14 is a public-institutional planning area for a fire station located at the southeast corner of Scholar Avenue and 58th Street.

- Maximum Building Height: None.

4.1.4. Parks and Open Space Standards

The Parks and Open Space (P/OS) District includes Panning Areas J through V. Planning Areas J, K, and L are parks and Planning Areas M through V are trails and open space areas. Planning Area J (PA J) is a village green located between PA 5 and 3, which could be used for community events, such as concerts, movies, art fairs, farmers markets, etc. Planning Area L (PA L) is adjacent to PA 6 and 8 and planned for a community park. Planning Area K (PA K) is adjacent to PA 7 and 12 and is planned as a private recreation facility for the residents of the Leal Master Plan.

- Parking Area Setback from Internal Backbone Street Right-of-Way: 10'
- Building and Structure Setback from Internal Backbone Street Right-of-Way: 6'
- Maximum Building Height: 40' (2 stories); 15' for accessory structure

4.1.5. Allowable Projections and Encroachments

An encroachment is a permitted allowance into a ground-floor or upper-level setback. A projection is an element that is allowed to project above the height limit. In all cases, all encroachments and projections shall comply with the California Building Code (CBC), as well as other applicable codes and regulations such as the American Disability Act. The permitted encroachments and projections are discussed below.

A. Detached accessory buildings, including garages, or parking spaces required in the absence of garages, may occupy not more than 25 percent of a required rear or interior side yard, provided such building is not more than 15 feet in height and the wall of such building or parking space is located not less than 6 feet from the nearest wall of a main building on the same lot or a contiguous lot.

B. A breezeway connecting a main building to another building may be permitted. Such breezeway shall remain open on one side and shall not be considered part of a main building.

C. A covered patio, attached or unattached, which is enclosed on not more than 3 sides may encroach into any setback provided the distance between the property line and the patio at the nearest point is not less than 6 feet.

D. Eaves, cornices, canopies, belt courses, sills, buttresses, bay windows, planter boxes, light fixtures, or other similar architectural features may encroach into any required setback, provided such extensions shall not be nearer than 2 feet to any property line. Where more than one building is located on the same lot or parcel, such features shall not be nearer than 2 feet to a line midway between the main walls of such buildings. Chimneys and fireplaces may encroach into any setback not more than 2 feet, provided such chimneys or fireplaces shall not be nearer than 3 feet to any property line. Where more than one building is located on the same lot or parcel, such chimneys or fireplaces shall not be nearer than 3 feet to a line midway between the main walls of such buildings.

E. Open, unenclosed stairways or balconies not covered by roofs or canopies may encroach into any setback not more than 3 feet.

F. Uncovered porches, platforms, or landings which do not extend above the level of the first floor of the building may encroach into any setback not more than 6 feet; provided, however, an open-work railing, glass or glass like material, no more than 3 ½ feet in height may be installed or constructed on such porch, platform, or landing.

G. Open-work fences, hedges, guard railings, or other landscaping or architectural devices for safety protection around depressed ramps may encroach into any required setback provided such devices are not more than 3 ½ feet in height.

H. Fences and walls, pursuant to Section 5.3 of the Eastvale Zoning Code.

I. Signs may project and/or encroach into any required setback or public right-of-way, subject to applicable requirements in this Master Plan and the Eastvale Zoning Code.

J. Landscape elements such as benches, fountains, and other decorative features may encroach into any setback, provided they do not obstruct any path of travel or intersection visibility requirements per the Eastvale Zoning Code.

K. Mechanical equipment may encroach into any required setback area up to the property line, provided the equipment is screened by landscape or material (e.g. wall) to the maximum extent feasible and allowed by the applicable utility provider.

L. Stairwells, elevator penthouses, mechanical equipment, and roof attachments such as flagpoles, towers, wireless masts, television antennas, and similar diminutive roof attachments, may project above the height limits set forth within the Leal Master Plan, provided such projections shall not exceed 20 feet above the prescribed height limit.

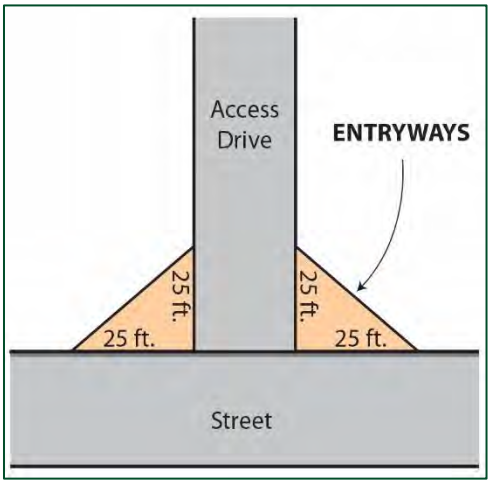
M. Parapets, security railing, and other appurtenances on a flat roof may project above the height limits set forth within the Leal Master Plan,

provided such appurtenances shall not exceed forty-two (42) inches above the prescribed height limit.

4.2. COMMUNITY FEATURES STANDARDS

Community features such as entry monuments, parks, and trails are significant components in the Leal Master Plan. The development and design standards for entryway statements shall be consistent with Chapter 2, Project Character, of this Master Plan and the following:

A. Entryways into the Master Plan shall be identified with special gateway treatments to announce arrival into the project area. The minimum sizes of each are shown in the figures below.



B. Entryway feature treatments may include public art and/or special architectural elements such as sculptures, signage, or enhanced landscaping. All entry points shall be defined through the use of landscaping, trees, and/or architectural elements.

C. Entryway statements shall satisfy the design guidelines provided in the Eastvale Design Standards and Guidelines.

D. Entryways should be designed to provide a clear sense of arrival and set the tone for the overall design quality in Eastvale.

4.3. PARKING

4.3.1. Parking Requirements

Vehicular and bicycle parking shall comply with the parking standards and requirements listed in Table 4-8, *Parking Requirements*, below.

Table 4-8: Parking Requirements

USE TYPE	PARKING REQUIREMENTS
General Commercial/Retail Uses	
General Retail including, but not limited to, neighborhood, community and regional shopping centers, including those with restaurants[1]	4 spaces/1,000 sq ft. of net leasable floor area, except where reduced through a shared parking and/or TDM (see Section 4.3.4)
Professional Business Offices	3 spaces/1,000 sq. ft. of net leasable floor area
Breweries, Wine Blending Businesses and Distilleries	2 spaces/3 employees on the largest shift plus 1 parking space per 100 square feet of tasting area.
Medical Uses	
Medical and Dental Offices, Clinics, and Medical Business Offices	4 spaces/1,000 sq. ft. of net leasable floor area
Civic Uses	
Civic Center, Police Station, Fire Station and the like	3 spaces/1,000 sq. ft. of net floor area. Areas devoted to storage, hallways, restrooms, utility rooms and the like shall not be included within this calculation.
Residential Uses	
Single Family Detached Residential - Conventional SFD, Front-loaded Zero-lot Line SFD, Rear-loaded SFD, and Detached Cluster Homes	1 space/unit within a garage, 1 open space/unit within the lot
Attached Residential - Row Townhomes and Attached Motorcourt Homes	1-bedroom or studio unit: 1.25 spaces/unit 2-bedroom dwelling unit: 1.5 spaces/unit 3+ bedroom dwelling unit: 2.0 spaces/unit
Attached Residential – Apartments and Flats, Residential Units in Mixed-Use Residential Buildings	1-bedroom or studio unit: 1.25 spaces/unit 2-bedroom dwelling unit: 1.5 spaces/unit 3+ bedroom dwelling unit: 2.0 spaces/unit

[1] For designated outdoor dining areas, no parking spaces are required for the first 500 square feet. Any outdoor dining area that is more than 500 square feet in size shall provide 1 space per 100 square feet for the area beyond 500 square feet.

Parking requirements for uses not indicated in Table 4-8, *Parking Requirements*, shall be reviewed and approved by the Community Development Director. Uses not specified shall be compared to a similar use or uses that could satisfy the minimum parking demand. When there is no similar use in Table 4-8, *Parking Requirements*, parking requirements found in Section 5.6 of the Eastvale Zoning Code shall apply or a parking study prepared by a firm acceptable to the Community Development Director shall be submitted that provides justification, and data supporting the proposed minimum parking requirement.

Parking may be shared within the Leal Area Master Plan, with some limitations. Figure 4.9, Parking Distribution identifies the location of where parking may be shared for residential and commercial uses within the Master Plan area.

Figure 4.9 Parking Distribution



4.3.2. On-Street Parking

On-street parking spaces immediately adjacent to and on the same side of the street of a property along the internal backbone streets may be counted toward meeting the off-street parking requirement for that property. These spaces may be parallel or angled spaces. With respect to parallel parking spaces that are not marked, each 24-foot length may be counted as one space. No credit is allowed for street frontage where parking is prohibited, such as loading zones and red curb areas.

4.3.3. Tandem Parking

Tandem parking is permitted for both residential and commercial uses within the Leal Master Plan area. Two tandem parking spaces shall have a minimum depth of 36 feet and shall meet the Development Standards for Off-Street Parking Facilities in Section 5.6 of the Eastvale Zoning Code.

4.3.4. Alternative Programs for Parking

Shared parking and other alternative programs for parking may be permitted pursuant to Section 5.6.B of the Eastvale Zoning Code.

A Parking Management Plan/Transportation Demand Management is required for all non-residential uses that increase parking demand by ten (10) parking spaces. The Parking Management Plan/Transportation Demand Management Plan may reduce the overall parking requirements by up to 25 percent, depending on the findings of said plan. This plan shall include at least the following items:

- Information related to carpooling, van pools and staggered work hours.
- Projected effectiveness of carpool, vanpool, staggered work hours or similar transportation programs.
- Proximity to public transportation facilities serving a significant portion of employees and/or customers.
- Shared parking/overlapping parking demands.
- Specific parking management programs increasing parking efficiency, such as valet parking.
- Evidence that employees and/or customers utilize on transportation alternatives on a consistent basis.

4.3.5. Parking Lot Design

The design standards for the parking area shall be consistent with the Eastvale Design Standards and Guidelines and with the following:

A. Parking lots and structures shall be designed to be functionally and visually integrated and connected. Developments on separate parcels shall provide common access and parking areas.

B. All parking areas shall be screened with landscaping and/or decorative walls from all residential developments and pedestrians along the public right-of-way.

C. Parking lots should be visually separated into smaller units with landscaping or low walls however adjacent parking lots shall be connected for vehicle and pedestrian access.

D. Different landscape design should be used to differentiate major access aisles from the rest of the parking area.

E. Common parking areas shall be landscaped with shade trees to create an attractive pedestrian environment.

4.4. SIGNAGE

Except as identified in the Leal Master Plan, signage shall conform to the applicable provisions of Eastvale Zoning Code, Section 5.7, Signs.

Downtown District: A comprehensive Sign Program for the DT District identifying the location and design standards of thematic signage elements, including the sign type, size, material, and illumination, shall receive the Community Development Director's approval prior to the installation of signs. The standards shall include design standards for signs provided in the DT District and a Master Plan Area Map, consistent the signage guidelines included in Section 2.2.10 of the Leal Master Plan.

Residential Use Districts: Signage for the Residential Use (RU) Districts identifying the signage location and design standards, including the sign type, size, material, and illumination, shall receive Community Development Director's approval prior to the installation of signs.

In addition to the sign types listed in Section 2.2.10, Signage, of the Leal Master Plan, the sign standards for the DT and RU Districts shall also address standards for the following, as applicable:

- Grand opening/coming soon signs for commercial and residential development
- For sale/lease signs for commercial and residential development
- Model home signs
- Signs on kiosks

4.4.1. General Sign Standards

The following requirements shall apply to signs within the Leal Master Plan area:

A. All signs and community monumentation in the DT District shall be included as part of an approved Sign Program.

B. Projecting Signs Clearance. A minimum eight (8) feet vertical clearance is required from the bottom of a projecting sign, marquee, blade or awning to the sidewalk or grade immediately below the sign.

C. Moving or Animated Signs. Unless otherwise permitted herein, signs that include, but are not limited to, rotating, flashing, swinging, blinking, strobing, or otherwise changing appearance are prohibited, except for signs that include time and/or temperature that are located at least 100 feet away from a residential land use District. In cases where illuminated signs display temperature and time, said sign shall receive City approval and shall include a mechanism to reduce the brightness of said sign when in proximity to a residential neighborhood. Signs, except for public service time and temperature signs, shall not be flashing, animated, or revolving in nature.

D. Sign Illumination. All signs may be internally or externally illuminated. All direct light rays from all signs shall be confined onto the site on which the sign is located and shall not shine directly upon neighboring property. All exposed raceways are prohibited. Temporary lighting, such as search or flood lights that are used on a permanent basis, are prohibited.

E. Approval of Sign Modifications. The Planning Commission may grant approval of signs that do not comply with the regulations contained in the Leal Master Plan or in the approved Sign Program.

4.4.2. Changeable Signage

A. Pageantry

Pageantry is allowed in the DT District and includes flags, pole-mounted banners, community banners over the right-of-way, kiosks, canopies, lights, directories, ground-mounted graphics, and other similar temporary or permanent (but changeable) elements. The purpose of changeable pageantry signage is to create excitement and provide a visually interesting commercial area. The intent is to allow regular changes to the pageantry elements in terms of color, design, and other visual content so the pageantry signage can look current. Pageantry signage shall comply with the following:

1) No limit on the number of permitted pageantry signs. Maximum sign area per sign face shall be 24 square feet. Maximum height of the sign shall not exceed 20 feet. Minimum setbacks for the freestanding signs shall be the same as the setbacks established for the DT District. Banners over or within the public rights-of-way do not have any size limitation, however, applicable permits from Public Works shall be obtained.

2) Pageantry may consist of murals or other decorative graphics for products sold or offered on or off the premises. All pageantry with off-premises signage must be located within the commercial portion of the project and shall be oriented towards internal uses and shall not be readily visible from properties outside of the Master Plan area.

3) Pageantry may be located in any portion of the DT District, except that pageantry shall not be located at least 20 feet from the curved portion of the street corner to maintain visibility for motorists.

4) Air-inflated signs, moving signs, paper, cardboard, freestanding billboards, styrofoam, stickers, and decals are not acceptable forms of pageantry (directories and kiosks excepted).

5) Pageantry shall not include flashing, flickering, rotating, or moving lights.

6) Temporary promotional advertising (banners) is not considered to be pageantry.

7) Kiosks and directories should provide vertical breaks in the sign structure.

8) Individual panels shall be recessed, framed, or treated to avoid a flat appearance of the sign face.

B. Marquee Signs

The height of manual letters located on a marquee shall be affixed flat to the surface of the sign and shall not have a vertical height of more than 2 feet and shall not extend vertically or horizontally beyond the marquee. An electronic marquee display is permitted, provided that the individual letters shall not have a vertical height of more than 2 feet.

4.4.3. Exempted Signs

The following signs and/or sign structures are exempt from any sign permit requirement as identified in Section 5.7 of the Eastvale Zoning Code; provided, however, that such signs shall comply with all other applicable requirements of the Leal Master Plan and Eastvale Zoning Code.

A. Exempted signs identified in the Eastvale Zoning Code.

B. Temporary contractor's, future development and building sale signs that comply with the provisions in the Eastvale Zoning Code.

C. Public Notices and Signs. Public notices posted pursuant to law, signs erected by governmental agencies and public utilities and warning or information signs required by law for public health and safety.

D. Copy or Message on Changeable Copy Signs. The changing of advertising copy or message on bulletin boards and pageantry, where the basic board or pageantry is permitted under the provisions of this Master Plan, may be changed digitally or manually.

4.5. MASTER PLAN AREA MAPS

Large area maps should be placed at the information booths in the Downtown District. These maps could be combined with local area information/history, advertising, events calendars, etc.

4.6. LANDSCAPING

Landscaping within the Leal Master Plan area shall comply with Section 5.4, Landscaping, General Provisions, of the Eastvale Zoning Code.

5 DEVELOPMENT PROCESS

The goal of the Leal Master Plan is to encourage development of the desired development and level of quality (see Chapter 2, Project Character, and Chapter 3, Land Use Program), while allowing flexibility in the design and implementation of the project. To achieve this, a staged development process has been established which provides for the developer(s) flexibility while this document serves as a guide for the development of the project.

The intent of the staged development process is to allow prospective developers to respond to market demand by first creating a framework of development standards and design guidelines at the time of project conception instead of establishing strict requirements prior to any development being proposed for the Leal Master Plan. In the second phase, an amendment to the Master Plan will be conducted to establish development standards and enhanced guidelines, ensuring that overall design quality meets the City's goals for the project as stated in Chapter 2.

While the City intends to allow flexibility in the project design and layout through implementation of the staged development process, this Master Plan also establishes specific parameters for the design and quality of the project, which must be met by any future development.

Phasing requirements have also been established to ensure that a unifying theme for the Leal Master Plan and comprehensive project-wide plans are developed prior to any development taking place. These phasing requirements will ensure that the City's goal of a comprehensive, high-quality project may be updated.

This chapter establishes the process through which all proposed development is submitted, reviewed, and approved, including requirements for the staged development process and requirements for phasing of developments.

5.1. GENERAL PROVISIONS

The City of Eastvale shall administer the provisions of the Leal Master Plan in accordance with the City of Eastvale General Plan, the City of Eastvale Municipal Code, the Subdivision Map Act, and other applicable State and City regulations. The Master Plan development procedures, regulations, standards, and specifications shall supersede the relevant provisions of the City's Municipal Code, as they currently exist or may be amended in the future. Any development regulation and building requirement not addressed in this Master Plan shall be subject to the City's adopted codes and regulations.

5.1.1. Interpretation

In instances where any section, subsection, sentence, clause, phrase, portion or word contained within this Master Plan is undefined, unclear or vague, then the

Community Development Director, or his/her designee, shall make a determination as to its meaning and intent. The Community Development Director may elect to forward any item to the Planning Commission for final determination. Said determination shall be judged to be final.

5.1.2. Severability

If any section, subsection, sentence, clause, phrase, or portion of this Master Plan, or any future amendments or additions hereto, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Master Plan, or any future amendments or additions hereto. The City hereby declares that it would have adopted these requirements and each sentence, subsection, clause, phrase, or portion or any future amendments or additions thereto, irrespective of the fact that any one or more sections, subsections, clauses, phrases, portions or any future amendments or additions thereto may be declared invalid or unconstitutional.

5.2. STAGED DEVELOPMENT PROCESS SUMMARY

The staged development process has been established for all proposed developments in the Leal Master Plan. The process consists of the following stages:

- Stage 1, Initial Leal Master Plan
- Stage 2, Master Plan Amendment to Create Development Standards and Enhanced Guidelines
- Stage 3, Rough Grading Permit
- Stage 4, Development Plan Review
- Stage 5, Precise Grading and Building Permits

Table 5-1, Staged Development Process, illustrates these steps.

Table 5-1: Staged Development Process

Stage 1: Initial Leal Master Plan (Adopted in 2017)
• Identified Project Objectives and Project Character
• Established Permitted and Conditionally Permitted Uses and Other Development Requirements
• Outlined the Staged Development Review Process
• Amended the General Plan and Zoning Code.
Stage 2: Master Plan Amendment to Create Development Standards and Enhance Guidelines (this document)
• Refine land use and zoning designations within the Master Plan.
• Establish project-wide Land Use Plan, Circulation Plan, and Infrastructure Plans.
• Determine project-wide development standards, design guidelines and project theme.
Stage 3: Rough Grading Permit
• Tentative Tract Map (A Map) will be reviewed and approved to allow to grade the site.
• The site would be cleared and backbone infrastructure such as streets and utilities would be installed.
Stage 4: Development Plan Review
• Submittal of detailed development plans. Development Plans will be reviewed per the Leal Master Plan and the Eastvale Municipal Code, as applicable.
• Any required conditional use permits for specific uses will be reviewed and approved as provided in the Eastvale Municipal Code.
Stage 5: Precise Grading and Building Permits
• Will be reviewed and issued based on the approved Development Plan.
• May occur concurrently with Stage 4.

Stage 1: Initial Leal Master Plan

This first stage in the approval process was completed with the adoption of the Initial Leal Master Plan and the associated General Plan Amendment and Change of Zone. These approvals accomplished the following:

- Identified the project objectives and project character.
- Established permitted and conditionally permitted uses and other development requirements.
- Outlined the staged development review process.
- Created an expanded General Plan policy for the Leal Master Plan and amended the General Plan Land Use Map to show uses consistent with the new Leal Master Plan policy.
- Amended the Zoning Code to provide for the creation and adoption of Master Plans (including this Master Plan) and amended the Zoning Map to reflect the Leal Master Plan.

The Stage 1 process also included the certification of a Final Environmental Impact Report (FEIR), which provided an analysis of the impacts of this Master Plan.

Stage 2: Master Plan Amendment to Create Development Standards and Enhance Guidelines

Stage 2 prepares project-wide development criteria and guidelines which are not included in the Initial Master Plan. The 2022 Amendment conducts this phase. The submittals required in Stage 2 will amend the initial Master Plan to:

- Refine land use and zoning designations within the Master Plan.
- Establish project-wide land use plan, circulation plan, and infrastructure plans.
- Determine project-wide development standards and design guidelines.
- Establish the project theme.
- Refine the permitted and conditionally permitted uses to better reflect anticipated, future development trends.

The submittal of the Stage 2 materials triggered additional environmental review in the form of an Addendum to the Leal Master Plan EIR, which concluded that no new or more severe impacts would occur as a result of the State 2 submittal. The Addendum to the Leal Master Plan EIR prepared for this stage established land use intensity limits within this Master Plan.

Stage 3: Rough Grading Permit

In Stage 3, rough grading permit(s) will be reviewed and issued pursuant to an approved Tentative Tract Map and established grading permit processes in the

City of Eastvale. This phase will consist of clearing the site and installing backbone infrastructure.

Stage 4: Development Review

Stage 4 will consist of the submittal of specific development projects through the Development Review process established in the Leal Master Plan and in the Eastvale Zoning Code, as applicable. During this stage, any required Conditional Use Permits for specific uses will be reviewed and approved as provided in the Eastvale Zoning Code.

Table 5-2, Development Process Approvals, is intended to clarify the process of entitlement through the City of Eastvale for various applications and actions. Table 5-2 applies only to future developments being implemented within the Leal Master Plan area.

Table 5-2: Development Process Approvals

	Action Required By:		
	Community Development Director	Planning Commission	City Council
Development Plan Review and Conditional Use Permits		X	
Master Plan – Interpretations	X		
Master Plan – Minor Adjustments	X		
Master Plan – Amendments		X	X
Tentative Tract Map		X	

The following administrative provisions apply to the implementation of development applications (e.g., Development Plan Reviews) for future developments within the Master Plan area:

A. No vertical development shall occur or building permits issued within the Master Plan area until the proposed development is reviewed by the City's Planning Division and found to be consistent with the adopted Master Plan. Criteria for review and approval of proposed development shall include, but not be limited to, the following:

   i. Conformance with the land use program;

   ii. Conformance with the specific development standards, goals, and policies of the Master Plan; and

B. All Tentative Tract or Parcel Maps shall be consistent with this Master Plan.

Stage 5: Precise Grading and Building Permits

Finally, grading and building permits will be reviewed and issued based on the approved development plans. This process may occur concurrently with Stage 3, pursuant to existing permit processes in the City of Eastvale.

5.3. STAGED DEVELOPMENT PROCESS SUBMITTAL REQUIREMENTS

The following sections describe the items that must be submitted at various points in the development process. Since Stages 1 and 2 were completed with the adoption of the Master Plan and subsequent amendment, no submittal requirements apply and are therefore not shown here.

5.3.1. Stage 1: Initial Leal Master Plan

The Leal Master Plan is the implementing mechanism for the MP (Master Plan) zone district for the Leal property. It sets the vision for development of the project site, assigns a land use program, establishes development standards, and outlines the process by which the property will develop, and the Master Plan will be implemented. As noted above, there are no submittal requirements for Stage 1, which was completed with the adoption of the initial Master Plan.

5.3.2. Stage 2: Master Plan Amendment to Create Development Standards and Enhance Guidelines

The Master Plan Amendment establishes the project-wide development plan components and development standards/enhanced guidelines. As noted above, there are no submittal requirements for Stage 2, which was completed with the adoption of the Master Plan Amendment. Future amendments or adjustments to the Master Plan are discussed in Section 5.4, Master Plan Adjustments and Amendments.

5.3.3. Stage 3: Rough Grading Permits

Submittals of rough grading permits for development within the Leal Master Plan area shall be pursuant to the submittal requirements and procedures established by the City of Eastvale Community Development Department.

5.3.4. Stage 4: Development Review

Each development within the Leal Master Plan must submit a development entitlement application to the City of Eastvale Planning Division for review per the Major or Minor Development Review provisions of the Eastvale Zoning Code (Section 2.1).

5.3.5. Stage 5: Precise Grading and Building Permits

Submittals of precise grading and building permits for development within the Leal Master Plan area shall be pursuant to the submittal requirements and procedures established by the City of Eastvale Community Development Department.

5.4. MASTER PLAN ADJUSTMENTS AND AMENDMENTS

5.4.1. Minor Adjustments to the Master Plan

Minor adjustments to the plans, guidelines, regulations, and standards contained in the adopted Master Plan be approved at the discretion of the Community Development Director, or his/her designee; provided, however, that such deviations are deemed to be in substantial conformance with this Master Plan and are not detrimental to the public health, safety, and welfare. Minor adjustments to the Master Plan must be consistent with the purpose and intent of the originally approved Master Plan. Any decisions made by the Community Development Director may be appealed to the Planning Commission. Decisions of the Planning Commission may be appealed to the City Council. Decisions by the City Council shall be deemed final.

All minor adjustments must comply with the following findings:

A. The total number of dwelling units within the Leal Master Plan area shall not exceed 2,500 dwelling units.[1]

B. The total gross leasable commercial area (office, retail, city hall, library, police station etc.) within the Leal Master Plan shall not exceed 595,000 square feet.[1]

C. The public health, safety, and welfare shall not be jeopardized by the proposed adjustments.

D. No potentially significant environmental impacts are expected to occur as a result of the proposed adjustments, unless if the significant impacts have already been analyzed in a previously environmental document.

E. Substantial conformance to the design guidelines included in Chapter 2, Project Character.

The following modifications constitute "minor adjustments" to the approved Master Plan and may be approved without amending the Master Plan.

A. Slight modifications to the Master Plan area boundaries, as shown in Figure 3.1, Land Use Plan, that respond to more accurate or recent data or actual on-site conditions.

[1] As established by the Leal Master Plan EIR Addendum to avoid new or more severe significant impacts.

B. Minor adjustments to a development standard or intensity limitation not exceeding 20%.

C. Modifications to individual park sizes, provided a total of 14.06 acres is provided for parks or open space.

D. Minor changes to the circulation concept to accommodate actual conditions on-site or modify ingress and egress locations, or to respond to new information that was not available at the time the Master Plan was approved.

E. Minor changes to the design of the street cross sections, provided that the streets have adequate capacity to handle the anticipated volumes of traffic and the design changes are deemed acceptable by the City's Traffic Engineer.

F. Modifications to the Master Plan that allow the Project master developer to move and adjust components of the plan; provided, however, that a plan is submitted to the City and reviewed and approved by the Community Development Director, or his/her designee, and the City Engineer. The plan shall depict the location of all land uses and the relationships of the uses to one another. In evaluating the plan, all of the following conditions must be met for the site plan to be approved:

   i. A maximum of 2,500 dwelling units and 595,000 square feet of commercial gross leasable area (which does not include any civic or public facility uses) shall be allowed within the Master Plan area.[2]

   ii. The land use modifications would not result in any new environmental impacts that were not previously assessed in the approved California Environmental Quality Act (CEQA) documentation for the Master Plan.

G. Minor modifications to the architectural or landscape design guidelines included in Chapter 2. *Project Character*.

H. Minor modifications to the water, sewer, and/or drainage plan(s).

I. Any modifications to the Master Plan phasing.

[2] As established by the Leal Master Plan EIR Addendum to avoid new or more severe significant impacts.

5.4.2. Master Plan Amendments

A. The Project master developer, property owner, or designee shall have the authority to initiate an amendment to the adopted Master Plan at any time. No authorization by City staff, the Planning Commission, or the City Council shall be necessary to initiate a Master Plan Amendment for The Leal Master Plan area. However, the City shall be the approving authority of any requested amendments.

B. Said amendment shall not require a concurrent General Plan Amendment unless it is determined by the City of Eastvale that the proposed amendment would substantively affect the General Plan goals, objectives, policies, or programs for the Leal Master Plan area.

C. All Master Plan Amendments shall be subject to the requirements of CEQA and any applicable City of Eastvale environmental guidelines.

D. The Planning Commission shall review at a noticed public hearing all proposed amendments to the adopted Master Plan. Upon the close of the required public hearing, the Planning Commission shall act by resolution to recommend to adopt, reject, or modify the proposed Master Plan Amendment and forward its recommendation and findings to the City Council for action.

E. The City Council, at a noticed public hearing, shall review the Planning Commission's findings and recommendations. Upon the close of the required public hearing, the City Council shall act by resolution to adopt, reject, or modify the proposed Master Plan Amendment.

F. Prior to approving or conditionally approving any Master Plan Amendment, the Planning Commission and City Council must make the following findings regarding the Amendment:

   i. It is consistent with the goals and policies of the City of Eastvale General Plan;

   ii. It is consistent with the vision, purpose and intent of the Master Plan;

   iii. Results in development of desirable character that will be compatible with existing and proposed development in the surrounding neighborhoods; and

   iv. Respects the aesthetic assets of the community consistent with economic realities.

6 IMPLEMENTATION PLAN

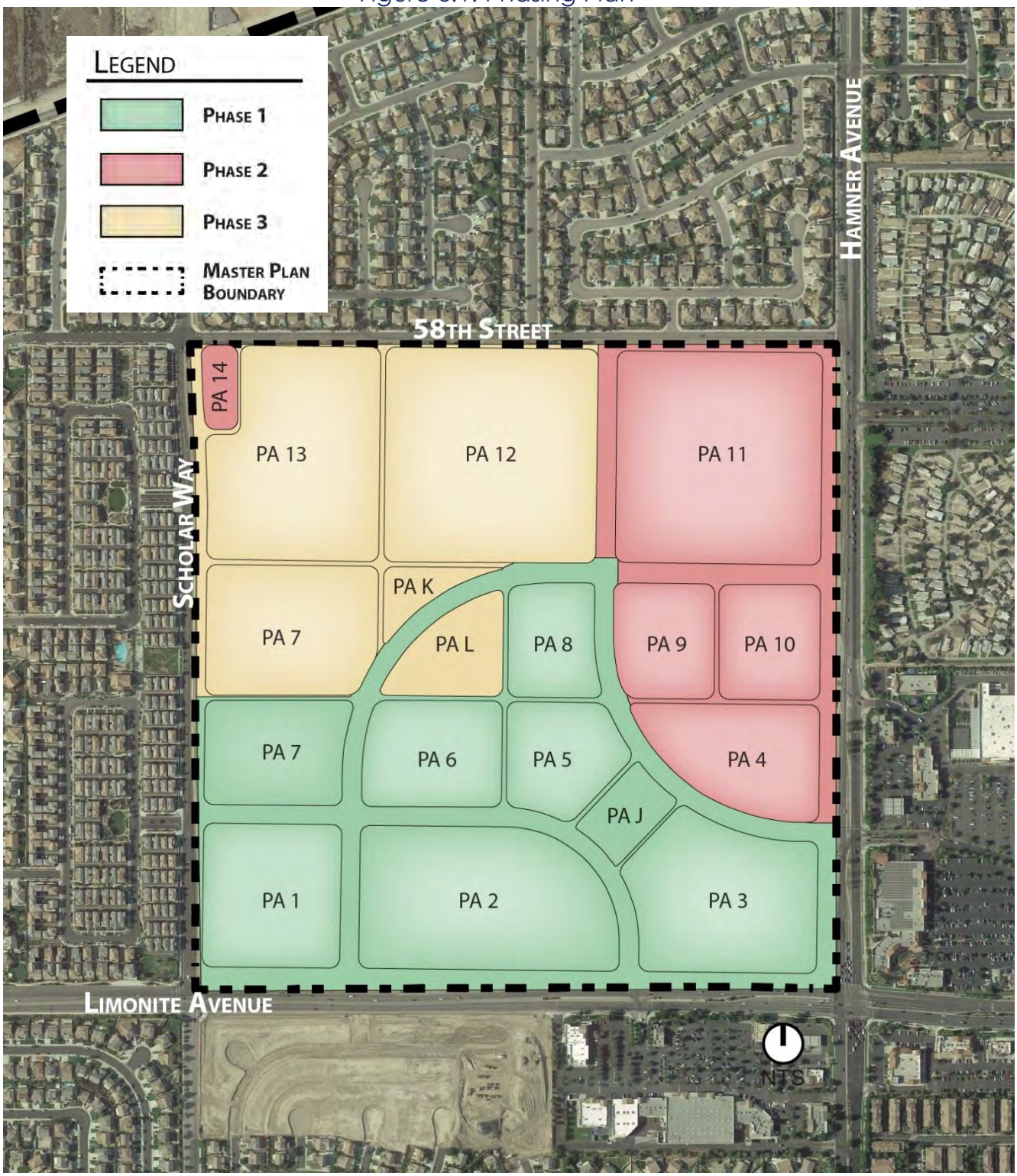
This chapter describes the implementation of this Master Plan, including the phasing of infrastructure and development. Information on the administration of this Master Plan can be found in Chapter 1.

6.1. PHASING

A conceptual Phasing Plan is shown in Figure 6.1. Phasing of the infrastructure as described below shall begin along Limonite Avenue and move north through the project site. The development of uses and the boundaries of each phase will be determined by market forces[1] and the developer(s) of the property, however phasing of residential uses shall be such that several different types of housing shall be offered concurrently.

[1] Since phasing is tied to market conditions, changes to the conceptual phasing plan do not require administrative approval. The Phasing Plan provides information only and is not regulatory. Phasing is at the sole discretion of the developer and may adjust according to market conditions.

Figure 6.1: Phasing Plan



Source: Hunsaker & Associates

6.2. INFRASTRUCTURE COORDINATION

To ensure that infrastructure is developed in a coordinated way and so that all phases of development will have sufficient infrastructure capacity, the following requirements are imposed. Should the project be developed in a single phase, all infrastructure will be installed in the first phase.

The following requirements relate to the coordination of infrastructure with development of uses:

1) Backbone Sewer/Water/Storm Drain Infrastructure – This infrastructure must be developed in conjunction with each phase of development as shown in Figure 6.2. Preparation of an infrastructure plan for backbone water/sewer/drainage infrastructure is a required Stage 3 component (see Chapter 5, Development Process).

   Backbone water/sewer/storm drainage infrastructure includes:

   - Water – Hamner and Limonite Avenues have 30-inch water mains located within the rights-of-way. Water services for the project will use these existing lines to serve the project area.
   - Sewer – Sewer service is available in all of the streets bordering the project (Hamner, Limonite, Scholar, and 58th). Sewer service inside the project area will be built to accommodate development as it proceeds and will all connect to the existing sewer in Limonite.
   - Storm Drainage – These improvements will include water quality and drainage improvements to ensure that stormwater runoff from the site does not degrade downstream environments. Integration of water quality improvements into parks, parkways, and landscaped areas is encouraged throughout the Leal Master Plan.

Figure 6.2: Water Plan



Source: Hunsaker & Associates

Figure 6.3: Sewer Plan

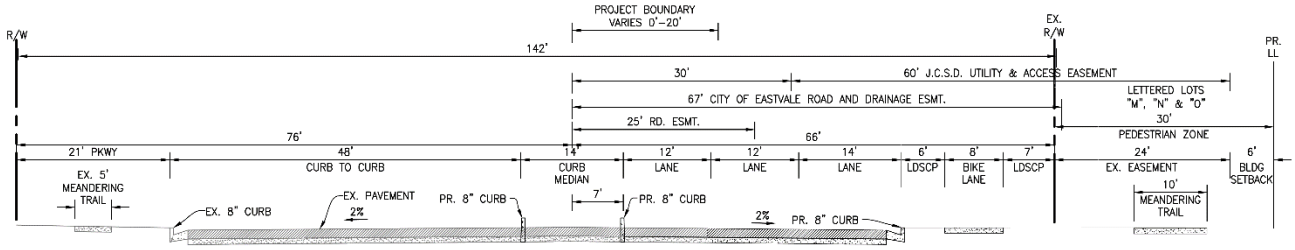


Source: Hunsaker & Associates

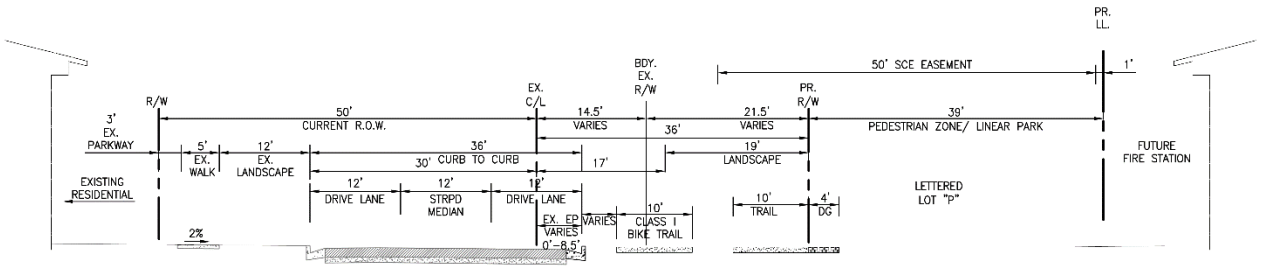
Figure 6.4: Storm Drainage Plan



2) External Circulation – Half-width public improvements to Hamner Avenue, Limonite Avenue, Scholar Way and 58th Street shall be constructed with the Phasing Plan as shown in Figure 6.1. Improvements to Scholar Way and 58th Street may be provided in the form of half-width pavement and sidewalks, with the provision that landscaping must be installed at the time that development occurs adjacent to the street. Class I trails are provided on both sides of Limonite Avenue. Class I trails are also provided on one side of Scholar Way, 58th Street and Hamner Avenue. One bike lane is provided on one side of Limonite Avenue. Bike lanes are also provided on both sides of Scholar Way.



SECTION A-A
LIMONITE AVE. PROPOSED



SECTION F-F
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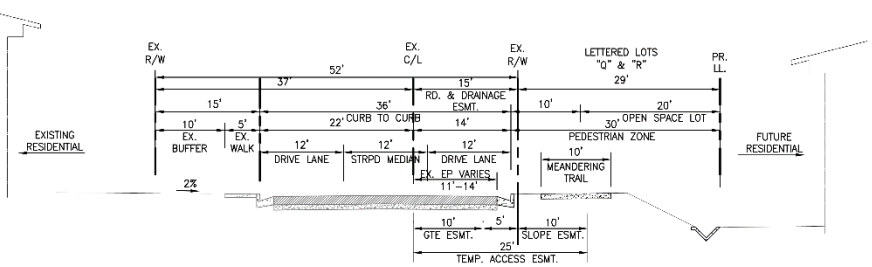

SECTION C-C
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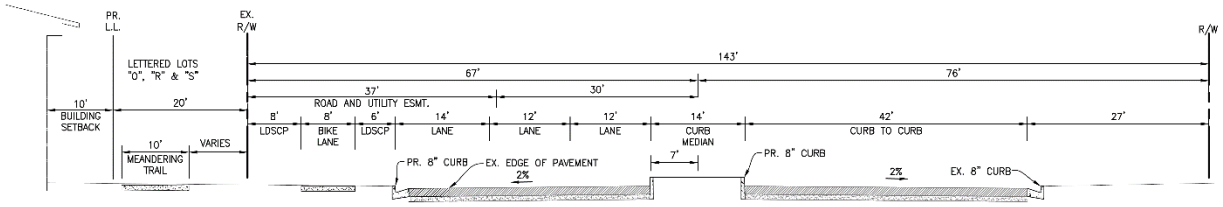
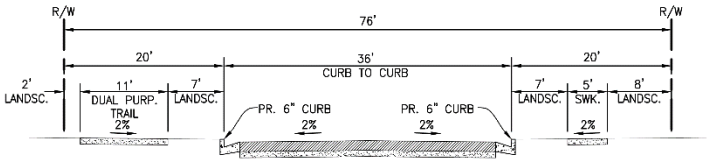


SECTION D-D
HAMNER AVE. PROPOSED

Source: Hunsaker & Associates

3) Internal Circulation – Internal roadways within the proposed phase will be constructed to provide adequate ingress/egress to all proposed development in the phase. As needed, roadways in the undeveloped portions of the site shall be constructed to provide adequate emergency access.



SECTION E-E
INTERNAL STREET PROPOSED

Source: Hunsaker & Associates

4) Major/Minor Entries – Major and minor entries shall be developed at the time that a phase containing the entry(ies) is developed. Preparation of a detailed design for both types of entries and a plan for their locations is a required Stage 3 component (see Chapter 5).

5) Signature Iconic Element (Clock-tower, art, etc.) - A unique iconic element such as an art sculpture, mural, clock-tower, or the like that helps define the project and would be unique to the City shall be provided as part of the project. The element shall be located within a publicly accessible space or at a focal point or project entry.

Additional development standards and requirements related to each increment of development are included in Chapter 4, Development Standards, and Chapter 5, Development Process.

6.3. MAINTENANCE

Successful operation of maintenance districts and associations are important in ensuring that the Master Plan area is well-maintained. Maintenance responsibilities for the open spaces, landscape areas, lighting, and common project facilities will be maintained by the homeowner association's property manager.[2] Table 6-1, Maintenance Responsibilities, identifies the maintenance responsibilities for various infrastructure and landscape improvements associated with the project.

Table 6-1: Maintenance Responsibilities

Maintenance Area	City/JCSD	HOA	POA
Internal Streets		X	
Perimeter Right-of-Way	X		
The commercial area, including any parking structures			X
Water System	X		
Sewer System	X		
Internal Storm Drainage Systems		X	
Water Quality Basins		X	
Parks and trails[3]		X	

[2] Funding for private maintenance responsibilities may occur through the homeowner's association, community facilities district, or other maintenance district.

[3] Except for Planning Area J, which will be a City-owned and maintained park.

Appendix B

LEAL MASTER PLAN AMENDMENT PROJECT
AIR QUALITY, GREENHOUSE GAS AND ENERGY IMPACT STUDY
City of Eastvale, California



LEAL MASTER PLAN AMENDMENT PROJECT
AIR QUALITY, GREENHOUSE GAS AND ENERGY IMPACT STUDY
City of Eastvale, California

Prepared for:

Mr. AJ Jarvis, President
THE NEW HOME COMPANY
15231 Laguna Canyon Rd Suite 250
Irvine, CA 92618

Prepared by:

RK ENGINEERING GROUP, INC.
4000 Westerly Place, Suite 280
Newport Beach, CA 92660

Bryan Estrada, AICP, PTP
Darshan Shivaiah, M.S

April 8, 2022

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1.0 Introduction

This report contains analyses of air quality and greenhouse gas (GHG) emissions and energy usage for the proposed Leal Master Plan Amendment Project (hereinafter referred to as project). This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.).

The methodology follows the California Air Resources Board (CARB), the South Coast Air Quality Management District (SCAQMD), and City of Eastvale recommendations for quantification of emissions and evaluation of potential impacts.

The purpose of this analysis is to review changes in air quality and GHG emissions that would occur as a result of the proposed project in comparison to the previously approved project described in the Leal Master Plan Draft Environmental Impact Report, prepared by Michael Baker International, July 2015 (hereinafter referred to as 2015 EIR).

1.1 Site Location

The proposed project site is located near the northwest corner (NWC) of Hamner Avenue and Limonite Avenue, in the City of Eastvale. The project site is bound by 58th Street to the north, Limonite Avenue to the south, Hamner Avenue to the east, and Scholar Avenue to the west.

The project site is located within the South Coast Air Basin (SCAB), the SCAQMD Riverside Valley General Forecast Area, and the Corona/Norco air monitoring area-22.

The project site is currently vacant and is zoned as the Leal Master Plan in the City of Eastvale Zoning Map. The City of Eastvale General Plan Land Use Map designates the project site as Leal Policy Area.

The project location map is provided in Exhibit A.

1.2 Project Description

The project consists of amending the Leal Master Plan to allow for the construction and operation of a total of 2,500 residential dwelling units, a 1.6 acre community recreational center, 12.5 acres of community park, and 28.17 acres of mixed use development (including a new civic center, retail/commercial and residential uses).

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The total gross site area is approximately 158.6 acres.

The buildout of the project will also include approximately 22.9 acres of roadway improvement to 58th Street, Limonite Avenue, Hamner Avenue and Scholar Way, along with new internal street improvements.

The site plan used for this analysis, provided by the HUNSAKER & ASSOCIATES, is illustrated in Exhibit B. Table 1 summarizes the land use assumptions used for this analysis.

Table 1
Land Use Summary

Land Use	CalEEMod Use	Quantity	Metric[1]	Acre
Single Family Residential	Single Family Detached	400	DU	47.148
Multifamily Residential	Townhomes/Condos	1,000	DU	35.277
	Apartments	1,100	DU	28.169
Retail	Regional Shopping Center	390.0	TSF	
General Office	General Office	65.0	TSF	
Medical Office	Medical Office Building	65.0	TSF	
Civic Center	Government (Civic Center)	40.0	TSF	11.019
Fire Station		12.2	TSF	
Police		10.0	TSF	
Library	Library	25.0	TSF	
Parking	Parking Structure	2,820.0	Spaces	
Parking	Parking Lot	978.0	Spaces	
Recreational Center	City Park	1.584	Acre	1.584
Park	City Park	12.478	Acre	12.478
On-site / Off-site Street Improvements	Parking Lot	22.9	Acre	22.917
Total				**158.592**

[1] D.U. – Dwelling units; T.S.F. – Thousand Square Feet

Construction of the project is estimated to begin in the year 2022 and last approximately 56 months. Construction activities are expected to consist of demolition, site preparation, grading, building construction, paving, and architectural coating. The construction phase length is provided by the applicant.

The project is expected to demolish approximately 67,500 square feet of the exiting on-site building structures and export approximately 340,000 cubic yards of on-site dairy waste. The project is also expected to require the import of approximately 542,000 cubic yards of earthwork materials during site grading. The project is expected to be operational in the year 2026.

1.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases.

For CEQA purposes, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24-hours or longer, such as residences, hospitals, and schools. Several sensitive land use areas are present surrounding the project site, including;

- Existing residential dwelling units located to the north, south, east and west of the project site.

The sensitive receptors are expected to be located less than 25 meters from the project site

1.4 Recommended Project Design Features

The following section provides a summary of the recommended project design features that are expected to be included in the latest project to help reduce Air Quality and GHG emissions. The recommended project design features include several standard rules and requirements, best practices and project design elements know for reducing Air Quality and GHG emissions.

Construction Design Features:

DF-1 Prepare and implement a Construction Management Plan which shall include the Air Quality design features to be submitted to the City of Eastvale for all phases of construction.

DF-2 Follow the SCAQMD rules and requirements for fugitive dust control, which includes, but are not limited to the following:

1. All active construction areas shall be watered two (2) times daily.

2. Speed on unpaved roads shall be reduced to less than 15 mph.

3. Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.

4. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.

5. All operations on any unpaved surface shall be suspended if winds exceed 15 mph.

6. Access points shall be washed or swept daily.

7. Construction sites shall be sandbagged for erosion control.

8. Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).

9. Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.

10. Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.

11. Replace the ground cover of disturbed areas as quickly possible.

12. A fugitive dust control plan should be prepared and submitted to SCAQMD prior to the start of construction.

DF-3 Require all construction equipment to have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.

DF-4 Construction equipment shall be maintained in proper tune.

DF-5 All construction vehicles shall be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

DF-6 Minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.

DF-7 The use of heavy construction equipment and earthmoving activity should be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.

DF-8 Establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.

DF-9 Establish staging areas for the construction equipment that are as distant as possible from adjacent residential homes.

DF-10 Use haul trucks with on-road engines instead of off-road engines for on-site hauling.

Operational Design Features:

DF-11 Implement trip reduction measures and project design features to reduce the number of auto-based trips generated by the project and encourage the use of transit, bicycling, and walking through the following measures;

1. Improve the walkability design of the project by providing pedestrian and bicycling connections within the project site and to adjacent off-site facilities (i.e. sidewalks, bike lanes, trails, parcel-to-parcel connections, crosswalks, wayfinding signage, etc.).

2. Provide traffic calming measures (i.e. marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.)

3. Provide bicycle parking at the commercial, civic center and community center areas.

4. Provide secure bicycle parking areas at the multi-family uses.

5. Provide electric vehicle charging stations and parking for all uses (i.e. common area charging stations for the multi-family, retail/commercial, and civic center uses and garages setup with dedicated circuits and plugs for single family/condos).

DF-12 No wood burning fireplaces will be allowed in any residential dwelling.

DF-13 Install rooftop solar panels, community solar panels, and/or other sources of on-site renewable energy capable of meeting the required California Energy Code Energy Design Rating for all single family, multifamily residences and municipal building uses.

DF-14 Comply with the mandatory requirements of California Building Standards Code Title 24 Part 6 (Energy Code) and Title 24 Part 11 (CAL Green).

DF-15 Implement water conservation strategies, including low flow fixtures and toilets, water efficient irrigation systems, drought tolerant/native landscaping, and limit the amount of turf/sod.

DF-16 Participate in the local waste management recycling and composting programs.

DF-17 The home-owners associations and property management companies should encourage landscape maintenance crews to use electric landscaping equipment, such as lawn mowers and leaf blowers, wherever feasible.

2.0 Air Quality Setting

The Federal Clean Air Act (§ 7602) defines air pollution as any agent or combination of such agents, including any physical, chemical, biological, or radioactive substance which is emitted into or otherwise enters the ambient air. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Air pollution can cause disease, allergies and death. It affects soil, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate. It can also cause damage to and deterioration of property, present hazards to transportation, and negatively impact the economy.

This section provides background information on criteria air pollutants, the applicable federal, state and local regulations concerning air pollution, and the existing physical setting of the project within the context of local air quality.

2.1 Description of Air Pollutants[1].

The following section describes the air pollutants of concern related to the project. Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health. The following descriptions of criteria air pollutants have been provided by the SCAQMD.

- **Carbon Monoxide (CO)** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, and competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs in the body. The ambient air quality standard for carbon monoxide is intended to protect persons whose medical condition already compromises their circulatory system's ability to deliver oxygen. These medical conditions include certain heart ailments, chronic lung diseases, and anemia. Persons with these conditions have reduced exercise capacity even when exposed to relatively low levels of CO. Fetuses are at risk because their blood has an even greater affinity to bind with CO. Smokers are also at risk from ambient CO levels because smoking

[1] SCAQMD. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning (May 6, 2005)

increases the background level of CO in their blood. The South Coast basin has recently achieved attainment status for carbon monoxide by both USEPA and CARB.

- **Nitrogen Dioxide (NO_2)** is a byproduct of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in young children has also been observed at concentrations below 0.3 parts per million (ppm). NO_2 absorbs blue light which results in a brownish red cast to the atmosphere and reduced visibility. Although NO_2 concentrations have not exceeded national standards since 1991 and the state hourly standard since 1993, NO_x emissions remain of concern because of their contribution to the formation of O_3 and particulate matter.

- **Ozone (O_3)** is one of a number of substances called photochemical oxidants that are formed when volatile organic compounds (VOC) and NO_x react in the presence of ultraviolet sunlight. O_3 concentrations in the South Coast basin are typically among the highest in the nation, and the damaging effects of photochemical smog, which is a popular name for a number of oxidants in combination, are generally related to the concentrations of O_3. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the subgroups most susceptible to O_3 effects. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. The South Coast Air Basin is designated by the USEPA as an extreme non-attainment area for ozone. Although O_3 concentrations have declined substantially since the early 1990s, the South Coast basin continues to have peak O_3 levels that exceed both state and federal standards.

- **Fine Particulate Matter (PM_{10})** consists of extremely small suspended particles or droplets 10 microns or smaller in diameter that can lodge in the lungs, contributing to respiratory problems. PM_{10} arises from such sources as re-entrained road dust, diesel soot, combustion products, tire and brake abrasion, construction operations, and fires. It is also formed in the atmosphere from NO_x and SO_2 reactions with ammonia. PM_{10} scatters light and significantly reduces visibility. Inhalable particulates

pose a serious health hazard, alone or in combination with other pollutants. More than half of the smallest particles inhaled will be deposited in the lungs and can cause permanent lung damage. Inhalable particulates can also have a damaging effect on health by interfering with the body's mechanism for clearing the respiratory tract or by acting as a carrier of an absorbed toxic substance. The South Coast basin has recently achieved federal attainment status for PM_{10}, but is non-attainment based on state requirements.

- **Ultra-Fine Particulate Matter ($PM_{2.5}$)** is defined as particulate matter with a diameter less than 2.5 microns and is a subset of PM_{10}. $PM_{2.5}$ consists mostly of products from the reaction of NO_x and SO_2 with ammonia, secondary organics, finer dust particles, and the combustion of fuels, including diesel soot. $PM_{2.5}$ can cause exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease, declines in pulmonary function growth in children, and increased risk of premature death from heart or lung diseases in the elderly. Daily fluctuations in $PM_{2.5}$ levels have been related to hospital admissions for acute respiratory conditions, school absences, and increased medication use in children and adults with asthma. The South Coast basin is designated as non-attainment for $PM_{2.5}$ by both federal and state standards.

- **Sulfur dioxide (SO_2)** is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children. Individuals with asthma may experience constriction of airways with exposure to SO_2. Though SO_2 concentrations have been reduced to levels well below state and federal standards, further reductions in SO_2 emissions are needed because SO_2 is a precursor to sulfate and PM_{10}. The South Coast basin is considered a SO_2 attainment area by USEPA and CARB.

- **Lead (Pb)** is a toxic heavy metal that can be emitted into the air through some industrial processes, burning of leaded gasoline and past use of lead-based consumer products. Lead is a neurotoxin that accumulates in soft tissues and bones, damages the nervous system, and causes blood disorders. It is particularly problematic in children, in that permanent brain damage may result, even if blood levels are promptly normalized with treatment. Concentrations of lead once exceeded the state and federal air quality standards by a wide margin, but as a result of the removal of lead from motor vehicle gasoline, ambient air quality standards for lead have not been exceeded since 1982. Though special monitoring sites immediately downwind of lead sources recorded localized violations of the state standard in 1994, no violations have been recorded since. Consequently, the South Coast basin is designated as an attainment area for lead by both the USEPA and CARB. This report

does not analyze lead emissions from the project, as it is not expected to emit lead in any significant measurable quantity.

- **Volatile Organic Compounds (VOC),** although not actually a criteria air pollutant, VOCs are regulated by the SCAQMD because they cause chemical reactions which contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM_{10} and lower visibility levels. Sources of VOCs include combustion engines, and evaporative emissions associated with fuel, paints and solvents, asphalt paving, and the use of household consumer products such as aerosols. Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOC. Some hydrocarbon components classified as VOC emissions are hazardous air pollutants. Benzene, for example, is a hydrocarbon component of VOC emissions that are known to be a human carcinogen. The term reactive organic gases (ROG) are often used interchangeably with VOC.

- **Toxic Air Contaminants (TACs)** are defined as air pollutants which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health, and for which there is no concentration that does not present some risk. This contrasts with the criteria pollutants, in that there is no threshold level for TAC exposure below which adverse health impacts are not expected to occur. The majority of the estimated health risk from TACs can be attributed to a relatively few compounds, the most common being diesel particulate matter (DPM) from diesel engine exhaust. In addition to DPM, benzene and 1,3-butadiene are also significant contributors to overall ambient public health risk in California.

2.2 Federal and State Ambient Air Quality Standards

The Federal Clean Air Act, which was last amended in 1990, requires the EPA to set National Ambient Air Quality Standards (NAAQS) for criteria pollutants considered harmful to public health and the environment. The State of California has also established additional and more stringent California Ambient Air Quality Standards (CAAQS) in addition to the seven criteria pollutants designated by the federal government.

AAQS are designed to protect the health and welfare of the populace with a reasonable margin of safety. The standards are divided into two categories, primary standards and secondary standards. Primary standards are implemented to provide protection for the "sensitive" populations such as those with asthma, or the children and elderly. Secondary standards are to provide protection against visible pollution as well as damage to the surrounding environment, including animals, crops, and buildings.

Table 2 shows the Federal and State Ambient Air Quality Standards.

Table 2
Federal and State Ambient Air Quality Standards (AAQS)[1]

Air Pollutant	Averaging Time [2]	Federal Standard (NAAQS)[2]	California Standard (CAAQS)[2]
Ozone	1 Hour	--	0.09 ppm
	8 Hour	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	1 Hour	35 ppm	20 ppm
	8 Hour	9 ppm	9 ppm
Nitrogen Dioxide (NO_2)	1 Hour	0.100 ppm	0.18 ppm
	Annual	0.053 ppm	0.030 ppm
Sulfur Dioxide (SO_2)	1 Hour	0.075 ppm	0.25 ppm
	3 Hour	0.5 ppm[3]	--
	24 Hour	--	0.04 ppm
Particulate Matter (PM_{10})	24 Hour	150 $\mu g/m^3$	50 $\mu g/m^3$
	Mean	--	20 $\mu g/m^3$
Particulate Matter (PM2.5)	24 Hour	35 $\mu g/m^3$	--
	Annual	12 $\mu g/m^3$	12 $\mu g/m^3$
Lead	30-day	--	1.5 $\mu g/m$
	Quarter	1.5 $\mu g/m$	--
	3-month average	0.15 $\mu g/m$	--
Visibility reducing particles	8 Hour	--	0.23/km extinction coefficient. (10-mile visibility standard)
Sulfates	24 Hour	--	25 $\mu g/m$
Vinyl chloride	24 Hour	--	0.01 ppm
Hydrogen sulfide	24 Hour	--	0.03 ppm

[1] Source: USEPA: https://www.epa.gov/criteria-air-pollutants/naaqs-table and
CARB: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards

[2] ppm = parts per million of air, by volume; µg/m3 = micrograms per cubic meter; Annual = Annual Arithmetic Mean; 30-day = 30-day average; Quarter = Calendar quarter.

[3] Secondary standards

Several pollutants listed in Table 2 are not addressed in this analysis. Lead is not included because the project is not anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed. The project is not expected to generate or be exposed to vinyl chloride because proposed project uses do not utilize the chemical processes that create this pollutant and there are no such uses in the project vicinity. The proposed project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

2.3 Attainment Status

The Clean Air Act requires states to prepare a State Implementation Plan (SIP) to ensure air quality meets the NAAQS. The California Air Resources Board (CARB) provides designations of attainment for air basins where AAQS are either met or exceeded. If the AAQS are met, the area is designated as being in "attainment", if the air pollutant concentrations exceed the AAQS, than the area is designated as being "nonattainment". If there is inadequate or inconclusive data to make a definitive attainment designation, the area is considered "unclassified."

National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

When a state submits a request to the EPA to re-designate a nonattainment area to attainment, the Clean Air Act (CAA) section 175A(a) requires that the state (or states, if the area is a multi-state area) submit a maintenance plan ensuring the area can maintain the air quality standard for which the area is to be re-designated for at least 10 years following the effective date of re-designation. Table 3 lists the attainment status for the criteria pollutants in the South Coast Air Basin (SCAB).

Table 3
South Coast Air Basin Attainment Status[1]

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment (Extreme)[2]
Carbon monoxide	Attainment	Attainment (Maintenance)
Nitrogen dioxide	Attainment	Attainment (Maintenance)
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	Nonattainment (Partial)[3]

[1] Source: California Air Resources Board. http://www.arb.ca.gov/desig/adm/adm.htm
[2] 8-Hour Ozone.
[3] Partial Nonattainment designation – Los Angeles County portion of Basin only.

2.4 South Coast Air Quality Management District (SCAQMD)

The agency responsible for air pollution control for the South Coast Air Basin (SCAB) is the South Coast Air Quality Management District (SCAQMD). SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the SCAB. SCAQMD, in coordination with the Southern California Association of Governments, is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the SCAB. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient air quality standards. The term nonattainment area is used to refer to an air SCAB where one or more ambient air quality standards are exceeded.

Every three (3) years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. The latest version is the 2016 AQMP. The 2016 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air. While air quality has dramatically improved over the years, the SCAB still exceeds federal public health standards for both ozone and particulate matter (PM) and experiences some of the worst air pollution in the nation. The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time.

The most significant air quality challenge in the SCAB is to reduce nitrogen oxide (NOx) emissions sufficiently to meet the upcoming ozone standard deadlines. Based on the inventory and modeling results, 522 tons per day (tpd) of total SCAB NOx 2012 emissions are projected to drop to 255 tpd and 214 tpd in the 8-hour ozone attainment years of 2023 and 2031 respectively, due to continued implementation of already adopted regulatory actions ("baseline emissions"). The analysis suggests that total SCAB emissions of NOx must be reduced to approximately 141 tpd in 2023 and 96 tpd in 2031 to attain the 8-hour ozone standards. This represents an additional 45 percent reduction in NOx in 2023, and an additional 55 percent NOx reduction beyond 2031 levels.

The SCAQMD establishes a program of rules and regulations to obtain attainment of the state and federal standards in conjunction with the AQMP. Several of the rules and regulations that may be applicable to this project include, but are not limited to, the following:

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

SCAQMD Rule 445 restricts wood burning devices from being installed into any new development and is intended to reduce the emissions of particulate matter for wood burning devices.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of project must comply with Rule 1113.

SCAQMD Rule 1143 governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment,

and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

SCAQMD Rule 1186 limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1303 governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for PM10 among other pollutants.

SCAQMD Rule 2202 On-Road Motor Vehicle Mitigation Options, is to provide employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and state Clean Air Act requirements, Health & Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act. It applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average.

Connect SOCAL 2024: On September 3, 2020, the Southern California Association of Governments (SCAG) adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal or "Plan" herein) for the six-county region including Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. Connect SoCal reflects the region's commitment to improve the region's mobility, sustainability and economy. To achieve these goals, the Plan demonstrates how the region will reduce greenhouse gas (GHG) emissions from transportation sources to comply with Senate Bill 375 (SB 375) and meet Federal Transportation Conformity Requirements pursuant to the Federal Clean Air Act.

2.5 South Coast Air Basin

The project is located within the South Coast Air Basin (SCAB). To the west of the SCAB is the Pacific Ocean. To the north and east are the San Gabriel, San Bernardino, and San Jacinto mountains, while the southern limit of the SCAB is the San Diego County line. The SCAB consists of Orange County, all of Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

The local dominant wind blows predominantly from the south-southwest with relatively low velocities. The annual average annual wind speed is about 10 miles per hour. Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion limit the vertical dispersion of air pollutants throughout the SCAB.

The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.
The annual average temperature varies little throughout much of the SCAB, ranging from the low to middle 60s (°F). With more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal regions and Los Angeles metropolitan area are transported inland until reaching the mountains, where the combination of mountains and temperature inversion layers generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas of the SCAB. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows.

Temperature inversions are an important feature that limits the vertical depth through which pollution can be mixed. During the summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high-pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the SCAB. The air remains stagnant, as the average wind speed in downtown Los Angeles becomes less than five mph.

The second type of inversion forms on clear winter nights when cold air off the mountains sinks to the valley floor while the air aloft over the valley remains warm. This forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as those from automobile exhaust near their source. They lead to air pollution "hotspots" in heavily developed coastal areas of the SCAB, although onshore breezes often push the pollutants along canyons into the inland valleys. Summers are often periods of hazy visibility and occasionally unhealthful air, while winter air quality impacts tend to be highly localized and can consist of elevated levels of nitrogen dioxide and fine particulate matter.

2.6 Local Climate and Meteorology

The weather station closest to the project site is a National Weather Service Cooperative weather station located at Corona Station, (042031). Climatological data from the National Weather Service at this station is summarized in Table 4.

Table 4
Meteorological Summary[1]

Month	Temperature (˚F)			Mean Precipitation (inches)
	Max.	Min.	Mean	Max.
January	65.3	39.7	52.5	2.61
February	67.7	41.2	54.4	2.62
March	70.5	42.8	56.6	2.00
Total	74.9	45.7	60.3	0.98
May	79.3	49.9	64.6	0.26
June	85.5	53.7	69.6	0.04
July	92.3	57.7	75.0	0.02
August	92.2	58.3	75.2	0.09
September	89.1	55.6	72.4	0.25
October	81.6	50.2	65.9	0.55
November	73.5	44.3	58.9	1.14
December	66.8	40.4	53.6	2.15
Annual	**78.2**	**48.3**	**63.3**	**12.71**

[1] Source: Western Regional Climate Center 2012. Averages derived from measurements recorded between 1908 and 1988 at Corona Station No. 042031.

2.7 Local Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates of the existing emissions in the Basin provided in the Final 2016 Air Quality Management Plan, prepared by SCAQMD, March 2017, indicate that collectively, mobile sources account for 60 percent of the VOC, 90 percent of the NOx emissions, 95 percent of the CO emissions and 34 percent of directly emitted PM2.5, with another 13 percent of PM2.5 from road dust.

The SCAQMD has divided the SCAB into fourteen general forecasting areas and thirty eight Source Receptor Areas (SRA) for monitoring and reporting local air quality. The SCAQMD provides daily reports of the current air quality conditions in each general forecast area and

SRA. The monitoring areas provide a general representation of the local meteorological, terrain, and air quality conditions within the SCAB.

The project is located within the Riverside Valley general forecasting area and Corona/Norco air monitoring area (SRA-22). Due to lack of sufficient data at Corona/Norco air monitoring station, air quality data is derived from the nearest adjacent Metropolitan Riverside Station-1 (SRA-23).

Table 5 summarizes the published air quality monitoring data from 2018 through 2020, which is the most recent 3-year period available. These pollutant levels were used to comprise a "background" for the project location and existing local air quality.

Table 5
Local Air Quality

Air Pollutant Location	Averaging Time	Item	2018	2019	2020
Carbon Monoxide -- Metropolitan Riverside County 1	1 Hour	Max 1-Hour (ppm)	2.2	1.5	1.9
		Exceeded State Standard (20 ppm)	No	No	No
		Exceeded National Standard (35 ppm)	No	No	No
	8 Hour	Max 8 Hour (ppm)	2.0	1.2	1.4
		Days > State Standard (9 ppm)	No	No	No
		Days >National Standard (9 ppm)	No	No	No
Ozone -- Metropolitan Riverside County 1	1 Hour	Max 1-Hour (ppm)	0.123	0.123	0.143
		Days > State Standard (0.09 ppm)	22.0	24.0	46.0
	8 Hour	Max 8 Hour (ppm)	0.101	0.096	0.115
		Days > State Standard (0.070 ppm)	53	59	81
		Days >National Standard (0.070 ppm)	53	59	81
Nitrogen Dioxide -- Metropolitan Riverside County 1	1 Hour	Max 1-Hour (ppm)	0.055	0.056	0.066
		Exceeded State Standard (0.18 ppm)	No	No	No
	Annual	Annual Average (ppm)	0.014	0.014	0.014
		Exceeded State Standard (0.030 ppm)	No	No	No
		Exceeded National Standard (0.053 ppm)	No	No	No
Sulfur Dioxide -- Metropolitan Riverside County 1	1 Hour	Max 1 Hour (ppm)	0.0017	0.0018	0.0022
		Exceeded State Standard (0.25 ppm)	No	No	No
		Exceeded National Standard (0.075 ppm)	No	No	No
Suspended Particles (PM10) -- Metropolitan Riverside County 1	24 Hour	Max 24-Hour ($\mu g/m^3$)	126	99	104
		Days > State Standard (50 $\mu g/m^3$)	132	21	110
		Days >National Standard (150 $\mu g/m^3$)	0	0	0
	Annual	Annual Average ($\mu g/m^3$)	44.00	34.40	30.00
		Exceeded State Standard (20 $\mu g/m^3$)	Yes	Yes	Yes
Fine Particulates (PM2.5) -- Metropolitan Riverside County 1	24 Hour	Max 24-Hour ($\mu g/m^3$)	50.70	46.70	41.00
		Days >National Standard (35 $\mu g/m^3$)	2	4	4
	Annual	Annual Average ($\mu g/m^3$)	12.41	11.13	12.63
		Exceeded State Standard (12 $\mu g/m^3$)	Yes	No	Yes
		Exceeded National Standard (15 $\mu g/m^3$)	No	No	No

Source: https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year
$\mu g/m^3$ = micrograms per cubic meter
ppm = part per million

3.0 Global Climate Change Setting

Global climate change is the change in the average weather of the earth that is measured by such things as alterations in temperature, wind patterns, storms, and precipitation. Current data shows that the recent period of warming is occurring more rapidly than past geological events. The average global surface temperature has increased by approximately 1.4° Fahrenheit since the early 20th Century. 1.4° Fahrenheit may seem like a small change, but it's an unusual event in Earth's recent history, and as we are seeing, even small changes in temperature can cause enormous changes in the environment.

The planet's climate record, preserved in tree rings, ice cores, and coral reefs, shows that the global average temperature has been stable over long periods of time. For example, at the end of the last ice age, when the Northeast United States was covered by more than 3,000 feet of ice, average global temperatures were only 5° to 9° Fahrenheit cooler than today. The Intergovernmental Panel on Climate Change (IPCC), which includes more than 1,300 scientists from the United States and other countries, forecasts a temperature rise of 2.5° to 10° Fahrenheit over the next century. Therefore, significant changes to the environment are expected in the near future.

The consequences of global climate change include more frequent and severe weather, worsening air pollution by increasing ground level ozone, higher rates of plant and animal extinction, more acidic and oxygen depleted oceans, strain on food and water resources, and threats to densely populated coastal and low lying areas from sea level rise.

The impacts of climate change are already visible in the Southwest United States. In California, the consequences of climate change include;

- A rise in sea levels resulting in the displacement of coastal businesses and residencies
- A reduction in the quality and supply of water from the Sierra snowpack
- Increased risk of large wildfires
- Exacerbation of air quality problems
- Reductions in the quality and quantity of agricultural products
- An increased temperature and extreme weather events
- A decrease in the health and productivity of California's forests

3.1 Greenhouse Gases

Most scientists agree the main cause of the current global warming trend is anthropogenic (human-induced) augmentation of the greenhouse effect. The greenhouse effect refers to the way gases in the earth's atmosphere trap and re-emits long wave infrared radiation, acting like a blanket insulating the earth. Activities such as fossil fuel combustion, industrial processes, agriculture, and waste decomposition have elevated the concentration of greenhouse gases in the atmosphere beyond the level of naturally occurring concentrations.

GHGs comprise less than 0.1 percent of the total atmospheric composition, yet they play an essential role in influencing climate. Greenhouse gases include naturally occurring compounds such as carbon dioxide (CO_2), methane (CH_4), water vapor (H_2O), and nitrous oxide (N_2O), while others are synthetic. Man-made GHGs include the chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs), as well as sulfur hexafluoride (SF_6). Different GHGs have different effects on the Earth's warming. GHGs differ from each other in their ability to absorb energy (their "radiative efficiency") and how long they stay in the atmosphere, also known as the "lifetime".

The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of CO_2. The larger the GWP, the more than a given gas warms the Earth compared to CO_2 over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure, which allows analysts to add up emissions estimates of different gases and allows policymakers to compare emissions reduction opportunities across sectors and gases.

Table 6 lists the 100-year GWP of GHGs from the Intergovernmental Panel on Climate Change (IPCC) fifth assessment report (AR5).

Table 6
Global Warming Potential of Greenhouse Gases[1, 2]

Gas Name	Formula	Lifetime (years)	GWP
Carbon Dioxide	CO_2		1
Methane	CH_4	12	28
Nitrous Oxide	N_2O	114	265
Sulphur Hexafluoride	SF_6	3200	23,500
Nitrogen Trifluoride	NF_3	740	16,100
Hexafluoroethane (PFC-116)	C_2F_6	10,000	11,100
Octafluoropropane (PFC-218)	C_3F_8	2,600	8,900
Octafluorocyclobutane (PFC-318)	C_4F_8	3,200	9,540
Tetrafluoromethane (PFC-14)	CF_4	50,000	6,630
Hydrofluorocarbon 125	HFC-125	29	3,170
Hydrofluorocarbon 134a	HFC-134a	14	1,300
Hydrofluorocarbon 143a	HFC-143a	52	4,800
Hydrofluorocarbon 152a	HFC-152a	1	138
Hydrofluorocarbon 227ea	HFC-227ea	34	3,350
Hydrofluorocarbon 23	HFC-23	270	12,400
Hydrofluorocarbon 236fa	HFC-236fa	240	8,060
Hydrofluorocarbon 245fa	HFC-245fa	8	858
Hydrofluorocarbon 32	HFC-32	5	677
Hydrofluorocarbon 365mfc	HFC-365mfc	9	804
Hydrofluorocarbon 43-10mee	HFC-43-10mee	16	1,650

[1] Source: IPCC Fifth Assessment Report (AR5)
https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf
[2] GWPs are used to convert GHG emission values to "carbon dioxide equivalent" (CO_2e) units

3.2 GHG Regulatory Setting - International

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations. The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC) (signed on March 21, 1994). Under the Convention, governments gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change. The 2014 UN Climate Change Conference in Lima Peru provided a unique opportunity to engage all countries to assess how developed countries are implementing actions to reduce emissions.

Kyoto Protocol. The Kyoto Protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5 percent from 1990 levels during the first commitment period of 2008 – 2012 (UNFCCC 1997). On December 8, 2012, the Doha Amendment to the Kyoto Protocol was adopted. The amendment includes: New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 2013 – 2020, a revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period, and Amendments to several articles of the Kyoto Protocol, which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

The Paris Agreement. The Paris agreement is the first comprehensive global climate agreement to be ratified by the United States, United Nations, China, and India; the largest producers of greenhouse gas emissions in the world. The agreement was negotiated by a total of 195 nations and entered into force on November 4, 2016. The central aim is to strengthen the global response to the threat of climate change by keeping the global temperature rise this century well below 2 degrees Celsius compared to pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. Currently, 123 parties have ratified the agreement.

3.3 GHG Regulatory Setting – National

Greenhouse Gas Endangerment. On December 2, 2009, the EPA announced that GHGs threaten the public health and welfare of the American people. The EPA also states that GHG emissions from on-road vehicles contribute to that threat. The decision was based on *Massachusetts v. EPA* (Supreme Court Case 05-1120) which argued that GHGs are air pollutants covered by the Clean Air Act and that the EPA has authority to regulate those emissions.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy (CAFE) law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They required these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards were estimated to cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

The second phase of the national program for passenger cars, light-duty trucks, and medium-duty passenger vehicles covers model years 2017 through 2025. The final standards were established in 2012 and were projected to result in an average industry fleetwide level of 163 grams/mile of carbon dioxide (CO2) in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation also implemented the first national standards to reduce greenhouse gas emissions and improve the fuel efficiency of medium-

and heavy-duty engines and vehicles trucks and buses in 2010. The standards applied to all on-road vehicles rated at a gross vehicle weight at or above 8,500 pounds, and the engines that power them, except those covered by the current GHG emissions and CAFE standards for light duty vehicles, for model year 2014 to 2018. In 2016, the EPA and NHTSA finalized phase 2 of the standards which applied to model years 2018 through 2027.

The Safer Affordable Fuel Efficient (SAFE) Vehicles. The National Highway Traffic Safety Administration (NHTSA) and the Environmental Protection Agency (EPA) have amended certain previous Corporate Average Fuel Economy (CAFE) and greenhouse gas emissions standards for passenger cars and light trucks and establish new standards, covering model years 2021 through 2026. The (SAFE) Vehicles Rule published on April 30, 2020 and is effective as of June 29, 2020.

Mandatory Reporting of Greenhouse Gases. On January 1, 2010, the EPA started requiring large emitters of heat-trapping emissions to begin collecting GHG data under a new reporting system. Under the rule, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of greenhouse gas emissions are required to submit annual reports to the EPA.

Climate Adaptation Planning. The EPA's Climate Change Adaptation Plan identifies priority actions the EPA will take to incorporate considerations of climate change into its programs, policies, rules and operations to ensure they are effective under future climatic conditions. Under the Trump administration, the EPA has said it would continue to advance climate adaptation efforts and that the agency recognizes the challenges that communities face in adapting to a changing climate. The EPA currently runs the Climate Change Adaptation Resource Center (ARC-X) to help local governments prepare for climate change.

3.4 GHG Regulatory Setting – State of California

The State of California has been a leader in climate change legislation and has passed numerous bills to reduce greenhouse gas emissions across all sectors of the economy. Some of the key climate legislation in the State include the following:

Assembly Bill (AB) 32, California Global Warming Solutions Act of 2006. AB 32 set the stage for the State's transition to a sustainable, low-carbon future. AB 32 was the first program in the country to take a comprehensive, long-term approach to addressing

climate change.[2] AB 32 was followed by Senate Bill (SB) 32, which further requires GHG emissions to be reduced to 40% below 1990 levels by 2030 and appointing CARB to develop policies (i.e. cap-and-trade) to achieve this goal.

Senate Bill (SB) 375, Sustainable Communities & Climate Protection Act of 2008. SB 375 requires the Air Resources Board to develop regional greenhouse gas emission reduction targets for passenger vehicles GHG reduction targets for 2020 and 2035 for each region covered by the State's 18 metropolitan planning organizations.[3]

Senate Bill (SB) 100, California Renewables Portfolio Standard Program. SB 100 established a landmark policy requiring renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045.[4]

3.5 GHG Emissions Inventory

Table 7 shows the latest GHG emission inventories at the national, state, regional and local levels.

Table 7
GHG Emissions Inventory[1]

United States (2019)[2]	State of California (2019)[3]	SCAG (2020)[4]	City of Eastvale
6,558 $MMTCO_2e$	418.2 $MMTCO_2e$	216.4 $MMTCO_2e$	--

[1] $MMTCO_2e$ = Million Metric Tons of Carbon Dioxide Equivalent
[2] https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks
[3] https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf
[4] http://www.scag.ca.gov/programs/Pages/GreenhouseGases.aspx

[2] California Air Resources Board. AB 32 Global Warming Solutions Act of 2006. https://ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006
[3] California Air Resources Board. Sustainable Communities and Climate Protection Program. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-climate-protection-program/about
[4] California Energy Commission. SB 100 Joint Agency Report. https://www.energy.ca.gov/sb100

4.0 Modeling Parameters and Assumptions

The California Emissions Estimator Model Version 2020.4.0 (CalEEMod) was used to calculate criteria air pollutants and GHG emissions from the construction and operation of the project. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify criteria air pollutant and GHG emissions.

The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from off-site energy generation, solid waste disposal, vegetation planting and/or removal, and water use. The model also identifies mitigation measures to reduce criteria pollutant and GHG emissions. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts.

4.1 Construction Assumptions

Construction of the project is assumed to begin in the year 2022 and last approximately 56 months. Construction activity will consist of demolition, site preparation, grading, building construction, paving, and architectural coating.

The project is expected to demolish approximately 67,500 square feet of existing on-site building structures and export approximately 340,000 cubic yards of on-site dairy waste. The project is also expected to require the import of approximately 542,000 cubic yards of earthwork materials.

The project is expected to be operational in the year 2026. The construction phase lengths are provided by the applicant and has been adjusted to meet 2026 opening year deadline.

The CalEEMod default construction equipment list is used and is based on survey data and the size of the site. The parameters used to estimate construction emissions, such as the worker and vendor trips and trip lengths, utilize the CalEEMod defaults. The construction equipment list is shown in Table 8.

A soil disturbance rate is applied to tractors/loaders/backhoes as a worst-case estimate of fugitive dust emissions and is based on similar type equipment, such as rubber-tired dozers and crawler tractors. The maximum daily disturbance footprint is calculated to be 4.0 acres per 8-hour day with all equipment in use.

Table 8
Construction Equipment Assumptions Phase[1]

Phase	Equipment	Amount	Hours Per Day	Soil Disturbance Rate (Acres/ 8hr-Day)	Equipment Daily Disturbance Footprint (Acres)	Total Phase Daily Disturbance Footprint (Acres)
Demolition	Concrete/Industrial Saw	1	8	0.0	0.00	1.0
	Excavators	3	8	0.0	0.00	
	Rubber Tired Dozers	2	8	0.5	1.00	
Site Preparation	Rubber Tired Dozers	3	8	0.5	1.50	3.5
	Tractors/Loaders/Backhoes	4	8	0.5	2.00	
Grading	Excavators	2	8	0.0	0.00	4.0
	Graders	1	8	0.5	0.50	
	Rubber Tired Dozers	1	8	0.5	0.50	
	Scrapers	2	8	1.0	2.00	
	Tractors/Loaders/Backhoes	2	8	0.5	1.00	
Building Construction	Cranes	1	7	0.0	0.00	1.3
	Forklifts	3	8	0.0	0.00	
	Generator Sets	1	8	0.0	0.00	
	Tractors/Loaders/Backhoes	3	7	0.5	1.31	
	Welders	1	8	0.0	0.00	
Paving	Pavers	1	8	0.0	0.00	0.0
	Paving Equipment	1	8	0.0	0.00	
	Rollers	2	8	0.0	0.00	
Architectural Coating	Air Compressors	1	6	0.0	0.00	0.0

[1] CalEEMod Defaults

4.2 Localized Construction Analysis Modeling Parameters

CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. This report identifies the following parameters in the project design in order to compare CalEEMod reported emissions against the localized significance threshold lookup tables:

1) The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
2) The maximum number of acres disturbed on the peak day.
3) Any emission control devices added onto off-road equipment.
4) Specific dust suppression techniques used on the day of construction activity with maximum emissions.

4.3 Operational Assumptions

Operational emissions occur over the life of the project and are considered "long-term" sources of emissions. Operational emissions include both direct and indirect sources. This section briefly describes the operational sources of emissions analyzed for the project.

4.3.1 Mobile Source Emissions

Mobile source emissions are the largest source of long-term air pollutants from the operation of the project. Mobile sources are direct sources of project emissions that are primarily attributed to tailpipe exhaust and road dust (tire, brake, clutch, and road surface wear) from motor vehicles traveling to and from the site.

Estimates of mobile source emissions require information on four parameters: trip generation, trip length, vehicle type (also known as fleet mix), and emission factors (quantity of pollutants emitted for each mile traveled or time spent idling by each vehicle).

The trip generation estimates are based on the LEAL Master Plan Amendment Project Traffic Study Scoping Agreement, RK Engineering Group, Inc., November 2021 and the latest version of the ITE Trip Generation Manual.

The Emission Factors (EMFAC) 2017 model is used to estimate the mobile source emissions are embedded in the CalEEMod emissions model. No adjustments have been made to default emission factors.

The project's total unmitigated vehicle miles traveled is shown in the Table 9.

Table 9
Operational Vehicle Miles Traveled

Land Use	Annual Vehicle Miles Traveled (VMT)[1]
Project Total	68,221,050

[1] CalEEMod Default VMT, with project design features.

The operational vehicle fleet mix has been adjusted to reflect vehicle types used for typical residential home-based trips and retail/commercial (non-industrial) land uses. To be conservative, the Air Quality/GHG analysis has assumed that 2% of the total home-based

trips will include trucks with a gross vehicle weight rating (GVWR) of 10,000 pound or greater. This includes LHD2, MHD, HHD, OBUS, UBUS, and SBUS vehicles. The 2% mix is also consistent with the default Highway Capacity Manual (HCM) assumptions.

Table 10 summarizes vehicle mix used for this project.

Table 10
Operational Vehicle Fleet Mix[1]

YUY	Vehicle Mix (%)
Light Duty Automobile (LDA)	55.64%
Light Duty Truck (LDTI)	5.81%
Light Duty Truck (LDT2)	17.88%
Medium Duty Truck (MDV)	13.74%
Light Heavy Truck (LHD1)	2.53%
Light Heavy Truck (LHD2)	0.32%
Medium Heavy Truck (MHD)	0.53%
Heavy Heavy Truck (HHD)	0.85%
Other Bus (OBUS)	0.03%
Urban Bus (UBUS)	0.01%
Motorcycle (MCY)	2.40%
School Bus (SBUS)	0.05%
Motor Home (MH)	0.21%
Total	**100.0%**

[1] Adjusted fleet mix to include 2% total trucks over 10,000 lbs GVWR. (LHD2, MHD, HHD, OBUS, UBUS, SBUS, MH)

4.3.2 Energy Source Emissions

Energy usage includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage (non-hearth) for heating, while indirect emissions include electricity generated by offsite power plants. Natural gas use is measured in units of a thousand British Thermal Units (kBTU) per size metric for each land use subtype and electricity use is measured in kilowatt hours (kWh) per size metric for each land use subtype.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. Lighting electricity usage is also calculated as a separate category in CalEEMod. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24, such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses, such as appliances, electronics, and other miscellaneous plug-in uses. Because some lighting is not considered as part of the building envelope energy budget, CalEEMod makes lighting a separate category.

For natural gas, uses are likewise categorized as Title 24 or Non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include cooking and appliances (including pool/spa heaters).

The baseline values are based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

The total annual electricity and natural gas usage for the proposed project is discussed further in Section 9 of this report.

The project will be required to provide on-site renewable energy photovoltaic installations (solar panels) for the residential uses, as required by the latest 2019 CA Energy Code requirements. The Energy Code requires all new residential construction to achieve net-zero emissions associated with electricity usage through the use of on-site renewable sources. However, for purposes of this analysis, no reductions in emissions have been accounted for as a result of on-site renewables. The result is a conservative estimate of energy source emissions.

4.3.3 Area Source Emissions

Area source emissions are direct sources of emissions that fall under four categories: hearths, consumer products, architectural coatings, and landscaping equipment. Per SCAQMD rule 445, no wood burning devices are allowed in new developments; therefore, no wood hearths are included in this project. Consumer products are various solvents used in non-industrial applications which emit ROGs during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics, and toiletries.

4.3.4 Other Sources of Operational Emissions

Water. Greenhouse gas emissions are generated from the upstream energy required to supply and treat the water used on the project site. Indirect emissions from water usage are counted as part of the project's overall impact. The estimated water usage for the project is reported in Table 11 and recommendations to reduce water usage are discussed in Section 6.0.

Waste. CalEEMod calculates the indirect GHG emissions associated with waste that is disposed of at a landfill. The program uses annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses. The program quantifies the GHG emissions associated with the decomposition of the waste which generates methane based on the total amount of degradable organic carbon.

The estimated waste generation by the project is reported in Table 11 and recommendations to reduce waste generation in landfills are discussed in Section 6.0

Table 11
Operational Water Usage and Waste Generation

Land Use	Water Usage (gallons/year)			Waste Generation (tons/year)[1]
	Indoor	Outdoor	Total	
Apartments Low Rise	71,669,400	45,182,900	116,852,300	506.00
City Park	0	16,752,200	16,752,200	1.21
Condo/Townhouse	65,154,000	41,075,400	106,229,400	460.00
General Office Building	11,552,700	7,080,680	18,633,380	60.45
Government (Civic Center)	12,356,600	7,573,420	19,930,020	354.54
Library	782,223	1,223,480	2,005,703	23.02
Medical Office Building	8,156,230	1,553,570	9,709,800	702.00
Regional Shopping Center	28,888,300	17,705,700	46,594,000	409.50
Single Family Housing	26,061,600	16,430,100	42,491,700	469.04
Total	**224,621,053**	**154,577,450**	**379,198,503**	**2,985.76**

[1] CalEEMod default estimates.

5.0 Significance Thresholds

5.1 Air Quality Regional Significance Thresholds

The SCAQMD has established air quality emissions thresholds for criteria air pollutants for the purposes of determining whether a project may have a significant effect on the environment per Section 15002(g) of the Guidelines for implementing CEQA. By complying with the thresholds of significance, the project would be in compliance with the SCAQMD Air Quality Management Plan (AQMP) and the federal and state air quality standards.

Table 12 lists the air quality significance thresholds for the six air pollutants analyzed in this report. Lead is not included as part of this analysis as the project is not expected to emit lead in any significant measurable quantity.

Table 12
SCAQMD Regional Significance Thresholds

Pollutant	Construction (lbs/day)	Operation (lbs/day)
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550

[1] Source: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

5.2 Air Quality Localized Significance Thresholds

Air quality emissions were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold (LST) Look-up Tables.

Table 13 lists the Localized Significance Thresholds (LST) used to determine whether a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard.

LSTs are developed based on the ambient concentrations of four applicable air pollutants for source receptor area (SRA-22) – Corona/Norco.

The nearest existing sensitive receptors are located along the northern and eastern property line of the site, less than 25 meters from potential areas of on-site construction and operational activity. Although receptors may be located closer than 25 meters to the site, SCAQMD LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.

The daily disturbance area is calculated to be 4 acres, however LST thresholds are only based on 1, 2 and 5-acre sites. In order to be conservative, a linear progression model was used to estimate the threshold for 4-acre site based on the established LST thresholds.

Table 13
SCAQMD Localized Significance Thresholds[1] (LST)

Pollutant	Construction (lbs/day)	Operational (lbs/day)
NO_X	235.2	235.2
CO	1,461.2	1,461.2
PM_{10}	10.0	2.6
$PM_{2.5}$	6.9	1.9

[1] Source: SCAQMD Mass Rate Localized Significance Thresholds for 4-acre site in SRA-22 at 25 meters

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings).

5.3 Microscale CO Concentration Standards

The significance of localized CO impacts depends on whether ambient CO levels in the vicinity of the project are above or below federal or state standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of the AAQS. If ambient levels already exceed State or federal standards, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more.

Current CO levels in the SCAB are in attainment of both federal and state standards, and local air quality monitoring data indicates there have not been any localized exceedances of CO over the past three years. As described in subsequent sections of this report, the project's impact to CO concentrations is reviewed based upon the changes in regional emissions and vehicular trip generation in relation to the previous estimates from the 2015 EIR.

5.4 GHG Significance Thresholds

5.4.1 SCAQMD Recommended GHG Thresholds

SCAQMD has developed recommended GHG thresholds of significance to assist local agencies with determining the impact of a project for CEQA. SCAQMD's objective in providing the GHG guidelines is to establish a performance standard that will ultimately contribute to reducing GHG emissions below 1990 levels, and thus achieve the requirements of the California Global Warming Solutions Act (AB 32).

SCAQMD first issued the *Interim CEQA Greenhouse Gas (GHG) Significance Thresholds* guidance document in October 2008, and has since help several stakeholder working group meetings where staff has presented updated recommendations that serve in addendum to the interim document. The latest recommended GHG thresholds are based on the GHG CEQA Significance Threshold Stakeholder Working Group #15, September 2010.

The SCAQMD describes a five-tiered approach for determining GHG Significance Thresholds.

- **Tier 1 -** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2 -** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment based on the following tiers.

- **Tier 3 -** Consists of screening values that are intended to capture 90 percent of the GHG emissions from projects. If a project's emissions are under the screening

thresholds, then the project is less than significant. SCAQMD has presented two options that lead agencies could choose for screening values. Option #1 sets the thresholds for residential projects to 3,500 $MTCO_2e$/year, commercial projects to 1,400 $MTCO_2e$/year), and the mixed use to 3,000 $MTCO_2e$/year. Option #2 sets a single numerical threshold for all non-industrial projects of 3,000 $MTCO_2e$/year. The current staff recommendation is to use option #2, but allows lead agencies to choose option #1 if they prefer. Regardless of which option a lead agency chooses to follow, it is recommended that the same option is consistently used for all projects.

Table 14 shows the screening levels described in option #2, which has been used previously in the City of Eastvale.

Table 14
SCAQMD Tier 3 GHG Screening Values

Land Use	Screening Value
Industrial Projects	10,000 $MTCO_2e$/Yr
Residential/Commercial Projects	3,000 $MTCO_2e$/Yr

- **Tier 4 -** includes performance standards compliance options to demonstrate that a project is not significant for GHG emissions.

  Compliance Option 3 consists of staffs currently proposed Tier 4 performance standards for establishing efficiency-based standards at the plan level (program-level projects such as general plans and specific plans) and project level. Efficiency standards are based on the amount of GHG emissions ($MTCO_2e$/year) per Service Population (SP). SP is defined as the sum of the residential and employment populations provided by a project.

Table 15
SCAQMD Tier 4 Efficiency Thresholds

Project Type	Efficiency Thresholds[1]
	Target Year 2035
Plan (Program) Level	4.1 $MTCO_2e$/yr/SP
Project Level	3.0 $MTCO_2e$/yr/SP

- **Tier 5 –** involves implementing off-site mitigation or the purchasing of offsets to reduce GHG emissions to less than the proposed screening level. The project proponent would be required to provide offsets for the life of the project, which is defined as 30 years.

By complying with the SCAQMD GHG thresholds of significance, the project is considered to be in compliance with the applicable State GHG legislation.

5.4.2 City of Eastvale GHG Thresholds

The City of Eastvale does not have an adopted threshold of significance for GHG emissions, and that the City has selected the 10,000MTCO2e/Yr significance criterion for CEQA purposes, based on substantial evidence.

6.0 Air Quality Impact Analysis

Consistent with CEQA and the State CEQA Guidelines, a significant impact related to air quality would occur if the proposed project is determined to:

a) Conflict with or obstruct implementation of the applicable air quality plan.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard.

c) Expose sensitive receptors to substantial pollutant concentrations.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

6.1 Short Term Air Quality Impacts - Construction

6.1.1 Regional Emissions - Construction

Regional air quality emissions include both on-site and off-site emissions associated with construction of the project. Regional daily emissions of criteria pollutants are compared to the SCAQMD regional thresholds of significance.

As shown in Table 16, regional daily emissions of criteria pollutants are expected to be below the allowable thresholds of significance.

CalEEMod daily emissions outputs are provided in Appendix A.

Table 16
Regional Construction Emissions

Maximum Daily Emissions (lbs/day)[1]						
Activity	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Demolition	0.59	4.80	24.46	0.05	2.32	0.49
Site Preparation	1.66	49.77	31.79	0.24	14.65	6.20
Grading	2.98	94.62	53.41	0.45	16.97	5.81
Building Construction	12.89	40.14	145.48	0.49	41.49	11.45
Paving	1.19	1.24	17.78	0.02	0.21	0.08
Architectural Coating	73.82	1.31	22.10	0.06	7.11	1.91
Maximum[1]	**73.82**	**94.62**	**145.48**	**0.49**	**41.49**	**11.45**
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes both on-site and off-site project emissions.

The project must follow all standard SCAQMD rules and requirements with regards to fugitive dust control, as described in Section 6.1.3. SCAQMD dust control requirements are assumed to be included as part of the project design features.

Table 16 shows that the project's daily construction emissions will be below the applicable SCAQMD regional air quality standards and thresholds of significance. As a result, the project would not contribute substantially to an existing or projected air quality violation.

Furthermore, by complying with the SCAQMD standards, the project would not contribute to a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

The project's short-term construction impact on regional air resources is less than significant with mitigation.

6.1.2 Localized Emissions - Construction

Table 17 illustrates the construction related localized emissions and compares the results to SCAQMD LST thresholds. As shown in Table 17, the emissions will be below the SCAQMD thresholds of significance for localized construction emissions. The project must follow all standard SCAQMD rules and requirements with regards to fugitive dust control, as described in Section 6.1.3. Compliance with the dust control is considered a standard requirement and included as part of the project's design features, not mitigation.

The project's short-term construction impact to localized air resources is less than significant.

Table 17
Localized Construction Emissions

Maximum Daily Emissions (lbs/day)[1]				
Activity	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
On-site Emissions	3.30	33.00	7.72	3.95
SCAQMD Construction Threshold[2]	235.0	1,461.0	10.0	6.9
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes on-site project emissions only.
[2] Reference 2006-2008 SCAQMD Mass Rate Localized Significant Thresholds for construction and operation. SRA-22, Corona/Norco, 4-acre site, receptor distance 25 meters.

6.1.3 Fugitive Dust - Construction

The Project is required to comply with regional rules that assist in reducing short-term air pollutant emissions associated with suspended particulate matter, also known as fugitive dust. Fugitive dust emissions are commonly associated with land clearing activities, cut-and-fill grading operations, and exposure of soils to the air and wind. SCAQMD Rule 403 requires that fugitive dust is controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rules 402 and 403 require implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site.

To ensure full compliance with the applicable dust control standards, the following design features are recommended for the project:

DF-1 Prepare and implement a Construction Management Plan which shall include the Air Quality design features to be submitted to the City of Eastvale for all phases of construction.

DF-2 Follow the standard SCAQMD rules and requirements with regards to fugitive dust control, which includes, but are not limited to the following:

1. All active construction areas shall be watered two (2) times daily.
2. Speed on unpaved roads shall be reduced to less than 15 mph.
3. Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
4. Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.
5. All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
6. Access points shall be washed or swept daily.
7. Construction sites shall be sandbagged for erosion control.
8. Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
9. Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.
10. Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
11. Replace the ground cover of disturbed areas as quickly possible.
12. A fugitive dust control plan should be prepared and submitted to SCAQMD prior to the start of construction.

The regional and localized analysis of daily fugitive dust emissions, as shown in Table 18 and Table 19, indicate that with standard control measures the project would be below the

applicable thresholds established by the SCAQMD. **The proposed project's short-term construction activities would cause less than significant fugitive dust impacts.**

6.1.4 Odors - Construction

Heavy-duty equipment in the project area during construction will emit odors; however, the construction activity would cease to occur after individual construction is completed. The project is required to comply with Rule 402 during construction, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. No other sources of objectionable odors have been identified for the proposed Project.

Therefore, the project impact from odor emissions is less than significant.

6.1.5 Asbestos - Construction

Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the Environmental Protection Agency (EPA) and regulated through the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Asbestos fibers imbedded within construction materials become a health hazard once they are disturbed and rendered airborne, such as through physical contact like building renovation and demolition activities.

SCAQMD is the local enforcement authority for asbestos. SCAQMD Rule 1403 establishes the survey requirements, notification, and work practices to prevent asbestos emissions from emanating during building renovation and demolition activities.

Asbestos also occurs naturally in serpentine and ultramafic rock. Based on the California Division of Mines and Geology General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, naturally occurring asbestos has not been shown to occur within in the vicinity of the project site. Therefore, the potential risk for naturally occurring asbestos (NOA) during project construction is small. However, in the event NOA is found on the site, the project will be required to comply with SCAQMD and NESHAP standards.

The project also includes demolition of existing structures that would be subject to the National Emissions Standards for Asbestos (40CFR Part 61 Subpart M). Prior to demolition of existing structures, an asbestos evaluation must be completed in accordance with the Asbestos NESHAP regulations. Section 61.145 requires written notification of demolition operations. Asbestos NESHAP demolition/Renovation Notification Form can be downloaded at http://www.arb.ca.gov/enf/asbestosform.pdf.

By following the required asbestos abatement protocols, **the project impact is less than significant**.

6.1.6 Diesel Particulate Matter - Construction

The California Office of Environmental Health Hazard Assessment (OEHHA) adopted the Guidance Manual for Preparation of Health Risk Assessments (HRA Guidelines) to provide procedures for use in the Air Toxics Hot Spots Program or for the permitting of existing, new, or modified stationary sources.[5] The HRA Guidelines provide risk factors based on exposure to toxic substances over a 30-year lifetime span.

The project will generate diesel particulate matter (DPM) during construction from off-road diesel equipment and trucks. However, the project's construction activity is not expected to be a long-term (i.e., 30 years) source of toxic air contaminant emissions and short-term risk factors have not been developed. Due the significantly reduced risk from short-term exposure, SCAQMD does not typically require the evaluation of long-term cancer risk or chronic health impacts for construction operations from a project such as the one being proposed.

Hence, the impacts from short-term exposure to DMP during project construction are presumed to be less than significant without the need for a detailed HRA study.

To help further reduce the potential health risks associated with DPM exposure during construction, the following project design features are recommended. Project design features include a recommendation for Tier 4 engines on all off-road diesel equipment. Tier 4 engines, along with the latest national fuel standards, have been shown to yield PM reductions of over 95% from the typical Tier 2 and Tier 3 engines.[6]

[5] OEHHA. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance for Preparation of Health Risk Assessments. February 2015.
[6] EPA. Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuel; Final Rule. (40 CFR Parts 9, 69, et al.)

DF-3 Require all construction equipment to have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.

DF-4 Construction equipment shall be maintained in proper tune.

DF-5 All construction vehicles shall be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

DF-6 Minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.

DF-7 The use of heavy construction equipment and earthmoving activity should be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.

DF-8 Establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.

DF-9 Establish staging areas for the construction equipment that are as distant as possible from adjacent residential homes.

DF-10 Use haul trucks with on-road engines instead of off-road engines for on-site hauling.

6.2 Long Term Air Quality Impacts - Operation

6.2.1 Regional Emissions - Operation

Long-term operational air pollutant impacts from the project are shown in Table 18 and are compared to the previously approved 2015 EIR emission levels. As shown in Table 18, the project is expected to generate fewer emissions compared to the previously approved 2015 EIR emission levels.

As a result, the proposed project would not result in any additional regional operational impacts. CalEEMod daily emissions outputs are provided in Appendix A.

All previously identified mitigation measures to reduced operational emissions in the 2015 EIR are still applicable.

Table 18
Regional Operational Emissions

Maximum Daily Emissions (lbs/day)[1]						
Project Emissions	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Mobile Sources	105.36	84.22	788.32	1.58	179.11	48.35
Energy Sources	1.52	13.01	5.80	0.08	1.05	1.05
Area Sources	85.70	37.63	221.51	0.24	4.00	4.00
Total Project Emission	**192.58**	**134.86**	**1015.62**	**1.90**	**184.15**	**53.40**
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	Yes	Yes	Yes	No	Yes	No
LEAL Master Plan 2015 EIR	268.32	258.6	1,200.15	4.94	326.66	92.99
Exceeds 2015 EIR Levels (?)	**No**	**No**	**No**	**No**	**No**	**No**
Change in Emission Levels	-75.74	-123.742	-184.53	-3.0393	-142.5076	-39.5922
Percentage Change	**-28%**	**-48%**	**-15%**	**-62%**	**-44%**	**-43%**

[1] Maximum daily emission during summer or winter; includes both on-site and off-site project emissions.

6.2.2 Odors - Operation

Land uses that commonly receive odor complaints include agricultural uses (farming and livestock), chemical plants, composting operations, dairies, fiberglass molding facilities, food processing plants, landfills, refineries, rail yards, and wastewater treatment plants. The proposed project does not contain land uses that would typically be associated with significant odor emissions.

The project will be required to comply with standard building code requirements related to exhaust ventilation, as well as comply with SCAQMD Rule 402. Rule 402 requires that a person may not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Project related odors are not expected to meet the criteria of being a nuisance. **The project's operation would result in less than significant odor impacts.**

6.2.3 Toxic Air Contaminants - Operations

The project would consist of mixed used residential and commercial/retail land uses with civic center, community parks and a community center. This type of project does not include major sources of toxic air contaminants (TAC) emissions that would result in significant exposure of sensitive receptors to substantial pollutant concentrations. Therefore, **the project impact is considered less than significant.**

6.3 CO Hot Spot Emissions

A CO hot spot is a localized concentration of carbon monoxide (CO) that is above the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. At the time of the publishing of the 1993 CEQA Air Quality Handbook, the SCAB was designated nonattainment, and projects were required to perform hot spot analyses to ensure they did not exacerbate an existing problem. Since this time, the SCAB has achieved attainment status and the potential for hot spots caused by vehicular traffic congestion has been greatly reduced. In fact, the SCAQMD Air Quality Management Plan (AQMP) found that peak CO concentrations were primarily the result of unusual meteorological and topographical conditions, not traffic congestion. Additionally, the 2003 SCAQMD AQMP found that, at four of the busiest intersections in SCAB, there were no CO hot spots concentrations. Therefore, it is reasonable to conclude that the project would not significantly increase traffic congestion in the vicinity of the site that would lead to the formation of CO Hot Spots.

Based on the 2015 EIR report the CO hot spot emission levels are predicted to be below the California Ambient Air Quality Standards (CAAQS) levels. Since, the proposed project is expected to generate approximately 27,764 fewer daily trips and is not expected to have any additional traffic impacts on the roadways, it can also be concluded that no new CO hotspots would occur as a result of the project. **The project impact to CO Hot Spots is considered to be less than significant.**

7.0 Greenhouse Gas Impact Analysis

Consistent with CEQA Guidelines, a significant impact related to greenhouse gas would occur if the proposed project is determined to:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

7.1 Greenhouse Gas Emissions - Construction

Greenhouse gas emissions are estimated for on-site and off-site construction activity using CalEEMod. Table 19 shows the construction greenhouse gas emissions, including equipment and worker vehicle emissions for all phases of construction. Construction emissions are amortized over 30 years and added to the long-term operational emissions, pursuant to SCAQMD recommendations. CalEEMod annual GHG output calculations are provided in Appendix B.

Table 19
Construction Greenhouse Gas Emissions

Activity	Emissions ($MTC0_2e$)[1]		
	On-site	Off-site	Total
Demolition	25.67	9.93	35.60
Site Preparation	202.26	1,248.17	1,450.43
Grading	274.88	1,932.38	2,207.26
Building Construction	676.34	12,097.70	12,774.04
Paving	70.63	4.26	74.89
Architectural Coating	42.70	842.76	885.46
Total	1,292.48	16,135.20	17,427.68
Amortized over 30 years[2]	43.08	537.84	580.92

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbon).
[2] The emissions are amortized over 30 years and added to the operational emissions, pursuant to SCAQMD recommendations.

Because impacts from construction activities occur over a relatively short-term period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. By itself, the construction activities from this project are less than significant when compared to the thresholds recommended by SCAQMD. However, SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime and added to the overall project operational emissions. In doing so, construction GHG emissions are included in the overall contribution of the project, as further discussed in the following section.

7.2 Greenhouse Gas Emissions - Operation

Greenhouse gas emissions are estimated for on-site and off-site operational activity using CalEEMod. Greenhouse gas emissions from mobile sources, area sources and energy sources are shown in Table 20. CalEEMod annual GHG output calculations are provided in Appendix B.

Table 20
Operational Greenhouse Gas Emissions

Emission Source	Unmitigated GHG Emissions ($MTCO_2e$)[1]
Mobile Source	21,034.65
Energy Source	7,413.89
Area Source	556.56
Water	1,133.26
Waste	1,501.54
Construction (30-year amortization)	580.92
Total Annual Emissions	32,220.82
LEAL Master Plan 2015 EIR Emission Levels[2]	74,317
Change in Emission Levels	-42,096.18
Percentage Change	**-57%**

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents.

[2] As stated in the 2015 EIR, emissions account for 2035 vehicle fleet modernization associated with the turnover of older, less efficient makes and models. All other emission sources are limited to the 2020 condition due to lack of specific GHG-reducing regulatory mechanisms for target years beyond 2020.

As shown in Table 20, project GHG emissions are not expected to exceed LEAL Master Plan EIR 2015 – Master Plan Buildout GHG Emissions Year 2035 conditions. The project's operational GHG emissions are expected to be 57% less than the previously approved 2015 EIR levels. All previously identified mitigation measures to reduced operational emissions in the 2015 EIR are still applicable.

7.3 Project Consistency With GHG Reduction Plans

The project will be required to comply with the mandatory requirements of the latest 2019 California Building Standards Code, including Title 24, Part 11, CALGreen and Title 24, Part 6, Energy Code. The purpose of the building standards is to reduce negative impacts on the environment through improved planning and design, energy efficiency, water efficiency and conservation and material and resource conservation. The California Building Standards were developed to help meet the requirements of the Global Warming Solutions Act (AB 32). The project shall design all project buildings to meet the California Building

Code (CBC) Title 24 energy standard, including, but not limited to, any combination of the following:

- Increase insulation such that heat transfer and thermal bridging are minimized.
- Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption.
- Incorporate Energy Star or better rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.
- Install energy-efficient lighting (e.g., light-emitting diodes [LEDs] and lighting control systems). Use daylight as an integral part of the lighting systems in buildings.
- Install light-colored "cool" roofs (e.g., Energy Star roofing) or other highly reflective, highly emissive roofing materials.

Also, as part of the latest Energy Code requirements, the project will be required to include rooftop solar panels, community solar panels, and/or other sources of on-site renewable energy capable of meeting the required California Energy Code Energy Design Rating. Therefore, by complying with the City's GHG reduction policy the project would not conflict with an applicable plan, policy, or regulation for the purpose of reducing the emissions of greenhouse gases and the impact is considered less than significant.

7.4 Project Design Features

The mixed-use Master Plan project includes many design features that will help reduce Air Quality and GHG emissions. The following operational project features will be included as part of the project's design:

Operational Design Features:

DF-11 Implement trip reduction measures and project design features to reduce the number of auto-based trips generated by the project and encourage the use of transit, bicycling, and walking through the following measures;

1. Improve the walkability design of the project by providing pedestrian and bicycling connections within the project site and to adjacent off-

site facilities (i.e. sidewalks, bike lanes, trails, parcel-to-parcel connections, crosswalks, wayfinding signage, etc.).

2. Provide traffic calming measures (i.e. marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.)

3. Provide bicycle parking at the commercial, civic center and community center areas.

4. Provide secure bicycle parking areas at the multi-family uses.

5. Provide electric vehicle charging stations and parking for all uses (i.e. common area charging stations for the multi-family, retail/commercial, and civic center uses and garages setup with dedicated circuits and plugs for single family/condos).

DF-12 No wood burning fireplaces will be allowed in any residential dwelling.

DF-13 Install rooftop solar panels, community solar panels, and/or other sources of on-site renewable energy capable of meeting the required California Energy Code Energy Design Rating for all single family, multifamily residences and municipal building uses.

DF-14 Comply with the mandatory requirements of California Building Standards Code Title 24 Part 6 (Energy Code) and Title 24 Part 11 (CAL Green).

DF-15 Implement water conservation strategies, including low flow fixtures and toilets, water efficient irrigation systems, drought tolerant/native landscaping, and limit the amount of turf/sod.

DF-16 Participate in the local waste management recycling and composting programs.

DF-17 The home-owners associations and property management companies should encourage landscape maintenance crews to use electric landscaping equipment, such as lawn mowers and leaf blowers, wherever feasible.

8.0 Energy Conservation Analysis

8.1 Study Objectives

The purpose of this energy conservation analysis is to review the energy implications of the proposed LEAL Master Plan Amendment (project) and provide recommendations to reduce wasteful, inefficient and unnecessary consumption of energy during construction and operation. This analysis has been prepared within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.).

CEQA Guidelines, Appendix F, Energy Conservation, describes the framework within which energy conservation should be analyzed. Conserving energy implies the wise and efficient use of energy through decreasing overall per capita energy consumption, decreasing reliance on fossil fuels (such as coal, natural gas and oil), and increasing reliance on renewable energy sources. This analysis considers energy impacts to include:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction and operation.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.

3. The effects of the project on peak and base period demands for electricity and other forms of energy.

4. The degree to which the project complies with existing energy standards.

5. The effects of the project on energy resources.

8.2 Utility Providers

The project will be served by the following utility providers, as shown in Table 21.

Table 21
Utility Providers

Utility	Provider
Electricity	Southern California Edison
Natural Gas	Southern California Gas Company
Water	Jurupa Community Service
Sewer	Waste Management / Burrtec Waste Industries
Telephone	T-Mobile, AT&T, Spectrum & Google Fi
Cable	Direct TV, Spectrum & Verizon

8.3 Energy Consumption Methodology

The three (3) main types of energy expected to be consumed by the project include electricity, natural gas and petroleum products in the form of gasoline and diesel fuel.

The California Emissions Estimator Model Version 2020.4.0 (CalEEMod) is used to calculate energy usage from project construction and operational activities.

The CalEEMod Unmitigated Reports for the project are provided in Appendix A.

8.4 Electricity Consumption

The project will use electricity for many different operational activities including, but not limited to, building heating and cooling, lighting, appliances, electronics, mechanical equipment, electric vehicle charging, and parking lot lighting. Indirect electricity usage will also be required to supply, distribute, and treat water and wastewater. Electricity will be provided to the site by Southern California Edison.

Temporary electricity usage for construction activities may include lighting, electric equipment and mobile office uses, however, CalEEMod does not calculate electricity usage during construction. Electricity usage during construction is expected to be short-term and relatively minor compared to the operational demand, and therefore electricity usage during construction is not counted in this analysis.

Table 22 shows the project's estimated operational electricity consumption in kilowatt-hours per year (kWh/year) and millions of Btu per year.

Table 22
Project Electricity Consumption

Land Use/Activity	Electricity Consumption[1]	
	(kWhr/yr)[2]	(MBtu/yr)[2]
General Office Building	597,350.00	2,038.16
Government (Civic Center)	571,618.00	1,950.36
Medical Office Building	597,350.00	2,038.16
Library	248,000.00	846.18
Enclosed Parking with Elevator	6,136,320.00	20,937.12
Parking Lot	136,920.00	467.17
Street Lighting	349,438.00	1,192.28
Apartments Low Rise	4,586,950.00	15,650.67
Condo/Townhouse	4,973,760.00	16,970.47
Single Family Housing	3,185,860.00	10,870.15
Regional Shopping Center	4,734,600.00	16,154.46
Water Supply and Treatment	2,394,345.79	8,169.51
Total	28,512,511.79	97,284.69

[1] Source: CalEEMod Unmitigated Default.

[2] kWhr/yr = Kilowatt Hours per Year
MBtu/yr = Million British Thermal Units per Year

8.5 Natural Gas Consumption

The project will use natural gas for such things as building heating and cooling, cooking, kitchen appliances, and gas water heaters. Natural gas is not expected to be used during construction in any significant quantities and is not included in the overall calculation of the project's natural gas consumption.

Table 23 shows the project's estimated operational natural gas consumption in millions of Btu per year.

Table 23
Project Natural Gas Consumption

Land Use/Activity	Natural Gas Consumption[1] (MBtu/yr)[2]
General Office Building	0.22
Government (Civic Center)	0.21
Medical Office Building	0.22
Library	0.81
Apartments Low Rise	16.64
Condo/Townhouse	21.10
Single Family Housing	11.31
Regional Shopping Center	0.86
Total	51.38

[1] Source: CalEEMod Unmitigated Default.
[2] MBtu/yr = Millions of British Thermal Units per Year

8.6 Petroleum Consumption

The project's energy consumption from petroleum products is primarily associated with transportation related activities. This includes gasoline and diesel fuel usage for auto and truck trips during construction and operation and off-road equipment usage during construction.

8.6.1 Petroleum Consumption - Construction

Construction of the project is estimated to last approximately 14 months and consist of site preparation, grading, building construction, paving, and architectural coating phases. Construction activities will consume energy in the form of motor vehicle fuel (gasoline and diesel) for off-road construction equipment and on-road vehicle trips. Vehicle trips include workers and vendors traveling to and from the job-site.

Table 24 shows the project's energy consumption for all off-road equipment during construction. For purposes of this analysis, all off-road equipment is assumed to run on diesel fuel. Table 25 shows the project's energy consumption from on-road vehicle trips during construction.

Table 24
Construction Off-Road Equipment Energy Consumption

Phase[1]	Phase Duration (Days)[1]	Equipment[1]	Amount[1]	Hours/ Day[1]	Horspower (HP)[1]	Load Factor[1]	HP-hrs[2]	Fuel Consumption Rate[3] (hp-hr/gal)	Diesel Fuel Consumption (gal.)	Diesel Fuel Consumption by Phase (gal.)	MBtu[4]
Demolition	15	Concrete/Industrial Saw	1	8	81	0.73	7095.6	18.5	383.5	2833.6	389.286
		Excavators	3	8	158	0.38	21614.4		1168.3		
		Rubber Tired Dozers	2	8	247	0.4	23712		1281.7		
Site Preparation	120	Rubber Tired Dozers	3	8	247	0.40	284,544.0		15,380.8	22,830.4	3,136.457
		Tractors/Loaders/Backhoes	4	8	97	0.37	137,817.6		7,449.6		
Grading	100	Excavators	2	8	158	0.38	96,064.0		5,192.6	24,327.8	3,342.180
		Graders	1	8	187	0.41	7,360.3		397.9		
		Rubber Tired Dozers	1	8	247	0.40	7,360.3		397.9		
		Scrapers	2	8	367	0.48	281,856.0		15,235.5		
		Tractors/Loaders/Backhoes	2	8	97	0.37	57,424.0		3,104.0		
Building Construction	580	Cranes	1	7	231	0.29	271,979.4		14,701.6	72,506.3	9,960.984
		Forklifts	3	8	89	0.20	247,776.0		13,393.3		
		Generator Sets	1	8	84	0.74	288,422.4		15,590.4		
		Tractors/Loaders/Backhoes	3	7	97	0.37	437,140.2		23,629.2		
		Welders	1	8	46	0.45	96,048.0		5,191.8		
Paving	70	Pavers	1	8	130	0.42	30,576.0		1,652.8	4,931.6	677.513
		Paving Equipment	1	8	132	0.36	26,611.2		1,438.4		
		Rollers	2	8	80	0.38	34,048.0		1,840.4		
Architectural Coating	334	Air Compressors	1	6	78	0.48	75,029.8		4,055.7	4,055.7	557.171
								Total Energy Requirements		**131,485.4**	**18,063.591**

[1] Source: CalEEMod (CalEEMod v.2020.4.0)

[2] HP-hrs = Horsepower Hours.

[3] Source: Carl Moyer Program Guidelines. 2017 Revisions. Table D-21. https://www.arb.ca.gov/msprog/moyer/guidelines/current.htm

[4] Mbtu = Millions of Btu; assuming 1 gallon of diesel fuel = 137,381 Btu.

Table 25
Construction On-Road Trips Energy Consumption

Construction Phase[1]	Phase Duration (Days)[1]	Trips /Day[1]	Trip Length[1]	Phase VMT	Vehicle Class[1]	Vehicle Mix[1]	Average Fuel Economy (MPG)[2]	Gasoline			Diesel			Total MBtu[3]
								Fuel Split[2]	Fuel Consumption by Veh. Class (gal.)	Fuel Consumption by Phase (gal.)	Fuel Split[2]	Fuel Consumption by Veh. Class (gal.)	Fuel Consumption by Phase	
Worker Trips														
Demolition	15	15	14.7	3307.5	LDA	0.5	31.57	0.9941	52.1	116.3	0.006	0.31	0.49	14.08
					LDT1	0.25	26.69	0.9996	30.97		0.0004	0.01		
					LDT2	0.25	24.72	0.995	33.28		0.0050	0.17		
Site Preparation	120	18	14.7	31,752	LDA	0.50	31.57	0.9941	499.92	1,116.72	0.0059	2.97	4.69	135.13
					LDT1	0.25	26.69	0.9996	297.30		0.0004	0.12		
					LDT2	0.25	24.72	0.9950	319.51		0.0050	1.61		
Grading	100	20	14.7	29,400	LDA	0.50	31.57	0.9941	462.88	1,034.00	0.0059	2.75	4.34	125.12
					LDT1	0.25	26.69	0.9996	275.27		0.0004	0.11		
					LDT2	0.25	24.72	0.9950	295.84		0.0050	1.49		
Building Construction	580	3,167	14.7	27,001,842	LDA	0.50	31.57	0.9941	425,127.20	949,658.49	0.0059	2,523.14	3,989.69	114,914.53
					LDT1	0.25	26.69	0.9996	252,819.79		0.0004	101.17		
					LDT2	0.25	24.72	0.9950	271,711.50		0.0050	1,365.38		
Paving	70	15	14.7	15,435	LDA	0.50	31.57	0.9941	243.01	542.85	0.0059	1.44	2.28	65.69
					LDT1	0.25	26.69	0.9996	144.52		0.0004	0.06		
					LDT2	0.25	24.72	0.9950	155.32		0.0050	0.78		
Architectural Coating	334	633	14.7	3,107,903	LDA	0.50	31.57	0.9941	48,932.00	109,305.39	0.0059	290.41	459.21	13,226.63
					LDT1	0.25	26.69	0.9996	29,099.48		0.0004	11.64		
					LDT2	0.25	24.72	0.9950	31,273.91		0.0050	157.16		
Sub-Total Worker Trips Energy Consumption									Gasoline (gal.)	1,061,657.45		Diesel (gal.)	4,460.22	128,467.09
Vendor Trips														
Building Construction	580	880	6.9	3,521,760	MHDT	0.50	9.22	0.2648	50,572.78	50,843.68	0.7352	140,412.04	411,045.75	62,592.93
					HHDT	0.50	6.50	0.0010	270.90		0.9990	270,633.71		
Hauling Trips														
Demolition	15	307	20.0	92,100	HHDT	1.00	6.5	0.001	14.17	14.17	1.00	14,155.06	14,155.06	1,946.34
Site Preparation	120	42,500	20.0	102,000,000	HHDT	1.00	6.5	0.001	15,692.31	15,692.31	1.00	15,676,615.38	15,676,615.38	2,155,558.91
Grading	100	67,750	20.0	135,500,000	HHDT	1.00	6.5	0.001	20,846.15	20,846.15	0.9990	20,825,307.69	20,825,307.69	2,863,512.08
Total On-Road Construction Trips Energy Consumption									**Gasoline (gal.)**	**1,149,053.77**		**Diesel (gal.)**	**36,931,584.10**	**5,212,077.35**

[1] Source: CalEEMod Defaults (CalEEMod v.2020.4.0)

[2] Source: EMFAC2017 Web Database. https://www.arb.ca.gov/emfac/2017/. (See Appendix C for more details.)

[3] Mbtu = Millions of Btu; assuming 1 gallon of gasoline fuel = 120,429 Btu and 1 gallon of diesel fuel = 137,381 Btu

8.6.2 Petroleum Consumption - Operation

The project is expected to consume energy from auto and truck trips generated by the proposed land uses. Operational vehicle trips are associated with workers, customers and vendors/non-workers (i.e., delivery, service, maintenance vehicles, etc.) traveling to and from the site. EMFAC2017 vehicle fuel consumption data is provided in Appendix C.

Table 26 shows the project's petroleum energy consumption for all operational trips generated by the project on an annual basis.

Table 26
Operational Trips Energy Consumption - Annual

Vehicle Class	Vehicle Mix	Average Fuel Economy (MPG)	Annual VMT	Gasoline		Diesel		MBtu
				Fuel Split	Fuel Consumption (gal.)	Fuel Split	Fuel Consumption (gal.)	
LDA	55.64%	31.57	68,221,050	0.9941	1,195,362.88	0.0059	7,094.50	144,931.01
LDT1	5.81%	26.69		0.9996	148,452.70	0.0004	59.40	17,886.17
LDT2	17.88%	24.72		0.9950	490,972.56	0.0050	2,467.20	59,466.28
MDV	13.74%	20.13		0.9826	457,490.71	0.0174	8,101.30	56,208.11
LHD1	2.53%	13.52		0.7287	93,009.83	0.2713	34,628.20	15,958.34
LHD2	0.32%	13.88		0.5425	8,467.34	0.4575	7,140.66	2,000.70
MHD	0.53%	9.22		0.2648	10,360.02	0.7352	28,763.91	5,199.26
HHD	0.85%	6.50		0.0010	89.07	0.9990	88,980.01	12,234.89
OBUS	0.03%	5.31		0.4636	1,652.27	0.5364	1,911.72	461.62
UBUS	0.01%	4.87		0.9868	1,879.51	0.0132	25.14	229.80
MCY	2.40%	36.31		1.0000	45,039.86	0.0000	0.00	5,424.11
SBUS	0.05%	8.05		0.2990	1,261.33	0.7010	2,957.16	558.16
MH	0.21%	5.96		0.8499	20,812.74	0.1501	3,675.72	3,011.43
Total Operational Trips Energy Usage				Gasoline Consumption (gal.)	2,474,850.82	Diesel Consumption (gal.)	185,804.92	323,569.88

[1] Source: CalEEMod Defaults. (CalEEMod v.2020.4.0)
[2] Source: EMFAC2017 Web Database. https://www.arb.ca.gov/emfac/2017/. (See Appendix C for more details.)
[3] MBtu/yr = Millions of Btu per year; assuming 1 gallon of gasoline fuel = 120,429 Btu and 1 gallon of diesel fuel = 137,381 Btu

8.7 Summary of Project Energy Consumption

Table 27 provides a summary of the project's annual operational energy consumption.

Table 27
Annual Energy Consumption

Activity	Energy Consumption (MBtu/yr)[1]
Electricity	97,284.69
Natural Gas	51.38
Petroleum	323,569.88
Total Annual Operational Energy Consumption	**420,905.94**

[1] MBtu/yr = Millions of Btu per year. Operational activities only.

8.8 Energy Impact Analysis

This analysis has been prepared within the context of the CEQA Guidelines, Appendix F, Energy Conservation, and Appendix G, Environmental Checklist Form. According to CEQA, the goal of conserving energy implies the wise and efficient use of energy through decreasing overall per capita energy consumption, decreasing reliance on fossil fuels (such as coal, natural gas and oil), and increasing reliance on renewable energy sources.

8.9 Energy Impact – 1

Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project's impact is considered less than significant with the inclusion of the mandatory requirements of California's Building Energy Efficiency Standards (Title 24, Part 6) and Green Building Standards (CALGreen, Title 24, Part 11). California's building energy efficiency standards are some of the strictest in the nation and the project's compliance with California's building code will ensure that wasteful, inefficient or unnecessary consumption of energy is minimized. The building standards code is designed to reduce the amount of energy needed to heat or cool a building, reduce energy usage for lighting and appliances and promote usage of energy from renewable sources.

The project will also implement several project design features for reducing energy demand, as described in Section 1.4 of this report.

8.10 Energy Impact – 2

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project's impact is considered less than significant as the project will purchase electricity through Southern California Edison which is subject to the requirements of California Senate Bill 100 (SB 100). SB 100 is the most stringent and current energy legislation in California; requiring that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045.[7]

The project will be required to comply with the mandatory requirements of California's Green Building and Building Energy Efficiency standards that promote renewable energy and energy efficiency. The project will include on-site solar for all new single family homes and low-rise multifamily homes, per the requirements of the California Energy Code Energy Design Rating.

The project will also comply with the City of Eastvale General Plan applicable goals and policies regarding energy efficiency and conservation policies including but not limited to the following goals as shown in Table 28.

[7] SB-100 California Renewables Portfolio Standard Program. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100

Table 28
Project Consistency with the City of Eastvale
Applicable Energy Efficiency and Conservation Policies

Energy Efficiency and Conservation Policies	Project's Consistency
Policy AQ-26: Permit and encourage the use of passive solar devices and other state-of-the-art energy conservation measures.	The project will include on-site solar for all new single-family homes and low-rise multifamily homes, per the requirements of the California Energy Code Energy Design Rating.
POLICY AQ-27: Support and encourage voluntary efforts to provide active and passive solar access opportunities in new developments.	
POLICY AQ-30: Promote coordination of new public facilities with mass transit service and other alternative transportation services, including bicycles, and design structures to promote mass transit, bicycle, and pedestrian use.	As previously explained in Design Feature – 11 (DF-11), the project will include alternative transportation services, including bicycles, and design structures to promote mass transit, bicycle, and pedestrian use.
POLICY AQ-32: Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.	The project will participate in the local waste management recycling and composting programs.

Exhibits

Location Map



Legend:

✳ = Project Site

N

Exhibit B
Site Plan



N

Appendices

Appendix A

Daily Emissions Calculations Output
(CalEEMod)

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

LEAL Master Plan Modification Project-Unmitigated

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	65.00	1000sqft	0.00	65,000.00	0
Government (Civic Center)	62.20	1000sqft	11.02	62,200.00	0
Medical Office Building	65.00	1000sqft	0.00	65,000.00	0
Library	25.00	1000sqft	0.00	25,000.00	0
Enclosed Parking with Elevator	2,820.00	Space	0.00	1,128,000.00	0
Parking Lot	978.00	Space	0.00	391,200.00	0
Parking Lot	22.92	Acre	22.92	998,395.20	0
City Park	14.06	Acre	14.06	612,540.72	0
Apartments Low Rise	1,100.00	Dwelling Unit	28.17	1,100,000.00	3146
Condo/Townhouse	1,000.00	Dwelling Unit	35.28	1,000,000.00	2860
Single Family Housing	400.00	Dwelling Unit	47.15	720,000.00	1144
Regional Shopping Center	390.00	1000sqft	0.00	390,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use - The project land uses are summarized in Table 1: Land Use Summary in the Air Quality Report.

Construction Phase - The construction phases has been updated to meet opening year 2026.

Demolition - The project is expected to demolish all existing structures of approximately 67,500 square feet of building material.

Grading - The project is expecting to export approx. 340,000 cy of organic dairy waste and import approx. 542,000 cy of earthwork material.

Architectural Coating -

Vehicle Trips - Project Trip Generation Rates are based on LEAL Masterplan Amendment Project Traffic Study, by RK Engineering Group.

Woodstoves - SCAQMD Rule 445 restricts wood burning hearths/fireplaces from being installed in new development.

Consumer Products -

Area Coating -

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regarding fugitive dust control. The project is expected to use Tier 4 diesel engine construction equipment.

Area Mitigation - The project is expected use only natural gas hearth.

Energy Mitigation -

Fleet Mix - Operational fleet mix adjusted to equal 2% trucks with GVWR > 10,000 lbs.

Trips and VMT -

Mobile Land Use Mitigation - The project is proposing to implement traffic calming measures as a part of their design feature.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	200.00	15.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	NumDays	3,100.00	580.00
tblConstructionPhase	NumDays	220.00	70.00
tblConstructionPhase	NumDays	220.00	334.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	55.00	0.00
tblFireplaces	NumberWood	50.00	0.00
tblFireplaces	NumberWood	20.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MDV	0.13	0.14
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblGrading	MaterialExported	0.00	340,000.00
tblGrading	MaterialImported	0.00	542,000.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	1.43	11.02
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	0.57	0.00
tblLandUse	LotAcreage	25.38	0.00
tblLandUse	LotAcreage	8.80	0.00
tblLandUse	LotAcreage	68.75	28.17
tblLandUse	LotAcreage	62.50	35.28
tblLandUse	LotAcreage	129.87	47.15
tblLandUse	LotAcreage	8.95	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	7.32	6.59
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	6.59
tblVehicleTrips	WD_TR	9.74	9.68
tblVehicleTrips	WD_TR	33.98	23.80
tblVehicleTrips	WD_TR	72.05	64.84
tblVehicleTrips	WD_TR	34.80	31.32
tblVehicleTrips	WD_TR	37.75	35.01
tblVehicleTrips	WD_TR	9.44	8.50
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.8461	125.4211	49.0803	0.4536	26.4158	2.6417	28.5552	11.9096	2.4673	13.8971	0.0000	47,772.7123	47,772.7123	2.5114	6.5511	49,787.7192
2023	14.1353	102.2186	144.2659	0.4921	41.0360	2.2421	42.1522	11.0110	2.0928	12.0619	0.0000	50,725.5074	50,725.5074	2.5127	6.2691	51,702.4040
2024	13.2353	48.5680	136.6590	0.4797	41.0359	1.0207	42.0566	11.0110	0.9609	11.9719	0.0000	49,705.8492	49,705.8492	1.4354	3.0588	50,653.2530
2025	73.9659	46.7004	129.0386	0.4668	41.0358	0.9274	41.9632	11.0110	0.8733	11.8843	0.0000	48,661.7778	48,661.7778	1.3734	2.9663	49,580.0636
2026	73.8439	2.1797	20.8264	0.0594	7.0755	0.0801	7.1556	1.8764	0.0778	1.9543	0.0000	6,203.3030	6,203.3030	0.1230	0.1211	6,242.4738
Maximum	**73.9659**	**125.4211**	**144.2659**	**0.4921**	**41.0360**	**2.6417**	**42.1522**	**11.9096**	**2.4673**	**13.8971**	**0.0000**	**50,725.5074**	**50,725.5074**	**2.5127**	**6.5511**	**51,702.4040**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.9828	89.8777	53.0379	0.4536	15.8645	1.1084	16.9729	5.6378	1.0648	6.2038	0.0000	47,772.7123	47,772.7123	2.5114	6.5511	49,787.7192
2023	12.8904	71.0030	145.4822	0.4921	41.0360	0.9192	41.4933	11.0110	0.8838	11.4442	0.0000	50,725.5074	50,725.5074	2.5127	6.2691	51,702.4040
2024	12.0915	37.3590	137.9525	0.4797	41.0359	0.4482	41.4841	11.0110	0.4248	11.4358	0.0000	49,705.8492	49,705.8492	1.4354	3.0588	50,653.2530
2025	73.8248	36.4655	130.4142	0.4668	41.0358	0.4406	41.4764	11.0110	0.4178	11.4288	0.0000	48,661.7778	48,661.7778	1.3734	2.9663	49,580.0636
2026	73.7028	1.1630	20.8497	0.0594	7.0755	0.0326	7.1080	1.8764	0.0303	1.9067	0.0000	6,203.3030	6,203.3030	0.1230	0.1211	6,242.4738
Maximum	**73.8248**	**89.8777**	**145.4822**	**0.4921**	**41.0360**	**1.1084**	**41.4933**	**11.0110**	**1.0648**	**11.4442**	**0.0000**	**50,725.5074**	**50,725.5074**	**2.5127**	**6.5511**	**51,702.4040**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.06**	**27.44**	**-1.64**	**0.00**	**6.74**	**57.34**	**8.25**	**13.40**	**56.41**	**18.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197
Energy	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433
Mobile	120.6838	106.2988	1,085.8612	2.3442	267.2824	1.5399	268.8223	71.0849	1.4351	72.5200		246,009.8094	246,009.8094	12.0798	9.3439	249,096.2788
Total	**207.9055**	**156.9362**	**1,313.1663**	**2.6630**	**267.2824**	**6.5836**	**273.8661**	**71.0849**	**6.4789**	**77.5638**	**0.0000**	**307,942.5952**	**307,942.5952**	**13.6179**	**10.4725**	**311,403.8417**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197
Energy	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433
Mobile	105.3620	79.2966	788.3161	1.5820	178.0279	1.0800	179.1079	47.3473	1.0060	48.3533		166,018.6471	166,018.6471	9.4041	7.0175	168,344.9714
Total	**192.5837**	**129.9341**	**1,015.6212**	**1.9007**	**178.0279**	**6.1238**	**184.1517**	**47.3473**	**6.0498**	**53.3971**	**0.0000**	**227,951.4329**	**227,951.4329**	**10.9422**	**8.1461**	**230,652.5343**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.37**	**17.21**	**22.66**	**28.63**	**33.39**	**6.98**	**32.76**	**33.39**	**6.62**	**31.16**	**0.00**	**25.98**	**25.98**	**19.65**	**22.21**	**25.93**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/2/2022	5/20/2022	5	15	
2	Site Preparation	Site Preparation	5/21/2022	11/4/2022	5	120	
3	Grading	Grading	11/5/2022	3/24/2023	5	100	
4	Building Construction	Building Construction	3/25/2023	6/13/2025	5	580	
5	Paving	Paving	6/14/2025	9/19/2025	5	70	
6	Architectural Coating	Architectural Coating	9/20/2025	12/31/2026	5	334	

Acres of Grading (Site Preparation Phase): 180

Acres of Grading (Grading Phase): 300

Acres of Paving: 22.92

Residential Indoor: 5,710,500; Residential Outdoor: 1,903,500; Non-Residential Indoor: 910,800; Non-Residential Outdoor: 303,600; Striped Parking Area: 151,056 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	307.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	42,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	67,750.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,167.00	880.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	633.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.4569	0.0000	4.4569	0.6748	0.0000	0.6748			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**4.4569**	**1.2427**	**5.6996**	**0.6748**	**1.1553**	**1.8301**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0647	2.6139	0.5813	0.0118	0.3582	0.0304	0.3886	0.0982	0.0291	0.1273		1,255.3270	1,255.3270	0.0170	0.1978	1,314.6806
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0591	0.0383	0.5980	1.5200e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		155.0309	155.0309	3.8400e-003	3.8100e-003	156.2632
Total	**0.1238**	**2.6522**	**1.1793**	**0.0133**	**0.5259**	**0.0312**	**0.5571**	**0.1427**	**0.0298**	**0.1725**		**1,410.3578**	**1,410.3578**	**0.0208**	**0.2016**	**1,470.9437**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7048	0.0000	1.7048	0.2581	0.0000	0.2581			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**1.7048**	**0.0616**	**1.7664**	**0.2581**	**0.0616**	**0.3198**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0647	2.6139	0.5813	0.0118	0.3582	0.0304	0.3886	0.0982	0.0291	0.1273		1,255.3270	1,255.3270	0.0170	0.1978	1,314.6806
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0591	0.0383	0.5980	1.5200e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		155.0309	155.0309	3.8400e-003	3.8100e-003	156.2632
Total	**0.1238**	**2.6522**	**1.1793**	**0.0133**	**0.5259**	**0.0312**	**0.5571**	**0.1427**	**0.0298**	**0.1725**		**1,410.3578**	**1,410.3578**	**0.0208**	**0.2016**	**1,470.9437**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					20.0158	0.0000	20.0158	10.1568	0.0000	10.1568			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**20.0158**	**1.6126**	**21.6284**	**10.1568**	**1.4836**	**11.6404**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1200	45.2322	10.0586	0.2036	6.1988	0.5257	6.7246	1.6995	0.5030	2.2025		21,722.8812	21,722.8812	0.2938	3.4220	22,749.9690
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0709	0.0460	0.7176	1.8300e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		186.0370	186.0370	4.6100e-003	4.5800e-003	187.5158
Total	**1.1909**	**45.2782**	**10.7762**	**0.2055**	**6.4000**	**0.5267**	**6.9268**	**1.7528**	**0.5039**	**2.2568**		**21,908.9182**	**21,908.9182**	**0.2984**	**3.4265**	**22,937.4848**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6560	0.0000	7.6560	3.8850	0.0000	3.8850			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**7.6560**	**0.0621**	**7.7181**	**3.8850**	**0.0621**	**3.9471**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.1200	45.2322	10.0586	0.2036	6.1988	0.5257	6.7246	1.6995	0.5030	2.2025		21,722.8812	21,722.8812	0.2938	3.4220	22,749.9690
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0709	0.0460	0.7176	1.8300e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		186.0370	186.0370	4.6100e-003	4.5800e-003	187.5158
Total	**1.1909**	**45.2782**	**10.7762**	**0.2055**	**6.4000**	**0.5267**	**6.9268**	**1.7528**	**0.5039**	**2.2568**		**21,908.9182**	**21,908.9182**	**0.2984**	**3.4265**	**22,937.4848**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.8899	0.0000	9.8899	3.7577	0.0000	3.7577			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.8899**	**1.6349**	**11.5248**	**3.7577**	**1.5041**	**5.2618**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1424	86.5265	19.2415	0.3895	11.8580	1.0057	12.8637	3.2510	0.9622	4.2132		41,554.5939	41,554.5939	0.5621	6.5460	43,519.3525
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0788	0.0511	0.7973	2.0300e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		206.7078	206.7078	5.1200e-003	5.0800e-003	208.3509
Total	**2.2212**	**86.5776**	**20.0388**	**0.3916**	**12.0816**	**1.0068**	**13.0884**	**3.3103**	**0.9632**	**4.2735**		**41,761.3017**	**41,761.3017**	**0.5672**	**6.5511**	**43,727.7034**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.7829	0.0000	3.7829	1.4373	0.0000	1.4373			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**0.7616**	**3.3000**	**32.9991**	**0.0621**	**3.7829**	**0.1015**	**3.8844**	**1.4373**	**0.1015**	**1.5389**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1424	86.5265	19.2415	0.3895	11.8580	1.0057	12.8637	3.2510	0.9622	4.2132		41,554.5939	41,554.5939	0.5621	6.5460	43,519.3525
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0788	0.0511	0.7973	2.0300e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		206.7078	206.7078	5.1200e-003	5.0800e-003	208.3509
Total	**2.2212**	**86.5776**	**20.0388**	**0.3916**	**12.0816**	**1.0068**	**13.0884**	**3.3103**	**0.9632**	**4.2735**		**41,761.3017**	**41,761.3017**	**0.5672**	**6.5511**	**43,727.7034**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.8899	0.0000	9.8899	3.7577	0.0000	3.7577			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.8899**	**1.4245**	**11.3144**	**3.7577**	**1.3105**	**5.0682**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4826	67.6578	18.6050	0.3723	11.8575	0.8166	12.6741	3.2508	0.7813	4.0321		39,755.4076	39,755.4076	0.5639	6.2644	41,636.3033
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0731	0.0452	0.7337	1.9700e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		201.2406	201.2406	4.5900e-003	4.6900e-003	202.7537
Total	**1.5557**	**67.7030**	**19.3387**	**0.3743**	**12.0810**	**0.8176**	**12.8987**	**3.3101**	**0.7822**	**4.0923**		**39,956.6482**	**39,956.6482**	**0.5685**	**6.2691**	**41,839.0570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.7829	0.0000	3.7829	1.4373	0.0000	1.4373			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**0.7616**	**3.3000**	**32.9991**	**0.0621**	**3.7829**	**0.1015**	**3.8844**	**1.4373**	**0.1015**	**1.5389**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4826	67.6578	18.6050	0.3723	11.8575	0.8166	12.6741	3.2508	0.7813	4.0321		39,755.4076	39,755.4076	0.5639	6.2644	41,636.3033
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0731	0.0452	0.7337	1.9700e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		201.2406	201.2406	4.5900e-003	4.6900e-003	202.7537
Total	**1.5557**	**67.7030**	**19.3387**	**0.3743**	**12.0810**	**0.8176**	**12.8987**	**3.3101**	**0.7822**	**4.0923**		**39,956.6482**	**39,956.6482**	**0.5685**	**6.2691**	**41,839.0570**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9919	28.7502	11.8380	0.1538	5.6364	0.2504	5.8868	1.6229	0.2395	1.8624		16,303.8482	16,303.8482	0.1663	2.4092	17,025.9522
Worker	11.5707	7.1498	116.1840	0.3114	35.3996	0.1661	35.5657	9.3881	0.1529	9.5410		31,866.4494	31,866.4494	0.7276	0.7430	32,106.0457
Total	**12.5626**	**35.9000**	**128.0219**	**0.4651**	**41.0360**	**0.4165**	**41.4525**	**11.0110**	**0.3924**	**11.4035**		**48,170.2975**	**48,170.2975**	**0.8939**	**3.1522**	**49,131.9979**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9919	28.7502	11.8380	0.1538	5.6364	0.2504	5.8868	1.6229	0.2395	1.8624		16,303.8482	16,303.8482	0.1663	2.4092	17,025.9522
Worker	11.5707	7.1498	116.1840	0.3114	35.3996	0.1661	35.5657	9.3881	0.1529	9.5410		31,866.4494	31,866.4494	0.7276	0.7430	32,106.0457
Total	**12.5626**	**35.9000**	**128.0219**	**0.4651**	**41.0360**	**0.4165**	**41.4525**	**11.0110**	**0.3924**	**11.4035**		**48,170.2975**	**48,170.2975**	**0.8939**	**3.1522**	**49,131.9979**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9763	28.7525	11.7023	0.1513	5.6363	0.2487	5.8850	1.6229	0.2379	1.8608		16,052.5709	16,052.5709	0.1721	2.3685	16,762.6911
Worker	10.7874	6.3718	108.7899	0.3015	35.3996	0.1587	35.5583	9.3881	0.1461	9.5342		31,097.5794	31,097.5794	0.6589	0.6903	31,319.7542
Total	**11.7637**	**35.1243**	**120.4922**	**0.4528**	**41.0359**	**0.4074**	**41.4433**	**11.0110**	**0.3840**	**11.3950**		**47,150.1503**	**47,150.1503**	**0.8310**	**3.0588**	**48,082.4453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9763	28.7525	11.7023	0.1513	5.6363	0.2487	5.8850	1.6229	0.2379	1.8608		16,052.5709	16,052.5709	0.1721	2.3685	16,762.6911
Worker	10.7874	6.3718	108.7899	0.3015	35.3996	0.1587	35.5583	9.3881	0.1461	9.5342		31,097.5794	31,097.5794	0.6589	0.6903	31,319.7542
Total	**11.7637**	**35.1243**	**120.4922**	**0.4528**	**41.0359**	**0.4074**	**41.4433**	**11.0110**	**0.3840**	**11.3950**		**47,150.1503**	**47,150.1503**	**0.8310**	**3.0588**	**48,082.4453**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9635	28.5160	11.5701	0.1486	5.6362	0.2489	5.8851	1.6228	0.2381	1.8609		15,769.6084	15,769.6084	0.1785	2.3221	16,466.0609
Worker	10.0844	5.7147	101.3839	0.2912	35.3996	0.1509	35.5505	9.3881	0.1389	9.5271		30,335.6951	30,335.6951	0.5940	0.6442	30,542.5047
Total	**11.0479**	**34.2307**	**112.9539**	**0.4398**	**41.0358**	**0.3998**	**41.4356**	**11.0110**	**0.3770**	**11.3880**		**46,105.3034**	**46,105.3034**	**0.7725**	**2.9663**	**47,008.5656**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9635	28.5160	11.5701	0.1486	5.6362	0.2489	5.8851	1.6228	0.2381	1.8609		15,769.6084	15,769.6084	0.1785	2.3221	16,466.0609
Worker	10.0844	5.7147	101.3839	0.2912	35.3996	0.1509	35.5505	9.3881	0.1389	9.5271		30,335.6951	30,335.6951	0.5940	0.6442	30,542.5047
Total	**11.0479**	**34.2307**	**112.9539**	**0.4398**	**41.0358**	**0.3998**	**41.4356**	**11.0110**	**0.3770**	**11.3880**		**46,105.3034**	**46,105.3034**	**0.7725**	**2.9663**	**47,008.5656**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7730**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0478	0.0271	0.4802	1.3800e-003	0.1677	7.1000e-004	0.1684	0.0445	6.6000e-004	0.0451		143.6803	143.6803	2.8100e-003	3.0500e-003	144.6598
Total	**0.0478**	**0.0271**	**0.4802**	**1.3800e-003**	**0.1677**	**7.1000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**143.6803**	**143.6803**	**2.8100e-003**	**3.0500e-003**	**144.6598**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1383**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0478	0.0271	0.4802	1.3800e-003	0.1677	7.1000e-004	0.1684	0.0445	6.6000e-004	0.0451		143.6803	143.6803	2.8100e-003	3.0500e-003	144.6598
Total	**0.0478**	**0.0271**	**0.4802**	**1.3800e-003**	**0.1677**	**7.1000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**143.6803**	**143.6803**	**2.8100e-003**	**3.0500e-003**	**144.6598**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**71.9503**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0156	1.1422	20.2640	0.0582	7.0755	0.0302	7.1056	1.8764	0.0278	1.9042		6,063.3075	6,063.3075	0.1187	0.1288	6,104.6433
Total	**2.0156**	**1.1422**	**20.2640**	**0.0582**	**7.0755**	**0.0302**	**7.1056**	**1.8764**	**0.0278**	**1.9042**		**6,063.3075**	**6,063.3075**	**0.1187**	**0.1288**	**6,104.6433**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**71.8092**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0156	1.1422	20.2640	0.0582	7.0755	0.0302	7.1056	1.8764	0.0278	1.9042		6,063.3075	6,063.3075	0.1187	0.1288	6,104.6433
Total	**2.0156**	**1.1422**	**20.2640**	**0.0582**	**7.0755**	**0.0302**	**7.1056**	**1.8764**	**0.0278**	**1.9042**		**6,063.3075**	**6,063.3075**	**0.1187**	**0.1288**	**6,104.6433**

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**71.9503**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8936	1.0342	19.0172	0.0564	7.0755	0.0286	7.1041	1.8764	0.0263	1.9028		5,921.8549	5,921.8549	0.1076	0.1211	5,960.6419
Total	**1.8936**	**1.0342**	**19.0172**	**0.0564**	**7.0755**	**0.0286**	**7.1041**	**1.8764**	**0.0263**	**1.9028**		**5,921.8549**	**5,921.8549**	**0.1076**	**0.1211**	**5,960.6419**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**71.8092**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8936	1.0342	19.0172	0.0564	7.0755	0.0286	7.1041	1.8764	0.0263	1.9028		5,921.8549	5,921.8549	0.1076	0.1211	5,960.6419
Total	**1.8936**	**1.0342**	**19.0172**	**0.0564**	**7.0755**	**0.0286**	**7.1041**	**1.8764**	**0.0263**	**1.9028**		**5,921.8549**	**5,921.8549**	**0.1076**	**0.1211**	**5,960.6419**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	105.3620	79.2966	788.3161	1.5820	178.0279	1.0800	179.1079	47.3473	1.0060	48.3533		166,018.6471	166,018.6471	9.4041	7.0175	168,344.9714
Unmitigated	120.6838	106.2988	1,085.8612	2.3442	267.2824	1.5399	268.8223	71.0849	1.4351	72.5200		246,009.8094	246,009.8094	12.0798	9.3439	249,096.2788

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,249.00	8,954.00	6908.00	25,436,791	16,942,598
City Park	0.00	0.00	0.00		
Condo/Townhouse	6,590.00	8,140.00	6280.00	23,124,355	15,402,362
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	629.20	143.65	45.50	1,534,865	1,022,322
Government (Civic Center)	1,480.36	0.00	0.00	3,265,389	2,174,967
Library	1,621.00	2,002.25	1052.25	4,024,890	2,680,845
Medical Office Building	2,035.80	557.05	92.30	4,012,458	2,672,565
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	13,653.90	17,986.80	8229.00	29,193,851	19,445,051
Single Family Housing	3,400.00	3,816.00	3420.00	11,831,156	7,880,339
Total	36,659.26	41,599.75	26,027.05	102,423,756	68,221,050

4.3 Trip Type Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
City Park	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Condo/Townhouse	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Enclosed Parking with Elevator	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
General Office Building	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Government (Civic Center)	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Library	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Medical Office Building	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Parking Lot	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Regional Shopping Center	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Single Family Housing	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139

5.0 Energy Detail

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433
NaturalGas Unmitigated	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	45584.9	0.4916	4.2010	1.7876	0.0268		0.3397	0.3397		0.3397	0.3397		5,362.9334	5,362.9334	0.1028	0.0983	5,394.8027
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	57808.1	0.6234	5.3274	2.2670	0.0340		0.4307	0.4307		0.4307	0.4307		6,800.9573	6,800.9573	0.1304	0.1247	6,841.3720
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	610.822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Government (Civic Center)	584.51	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.7658	68.7658	1.3200e-003	1.2600e-003	69.1745
Library	2214.38	0.0239	0.2171	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5157	260.5157	4.9900e-003	4.7800e-003	262.0638
Medical Office Building	610.822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2350.68	0.0254	0.2305	0.1936	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.5512	276.5512	5.3000e-003	5.0700e-003	278.1946
Single Family Housing	30999.4	0.3343	2.8568	1.2157	0.0182		0.2310	0.2310		0.2310	0.2310		3,646.9866	3,646.9866	0.0699	0.0669	3,668.6588
Total		**1.5180**	**13.0098**	**5.7950**	**0.0828**		**1.0488**	**1.0488**		**1.0488**	**1.0488**		**16,560.4329**	**16,560.4329**	**0.3174**	**0.3036**	**16,658.8432**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	45.5849	0.4916	4.2010	1.7876	0.0268		0.3397	0.3397		0.3397	0.3397		5,362.9334	5,362.9334	0.1028	0.0983	5,394.8027
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	57.8081	0.6234	5.3274	2.2670	0.0340		0.4307	0.4307		0.4307	0.4307		6,800.9573	6,800.9573	0.1304	0.1247	6,841.3720
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.610822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Government (Civic Center)	0.58451	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.7658	68.7658	1.3200e-003	1.2600e-003	69.1745
Library	2.21438	0.0239	0.2171	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5157	260.5157	4.9900e-003	4.7800e-003	262.0638
Medical Office Building	0.610822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.35068	0.0254	0.2305	0.1936	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.5512	276.5512	5.3000e-003	5.0700e-003	278.1946
Single Family Housing	30.9994	0.3343	2.8568	1.2157	0.0182		0.2310	0.2310		0.2310	0.2310		3,646.9866	3,646.9866	0.0699	0.0669	3,668.6588
Total		**1.5180**	**13.0098**	**5.7950**	**0.0828**		**1.0488**	**1.0488**		**1.0488**	**1.0488**		**16,560.4329**	**16,560.4329**	**0.3174**	**0.3036**	**16,658.8432**

6.0 Area Detail

6.1 Mitigation Measures Area

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197
Unmitigated	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.5683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	68.7819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4.1250	35.2500	15.0000	0.2250		2.8500	2.8500		2.8500	2.8500	0.0000	45,000.0000	45,000.0000	0.8625	0.8250	45,267.4125
Landscaping	6.2285	2.3776	206.5101	0.0109		1.1450	1.1450		1.1450	1.1450		372.3529	372.3529	0.3582		381.3072
Total	**85.7036**	**37.6276**	**221.5101**	**0.2359**		**3.9950**	**3.9950**		**3.9950**	**3.9950**	**0.0000**	**45,372.3529**	**45,372.3529**	**1.2207**	**0.8250**	**45,648.7197**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.5683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	68.7819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4.1250	35.2500	15.0000	0.2250		2.8500	2.8500		2.8500	2.8500	0.0000	45,000.0000	45,000.0000	0.8625	0.8250	45,267.4125
Landscaping	6.2285	2.3776	206.5101	0.0109		1.1450	1.1450		1.1450	1.1450		372.3529	372.3529	0.3582		381.3072
Total	**85.7036**	**37.6276**	**221.5101**	**0.2359**		**3.9950**	**3.9950**		**3.9950**	**3.9950**	**0.0000**	**45,372.3529**	**45,372.3529**	**1.2207**	**0.8250**	**45,648.7197**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

LEAL Master Plan Modification Project-Unmitigated

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	65.00	1000sqft	0.00	65,000.00	0
Government (Civic Center)	62.20	1000sqft	11.02	62,200.00	0
Medical Office Building	65.00	1000sqft	0.00	65,000.00	0
Library	25.00	1000sqft	0.00	25,000.00	0
Enclosed Parking with Elevator	2,820.00	Space	0.00	1,128,000.00	0
Parking Lot	978.00	Space	0.00	391,200.00	0
Parking Lot	22.92	Acre	22.92	998,395.20	0
City Park	14.06	Acre	14.06	612,540.72	0
Apartments Low Rise	1,100.00	Dwelling Unit	28.17	1,100,000.00	3146
Condo/Townhouse	1,000.00	Dwelling Unit	35.28	1,000,000.00	2860
Single Family Housing	400.00	Dwelling Unit	47.15	720,000.00	1144
Regional Shopping Center	390.00	1000sqft	0.00	390,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use - The project land uses are summarized in Table 1: Land Use Summary in the Air Quality Report.

Construction Phase - The construction phases has been updated to meet opening year 2026.

Demolition - The project is expected to demolish all existing structures of approximately 67,500 square feet of building material.

Grading - The project is expecting to export approx. 340,000 cy of organic dairy waste and import approx. 542,000 cy of earthwork material.

Architectural Coating -

Vehicle Trips - Project Trip Generation Rates are based on LEAL Masterplan Amendment Project Traffic Study, by RK Engineering Group.

Woodstoves - SCAQMD Rule 445 restricts wood burning hearths/fireplaces from being installed in new development.

Consumer Products -

Area Coating -

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regarding fugitive dust control. The project is expected to use Tier 4 diesel engine construction equipment.

Area Mitigation - The project is expected use only natural gas hearth.

Energy Mitigation -

Fleet Mix - Operational fleet mix adjusted to equal 2% trucks with GVWR > 10,000 lbs.

Trips and VMT -

Mobile Land Use Mitigation - The project is proposing to implement traffic calming measures as a part of their design feature.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	200.00	15.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	NumDays	3,100.00	580.00
tblConstructionPhase	NumDays	220.00	70.00
tblConstructionPhase	NumDays	220.00	334.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	55.00	0.00
tblFireplaces	NumberWood	50.00	0.00
tblFireplaces	NumberWood	20.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MDV	0.13	0.14
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblGrading	MaterialExported	0.00	340,000.00
tblGrading	MaterialImported	0.00	542,000.00

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	1.43	11.02
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	0.57	0.00
tblLandUse	LotAcreage	25.38	0.00
tblLandUse	LotAcreage	8.80	0.00
tblLandUse	LotAcreage	68.75	28.17
tblLandUse	LotAcreage	62.50	35.28
tblLandUse	LotAcreage	129.87	47.15
tblLandUse	LotAcreage	8.95	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	7.32	6.59
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	6.59
tblVehicleTrips	WD_TR	9.74	9.68
tblVehicleTrips	WD_TR	33.98	23.80
tblVehicleTrips	WD_TR	72.05	64.84
tblVehicleTrips	WD_TR	34.80	31.32
tblVehicleTrips	WD_TR	37.75	35.01
tblVehicleTrips	WD_TR	9.44	8.50
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	5.7389	130.1620	49.4573	0.4538	26.4158	2.6431	28.5559	11.9096	2.4686	13.8978	0.0000	47,784.9626	47,784.9626	2.5064	6.5562	49,801.3855
2023	13.3364	106.2517	122.8239	0.4632	41.0360	2.2433	42.1531	11.0110	2.0939	12.0627	0.0000	47,773.3863	47,773.3863	2.5069	6.2791	48,757.7230
2024	12.5165	50.5465	116.6476	0.4519	41.0359	1.0216	42.0575	11.0110	0.9617	11.9727	0.0000	46,830.8404	46,830.8404	1.4312	3.0826	47,785.2406
2025	73.8506	48.6395	110.5217	0.4399	41.0358	0.9282	41.9640	11.0110	0.8741	11.8850	0.0000	45,864.8643	45,864.8643	1.3710	2.9887	46,789.7802
2026	73.7410	2.2175	17.2933	0.0541	7.0755	0.0801	7.1556	1.8764	0.0778	1.9543	0.0000	5,650.6713	5,650.6713	0.1234	0.1239	5,690.6747
Maximum	**73.8506**	**130.1620**	**122.8239**	**0.4632**	**41.0360**	**2.6431**	**42.1531**	**11.9096**	**2.4686**	**13.8978**	**0.0000**	**47,784.9626**	**47,784.9626**	**2.5069**	**6.5562**	**49,801.3855**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	2.8756	94.6186	53.4149	0.4538	15.8645	1.1097	16.9742	5.6378	1.0661	6.2045	0.0000	47,784.9626	47,784.9626	2.5064	6.5562	49,801.3855
2023	12.0914	75.0362	124.0402	0.4632	41.0360	0.9203	41.4941	11.0110	0.8849	11.4451	0.0000	47,773.3863	47,773.3863	2.5069	6.2791	48,757.7230
2024	11.3727	39.3374	117.9411	0.4519	41.0359	0.4491	41.4850	11.0110	0.4256	11.4366	0.0000	46,830.8404	46,830.8404	1.4312	3.0826	47,785.2406
2025	73.7094	38.4045	111.8972	0.4399	41.0358	0.4415	41.4772	11.0110	0.4186	11.4296	0.0000	45,864.8643	45,864.8643	1.3710	2.9887	46,789.7802
2026	73.5999	1.2008	17.3166	0.0541	7.0755	0.0326	7.1080	1.8764	0.0303	1.9067	0.0000	5,650.6713	5,650.6713	0.1234	0.1239	5,690.6747
Maximum	**73.7094**	**94.6186**	**124.0402**	**0.4632**	**41.0360**	**1.1097**	**41.4941**	**11.0110**	**1.0661**	**11.4451**	**0.0000**	**47,784.9626**	**47,784.9626**	**2.5069**	**6.5562**	**49,801.3855**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.09**	**26.41**	**-1.89**	**0.00**	**6.74**	**57.30**	**8.24**	**13.40**	**56.37**	**18.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197
Energy	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433
Mobile	101.4260	113.0164	968.6874	2.1632	267.2824	1.5406	268.8230	71.0849	1.4358	72.5207		227,002.7926	227,002.7926	12.4531	9.5889	230,171.6089
Total	**188.6477**	**163.6538**	**1,195.9925**	**2.4819**	**267.2824**	**6.5843**	**273.8668**	**71.0849**	**6.4796**	**77.5645**	**0.0000**	**288,935.5784**	**288,935.5784**	**13.9911**	**10.7175**	**292,479.1719**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197
Energy	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433
Mobile	86.3480	84.2206	719.3863	1.4616	178.0279	1.0807	179.1086	47.3473	1.0067	48.3540		153,387.9957	153,387.9957	9.8602	7.2044	155,781.4074
Total	**173.5697**	**134.8580**	**946.6914**	**1.7804**	**178.0279**	**6.1245**	**184.1524**	**47.3473**	**6.0505**	**53.3978**	**0.0000**	**215,320.7815**	**215,320.7815**	**11.3982**	**8.3330**	**218,088.9703**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	7.99	17.60	20.84	28.27	33.39	6.98	32.76	33.39	6.62	31.16	0.00	25.48	25.48	18.53	22.25	25.43

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/2/2022	5/20/2022	5	15	
2	Site Preparation	Site Preparation	5/21/2022	11/4/2022	5	120	
3	Grading	Grading	11/5/2022	3/24/2023	5	100	
4	Building Construction	Building Construction	3/25/2023	6/13/2025	5	580	
5	Paving	Paving	6/14/2025	9/19/2025	5	70	
6	Architectural Coating	Architectural Coating	9/20/2025	12/31/2026	5	334	

Acres of Grading (Site Preparation Phase): 180

Acres of Grading (Grading Phase): 300

Acres of Paving: 22.92

Residential Indoor: 5,710,500; Residential Outdoor: 1,903,500; Non-Residential Indoor: 910,800; Non-Residential Outdoor: 303,600; Striped Parking Area: 151,056 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	307.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	42,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	67,750.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,167.00	880.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	633.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.4569	0.0000	4.4569	0.6748	0.0000	0.6748			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**4.4569**	**1.2427**	**5.6996**	**0.6748**	**1.1553**	**1.8301**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0616	2.7571	0.5972	0.0118	0.3582	0.0304	0.3886	0.0982	0.0291	0.1273		1,256.2853	1,256.2853	0.0168	0.1979	1,315.6806
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0552	0.0398	0.4846	1.3800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		140.4261	140.4261	3.8100e-003	3.9000e-003	141.6847
Total	**0.1169**	**2.7968**	**1.0819**	**0.0132**	**0.5259**	**0.0313**	**0.5571**	**0.1427**	**0.0299**	**0.1726**		**1,396.7114**	**1,396.7114**	**0.0206**	**0.2018**	**1,457.3653**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7048	0.0000	1.7048	0.2581	0.0000	0.2581			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**0.4623**	**2.0032**	**23.2798**	**0.0388**	**1.7048**	**0.0616**	**1.7664**	**0.2581**	**0.0616**	**0.3198**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0616	2.7571	0.5972	0.0118	0.3582	0.0304	0.3886	0.0982	0.0291	0.1273		1,256.2853	1,256.2853	0.0168	0.1979	1,315.6806
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0552	0.0398	0.4846	1.3800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		140.4261	140.4261	3.8100e-003	3.9000e-003	141.6847
Total	**0.1169**	**2.7968**	**1.0819**	**0.0132**	**0.5259**	**0.0313**	**0.5571**	**0.1427**	**0.0299**	**0.1726**		**1,396.7114**	**1,396.7114**	**0.0206**	**0.2018**	**1,457.3653**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					20.0158	0.0000	20.0158	10.1568	0.0000	10.1568			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**20.0158**	**1.6126**	**21.6284**	**10.1568**	**1.4836**	**11.6404**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0666	47.7095	10.3347	0.2038	6.1988	0.5264	6.7253	1.6995	0.5037	2.2032		21,739.4648	21,739.4648	0.2913	3.4246	22,767.2745
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0663	0.0477	0.5816	1.6600e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		168.5113	168.5113	4.5800e-003	4.6800e-003	170.0216
Total	**1.1329**	**47.7572**	**10.9162**	**0.2055**	**6.4000**	**0.5274**	**6.9275**	**1.7528**	**0.5046**	**2.2574**		**21,907.9761**	**21,907.9761**	**0.2958**	**3.4293**	**22,937.2960**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6560	0.0000	7.6560	3.8850	0.0000	3.8850			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**0.4656**	**2.0175**	**20.8690**	**0.0380**	**7.6560**	**0.0621**	**7.7181**	**3.8850**	**0.0621**	**3.9471**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0666	47.7095	10.3347	0.2038	6.1988	0.5264	6.7253	1.6995	0.5037	2.2032		21,739.4648	21,739.4648	0.2913	3.4246	22,767.2745
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0663	0.0477	0.5816	1.6600e-003	0.2012	1.0000e-003	0.2022	0.0534	9.2000e-004	0.0543		168.5113	168.5113	4.5800e-003	4.6800e-003	170.0216
Total	**1.1329**	**47.7572**	**10.9162**	**0.2055**	**6.4000**	**0.5274**	**6.9275**	**1.7528**	**0.5046**	**2.2574**		**21,907.9761**	**21,907.9761**	**0.2958**	**3.4293**	**22,937.2960**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.8899	0.0000	9.8899	3.7577	0.0000	3.7577			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.8899**	**1.6349**	**11.5248**	**3.7577**	**1.5041**	**5.2618**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0404	91.2655	19.7696	0.3898	11.8580	1.0071	12.8651	3.2510	0.9635	4.2145		41,586.3173	41,586.3173	0.5571	6.5510	43,552.4568
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0736	0.0530	0.6462	1.8400e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		187.2348	187.2348	5.0800e-003	5.2000e-003	188.9129
Total	**2.1140**	**91.3185**	**20.4158**	**0.3917**	**12.0816**	**1.0082**	**13.0898**	**3.3103**	**0.9645**	**4.2748**		**41,773.5521**	**41,773.5521**	**0.5622**	**6.5562**	**43,741.3697**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.7829	0.0000	3.7829	1.4373	0.0000	1.4373			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**0.7616**	**3.3000**	**32.9991**	**0.0621**	**3.7829**	**0.1015**	**3.8844**	**1.4373**	**0.1015**	**1.5389**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0404	91.2655	19.7696	0.3898	11.8580	1.0071	12.8651	3.2510	0.9635	4.2145		41,586.3173	41,586.3173	0.5571	6.5510	43,552.4568
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0736	0.0530	0.6462	1.8400e-003	0.2236	1.1100e-003	0.2247	0.0593	1.0300e-003	0.0603		187.2348	187.2348	5.0800e-003	5.2000e-003	188.9129
Total	**2.1140**	**91.3185**	**20.4158**	**0.3917**	**12.0816**	**1.0082**	**13.0898**	**3.3103**	**0.9645**	**4.2748**		**41,773.5521**	**41,773.5521**	**0.5622**	**6.5562**	**43,741.3697**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.8899	0.0000	9.8899	3.7577	0.0000	3.7577			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.8899**	**1.4245**	**11.3144**	**3.7577**	**1.3105**	**5.0682**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3628	71.6893	18.9968	0.3729	11.8575	0.8177	12.6752	3.2508	0.7824	4.0332		39,817.5812	39,817.5812	0.5581	6.2743	41,701.2630
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0685	0.0469	0.5958	1.7800e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		182.3421	182.3421	4.5800e-003	4.8000e-003	183.8876
Total	**1.4313**	**71.7361**	**19.5926**	**0.3746**	**12.0810**	**0.8188**	**12.8998**	**3.3101**	**0.7833**	**4.0934**		**39,999.9233**	**39,999.9233**	**0.5627**	**6.2791**	**41,885.1505**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.7829	0.0000	3.7829	1.4373	0.0000	1.4373			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**0.7616**	**3.3000**	**32.9991**	**0.0621**	**3.7829**	**0.1015**	**3.8844**	**1.4373**	**0.1015**	**1.5389**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3628	71.6893	18.9968	0.3729	11.8575	0.8177	12.6752	3.2508	0.7824	4.0332		39,817.5812	39,817.5812	0.5581	6.2743	41,701.2630
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0685	0.0469	0.5958	1.7800e-003	0.2236	1.0500e-003	0.2246	0.0593	9.7000e-004	0.0603		182.3421	182.3421	4.5800e-003	4.8000e-003	183.8876
Total	**1.4313**	**71.7361**	**19.5926**	**0.3746**	**12.0810**	**0.8188**	**12.8998**	**3.3101**	**0.7833**	**4.0934**		**39,999.9233**	**39,999.9233**	**0.5627**	**6.2791**	**41,885.1505**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9185	30.4902	12.2365	0.1541	5.6364	0.2513	5.8877	1.6229	0.2404	1.8633		16,344.3103	16,344.3103	0.1630	2.4172	17,068.7232
Worker	10.8451	7.4185	94.3435	0.2821	35.3996	0.1661	35.5657	9.3881	0.1529	9.5410		28,873.8661	28,873.8661	0.7252	0.7604	29,118.5938
Total	**11.7636**	**37.9086**	**106.5799**	**0.4363**	**41.0360**	**0.4174**	**41.4533**	**11.0110**	**0.3933**	**11.4043**		**45,218.1764**	**45,218.1764**	**0.8881**	**3.1776**	**46,187.3170**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**0.3278**	**2.2347**	**17.4603**	**0.0269**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9185	30.4902	12.2365	0.1541	5.6364	0.2513	5.8877	1.6229	0.2404	1.8633		16,344.3103	16,344.3103	0.1630	2.4172	17,068.7232
Worker	10.8451	7.4185	94.3435	0.2821	35.3996	0.1661	35.5657	9.3881	0.1529	9.5410		28,873.8661	28,873.8661	0.7252	0.7604	29,118.5938
Total	**11.7636**	**37.9086**	**106.5799**	**0.4363**	**41.0360**	**0.4174**	**41.4533**	**11.0110**	**0.3933**	**11.4043**		**45,218.1764**	**45,218.1764**	**0.8881**	**3.1776**	**46,187.3170**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9032	30.4944	12.0997	0.1517	5.6363	0.2496	5.8859	1.6229	0.2387	1.8616		16,092.6882	16,092.6882	0.1688	2.3764	16,805.0616
Worker	10.1417	6.6083	88.3811	0.2732	35.3996	0.1587	35.5583	9.3881	0.1461	9.5342		28,182.4532	28,182.4532	0.6580	0.7063	28,409.3714
Total	**11.0449**	**37.1027**	**100.4808**	**0.4249**	**41.0359**	**0.4083**	**41.4442**	**11.0110**	**0.3848**	**11.3958**		**44,275.1415**	**44,275.1415**	**0.8268**	**3.0826**	**45,214.4329**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9032	30.4944	12.0997	0.1517	5.6363	0.2496	5.8859	1.6229	0.2387	1.8616		16,092.6882	16,092.6882	0.1688	2.3764	16,805.0616
Worker	10.1417	6.6083	88.3811	0.2732	35.3996	0.1587	35.5583	9.3881	0.1461	9.5342		28,182.4532	28,182.4532	0.6580	0.7063	28,409.3714
Total	**11.0449**	**37.1027**	**100.4808**	**0.4249**	**41.0359**	**0.4083**	**41.4442**	**11.0110**	**0.3848**	**11.3958**		**44,275.1415**	**44,275.1415**	**0.8268**	**3.0826**	**45,214.4329**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.8906	30.2447	11.9671	0.1490	5.6362	0.2497	5.8859	1.6228	0.2389	1.8617		15,809.2462	15,809.2462	0.1752	2.3298	16,507.8983
Worker	9.5075	5.9251	82.4699	0.2640	35.3996	0.1509	35.5505	9.3881	0.1389	9.5271		27,499.1437	27,499.1437	0.5948	0.6590	27,710.3839
Total	**10.3981**	**36.1698**	**94.4370**	**0.4129**	**41.0358**	**0.4007**	**41.4364**	**11.0110**	**0.3778**	**11.3888**		**43,308.3900**	**43,308.3900**	**0.7700**	**2.9887**	**44,218.2822**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.3278**	**2.2347**	**17.4603**	**0.0270**		**0.0408**	**0.0408**		**0.0408**	**0.0408**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.8906	30.2447	11.9671	0.1490	5.6362	0.2497	5.8859	1.6228	0.2389	1.8617		15,809.2462	15,809.2462	0.1752	2.3298	16,507.8983
Worker	9.5075	5.9251	82.4699	0.2640	35.3996	0.1509	35.5505	9.3881	0.1389	9.5271		27,499.1437	27,499.1437	0.5948	0.6590	27,710.3839
Total	**10.3981**	**36.1698**	**94.4370**	**0.4129**	**41.0358**	**0.4007**	**41.4364**	**11.0110**	**0.3778**	**11.3888**		**43,308.3900**	**43,308.3900**	**0.7700**	**2.9887**	**44,218.2822**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7730**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0281	0.3906	1.2500e-003	0.1677	7.1000e-004	0.1684	0.0445	6.6000e-004	0.0451		130.2454	130.2454	2.8200e-003	3.1200e-003	131.2459
Total	**0.0450**	**0.0281**	**0.3906**	**1.2500e-003**	**0.1677**	**7.1000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**130.2454**	**130.2454**	**2.8200e-003**	**3.1200e-003**	**131.2459**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8579					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1383**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0450	0.0281	0.3906	1.2500e-003	0.1677	7.1000e-004	0.1684	0.0445	6.6000e-004	0.0451		130.2454	130.2454	2.8200e-003	3.1200e-003	131.2459
Total	**0.0450**	**0.0281**	**0.3906**	**1.2500e-003**	**0.1677**	**7.1000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**130.2454**	**130.2454**	**2.8200e-003**	**3.1200e-003**	**131.2459**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**71.9503**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9003	1.1843	16.4836	0.0528	7.0755	0.0302	7.1056	1.8764	0.0278	1.9042		5,496.3555	5,496.3555	0.1189	0.1317	5,538.5769
Total	**1.9003**	**1.1843**	**16.4836**	**0.0528**	**7.0755**	**0.0302**	**7.1056**	**1.8764**	**0.0278**	**1.9042**		**5,496.3555**	**5,496.3555**	**0.1189**	**0.1317**	**5,538.5769**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**71.8092**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9003	1.1843	16.4836	0.0528	7.0755	0.0302	7.1056	1.8764	0.0278	1.9042		5,496.3555	5,496.3555	0.1189	0.1317	5,538.5769
Total	**1.9003**	**1.1843**	**16.4836**	**0.0528**	**7.0755**	**0.0302**	**7.1056**	**1.8764**	**0.0278**	**1.9042**		**5,496.3555**	**5,496.3555**	**0.1189**	**0.1317**	**5,538.5769**

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**71.9503**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7907	1.0720	15.4842	0.0511	7.0755	0.0286	7.1041	1.8764	0.0263	1.9028		5,369.2232	5,369.2232	0.1080	0.1239	5,408.8429
Total	**1.7907**	**1.0720**	**15.4842**	**0.0511**	**7.0755**	**0.0286**	**7.1041**	**1.8764**	**0.0263**	**1.9028**		**5,369.2232**	**5,369.2232**	**0.1080**	**0.1239**	**5,408.8429**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.7794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**71.8092**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.7 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7907	1.0720	15.4842	0.0511	7.0755	0.0286	7.1041	1.8764	0.0263	1.9028		5,369.2232	5,369.2232	0.1080	0.1239	5,408.8429
Total	**1.7907**	**1.0720**	**15.4842**	**0.0511**	**7.0755**	**0.0286**	**7.1041**	**1.8764**	**0.0263**	**1.9028**		**5,369.2232**	**5,369.2232**	**0.1080**	**0.1239**	**5,408.8429**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	86.3480	84.2206	719.3863	1.4616	178.0279	1.0807	179.1086	47.3473	1.0067	48.3540		153,387.9957	153,387.9957	9.8602	7.2044	155,781.4074
Unmitigated	101.4260	113.0164	968.6874	2.1632	267.2824	1.5406	268.8230	71.0849	1.4358	72.5207		227,002.7926	227,002.7926	12.4531	9.5889	230,171.6089

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,249.00	8,954.00	6908.00	25,436,791	16,942,598
City Park	0.00	0.00	0.00		
Condo/Townhouse	6,590.00	8,140.00	6280.00	23,124,355	15,402,362
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	629.20	143.65	45.50	1,534,865	1,022,322
Government (Civic Center)	1,480.36	0.00	0.00	3,265,389	2,174,967
Library	1,621.00	2,002.25	1052.25	4,024,890	2,680,845
Medical Office Building	2,035.80	557.05	92.30	4,012,458	2,672,565
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	13,653.90	17,986.80	8229.00	29,193,851	19,445,051
Single Family Housing	3,400.00	3,816.00	3420.00	11,831,156	7,880,339
Total	36,659.26	41,599.75	26,027.05	102,423,756	68,221,050

4.3 Trip Type Information

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
City Park	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Condo/Townhouse	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Enclosed Parking with Elevator	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
General Office Building	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Government (Civic Center)	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Library	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Medical Office Building	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Parking Lot	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Regional Shopping Center	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Single Family Housing	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139

5.0 Energy Detail

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433
NaturalGas Unmitigated	1.5180	13.0098	5.7950	0.0828		1.0488	1.0488		1.0488	1.0488		16,560.4329	16,560.4329	0.3174	0.3036	16,658.8433

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	45584.9	0.4916	4.2010	1.7876	0.0268		0.3397	0.3397		0.3397	0.3397		5,362.9334	5,362.9334	0.1028	0.0983	5,394.8027
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	57808.1	0.6234	5.3274	2.2670	0.0340		0.4307	0.4307		0.4307	0.4307		6,800.9573	6,800.9573	0.1304	0.1247	6,841.3720
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	610.822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Government (Civic Center)	584.51	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.7658	68.7658	1.3200e-003	1.2600e-003	69.1745
Library	2214.38	0.0239	0.2171	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5157	260.5157	4.9900e-003	4.7800e-003	262.0638
Medical Office Building	610.822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2350.68	0.0254	0.2305	0.1936	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.5512	276.5512	5.3000e-003	5.0700e-003	278.1946
Single Family Housing	30999.4	0.3343	2.8568	1.2157	0.0182		0.2310	0.2310		0.2310	0.2310		3,646.9866	3,646.9866	0.0699	0.0669	3,668.6588
Total		**1.5180**	**13.0098**	**5.7950**	**0.0828**		**1.0488**	**1.0488**		**1.0488**	**1.0488**		**16,560.4329**	**16,560.4329**	**0.3174**	**0.3036**	**16,658.8432**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	45.5849	0.4916	4.2010	1.7876	0.0268		0.3397	0.3397		0.3397	0.3397		5,362.9334	5,362.9334	0.1028	0.0983	5,394.8027
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	57.8081	0.6234	5.3274	2.2670	0.0340		0.4307	0.4307		0.4307	0.4307		6,800.9573	6,800.9573	0.1304	0.1247	6,841.3720
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.610822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Government (Civic Center)	0.58451	6.3000e-003	0.0573	0.0481	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.7658	68.7658	1.3200e-003	1.2600e-003	69.1745
Library	2.21438	0.0239	0.2171	0.1824	1.3000e-003		0.0165	0.0165		0.0165	0.0165		260.5157	260.5157	4.9900e-003	4.7800e-003	262.0638
Medical Office Building	0.610822	6.5900e-003	0.0599	0.0503	3.6000e-004		4.5500e-003	4.5500e-003		4.5500e-003	4.5500e-003		71.8614	71.8614	1.3800e-003	1.3200e-003	72.2884
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.35068	0.0254	0.2305	0.1936	1.3800e-003		0.0175	0.0175		0.0175	0.0175		276.5512	276.5512	5.3000e-003	5.0700e-003	278.1946
Single Family Housing	30.9994	0.3343	2.8568	1.2157	0.0182		0.2310	0.2310		0.2310	0.2310		3,646.9866	3,646.9866	0.0699	0.0669	3,668.6588
Total		**1.5180**	**13.0098**	**5.7950**	**0.0828**		**1.0488**	**1.0488**		**1.0488**	**1.0488**		**16,560.4329**	**16,560.4329**	**0.3174**	**0.3036**	**16,658.8432**

6.0 Area Detail

6.1 Mitigation Measures Area

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197
Unmitigated	85.7036	37.6276	221.5101	0.2359		3.9950	3.9950		3.9950	3.9950	0.0000	45,372.3529	45,372.3529	1.2207	0.8250	45,648.7197

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.5683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	68.7819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4.1250	35.2500	15.0000	0.2250		2.8500	2.8500		2.8500	2.8500	0.0000	45,000.0000	45,000.0000	0.8625	0.8250	45,267.4125
Landscaping	6.2285	2.3776	206.5101	0.0109		1.1450	1.1450		1.1450	1.1450		372.3529	372.3529	0.3582		381.3072
Total	**85.7036**	**37.6276**	**221.5101**	**0.2359**		**3.9950**	**3.9950**		**3.9950**	**3.9950**	**0.0000**	**45,372.3529**	**45,372.3529**	**1.2207**	**0.8250**	**45,648.7197**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.5683					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	68.7819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	4.1250	35.2500	15.0000	0.2250		2.8500	2.8500		2.8500	2.8500	0.0000	45,000.0000	45,000.0000	0.8625	0.8250	45,267.4125
Landscaping	6.2285	2.3776	206.5101	0.0109		1.1450	1.1450		1.1450	1.1450		372.3529	372.3529	0.3582		381.3072
Total	**85.7036**	**37.6276**	**221.5101**	**0.2359**		**3.9950**	**3.9950**		**3.9950**	**3.9950**	**0.0000**	**45,372.3529**	**45,372.3529**	**1.2207**	**0.8250**	**45,648.7197**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Annual Emission Calculations Output
(CalEEMod)

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

LEAL Master Plan Modification Project-Unmitigated

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	65.00	1000sqft	0.00	65,000.00	0
Government (Civic Center)	62.20	1000sqft	11.02	62,200.00	0
Medical Office Building	65.00	1000sqft	0.00	65,000.00	0
Library	25.00	1000sqft	0.00	25,000.00	0
Enclosed Parking with Elevator	2,820.00	Space	0.00	1,128,000.00	0
Parking Lot	978.00	Space	0.00	391,200.00	0
Parking Lot	22.92	Acre	22.92	998,395.20	0
City Park	14.06	Acre	14.06	612,540.72	0
Apartments Low Rise	1,100.00	Dwelling Unit	28.17	1,100,000.00	3146
Condo/Townhouse	1,000.00	Dwelling Unit	35.28	1,000,000.00	2860
Single Family Housing	400.00	Dwelling Unit	47.15	720,000.00	1144
Regional Shopping Center	390.00	1000sqft	0.00	390,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use - The project land uses are summarized in Table 1: Land Use Summary in the Air Quality Report.

Construction Phase - The construction phases has been updated to meet opening year 2026.

Demolition - The project is expected to demolish all existing structures of approximately 67,500 square feet of building material.

Grading - The project is expecting to export approx. 340,000 cy of organic dairy waste and import approx. 542,000 cy of earthwork material.

Architectural Coating -

Vehicle Trips - Project Trip Generation Rates are based on LEAL Masterplan Amendment Project Traffic Study, by RK Engineering Group.

Woodstoves - SCAQMD Rule 445 restricts wood burning hearths/fireplaces from being installed in new development.

Consumer Products -

Area Coating -

Construction Off-road Equipment Mitigation - Project will be required to comply with SCAQMD Rule 403 regarding fugitive dust control. The project is expected to use Tier 4 diesel engine construction equipment.

Area Mitigation - The project is expected use only natural gas hearth.

Energy Mitigation -

Fleet Mix - Operational fleet mix adjusted to equal 2% trucks with GVWR > 10,000 lbs.

Trips and VMT -

Mobile Land Use Mitigation - The project is proposing to implement traffic calming measures as a part of their design feature.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	200.00	15.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	NumDays	3,100.00	580.00
tblConstructionPhase	NumDays	220.00	70.00
tblConstructionPhase	NumDays	220.00	334.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	55.00	0.00
tblFireplaces	NumberWood	50.00	0.00
tblFireplaces	NumberWood	20.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	HHD	0.02	8.4860e-003
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	LHD2	6.9600e-003	3.1760e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.14

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	MDV	0.13	0.14
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MH	4.6890e-003	2.1390e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	MHD	0.01	5.2880e-003
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	OBUS	6.0800e-004	2.7700e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	SBUS	1.0910e-003	4.9800e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblFleetMix	UBUS	2.9800e-004	1.3600e-004
tblGrading	MaterialExported	0.00	340,000.00
tblGrading	MaterialImported	0.00	542,000.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	1.43	11.02
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	LotAcreage	0.57	0.00
tblLandUse	LotAcreage	25.38	0.00
tblLandUse	LotAcreage	8.80	0.00
tblLandUse	LotAcreage	68.75	28.17
tblLandUse	LotAcreage	62.50	35.28
tblLandUse	LotAcreage	129.87	47.15
tblLandUse	LotAcreage	8.95	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	7.32	6.59
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	6.59
tblVehicleTrips	WD_TR	9.74	9.68
tblVehicleTrips	WD_TR	33.98	23.80
tblVehicleTrips	WD_TR	72.05	64.84
tblVehicleTrips	WD_TR	34.80	31.32
tblVehicleTrips	WD_TR	37.75	35.01
tblVehicleTrips	WD_TR	9.44	8.50
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3964	7.6662	2.9755	0.0241	2.1686	0.1908	2.3594	0.8732	0.1775	1.0508	0.0000	2,294.5574	2,294.5574	0.1339	0.3069	2,389.3489
2023	1.4252	8.3955	14.1921	0.0601	4.7681	0.1789	4.9470	1.3044	0.1679	1.4723	0.0000	5,644.1006	5,644.1006	0.2045	0.4600	5,786.2801
2024	1.5732	6.6024	15.8759	0.0600	5.2883	0.1338	5.4221	1.4210	0.1259	1.5469	0.0000	5,640.5415	5,640.5415	0.1706	0.3675	5,754.3097
2025	3.4207	3.2475	7.9928	0.0292	2.6415	0.0724	2.7139	0.7090	0.0679	0.7769	0.0000	2,757.5837	2,757.5837	0.1008	0.1650	2,809.2640
2026	9.6100	0.2930	2.3644	7.2100e-003	0.9080	0.0105	0.9184	0.2411	0.0102	0.2513	0.0000	683.6656	683.6656	0.0146	0.0149	688.4841
Maximum	**9.6100**	**8.3955**	**15.8759**	**0.0601**	**5.2883**	**0.1908**	**5.4221**	**1.4210**	**0.1775**	**1.5469**	**0.0000**	**5,644.1006**	**5,644.1006**	**0.2045**	**0.4600**	**5,786.2801**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1605	4.9135	3.1451	0.0241	1.2126	0.0582	1.2708	0.4391	0.0560	0.4951	0.0000	2,294.5570	2,294.5570	0.1339	0.3069	2,389.3485
2023	1.2239	6.2440	14.4622	0.0601	4.5371	0.0734	4.6105	1.2293	0.0699	1.2992	0.0000	5,644.1001	5,644.1001	0.2045	0.4600	5,786.2797
2024	1.4234	5.1340	16.0453	0.0600	5.2883	0.0588	5.3471	1.4210	0.0557	1.4767	0.0000	5,640.5412	5,640.5412	0.1706	0.3675	5,754.3093
2025	3.3320	2.3487	8.1700	0.0292	2.6415	0.0286	2.6701	0.7090	0.0272	0.7361	0.0000	2,757.5835	2,757.5835	0.1008	0.1650	2,809.2637
2026	9.5915	0.1603	2.3674	7.2100e-003	0.9080	4.2500e-003	0.9122	0.2411	3.9500e-003	0.2451	0.0000	683.6655	683.6655	0.0146	0.0149	688.4840
Maximum	**9.5915**	**6.2440**	**16.0453**	**0.0601**	**5.2883**	**0.0734**	**5.3471**	**1.4210**	**0.0699**	**1.4767**	**0.0000**	**5,644.1001**	**5,644.1001**	**0.2045**	**0.4600**	**5,786.2797**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.23**	**28.25**	**-1.82**	**0.00**	**7.52**	**61.93**	**9.47**	**11.20**	**61.30**	**16.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-2-2022	8-1-2022	2.3680	1.3118
2	8-2-2022	11-1-2022	2.7457	1.6361
3	11-2-2022	2-1-2023	4.1264	2.9224
4	2-2-2023	5-1-2023	2.8992	2.1022
5	5-2-2023	8-1-2023	2.1167	1.6765
6	8-2-2023	11-1-2023	2.1305	1.6904
7	11-2-2023	2-1-2024	2.1271	1.6989

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8	**2-2-2024**	**5-1-2024**	2.0131	1.6160
9	**5-2-2024**	**8-1-2024**	2.0307	1.6248
10	**8-2-2024**	**11-1-2024**	2.0451	1.6392
11	**11-2-2024**	**2-1-2025**	2.0417	1.6481
12	**2-2-2025**	**5-1-2025**	1.9057	1.5474
13	**5-2-2025**	**8-1-2025**	1.0904	0.7772
14	**8-2-2025**	**11-1-2025**	1.3527	1.1949
15	**11-2-2025**	**2-1-2026**	2.5005	2.4625
16	**2-2-2026**	**5-1-2026**	2.4151	2.3783
17	**5-2-2026**	**8-1-2026**	2.4979	2.4599
18	**8-2-2026**	**9-30-2026**	1.6291	1.6043
		Highest	4.1264	2.9224

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	14.5815	0.7378	26.0013	4.1800e-003		0.1788	0.1788		0.1788	0.1788	0.0000	552.5155	552.5155	0.0504	9.3600e-003	556.5633
Energy	0.2770	2.3743	1.0576	0.0151		0.1914	0.1914		0.1914	0.1914	0.0000	7,373.7057	7,373.7057	0.4435	0.0977	7,413.8940
Mobile	14.9433	16.6273	145.9476	0.3222	38.4934	0.2250	38.7184	10.2508	0.2097	10.4605	0.0000	30,673.6995	30,673.6995	1.6416	1.2784	31,095.6956
Waste						0.0000	0.0000		0.0000	0.0000	606.0823	0.0000	606.0823	35.8184	0.0000	1,501.5432
Water						0.0000	0.0000		0.0000	0.0000	71.2619	823.2642	894.5262	7.3888	0.1813	1,133.2569
Total	**29.8018**	**19.7394**	**173.0064**	**0.3415**	**38.4934**	**0.5952**	**39.0886**	**10.2508**	**0.5799**	**10.8307**	**677.3442**	**39,423.1849**	**40,100.5291**	**45.3427**	**1.5666**	**41,700.9531**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	14.5815	0.7378	26.0013	4.1800e-003		0.1788	0.1788		0.1788	0.1788	0.0000	552.5155	552.5155	0.0504	9.3600e-003	556.5633
Energy	0.2770	2.3743	1.0576	0.0151		0.1914	0.1914		0.1914	0.1914	0.0000	7,373.7057	7,373.7057	0.4435	0.0977	7,413.8940
Mobile	12.7194	12.3486	107.7492	0.2176	25.6392	0.1578	25.7969	6.8277	0.1470	6.9747	0.0000	20,716.8224	20,716.8224	1.2946	0.9579	21,034.6523
Waste						0.0000	0.0000		0.0000	0.0000	606.0823	0.0000	606.0823	35.8184	0.0000	1,501.5432
Water						0.0000	0.0000		0.0000	0.0000	71.2619	823.2642	894.5262	7.3888	0.1813	1,133.2569
Total	**27.5780**	**15.4607**	**134.8080**	**0.2369**	**25.6392**	**0.5279**	**26.1671**	**6.8277**	**0.5171**	**7.3448**	**677.3442**	**29,466.3078**	**30,143.6520**	**44.9957**	**1.2462**	**31,639.9098**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.46**	**21.68**	**22.08**	**30.63**	**33.39**	**11.30**	**33.06**	**33.39**	**10.82**	**32.18**	**0.00**	**25.26**	**24.83**	**0.77**	**20.45**	**24.13**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/2/2022	5/20/2022	5	15	
2	Site Preparation	Site Preparation	5/21/2022	11/4/2022	5	120	
3	Grading	Grading	11/5/2022	3/24/2023	5	100	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	3/25/2023	6/13/2025	5	580	
5	Paving	Paving	6/14/2025	9/19/2025	5	70	
6	Architectural Coating	Architectural Coating	9/20/2025	12/31/2026	5	334	

Acres of Grading (Site Preparation Phase): 180

Acres of Grading (Grading Phase): 300

Acres of Paving: 22.92

Residential Indoor: 5,710,500; Residential Outdoor: 1,903,500; Non-Residential Indoor: 910,800; Non-Residential Outdoor: 303,600; Striped Parking Area: 151,056 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	307.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	42,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	67,750.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,167.00	880.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	633.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0334	0.0000	0.0334	5.0600e-003	0.0000	5.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0198	0.1929	0.1545	2.9000e-004		9.3200e-003	9.3200e-003		8.6600e-003	8.6600e-003	0.0000	25.4927	25.4927	7.1600e-003	0.0000	25.6717
Total	**0.0198**	**0.1929**	**0.1545**	**2.9000e-004**	**0.0334**	**9.3200e-003**	**0.0428**	**5.0600e-003**	**8.6600e-003**	**0.0137**	**0.0000**	**25.4927**	**25.4927**	**7.1600e-003**	**0.0000**	**25.6717**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.8000e-004	0.0207	4.4100e-003	9.0000e-005	2.6500e-003	2.3000e-004	2.8800e-003	7.3000e-004	2.2000e-004	9.5000e-004	0.0000	8.5438	8.5438	1.2000e-004	1.3500e-003	8.9478
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	3.1000e-004	3.8300e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9778	0.9778	3.0000e-005	3.0000e-005	0.9865
Total	**8.7000e-004**	**0.0210**	**8.2400e-003**	**1.0000e-004**	**3.8900e-003**	**2.4000e-004**	**4.1200e-003**	**1.0600e-003**	**2.3000e-004**	**1.2800e-003**	**0.0000**	**9.5216**	**9.5216**	**1.5000e-004**	**1.3800e-003**	**9.9343**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0128	0.0000	0.0128	1.9400e-003	0.0000	1.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0150	0.1746	2.9000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	25.4926	25.4926	7.1600e-003	0.0000	25.6717
Total	**3.4700e-003**	**0.0150**	**0.1746**	**2.9000e-004**	**0.0128**	**4.6000e-004**	**0.0133**	**1.9400e-003**	**4.6000e-004**	**2.4000e-003**	**0.0000**	**25.4926**	**25.4926**	**7.1600e-003**	**0.0000**	**25.6717**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.8000e-004	0.0207	4.4100e-003	9.0000e-005	2.6500e-003	2.3000e-004	2.8800e-003	7.3000e-004	2.2000e-004	9.5000e-004	0.0000	8.5438	8.5438	1.2000e-004	1.3500e-003	8.9478
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	3.1000e-004	3.8300e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9778	0.9778	3.0000e-005	3.0000e-005	0.9865
Total	**8.7000e-004**	**0.0210**	**8.2400e-003**	**1.0000e-004**	**3.8900e-003**	**2.4000e-004**	**4.1200e-003**	**1.0600e-003**	**2.3000e-004**	**1.2800e-003**	**0.0000**	**9.5216**	**9.5216**	**1.5000e-004**	**1.3800e-003**	**9.9343**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2010	0.0000	1.2010	0.6094	0.0000	0.6094	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1902	1.9850	1.1819	2.2800e-003		0.0968	0.0968		0.0890	0.0890	0.0000	200.6363	200.6363	0.0649	0.0000	202.2586
Total	**0.1902**	**1.9850**	**1.1819**	**2.2800e-003**	**1.2010**	**0.0968**	**1.2977**	**0.6094**	**0.0890**	**0.6984**	**0.0000**	**200.6363**	**200.6363**	**0.0649**	**0.0000**	**202.2586**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0659	2.8617	0.6104	0.0122	0.3665	0.0316	0.3981	0.1007	0.0302	0.1308	0.0000	1,182.7790	1,182.7790	0.0159	0.1863	1,238.7014
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7800e-003	2.9400e-003	0.0368	1.0000e-004	0.0119	6.0000e-005	0.0119	3.1500e-003	6.0000e-005	3.2100e-003	0.0000	9.3865	9.3865	2.5000e-004	2.6000e-004	9.4702
Total	**0.0696**	**2.8646**	**0.6472**	**0.0123**	**0.3784**	**0.0316**	**0.4100**	**0.1038**	**0.0303**	**0.1341**	**0.0000**	**1,192.1655**	**1,192.1655**	**0.0162**	**0.1866**	**1,248.1715**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4594	0.0000	0.4594	0.2331	0.0000	0.2331	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.1211	1.2521	2.2800e-003		3.7200e-003	3.7200e-003		3.7200e-003	3.7200e-003	0.0000	200.6361	200.6361	0.0649	0.0000	202.2584
Total	**0.0279**	**0.1211**	**1.2521**	**2.2800e-003**	**0.4594**	**3.7200e-003**	**0.4631**	**0.2331**	**3.7200e-003**	**0.2368**	**0.0000**	**200.6361**	**200.6361**	**0.0649**	**0.0000**	**202.2584**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0659	2.8617	0.6104	0.0122	0.3665	0.0316	0.3981	0.1007	0.0302	0.1308	0.0000	1,182.7790	1,182.7790	0.0159	0.1863	1,238.7014
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7800e-003	2.9400e-003	0.0368	1.0000e-004	0.0119	6.0000e-005	0.0119	3.1500e-003	6.0000e-005	3.2100e-003	0.0000	9.3865	9.3865	2.5000e-004	2.6000e-004	9.4702
Total	**0.0696**	**2.8646**	**0.6472**	**0.0123**	**0.3784**	**0.0316**	**0.4100**	**0.1038**	**0.0303**	**0.1341**	**0.0000**	**1,192.1655**	**1,192.1655**	**0.0162**	**0.1866**	**1,248.1715**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3138	0.0000	0.3138	0.0886	0.0000	0.0886	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0725	0.7769	0.5808	1.2400e-003		0.0327	0.0327		0.0301	0.0301	0.0000	109.0692	109.0692	0.0353	0.0000	109.9511
Total	**0.0725**	**0.7769**	**0.5808**	**1.2400e-003**	**0.3138**	**0.0327**	**0.3465**	**0.0886**	**0.0301**	**0.1187**	**0.0000**	**109.0692**	**109.0692**	**0.0353**	**0.0000**	**109.9511**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0420	1.8248	0.3892	7.7900e-003	0.2337	0.0201	0.2539	0.0642	0.0193	0.0834	0.0000	754.1956	754.1956	0.0102	0.1188	789.8543
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-003	1.0900e-003	0.0136	4.0000e-005	4.4000e-003	2.0000e-005	4.4200e-003	1.1700e-003	2.0000e-005	1.1900e-003	0.0000	3.4765	3.4765	9.0000e-005	1.0000e-004	3.5075
Total	**0.0434**	**1.8258**	**0.4029**	**7.8300e-003**	**0.2381**	**0.0202**	**0.2583**	**0.0654**	**0.0193**	**0.0846**	**0.0000**	**757.6721**	**757.6721**	**0.0103**	**0.1189**	**793.3618**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1200	0.0000	0.1200	0.0339	0.0000	0.0339	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0152	0.0660	0.6600	1.2400e-003		2.0300e-003	2.0300e-003		2.0300e-003	2.0300e-003	0.0000	109.0691	109.0691	0.0353	0.0000	109.9510
Total	**0.0152**	**0.0660**	**0.6600**	**1.2400e-003**	**0.1200**	**2.0300e-003**	**0.1221**	**0.0339**	**2.0300e-003**	**0.0359**	**0.0000**	**109.0691**	**109.0691**	**0.0353**	**0.0000**	**109.9510**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0420	1.8248	0.3892	7.7900e-003	0.2337	0.0201	0.2539	0.0642	0.0193	0.0834	0.0000	754.1956	754.1956	0.0102	0.1188	789.8543
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-003	1.0900e-003	0.0136	4.0000e-005	4.4000e-003	2.0000e-005	4.4200e-003	1.1700e-003	2.0000e-005	1.1900e-003	0.0000	3.4765	3.4765	9.0000e-005	1.0000e-004	3.5075
Total	**0.0434**	**1.8258**	**0.4029**	**7.8300e-003**	**0.2381**	**0.0202**	**0.2583**	**0.0654**	**0.0193**	**0.0846**	**0.0000**	**757.6721**	**757.6721**	**0.0103**	**0.1189**	**793.3618**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3741	0.0000	0.3741	0.1217	0.0000	0.1217	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0997	1.0355	0.8415	1.8600e-003		0.0427	0.0427		0.0393	0.0393	0.0000	163.6056	163.6056	0.0529	0.0000	164.9285
Total	**0.0997**	**1.0355**	**0.8415**	**1.8600e-003**	**0.3741**	**0.0427**	**0.4168**	**0.1217**	**0.0393**	**0.1610**	**0.0000**	**163.6056**	**163.6056**	**0.0529**	**0.0000**	**164.9285**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0430	2.1414	0.5631	0.0112	0.3506	0.0245	0.3751	0.0963	0.0235	0.1197	0.0000	1,082.6756	1,082.6756	0.0153	0.1706	1,133.8974
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9500e-003	1.4400e-003	0.0188	5.0000e-005	6.5900e-003	3.0000e-005	6.6300e-003	1.7500e-003	3.0000e-005	1.7800e-003	0.0000	5.0780	5.0780	1.3000e-004	1.3000e-004	5.1208
Total	**0.0449**	**2.1428**	**0.5819**	**0.0112**	**0.3572**	**0.0245**	**0.3817**	**0.0980**	**0.0235**	**0.1215**	**0.0000**	**1,087.7536**	**1,087.7536**	**0.0154**	**0.1707**	**1,139.0182**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1431	0.0000	0.1431	0.0465	0.0000	0.0465	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.0990	0.9900	1.8600e-003		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	163.6054	163.6054	0.0529	0.0000	164.9283
Total	**0.0229**	**0.0990**	**0.9900**	**1.8600e-003**	**0.1431**	**3.0500e-003**	**0.1461**	**0.0465**	**3.0500e-003**	**0.0496**	**0.0000**	**163.6054**	**163.6054**	**0.0529**	**0.0000**	**164.9283**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0430	2.1414	0.5631	0.0112	0.3506	0.0245	0.3751	0.0963	0.0235	0.1197	0.0000	1,082.6756	1,082.6756	0.0153	0.1706	1,133.8974
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9500e-003	1.4400e-003	0.0188	5.0000e-005	6.5900e-003	3.0000e-005	6.6300e-003	1.7500e-003	3.0000e-005	1.7800e-003	0.0000	5.0780	5.0780	1.3000e-004	1.3000e-004	5.1208
Total	**0.0449**	**2.1428**	**0.5819**	**0.0112**	**0.3572**	**0.0245**	**0.3817**	**0.0980**	**0.0235**	**0.1215**	**0.0000**	**1,087.7536**	**1,087.7536**	**0.0154**	**0.1707**	**1,139.0182**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8048	231.8048	0.0551	0.0000	233.1833
Total	**0.1573**	**1.4385**	**1.6244**	**2.6900e-003**		**0.0700**	**0.0700**		**0.0658**	**0.0658**	**0.0000**	**231.8048**	**231.8048**	**0.0551**	**0.0000**	**233.1833**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0954	3.0172	1.2020	0.0154	0.5559	0.0251	0.5810	0.1604	0.0240	0.1844	0.0000	1,480.6044	1,480.6044	0.0150	0.2189	1,546.2199
Worker	1.0280	0.7616	9.9423	0.0289	3.4809	0.0166	3.4975	0.9243	0.0153	0.9396	0.0000	2,680.3322	2,680.3322	0.0661	0.0703	2,702.9303
Total	**1.1234**	**3.7787**	**11.1443**	**0.0443**	**4.0369**	**0.0417**	**4.0786**	**1.0847**	**0.0393**	**1.1240**	**0.0000**	**4,160.9366**	**4,160.9366**	**0.0810**	**0.2892**	**4,249.1502**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0328	0.2235	1.7460	2.6900e-003		4.0800e-003	4.0800e-003		4.0800e-003	4.0800e-003	0.0000	231.8045	231.8045	0.0551	0.0000	233.1830
Total	**0.0328**	**0.2235**	**1.7460**	**2.6900e-003**		**4.0800e-003**	**4.0800e-003**		**4.0800e-003**	**4.0800e-003**	**0.0000**	**231.8045**	**231.8045**	**0.0551**	**0.0000**	**233.1830**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0954	3.0172	1.2020	0.0154	0.5559	0.0251	0.5810	0.1604	0.0240	0.1844	0.0000	1,480.6044	1,480.6044	0.0150	0.2189	1,546.2199
Worker	1.0280	0.7616	9.9423	0.0289	3.4809	0.0166	3.4975	0.9243	0.0153	0.9396	0.0000	2,680.3322	2,680.3322	0.0661	0.0703	2,702.9303
Total	**1.1234**	**3.7787**	**11.1443**	**0.0443**	**4.0369**	**0.0417**	**4.0786**	**1.0847**	**0.0393**	**1.1240**	**0.0000**	**4,160.9366**	**4,160.9366**	**0.0810**	**0.2892**	**4,249.1502**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	**0.1928**	**1.7611**	**2.1179**	**3.5300e-003**		**0.0803**	**0.0803**		**0.0756**	**0.0756**	**0.0000**	**303.7223**	**303.7223**	**0.0718**	**0.0000**	**305.5179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1230	3.9528	1.5568	0.0199	0.7283	0.0326	0.7609	0.2101	0.0312	0.2413	0.0000	1,909.7124	1,909.7124	0.0203	0.2820	1,994.2395
Worker	1.2575	0.8885	12.2013	0.0366	4.5600	0.0208	4.5808	1.2109	0.0191	1.2300	0.0000	3,427.1068	3,427.1068	0.0785	0.0855	3,454.5523
Total	**1.3805**	**4.8413**	**13.7580**	**0.0565**	**5.2883**	**0.0534**	**5.3417**	**1.4210**	**0.0504**	**1.4713**	**0.0000**	**5,336.8192**	**5,336.8192**	**0.0988**	**0.3675**	**5,448.7918**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0429	0.2928	2.2873	3.5300e-003		5.3400e-003	5.3400e-003		5.3400e-003	5.3400e-003	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	**0.0429**	**0.2928**	**2.2873**	**3.5300e-003**		**5.3400e-003**	**5.3400e-003**		**5.3400e-003**	**5.3400e-003**	**0.0000**	**303.7220**	**303.7220**	**0.0718**	**0.0000**	**305.5175**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1230	3.9528	1.5568	0.0199	0.7283	0.0326	0.7609	0.2101	0.0312	0.2413	0.0000	1,909.7124	1,909.7124	0.0203	0.2820	1,994.2395
Worker	1.2575	0.8885	12.2013	0.0366	4.5600	0.0208	4.5808	1.2109	0.0191	1.2300	0.0000	3,427.1068	3,427.1068	0.0785	0.0855	3,454.5523
Total	**1.3805**	**4.8413**	**13.7580**	**0.0565**	**5.2883**	**0.0534**	**5.3417**	**1.4210**	**0.0504**	**1.4713**	**0.0000**	**5,336.8192**	**5,336.8192**	**0.0988**	**0.3675**	**5,448.7918**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0807	0.7357	0.9490	1.5900e-003		0.0311	0.0311		0.0293	0.0293	0.0000	136.8325	136.8325	0.0322	0.0000	137.6366
Total	**0.0807**	**0.7357**	**0.9490**	**1.5900e-003**		**0.0311**	**0.0311**		**0.0293**	**0.0293**	**0.0000**	**136.8325**	**136.8325**	**0.0322**	**0.0000**	**137.6366**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0547	1.7655	0.6933	8.7800e-003	0.3280	0.0147	0.3427	0.0946	0.0141	0.1087	0.0000	844.9434	844.9434	9.4800e-003	0.1245	882.2794
Worker	0.5301	0.3587	5.1260	0.0159	2.0538	8.9100e-003	2.0627	0.5454	8.2000e-003	0.5536	0.0000	1,505.9749	1,505.9749	0.0319	0.0359	1,517.4808
Total	**0.5847**	**2.1242**	**5.8193**	**0.0247**	**2.3817**	**0.0236**	**2.4054**	**0.6400**	**0.0223**	**0.6623**	**0.0000**	**2,350.9183**	**2,350.9183**	**0.0414**	**0.1604**	**2,399.7602**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0193	0.1319	1.0302	1.5900e-003		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	136.8323	136.8323	0.0322	0.0000	137.6364
Total	**0.0193**	**0.1319**	**1.0302**	**1.5900e-003**		**2.4100e-003**	**2.4100e-003**		**2.4100e-003**	**2.4100e-003**	**0.0000**	**136.8323**	**136.8323**	**0.0322**	**0.0000**	**137.6364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0547	1.7655	0.6933	8.7800e-003	0.3280	0.0147	0.3427	0.0946	0.0141	0.1087	0.0000	844.9434	844.9434	9.4800e-003	0.1245	882.2794
Worker	0.5301	0.3587	5.1260	0.0159	2.0538	8.9100e-003	2.0627	0.5454	8.2000e-003	0.5536	0.0000	1,505.9749	1,505.9749	0.0319	0.0359	1,517.4808
Total	**0.5847**	**2.1242**	**5.8193**	**0.0247**	**2.3817**	**0.0236**	**2.4054**	**0.6400**	**0.0223**	**0.6623**	**0.0000**	**2,350.9183**	**2,350.9183**	**0.0414**	**0.1604**	**2,399.7602**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0320	0.3004	0.5102	8.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	70.0674	70.0674	0.0227	0.0000	70.6339
Paving	0.0300					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0621**	**0.3004**	**0.5102**	**8.0000e-004**		**0.0147**	**0.0147**		**0.0135**	**0.0135**	**0.0000**	**70.0674**	**70.0674**	**0.0227**	**0.0000**	**70.6339**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4900e-003	1.0100e-003	0.0144	4.0000e-005	5.7700e-003	3.0000e-005	5.8000e-003	1.5300e-003	2.0000e-005	1.5600e-003	0.0000	4.2313	4.2313	9.0000e-005	1.0000e-004	4.2637
Total	**1.4900e-003**	**1.0100e-003**	**0.0144**	**4.0000e-005**	**5.7700e-003**	**3.0000e-005**	**5.8000e-003**	**1.5300e-003**	**2.0000e-005**	**1.5600e-003**	**0.0000**	**4.2313**	**4.2313**	**9.0000e-005**	**1.0000e-004**	**4.2637**

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8200e-003	0.0425	0.6054	8.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	70.0673	70.0673	0.0227	0.0000	70.6338
Paving	0.0300					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0399**	**0.0425**	**0.6054**	**8.0000e-004**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**70.0673**	**70.0673**	**0.0227**	**0.0000**	**70.6338**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4900e-003	1.0100e-003	0.0144	4.0000e-005	5.7700e-003	3.0000e-005	5.8000e-003	1.5300e-003	2.0000e-005	1.5600e-003	0.0000	4.2313	4.2313	9.0000e-005	1.0000e-004	4.2637
Total	**1.4900e-003**	**1.0100e-003**	**0.0144**	**4.0000e-005**	**5.7700e-003**	**3.0000e-005**	**5.8000e-003**	**1.5300e-003**	**2.0000e-005**	**1.5600e-003**	**0.0000**	**4.2313**	**4.2313**	**9.0000e-005**	**1.0000e-004**	**4.2637**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2400e-003	0.0418	0.0660	1.1000e-004		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	9.3194	9.3194	5.1000e-004	0.0000	9.3321
Total	**2.6262**	**0.0418**	**0.0660**	**1.1000e-004**		**1.8800e-003**	**1.8800e-003**		**1.8800e-003**	**1.8800e-003**	**0.0000**	**9.3194**	**9.3194**	**5.1000e-004**	**0.0000**	**9.3321**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0655	0.0444	0.6338	1.9700e-003	0.2540	1.1000e-003	0.2551	0.0674	1.0100e-003	0.0685	0.0000	186.2148	186.2148	3.9500e-003	4.4400e-003	187.6375
Total	**0.0655**	**0.0444**	**0.6338**	**1.9700e-003**	**0.2540**	**1.1000e-003**	**0.2551**	**0.0674**	**1.0100e-003**	**0.0685**	**0.0000**	**186.2148**	**186.2148**	**3.9500e-003**	**4.4400e-003**	**187.6375**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0800e-003	4.7000e-003	0.0669	1.1000e-004		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	9.3194	9.3194	5.1000e-004	0.0000	9.3321
Total	**2.6210**	**4.7000e-003**	**0.0669**	**1.1000e-004**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**9.3194**	**9.3194**	**5.1000e-004**	**0.0000**	**9.3321**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0655	0.0444	0.6338	1.9700e-003	0.2540	1.1000e-003	0.2551	0.0674	1.0100e-003	0.0685	0.0000	186.2148	186.2148	3.9500e-003	4.4400e-003	187.6375
Total	**0.0655**	**0.0444**	**0.6338**	**1.9700e-003**	**0.2540**	**1.1000e-003**	**0.2551**	**0.0674**	**1.0100e-003**	**0.0685**	**0.0000**	**186.2148**	**186.2148**	**3.9500e-003**	**4.4400e-003**	**187.6375**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.3672					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
Total	**9.3895**	**0.1495**	**0.2361**	**3.9000e-004**		**6.7200e-003**	**6.7200e-003**		**6.7200e-003**	**6.7200e-003**	**0.0000**	**33.3200**	**33.3200**	**1.8200e-003**	**0.0000**	**33.3654**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2205	0.1435	2.1283	6.8200e-003	0.9080	3.7300e-003	0.9117	0.2411	3.4400e-003	0.2445	0.0000	650.3456	650.3456	0.0128	0.0149	655.1187
Total	**0.2205**	**0.1435**	**2.1283**	**6.8200e-003**	**0.9080**	**3.7300e-003**	**0.9117**	**0.2411**	**3.4400e-003**	**0.2445**	**0.0000**	**650.3456**	**650.3456**	**0.0128**	**0.0149**	**655.1187**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.3672					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8800e-003	0.0168	0.2391	3.9000e-004		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
Total	**9.3711**	**0.0168**	**0.2391**	**3.9000e-004**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**33.3199**	**33.3199**	**1.8200e-003**	**0.0000**	**33.3654**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2205	0.1435	2.1283	6.8200e-003	0.9080	3.7300e-003	0.9117	0.2411	3.4400e-003	0.2445	0.0000	650.3456	650.3456	0.0128	0.0149	655.1187
Total	**0.2205**	**0.1435**	**2.1283**	**6.8200e-003**	**0.9080**	**3.7300e-003**	**0.9117**	**0.2411**	**3.4400e-003**	**0.2445**	**0.0000**	**650.3456**	**650.3456**	**0.0128**	**0.0149**	**655.1187**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	12.7194	12.3486	107.7492	0.2176	25.6392	0.1578	25.7969	6.8277	0.1470	6.9747	0.0000	20,716.8224	20,716.8224	1.2946	0.9579	21,034.6523
Unmitigated	14.9433	16.6273	145.9476	0.3222	38.4934	0.2250	38.7184	10.2508	0.2097	10.4605	0.0000	30,673.6995	30,673.6995	1.6416	1.2784	31,095.6956

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	7,249.00	8,954.00	6908.00	25,436,791	16,942,598
City Park	0.00	0.00	0.00		
Condo/Townhouse	6,590.00	8,140.00	6280.00	23,124,355	15,402,362
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	629.20	143.65	45.50	1,534,865	1,022,322
Government (Civic Center)	1,480.36	0.00	0.00	3,265,389	2,174,967
Library	1,621.00	2,002.25	1052.25	4,024,890	2,680,845
Medical Office Building	2,035.80	557.05	92.30	4,012,458	2,672,565
Parking Lot	0.00	0.00	0.00		

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	13,653.90	17,986.80	8229.00	29,193,851	19,445,051
Single Family Housing	3,400.00	3,816.00	3420.00	11,831,156	7,880,339
Total	36,659.26	41,599.75	26,027.05	102,423,756	68,221,050

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Government (Civic Center)	16.60	8.40	6.90	75.00	20.00	5.00	50	34	16
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
City Park	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Condo/Townhouse	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Enclosed Parking with Elevator	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
General Office Building	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Government (Civic Center)	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Library	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Medical Office Building	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Parking Lot	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Regional Shopping Center	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139
Single Family Housing	0.556450	0.058102	0.178799	0.137382	0.025295	0.003176	0.005288	0.008486	0.000277	0.000136	0.023972	0.000498	0.002139

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,631.9403	4,631.9403	0.3910	0.0474	4,655.8357
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,631.9403	4,631.9403	0.3910	0.0474	4,655.8357
NaturalGas Mitigated	0.2770	2.3743	1.0576	0.0151		0.1914	0.1914		0.1914	0.1914	0.0000	2,741.7654	2,741.7654	0.0526	0.0503	2,758.0583
NaturalGas Unmitigated	0.2770	2.3743	1.0576	0.0151		0.1914	0.1914		0.1914	0.1914	0.0000	2,741.7654	2,741.7654	0.0526	0.0503	2,758.0583

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.66385e+007	0.0897	0.7667	0.3263	4.8900e-003		0.0620	0.0620		0.0620	0.0620	0.0000	887.8938	887.8938	0.0170	0.0163	893.1701
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.11e+007	0.1138	0.9723	0.4137	6.2100e-003		0.0786	0.0786		0.0786	0.0786	0.0000	1,125.9748	1,125.9748	0.0216	0.0206	1,132.6659
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	222950	1.2000e-003	0.0109	9.1800e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8975	11.8975	2.3000e-004	2.2000e-004	11.9682
Government (Civic Center)	213346	1.1500e-003	0.0105	8.7800e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3850	11.3850	2.2000e-004	2.1000e-004	11.4526
Library	808250	4.3600e-003	0.0396	0.0333	2.4000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	43.1313	43.1313	8.3000e-004	7.9000e-004	43.3876
Medical Office Building	222950	1.2000e-003	0.0109	9.1800e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8975	11.8975	2.3000e-004	2.2000e-004	11.9682
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	858000	4.6300e-003	0.0421	0.0353	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.7862	45.7862	8.8000e-004	8.4000e-004	46.0582
Single Family Housing	1.13148e+007	0.0610	0.5214	0.2219	3.3300e-003		0.0422	0.0422		0.0422	0.0422	0.0000	603.7995	603.7995	0.0116	0.0111	607.3876
Total		**0.2770**	**2.3743**	**1.0576**	**0.0151**		**0.1914**	**0.1914**		**0.1914**	**0.1914**	**0.0000**	**2,741.7654**	**2,741.7654**	**0.0526**	**0.0503**	**2,758.0583**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.66385e+007	0.0897	0.7667	0.3263	4.8900e-003		0.0620	0.0620		0.0620	0.0620	0.0000	887.8938	887.8938	0.0170	0.0163	893.1701
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.11e+007	0.1138	0.9723	0.4137	6.2100e-003		0.0786	0.0786		0.0786	0.0786	0.0000	1,125.9748	1,125.9748	0.0216	0.0206	1,132.6659
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	222950	1.2000e-003	0.0109	9.1800e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8975	11.8975	2.3000e-004	2.2000e-004	11.9682
Government (Civic Center)	213346	1.1500e-003	0.0105	8.7800e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.3850	11.3850	2.2000e-004	2.1000e-004	11.4526
Library	808250	4.3600e-003	0.0396	0.0333	2.4000e-004		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	43.1313	43.1313	8.3000e-004	7.9000e-004	43.3876
Medical Office Building	222950	1.2000e-003	0.0109	9.1800e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8975	11.8975	2.3000e-004	2.2000e-004	11.9682
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	858000	4.6300e-003	0.0421	0.0353	2.5000e-004		3.2000e-003	3.2000e-003		3.2000e-003	3.2000e-003	0.0000	45.7862	45.7862	8.8000e-004	8.4000e-004	46.0582
Single Family Housing	1.13148e+007	0.0610	0.5214	0.2219	3.3300e-003		0.0422	0.0422		0.0422	0.0422	0.0000	603.7995	603.7995	0.0116	0.0111	607.3876
Total		**0.2770**	**2.3743**	**1.0576**	**0.0151**		**0.1914**	**0.1914**		**0.1914**	**0.1914**	**0.0000**	**2,741.7654**	**2,741.7654**	**0.0526**	**0.0503**	**2,758.0583**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.58695e+006	813.4743	0.0687	8.3200e-003	817.6708
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	4.97376e+006	882.0742	0.0745	9.0200e-003	886.6247
Enclosed Parking with Elevator	6.13632e+006	1,088.2490	0.0919	0.0111	1,093.8631
General Office Building	597350	105.9374	8.9400e-003	1.0800e-003	106.4839
Government (Civic Center)	571618	101.3739	8.5600e-003	1.0400e-003	101.8969
Library	248000	43.9817	3.7100e-003	4.5000e-004	44.2086
Medical Office Building	597350	105.9374	8.9400e-003	1.0800e-003	106.4839
Parking Lot	136920	24.2822	2.0500e-003	2.5000e-004	24.4074
Parking Lot	349438	61.9713	5.2300e-003	6.3000e-004	62.2910
Regional Shopping Center	4.7346e+006	839.6602	0.0709	8.5900e-003	843.9919
Single Family Housing	3.18586e+006	564.9988	0.0477	5.7800e-003	567.9135
Total		**4,631.9403**	**0.3910**	**0.0474**	**4,655.8357**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	4.58695e+006	813.4743	0.0687	8.3200e-003	817.6708
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	4.97376e+006	882.0742	0.0745	9.0200e-003	886.6247
Enclosed Parking with Elevator	6.13632e+006	1,088.2490	0.0919	0.0111	1,093.8631
General Office Building	597350	105.9374	8.9400e-003	1.0800e-003	106.4839
Government (Civic Center)	571618	101.3739	8.5600e-003	1.0400e-003	101.8969
Library	248000	43.9817	3.7100e-003	4.5000e-004	44.2086
Medical Office Building	597350	105.9374	8.9400e-003	1.0800e-003	106.4839
Parking Lot	136920	24.2822	2.0500e-003	2.5000e-004	24.4074
Parking Lot	349438	61.9713	5.2300e-003	6.3000e-004	62.2910
Regional Shopping Center	4.7346e+006	839.6602	0.0709	8.5900e-003	843.9919
Single Family Housing	3.18586e+006	564.9988	0.0477	5.7800e-003	567.9135
Total		**4,631.9403**	**0.3910**	**0.0474**	**4,655.8357**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	14.5815	0.7378	26.0013	4.1800e-003		0.1788	0.1788		0.1788	0.1788	0.0000	552.5155	552.5155	0.0504	9.3600e-003	556.5633
Unmitigated	14.5815	0.7378	26.0013	4.1800e-003		0.1788	0.1788		0.1788	0.1788	0.0000	552.5155	552.5155	0.0504	9.3600e-003	556.5633

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1987					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0516	0.4406	0.1875	2.8100e-003		0.0356	0.0356		0.0356	0.0356	0.0000	510.2914	510.2914	9.7800e-003	9.3600e-003	513.3238
Landscaping	0.7786	0.2972	25.8138	1.3700e-003		0.1431	0.1431		0.1431	0.1431	0.0000	42.2241	42.2241	0.0406	0.0000	43.2395
Total	**14.5815**	**0.7378**	**26.0013**	**4.1800e-003**		**0.1787**	**0.1787**		**0.1787**	**0.1787**	**0.0000**	**552.5155**	**552.5155**	**0.0504**	**9.3600e-003**	**556.5633**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1987					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0516	0.4406	0.1875	2.8100e-003		0.0356	0.0356		0.0356	0.0356	0.0000	510.2914	510.2914	9.7800e-003	9.3600e-003	513.3238
Landscaping	0.7786	0.2972	25.8138	1.3700e-003		0.1431	0.1431		0.1431	0.1431	0.0000	42.2241	42.2241	0.0406	0.0000	43.2395
Total	**14.5815**	**0.7378**	**26.0013**	**4.1800e-003**		**0.1787**	**0.1787**		**0.1787**	**0.1787**	**0.0000**	**552.5155**	**552.5155**	**0.0504**	**9.3600e-003**	**556.5633**

7.0 Water Detail

7.1 Mitigation Measures Water

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	894.5262	7.3888	0.1813	1,133.2569
Unmitigated	894.5262	7.3888	0.1813	1,133.2569

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	71.6694 / 45.1829	277.2619	2.3568	0.0578	353.3912
City Park	0 / 16.7522	33.0071	2.7900e-003	3.4000e-004	33.1773
Condo/Townhouse	65.154 / 41.0754	252.0563	2.1426	0.0525	321.2647
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	11.5527 / 7.08068	44.2939	0.3799	9.3000e-003	56.5635
Government (Civic Center)	12.3566 / 7.57342	47.3763	0.4063	9.9500e-003	60.4997
Library	0.782223 / 1.22348	4.4651	0.0258	6.4000e-004	5.3034
Medical Office Building	8.15623 / 1.55357	24.4831	0.2676	6.5000e-003	33.1104
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	28.8883 / 17.7057	110.7600	0.9499	0.0233	141.4408
Single Family Housing	26.0616 / 16.4301	100.8225	0.8570	0.0210	128.5059
Total		**894.5262**	**7.3888**	**0.1813**	**1,133.2569**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
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City Park	0 / 16.7522	33.0071	2.7900e-003	3.4000e-004	33.1773
Condo/Townhouse	65.154 / 41.0754	252.0563	2.1426	0.0525	321.2647
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
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Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	28.8883 / 17.7057	110.7600	0.9499	0.0233	141.4408
Single Family Housing	26.0616 / 16.4301	100.8225	0.8570	0.0210	128.5059
Total		**894.5262**	**7.3888**	**0.1813**	**1,133.2569**

8.0 Waste Detail

8.1 Mitigation Measures Waste

LEAL Master Plan Modification Project-Unmitigated - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	606.0823	35.8184	0.0000	1,501.5432
Unmitigated	606.0823	35.8184	0.0000	1,501.5432

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	506	102.7134	6.0702	0.0000	254.4682
City Park	1.21	0.2456	0.0145	0.0000	0.6085
Condo/Townhouse	460	93.3758	5.5184	0.0000	231.3347
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	60.45	12.2708	0.7252	0.0000	30.4004
Government (Civic Center)	354.54	71.9684	4.2532	0.0000	178.2987
Library	23.02	4.6729	0.2762	0.0000	11.5768
Medical Office Building	702	142.4997	8.4215	0.0000	353.0369
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	409.5	83.1248	4.9125	0.0000	205.9382
Single Family Housing	469.04	95.2109	5.6268	0.0000	235.8809
Total		**606.0823**	**35.8184**	**0.0000**	**1,501.5432**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	506	102.7134	6.0702	0.0000	254.4682
City Park	1.21	0.2456	0.0145	0.0000	0.6085
Condo/Townhouse	460	93.3758	5.5184	0.0000	231.3347
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
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Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	409.5	83.1248	4.9125	0.0000	205.9382
Single Family Housing	469.04	95.2109	5.6268	0.0000	235.8809
Total		**606.0823**	**35.8184**	**0.0000**	**1,501.5432**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix C

March 25, 2022

AJ Jarvis
The New Home Company
15231 Laguna Canyon Road, Suite 250
Irvine, CA 92618

Subject: Biological Assessment of the Leal Property located in the City of Eastvale

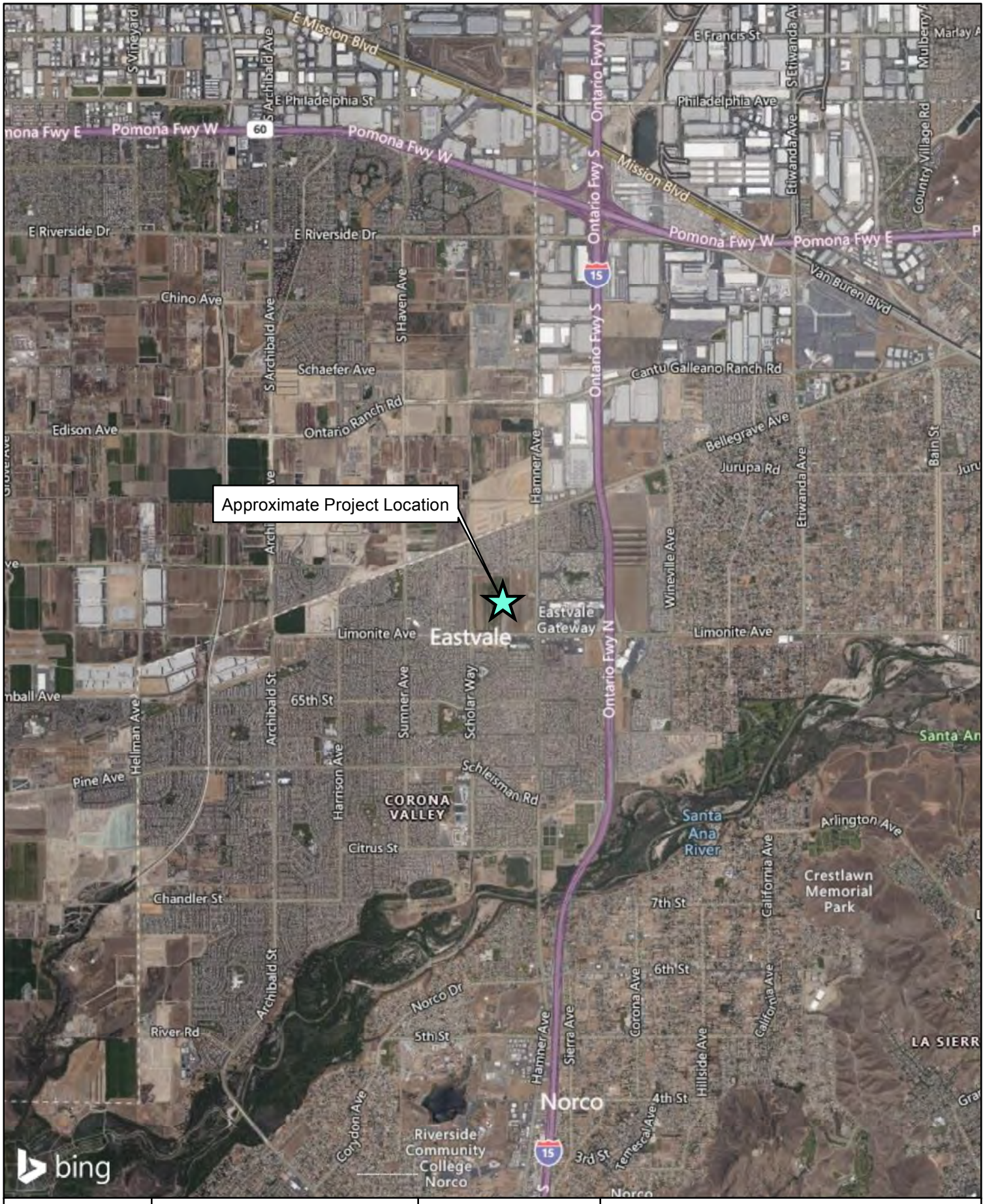
Dear Mr. Jarvis:

On behalf of The New Home Company (Applicant), Carlson Strategic Land Solutions (CSLS) prepared a focused biological assessment, summarized in the following letter report and graphics, documenting the findings of the biological field review of the proposed 160-acres Leal Project site (Project site) and surrounding 500-feet (Study Area). The Study Area is located within the City of Eastvale in the County of Riverside (Figures 1 and 2). In support of Project efforts, CSLS biologist Brianna Bernard and Justinne Manahan conducted an analysis of biological resources and jurisdictional waters within the Study Area on June 9, 2021, and focused burrowing owl surveys and narrow endemic plant surveys on June 16, 23, July 1 and 13, 2021. Furthermore, a Delhi Sands Flower Loving Fly Assessment was performed on June 18, 2021. The results of the field surveys are described in further detail below.

1.0 Project Location

The Project site is bounded by 58th Street to the north, Hamner Avenue to the east, Limonite Avenue to the south, and Scholar Way to the west. It is situated immediately west and north of existing commercial and retail developments and south and east of established residential neighborhoods of varying densities. The Project site is located approximately half a mile west of Interstate 15 (I-15). The Project site is within the *Corona North* U.S. Geological Survey 7.5-minute topographic map. Please refer to attached Figure 1 and Figure 2. Access to the Project site is provided off the Hamner Avenue or 58th Street.

The Assessor's Parcel Numbers include: 164-030-010, 164-030-012, 164-030-013, 164-030-014, 164-030-024, and 164-030-025.



GIS Prepared By:
Carlson SLS

Created: June 8, 2021

0 1,250 2,500 5,000 7,500 Feet

1 inch = 5,000 feet

Data Source: Bing Maps

The New Home Company: Leal Project

Regional Location Map

FIGURE 1



GIS Prepared By:
Carlson SLS

Created: June 8, 2021

0 50 100 200 300 400 500 600 Feet
1 inch = 500 feet

Data Source: Bing Map

The New Home Company: Leal Project

Project Site Map

667

FIGURE 2

2.0 Background and Existing Conditions

The Project site historically functioned as a dairy with associated agriculture, a horse farm, and the Leal family home. The dairy activities and associated agriculture is no longer in use. The Project site currently has 3 horses and associated horse corrals, several homes and associated trailers found scattered around the property, along with dairy and farm equipment. The Project site consists primarily of disturbed land associated with historical dairy activities, as well as developed and ruderal habitat communities.

The Leal Master Plan Environmental Impact Report (EIR) was completed and adopted in 2015. The document identified the general parameters for future development of the 160-acre Project site. The overall approach to planning for development of the Project site, including the envisioned level of quality, expected project characteristics, allowed land uses, etc., is discussed within the adopted Master Plan. The Master Plan is proposed to occur in stages from Adoption of the Master Plant to physical Development of the Project Site.

As part of the 2015 EIR and Master Plan, a brief biological assessment and database search was completed in order to determine the level of impacts to biological resources as a result of the potential Project construction. It was determined that many of the biological impacts would be less than significant with mitigation measures incorporated or no impact. Minor biological impacts occur as a result of potential develop and would require mitigation measures to lessen impacts to a less than significant level. Those Mitigation Measures (MM) include the following:

MM 3.7.1 *All construction and clearing activities shall be conducted outside of the main avian nesting season (January 15– August 31), when feasible. Preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.*

If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusions zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged.

MM 3.7.2 *Prior to breaking ground, a qualified biologist shall be retained to determine whether potentially jurisdictional waters are present. If potentially jurisdictional features are identified, the project applicant shall submit a preliminary jurisdictional determination to the US Army Corps of Engineers for verification. The verified delineation will be submitted to the City for its records.*

MM 3.7.3 *Projects shall result in no net loss of sensitive habitats, riparian vegetation, and/or federally protected waters through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in Clean Water Act Section 404 and 401 permits and/or a 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided to the City prior to approval of each individual grading permit.*

Furthermore, since the Project site occurs within the Western Riverside Multiple Species Conservation Plan (MSHCP) Area, and the City of Eastvale is a participating entity (signatory participant). As such, the following mitigation measures and standard conditions also apply to the Project.

MSHCP A. *The project applicant shall submit fees to the City in accordance with the requirements of the MSHCP Mitigation Fee Ordinance (Chapter 4.62 of the City of Eastvale Municipal Code).*

MSHCP B. *The project applicant shall assess the proposed project's consistency with Section 6.1.2, Section 6.1.3, Section 6.3.2, and Section 6.1.4 of the MSHCP.*

MSHCP C. *A qualified biologist shall conduct a burrowing owl habitat assessment. If needed, focused surveys and preconstruction surveys shall be conducted, as well as appropriate avoidance and minimization (Section 6.3.2 of the MSHCP).*

MSHCP D. *A qualified biologist shall conduct habitat assessments for the required Narrow Endemic Plant Species. If needed, focused surveys and shall be conducted, as well as appropriate avoidance and minimization (Section 6.1.3 of the MSHCP).*

MSHCP E. *A qualified biologist shall conduct a habitat assessment for Delhi sands flower-loving fly in areas underlain by Delhi soil series (Species-specific Objective 1B).*

3.0 Methodology

3.1 Historical Documentation

Prior to the field investigation, the original Environmental Documents and historical aerials were reviewed and utilized to understand prior biological components, jurisdictional delineation, and authorized impacts. These documents included the following:

- City of Eastvale Leal Master Plan Draft Environmental Impact Report (SCH 2015031028)
- City of Eastvale Leal Master Plan Final Environmental Impact Report (SCH 2015031028)
- Google Earth Historical Imagery

3.2 Biological Survey

Available literature and databases were reviewed regarding sensitive habitats and special status plant and wildlife species occurring within the Project vicinity. CSLS reviewed and consulted literature and databases focused on Riverside County, California, including the California Natural Diversity Database (CNDDB) and the U.S. Fish and Wildlife Service (USFWS) Critical Habitat. The CNDDB is a California Department of Fish and Wildlife (CDFW) species account database that inventories status and locations of rare plants and wildlife in California. The Project Site is located within the United States Geological Survey (USGS) 7.5-Minute Topographic Map *Corona North* Quadrangle. The CNDDB was used to identify any sensitive plant communities and special status plants and wildlife that have potential to occur within the Study Area and the adjacent quadrangles (Corona South, Black Star Canyon, Prado Dam, Riverside West, Lake Mathews, Fontana, Guasti, and Ontario).

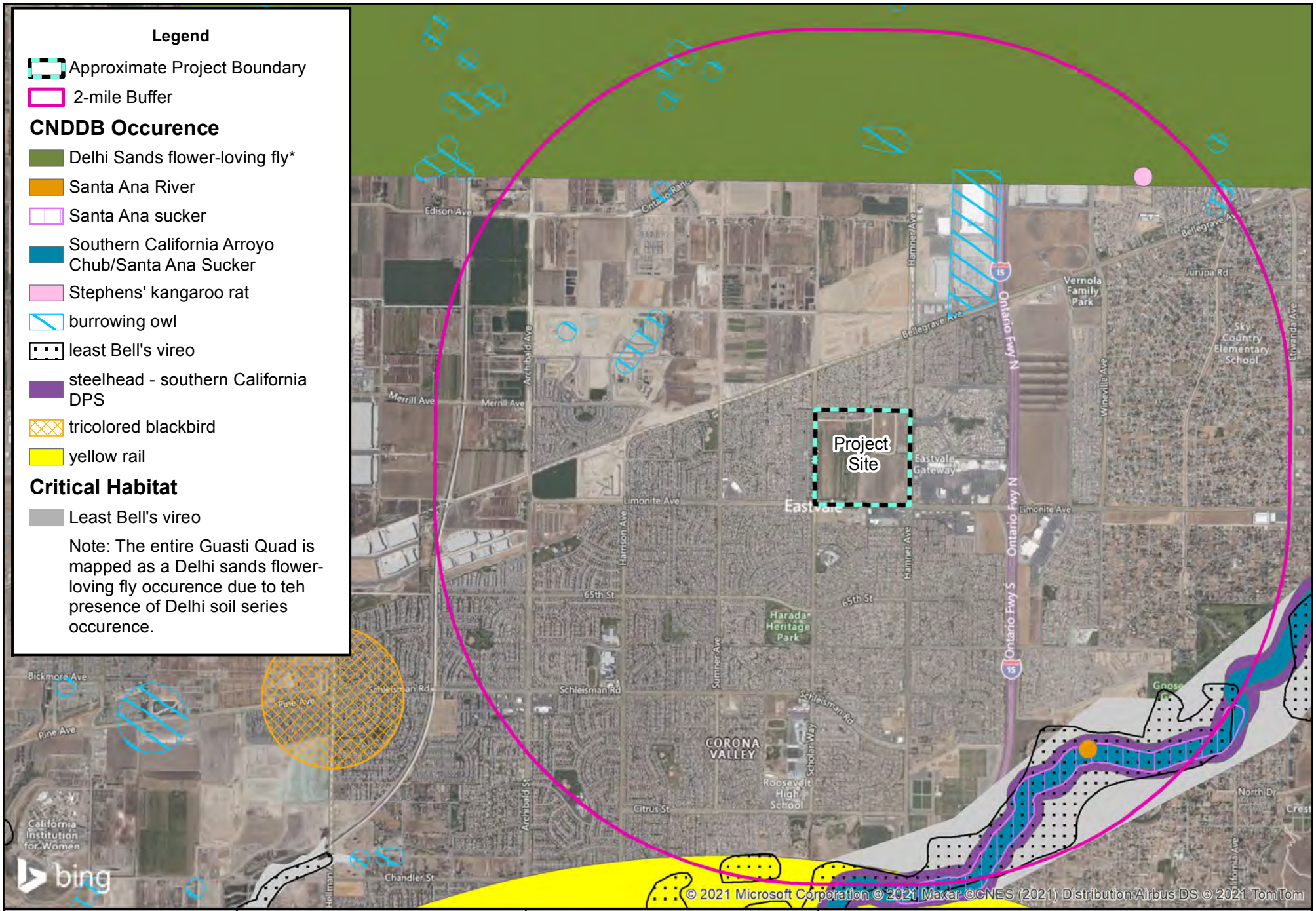
A two-mile radius surrounding the Study Area was assessed for special status plant and wildlife occurrences (Figure 3).

3.2.1 General Plant Inventory

All plant species observed during the general and focused surveys were either identified in the field or collected and later identified using taxonomic keys. Vegetation communities were characterized utilizing vegetation alliances in accordance with The Manual of California Vegetation, Second Edition (MCVII) (Sawyer et al. 2009). All plant species observed were recorded in field notes.

3.2.2 General Wildlife Inventory

All wildlife species observed on the Project site, as well as any diagnostic sign (call, tracks, nests, scat, remains, or other sign), were recorded in field notes. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. Wildlife taxonomy follows Stebbins (2003) and California Herps (2015) for amphibians and reptiles, the American Ornithologists' Union (1998) for birds, and Jameson and Peeters (1988) for mammals. All wildlife species detected were recorded in field notes.



GIS Prepared By:
Carlson SLS

Created: June 8, 2021

0 875 1,750 3,500 5,250 7,000 Feet
1 inch = 3,500 feet

Data Source: Bing Map
CNDDB (June 2021)

The New Home Company: Leal Project

CNDDB Occurences and Critical Habitat

671

FIGURE 3

3.2.3 Delhi Sands Flower-loving Fly Assessment

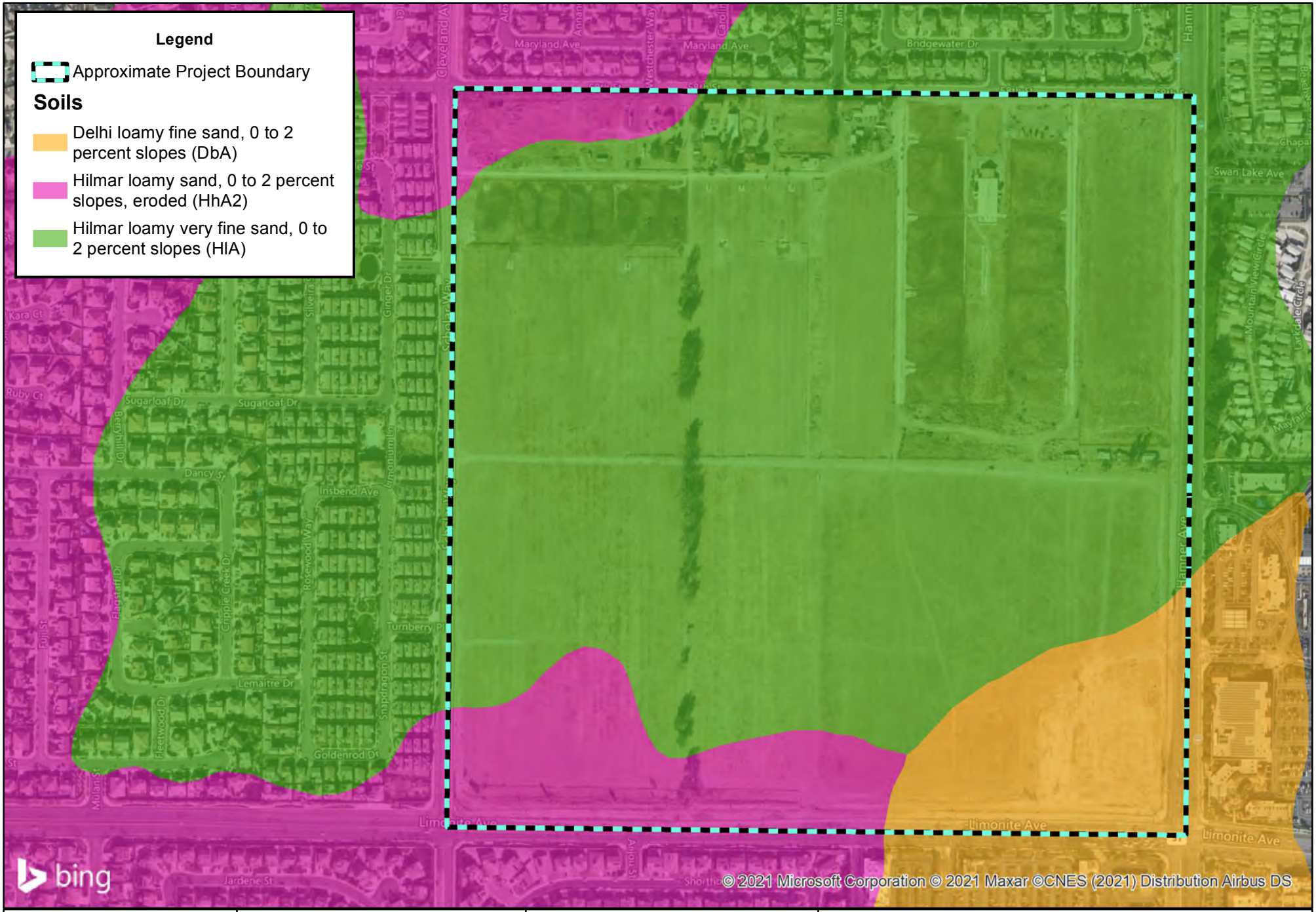
Approximately 15-acres of the southeastern portion of the Project site consist of Delhi loamy fine sands (Figure 4). This soil series is suitable to the Delhi Sands Flower-Loving Fly (DSF). Due to the presence of the soil series a DSF Assessment was conducted. Prior to a site visit, soil maps covering the Project site were reviewed, along with aerial imagery to gain an understanding of historical land use regimens. Photographs were taken of the site, along with field notes on vegetation and soil conditions. The site is then rated based on its potential to support DSF based on the following scale of 1 to 5, with 5 being the best quality and most suitable habitat:

1. Developed areas, non-Delhi sands soils with high clay, silt, and/or gravel content. Delhi sands extensively and deeply covered by dumping of exotic soils, rubble, trash, manure, or organic debris. *Unsuitable*.
2. Delhi sands are present, but the soil characteristics include a predominance of exotic soils such as alluvial materials, or predominance of other foreign contamination as gravels, manure, or organic debris. Severe and frequent disturbance (such as a maintenance yard or high use roadbed). *Very Low Quality*.
3. Moderately contaminated Delhi sands. Delhi sands with moderate to high disturbance (such as annual disking). Sufficient Delhi Sands are present to prevent soil compaction (related to contamination by foreign soils). Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality*.
4. Abundant clean Delhi Sands with little or no foreign soils (such as alluvial material) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. May represent high quality habitat with mild or superficial disturbance. *Moderate Quality*.
5. Sand dune habitat with clean Delhi Sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. Sand associated plant and arthropod species may be abundant and vegetation species composition is often indicative of low disturbance. *High Quality*.

It should be noted that habitat qualities often vary spatially within a site and may range in quality of suitability for DSF habitat. Further, overall habitat quality is affected by the overall habitat area on a site, such that very small areas diminish the overall habitat value of a site. Habitat conditions rated from Very Low Quality up to High Quality, are formally considered as representing Suitable conditions for the DSF.

3.3 Multiple Species Habitat Conservation Plan (MSHCP)

The Project site is not located within MSHCP Criteria Cell, or Criteria Area Plant Species, Amphibians, Mammals, or Special Linkage Areas. The Study Area was assessed for MSHCP Section 6.1.2 Riparian and Riverine Areas and associated species; MSHCP Section 6.1.4 Urban/Wildlands Interface; MSHCP Section 6.1.3 Narrow Endemic Plant Species, and Section 6.3.2 Species Survey Requirements for the western burrowing owl (*Athene cunicularia hypugaea* [BUOW]) habitat (Figure 5).



GIS Prepared By:
Carlson SLS

Created: May 13, 2021

0 50 100 200 300 400 500 600 Feet
1 inch = 450 feet

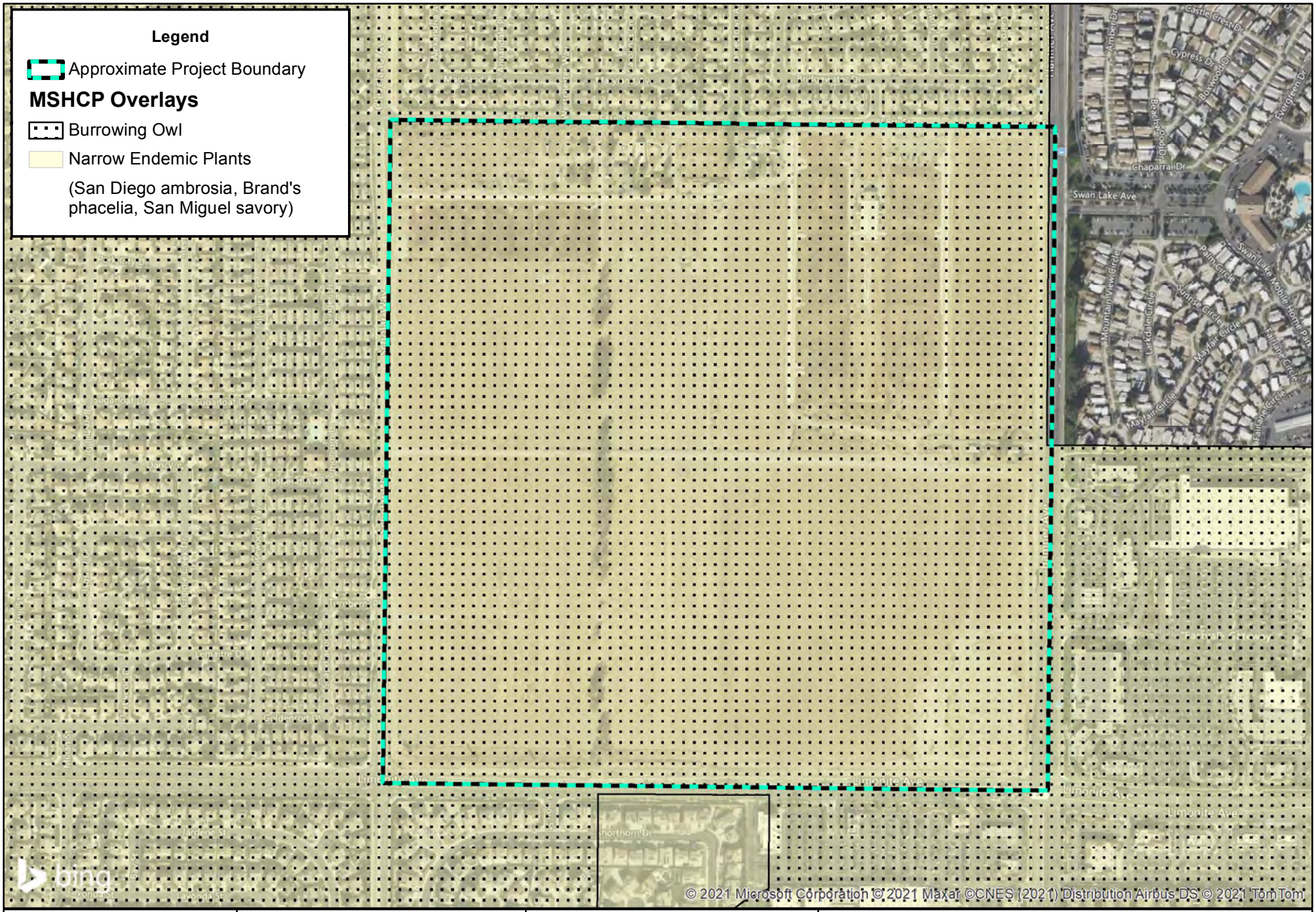
Data Source: Bing Map

The New Home Company: Leal Project

Soil Map

673

FIGURE 4



GIS Prepared By:
Carlson SLS

Created: June 8, 2021

0 50 100 200 300 400 500 600 Feet
1 inch = 500 feet

Data Source: Bing Map

The New Home Company: Leal Project

MSHCP Overlays

FIGURE 5

3.3.1 Section 6.1.2 Riparian/Riverine Areas and Vernal Pools

Volume I, Section 6.1.2 of the MSHCP describes the process through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose is to ensure that the biological functions and values of these areas throughout the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed. The Study Area was evaluated for the presence/absence of MSHCP riparian/riverine areas and vernal pools. With respect to riparian habitat, the Study Area was evaluated for the potential habitat to support the special status species including the least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii traillii*), the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), listed fairy shrimp, and other species identified in Section 6.1.2 of the MSHCP.

The Project site was evaluated to determine the limits of MSHCP riparian/riverine areas and vernal pools. Suspected areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Any MSHCP riparian/riverine limits were recorded onto a 200-scale (1" = 200') color aerial photograph and a GPS unit paired with the ARCGIS Collector Application.

3.3.1 Section 6.1.3 Narrow Endemic Plants- Survey Area Number 7

The Project site falls within Narrow Endemic Plants (Survey Area Number 7). The CNDDB and MSHCP were reviewed to determine known occurrences of special- status plants in the region. Based on this information, a list of target plants (including their suitable habitats and soil) was developed and incorporated into a survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floral compendium; and (3) document the distribution and abundance of any special-status plant species within the Project site.

General surveys were conducted to identify potential sensitive plant habitats, and to establish the accuracy of the data identified from the literature review and previous biological assessment and search. An aerial photograph and topographic map were used to determine the community types and other physical features that may support sensitive species or communities within the Project site and surrounding buffer area. The reconnaissance surveys also considered the guidelines adopted by CNPS and CDFW (Nelson 1984, CNPS 2001).

Where potentially suitable habitat was present, focused plant surveys included those MSCHP Covered Species identified by the NEPSSA Survey Area Number 7. For any locations with positive survey results, the MSHCP requires that 90 percent of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species are met. Findings of equivalency shall be made demonstrating that the 90-percent standard has been met.

3.3.2 Section 6.1.4 Urban/Wildlands Interface

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area. In order to evaluate direct, indirect, and cumulative impacts of the proposed Project on urban/wildlands interface, an analysis of wildlife use/movement was conducted for the Project site and adjacent buffer area. The analysis considered the movement and use of large mammals (i.e., mountain lion and mule deer), medium-sized mammals (mesocarnivores), and other wildlife such as small mammals, birds, reptiles, and amphibians. Methods utilized for the wildlife analysis included a review of existing information on wildlife use (including the MSHCP), general and focused biological surveys to document the presence/absence of wildlife, and opportunistic observations of mammal tracks and scat.

3.3.3 Section 6.3.2 Burrowing Owl Habitat Assessment

Prior to the field survey, available literature and databases including the CNDDB, were reviewed to identify sensitive habitats and special status wildlife species, including BUOW in the vicinity of the Study Area. Consistent with the MSHCP Survey Instructions, pedestrian survey transects were spaced approximately 10 to 15 meters apart to allow 100 percent visual coverage of the ground surface.

Consistent with the MSHCP guidelines and where feasible, CSLS biologists walked the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project boundary. Parcels of land that could not be accessed (e.g. private property) were viewed using binoculars from vantage points to survey for BUOW activity or signs thereof, as well as other nesting bird activity.

3.4 Jurisdictional Waters

Prior to the field investigation, CSLS biologist reviewed historic aerial imagery, topographic maps, and background information for the Study Area to determine the potential for perennial, intermittent, or ephemeral drainages and associated riparian resources.

3.4.1 Federal Clean Water Act (CWA)

The Clean Water Act (CWA), Section 401 provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project applicant to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Board administers the certification program in California. Section 404 establishes a permit program administered by the United States Army Corps of Engineers (Corps) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The Corps implementing regulations are found at 33 CFR 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed

by the United States Environmental Protection Agency in conjunction with the Corps (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

3.4.2 Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and fall under the jurisdiction of several regulatory agencies. The Corps exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features. The extent of waters of the United States is generally defined as the portion that falls within the limits of the Ordinary High-Water Mark (OHWM). The OHWM is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

The definition of Navigable Waters has undergone several iterations, including a much more streamlined definition which was published and formally adopted in April 2020. However, in August 2021, the April 2020 Navigable Waters definition was challenged in the case *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency*. In light of this case and subsequent order from US District Court for the District of Arizona, the U.S. Environmental Protection Agency (EPA) and Corps have halted implementation of the Navigable Waters Protection Rule from 2020 and are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice.

The pre-2015 definition of Navigable Waters includes (1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (4) All impoundments of waters otherwise defined as waters of the United States under this definition; (5) Tributaries of waters identified in paragraphs (s)(1) through (4) of this section; (6) The territorial sea; and (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by Corps as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33

CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by Corps (USACE 1987).

It is important to note that the RWQCB definition of wetland was redefined and the new definition went into effect May 28, 2020. The definition of a wetland is as follows: An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. This RWQCB modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils, and hydrophytic vegetation. Unlike the federal definition, however, the RWQCB wetland definition allows for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland.

However, if any vegetation is present, then the Corps delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). Examples of waters that would be considered wetlands by the RWQCB definition, but not by the federal wetland definition, are non-vegetated wetlands, or wetlands characterized by exposed bare substrates like mudflats and playas, as long as they meet the three-parameters as described in the RWQCB definition. It is important to note that while the Corps may not designate a feature as a wetland, that feature could be considered a special aquatic site or other water of the U.S. by the Corps and potentially subject to Corps' jurisdiction.

3.4.3 Porter-Cologne Water Quality Act – California Code, Division 7

The RWQCB also has jurisdiction over waters deemed "isolated" or not subject to Section 404 jurisdiction under the Solid Waste Agency of Northern Cook County v. Corps decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the state and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

Under Section 401 of the CWA, the local RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.

3.4.4 California Fish and Game Code Section 1600-1616

Waters of the State are regulated by the California Department of Fish and Wildlife (CDFW) through Section 1600 et seq. of the California Fish and Game Code. Section 1600 et seq. requires notifying the CDFW prior to any project activity that might (1) substantially divert or

obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If, after this notification, the CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will need to be obtained. CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

The limits of Waters of the State are defined as the "body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Therefore, the limits extend from the channel bed to the top of the bank, with the addition of the canopy of any riparian habitat associated with the watercourse.

4.0 Project Description

The Applicant proposes to construct a mix of residential units and commercial development and associated infrastructure on the site.

5.0 Results

5.1 Biological Survey

CSLS biologist conducted an analysis of biological resources and jurisdictional waters within the Study Area on June 9, 2021, and focused burrowing owl surveys and narrow endemic plant surveys on June 16, 23, July 1, and 13, 2021. Furthermore, a Delhi Sands Flower Loving Fly Assessment was performed on June 18, 2021. The June 9 Biological assessment survey was performed between 7:00 am and 1:50 pm, the temperature measured 82° F with clear skies. CSLS biologists conducted all the surveys by foot, hiking all accessible areas. Any inaccessible or restricted areas were surveyed using binoculars. The vegetation, jurisdictional waters, and wildlife observed were documented and representative photographs of the Study Area were taken (Attachment A). The following table summarized the field survey data.

Table 1. Survey Information

Survey Date	Time	Surveys	Surveyors
June 9, 2021	0700 - 1350	Biological Assessment, Jurisdictional Delineation, Burrowing Owl Assessment, Narrow Endemic Plant Survey.	Brianna Bernard
June 16, 2021	0715 - 1208	Biological Assessment, Jurisdictional Delineation,	Brianna Bernard

Survey Date	Time	Surveys	Surveyors
		Burrowing Owl Survey #1, Narrow Endemic Plant Survey.	
June 18, 2021	1200 - 1300	Delhi Sands Flower Loving Fly Assessment	Ken Osborne
June 23, 2021	0730 - 1145	Burrowing Owl Survey #2, Narrow Endemic Plant Survey.	Brianna Bernard
July 1, 2021	0658 - 1054	Burrowing Owl Survey #3, Narrow Endemic Plan Survey.	Brianna Bernard and Justinne Manahan
July 13, 2021	0715 - 1100	Burrowing Owl Survey #4, Narrow Endemic Plan Survey.	Brianna Bernard and Justinne Manahan

5.1.1 Vegetation Communities

The vegetation community remains consistent with the original assumptions in the 2015 Biological Assessment. The communities include disturbed historic dairy farm, ruderal, and developed vegetation communities. Vegetation communities were mapped in the field directly onto a 200-scale (1" = 200') aerial photograph and CSLS biologists utilized a Trimble R1 GNSS Receiver paired with the ARCGIS Collector Application. Vegetation mapping and acreages for each vegetation community is based on the observations of the field survey and is listed below in Table 2 and graphically depicted on Figure 6.

The surrounding 500 feet consists of developed vegetation community, including residential development and commercial development.

Table 2. Vegetation Communities Observed

Vegetation Community	Acreage within in the Project Site	Acreage within in the Surrounding Buffer	Total Acreage within the Study Area
Ruderal	96.82	-	96.82
Historical Dairy Farm	25.82	-	25.82
Disturbed/Developed	37.87	138.64	176.51
TOTAL	160.0	138.64	299.15

The general description of the vegetation communities observed during the 2021 field surveys are described below.

Ruderal

A majority of the ruderal vegetation community occurs within the southern 80-acres. The vegetation within this area is comprised of predominantly of London rocket (*Sisymbrium irio*) and summer mustard (*Hirschfeldia incana*). Other species include Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora*), rat-tail fescue (*Festuca microstachys*), foxtail brome (*Bromus madritensis ssp. rubens*), ripgut brome (*Bromus diandrus*), tocalote (*Centaurea melitensis*), Jimson weed (*Datura stramonium*), and scattered Mexican fan palms (*Washingtonia robusta*),

and mulefat (*Baccharis salicifolia*). A row of trees bisects the Project site from the north to south and includes mulberry trees (*Morus alba*), and Shamuel ash (*Fraxinus uhdei*).

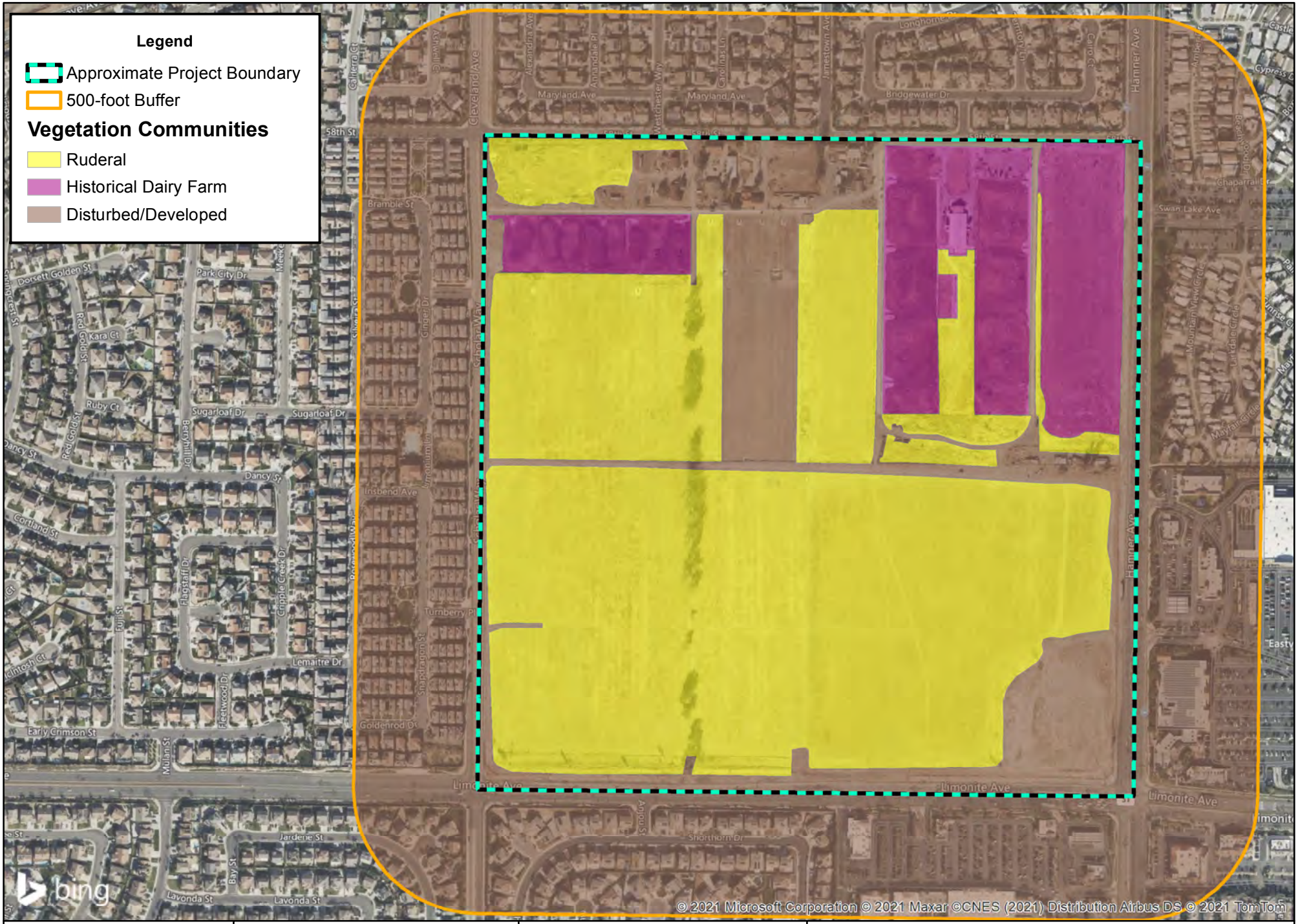
Historical Dairy Farm
This community consists of former dairy activities. The historical dairy farm includes old cow-pens and dried manure settling basins, prior grazing areas, and associated outbuildings and infrastructure. The dairy farm is no longer in use and includes areas mostly devoid of vegetation, with the exception of patchy areas supporting non-native ruderal vegetation.

Disturbed/Developed
This community includes bare dirt, residential structures, concrete roads, dirt roads and asphalt roads.

5.1.1 CNDDB and Critical Habitat

The Study Area contains no special-status vegetation type listed by the CNDDB and CDFW. No sensitive wildlife species were observed during the 2021 surveys.

The Study Area is not located within any designated critical habitat. The closest designated critical habitat is for the least Bell's vireo (*Vireo bellii pusillus* [LBV]) and it is located an approximate 1.5 miles to the south of the Project site (Figure 3). No habitat suitable for LBV occurs on the Project site.



GIS Prepared By:
Carlson SLS

Created: June 8, 2021

0 50 100 200 300 400 500 600 Feet
1 inch = 500 feet

Data Source: Bing Map

The New Home Company: Leal Project

Vegetation Community Map

FIGURE 6

5.1.2 Wildlife Species

Observations regarding the wildlife species present were made during the field visit (Table 3). Other species observed include California ground squirrel (Otospermophilus beecheyi), desert cottontail *(Sylvilagus audubonii),* and coyote *(Canis latrans*).

Table 3. Wildlife Species Observed Onsite

Scientific Name	Common Name
Buteo jamaicensis	red-tailed hawk
Calypte anna	Anna's hummingbird
Cathartes aura	turkey vulture
Carpodacus mexicanus	house finch
Charadrius vociferus	killdeer
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Eremophila alpestris	California horned lark
Euphagus cyanocephalus	Brewer's blackbird
Falco sparverius	American kestrel
Hirundo rustica	Barn swallow
Icterus cucullatus	Hooded oriole
Melospiza melodia	song sparrow
Mimus polyglottos	Northern mockingbird
Pyrocephalus rubinus	Vermilion flycatcher
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Spinus psaltria	Lesser goldfinch
Tyrannus vociferans	Cassin's kingbird
Zenaida macroura	mourning dove

5.1.3 Sensitive Wildlife Species

Sensitive wildlife include those species listed as Endangered or Threatened under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA), candidates for listing by the USFWS or CDFW, and California Watch List, Fully Protected and Species of Special Concern to CDFW. No listed wildlife was identified or observed within the Project site during the field surveys.

5.2 CMSHCP Assessment

The Project site is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits. Furthermore, the Project site is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits, and the Project site is not located in survey areas for Amphibians, Mammals, or Special Linkage areas. The Project site is subject to Riparian and Riverine Areas pursuant to MSHCP Section 6.1.2, Narrow Endemic Plants (Survey Area 7) pursuant to MSHCP Section 6.1.3, Urban/Wildlands Interface guidelines pursuant to MSHCP Section 6.1.4, and Western Burrowing Owl overlay pursuant to MSHCP Section 6.3.2.

5.2.1 Riparian and Riverine Areas and Vernal Pools (Section 6.1.2)

The Project site was assessed for MSHCP riparian/riverine areas and vernal pools pursuant to Section 6.1.2 of the MSHCP. The Project site does not contain any MSHCP riparian/riverine features.

Species Protected under Section 6.1.2

During vegetation mapping conducted for the Project site, no special status plants were detected during the 2021 surveys. Likewise, the Project site did not contain any suitable habitat for the avian species listed in Section 6.1.2: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools.

Vernal Pools

The Project site does not contain vernal pools or any suitable habitat for any of the riparian/riverine vernal pool species listed in Section 6.1.2 of the MSHCP, including listed fairy shrimp.

5.2.2 Narrow Endemic Plant – Survey Area Number 7 (Section 6.1.3)

The Project site is located within the Narrow Endemic Plant Species Survey Areas (NEPSSA) Number 7 overlay, which include the following target species:

- San Diego ambrosia (*Ambrosia pumila*)
  Status: California Rare Plant Rank 1B.1, federally endangered
  Distribution: Riverside and San Diego Counties.
  Habitat(s): Habitats supporting chaparral, coastal scrub, valley and foothill grasslands, and vernal pools. Observed in sandy loam or clay soils, sometimes alkaline soils. Known from 20 to 415 meters (65 to 1360 feet) MSL. Blooms April through October.
  Status onsite: None. The Project site lacks suitable habitat and soils. Not observed during field visit.

- Brand's phacelia (*Phacelia stellaris*)
  Status: California Rare Plant Rank 1B.1
  Distribution: Orange, Riverside, San Bernardino, and San Diego Counties.
  Habitat(s): Habitats supporting coastal dunes and coastal scrub. Known from 1 to 400 meters (5 to 1,310 feet) MSL. Blooms May through June.
  Status onsite: None. The Project site lacks suitable habitat and soils. Not observed during field visit.

- San Miguel savory (*Satureja chandleri*)
  Status: California Rare Plant Rank 1B.2
  Distribution: Orange, Riverside, and San Diego Counties.
  Habitat(s): Habitats supporting chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grasslands. Observed in rocky, gabbroic, or

metavolcanic soils. Known from 120 to 1,075 meters (395 to 3,525 feet) MSL. Blooms March through July.
Status onsite: None. The Project site lacks suitable habitat and soils. Not observed during field visit.

No special status plant species were observed during the 2021 surveys and none are expected to occur onsite due to the lack of suitable habitat or suitable soil found on the Project site.

5.2.3 Urban/Wildlands Interface (Section 6.1.4)

The Project site is not located adjacent to an existing or proposed MSHCP Conservation Area. Furthermore, the Project site is isolated from any large open space areas and instead is surrounded by residential and commercial development and does not function as a regional movement corridor.

5.2.4 Focused Burrowing Owl Survey (Section 6.3.2)

Step I Habitat Assessment survey was conducted on June 9, 2021 to determine if the Project site contains suitable BUOW habitat. Based on the Habitat Assessment it was determined the Project site does contain suitable habitat for BUOW. Therefore, a total of four focused burrowing owl surveys were performed on June 16, 23, July 1, and 13, 2021. The surveys took place between 6:45 a.m. and 12:00 p.m. Temperatures during the survey ranged between 65° F and 85° F, with generally predominant sunny, clear skies and 0-2 mph winds. The surveys were conducted during typical BUOW peak activity time and was not conducted during rain, high winds (> 20 miles per hour), dense cloud cover >75%. Prior to the commencement of the survey, CSLS biologist scanned the Study Area, consisting of the Project site and the surrounding 500-foot buffer, using binoculars to look for burrowing owl. The Study Area was assessed for the suitability to support burrowing owls and all suitable burrows were inspected for signs of use by burrowing owls.

No BUOWs or evidence of BUOWs were observed within the Study Area during the focused survey. A majority of the Project site is characterized by disturbed dairy land, ruderal, and developed vegetation communities, lacking necessary sized burrows to provide suitable nesting habitat for BUOW. The surrounding buffer area is developed with residential and commercial developments. California ground squirrels and their burrows were observed within the Study Area. These burrows were actively utilized by the California ground squirrels and contained no BUOW or keys signs (sight, whitewash, burrows, bones, feathers, pellets, nests, and calls). Furthermore, debris piles and farm equipment were thoroughly examined for any BUOW key signs. Based on the results of the focused surveys and lack of diagnostic signs for burrowing owl, the Project site is not occupied by the burrowing owl. Please refer to Attachment B for the complete results for the focused survey.

5.2.5 Delhi Sands Flower-Loving Fly Assessment

Due to the location of the Project site within the Ontario Recovery Unit for the Delhi Sands flower-loving fly, a habitat assessment for this species was conducted by Ken Osborne on June 18, 2021 (see Attachment C). The Delhi Sands flower-loving fly is a Federally Endangered

species which is dependent on Delhi sands and Delhi sand dunes with less than 50% vegetation cover. Typical vegetation includes California buckwheat (Eriogonum fasciculatum), California croton (Croton californicus), and telegraph weed (Heterotheca grandiflora).

The Project site contains a total of 13-acres of Delhi sand series located in the south eastern portion of the property (Figure 4). The remaining portions of the site includes Hilmar loamy sands. Of the total 13-acres, a total of 5-acres of Delhi sands is overlain with a meter depth of exotic soils dominated by alluvial gravely materials. Remaining peripheral areas mapped with Delhi fine soils are intermixed with fine loam soils (Hilmar classification), the mixing and contamination likely the result of decades of dairy operations where pasture lands have been disked. The site has been largely surrounded by residential and commercial development since 2004, isolating the Project site from areas with Delhi Sands Flower-loving fly populations. The last known extant Delhi Sands Flower-loving fly population site in the Ontario Recovery Unit area is located some six kilometers north northeast of the site. Plant species normally associated with Delhi sands ecosystems do not occur on the site.

The entire site is in historical dairy and associated developed residential and dairy infrastructure. Aerial imagery available on Google Earth, shows that the dairy operations have been maintained since 1985 and is no longer in use today. Site conditions feature continuously irrigated pastures, cattle pens, and developed buildings (including residences) with irrigated landscaping, and ponds. Lands so managed with dairy operations are not suitable for the Delhi Sands flower-loving fly. Northern, western, and central portions of the site are mapped (and field investigation confirms) with Hilmar loamy sands – soils unsuitable for Delhi Sands flower-loving fly. The site is further set within the larger context of adjacent and surrounding developed lands, further reinforcing the unsuitability of habitat conditions for Delhi Sands flower-loving fly. The entire Project site is determined to be Unsuitable for Delhi Sands flower-loving fly.

5.3 Jurisdictional Waters

The National Wetlands Inventory map was reviewed, along with USGS 7.5-minute topo map to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their location within any watersheds associated with the site, and other features that might contribute to federal authority located within watersheds associated with the Project Site. Lastly, a field survey was performed on June 9 and 16, 2021.

California Department of Fish and Wildlife (CDFW) commented on the Draft EIR in 2015 regarding a potential jurisdictional feature on the southwestern portion of the Project Site. The entire site was inspected for jurisdictional features, specifically the area CDFW referenced in the comment letter, was thoroughly examined for any signs meeting the definition of jurisdictional waters. The Project site consists primarily of disturbed agriculture lands, ruderal, and developed vegetation communities. No wetlands, riparian, or drainage features were observed.

Based on the field survey, there are no features identified on the Project site that meet the definition and are considered jurisdictional Waters of the United States or Waters of the State, pursuant to Section 1600-1603 of the California Fish and Game Code and Section 401 and 404 of the Clean Water Act, respectively.

6.0 Thresholds of Significance

The Draft EIR, and subsequent Final EIR, analyzed Biological Impacts as a result of Project implementation. The thresholds below mimic those found within the EIR for the Leal Master Plan.

The thresholds include the following:

Threshold 1 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Threshold 2 Have a substantial adverse effect on any riparian habitat or other sensitive plant community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

Threshold 3 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Threshold 4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery areas.

Threshold 5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Threshold 6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

Threshold 7 Reduce the number or restrict the range of an endangered, rare, or threatened plant or animal species or biotic community, thereby causing the species or community to drop below self-sustaining levels.

Threshold 8 Cumulative impacts to biological resources.

The 2015 EIR analyzed the Project based on a biological desktop review. In 2021, the Project site was formally evaluated for sensitive resources, including performing a jurisdictional delineation and all focused surveys for sensitive wildlife and plant species, as specified within the MSHCP and 2015 EIR. Based on the 2021 results, the Project site does not contain any sensitive biological resources. Below is a summary of the impact analysis and determination within the 2015 EIR in comparison to the 2021 field results and results from the jurisdictional delineation and additional special status species focused surveys. As part of the Project implementation the entire 160-acre site will be permanently impacted.

Table 4. Threshold Comparison

Threshold Number	2015 Determination	2021 Determination	Change from 2015 to 2021
1	Less Than Significant with Mitigation	Less Than Significant with Mitigation	No change
2	Less Than Significant with Mitigation	No Impact	Less impactful
3	Less Than Significant with Mitigation	No Impact	Less impactful
4	Less Than Significant	Less Than Significant	No change
5	No Impact	No Impact	No change
6	Less Than Significant	Less Than Significant	No change
7	Less Than Significant with Mitigation	Less Than Significant	Less impactful
8	Less Than Cumulatively Considerable with Mitigation	Less Than Cumulatively Considerable with Mitigation	No change

6.1 Threshold 1

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation.

6.1.1 Sensitive Plant Species

Development of the Project site would result in the direct removal of non-native and ruderal plant species. The Project site does not contain any suitable habitat for special status species or sensitive species, nor were any observed onsite. The Project would include the removal of non-native and ruderal species; therefore, impacts would not be considered a significant impact and no mitigation is required. No change from what was analyzed in the 2015 EIR.

6.1.2 Sensitive Wildlife Species

Development of the Project site would result in the disruption and removal of ruderal and developed habitat and the loss and displacement of non-sensitive common wildlife species. Due to the level of existing disturbance from the historical use as a dairy farm, human activity onsite and within the vicinity (e.g., nearby development), these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds. Therefore, impacts to common wildlife species would not be considered a significant impact and no mitigation is required. No change from what was analyzed in the 2015 EIR.

As stated in the 2015 EIR analysis, the Project site consists of suitable habitat for nesting, foraging, and/or wintering avian species. While none of the common species carry a Federal or State listing as threatened or endangered, they are all protected under the MBTA during breeding season. Therefore, a pre-construction survey is required in compliance with the MBTA. Implementation of Mitigation Measure MM 3.7.1 would reduce potential impacts to the avian species to a less than significant level if nesting individuals are present. This 2015 mitigation measure is still applicable following the 2021 field survey and biological analysis.

MM 3.7.1 *All construction and clearing activities shall be conducted outside of the main avian nesting season (January 15– August 31), when feasible. Preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds.*

If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusions zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged.

6.2 Threshold 2

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Widlife or U.S. Fish and Wildlife Service?

No impact.

Based on the 2021 field surveys and focused surveys, no sensitive plant communities or habitats occur on the Project site. Sensitive habitats include those that are of special concern to resource agencies and those that are protected under the MSHCP, CEQA, Section 1600 of the California Fish and Game Code, and Section 404 of the Clean Water Act.

Furthermore, the 2021 included a formal jurisdictional delineation on the Project site. Based on those results, no jurisdictional features were identified on the Project site subject to Section 1602 of the California Fish and Game Code, as regulated by CDFW.

Based on the detailed 2021 biological surveys and investigations of the Project site, no sensitive biological resources or jurisdictional features were identified on the Project site, therefore, no impacts would occur. Mitigation Measure 3.7.2 and 3.7.3 have been fulfilled and are no longer required.

~~*MM 3.7.2 Prior to breaking ground, a qualified biologist shall be retained to determine whether potentially jurisdictional waters are present. If potentially jurisdictional features are identified, the project applicant shall submit a preliminary jurisdictional determination to the US Army Corps of Engineers for verification. The verified delineation will be submitted to the City for its records.*~~

~~*MM 3.7.3 Projects shall result in no net loss of sensitive habitats, riparian vegetation, and/or federally protected waters through impact avoidance, impact minimization, and/or compensatory mitigation, as determined in Clean Water Act Section 404 and 401 permits and/or a 1602 Streambed Alteration Agreement. Evidence of compliance with this mitigation measure shall be provided to the City prior to approval of each individual grading permit.*~~

The analysis from the 2015 EIR concluded the impacts less than significant with mitigation. However, based on the lack of sensitive biological resources and jurisdictional resources found onsite during the field investigations, the 2021 conclusion is no impact. The 2021 conclusion is less impactful than what was analyzed in the 2015 EIR.

6.3 Threshold 3

Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact.

No jurisdictional non-wetland or wetland waters regulated under Section 404 of the CWA were identified on the Project site. Based on the detailed 2021 biological surveys and jurisdictional investigations of the Project site, no sensitive biological resources or jurisdictional features were identified on the Project site, therefore, no impacts would occur and Mitigation Measure 3.7.2 and 3.7.3 have been fulfilled and are no longer required.

The analysis from the 2015 EIR concluded the impacts less than significant with mitigation. However, based on the lack of jurisdictional resources found onsite during field investigations, the 2021 conclusion is no impact. The 2021 conclusion is less impactful than what was analyzed in the 2015 EIR.

6.4 Threshold 4

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?

Less than Significant.

6.4.1 Wildlife Movement

As stated in the 2015 EIR analysis and verified during the 2021 field surveys, the entire Project site has been disturbed by development and intense historical dairy and agricultural uses and is unlikely to facilitate local wildlife movement. In addition, the Project site is completely surrounded by dense urban development, further impairing wildlife movement.

The site supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and marginal movement habitat for reptile, bird, and mammal species), however, the site provides little to no function to facilitate wildlife movement on a regional scale. Furthermore, the site is not identified as a Special Linkage area within the MSHCP. Movement on a local scale likely occurs with species adapted to urban environments due to the surrounding development and disturbances in the vicinity of the site. Although implementation of the Project would result in disturbances to local wildlife movement within the site, those species adapted to urban areas would be expected to persist on-site following construction. As such, impacts would be less than significant, and no mitigation measures would be required. No change in conclusion from what was analyzed in the 2015 EIR.

6.5 Threshold 5

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact.

The Project is not subject to any local policies, such as a tree preservation ordinance. Therefore, no impacts would occur, and no mitigation is required. No change in conclusion from what was analyzed in the 2015 EIR.

6.6 Threshold 6

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant.

The Project site is located within the MSHCP. The Project site is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits. Furthermore, the Project site is not located in survey areas for Amphibians, Mammals, or Special Linkage areas. The Project site is subject to Riparian and Riverine Areas pursuant to MSHCP Section 6.1.2, Narrow Endemic Plants Overlay, pursuant to MSHCP Section 6.1.3, Urban/Wildland Interface pursuant to Section 6.1.4, and Western Burrowing Owl overlay pursuant to MSHCP Section 6.3.2. Detailed biological surveys and investigations of the Project site were conducted in 2021 for MSHCP riparian/riverine features and associated special status species, narrow endemic plants, burrowing owl, and Delhi Sands Flower-Loving Fly. Results of the 2021 surveys are discussed below. Since the Project site occurs within the MSHCP and the City of Eastvale is a participating entity several mitigation measure and standard conditions were applied to the Project within the 2015 EIR. The following MSHCP measures still apply. Several of the measures were completed as part of the field surveys and detail investigations conducted for the 2021 update. Those measures are discussed below.

MSHCP A. *The project applicant shall submit fees to the City in accordance with the requirements of the MSHCP Mitigation Fee Ordinance (Chapter 4.62 of the City of Eastvale Municipal Code).*

~~*MSHCP B.* *The project applicant shall assess the proposed project's consistency with Section 6.1.2, Section 6.1.3, Section 6.3.2, and Section 6.1.4 of the MSHCP.*~~

~~*MSHCP C.* *A qualified biologist shall conduct a burrowing owl habitat assessment. If needed, focused surveys and preconstruction surveys shall be conducted, as well as appropriate avoidance and minimization (Section 6.3.2 of the MSHCP).*~~

~~*MSHCP D. A qualified biologist shall conduct habitat assessments for the required Narrow Endemic Plant Species. If needed, focused surveys and shall be conducted, as well as appropriate avoidance and minimization (Section 6.1.3 of the MSHCP).*~~

~~*MSHCP E. A qualified biologist shall conduct a habitat assessment for Delhi sands flower-loving fly in areas underlain by Delhi soil series (Species-specific Objective 1B).*~~

6.6.1 Riparian and Riverine Areas and Vernal Pools (Section 6.1.2)

There are no features identified on the Project site that are considered riparian and/or riverine, nor meet the definition of riparian and/or riverine as outline within the MSHCP Section 6.1.2. The Project site does not contain suitable habitat for any of the riparian/riverine vernal pool species listed in Section 6.1.2 of the MSHCP, including listed fairy shrimp. No impacts to those species listed in Section 6.1.2 of the MSHCP are associated with Project implementation due to the lack of suitable habitat onsite. Therefore, the Project is consistent with MSHCP Section 6.1.2. As part of the 2015 EIR, MSHCP B standard condition was to be applied to the Project because the City is a signatory to the MSHCP. MSHCP B has been fulfilled and is considered complete with the 2021 field surveys and detailed jurisdictional investigations.

6.6.2 Narrow Endemic Plant – Survey Area Number 7 (Section 6.1.3)

Portions of the Project site are located within the Narrow Endemic Plant Species Survey Areas Number 7, which include the following target species:

- San Diego ambrosia (*Ambrosia pumila*)
- Brand's phacelia (*Phacelia stellaris*)
- San Miguel savory (*Satureja chandleri*)

No special status plant species were observed during the 2021 surveys and none are expected to occur onsite due to the lack of suitable habitat or suitable soil found on the Project site; therefore, there are no potential impacts to special status plants due to Project implementation. As part of the 2015 EIR, MSHCP D standard condition was to be applied to the Project because the City is a signatory to the MSHCP. MSHCP D has been fulfilled and is considered complete with the 2021 field surveys and detailed investigations.

6.6.3 Urban/Wildlands Interface (Section 6.1.4)

The Project site is not located to an existing or proposed MSHCP Conservation Area as pursuant to Section 6.1.4 of the MSHCP. Therefore, there are no potential impacts to Urban/Wildlands Interface due to Project implementation. As part of the 2015 EIR, MSHCP B standard condition was to be applied to the Project because the City is a signatory to the MSHCP. MSHCP B has been fulfilled and is considered complete with the 2021 field surveys and detailed investigations.

6.6.4 Focused Burrowing Owl Surveys (Section 6.3.2)

Based on the Habitat Assessment it was determined the Project site contains suitable habitat for BUOW; therefore, four additional focused BUOW surveys were conducted by qualified

biologist. Based on the focus surveys, no BUOWs or evidence of BUOWs were observed within the Study Area during the focused surveys. A majority of the Project site is characterized by disturbed dairy land, ruderal, and developed vegetation communities, lacking necessary sized burrows to provide suitable nesting habitat for BUOW. The surrounding buffer area is developed with residential and commercial developments. California ground squirrels and their burrows were observed within the Study Area. These burrows were actively utilized by the California ground squirrels and contained no BUOW or keys signs (sight, whitewash, burrows, bones, feathers, pellets, nests, and calls). Furthermore, debris piles and farm equipment were thoroughly examined for any BUOW key signs. Based on the results of the focused surveys and lack of diagnostic signs for burrowing owl, the Project site is not occupied by the burrowing owl. As part of the 2015 EIR, MSHCP C standard conditions were to be applied to the Project because the City is a signatory to the MSHCP. MSHCP C has been partially fulfilled with the 2021 field surveys and detailed investigations. As part of MSHCP C standard condition, should suitable habitat be observed, a pre-construction burrowing owl survey is to be performed within 30-days of ground disturbances. The following Standard Conditions is to be incorporated as part of MSHCP C measure.

SC MSHCP C: *Prior to impacts, a pre-construction survey for burrowing owl within the Study Area (Project site and surrounding 500-foot buffer) shall be conducted by a qualified biologist where suitable habitat is present within 30 days to the commencement of ground disturbing activities.*

If active burrowing owl burrows are detected during the breeding season, all work within 300 feet of any active burrow will be halted until that nesting effort is finished. The on-site biologist will review and verify compliance with these boundaries and will verify the nesting effort has finished. Work can resume when no other active burrowing owl nesting efforts are observed.

If active burrowing owl burrows are detected outside the breeding season, then passive and/or active relocation pursuant to a Burrowing Owl Exclusion Plan that shall be prepared by the Applicant and approved by the County of Riverside Environmental Programs Department (EPD) in consultation with CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and MSHCP.

Burrowing owl burrows shall be excavated with hand tools by a qualified biologist when determined to be unoccupied, and backfilled to ensure that animals do not reenter the holes/dens.

6.6.5 Delhi Sands Flower-Loving Fly (Species-specific Objective 1B)

Due to the location of the Project site within the Ontario Recovery Unit for the Delhi Sands flower-loving fly, a habitat assessment for this species was conducted. The entire site is in

historical dairy and associated developed residential and dairy infrastructure. Aerial imagery available on Google Earth, shows that the dairy operations have been maintained since 1985 to the up to 2020. Site conditions feature continuously irrigated pastures, cattle pens, and developed buildings (including residences) with irrigated landscaping, and ponds. Lands so managed with dairy operations are not suitable for the Delhi Sands flower-loving fly. Northern, western, and central portions of the site are mapped (and field investigation confirms) with Hilmar loamy sands – soils unsuitable for Delhi Sands flower-loving fly. The site is further set within the larger context of adjacent and surrounding developed lands, further reinforcing the unsuitability of habitat conditions for Delhi Sands flower-loving fly. The entire Project site is determined to be Unsuitable for Delhi Sands flower-loving fly. As part of the 2015 EIR, MSHCP E standard condition was to be applied to the Project because the City is a signatory to the MSHCP. MSHCP E has been fulfilled and is considered complete with the 2021 field surveys and detailed investigations.

6.7 Threshold 7

> *Reduce the number or restrict the range of an endangered, rare, or threatened plant or animal species or biotic community, thereby causing the species or community to drop below self-sustaining levels.*

Less than Significant.

There are no previously recorded sensitive biological resources (i.e., special-status species populations, sensitive habitats, or jurisdictional features) within the Study Area. No sensitive biological resources, including i.e., special-status species populations, sensitive habitats, or jurisdictional features occur onsite as confirmed by the 2021 Biological Surveys.

However, suitable habitat for burrowing owl, white-tailed kite, grasshopper sparrow, and mountain plover exists within the Study Area. All of these animal species are covered under the MSHCP. With the City's participation and implementation of the MSHCP, any direct and indirect impacts to sensitive species would be less than significant with the payment of the mitigation fee and compliance with all applicable requirements of the MSHCP. This provides full mitigation under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the California Endangered Species Act (CESA) for impacts to MSHCP covered species and habitats. The MSHCP also addresses indirect impacts through cores and linkages, criteria cells, and plan fees.

Project compliance with the MSHCP A standard condition fully mitigates impacts for these covered species. Additional surveys/assessments were performed in 2021, and no burrowing owl, narrow endemic plant species, or Delhi sands flower-loving fly occur onsite and no mitigation is required.

The analysis from the 2015 EIR concluded the impacts less than significant with mitigation. However, based on the lack of sensitive biological resources (i.e., special-status species

populations, sensitive habitats, or jurisdictional features) within the Study Area, the 2021 conclusion is less than significant. The 2021 conclusion is less impactful than what was analyzed in the 2015 EIR.

6.8 Threshold 8

Cumulative impacts to biological resources.

Less than Cumulatively Considerable with Mitigation.

The City participates in the MSHCP, which is designed to protect over 150 species and conserve over 500,000 acres in western Riverside County. Project compliance with the MSHCP fully mitigates for impacts on covered species and ensures large segments of natural communities in western Riverside County will be preserved.

Adherence to the standards and conditions of the MSHCP, and implementation of mitigation measure MM 3.7.1, ensures that impacts to avian species and their habitats are minimized. Based on the detailed 2021 biological surveys and investigations of the Project site, no sensitive biological resources or jurisdictional features were identified on the Project site, therefore, no impacts would occur. MM 3.7.2 and MM 3.7.3 have been fulfilled and are no longer required.

Detailed biological surveys and investigations of the Project site were conducted in 2021 for MSHCP riparian/riverine features and associated special status species, narrow endemic plants, burrowing owl, and Delhi Sands Flower-Loving Fly. Based on those results, Standard Conditions MSHCP B, MSHCP D, and MSHCP E have been fulfilled and are no longer required. MSHCP A is the fulfillment of MSHCP Fees and still applicable. Furthermore, a portion of MSHCP C is fulfilled with focused protocol Burrowing Owl Surveys. It was determined that the Study Area is not occupied with burrowing owls, however, due to the suitable habitat found onsite, avoidance and minimization measures for the Burrowing Owl are still appliable. Participation in and implementation of the MSHCP will effectively reduce the project's contribution to cumulative impacts to less than cumulatively considerable.

7.0 Summary

In summary, the 2015 EIR analyzed the Project based on a biological desktop review. In 2021, the Project site was formally evaluated for sensitive resources, including performing a jurisdictional delineation and all focused surveys for sensitive wildlife and plant species, as specified within the MSHCP and 2015 EIR. Based on the 2021 results, the Project site does not contain any sensitive biological resources. As part of the Project implementation the entire 160-acre site will be permanently impacted.

The Project site is located within the MSHCP. The Project site is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits. Furthermore, the Project site is not located in survey

areas for Amphibians, Mammals, or Special Linkage areas. The Project site is subject to Riparian and Riverine Areas pursuant to MSHCP Section 6.1.2, Narrow Endemic Plants Overlay, pursuant to MSHCP Section 6.1.3, Urban/Wildland Interface pursuant to Section 6.1.4, and Western Burrowing Owl overlay pursuant to MSHCP Section 6.3.2.

Adherence to the standards and conditions of the MSHCP, and implementation of mitigation measure MM 3.7.1, ensures that impacts to special-status avian species and their habitats are minimized. Based on the detailed 2021 biological surveys and investigations of the Project site, no sensitive biological resources or jurisdictional features were identified on the Project site, therefore, no impacts would occur. MM 3.7.2 and MM 3.7.3 have been fulfilled and are no longer required.

Detailed biological surveys and investigations of the Project site were conducted in 2021 for MSHCP riparian/riverine features and associated special status species, narrow endemic plants, burrowing owl, and Delhi Sands Flower-Loving Fly. Based on those results, Standard Conditions MSHCP B, MSHCP D, and MSHCP E have been fulfilled and are no longer required. MSHCP A is the fulfillment of MSHCP Fees and still applicable. Furthermore, a portion of MSHCP C is fulfilled with focused protocol Burrowing Owl Surveys. It was determined that the Study Area is not occupied with burrowing owls, however, due to the suitable habitat found onsite, avoidance and minimization measures for the Burrowing Owl are still appliable.

Based on the updated 2021 detailed Biological Surveys, it is determined that impacts are either the same as analyzed in the 2015 EIR or less impactful with Project implementation. The Project is not anticipated to have a greater impact than what was originally analyzed in the 2015 EIR.

Please contact me at bbernard@carlsonsls.com or 949.542.7042, should you have any questions or comments.

Brianna Bernard
Project Manager and Project Biologist

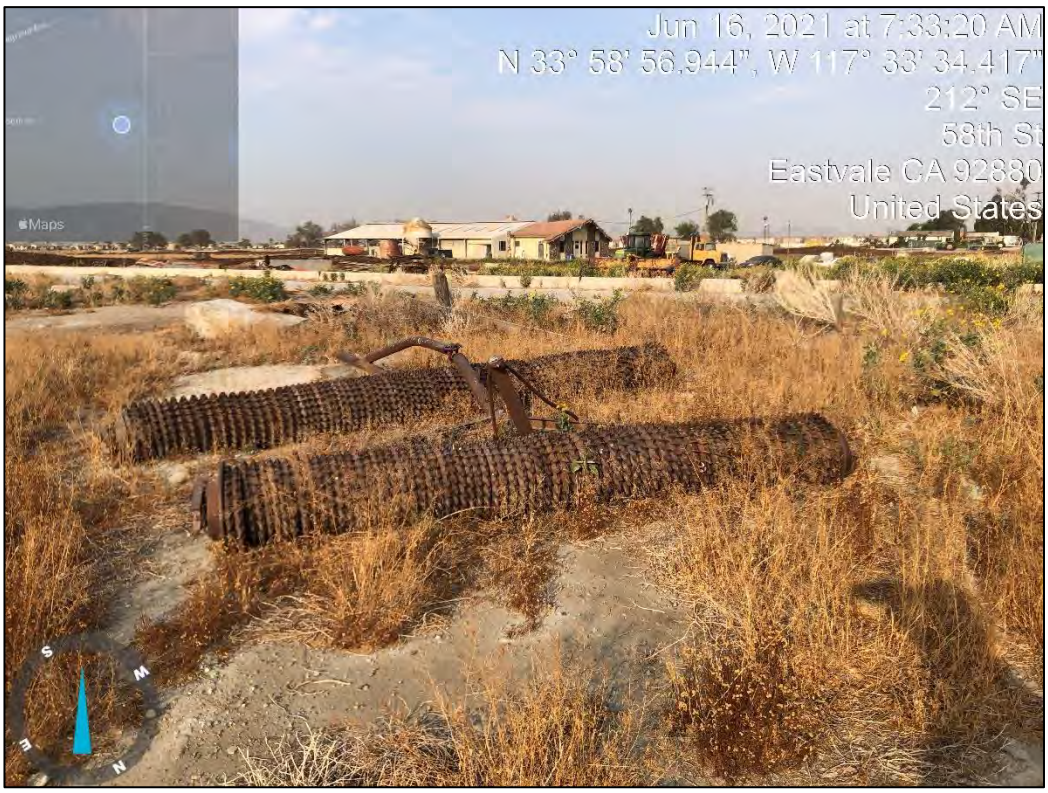
Enclosures:

- Attachment A: Photopages
- Attachment B: Burrowing Owl Survey Results
- Attachment C: Delhi Sands Flower-Loving Fly Assessment

Attachment A: Photopages



Looking over the Project site in the north-east corner.



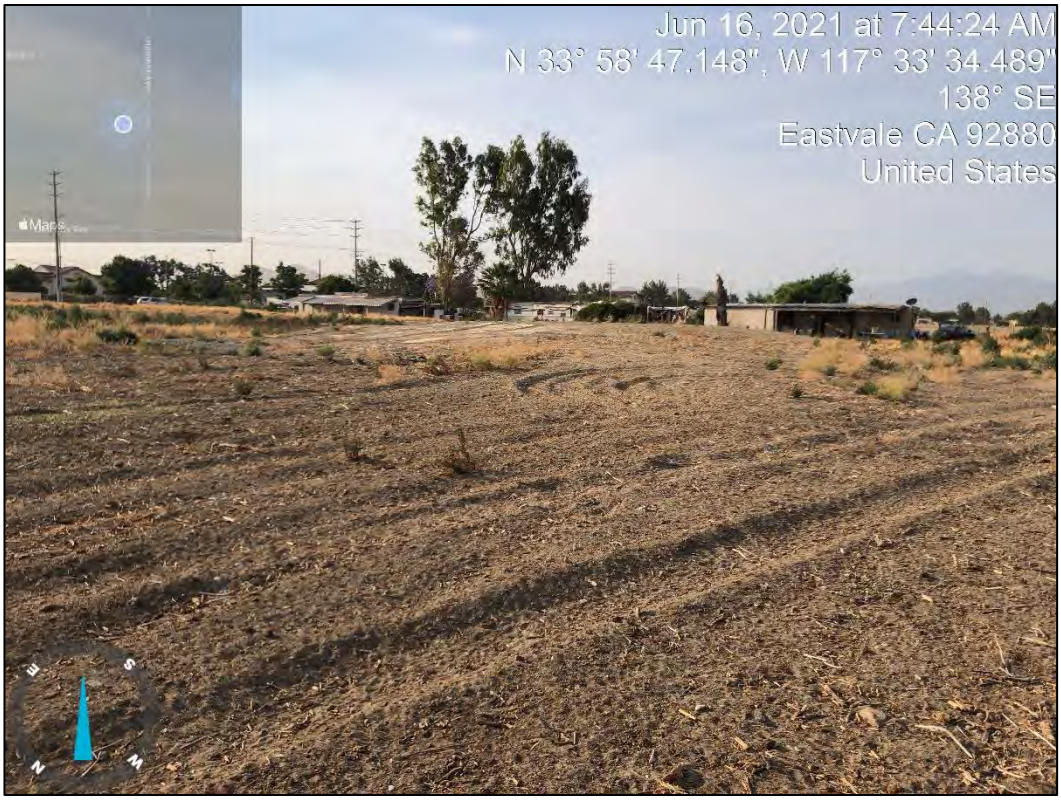
Historical agriculture and dairy equipment is scattered throughout the site.



Typical burrow observed.



A majority of the site is disturbed.



Old homes and trailers are scattered throughout the site.



A majority of the site include ruderal habitat.



Ruderal Habitat found onsite.



The site also includes disturbed habitat.

Attachment B: Burrowing Owl Survey Results

Information Summary

Report Date:	November 2, 2021
Report Title:	Results of MSHCP Focused Burrowing Owl Survey for the Leal Project in Riverside County, California
APN Numbers:	164-030-010, 164-030-012, 164-030-013, 164-030-014, 164-030-024, and 164-030-025.
Principal Investigator:	Brianna Bernard Carlson Strategic Land Solutions 27134A Paseo Espada, Suite 323 San Juan Capistrano, CA 92675 949.542.7042 Office 916.218.2644 Mobile bbernard@carlsonsls.com

Report Summary

This letter describes the methods and results of a focused burrowing owl (*Athene cunicularia* [BUOW]) survey for the Leal Project (Project) located in the City of Eastvale. The Project site is generally located in the Hemet area of Riverside County. The Project site is bounded by 58th Street to the north, Hamner Avenue to the east, Limonite Avenue to the south, and Scholar Way to the west. It is situated immediately west and north of existing commercial and retail developments and south and east of established residential neighborhoods of varying densities. The Project site is located approximately half a mile west of Interstate 15 (I-15). The Project site is within the *Corona North* U.S. Geological Survey 7.5-minute topographic map. Please refer to attached Figure 1 and Figure 2. Access to the Project site is provided off the Hamner Avenue or 58th Street. The Project site and surrounding 500-foot buffer (Study Area) was surveyed.

The surveys were performed on the following days:

Survey	Survey Date	Time	Surveyors
Burrowing Owl Assessment	June 9, 2021	0700 - 1350	Brianna Bernard
Burrowing Owl Survey #1	June 16, 2021	0715 - 1208	Brianna Bernard
Burrowing Owl Survey #2	June 23, 2021	0730 - 1145	Brianna Bernard
Burrowing Owl Survey #3	July 1, 2021	0658 - 1054	Brianna Bernard and Justinne Manahan

Survey	Survey Date	Time	Surveyors
Burrowing Owl Survey #4	July 13, 2021	0715 - 1100	Brianna Bernard and Justinne Manahan

The Project site historically functioned as a dairy with associated agriculture, a horse farm, and the Leal family home. The Project site currently has 3 horses and associated horse corrals, several homes and associated trailers found scattered around the property, along with dairy and farm equipment. The Project site consists primarily of disturbed land associated with historical dairy activities, as well as developed and ruderal habitat communities. Scattered burrows were observed on the Project site. All observed burrows were inspected carefully for any evidence of BUOW presence. Based on the lack of direct observation of BUOW or evidence of BUOW activity (e.g. evidence of active burrows with whitewash, pellets, feather, etc.) during the survey, the Study Area is not currently considered occupied by BUOW.

Field Survey Methods

Prior to the field survey, available literature and databases including the California Natural Diversity Database (CNDDB), were reviewed to identify sensitive habitats and special status wildlife species, including BUOW in the vicinity of the Study Area. Consistent with the MSHCP Survey Instructions, a burrowing owl habitat assessment was conducted on June 9, 2021 and pedestrian survey transects were spaced approximately 15 to 25 meters apart to allow 100 percent visual coverage of the ground surface.

According to the MSHCP guidelines, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars. Parcels of land that could not be accessed (e.g. private property) were viewed using binoculars from vantage points to survey for BUOW activity or signs thereof, as well as other nesting bird activity.

The Project site and surrounding 500-foot buffer, collectively referred to as the Study Area, was assessed for the suitability to support burrowing owls and all suitable burrows were inspected for signs of use by burrowing owls. After the initial assessment of the site and surrounding areas, the Project site was systematically walked in an east-west direction of the Project site within suitable habitat for BUOW. Adjacent suitable areas, where accessible, were also surveyed to determine possible presence of owls within the buffer area (500-feet surrounding the Project site). Areas not accessible were surveyed using binoculars.

All encountered burrows or structure entrances were checked for the presence of BUOWs, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or

excrement at or near a burrow entrance. Natural or man-made structures and debris piles that could support BUOWs were also surveyed.

All wildlife species encountered, visually or audibly during the field survey, were identified and recorded in the field notes. Binoculars were used to aid in the identification of observed wildlife. Photographs were taken to document existing conditions within the Project site (Attachment A).

Results

The BUOW survey was performed on June 9, 2021 between the hours of 7:00 a.m. – 1:50 p.m. on the Project site and surrounding 500-foot area within suitable Burrowing Owl habitat (Figure 2). The survey was performed by Carlson Strategic Land Solutions (CSLS) biologists Brianna Bernard. The Biologists performed transects within areas that could potentially provide suitable BUOW habitat. Weather conditions during the survey was conducive to observing signs of BUOW activity, such as owls outside burrows. Temperatures during the survey ranged from 68° F to 90° F with clear skies and winds from 0-1 mph. The survey was conducted during typical BUOW peak activity time and was not conducted during rain, high winds, or dense fog.

Following the habitat assessment, additional focused surveys took place on June 16, June 23, July 1, and July 13, 2021 generally between 7:00 a.m. and 12:00 p.m. by CSLS Biologists Brianna Bernard and Justinne Manahan on select dates. Temperatures during the surveys ranged between 70° F and 98° F, with predominant sunny, clear skies and 0-2 mph winds. The survey was conducted during typical BUOW peak activity time and was not conducted during rain, high winds (> 20 miles per hour), dense cloud cover >75%, or extreme temperatures.

The Study Area consist primarily of historical dairy activities, ruderal habitat, and disturbed/developed habitat. The ruderal habitat appears to be routinely maintained. The ruderal habitat is dominated by London rocket (*Sisymbrium irio*) and summer mustard (*Hirschfeldia incana*). Other species include Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora*), rat-tail fescue (*Festuca microstachys*), foxtail brome (*Bromus madritensis ssp. rubens*), ripgut brome (*Bromus diandrus*), tocalote (*Centaurea melitensis*), Jimson weed (*Datura stramonium*), and scattered Mexican fan palms (*Washingtonia robusta*), and mulefat (*Baccharis salicifolia*). A row of trees bisects the Project site from the north to south and includes mulberry trees (*Morus alba*), and Shamuel ash (*Fraxinus uhdei*).

The Study Area contains a small population of California ground squirrels (*Spermophilus beecheyi*), specifically located in the historical dairy activities community, which in turn results in various burrows that could potentially support suitable BUOW foraging and nesting habitat. These areas were inspected carefully for the presence of

BUOWs and active nests. No pellets, whitewash, feathers, tracks or any other signs indicative of burrowing owl presence were observed within the Study Area.

The Study Area provides suitable foraging and nesting habitats to support wildlife. Bird activity during the survey was moderate. During the field surveys the following species were observed/detected:

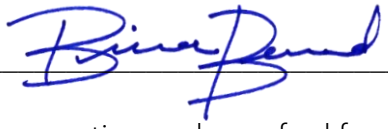
- red-tailed hawk *(Buteo jamaicensis)*
- Anna's hummingbird (*Calypte anna)*
- Coyote (*Canis latrans)*
- house finch (*Carpodacus mexicanus)*
- Turkey Vulture (*Cathartes aura)*
- Killdeer (*Charadrius vociferus)*
- American crow (*Corvus brachyrhynchos)*
- California horned lark (*Eremophila alpestris*)
- Common raven (*Corvus corax)*
- Brewer's blackbird (Euphagus cyanocephalus)
- American Kestrel (*Falco sparverius*)
- Barn swallow (Hirundo rustica)
- Hooded oriole (*Icterus cucullatus)*
- Song Sparrow *(Melospiza melodia)*
- Northern mockingbird (*Mimus polyglottos*)
- Vermilion flycatcher (*Pyrocephalus rubinus*)
- Black phoebe (*Sayornis nigricans*)
- Say's phoebe (*Sayornis saya*)
- California ground squirrel *(Spermophilus (Otospermophilus) beecheyi)*
- lesser goldfinch *(Spinus psaltria)*
- desert cottontail *(Sylvilagus audubonii)*
- mourning dove *(Zenaida macroura)*

Conclusion

Based on the lack of direct observation of BUOW or evidence of BUOW activity (e.g. evidence of active burrows with whitewash, pellets, feather, etc.) during the survey, the Study Area is not currently considered occupied by BUOW.

Certification

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed:  Dated: 11/02/2021

If you have any questions, please feel free to contact me at bbernard@carlsonsls.com or at 916-218-2644.

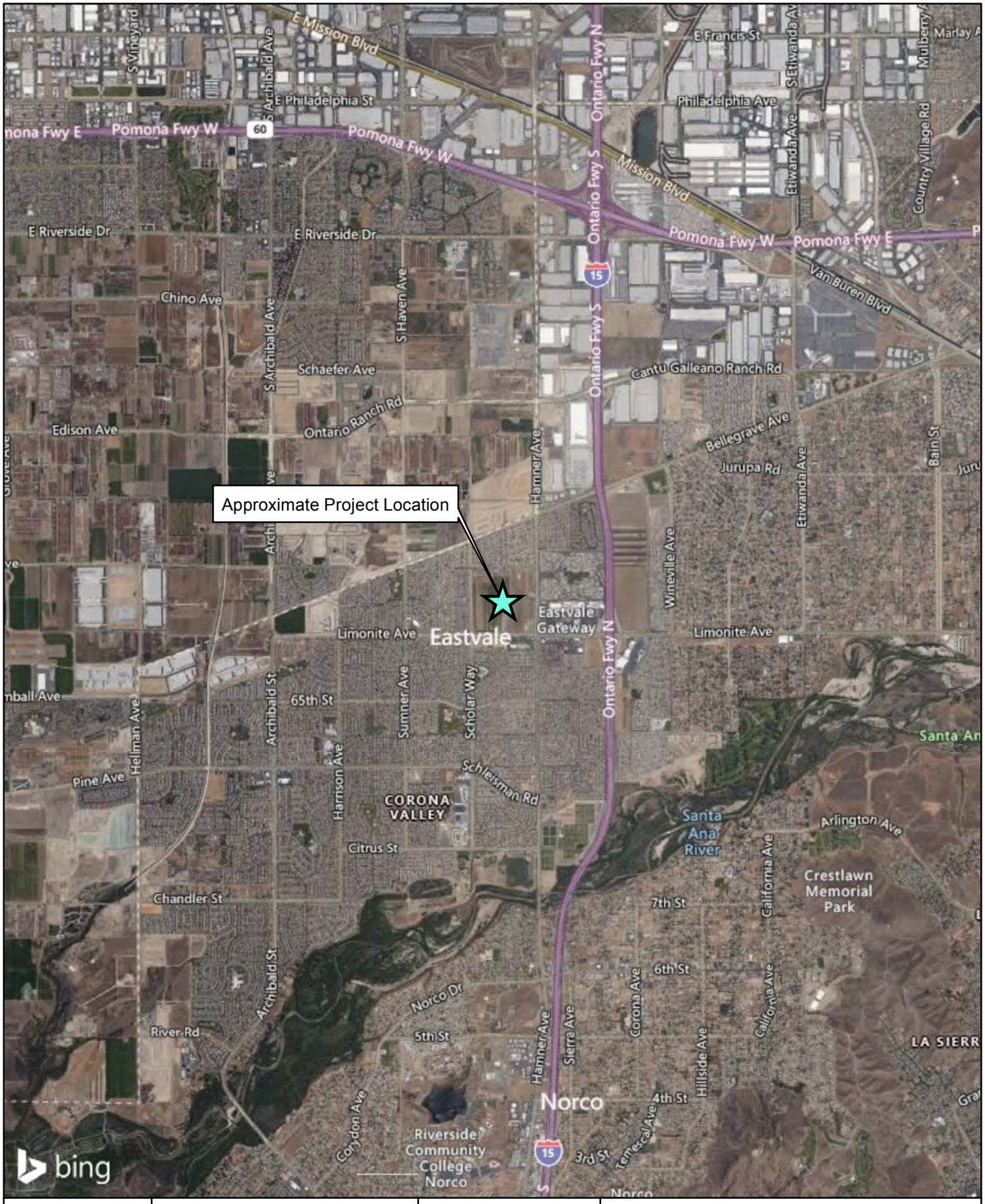
Figures

- Figure 1: Site Location Map
- Figure 2: Study Area Map

Attachments

- Attachment A: Site Photographs

Figures



GIS Prepared By:
Carlson SLS

Created: June 8, 2021

0 1,250 2,500 5,000 7,500 Feet

1 inch = 5,000 feet

Data Source: Bing Maps

The New Home Company: Leal Project

Regional Location Map

FIGURE 1



GIS Prepared By:
Carlson SLS

Created: June 8, 2021

0 50 100 200 300 400 500 600 Feet
1 inch = 500 feet

Data Source: Bing Map

The New Home Company: Leal Project

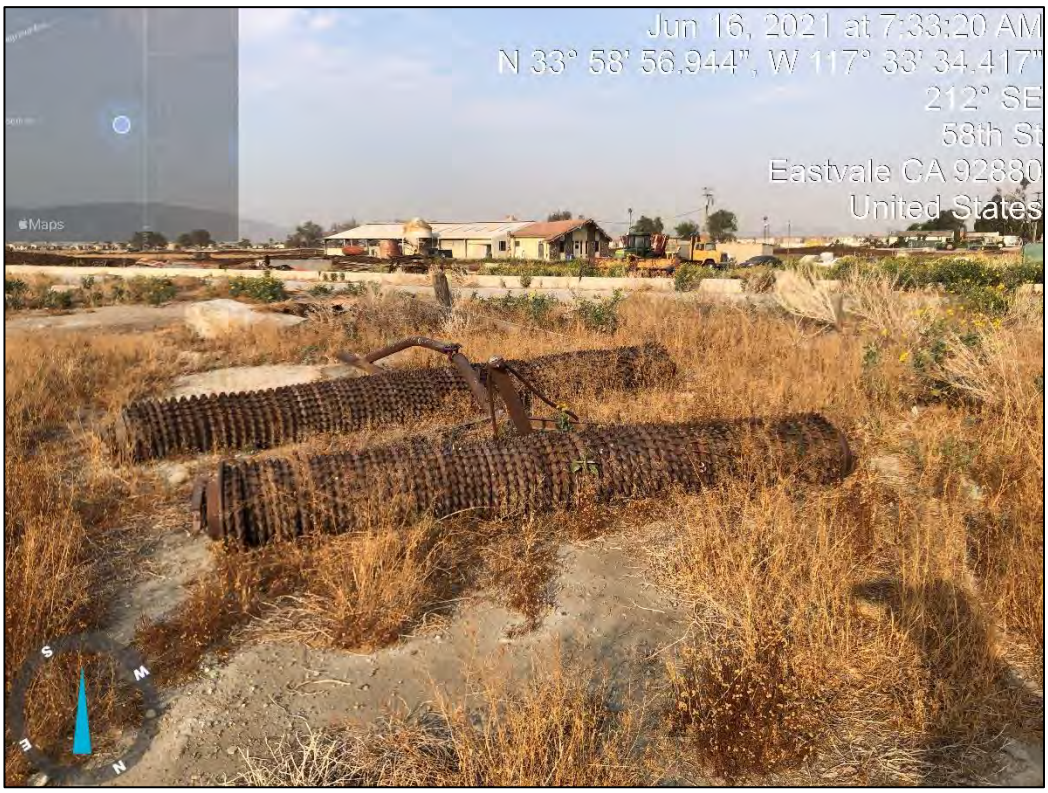
Project Site Map

FIGURE 2

Attachment A:
Site Photographs



Looking over the Project site in the north-east corner.



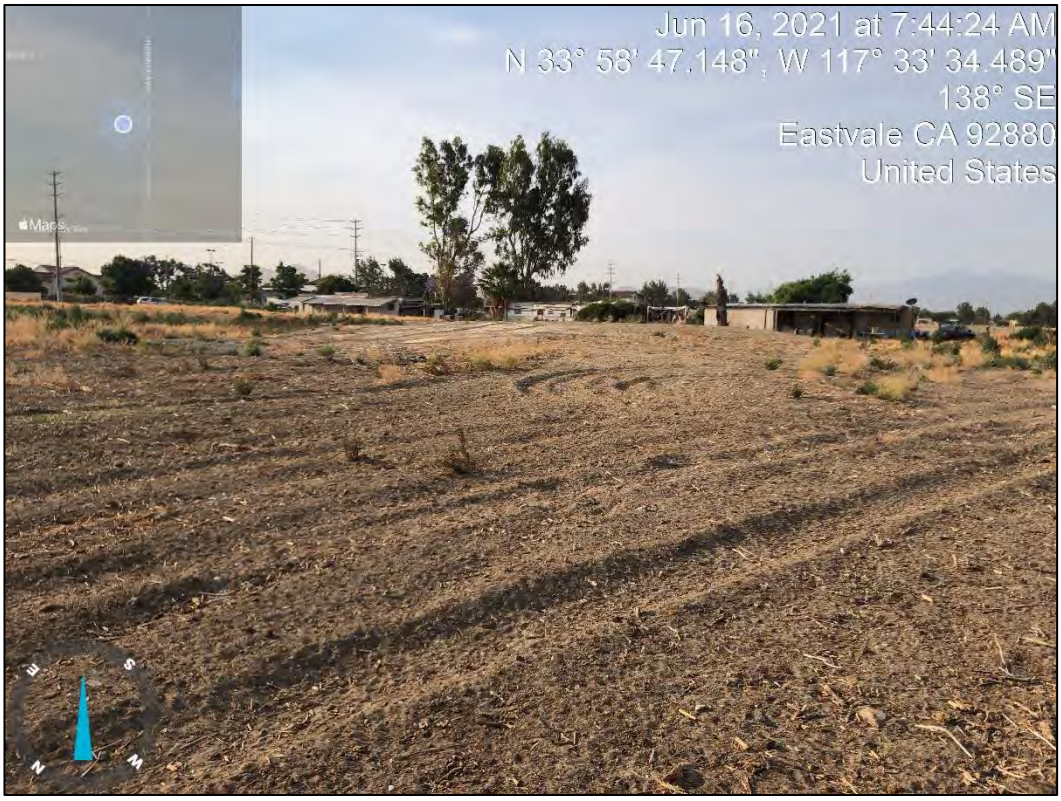
Historical agriculture and dairy equipment is scattered throughout the site.



Typical burrow observed.



A majority of the site is disturbed.



Old homes and trailers are scattered throughout the site.



A majority of the site include ruderal habitat.



Ruderal Habitat found onsite.



The site also includes disturbed habitat.

Attachment C: Delhi Sands Flower-Loving Fly Assessment

Ken H. Osborne
Osborne Biological Consulting
6675 Avenue Juan Diaz
Riverside, CA 92509

June 18, 2021

Attn: Ms. Brianna Bernard
Project Manager/Biologist
Carlson Strategic Land Solutions
27134 A, Paseo Espada, Suite 323
San Juan Capistrano, CA 92675

RE: Habitat conditions for Delhi Sands Flower-loving Fly on a portion of a proposed Leal development site located at the northwestern intersection of Limonite Avenue and Hamner Avenue, Eastvale.

To Whom It May Concern:

At the request of Carlson Strategic Land Solutions and on behalf of The New Home Company, I have conducted an evaluation of habitat suitability for the federally endangered Delhi Sands Flower-loving Fly (DSF, *Rhaphiomidas terminatus abdominalis*), for a 160-acre proposed Leal Project in Eastvale, California, with Assessor's Parcel Numbers 164-030-010, 164-030-012, 164-030-013, 164-030-014, 164-030-024, and 164-030-025. This area is indicated on the attached maps (Figures 1 and 2), and is located northwest of the intersection of Limonite Avenue and Hamner Avenue, Eastvale. For the purpose of this habitat assessment, I have evaluated site conditions for DSF suitability in terms of site characteristics on the basis of a detailed grading system I have developed in recent years.

Summary Conclusions: All lands on the subject site have a long history (since before 1985) in active dairy use. Site conditions feature continuously irrigated pastures, cattle pens, and developed buildings (including residences) with irrigated landscaping, and ponds. Lands so managed with dairy operations are not suitable for the DSF. Northern, western, and central portions of the site are mapped (and field investigation confirms) with Hilmar loamy sands – soils unsuitable for DSF. The site is further set within the larger context of adjacent and surrounding developed lands, further reinforcing the unsuitability of habitat conditions for DSF. The entire project area is determined to be Unsuitable for DSF.

Qualifications: Although I possess USFWS 10(a) permitting to survey for the federally endangered Delhi Sands Flower-loving Fly, such permitting is generally awarded to biologists only on the basis of a biologist's experience with and/or ability to identify adult DSF, such permitting not awarded on the basis of any real understanding of DSF biology, ecology, or habitat requirements. Traditionally, USFWS considered any land (within the known range of DSF) to have been mapped with Delhi Sands soils (Woodruff 1980) as subject to formal survey for the DSF. Thus, my additional qualifications in this regard include BS, MS, degrees in entomology, 45 years general entomological experience, thirty years experience with, research, and discoveries, in

Rhaphiomidas, life history, biology, and ecology, such that I am now a leading expert in this narrow field of study.

Methods: On June 18, 2021, I visited the study site in order to investigate habitat suitability for the DSF. I have reviewed soil maps covering the subject site, prepared by the California Department of Agriculture (Woodruff 1980, Knecht 1971). Aerial imagery covering the site, dating from 1985 to 2020 (Google Earth) was reviewed in order to gain an understanding of land use regimens in recent years. Photographs were taken of the site along with field notes on vegetation and soil conditions. I examined the subject site to rate its potential to support DSF, the rating based on the following scale of 1 to 5, with 5 being the best quality and most suitable habitat in my judgment:

1. Developed areas, non-Delhi sands soils with high clay, silt, and/or gravel content. Delhi sands extensively and deeply covered by dumping of exotic soils, rubble, trash, manure, or organic debris. *Unsuitable.*

2. Delhi sands are present but the soil characteristics include a predominance of exotic soils such as alluvial materials, or predominance of other foreign contamination as gravels, manure, or organic debris. Severe and frequent disturbance (such as a maintenance yard or high use roadbed). *Very Low Quality.*

3. Moderately contaminated Delhi sands. Delhi sands with moderate to high disturbance (such as annual disking). Sufficient Delhi Sands are present to prevent soil compaction (related to contamination by foreign soils). Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality.*

4. Abundant clean Delhi Sands with little or no foreign soils (such as alluvial material) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. May represent high quality habitat with mild or superficial disturbance. *Moderate Quality*

5. Sand dune habitat with clean Delhi Sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. Sand associated plant and arthropod species may be abundant and vegetation species composition is often indicative of low disturbance. *High Quality*

It should be noted that habitat qualities often vary spatially within a site so that conditions on a site fall within a range of qualities. Further, overall habitat quality is affected by the overall habitat area on a site, such that very small areas diminish the overall habitat value of a site. Habitat conditions rated from *Very Low Quality* up to *High Quality*, are formally considered as representing *Suitable* conditions for the DSF. Use of this habitat rating system is somewhat subjective and best undertaken by a biologist who has extensive experience with *Rhaphiomidas* species. It must be noted that these ratings do not infer or imply actual occupancy by DSF, only relative potential to harbor the species, and relative conservation value of the land should DSF be found.

Results: Department of Agriculture, Soil Conservation Service map (Woodruff 1980) and associated web based resources (https://casoilresource.lawr.ucdavis.edu/gmap/) show the site to have Delhi fine sand soils on a southeastern portion of the site, amounting to approximately 13 acres (Figure 3). The remaining portions of the site are on Hilmar loamy sands (Knecht 1971). Soil conditions on the extreme southeastern corner of the site, over an area of approximately five acres, where mapped with Delhi fine sands, is overlain with a meter depth of exotic soils dominated by alluvial gravely materials. Remaining peripheral areas mapped with Delhi fine soils are intermixed with fine loam soils (Hilmar classification)) – the mixing and contamination likely the result of decades of dairy operations where pasture lands have been disked. Aerial imagery available on Google Earth, shows that the dairy operations have been maintained since at least 1985 up to 2020 for the entire site. The site has been largely surrounded by residential and commercial development since 2004 (Google Earth), isolating the site from areas with Delhi Sands Flower-loving fly populations. The last known extant DSF population site in the Ontario area is located some six kilometers north northeast of the site. Plant species normally associated with Delhi sands ecosystems do not occur on the site. The entire site (160 acres) has been used in dairy operations and is so developed and/or covered in manure, ponds, irritated pasture, or with developed residences with irrigated landscaping, developed dairy buildings, storage facilities, gravel paved roads, drives, stalls or equipment lots, that the entire site has no potential for the DSF and is rated *Unsuitable* for the species. A list of plant species (not including exotic landscape plants) on the site and their context as to whether marginal, or dominant, is presented in Table 1.

Discussion: A long history of agricultural use has likely resulted in onsite cross contamination of Delhi sand soils with fine silty loamy soils on southeastern portions of the site, and the importation of approximately 24,000 cubic yards of exotic alluvial soils onto the southeastern portion of the site (seen to be underway in June 2004, Google Earth) with the result that all soils on the site that were mapped as Delhi sands (Knecht 1971) actually contain significant quantities contaminating soils rendering them *Unsuitable* for DSF beyond the long history of diary operation.

In general, the northern, western, and central portions of the project site may be ruled as *Unsuitable* for DSF on the basis of soil conditions (Figure 3) alone. A long and ongoing history (since before 1985) of agricultural dairy use further foreclosed on DSF suitability for the entire site. The southeastern portions of the site, where they occur over mapped Delhi sands also must be rated as *Unsuitable* for DSF due to intense degradation of habitat conditions and natural ecological function owing to contaminated soils. Similar findings have previously been made on similar agricultural and dairy lands of southern Ontario on consultation with USFWS (Osborne 2004) and areas with active irrigated agriculture (Osborne 2019).

Conclusions and Recommendations: On the basis of my experience, conditions on the subject site are *Unsuitable* for DSF. Interim General Survey Guidelines for the DSF, suggested by the USFWS (1996) typically recommend protocol surveys for DSF where undeveloped Delhi sands occur, and agency biologists sometimes assert that such undeveloped areas have potential for DSF. I would strongly disagree with such and assertion, and view it as an absurdity.

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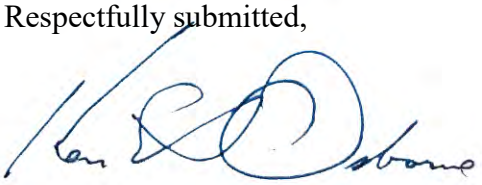
Respectfully submitted,



Ken H. Osborne

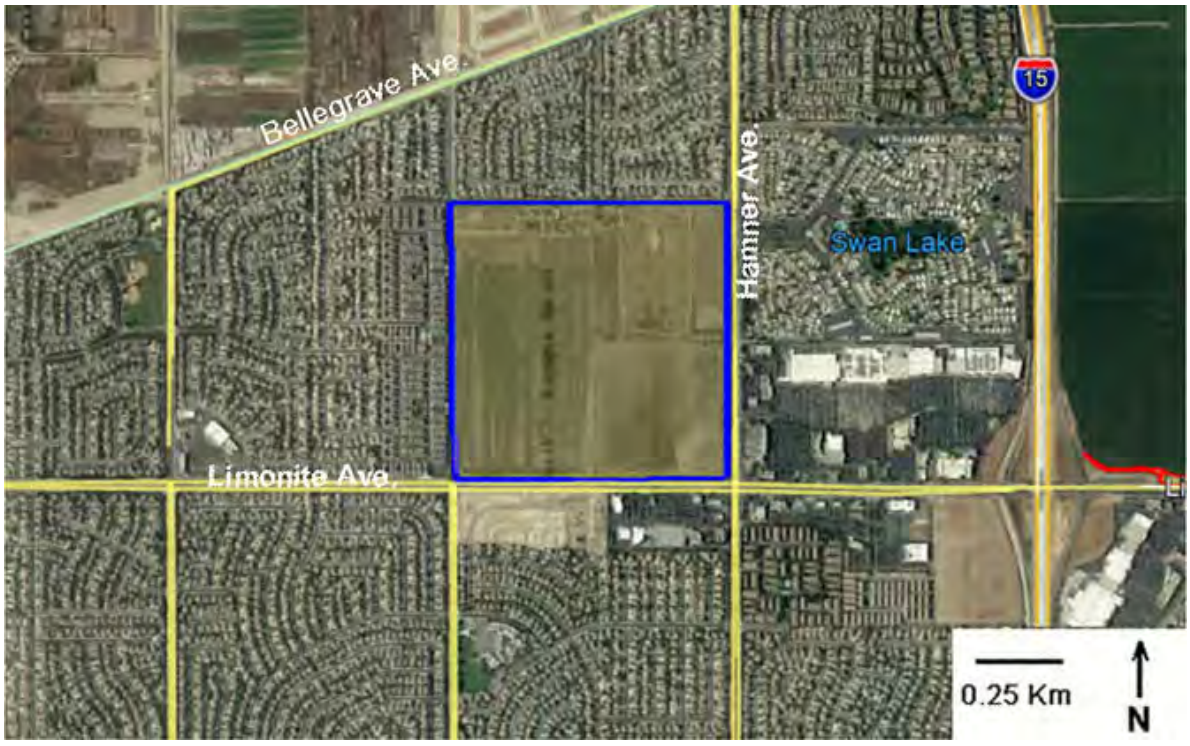


Figure 1. Aerial image with vicinity and habitat conditions surrounding the subject site (outlined in blue).

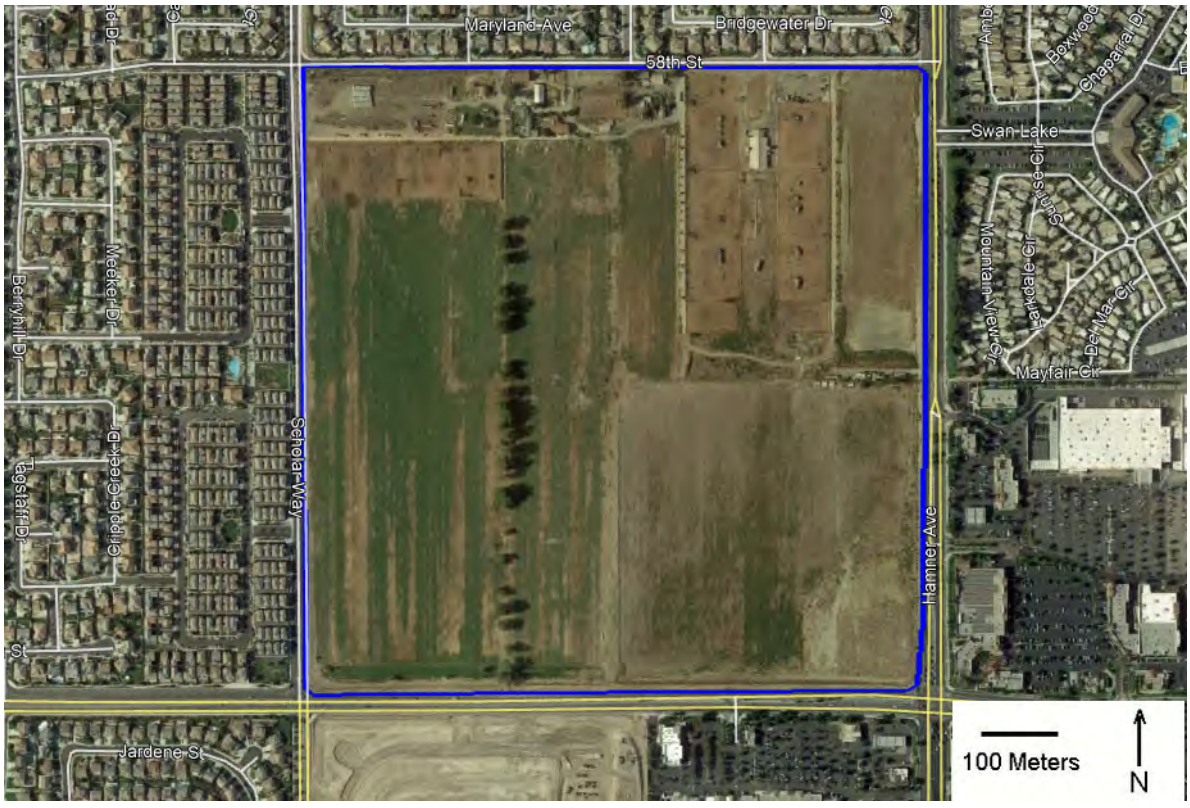


Figure 2. Aerial image showing the subject site (outlined in blue).



Figure 3. Soil types and habitat conditions on the subject site (outlined in blue): Yellow lines separate soils: Db = Delhi sands; HlA = Hilmar loamy very fine sands; HhA2 = Hilmar loamy sands.



Figure 4. Photograph of recent dairy cattle pen areas on a northern portion of the site with heavy manure contamination. Soils with high organic contamination are *Unsuitable* for DSF. View looking to the south from a central northern edge of the site.



Figure 5. Photograph of the southeastern portion of the site with exotic fill soils over what once were Delhi sand soils. These conditions represent habitat *Unsuitable* for DSF.



Figure 6. Photograph of soil surface (showing alluvial gravels) on the southeastern portion of the site. Alluvial fill soils present conditions *Unsuitable* for DSF.

Table 1. Plant species encountered on the subject site.

FAMILY	Species	Comment
ARECACEAE		
fan palm	*Washingtonia*	filed margins
ASTERACEAE		
mule fat	*Baccharis salicifolia*	filed margins
thistle	*Ciricium*	occasional
prickly lettus	*Lactuca serriola*	occasional
golden crownbeard	*Verbesina encelioides*	common
BRASSICACEAE		
shortpod mustard	*Hirschfeldia incana*	common
London rocket	*Sisymbrium irio*	dominant throughout
CHENOPODIACEAE		
Australian saltbush	*Atriplex semibaccata*	common
lamb's quarters	*Chenopodium album*	common
Kochia	*Kochia scoparia*	common
Russion thistle	*Salsola tragus*	common
GERANIACEAE		
red-stem filaree	*Erodium cicutarium*	dominant in areas
LAMINACEAE		
Horehound	*Marubium vulgare*	occasional
MALVACEAE		
cheeseweed	*Malva parviflora*	dominant throughout
OLEACEAE		
Ash	*Fraxinus*	filed margins
POACEAE		
Mediterranean barley	*Hordeum murinum*	dominant throughout
Shismus	*Schismus barbatus*	occasional
SOLANACEAE		
Tree tobacco	*Nicotiana glouca*	occasional

Appendix D

Cultural and Paleontological Resources Assessment

Leal Master Plan, City of Eastvale, Riverside County, California

Prepared for:

Carlson Strategic Land Solution
27134A Paseo Espada, Suite 323
San Juan Capistrano, CA 92675

The New Home Company
15231 Laguna Canyon Rd, Suite 250
Irvine, CA 92618

Prepared by:
Morgan Bender, M.A., RPA,
and Curt Duke, M.A., RPA
Duke Cultural Resources Management, LLC
18 Technology Drive, Suite 103
Irvine, CA 92618

April 2022

T2S, R7W Section 24, USGS *Corona North, Calif.*, 7.5-minute quad
Keywords: P-33-015333

MANAGEMENT SUMMARY

Duke Cultural Resources Management, LLC (DUKE CRM) is under contract to Carlson Strategic Land Solution and The New Home Company, to provide cultural and paleontological resources services for the Leal Master Plan Project, located in the City of Eastvale, Riverside County, California. The property is approximately 156 acres in size. The purpose of this study is to provide the necessary information and analysis to the City of Eastvale (CITY) as the lead agency to determine whether the proposed Project would cause impacts to historical, archaeological, or paleontological resources that may exist in or adjacent to the Project area. This work was conducted in compliance with the California Environmental Quality Act (CEQA).

The cultural and paleontological resources assessment included a records search for cultural resources at the Eastern Information Center (EIC), and a records search for paleontological resources at the Western Science Center (WSC) and locality searches on the University of California Museum of Paleontology (UCMP) and San Diego Natural History Museum (online collections, the online Paleobiology Database and FAUNMAP, and other published resources.

Cultural Resources

The results of the EIC records search indicate that there is one previously recorded cultural resource within ½ mile of the Project and one resource located within the Project. The resource within the Project is the Leal Property, resource (33-015333). The survey and evaluation of the properties found it to be ineligible for the National Register of Historic Place (NRHP), the California Register of Historical Resources (CRHR), or local designation (6Z). Additionally, the field survey did not identify any cultural resources within the Project boundary. The research conducted indicates a low sensitivity for prehistoric cultural resources and a low sensitivity for historic resources within the Project boundaries. Therefore, any disturbance of native soils has a low potential to directly impact unique cultural resources according to CEQA. According to CEQA, a "unique archaeological resource" is defined as an "archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: contains information needed to answer important scientific research questions, has a special and particular quality, or is directly associated with a scientifically recognized important prehistoric or historic event or person (Section 21083.2 (g)).DUKE CRM does not recommend any further cultural resources efforts. However, if any cultural resources are discovered during grading and/or ground disturbance during construction an archaeologist shall be retained to assess the nature and significance of the discovery and make recommendations.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Paleontological Resources

The records searches by the WSC and other resources indicate that there are no known fossil specimens within the Project boundaries but did indicate multiple fossil localities from similar deposits nearby (within 3 miles). The Project is situated on young alluvial-fan deposits (middle Holocene Epoch, *Qyf*), young eolian deposits (late Pleistocene to Holocene Epochs, *Qye*), and very old axial channel deposits (early to middle Pleistocene Epoch, *Qvoa*). Due to their age (early Pleistocene to late Pliocene Epochs) and history of producing fossil material nearby, the young eolian deposits (*Qye*) and very old axial channel deposits (*Qvoa*) underlying the Project area are assigned a high paleontological sensitivity.

Ground disturbance in the eastern half of the Project area will impact high-sensitivity deposits (*Qye* and *Qvoa*), and has the potential to directly impact unique paleontological resources. This would result in potentially significant impacts to paleontological resources according to CEQA. Therefore, paleontological construction monitoring is recommended during ground disturbance in this area. This, along with appropriate recording and recovery efforts, will mitigate the potential impact to a level that is less than significant for the purposes of CEQA.

Paleontological Monitoring - A paleontological monitor shall be present during ground disturbing activities in the eastern half of the Project. The monitor shall work under the direct supervision of a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated competence in paleontological research, fieldwork, reporting, and curation).

1. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
2. The paleontological monitor shall be present full-time during ground disturbance in the eastern half of the Project, including but not limited to grading, trenching, utilities, and off-site easements. If, after excavation begins, the qualified paleontologist determines that the sediments are not likely to produce fossil resources, monitoring efforts shall be reduced.
3. The monitor shall be empowered to temporarily halt or redirect grading efforts if paleontological resources are discovered.
4. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.
5. In consultation with the qualified paleontologist the monitor shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly mapped, documented, removed, and the area cleared.
6. If the discovery is significant the qualified paleontologist shall notify the CLIENT and CITY immediately.
7. In consultation with the CLIENT and CITY the qualified paleontologist shall develop a plan of mitigation which will likely include full-time monitoring, salvage excavation, scientific removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

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Appendix D Department of Parks and Recreation (DPR) 523 Record

TABLE OF ABBREVIATIONS

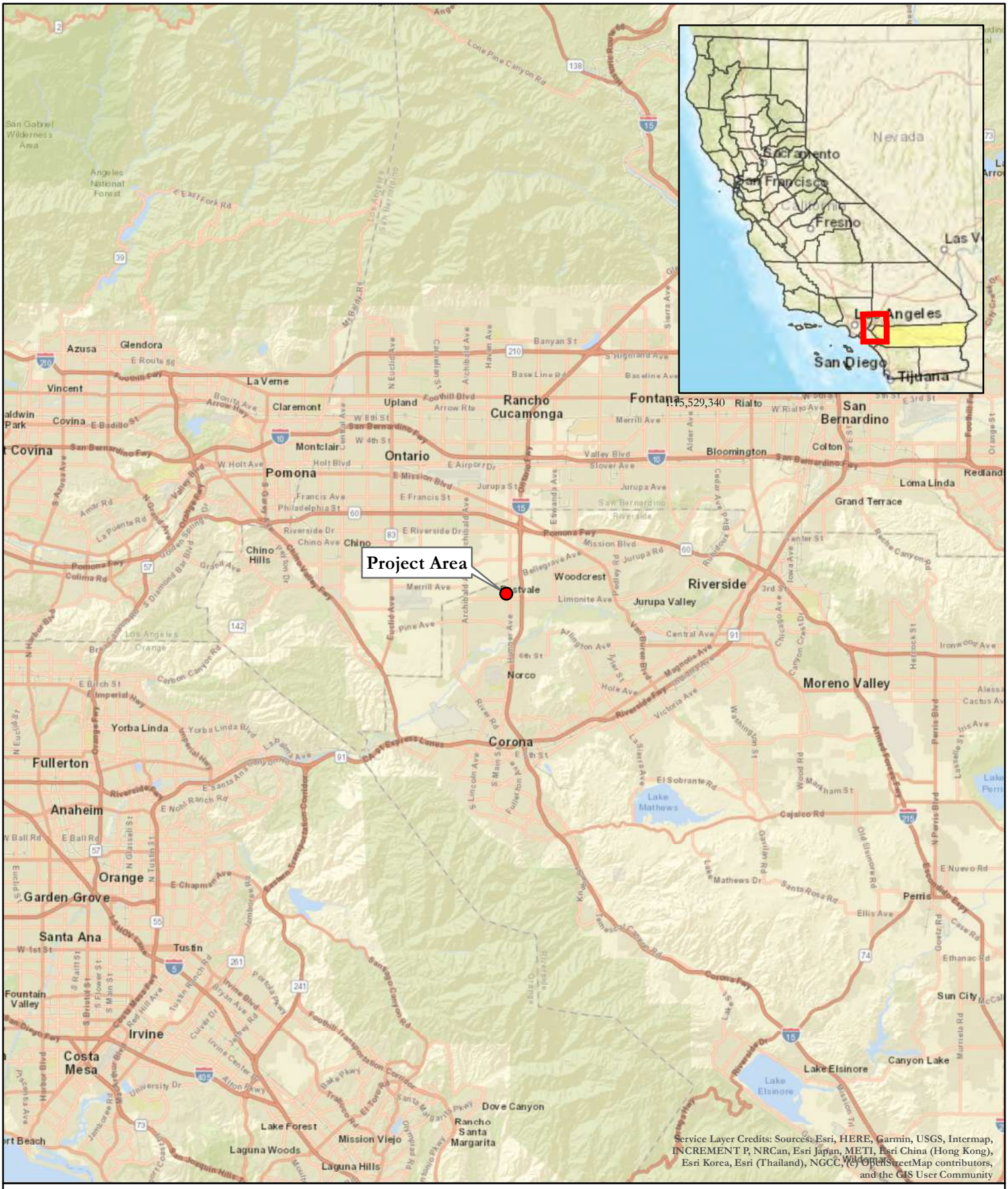
B.A.	Bachelor of Arts
B.S.	Bachelor of Science
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CITY	City of Eastvale
CLIENT	Carlson Strategic Land Solution
CRHR	California Register of Historical Resources-
DPR	State of California Department of Parks and Recreation 523 series forms
DUKE CRM	Duke Cultural Resources Management, LLC
EIC	Eastern Information Center
LACM	Natural History Museum of Los Angeles County
M.A.	Master of Arts
M.S.	Master of Science
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places-
PCT	Paleocoastal Tradition
Qvoa	early to middle Pleistocene Epoch very old axial channel deposits
Qye	late Pleistocene to Holocene Epochs young eolian deposits
Qyf	middle Holocene Epoch young alluvial-fan deposits
RPA	Registered Professional Archaeologist
UCMP	University of California Museum of Paleontology
WPLT	Western Pluvial Lakes Tradition
WSC	Western Science Center

INTRODUCTION

Duke Cultural Resources Management, LLC (DUKE CRM) is under contract to Carlson Strategic Land Solution (CLIENT) to provide cultural and paleontological resources services for the Leal Master Plan, Eastvale Project, located in the City of Eastvale, Riverside County, California. The property is approximately 156-acres in size. The purpose of this study is to provide the necessary information and analysis to the City of Eastvale (CITY) as the lead agency to determine whether the proposed Project would cause substantial significant impacts to historical, archaeological, or paleontological resources that may result from the Project in or adjacent to the Project area to comply with the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The Project is situated on the Leal dairy farm property located on Limonite Avenue, with 58th street to the north, Hamner Avenue to the east and Scholar Way to the west (see Figure 1, Project Vicinity Map). The Project is located in the Section 24, Township 2 South, Range 7 West, San Bernadino Base and Meridian, USGS *Corona North, Calif.* 7.5-minute quadrangle (see Figure 2, USGS Project Location Map). The Project is located within a dairy farm that is no longer in use (see Figure 3, Project Aerial Photograph). The Project will have 660 multi-family homes and 1840 single-family/single-family attached homes. Maximum depth will be 15 feet (ft.), with the majority of the project being excavated down to 3 ft.



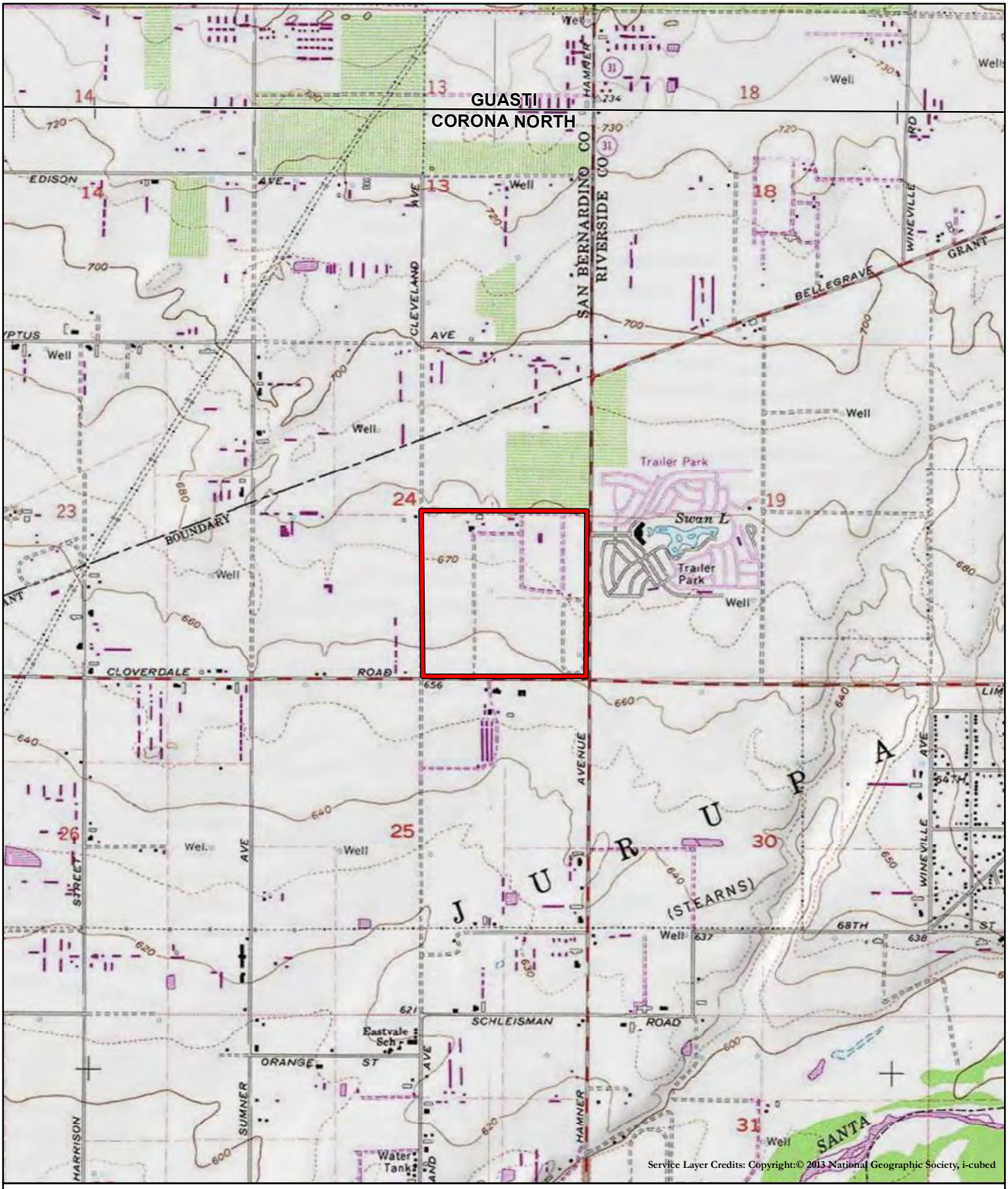
Map 1 - Project Vicinity
Leal Master Plan, Eastvale, C-0362

DUKE CRM

Project Area

0 6 12 Miles N

1 inch = 6 miles 1:360,000



Map 2 - Project Location
Leal Master Plan, Eastvale, C-0362

DUKE CRM

Corona North, Calif USGS 7.5-Minute Quadrangle
T2S R7W Section 24
Project Area
USGS 7.5' Quads

0 0.25 0.5 Miles
0 0.25 0.5 Kilometers
1 inch = 2,000 feet 1:24,000
N



Map 3 - Project Aerial

Leal Master Plan, Eastvale, C-0360

DUKE CRM

Project Area

0 200 400 Feet

1 inch =400 feet

N

1:4,800

SETTING

Geology

California is divided into 11 geomorphic provinces, each naturally defined by unique geologic and geomorphic characteristics. The Project is located in the northwestern portion of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is distinguished by northwest trending mountain ranges and valleys following faults branching from the San Andreas Fault. The Peninsular Ranges are bound to the east by the Colorado Desert and extend north to the San Bernardino – Riverside County line (Norris and Webb 1976), west into the submarine continental shelf, and south to the tip of Baja California.

Project elevation is approximately 730 feet above mean sea level. The geology of the Project area has been mapped by Morton and Miller (2006) at a scale of 1:250,000 (Figure 4). A review of this map indicated that the Project area is predominantly underlain in the western half by young alluvial-fan deposits (*Qyf*), and in the eastern half by young eolian deposits (*Qye*) and very old axial channel deposits (*Qvoa*).

Vegetation within the Project is dominated by grasses and other shrubs present in high density on the south side. The northern half of the site has little vegetation due to the soil being recently turned and several residential and dairy properties along the northern edge.

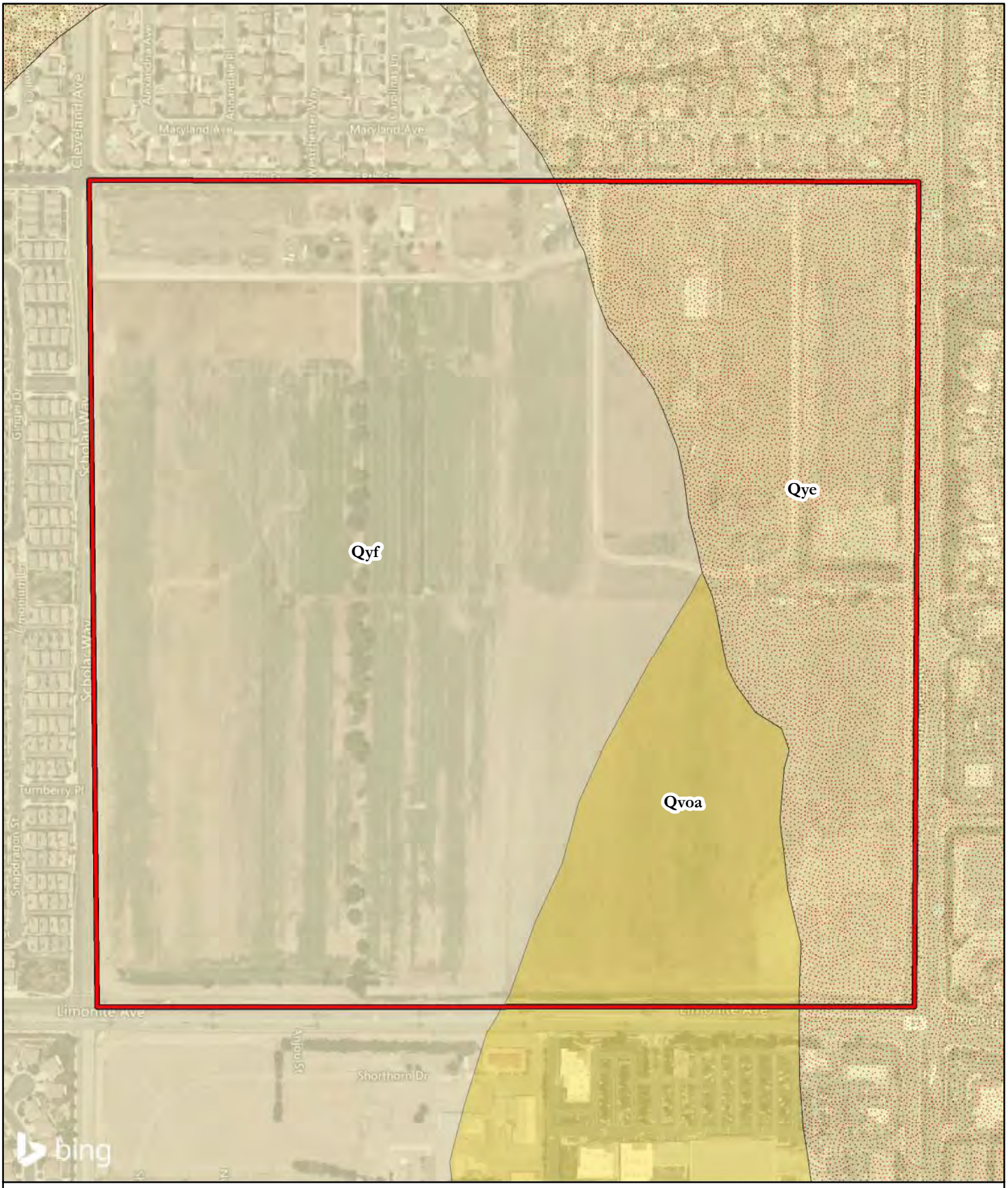
Cultural

Prehistory

Two primary regional schema are commonly cited in the archaeological literature for western Riverside County where the Project is located. These schema or syntheses generalize the presence or absence of certain artifact types into explanatory frameworks of temporal chronologies and/or subsistence practices. Schemas are necessary because many archaeological sites lack absolute datable material (ex. carbon for radiometric C_{14} dating) and so researchers need to cross-date sites by comparison to either coastal or desert chronologies with established chronological sequences backed by absolute dates. In western Riverside County, where the Project is located, it is thought to be the meeting ground of both schemas and consequently neither schema (coastal vs inland desert) exclusively explain prehistoric finds.

The first schema, advanced by Wallace (1955), defines four cultural horizons for the southern California coastal province, each with characteristic local variations:

I. Early Man (~9000–8500 B.P.) is a hunting culture based on almost exclusive evidence of chipped-stone hunting materials: dart points, scrapers, choppers, and bifaces.
II. Milling Stone (8500–4000 B.P.) reflects a change to a more sedentary, plant-collecting lifestyle as evidenced by the introduction and dominance of milling stone artifacts and a decrease in well-made projectile points.
III. Intermediate (4000–1500 B.P.) is characterized by a larger dependency on hunting, introduction of the bow and arrow, and the shift from using the mano/metate to mortar/pestle. However, knowledge of this horizon suffers from lack of knowledge about what occurred during this time, not a lack of inhabitants along the southern California coast.
IV. Late Prehistoric (1500~200 B.P.) contains a more nuanced artifact assemblage indicative of a more complex lifestyle and an increase of population. This horizon is characterized by an increase in bow and arrow use, steatite containers, pottery, circular fishhooks, perforated stones, asphaltum, diversified bone tools, ample shell ornaments, and elaborate mortuary customs.



Map 4 - Project Geology
Leal Master Plan, Eastvale, C-0360

DUKE CRM

Project Area
Qyf: young alluvial-fan deposits, middle Holocene
Qye: young eolian deposits, Holocene and late Pleistocene
Qvoa: very old axial-channel deposits, middle to early Pleistocene

0 200 400 Feet
N
1 inch =400 feet
1:4,800

Warren and Crabtree (1986) employ a more ecological approach to the deserts of southern California, defining five traditions in prehistory:

I. Lake Mojave (12000–7000 B.P.)
II. Pinto (7000–4000 B.P.)
III. Gypsum (4000–1500 B.P.)
IV. Saratoga Springs (1500–800 B.P.)
V. Shoshonean (800~200 B.P.)

Warren and Crabtree (1986) viewed cultural continuity and change in terms of various significant environmental shifts, defining the cultural ecological approach for archaeological research of the California deserts. The authors viewed changes in settlement pattern and subsistence as cultural adaptations to a changing environment, beginning with the gradual environmental warming in the late Pleistocene, the desiccation of the desert lakes during the early Holocene, the short return to pluvial conditions during the middle Holocene, and the general warming and drying trend, with periodic reversals, that continues to this day. The work by Warren and Crabtree (1986) is built upon, in part, Warren (1980) in which he argued for a chronology based on projectile points as period markers backed by radiocarbon assays providing absolute dates.

The two-schema contrast in important ways. The units employed by Warren are "traditions," and in contrast to Wallace (1955), traditions may be spatially restricted but display temporal continuity. For Wallace, "horizons" or "periods," are extensive through space but restricted in time. More recent schema has been attempted to reconcile these differences. More recently, Koerper and Drover (1983) synthesized chronologies for coastal southern California and employed Wallace's (1955) horizon terminology but use radiometric data to sequence stylistic changes observed in the artifact assemblages, which they interpreted as material indication of cultural change through time. Regardless of the overall schema to best explain the prehistory of western Riverside County, the region can be understood within broad chronological frameworks and as the meeting ground of the coastal and desert subsistence patterns.

Early Holocene (11,600 – 7,600 BP)

Traditional models of the prehistory of California hypothesize that its first inhabitants were the big game hunting Paleoindians who lived at the close of the last ice-age (~11,000 years before present [BP]). As the environment warmed and dried, large Ice Age fauna died out, requiring adaption by groups to survive. The western Great Basin and deserts of southern California were characterized by large pluvial (rainfall-fed) lakes, streams, marshes, and grasslands. The human response to this environment is known as the Western Pluvial Lakes Tradition (WPLT) (Moratto 1984). The WPLT is generally identified by an advanced flaked-stone industry of foliate knives/points, Silver Lake and Lake Mojave points, lanceolate bifaces, and long-stemmed points (Warren & Crabtree 1986). Other flaked-stone tools include crescents, scrapers, choppers, scraper-planes, hammer stones, cores, drills, and gravers. People of this period hunted diverse populations of smaller animals and collected a wide number of plants from diverse eco-zones. Importantly, this period lacks widespread evidence of milling stones, and, therefore, hard seed processing was likely not widely practiced. Sites are generally found along the shores of former pluvial lakes, marshes, and streams (Moratto 1984). The desert manifestation of the WPLT is the Lake Mojave Complex, while along the coast the WPLT is seen in the San Dieguito Complex. Along the coast, rising sea levels created bays and estuaries. Following initial settlement along the coast, groups adopted marine subsistence including fish and shellfish. These shell middens contain flaked cobble tools, metates, manos, discoidals, and flexed burials and allowed for a semi sedentary lifestyle (Byrd and Raab 2007). Eventually, shellfish became the primary source of food, while plant gathering, hunting and fishing were less important.

Middle Holocene (7,600 – 3,650 BP)

The middle Holocene is a time of change and transition. As conditions continued to warm and dry, lakes and streams in the desert disappeared. This resulted in a shift in subsistence strategies, namely a shift to the gathering of plant seeds, grasses and shellfish along the coast as the primary dietary staple. Fishing and the

hunting of smaller animals played a less important role in day-to-day activity. This shift in subsistence is what Wallace named the Millingstone Horizon (Wallace 1955) and this name has continued among archaeologists working on the coastal province of southern California. Large habitations are seen in the inland areas and considerable variability is seen along coastal occupation of southern California. Occupation revolved around seasonal and semi-sedentary movements in coastal Orange and San Diego counties. Trade networks are postulated by researchers that have dated *Olivella* grooved rectangle shell beads as far north as central Oregon dating to 4900-3500 BP (Byrd and Raab 2007). Characteristics of the middle Holocene sites include ground stone artifacts (manos and metates) used for processing plant material and shellfish, flexed burial beneath rock or milling stone cairns, flaked core or cobble tools, dart points, cogstones, discoidals, and crescentics.

Late Holocene (3,650 – 233 BP)

During the late Holocene there was a migration of Takic speakers from the Great Basin into southern California. This intrusion is known as the "Takic Wedge." Characteristics of the late Holocene include the introduction of the bow and arrow, mortar and pestle, use of ceramics, and a change in mortuary behavior from inhumations to cremations in much of southern California. This was also a period of climatic fluctuation. Paleoenvironmental data show that periods of drought alternated with cooler and moister periods (Vellanoweth and Grenda 2002; Byrd and Raab 2007; Jones et al. 2004). This resulted in dynamic regional cultural patterns with considerable local variation. Byrd and Raab (2007) suggest that foragers in southern California over-exploited high-ranked food, such as shellfish, fish, marine and land mammals, and plant remains. This led to resource depression, causing people to forage more costly resources that were more abundant, such as acorns.

Ethnography

The Project is located along the periphery of the traditional territory of four Native American groups, the Gabrielino, the Luiseno, the Cahuilla, and the Serrano (Kroeber 1925). The Native American languages of these Tribes are part of the Takic subfamily of the larger Uto-Aztecan language family. Similarly, these groups were organized into independent but interconnected village communities. These groups were hunters and gatherers who exploited both large and small game, as well as numerous plant resources.

Gabrielino

The Gabrielino are one of the least ethnographically understood Native American groups in California. Generally, their territory included all of the Los Angeles Basin, parts of the Santa Ana and Santa Monica Mountains along the coast from Aliso Creek in the south to Topanga Canyon in the north, and San Clemente, San Nicolas, and Santa Catalina Islands. The environmental conditions within this territory are very diverse, including the following zones: interior mountains/foothills, Prairie, exposed coast, and sheltered coast (Bean and Smith 1978a, Shipley 1978).

The Gabrielino lived in villages year-round and utilized smaller camps from which they could hunt and gather, likely on a seasonal basis. Villages were almost always situated near water. Gabrielino families lived in domed, round structures with thatching made from local plants. Other structures included semi-circular, earth covered sweathouses, menstrual huts, and ceremonial structures. Villages were politically autonomous from other villages, while each village was led by a chief who would, at times, reign over several villages (Bean and Smith 1978a). Acorns were the most important food for the Gabrielino; although the types and quantity of different foods varied by season and locale, common and important sources of food were acorn, piñon nuts, yucca, cacti, many varieties of seeds and grasses, deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, quail, doves, ducks and other fowl, fish, shellfish, and marine mammals (Bean and Smith 1978a, Shipley 1978).

Luiseño

The Luiseño share many similar cultural traits to the Gabrielino. The Luiseño lived in sedentary and independent village groups, each with specific subsistence territories encompassing hunting, food gathering, and fishing areas. Villages were usually located in valley basins, along creeks and streams adjacent to mountain ranges where water was available and where the villages would be protected from environmental conditions

and potential enemies. Most inland populations had access to fishing and food gathering sites on the coast (Bean and Shipek 1978).

Luiseño economic and subsistence practices centered upon the seasonal gathering of acorns and seeds; the hunting of deer and small mammals such as rabbits, wood rats, ground squirrels, and birds. Coastal foods included sea mammals, fish and shellfish. Tool technologies were organized around food collection, storage, and preparation strategies, which was reflected in the type, size, and quantity of food items gathered. Stone (lithic) tools included two types: ground stone and flaked stone tools. Ground stone equipment included: mortars, pestles, manos and metate grinding slicks, made from granite, schist, and gneiss. Flaked tools included: bifaces, projectile points, scrapers, and gravers, fabricated from siliceous rock such as chert and jasper, microcrystalline chalcedony, obsidian, fine grain ingenious rocks such as basalt rhyolite, and andesite, and hard silica such as quarts and quartzite. Utilitarian tools were constructed from wood, animal bones, skins, and/or woven from flora materials depending on need (Lovin 1963). Hunting activities were conducted both on an individual basis and/or organized into group activities, depending on seasonal factors and the game hunted. Acorns encompassed as much 50 percent of the Luiseño diet (White 1963). Acorns provided a reliable and abundant food source that was high in calories and could be easily stored for future use. Acorn collection was a central tenant in the lives of the Luiseños and dominated their economic and social structure (Basgall 1987, Johnson and Earle 1987).

Villages were organized around an inherited chief who exerted sole control over the economy, religious rituals, and territorial matters within the village (Bean and Shipek 1978:555). The chief at times would consult with a council of elders and shamans on matters of religious practices and on environmental conditions effecting village life. Large villages may have had a complex behavioral and political structure due to their territorial size and economic control, while the smaller villages' political complexity was limited by their territorial size (Strong 1929; Bean and Shipek 1978:555).

Cahuilla

The Project is located near the western boundaries of Cahuilla Indians. The center of their territory included the Coachella Valley, the San Jacinto and Santa Rosa Mountain ranges. Ethnographers have divided this population by habitation locale (Mountain, Pass, and Desert) whereas the Cahuilla divided themselves by patrilineal descent clans and one of two moieties (Wildcat and Coyote). Further distinctions were made within clans of politically important and independent subsidiary lineages. These lineages occupied their own villages as documented by Cahuilla ethnographic consultants in the early 20th century and from Franciscan Mission records (Earle 2004).

The three ethnographically documented zones of Cahuilla habitation (Pass, Mountain, and Desert) serve as general guidelines for understanding their subsistence practices. In general, Mountain and Pass Cahuilla diet emphasized acorn, salvia islay, yucca, agave and pinyon gathering in the mountain and foothill regions. In contrast Desert Cahuilla focused on the gathering of mesquite, cactus, and hard seeds such as screwbean, juniper and mesquite (Bean and Saubel 1972). These generalizations can only be broadly applied as the Cahuilla inhabiting different zones however were not mutually exclusive to each other. Desert Cahuilla in the Coachella Valley retained gathering areas in the Santa Rosa Mountains or other upland regions. Desert Cahuilla also utilized the resources in the foothills. The eastern foothills of the Coachella Valley produced agave and hard seeds. Also, the foothills on the western side of the Coachella Valley produced cactus, agave and hard seeds and higher upslope, pinyon, for the Desert Cahuilla.

The Cahuilla were also observed to cultivate small quantities of corn, beans, squashes, pumpkins, melons and wheat as early as 1824 by the Romero expedition. These crops and the cultivation of them potentially made their way from the Colorado River area to the Coachella Valley. The inhabitants of the Coachella did not practice flood recessional agriculture of the Colorado River groups (Bean and Lawton 1973). Based upon ethnographic interviews, Strong (1929:38) noted that he had been told by *Francisco Nombre* that his grandfather told him that the cultivation of corn and other crops by the Cahuilla was a recent practice and that the Cahuilla used to obtain corn from the "Yumas". Corn would likely have been available to the Cahuilla via

exchange systems between foraging groups who have access to resources outside of the Colorado River and horticulturalists along the river. Regardless of the timing of cultivation of these crops, by the 1850s oasis gardens and to a lesser extent, canyon gardens were important sources of foodstuffs (Bean et al. 1995).

Serrano

The Project is located within the southwester area of the Serrano Indians, though Bean and Smith (1978b:570) note difficulty of determining traditional Serrano use-areas due to the lack of data and the nature of Serrano sociopolitical structure in that, as Strong (1929) organized themselves into autonomous localized lineages that favored a home base from which generalized land usage was practiced, no a pan-tribal land holding. Serrano territory extends across the San Bernardino Mountains east of the Cajon Pass south to and in the Yucaipa Valley and north to at least to the area of Victorville and as far east as Twentynine Palms.

Water availability was a large determining factor of Serrano habitation though they lived in diverse ecozones such as the high desert basins of the Lower Sonoran, the Upper Sonoran, and the Transition zone as well as a range of elevations from as low as 1,500 feet to over 11,000 feet in the mountains. Like their neighboring groups, the Serranos were hunter-gathers but with their diverse topographical access to different ecozones, food varied by elevation. They hunted mountain sheep, deer, rabbits, antelope, and small rodents; and gathered acorns, piñon nuts, berries, mesquite, yucca, and various bulbs, seed-grasses, tubers, roots and shoots. Also, like other Native groups in Southern California, the Serrano situated their most dense populations around water sources. Their houses were round, with a domed of willow frames and thule thatching protecting the inhabitants during sleep. Additional structures consisted of a ramada where most of the day's activities occurred, and each family had a central fire pit. Each village had a large ceremonial structure ore the leader of the lineage of the village lived. Other structures included sweat lodges, and granaries. Serrano material culture closely resembled the Cahuilla (Bean and Smith 1978b).

History

In California, the historic era is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present). The first Europeans in the Jurupa Valley/Eastvale area came through the area in the 1770's. But no known settlements occurred in the area until in 1838 when *Rancho Jurupa* was granted to Juan Bandini. Within a few years Bandini divided *Rancho Jurupa* into two properties. He sold Able Stearns, his son-in-law, approximately 25,000 acres which continued to operate as *Rancho Jurupa*. About 1889 a six square mile portion of the Rancho was purchased by the Fuller family who established the Pioneer Ranch. The following history is largely adapted from Meissner's (2014) book, "Fuller Ranch at Eastvale" which is a comprehensive history of the area. The Fuller family owned the bulk of the ranch until 1954 and during the early 20th century the ranch had a reputation as one of the best cattle and racehorse ranches in California. Also, according to Meissner, the name of the ranch was changed to the Fuller Rancho and became a guest ranch in the 1930's, hosting some of the biggest names in entertainment at the time. The main Hacienda of the ranch was approximately a half mile northeast of the Project property. In 1954 the ranch was sold to dairyman Walter Koenig who, according to Meissner, almost immediately sold off parcels of the ranch to individual buyers. Historic aerial photographs show that the Project property was being used for agriculture in 1938 and that purpose continued until the first home appeared on the property sometime after 1994 (HistoricAerials.com 2021).

Research Objectives

The manner by which archaeological material is recovered and analyzed at each site is based on the formulation of research questions and associated research domains. The domains focus data recovery efforts on regionally important archaeological research issues and have been developed to identify basic knowledge common to archaeological research. These research objectives include:

1. Conduct a record search with the EIC and other archives.
2. Conduct an intensive pedestrian survey of the property.
3. Document and evaluate the three historic buildings on the property.
4. Summarize survey results in report.

METHODS

Research

On June 6, 2021, Morgan Bender, M.A., RPA, DUKE CRM conducted a records search at the EIC. The EIC is the Riverside County regional office of the California Historical Resources Information System (CHRIS) and is located at the University of California, Riverside. This research was undertaken to establish the status and extent of previous surveys in the Project and to note what types of cultural resources have been identified or might be expected to occur within or adjacent to the Project. In addition, the records search identified cultural resources listed on or determined eligible for listing on the NRHP and/or CRHR located within or near the Project area. In addition, Ms. Bender contacted the NAHC for a search of the Sacred Land Files on June 8, 2021. The internal archives at DUKE CRM along with a review of historic aerial photographs and historical USGS topographical maps were also inspected for relevant background information.

DUKE CRM requested a paleontological records search from the Western Science Center (WSC), and received the response on June 15, 2021. On June 16, 2021 (Appendix A), DUKE CRM Paleontologist Benjamin Scherzer conducted locality searches on the University of California Museum of Paleontology (UCMP) and San Diego Natural History Museum (online collections, the online Paleobiology Database and FAUNMAP, and other published resources.

Field Survey

On June 17 and 18, 2021, a pedestrian survey of the property was conducted by Morgan Bender, M.A., RPA, Benjamin Scherzer, M.S, Edgar Alverez, B.S., and Zachary Duke. The goal of the pedestrian survey was to identify all historic built environment resources, prehistoric/ historic period archaeological resources, and paleontological resources within the Project boundaries. Transects were spaced no greater than 15 meters apart. A Garmin Etrex GPS, an IPhone X with Google Earth, and field map was used to locate the Project boundary and to record the location of identified cultural resources. Built-environment resources were documented on State of California Department of Parks and Recreation (DPR) 523 series forms. Photographs were taken on a Fuji FinePix XP70 16.0 MP digital camera, an IPhone X camera.

CRHR Criteria

The regulatory framework for this historic resource study and the evaluation lies within the guidelines imposed for the CEQA and the CRHR under Public Relations Code section 5024.1. CEQA guidelines define a significant cultural resource as "a resource listed in or eligible for the listing on the CRHR". A historical resource may be eligible for inclusion in the CRHR if it:

1. Is associated with events that made a significant contribution to the broad patters of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possess high artistic values; or
4. Has yielded, or may likely to yield, information important to prehistory or history.

The CRHR also requires that a resource possess integrity, which is defined as the ability of a property to convey its significance. The aspects of integrity are location, design, setting, materials, workmanship, feeling, and association. To determine which of these factors are most important will depend on the particular CRHR criterion under which the resource is considered eligible for listing.

Key Personnel

This report was prepared by Morgan Bender, M.A, RPA and Benjamin Scherzer, M.S., under the direct supervision of Curt Duke, MA, RPA. Ms. Bender holds a Bachelor of Arts degree in Anthropology/ Sociology and minored in Classical Studies from Agnes Scott College in Decatur, Georgia. She received her

MA in Anthropology California State University, Los Angeles. She meets the Secretary of Interior Standards for principal investigator, is RPA-certified and has over four years of experience in California archaeology. Ms. Bender acted as field technician and the laboratory director for the Project and assisted in artifact analysis.

Mr. Scherzer has worked in all phases of paleontology (archival research, field survey, excavation, laboratory analysis, construction monitoring) since 2006. Mr. Scherzer is a certified paleontologist for Riverside County. Mr. Scherzer holds a Master of Science degree in Earth Sciences with an emphasis in vertebrate paleontology from Montana State University, Bozeman, and a Bachelor of Arts degree in Geosciences and Math from Earlham College, Indiana. Mr. Scherzer has worked throughout southern California, Nevada, South Dakota, Utah, and Wyoming.

Edgar Alvarez (DUKE CRM) holds a Bachelor of Arts degree in Anthropology from California State University, Northridge and has five years of experience in California archaeology. Mr. Alvarez served as field technician and GPS/GIS specialist.

Mr. Duke is the Principal Archaeologist of DUKE CRM. Mr. Duke meets the professional qualifications of the Secretary of the Interior for prehistoric and historical archaeology; he is also a Registered Professional Archaeologist (RPA) who has worked in all phases of archaeology (archival research, field survey, testing and data recovery excavation, laboratory analysis, construction monitoring) since 1994. He is also listed on the County of Riverside's list of qualified archaeologists. Mr. Duke holds a Master of Arts degree in Anthropology with an emphasis in archaeology from California State University, Fullerton and a Bachelor of Arts degree in Anthropology from the University of California, Santa Cruz. Mr. Duke has worked throughout southern and Northern California and parts of Arizona and Nevada. Please see Appendix B for Mr. Duke's resume.

RESULTS

Records Search

Cultural Resources

The map data from the EIC records search indicates that there are two previously recorded cultural resources within ½ mile of the Project area. These resources are summarized below in Table 1. Additionally, On June 29, 2021, the NAHC responded with a negative result for tribal resources within the Project (See Appendix C). DUKE CRM did not conduct any tribal outreach.

Table 1. Previously Recorded Cultural Resources Within ½ Mile of the Project

Site No.	Age	Description	Distance
P-33-001848	Historic	Historic Debris	2,500 ft. east
P-33-015333	Historic	Leal Property	Project

Site P-33-015333 was recorded by Bai "Tom" Tang and Kelli Olgren-Leblond from December 2005 – August 2006 during an intensive survey. In addition to the pedestrian survey, the westernmost house was also evaluated. The survey found the westernmost building to be ineligible for NRHP, CRHR, or local designation (6Z).

Reports

Twenty-one (21) reports within ½ mile of the Project area are on file at the EIC. Of these, one is the Project area property. *Historical/Archaeological Resources Survey Report: The Leal Property Near the City of Norco, Riverside County, California* as a result of the intensive survey done by Tang et al. (2005). One of the historical buildings on the property was recorded, however no other cultural or historical resources were recorded within the Project.

Paleontological Resources

The paleontological records search by the WSC did not produce any documented fossil localities in the Project but did produce one fossil locality 2 miles north of the Project. In addition, the review of other online and published databases produced two additional fossil localities within 3 miles of the Project:

- Vanderham produced limb remains from *Camelops* (Western camel) at a depth of 11 ft approximately 2 miles north of the Project in young eolian deposits (*Qye*) (Appendix A);
- Corona East (UCRV 8601) produced remains of *Mammut* (mastodon), horse (*Equus*), western camel (*Camelops*), bison (*Bison*), rabbit/hare (lagomorphs), rodent (rodentia), lizard (sauria), and bony fish (Osteichthyes) approximately 3 miles southeast of the Project in deposits from the Pleistocene Epoch (UCMP, Jefferson 1991a, b);
- Corona (LACM 1207) produced remains of deer (*Odocoileus*) approximately 3 miles south of the Project in deposits from the Pleistocene Epoch (Jefferson 1991b)

The young alluvial-fan deposits (*Qyf*) underlying the western half of the Project are too young to have accumulated or preserved significant biological material and have a low potential for containing paleontological resources. The young eolian deposits (*Qye*) and very old axial channel deposits (*Qvoa*) in the eastern half of the Project have a high potential to contain paleontological resources, and ground disturbing activities in this area has the potential to impact these resources.

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Field Survey

An intensive pedestrian survey was conducted on June 17 and 18, 2021. Ground visibility varied, with 0-15 percent visibility in the south half and 100% visibility in the north half where the soil has been turned (Figures 6 and 7). Visible sediment is 10YR 4/2 dark gray silt. Gravel density varied throughout site but on average was low. The land within the Project has been disturbed by activities such as cattle and farming (Figures 8 through 13). The three historic homes were photographed and documented as well as the non-historic buildings on the property. Other than the homes, no additional cultural resources were observed.



Figure 5: Zero percent visibility. View to west.



Figure 6: Freshly turned soil, 100% visibility. View to north.



Figure 7: Site overview. View to east.



Figure 8: Site overview. View to east.



Figure 9: Site overview. View to north.



Figure 10: Site overview. View to southeast.



Figure 11: Site overview. View to southwest.



Figure 12: Site overview. View to south.

CRHR Evaluation

The subject property, which encompasses 160-acres, is today one of the last remaining dairy farms left in present-day Eastvale. The dairy, however, was established in the mid to late-1950s by John C. and Elizabeth Leal, who later passed the ranch onto their son Bradley Leal, who owned and operated it until his death in 2016. The Leal Ranch and Dairy was not one of the first or pioneer dairy operations in Corona in what later became Eastvale. Historic photographs and maps indicate that the subject property was cultivated with a walnut orchard in the late-1920s, which included a small residence, barn, and outbuildings. Between 1954-1967, the westernmost residence, dating to the late-1920s, was likely demolished and replaced with the current Spanish Revival style residence, which was the former home of John C. and Elizabeth Leal. On the far east of the main core buildings and structures within the ranch was a bunkhouse, which dates before 1954. Between 1967 and 1980, as well as other improvements.

In order for a property to be significant under any criteria, it must retain integrity. The National Park Service, along with state and local agencies, define integrity as retaining location, design, setting, materials, workmanship, feeling, and association. In applying the definition of integrity to the subject property, the following findings are made below:

Location – The subject property retains its original location, although the original function of the property has changed since it was settled in the 1920s from a cultivated orchard to a ranch and dairy.

Design – The original farmhouse was either demolished or rebuilt in its current configuration. Two other residences were built in subsequent years, both of which appear to retain their original architectural design, but the easternmost house is in very poor condition with structural deterioration, and it partially collapsed.

Setting – The setting of the property has changed since its initial development. Today, the property is surrounded by contemporary residential housing tracts and commercial shopping centers.

Materials- All three residences retain most of their original materials, although the westernmost residence may have been rebuilt with more contemporary materials, such as windows and doors.

Workmanship – The workmanship of the three residences is consistent with the post-World War popularity of California Ranch architecture in the "Spanish" or "Mediterranean" style. None of the residences display a high-level or workmanship or craftsmanship.

Feeling – The feeling of the original pre-1950s orchard and farm no longer exists, however, the property as a whole still looks and feels like a dairy and cattle ranch.

Association – The property's association with its original owner and occupant no longer exists. The property bears a strong association with post-1950s dairy operations in Eastvale.

In summary, the subject property does not appear to be eligible for the CRHR under Criterion 1 since it is not associated with a significant event or events in the History of Corona or Eastvale. Under CRHR Criterion 2, the subject property does not appear to be associated with a person or persons of significance in the history of Corona or Eastvale, however, Brad Leal, the former owner of the Leal Ranch, was a respected rancher, who served on numerous agricultural related committees and commissions locally, regionally, and statewide, and was a person of importance in Eastvale before and after its incorporation as a city. Under CRHR Criterion 3, as a whole, the extant residences and outbuildings remaining within the ranch do not appear to be significant examples of Spanish Revival or California Ranch style architecture. Finally, under Criterion 4, there is no evidence that the various properties within the ranch have the potential to provide "significant" archaeological data associated with early-day ranching, farming, dairying, given that most of the development on the property occurred in the late 1950s-1980s with early-day ranching, farming, dairying, given that most of the development on the property occurred between the 1950s-1980s. See Appendix C for the DPR 523 site record.

IMPACTS ANALYSIS AND RECOMMENDATIONS

DUKE CRM evaluated the proposed Project for impacts to cultural and paleontological resources according to CEQA. The records search and field survey identified one previously recorded cultural resource within the Leal Project area. The pedestrian survey did not yield significant cultural resources, this indicates a low sensitivity for prehistoric cultural resources and a low sensitivity for historic cultural resources. None of the three extant buildings are recommended CRHR-eligible or important cultural resources under CEQA. Based on the low sensitivity for cultural resources DUKE CRM recommends an archaeologist does not need to be present during ground disturbing activity. Therefore, any disturbance of native soils has a low potential to directly impact unique cultural resources according to CEQA. DUKE CRM does not recommend any further cultural resources efforts. However, if any cultural resources are discovered during grading and/or ground disturbance during construction an archaeologist shall be retained to assess the nature and significance of the discovery and make recommendations.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

No paleontological resources were identified within the Project boundaries, but multiple fossil localities in similar deposits are documented nearby (within 3 miles). Ground disturbance in the eastern half of the Project area will impact high-sensitivity deposits (*Qye* and *Qvoa*) and has the potential to directly impact unique paleontological resources. This would result in a potentially significant impact to paleontological resources according to CEQA. Therefore, paleontological construction monitoring is recommended during ground disturbance in this area. This will mitigate the potential impact to a level that is less than significant for the purposes of CEQA.

Paleontological Monitoring- A paleontological monitor shall be present during ground disturbing activities in the eastern half of the Project. The monitor shall work under the direct supervision of a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated competence in paleontological research, fieldwork, reporting, and curation).

1. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
2. The paleontological monitor shall be present full-time during ground disturbance in the eastern half of the Project, including but not limited to grading, trenching, utilities, and off-site easements. If, after excavation begins, the qualified paleontologist determines that the sediments are not likely to produce fossil resources, monitoring efforts shall be reduced.
3. The monitor shall be empowered to temporarily halt or redirect grading efforts if paleontological resources are discovered.
4. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.
5. In consultation with the qualified paleontologist the monitor shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly mapped, documented, removed, and the area cleared.
6. If the discovery is significant the qualified paleontologist shall notify the CLIENT and CITY immediately.
7. In consultation with the CLIENT and CITY the qualified paleontologist shall develop a plan of mitigation which will likely include full-time monitoring, salvage excavation, and removal of the find, removal of sediment from around the specimen (in the laboratory), research to

identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

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APPENDIX A (CONFIDENTIAL)
Paleontological Record Searches

WESTERN SCIENCE CENTER

Duke CRM
Benjamin Scherzer
18 Technology Drive, Suite 103
Irvine, CA 92618

June 15, 2021

Dear Mr. Scherzer,

This letter presents the results of a record search conducted for the Leal MP Eastvale Project in Riverside County, California. The project site is located north of Limonite Avenue, south of 58th Street, west of Hamner Avenue, and east of Scholar Way in Section 24 of Township 2 South and Range 7 West on the *Corona North, CA* USGS 7.5 minute topographic quadrangles.

The geologic units underlying the project area are mapped entirely as Quaternary alluvial fan and channel deposits dating from the early Pleistocene to Holocene epochs (Morton, Gray, Bovard & Dawson, 2002). Pleistocene sedimentary units are considered to be of high paleontological sensitivity. The Western Science Center does not have localities within the project area or a one mile radius, but does have numerous localities throughout the region in similarly mapped sediments including one locality associated with the Vanderham Project that is less than two miles northeast of the Leal MP Eastvale Project area. The Vanderham Project locality produced a camleops specimen that indicates the alluvial units in the area are indeed Pleistocene in age.

Any fossils recovered from the Leal MP Eastvale Project area would be scientifically significant. Excavation activity associated with development of the area has the potential to impact the paleontologically sensitive Pleistocene units and it is the recommendation of the Western Science Center that a paleontological resource mitigation plan be put in place to monitor, salvage, and curate any recovered fossils associated with the current study area.

If you have any questions, or would like further information about the Vanderham Project, please feel free to contact me at dradford@westerncentermuseum.org

Sincerely,

Darla Radford
Collections Manager

APPENDIX B (CONFIDENTIAL)
Resumes

DUKE CRM
18 Technology Drive, #103
Irvine, CA 92618
949-356-6660
www.dukecrm.com

Morgan Bender

Archaeologist

Professional Experience: 4 Years

Expertise

Cultural Resources Management
California Prehistory
Historical Archaeology
Prehistoric Archaeology

Education

California State University, Los Angeles, M.A. Anthropology, 2019
Agnes Scott College, B.A., Anthropology/ Sociology, 2014

Professional Registrations

RPA, No. 18011

Professional Memberships

Society for California Archaeology
Society for American Archaeology

Professional Experience

Ms. Bender attended Agnes Scott College in Decatur, Georgia where she obtained her BA in 2014 in Anthropology/ Sociology and minored in Classical Studies. During her time there, she studied abroad and traveled throughout Turkey where she visited many archaeological sites. Ms. Bender attended California State University, Los Angeles where she received her MA in Anthropology, emphasis in California Archaeology in 2019. Her thesis focused on tracking climatic shifts using crab and sea urchin remains from a Middle Holocene site on San Nicolas Island, California (CA-SNI-40). She has four years of professional experience as a staff archaeologist where she became a Registered Professional Archaeologist. During this time, she has monitored major infrastructure sites such as Metro and utility projects as well as private commercial and residential developments projects. While monitoring, she identifies historic and prehistoric resources and is cross trained in paleontology. Additionally, she prepares the necessary DPR and archaeological reports for these finds. She has also surveyed sites in Arizona and California. Ms. Bender partook in the Woolsey Fire reconnaissance work with Cardno and Southern California Edison. She has training and significant experience in faunal and shellfish analysis, and lithic identification.

Selected Project Experience

San Marcos Creek Project, San Marcos 2021.
Metro Purple Line Section 3, West Los Angeles 2019-2021.
I-405 Project, Orange County 2020-2021.
ICF Metro Division 20, Los Angeles 2019-2021.
ICF Metro Regional Connector, Los Angeles 2017-2021.
Southern California Edison, Los Angeles and Ventura Counties, 2019-2021.
Moorefield French Valley, Murrieta 2020.
Caltrans Collection, Redlands 2019.
Stanton Energy Reliability Center, Stanton 2019.
Southern California Edison Pole Survey, Lake Isabella 2019.
10 West Walnut Morley Construction, Pasadena June 2019.
Survey, Redlands November 2018.
Woolsey Fire, Los Angeles December 2018.
Survey, Nothing July 2018.
Brookfield Residential Nelles Project, Whittier 2018-2020.
Brookfield Kaplan Project North, Ontario 2017-2018.
Brookfield Kaplan Project, Eastvale 2017.

DUKE CRM

18 Technology Dr., Ste. 103
Irvine, CA 92618
949-356-6660
www.dukecrm.com

Curt Duke

President/Principal Archaeologist



Expertise

Cultural Resources Management
California Prehistory
Section 106 Compliance
CEQA Compliance
Native American Consultation

Education

CSU, Fullerton, M.A., Anth, 2006
SDSU, Grad Studies, Anth, 1996-97
UC Santa Cruz, B.A., Anth, 1994

Professional Registrations

RPA, No. 15969
County of Riverside (No. 151)
County of Orange

Professional Memberships

Society for California Archaeology
Society for American Archaeology
Pacific Coast Archaeological Society
Assoc. of Environmental Professionals
Building Industry Association

Professional Experience

President/Principal Archaeologist, DUKE CRM, March 2011 to present
Archaeologist/Principal, LSA Associates, 1997-2011
Archaeological/Paleontological Technician, Various Companies, 1995-97
Archaeological Technician/Teachers Assistant, Cabrillo College, 1994
Anthropological Laboratory Technician, UC Santa Cruz, 1994

Selected Project Experience

Reid/Baldwin Adobe, LA Arboretum, Arcadia, 2019-Present
Veteran Affairs Medical Clinic, Santa Rosa, 2019
Deane Dana Friendship Park, Rancho Palos Verdes, 2019
Makayla Mine Expansion Project, Olancha, 2019
Sweeny Road, Lompoc, 2018
Vantage Point Church, Eastvale, 2016 and 2018
VA West Los Angeles Campus Master Plan, 2017-Present
Avenue S-8 and 40th St. E. Roundabout, Palmdale, 2017-18
SR-110 Improvements, Los Angeles, 2017
Diamond Valley Estates Specific Plan, Hemet, 2017
VA West Los Angeles Campus Hospital Replacement, 2016-Present
Shoemaker Bridge Replacement, Long Beach, 2016-Present
Spruce Goose Hangar, Playa Vista, 2016
Rice Avenue at 5th Street Grade Separation, Oxnard, 2015-Present
Vila Borba, Chino Hills, 2013-Present
Skyridge Residential, Mission Viejo, 2011-Present
Baker Water Treatment Plant, Lake Forest, 2014-2015
VA Clinic, Loma Linda, 2014-Present
Evanston Inn, Pasadena, 2014-2016
Petersen Ranch, Leona Valley, 2013-2014
California Street/Highway 101, Ventura, 2014-Present
6th Street Bridge Replacement, Los Angeles, 2013-Present
I-15/I-215 IC Project, Devore, 2008-10
Colton Crossing Rail-to-Rail Grade Separation, 2008-11
City of LA DPW BOE, On-Call, Cultural/Paleo Services, 2008-11
Mid County Parkway, Riverside County, 2014-10
McSweeny Farms Specific Plan, Hemet, 2004-08
Mesquite Regional Landfill, Coachella Valley, 2006-08
Hacienda at Fairview Valley Specific Plan, Apple Valley2007-08
Majestic Hills Specific Plan, Hesperia, 2006-07
Chuckwalla Solar I Project, Desert Center, 2007-08
Needles Highway Improvement Project, 2004-06
Superstition Solar I Project, Salton Sea, Imperial County, 2008
Muddy Canyon Archaeological Project, Newport Beach, 1997-2001
Temecula 32, Archaeological Phase II Testing, 2007
Mammoth Lakes Parks/Rec and Trail System Master Plan, 2010
24th Street Improvements, City of Bakersfield, 2008-11
California Valley Solar Ranch, San Luis Obispo County, 2009-10
Delano-Alpaugh Water Pipeline, Kern/Tulare Counties, 2006-09
I-15/SR-79 IC Project, Temecula, 2006-10
Westlake Historic Resources Survey, Los Angeles, 2008-09
CETAP, western Riverside County, 1999-2001
Los Coches Creek Elementary School, near Alpine, 2003-06
Oak Valley Specific Plan 1 Amendment, Beaumont, 2004
San Nicolas Island, Naval Base Ventura County, CA, 1997

APPENDIX C (CONFIDENTIAL)
Native American Heritage Commission for Sacred Land Files

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

June 29, 2021

Morgan Bender
Duke CRM

Via Email to: morganbender@dukecrm.com

Re: Leal MP (C-0362) Project, Riverside County

Dear Ms. Bender:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

APPENDIX D (CONFIDENTIAL)
Department of Parks and Recreation (DPR) 523 Record

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code: _____
Other Listings _____
Review Code ____ Reviewer _____ Date _____

 ***Resource Name or #:** Leal Ranch and Dairy

P1. Other Identifier: Leal Ranch and Dairy
***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County:** Riverside
***b. USGS 7.5' Quadrangle**: Corona North, California 1967 and 2012 Portion of SE 1/4 of Section 24 Township 2 South Range 7 West
c. Address: 12740 58th Street **City:** Eastvale **Zip**: 92880
d. UTM:
e. Other Locational Data (APN #164030025**):** The ranch is bordered on the north by 58th Street, on the west by Scholar Way, on the east by Hammer Avenue, and on the south by Limonite Avenue.

***P3a. Description:** The property consists of a part of a former 160-acre ranch and dairy located in Eastvale, Riverside County, California. The ranch was acquired by John and Elizabeth Leal and later owned and managed by their son Brad Leal until his death in 2016. Besides a cow barn, Quonset hut, sheds, calving barns, pastures, cross-fencing, corrals, and other ranch related infrastructure, there are four single-family residences built from the 1950s through the 1980s. Three of the oldest residences are described in this record. The first house is the westernmost residence, which appears to have either replaced an older residence built in the late-1920s or the older residence was extensively remodeled when the Leal family acquired the ranch in the 1950s. The residence is characterized by a red clay barrel tile cross-gable roof, stucco exterior wall cladding, wood-sash and metal windows, French doors, an arcaded veranda along the building's south elevation, and shed roof verandas along the building's south elevation. The second residence lies to the east and is characterized by its irregular-shape created through numerous additions to the original residence. Like the westernmost house, the second residence features an intersecting gable roof, asphalt shingles atop the roof, brick walls covered with stucco and painted white, along with wood shingle sided exterior walls. The residence also features an arched brick entryway facing north, vertical board cladding above some of the gable ends, metal and aluminum casement and slider windows, replacement doors with security metal screens, shed-roof porches supported by 4" x 4" wood columns, a brick exterior chimney on the gable end, a leaded and stained-glass window to the left of the chimney, and a shed-roof veranda facing south towards the pastures (refer to Primary Record, Page 2 of 2).

***P3b. Resource Attributes:** HP33 – Ranch/Dairy
***P4. Resources Present:** ■ Building ■ Structure ☐ Object ☐ Site ☐ District ☐ Element of District

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects).



P5b. Description of Photo: View looking northeast at the westernmost residence.

***P6. Date Constructed/Age and Sources:** ■ Historic Circa 1950-1980.

***P7. Owner and Address:**

***P8. Recorded by:** Dana E. Supernowicz, Historic Resource Associates, 3142 Bird Rock Road, Pebble Beach, CA 93953.

***P9. Date Recorded:** July 2021

***P10. Type of Survey:** ■ Architectural
Describe: CEQA Evaluation

***P11. Report Citation:** Architectural Assessment Study of 12740 58th Street, Eastvale, Riverside County, California 92880. Prepared for Duke Cultural Resources Management, LLC, 18 Technology Drive, Suite 103, Irvine, CA 92618. Prepared by Historic Resource Associates, 3142 Bird Rock Road, Pebble Beach, CA 93953. July 2020.

***Attachments:** Building, Structure, and Object Record; Photograph Record

***P3a. Description: (Continued):**

Immediately to the east of the irregular-shaped residence is a third residence, a contemporary Spanish style residence reportedly built in the 1980s. Further to the east is what is referred to as the "bunkhouse." The bunkhouse is a simple rectangular-shaped, gabled-roof painted brick building with a detached chimney that appears to have once been part of the house. The grouting technique used on the brick masonry walls of the residence was designed to give it the appearance of adobe bricks. The gabled roof of the building is in very poor condition and is clad with wood shingles, with stucco used beneath the gable ends. The south elevation of the residence features a large, rectangular picture style window with a large wooden header. The west elevation of the residence once included a shed-roof porch supported by simple wood columns, but is now largely collapsed. The most unusual feature of the residence is a wrap-around metal-sash corner Modernist style window.

BUILDING, STRUCTURE, AND OBJECT RECORD

B1. Historic Name: Leal Ranch
B2. Common Name: Same as above
B3. Original Use: Walnut Orchard and Farm/Cattle Ranch/Dairy **B4. Present Use:** Ranch
***B5. Architectural Style:** California Ranch/Mediterranean/Vernacular
***B6. Construction History:** Based upon oral history and historic aerial photographs, the Leal Ranch began as a cultivated walnut orchard during the 1920s through the late-1940s. By the late-1950s, the farm transitioned to a dairy and cattle ranch after it was acquired by the Leal family. The westernmost house appears to have been the first residence constructed within the 160-acre farm, although it may have been added on to and remodeled when the Leals purchased the property since historic topographic maps suggest it started as a simple rectangle. Besides one primary residence, there was once a small shed to its east and another barn or shed further east. Later, a cow barn was built near 58th Street at the entrance to the ranch. By 1959, a second residence had been constructed to the east of the original farm residence, and during the 1970s, yet another house was built further to the east. By the 1980s, a more contemporary or modern residence was built, that in later years had multiple additions. Besides the residences, development on the property included a Quonset hut, cross-fencing, corrals, wells, pastures, cultivated fields, and sheds where feed was stored and dairy cows were raised.
***B7. Moved?** ■ No ☐ Yes ☐ Unknown **Date:** **Original Location:**
***B8. Related Features:** Outbuildings, a Quonset hut, barn, sheds, corrals, wells, pastures, and cross-fencing.
B9a. Architect: Undetermined **B9b. Builder:** Undetermined
***B10. Significance: Theme:** Agriculture/Ranching/Dairies **Area:** Eastvale **Period of Significance:** 1950s-1974
Property Type: Farm/Ranch/Dairy **Applicable Criteria:** CRHR 1, 2, 3, and 4

The historic context of the subject parcel is largely tied to the development of Corona and the area that later became part of Eastvale during the 1950s. Eastvale's history is associated with its neighbors - Corona, Norco, Chino, and Ontario. For at least the last 176 years, the land now part of Eastvale was used for ranching and farming, particularly dairies. It wasn't until 1893, that Riverside County was created. In the minutes of one of the first meetings of the Riverside County Board of Commissioners, "East Vale" is listed as one of 53 school districts. During the late-1920s much of Eastvale, like other parts of Riverside County, featured walnut orchards and citrus groves intermixed with farms and ranches (Netronline Website 2021). By the 1950s, Los Angeles' population had expanded into outlying farm lands and dairymen began moving their operations into the valley. Dairies in Eastvale, the Chino Valley, and Ontario were owned and primarily operated by Dutch and Portuguese (Azorean) families. In the spring of 2007, five individuals were tasked by residents to explore cityhood for Eastvale. These five residents formed the Eastvale Incorporation Committee. Today, Eastvale is still tied to Corona and Norco as a member of the Corona-Norco Unified School District and shares a zip code with the City of Corona (92880) and the City of Jurupa Valley (91752). Until incorporation, Eastvale was a community residing in an unincorporated area of Western Riverside County (City of Eastvale Website. "History." 2021). Refer to BSO, Page 2 of 18.

B11. Additional Resource Attributes: N/A
B12. References: Ancestry.com Website. https://www.ancestry.com/search, accessed July 2021; City of Eastvale Website. "History." https://www.eastvaleca.gov/our-city/about-eastvale/history. Accessed July 6, 2021; City of Eastvale Website. "Leal Master Plan." https://www.eastvaleca.gov/home/showpublisheddocument/9676/636675443383230000. Accessed July 6, 2021); Halsted, Byron D., ed. *Barns, Sheds and Outbuildings*. New York: O. Judd Co., 1881. Reprinted Brattleboro, VT: Stephen Greene Press. 1977; Legacy Website. "Obituary: Brad William Leal." https://www.legacy.com/us/obituaries/pe/name/brad-leal-obituary. November 2016 (refer to BSO, Page 7 of 18).
B13. Remarks:
B14. Evaluator: Dana E. Supernowicz, Architectural Historian, 3142 Bird Rock Road, Pebble Beach, CA 93953
Date of Evaluation: July 2020

Aerial Photograph (Google Earth 2021)



(This space reserved for official comments.)

***B10. Significance (Continued):**



Figure 1: 3D Aerial view of the former Leal Ranch (Google Earth 2021).



Figure 2: 3D Aerial view looking north at the main buildings, structures, and objects within the former Leal Ranch and Dairy. The three black boxes represent the evaluated residences in the ranch built from the 1950s-1970s.

***B10. Significance (Continued):**



Figure 3: Street view of the entrance to the Leal Ranch from 58th Streeet.

The Leal family are of Portuguese descent, and Portuguese immigrants began settling in California in the mid-1800s with a dream to build a new life for their families and to escape the restrictions of the old world that limited their opportunities. With varied skills and little education, they were determined to improve their quality of life. A number of Portuguese Americans have been prominent in contributing to the development of American culture and society. Benjamin Cardoza, the Supreme Court Justice (1932-1938), John Dos Passos (1896-1970), the author of the famous USA trilogy and other works on American society, and John Phillip Sousa (1854-1932), the composer of many of America's best-loved marching songs, were men of Portuguese heritage who played important roles in the history of the United States. Just as important, but rarely told, is the story of the everyday immigrant, such as those who established farms and dairies throughout parts of Riverside County during the first few decades the twentieth century (Portuguese Historical Museum 2016).

The area that was once part of Corona and later became Eastvale attracted a wide range of immigrants, many of whom came from the Azores, Portugal, as well as the Netherlands. Most came for economic reasons and particularly the lands surrounding Eastvale that were conducive to dairy operations. Portuguese immigrant dairy owners and workers had a large presence in Eastvale and many reportedly settled in and around Chandler Street, between Archibald and Hellman Avenues, an area that had been subdivided before 1915 as part of the Persimmon Acres Tract. Over time, people constructed houses afterwhich the area was common referred to as "Portugee Village" (Meissner and Johnson 2013: 119-120). Around 1900, there were an estimated 80 dairies in what is now Eastvale with about 90,000 cows. Beginning in the late-twentieth century and early twenty-first century, Eastvale dairy farmers began a mass migration to other parts of California and other states to escape urban sprawl, stricter regulations, and aging dairy machinery (Stockley 2013; City of Eastvale Website. "Leal Master Plan." 2021). By the time the city was incorporated in 2010, nine dairies remained. By 2020, there was reportedly only one dairy still operating in Eastvale owned by the David Downey (Press-Enterprise Website 2020).

***B10. Significance (Continued):**

In 1881, the lands that were later acquired by the Leal family and other Portuguese ranchers had not as yet been subdivided into smaller parcels (Figure 4). The Leal Ranch was located just south of the border of San Bernardino County in Section 24.

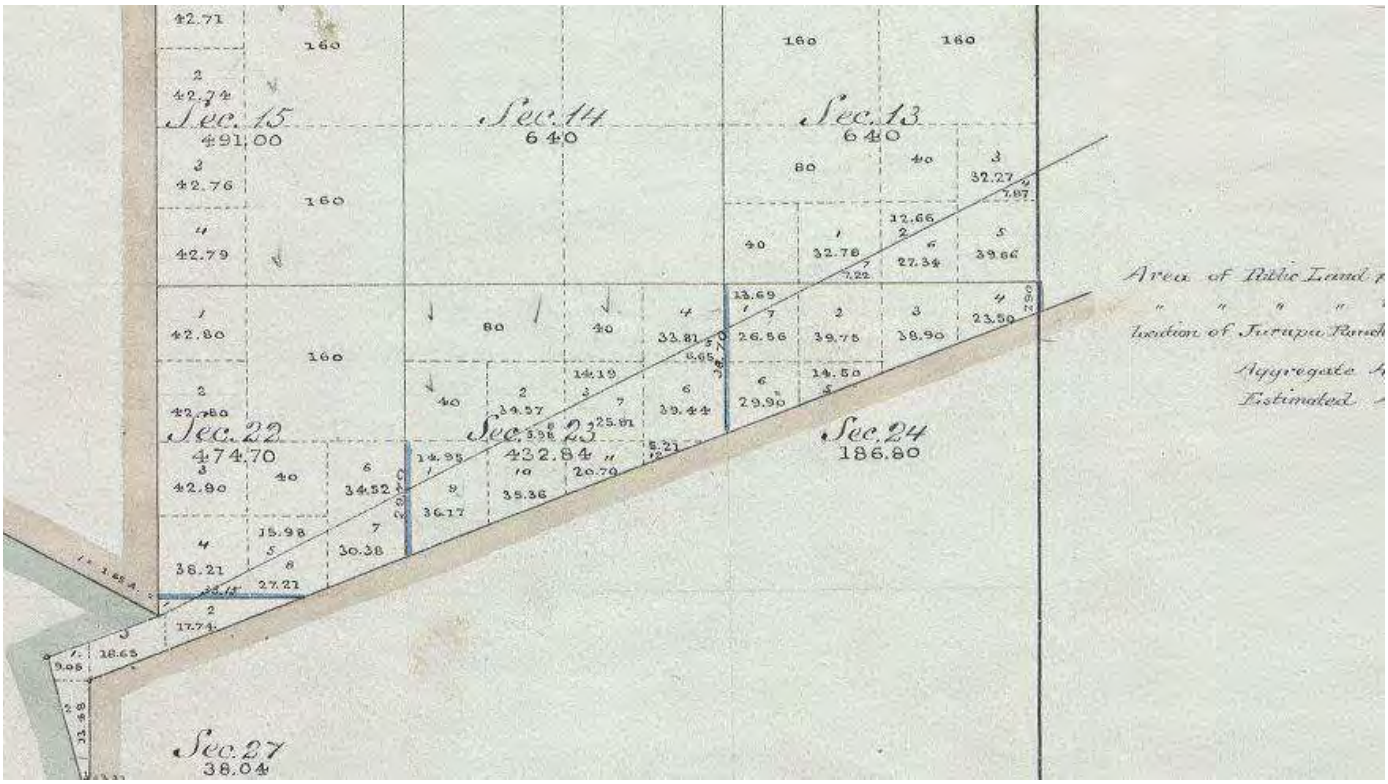


Figure 4: General Land Office Survey Plat Map 1881 (T2S, R7E).

While the Leal Ranch appears to have been established in the mid to late-1950s by John and Elizabeth (nee Kruidhof) Leal, and later owned and operated by their son Bradley Leal, the 160-acre parcel appears to have been previously cultivated as a walnut orchard with a single residence and a small barn or shed (Ancestry.com Website 2021; Netronline Website 2021). Elizabeth Leal, whose parent were from the Netherlands, was born on March 10, 1932 and died on July 22, 2009, while her husband, John C. Leal was born in 1923 and died in 1978. John and Elizabeth were married in Los Angeles in 1949, and had four children: Sonia, Bradley, Brenda, and Craig. The various residences within the ranch were built by the Leal family and occupied by different family member from the 1950s through the 2010s. Bradley was apparently the primary heir to the ranch.

On November 11, 2016, Bradley William Leal passed away. According to his obituary in 2016, Brad was survived by his brother, Craig Leal of Corona; sister, Brenda Martin of Porterville; and sister, Sonia Leal of Chino. Besides his dairy business for over 40 years, Bradley was chairman on multiple boards in the dairy industry, including the Southern Dairyman's Association, Southern California Producers Council, and “Land O Lakes.” He was on the Board of Directors for the Southern California Environmental Foundation, Chairman for the Leadership Council, Nominating Committee, Leader Development Committee, Credentials Committee, and the "Policy and Resolutions" Committee. On a state level, Brad was appointed to the State of California Department of Food and Agriculture Producers Review Board. He also acted as a lobbyist in the House of Congress on Capitol Hill, Washington DC. advocating special interests for the Agricultural Industry (Legacy Website 2016).

***B10. Significance (Continued):**

A review of historic topographic maps and aerial photographs helped illustrate the evolution of the Leal Ranch. As previously described the ranch evolved in the second decade of the twentieth century as a small farm producing walnuts. The farm remained largely intact through the early 1950s, with the main residence on the left adjacent to an outbuilding on the right, perhaps a detached garage, a barn to the north still intact, and to the right of another residence referred to as the "bunkhouse" (Figure 5). By 1967, the westernmost residence (Figure 6) was enlarged or entirely rebuilt, creating an "L" shaped residence, the bunkhouse to the east remained intact, and other outbuildings had been constructed.

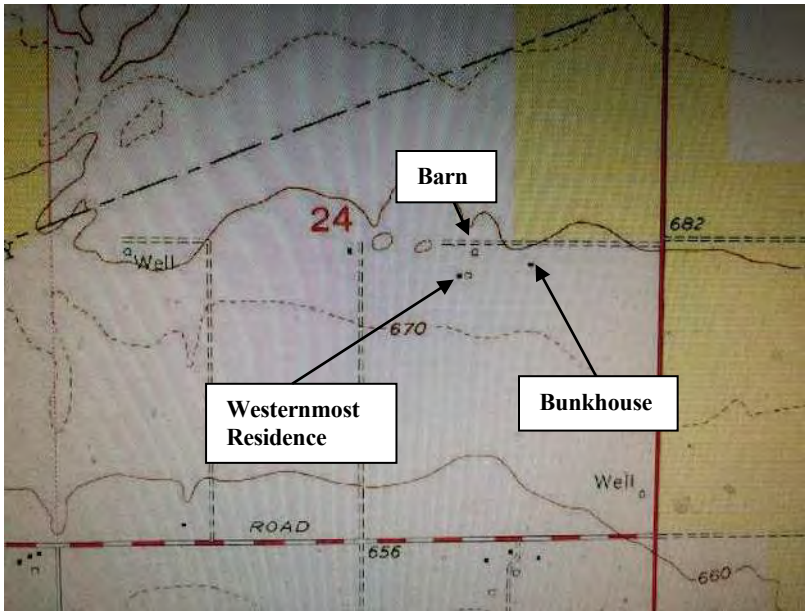


Figure 5: USGS 7.5' Corona North, CA Topographic Map, 1954.

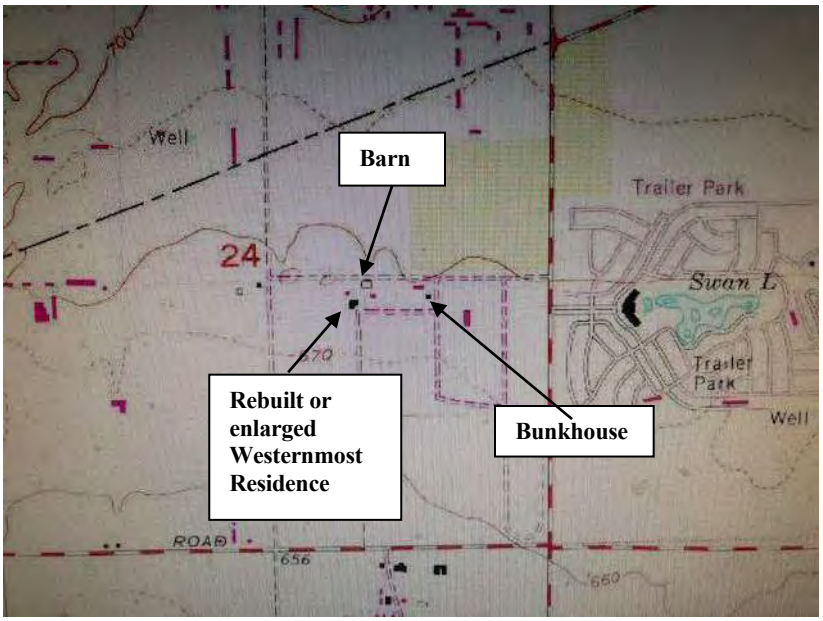


Figure 6: USGS 7.5' Corona North, CA Topographic Map, 1967.

***B10. Significance (Continued):**

REGULATORY AND EVALUATION FRAMEWORK

The regulatory framework for this historic resource study and the evaluation lies within the guidelines imposed for the California Environmental Quality Act (CEQA) and the California Register of Historic Resources (CRHR) under Public Resources Code section 5024.1. CEQA guidelines define a significant cultural resource as "a resource listed in or eligible for listing on the CRHR. A historical resource may be eligible for inclusion in the CRHR if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important to prehistory or history.

Even if a resource is not listed in, or determined eligible for listing in the CRHR, the lead agency may consider the resource to be an "historical resource" for the purposes of CEQA provided that the lead agency determination is supported by substantial evidence (CEQA Guidelines 14 CCR 15064.5). According to the state guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR 15064.5[b]). CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. Actions that would materially impair the significance of a historical resource are any actions that would demolish or adversely alter those physical characteristics of a historical resource that convey its significance and qualify it for inclusion in the CRHR or in a local register or survey that meet the requirements of PRC 5020.1(k) and 5024.1(g).

STATEMENT OF SIGNIFICANCE

The subject property, which encompasses 160 acres, is today one of the last remaining dairy farms left in present-day Eastvale. The dairy, however, was established in the mid to late-1950s by John C. and Elizabeth Leal, who later passed the ranch onto their son Bradley Leal, who owned and operated it until his death in 2016. The Leal Ranch and Dairy was not one of the first or pioneer dairy operations in Corona in what later became Eastvale. Historic photographs and maps indicate that the subject property was cultivated with a walnut orchard in the late-1920s, which included a small residence, barn, and outbuildings. Between 1954 and 1967, the westernmost residence, dating to the late-1920s, was likely demolished and replaced with the current Spanish Revival style residence, which was the former home of John C. and Elizabeth Leal. On the far east of the main core of buildings and structures within the ranch was a bunkhouse, which dates before 1954. Between 1967 and 1980, two other residential California Ranch style houses were built between the 1950s residence and the bunkhouse, as well as other improvements.

In order for a property to be significant under any criteria, it must retain integrity. The National Park Service, along with state and local agencies, define integrity. Integrity is defined as retaining location, design, setting, materials, workmanship, feeling, and association. In applying the definition of integrity to the subject property, the following findings are made below:

Location - The subject property retains its original location, although the original function of the property has changed since it was settled in the 1920s from a cultivated orchard to a ranch and dairy.

Design - The original farm house was either demolished or rebuilt in its current configuration. Two other residences were built in subsequent years, both of which appear to retain their original architectural design, but the easternmost house is in very poor condition with structural deterioration and is partially collapsed.

***B10. Significance (Continued):**

Setting - The setting of the property has changed since its initial development. Today, the property is surrounded by contemporary residential housing tracts and commercial shopping centers.

Materials - All three residences retain most of their original materials, although the westernmost residence may have been rebuilt with more contemporary materials, such as windows and doors.

Workmanship - The workmanship of the three residences is consistent with the post-World War popularity of California Ranch architecture in the "Spanish" or "Mediterranean" style. None of the residences display a high-level or workmanship or craftsmanship.

Feeling - The feeling of the original pre-1950s orchard and farm no longer exists, however, the property as a whole still looks and feels like a dairy and cattle ranch.

Association - The property's association with its original owner and occupant no longer exists. The property bears a strong association with post-1950s dairy operations in Eastvale.

APPLICATION OF THE SIGNIFICANCE CRITERIA

In summary, the subject property does not appear to be eligible for the CRHR under Criterion 1, since it is not associated with a significant event or events in the history of Corona or Eastvale Under CRHR Criterion 2, the subject property does not appear to be associated with a person or persons of significance in the history of Corona or Eastvale, however, Brad Leal, the former owner of the Leal Ranch was a respected rancher, who served on numerous agricultural related committees and commissions locally, regionally, and statewide, and was a person of importance in Eastvale before and after its incorporation as a city. Under CRHR Criterion 3, as a whole, the extant residences and outbuildings remaining within the ranch lack integrity and do not appear to be significant examples of Spanish Revival or California Ranch style architecture. Finally, under CRHR Criterion 4, there is no evidence that the various properties within the ranch have the potential to provide "significant" archaeological data associated with early-day ranching, farming, dairying, given that most of the development on the property occurred in the late-1950s-1980s.

B12. References: (Continued):

May, Cliff. *Sunset Western Ranch Houses.* Editorial Staff of *Sunset Magazine* in Collaboration with Cliff May. 1946, reprinted with permission, Hennessey+Ingalls. 1999; May, Cliff. *Western Ranch Houses.* Editorial Staff of *Sunset Magazine* and Books. 1958, reprinted with permission, Hennessey+Ingalls. 1997; Meissner, Loren P. and Kim Jarrell Johnson. *A Brief History of Eastvale*. Charleston, S.C.: History Press. 2013; NetroOnline Website. "Historic Aerials." https://www.historicaerials.com. Accessed July 10, 2020; Portuguese Historical Museum. "History." www.portugesemuseum.org. Accessed July 2021; Press-Enterprise Website. "On Eastvale's 10th anniversary." https://www.pe.com/2020/10/01/on-eastvales-10th-anniversary-here-are-5-things-to-watch-for. October 1, 2020; Rumsey, Davis. Historical Map Collection. http://www.davidrumsey.com. Accessed March 25, 2016; Schuler, Stanley. *American Barns: In a Class by Themselves*. Exton, PA: Schiffer Publishing Ltd., 1984; Schultz, LeRoy G., comp. *Barns, Stables and Outbuildings: A World Bibliography in English, 1700-1983*. Jefferson, NC and London: McFarland and Company. 1986; Stockley, Sandra. Press-Enterprise Website. "Eastvale: Dairies are a Bittersweet Link to the Past." https://www.pe.com/2013/09/27/eastvale-dairies-are-bittersweet-link-to-past. September 27, 2013; USDI, National Park Service. National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation, n.d.

***B10. Significance (Continued):**

PHOTOGRAPH RECORD



Photograph 1: View looking south at the westernmost residence, built between 1954 and 1967.



Photograph 2: View looking southwest at the westernmost residence.

*B10. Significance (Continued):



Photograph 3: View looking southeast at the west elevation of the westernmost residence.



Photograph 4: View looking southeast at the westernmost residence.

*B10. Significance (Continued):



Photograph 5: View looking north at the westernmost residence.



Photograph 6: View looking west at the westernmost residence.

***B10. Significance (Continued):**



Photograph 7: View looking north at the arcaded porch of the westernmost residence.



Photograph 8: View looking at the altered window detail of the westernmost residence.

***B10. Significance (Continued):**



Photograph 9: View looking at the French doors and porch brackets on the westernmost residence.



Photograph 10: View looking at the front elevation of the residence to the right or east of the late-1950s era residence. This residence, which was added onto numerous times, was likely built between 1967 and 1980.

***B10. Significance (Continued):**



Photograph 11: View looking east at the centermost residence.



Photograph 12: View looking northeast at the centermost residence.

***B10. Significance (Continued):**



Photograph 13: View looking at the side entrance on the centermost residence.



Photograph 14: View looking at the fireplace on the east end wall of the centermost residence.

***B10. Significance (Continued):**



Photograph 15: View looking at the side elevation of the bunkhouse residence, built prior to 1954.



Photograph 16: View looking northeast at the southeast elevation of the bunkhouse residence.

***B10. Significance (Continued):**



Photograph 17: View of the south elevation of the bunkhouse residence.



Photograph 18: View looking at the south elevation of the bunkhouse residence.

*B10. Significance (Continued):

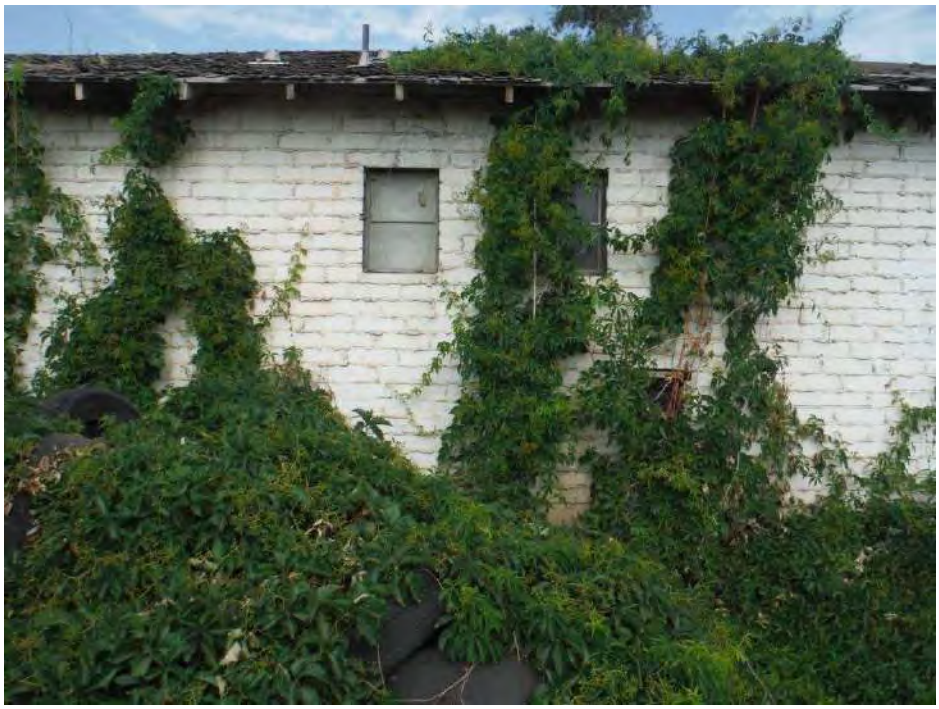


Photograph 19: View of the east elevation of the bunkhouse residence and the brick chimney.



Photograph 20: View looking east at the brick chimney.

***B10. Significance (Continued):**



Photograph 21: View of the brick masonry wall detail on the bunkhouse residence.



Photograph 22: View of window detail and wooden header above the window of the bunkhouse residence.

Appendix E

June 21, 2021 Project No. 21116-01

Mr. A.J. Jarvis
The New Home Company
85 Enterprise, Suite 450
Aliso Viejo, CA 92656

Subject: ***Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California***

In accordance with your request, LGC Geotechnical, Inc. has performed a geotechnical evaluation including near surface organic content for the proposed approximate 160-acre "Leal" property located southwest of the intersection of Hamner Avenue and 58th Street in the City of Eastvale, California. This report summarizes the results of our background review, subsurface exploration, and geotechnical analyses of the data collected, and presents our findings, conclusions, and preliminary recommendations for the proposed residential project.

If you should have any questions regarding this report, please do not hesitate to contact our office. We appreciate this opportunity to be of service.

Respectfully,

LGC Geotechnical, Inc.

Blake J. Elliott, RCE 70705
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
BLAKE J. ELLIOTT
No. 70705
CIVIL
STATE OF CALIFORNIA

Barry Graham, CEG 2749
Project Geologist

CERTIFIED ENGINEERING GEOLOGIST
BARRY GRAHAM
No. 2749
STATE OF CALIFORNIA

BJE/BPG/amm

Distribution: (1) Addressee (electronic copy, wet signed copies can be provided upon request)

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1.0 INTRODUCTION

1.1 Purpose and Scope of Services

This report presents the results of our geotechnical evaluation including near surface organic content for the proposed approximately 160-acre "Leal" property in the City of Eastvale, California (see Site Location Map, Figure 1). The purpose of our work was to collect subsurface data in order to prepare a geotechnical report providing recommendations for design and construction of the proposed project. Our scope of services included:

- Review of pertinent readily available geotechnical information and geologic maps (Appendix A).
- Subsurface investigation including excavation, sampling, and logging of ten small-diameter hollow stem borings.
- Excavation of 10 exploratory geotechnical trenches throughout the site to aid in estimating the depth of required removals during grading and assist in characterizing the near surface soils.
- Excavation of 25 shallow trenches to assess the organic content of near surface "soils".
- Laboratory testing of representative samples obtained during our subsurface investigation (Appendix C).
- Geotechnical analysis and evaluation of the data obtained, including:
  - Suitability of the site for the proposed development from a geotechnical standpoint;
  - Description of the site geology, and subsurface soil and groundwater conditions;
  - Assessment of the organic content of near surface "soils" including recommendations for offsite organic export and/or mixing;
  - Evaluation of the seismic conditions at the site, including seismic design criteria based on the 2019 California Building Code (CBC); and
  - Recommendations for remedial grading operations and site preparation.
- Preparation of this report presenting our findings, conclusions and recommendations with respect to the proposed site development.

1.2 Existing Site Conditions and Proposed Improvements

The square shaped site is approximately 160 acres in size with minor relief. The site is composed of four adjacent 40-acre parcels, and is bounded to the north by 58th street, the south by Limonite Avenue, the west by Scholar Way, and to the East by Hamner Avenue. The northern portion of the site is a former dairy that has been inactive for several years, while the south has remained as open pasture for decades. A review of historic aerial photographs suggests the site has been used as a dairy or agricultural farm dating back to the earliest available photos in 1938.

As of the date of this report, neither a conceptual plan nor grading plan was available. It is our understanding that the site will most likely consist of residential units, parks and associated street improvements and underground utilities. We expect the proposed residential development will be at-grade with relatively light building loads (column and wall loads assumed to be a maximum of approximately 30 kips and 3 kips per lineal foot, respectively). A preliminary grading plan was not available at this time either.

The recommendations provided herein are based upon the estimated structural loading and expected layout information above. We understand that the project plans are currently being developed at this time; LGC Geotechnical should be provided with updated project plans and any changes to the assumed structural loads when they become available, in order to either confirm or modify the recommendations provided herein.

1.3 Subsurface Evaluation

LGC Geotechnical performed a subsurface geotechnical evaluation of the site consisting of the excavation of 10 hollow-stem auger borings, 2 infiltration borings, 10 exploratory geotechnical trenches with organic testing, and 25 near surface organic trenches.

10 hollow-stem borings (HS-1 through HS-10) were drilled to depths ranging from approximately 25 to 50 feet below existing grade. An LGC Geotechnical representative observed the drilling operations, logged the borings, and collected soil samples for laboratory testing. The borings were excavated using a track-mounted drill rig equipped with 8-inch-diameter hollow-stem augers. Driven soil samples were collected by means of the Standard Penetration Test (SPT) and Modified California Drive (MCD) sampler generally obtained at 2.5 to 5-foot vertical increments. The MCD is a split-barrel sampler with a tapered cutting tip and lined with a series of 1-inch-tall brass rings. The SPT sampler and MCD sampler were driven using a 140-pound automatic hammer falling 30 inches to advance the sampler a total depth of 18 inches. The raw blow counts for each 6-inch increment of penetration were recorded on the boring logs. Bulk samples were also collected and logged at select depths for laboratory testing. At the completion of drilling, the borings were backfilled with the native soil cuttings and tamped. Some settlement of the backfill soils may occur over time.

Ten exploratory geotechnical trenches (TP-1 through TP-10) were excavated utilizing a standard backhoe in order to estimate removal depths and obtain samples for laboratory testing. A staff geologist observed the operation, logged the geotechnical trenches and collected the soil samples. Each exploratory geotechnical trench was also logged and sampled for the organic content of the near surface "soils." The exploratory geotechnical trenches were subsequently backfilled with tamped native soils.

Twenty-five additional shallow trenches (T-1 through T-25) were excavated utilizing a standard backhoe in order to assess the organic content of near surface "soils". Samples were collected at various depths within each trench. In general, based on visual observations, 2 layers of soil were identified including 1) near surface heavily tainted organic "soils" and 2) "clean" (organic free) soils. In some areas there was a "transitional" layer in between these two. The shallow trenches were subsequently backfilled and tamped with native soils. There are 4 areas identified as having thick zones of buried or stockpiled high-organic material. These 4 areas have been outlined on our Geotechnical Map (Figure 2).

LGC Geotechnical, Inc. was asked to avoid the northwest corner of the property during our evaluation as this area is currently occupied by a local farmer. This area was not explored during our evaluation. The boundary for this area is shown on the Geotechnical Map (Figure 2).

The approximate locations of borings and trenches are shown on the Geotechnical Map (Figure

2). Boring and geotechnical trench logs are presented in Appendix B. The Encumbrance Map prepared by Hunsaker & Associates (H&A, 2021) was utilized as a base map for our Geotechnical Map.

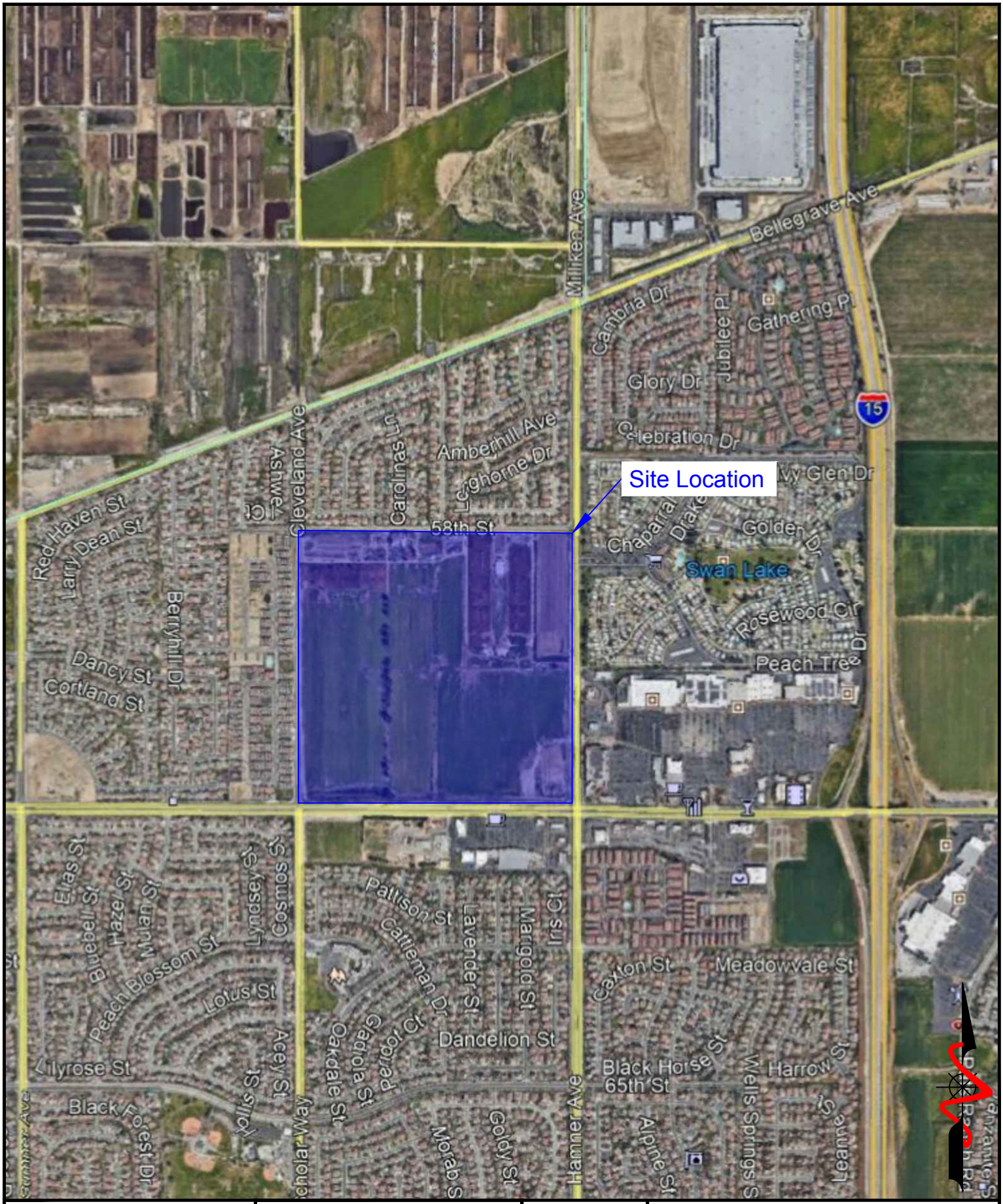
1.4 Laboratory Testing

Laboratory testing was performed on representative soil samples obtained from our subsurface evaluation. Laboratory testing included in-situ moisture and density tests, fines content/sieve analysis, Atterberg Limits (liquid limit and plastic limits), consolidation, collapse/swell potential, expansion index, laboratory compaction and corrosion (sulfate and chloride). Additionally, the near surface organic content trench samples were tested for characterization of the organic content (ASTM 2974).

The following is a summary of the laboratory test results.

- Dry density of the samples collected ranged from approximately 90 pounds per cubic foot (pcf) to 122 pcf, with an average of approximately 109 pcf. Field moisture contents ranged from approximately 1.1 percent to 32.0 percent, with an average of approximately 12 percent.
- One sample tested for fines content indicated a fines content (passing No. 200 sieve) of 83 percent. According to the Unified Soils Classification System (USCS), the tested sample is classified as "fine grained" soil.
- One Atterberg Limit (liquid limit and plastic limit) test was performed. The result indicated a Plasticity Index value of 11.
- One consolidation test was performed. The deformation versus vertical stress plot is provided in Appendix C.
- One swell/collapse test was performed. The plots are provided in Appendix C.
- One Expansion Index (EI) test was performed. The result indicates an EI value of 11, corresponding to "Very Low" expansion potential.
- One laboratory compaction test of a near surface sample indicated maximum dry density of 125.0 pcf with an optimum moisture content of 8.5 percent.
- Corrosion testing indicated soluble sulfate content of 78 parts per million (ppm) and chloride content of 100 ppm.
- The organic content of the samples ranged from approximately 0.1 to 33.2 percent.

A summary of the results is presented in Appendix C. The moisture and dry density test results are presented on the boring logs in Appendix B.



PROJECT NAME	TNHC - Eastvale
PROJECT NO.	21116-01
ENG. / GEOL.	BJE / BPG
SCALE	Not to Scale
DATE	June 2021

LGC Geotechnical, Inc.

FIGURE 1
Site Location Map

2.0 GEOTECHNICAL CONDITIONS

2.1 Regional Geology

The subject site is located south of the San Gabriel Mountains within the broad alluvial plain of the Santa Ana River Basin, within the Peninsular Ranges Geomorphic Province. Specifically, the site is located within the northern portion of the Perris Block, a geologic zone consisting of granitics overlain by sedimentary deposits that are bounded by active faults including the northwest-trending Whittier-Elsinore Fault Zone at the southwest and the northwest-trending San Jacinto Fault Zone at the northeast (USGS, 2002). The roughly rectangular Perris Block is transected by the southwest-trending Santa Ana River that passes approximately 2 miles south of the subject site.

Regional geologic mapping and local topographic expressions do not indicate the presence of large-scale landslides within or adjacent to the project area.

2.2 Site Geology and Generalized Subsurface Conditions

Based on regional mapping (USGS, 2002 & 2003), the subject site is underlain by Holocene- to Pleistocene-age alluvial fan deposits (Qyf), minor amounts of similar age eolian (wind-blown) deposits (Qye), and older early Pleistocene age alluvial channel deposits at depth. For this report however, alluvial and eolian deposits have been undifferentiated as general Quaternary deposits. As indicated in our field explorations, soils generally consisted of medium dense to dense sands and silty sands with thinner layers of stiff to very stiff fine-grained soils (i.e., silts and clays) to the maximum explored depth of approximately 50 feet below existing grade. Descriptions of the subsurface conditions are presented on the boring and geotechnical trench logs located in Appendix B. A brief description of the site geologic units can be found below.

2.3 Groundwater

Groundwater was not encountered in any of our borings. Groundwater levels recorded in the area by California Department of Water Resources are at depths greater than 100 feet below the ground surface (CDWR, 2021).

In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present within the near-surface deposits due to local seepage or during rainy seasons. Groundwater conditions below the site may be variable, depending on numerous factors including seasonal rainfall, local irrigation and groundwater pumping, among others.

2.4 Field Infiltration Testing

Two field percolation tests were performed on Borings I-1 and I-2 to approximate depths of 10 feet below existing grade, respectively. Estimation of infiltration rates was performed in general accordance with guidelines set forth by the Riverside County Flood Control (2011). In general, a 3-inch diameter perforated PVC pipe was placed in each borehole to be tested and

the annulus was backfilled with gravel, including placement of about 2 inches of gravel at the bottom of the borehole. The infiltration wells were pre-soaked prior to testing. Based on the County of Riverside methodology, the calculated (observed) infiltration rates are provided in Table 1 below. These infiltration rates do not include any factor of safety (to be determined by the project Civil Engineer); however, they have been normalized to correct the 3-D flow that occurs within the field test to 1-D flow out of the bottom of the boring only. The locations and depths of the infiltration tests were coordinated with the civil engineer. The approximate infiltration test locations are shown on the Geotechnical Map (Figure 2) and the infiltration test data is included in Appendix D and summarized below.

TABLE 1

Summary of Infiltration Testing

Infiltration Test Location	Infiltration Test Depth Below Existing Grade (ft)	Observed Infiltration Rate* (Inch/Hr.)
I-1	10	3.8
I-2	10	0.6

*Normalized to One-Dimensional Flow, does not include any Factor of Safety.

It should be emphasized that infiltration test results are only representative of the location and depth where they are performed. Varying subsurface conditions may exist outside of the test locations which could alter the calculated infiltration rates indicated above. Infiltration tests are performed using relatively clean water free of particulates, silt, etc. Refer to Section 4.8 for subsurface water infiltration recommendations.

2.5 Faulting and Seismic Hazards

Prompted by damaging earthquakes in California, State legislation and policies concerning the classification and land-use criteria associated with faults have been developed. Their purpose was to prevent the construction of urban developments across the trace of active faults, resulting in the Alquist-Priolo Earthquake Fault Zoning Act. Earthquake Fault Zones have been delineated along the traces of active faults within California. Where developments for human occupation are proposed within these zones, the State requires detailed fault evaluations be performed so that engineering geologists can mitigate the hazards associated with active faulting by identifying the location of active faults and allowing for a setback from zones of previous ground rupture.

The subject site is not located within an Alquist-Priolo Earthquake Fault Zone and no faults were identified on the site during our site evaluation. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site.

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the site, include ground lurching, shallow ground rupture, soil liquefaction and dynamic settlement. These secondary effects of seismic shaking

are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault and the onsite geology. Some of the major active nearby faults that could produce these secondary effects include the Chino-Central, Elsinore, Cucamonga and San Andreas Faults, among others (CGS, 2018). A discussion of these secondary effects is provided in the following sections.

2.5.1 Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that loose, saturated, near-surface, cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils, and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Furthermore, dynamic settlement of dry sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

Based on our review of the City of Eastvale General Plan (CE, 2012), the subject site is located in an area of "High" liquefaction susceptibility based only on soil type (sediments being less than 10,000 years old and unconsolidated). Site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet. However, isolated layers may be susceptible to dry sand seismic settlement. Seismically induced dry sand settlements were estimated by the procedures outlined by Pradel (Pradel, 1998) using the PGA_M per the 2019 CBC and a moment magnitude of 6.71 (USGS, 2014). Based on the data obtained from our field evaluation, seismic settlement due to dry sands is estimated to be on the order of about 0.5-inch or less. Differential settlement may be estimated as half of the total settlement over a horizontal span of 40 feet.

2.5.2 Lateral Spreading

Lateral spreading is a type of liquefaction induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to the depth to groundwater, low potential for liquefaction and lack of nearby "free face" conditions, the potential for lateral spreading is considered extremely low.

2.6 Seismic Design Criteria

The site seismic characteristics were evaluated per the guidelines set forth in Chapter 16, Section 1613 of the 2019 California Building Code (CBC) and applicable portions of ASCE 7-16 which has been adopted by the CBC. **Please note that the following seismic parameters are only applicable for code-based acceleration response spectra and are not applicable for where site-specific ground motion procedures are required by ASCE 7-16.** Representative site coordinates of latitude 33.975696 degrees north and longitude -117.566832 degrees west were utilized in our analyses. The maximum considered earthquake (MCE) spectral response accelerations (S_{MS} and S_{M1}) and adjusted design spectral response acceleration parameters (S_{DS} and S_{D1}) for Site Class D are provided in Table 1 on the following page. Since site soils are Site Class D, additional adjustments are required to code acceleration response spectrums as outlined below and provided in ASCE 7-16. The structural designer should contact the geotechnical consultant if structural conditions (e.g., number of stories, seismically isolated structures, etc.) require site-specific ground motions.

A deaggregation of the PGA based on a 2,475-year average return period (MCE) indicates that an earthquake magnitude of 6.71 at a distance of approximately 14.03 km from the site would contribute the most to this ground motion. A deaggregation of the PGA based on a 475-year average return period (Design Earthquake) indicates that an earthquake magnitude of 6.7 at a distance of approximately 17.24 km from the site would contribute the most to this ground motion (USGS, 2014).

Section 1803.5.12 of the 2019 CBC (per Section 11.8.3 of ASCE 7) states that the maximum considered earthquake geometric mean (MCE_G) Peak Ground Acceleration (PGA) should be used for liquefaction potential. The PGA_M for the site is equal to 0.74g (SEAOC, 2021).

TABLE 2

Seismic Design Parameters

Selected Parameters from 2019 CBC, Section 1613 - Earthquake Loads	Seismic Design Values	Notes/Exceptions
Distance to applicable faults classifies the site as a "Near-Fault" site.		Section 11.4.1 of ASCE 7
Site Class	D*	Chapter 20 of ASCE 7
Ss (Risk-Targeted Spectral Acceleration for Short Periods)	1.63g	From SEAOC, 2021
S_1 (Risk-Targeted Spectral Accelerations for 1-Second Periods)	0.586g	From SEAOC, 2021
F_a (per Table 1613.2.3(1))	1.0	For Simplified Design Procedure of Section 12.14 of ASCE 7, F_a shall be taken as 1.4 (Section 12.14.8.1)
F_v (per Table 1613.2.3(2))	1.714	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{MS} for Site Class D [Note: $S_{MS} = F_aS_S$]	1.63g	-
S_{M1} for Site Class D [Note: $S_{M1} = F_vS_1$]	1.004g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{DS} for Site Class D [Note: $S_{DS} = (^2/_3)S_{MS}$]	1.087g	-
S_{D1} for Site Class D [Note: $S_{D1} = (^2/_3)S_{M1}$]	0.669g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
C_{RS} (Mapped Risk Coefficient at 0.2 sec)	0.941	ASCE 7 Chapter 22
C_{R1} (Mapped Risk Coefficient at 1 sec)	0.918	ASCE 7 Chapter 22
*Since site soils are Site Class D and S_1 is greater than or equal to 0.2, the seismic response coefficient Cs is determined by Eq. 12.8-2 for values of $T \leq 1.5T_s$ and taken equal to 1.5 times the value calculated in accordance with either Eq. 12.8-3 for $T_L \geq T > T_s$, or Eq. 12.8-4 for $T > T_L$. Refer to ASCE 7-16.		

2.7 Organic Rich Soils

Approximately 60 bag soil samples were collected to determine their organic content (based on ASTM 2974). The organic content of the samples ranged from approximately 0.1 to 33.2 percent. In general, the organic content is higher near existing grade and decreases with depth. Table 6 (Appendix C) summarizes the measured organic content and also notes where the

organic content was estimated to be greater than 10% based on observation.

For most of the site there is a distinct contact between high organic content (greater than 5%) and low organic content (less than 2%) at the 1-foot depth. This upper 1-foot of soil across the site requires removal and disposal off-site due to high organic content (greater than 5.0 percent). In a few areas, there is a "transition zone" from 1-foot below the ground surface to approximately 2 feet below the ground surface where the organic content is greater than 2%. Below approximately 2 feet on average is generally free of organics.

There are 4 locations noted on our geotechnical map where appreciable amounts of high organic material is known to be stockpiled above the adjacent ground surface or buried below the ground surface. The depths of high organic material within these areas are noted on the Geotechnical Map (Figure 2). The material noted in these areas will need to be disposed of off-site.

Recommendations for off-site disposal and/or mixing to dilute organics to geotechnically acceptable organic levels (less than 2 percent) are provided in the following "Organic Rich Soil Recommendations" Section 4.1.2.

3.0 CONCLUSIONS

Based on the results of our subsurface geotechnical evaluation, it is our opinion that the proposed improvements are feasible from a geotechnical standpoint, provided that the recommendations contained in the following sections are incorporated during site grading and development. A summary of our geotechnical conclusions are as follows:

- The near-surface loose and compressible soils are not suitable for the planned improvements in their present condition (refer to Section 4.1). Organic rich soils (total organic carbon content generally greater than 2 percent) are not suitable for compacted fill soils from a geotechnical perspective.
- From a geotechnical perspective, onsite soils are anticipated to be suitable for use as general compacted fill provided the high organic content soils (soils with organic content greater than 5 percent) are removed from the site and the remaining soils with organic content between 2 and 5 percent are blended and mixed with "clean" soils and screened of construction debris and any oversized material (8 inches in greatest dimension).
- Records indicate groundwater levels recorded in the area are at depths greater than 100 feet below the ground surface.
- The subject study area is not located within a mapped State of California Earthquake Fault Zone, and based upon our review of published geologic mapping, no known active or potentially active faults are known to exist within or in the immediate vicinity of the site. Therefore, the potential for ground rupture as a result of faulting is considered very low.
- The main seismic hazard that may affect the site is ground shaking from one of the active regional faults. The subject site will likely experience strong seismic ground shaking during its design life.
- Site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet. However, isolated layers are susceptible to dry sand seismic settlement. Total dynamic settlement is estimated to be on the order 0.5-inch or less. Differential settlement may be estimated as half of the total settlement over a horizontal span of 40 feet.
- Based on the results of preliminary laboratory testing, site soils are anticipated to have "Very Low" expansion potential. Final design expansion potential must be determined at the completion of grading.
- Based on the corrosion test results, soils are not considered corrosive per the Caltrans criteria (Caltrans, 2015).
- Excavations into the existing site soils should be feasible with heavy construction equipment in good working order. We anticipate that the sandy and silty earth materials generated from the excavations will be generally suitable for re-use as compacted fill, provided they are relatively free of rocks larger than 8 inches in dimension, construction debris, and significant organic material.
- Some portion of the onsite soils have high fines content; therefore, are not suitable for backfill of site retaining walls. Therefore, import of sandy soils meeting project recommendation is required.
- Field testing resulted in observed infiltration rates ranging from 0.6 to 3.8 inches per hour. The observed infiltration rates do not include a factor of safety. Discussion regarding infiltration is provided in Section 4.8.

4.0 RECOMMENDATIONS

The following recommendations are to be considered preliminary and should be confirmed upon completion of grading and earthwork operations. In addition, they should be considered minimal from a geotechnical viewpoint, as there may be more restrictive requirements from the architect, structural engineer, building codes, governing agencies, or the owner.

It should be noted that the following geotechnical recommendations are intended to provide sufficient information to develop the site in general accordance with the 2019 CBC requirements. With regard to the possible occurrence of potentially catastrophic geotechnical hazards such as fault rupture, earthquake-induced landslides, liquefaction, etc. the following geotechnical recommendations should provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level." The "acceptable level" of risk is defined by the California Code of Regulations as "that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project" [Section 3721(a)]. Therefore, repair and remedial work of the proposed improvement may be required after a significant seismic event. With regards to the potential for less significant geologic hazards to the proposed development, the recommendations contained herein are intended as a reasonable protection against the potential damaging effects of geotechnical phenomena such as expansive soils, fill settlement, groundwater seepage, etc. It should be understood, however, that our recommendations are intended to maintain the structural integrity of the proposed development and structures given the site geotechnical conditions but cannot preclude the potential for some cosmetic distress or nuisance issues to develop as a result of the site geotechnical conditions.

The geotechnical recommendations contained herein must be confirmed to be suitable or modified based on the actual as-graded conditions.

4.1 Site Earthwork

Rough grading shall include removal of high organic content soils, remedial earthwork grading and placement of engineered compacted fill to design grades. Geotechnical recommendations for precise grading and construction of the proposed new improvements will be provided, as necessary.

We recommend that earthwork onsite be performed in accordance with the following recommendations, future grading plan review report(s), the 2019 CBC/City of Eastvale requirements, and the General Earthwork and Grading Specifications for Rough Grading included in Appendix D. In case of conflict, the following recommendations shall supersede those included in Appendix D. The following recommendations may be revised within future grading plan review reports or based on the actual conditions encountered during site grading.

4.1.1 Site Preparation

Prior to grading, areas to be developed should undergo the stripping and clearing of vegetation, high organic content soil removal/export and clearing of surface obstructions, pavements, foundation and slab elements from the site. Vegetation, debris and excessive organic material from livestock holding areas should be removed and properly disposed of offsite. Recommendations for removal of organic rich soils are provided in the following section. Holes resulting from removals of buried obstructions, which extend below proposed remedial and/or finish grades, should be replaced with suitable compacted fill material.

If cesspools or septic systems are encountered, they should be removed in their entirety. The resulting excavation should be backfilled with properly compacted fill soils. As an alternative, cesspools can be backfilled with lean sand-cement slurry. Any encountered wells should be properly abandoned in accordance with regulatory requirements.

4.1.2 Organic Rich Soil Recommendations

We recommend soils with an organic content greater than 5 percent be removed and exported from the site. For most of the site this is the top 1 foot. Figure 2 outlines areas that contains high organic content with more than 1-foot in thickness. Our recommendations are based on the following assumptions; 1) all soils with "high" organic contents greater than 5 percent shall be removed and disposed of off-site, 2) "transitional" soils (soils with organic content ranging from 2 to 5 percent) shall be adequately mixed or blended with the "clean" soils (soils with organic content less than 2.0 percent), and 3) There will be sufficient "clean" soils to dilute the limited "transitional" soils during the grading operation. From a geotechnical perspective, organic content of compacted fill soils should not exceed 2 percent.

After export of the top 1 foot of material, remedial grading as described in the following section should result in organic content of the fill materials to be approximately 1 percent. To satisfy the City's requirement of documenting the organic content in the fill, samples should be collected during grading and tested for organic content.

We recommend the geotechnical consultant be present during grading to observe the mixing of the onsite soils and perform periodic testing of the compacted fill. Organic materials shall be thoroughly mixed such that no nesting of organic materials occurs. Removal of organic materials is to satisfy geotechnical concerns and does not mitigate the potential for methane gas. Some methane gas should be expected after grading especially in former wastewater areas. Methane potential shall be evaluated by others.

4.1.3 Removal Depths and Limits

In order to provide a relatively uniform bearing condition for the planned improvements, we recommend the site soils be removed and recompacted. We recommend that soils within building pads be removed and recompacted to a minimum depth of 5 feet below

existing grade (not below base of organic removal). The envelope for removal and recompaction should extend laterally a minimum distance of 5 feet beyond the edges of the proposed improvements. In areas of design cut, over-excavation shall extend a minimum of 5 feet below existing grade or a minimum of 3 feet below finished grade, whichever is deeper. In the design cut areas, this depth may be reduced if in-place alluvial materials are tested and found to have an in-situ dry density equal or greater than 90 percent relative compaction (based on American Standard of Testing and Materials [ASTM] Test Method D1557) and exhibit uniform conditions. The Remedial Grading Diagram (Figure 5) provides a simplified example of the building pad remedial recommendations.

As shown on the attached Geotechnical Map (Figure 2), there is one isolated area of the site on the eastern edge of the property where removals will extend a minimum of 15 feet to remove a buried stockpile of manure. A representative from LGC geotechnical should be on site to approve the removal bottom to ensure it is acceptable from a geotechnical standpoint, and free of organic content.

For minor site structures such as free-standing and screen walls, the removals should extend at least 3 feet beneath the existing grade or 2 feet beneath the base of foundations, whichever is deeper. Within pavement and hardscape areas, removals should extend to a depth of at least 2 feet below the existing grade. The over-excavation in any design cut areas of the pavement may be reduced by the depth of the design cut but should not be less than 1-foot below the finished subgrade (i.e., below planned aggregate base/asphalt concrete). In general, the envelope for over-excavation should extend laterally a minimum distance of 2 feet beyond the edges of the proposed improvements mentioned above.

Local conditions may be encountered during excavation that could require additional over-excavation beyond the above-noted minimum in order to obtain an acceptable subgrade. The actual depths and lateral extents of grading will be determined by the geotechnical consultant, based on subsurface conditions encountered during grading. Removal areas and areas to be over-excavated should be accurately staked in the field by the Project Surveyor.

4.1.4 Temporary Excavations

Temporary excavations should be performed in accordance with project plans, specifications, and applicable Occupational Safety and Health Administration (OSHA) requirements. Excavations should be laid back or shored in accordance with OSHA requirements before personnel or equipment are allowed to enter. Based on our field investigation, the majority of site soils are anticipated to be OSHA Type "C" soils (refer to the attached boring logs). Sandy soils are present and should be considered susceptible to caving. Soil conditions should be regularly evaluated during construction to verify conditions are as anticipated. The contractor shall be responsible for providing the "competent person" required by OSHA standards to evaluate soil conditions. Close coordination with the geotechnical consultant should be maintained to facilitate construction while providing safe excavations. Excavation safety is the sole responsibility

of the contractor.

Vehicular traffic, stockpiles, and equipment storage should be set back from the perimeter of excavations a minimum distance equivalent to a 1:1(horizontal to vertical) projection from the bottom of the excavation or 5 feet, whichever is greater. Once an excavation has been initiated, it should be backfilled as soon as practical. Prolonged exposure of temporary excavations may result in some localized instability. Excavations should be planned so that they are not initiated without sufficient time to shore/fill them prior to weekends, holidays, or forecasted rain.

It should be noted that any excavation that extends below a 1:1 (horizontal to vertical) projection of an existing foundation will remove existing support of the structure foundation. If requested, temporary shoring parameters will be provided.

4.1.5 Subgrade Preparation

In general, areas to receive compacted fill should be scarified to a minimum depth of 6 inches, brought to a near-optimum moisture condition (generally within optimum and 2 percent above optimum moisture content), and re-compacted per project requirements. Removal bottoms and areas to receive fill should be observed and accepted by the geotechnical consultant prior to subsequent fill placement.

4.1.6 Material for Fill

From a geotechnical perspective, the onsite soils are generally considered suitable for use as general compacted fill, provided they are screened of organic materials, construction debris and any oversized material (8 inches in greatest dimension). From a geotechnical perspective, soils with an organic content of less than 2 percent are generally considered suitable for re-use as compacted fill.

From a geotechnical viewpoint, import soils for general fill (i.e., non-retaining wall backfill) should consist of clean, granular soils of Very Low expansion potential (expansion index 20 or less based on ASTM D4829). Import for retaining wall backfill should meet the criteria outlined in the paragraph below. Source samples should be provided to the geotechnical consultant for laboratory testing a minimum of three working days prior to any planned importation.

Retaining wall backfill should consist of granular free draining soils (sand equivalent of 30 or greater as determined by ASTM D2419 or CTM 217). Soils should also be screened of organic materials, construction debris, and any material greater than 3 inches in maximum dimension. The onsite soils are not considered suitable for retaining wall backfill due to their fines content (i.e., silt and clay content). Therefore, import of suitable soils meeting the criteria outlined above will be required.

Aggregate base should conform to the requirements of Section 200-2 of the most recent version of the Standard Specifications for Public Works Construction ("Greenbook") for

untreated base materials and/or City of Ontario requirements. It is our understanding that the City of Ontario only allows crushed aggregate base (CAB) and crushed miscellaneous base (CMB) is not allowed.

4.1.7 Placement and Compaction of Fills

Material to be placed as fill should be brought to near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content) and recompacted to at least 90 percent relative compaction (per ASTM D1557). Moisture conditioning of site soils will be required in order to achieve adequate compaction. Drying and/or mixing the very moist soils will be required prior to reusing the materials in compacted fills. Soils are also present that will require additional moisture in order to achieve the required compaction.

The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches in compacted thickness. Each lift should be thoroughly compacted and accepted prior to subsequent lifts. Generally, placement and compaction of fill should be performed in accordance with local grading ordinances and with observation and testing by LGC Geotechnical. Oversized material as previously defined should be removed from site fills.

During backfill of excavations, the fill should be properly benched into firm and competent soils of temporary backcut slopes as it is placed in lifts.

Aggregate base material should be compacted to a minimum of 95 percent relative compaction at or slightly above optimum moisture content per ASTM D1557. Subgrade below aggregate base should be compacted to a minimum of 90 percent relative compaction per ASTM D1557 at near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content).

4.1.8 Trench and Retaining Wall Backfill and Compaction

The onsite soils may generally be suitable as trench backfill, provided the soils are screened of rocks and other material greater than 6 inches in diameter and organic matter. If trenches are shallow or the use of conventional equipment may result in damage to the utilities, sand having a sand equivalent (SE) of 30 or greater (per California Test Method [CTM] 217) may be used to bed and shade the pipes. Sand backfill within the pipe bedding zone may be densified by jetting or flooding and then tamping to ensure adequate compaction. Subsequent trench backfill should be compacted in uniform thin lifts by mechanical means to at least the recommended minimum relative compaction (per ASTM D1557).

Retaining wall backfill should consist of sandy soils as outlined in preceding Section 4.1.6. The contractor should anticipate the importing of soils for the required retaining wall backfill. The limits of select sandy backfill should extend a minimum ½ the height of the

retaining wall or the width of the heel (if applicable), whichever is greater, refer to Figures 3 and 4 (rear of text). Retaining wall backfill soils should be compacted in relatively uniform thin lifts to at least 90 percent relative compaction (per ASTM D1557). Jetting or flooding of retaining wall backfill materials should not be permitted.

A representative from LGC Geotechnical should observe, probe, and test the backfill to verify compliance with the project recommendations.

4.1.9 Shrinkage and Subsidence

Allowance in the earthwork volumes budget should be made for an estimated 0 to 5 percent reduction in volume of near-surface (upper approximate 5 feet) soils. It should be stressed that these values are only estimates and that an actual shrinkage factor would be extremely difficult to predetermine. Subsidence due to earthwork equipment is expected to be up to 0.1 feet. These values are estimates only and exclude losses due to removal of vegetation or debris. The effective change in volume of onsite soils will depend primarily on the type of compaction equipment, method of compaction used onsite by the contractor, and accuracy of the topographic survey.

Due to the combined variability in topographic surveys, inability to precisely model the removals and variability of on-site near-surface conditions, it is our opinion that the site will not balance at the end of grading. If importing/exporting a large volume of soils is not considered feasible or economical, we recommend a balance area be designated onsite that can fluctuate up or down based on the actual volume of soil. We recommend a "balance" area that can accommodate on the order of 5 percent (plus or minus) of the total grading volume be considered.

4.2 Preliminary Foundation Recommendations

Provided that the remedial grading recommendations provided herein are implemented, the site may be considered suitable for the support of the residential structures using a conventional or post-tensioned foundation system. Site soils are anticipated to be "Very Low" expansion potential (EI of 20 or less per ASTM D4829) and special design considerations from a geotechnical perspective is not required, however, this must be verified based on as-graded conditions. Please note that the following foundation recommendations are preliminary and must be confirmed by LGC Geotechnical.

Preliminary foundation recommendations are provided in the following sections. Recommended soil bearing and estimated settlement due to structural loads are provided in Section 4.3.

4.2.1 Provisional Conventional Foundation Design

Due to the very low expansion potential of the onsite soils, the foundation/structural engineer may design a conventional foundation system that is tied together based upon the anticipated dead and live loads (wind, seismic) that will be imparted by the

structure. The recommendations provided in the "Soil Bearing and Lateral Resistance" section may be utilized in the design of a rigid slab-on-grade conventional foundation designed in accordance with Section 1808 of the 2019 C.B.C.

4.2.2 Provisional Post-Tensioned Foundation Design Parameters

The foundation designer may use a modulus of vertical subgrade reaction (k) of 200 pounds per cubic inch (pounds per square inch per inch of deflection). This value is for a 1-foot by 1-foot square loaded area and should be adjusted by the structural designer for the area of the proposed footing using the following formula:

$k = 200 \times [(B+1)/2B]^2$
k = modulus of vertical subgrade reaction, pounds per cubic inch (pci)
B = foundation width (feet)

The moisture content of near surface fill soils should be maintained at the level it was placed up to the time of concrete placement.

4.2.3 Shallow Foundation Maintenance

The geotechnical parameters provided herein assume that if the areas adjacent to the foundation are planted and irrigated, these areas will be designed with proper drainage and adequately maintained so that ponding, which causes significant moisture changes below the foundation, does not occur. Our recommendations do not account for excessive irrigation and/or incorrect landscape design. Plants should only be provided with sufficient irrigation for life and not overwatered to saturate subgrade soils. Sunken planters placed adjacent to the foundation, should either be designed with an efficient drainage system or liners to prevent moisture infiltration below the foundation. Some lifting of the perimeter foundation beam should be expected even with properly constructed planters.

In addition to the factors mentioned above, future owners/property management personnel should be made aware of the potential negative influences of trees and/or other large vegetation. Roots that extend near the vicinity of foundations can cause distress to foundations. Future owners (and the owner's landscape architect) should not plant trees/large shrubs closer to the foundations than a distance equal to half the mature height of the tree or 20 feet, whichever is more conservative unless specifically provided with root barriers to prevent root growth below the building foundation.

It is the owner's responsibility to perform periodic maintenance during hot and dry periods to ensure that adequate watering has been provided to keep soil from separating or pulling back from the foundation. Future owners and property management personnel should be informed and educated regarding the importance of maintaining a constant level of soil-moisture. The owners should be made aware of the potential negative consequences of both excessive watering, as well as allowing potentially expansive soils to become too dry. Expansive soils can undergo shrinkage

during drying, and swelling during the rainy winter season, or when irrigation is resumed. This can result in distress to building structures and hardscape improvements. The builder should provide these recommendations to future owners and property management personnel.

4.2.4 Slab Underlayment Guidelines

The following is for informational purposes only since slab underlayment (e.g., moisture retarder, sand or gravel layers for concrete curing and/or capillary break) is unrelated to the geotechnical performance of the foundation and thereby not the purview of the geotechnical consultant. Post-construction moisture migration should be expected below the foundation. The foundation engineer/architect should determine whether the use of a capillary break (sand or gravel layer), in conjunction with the vapor retarder, is necessary or required by code. Sand layer thickness and location (above and/or below vapor retarder) should also be determined by the foundation engineer/architect.

4.3 Soil Bearing and Lateral Resistance

Provided our earthwork recommendations are implemented, an allowable soil bearing pressure of 2,000 pounds per square foot (psf) may be used for the design of footings having a minimum width of 12 inches and minimum embedment of 15 inches below lowest adjacent ground surface. This value may be increased by 400 psf for each additional foot of embedment and 200 psf for each additional foot of foundation width to a maximum value of 3,000 psf. A mat foundation a minimum of 6 inches below lowest adjacent grade may be designed for an allowable soil bearing pressure of 1,200 psf. These allowable bearing pressures are applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Bearing values indicated are for total dead loads and frequently applied live loads and may be increased by ⅓ for short duration loading (i.e., wind or seismic loads).

Soil settlement is a function of footing dimensions and applied soil bearing pressure. In utilizing the above-mentioned allowable bearing capacity, assumed structural loads, and provided our earthwork recommendations are implemented, foundation settlement due to structural loads is anticipated to be on the order of 1-inch or less and ½-inch over a horizontal span of 40 feet for total and differential settlement, respectively. Differential settlement should be anticipated between nearby columns or walls where a large differential loading condition exists Furthermore, seismic settlement due to dry-sand settlement is anticipated to be 0.5 inches or less. Differential seismic settlement may be taken as half of the seismic settlement (i.e., ¼-inch over a horizontal span of 40 feet).

Resistance to lateral loads can be provided by friction acting at the base of foundations and by passive earth pressure. For concrete/soil frictional resistance, an allowable coefficient of friction of 0.35 may be assumed with dead-load forces. An allowable passive lateral earth pressure of 270 psf per foot of depth (or pcf) to a maximum of 2,700 psf may be used for the sides of footings poured against properly compacted fill. Allowable passive pressure may be increased to 360 pcf (maximum of 3,600 psf) for short duration seismic loading. This passive pressure is applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Frictional resistance and

passive pressure may be used in combination without reduction. We recommend that the upper foot of passive resistance be neglected if finished grade will not be covered with concrete or asphalt. The provided allowable passive pressures are based on a factor of safety of 1.5 and 1.1 for static and seismic loading conditions, respectively. The structural designer should incorporate appropriate factors of safety and/or load factors in their design.

4.4 Lateral Earth Pressures and Retaining Wall Design Considerations

Lateral earth pressures are provided as equivalent fluid unit weights, in pound per square foot (psf) per foot of depth or pcf. The values for the active condition do not contain an appreciable factor of safety, so the retaining wall designer should apply the applicable factors of safety and/or load factors during design. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of soil over the wall footing.

Lateral earth pressures are presented in Table 2. Table 2 contains values for approved select sandy backfill for both drained and undrained conditions. Typically, retaining walls are designed for a drained condition with select sandy soils used as backfill. Should retaining walls have constraints limiting the ability to install or drain or appropriately outlet a drain, the values for undrained conditions should be used. Approved select sandy soils should have a sand equivalent of 30 or greater as determined by ASTM D2419.

The retaining wall designer should clearly indicate on the retaining wall plans if drains are required.

TABLE 3

Lateral Earth Pressures – Select Sand Backfill

Condition	**Equivalent Fluid Weight (pcf)**	
	Level Backfill	
	Approved Sandy Backfill Material - Drained	**Approved Sandy Backfill Material - Undrained**
Active	35	80

The drained equivalent fluid pressure values assume free-draining conditions and a drainage system will be installed and maintained to prevent the build-up of hydrostatic pressures. A relatively sandy backfill along with a subdrain pipe wrapped in drainage aggregate and filter fabric (e.g., “burrito” subdrain) properly outletted to a suitable discharge point is typically used for conventional retaining walls. Retaining wall structures should be provided with appropriate drainage and appropriately waterproofed. Typical conventional (i.e., backfilled) retaining wall drainage is shown in Figure 3. At similar sites, wall drainage through the face has been a preferred option. For this condition wall drainage is shown in Figure 4. If conditions other than

those assumed above are anticipated, the equivalent fluid pressure values should be provided on an individual-case basis by the geotechnical consultant.

Surcharge loading effects from any adjacent structures should be evaluated by the retaining wall designer. In general, structural loads within a 1:1 (horizontal to vertical) upward projection from the bottom of the proposed retaining wall footing will surcharge the proposed retaining structure. Uniform surcharges may be estimated using the applicable coefficient of lateral earth pressure using a rectangular distribution. A factor of 0.5 and 0.33 may be used for at-rest and active conditions, respectively. The retaining wall designer should contact the geotechnical engineer for any required geotechnical input in estimating any applicable surcharge loads.

If required, the retaining wall designer may use a seismic lateral earth pressure increment of 5 pcf for retaining walls up to a maximum of 10 feet in height with level backfill. This increment should be applied in addition to the applicable static lateral earth pressure using a triangular distribution with the resultant acting at H/3 in relation to the base of the retaining structure (where H is the retained height). For the restrained, at-rest condition, the seismic increment may be added to the applicable active lateral earth pressure (in lieu of the at-rest lateral earth pressure) when analyzing short duration seismic loading. Per Section 1803.5.12 of the 2019 CBC, the seismic lateral earth pressure is applicable to structures assigned to Seismic Design Category D through F for retaining wall structures supporting more than 6 feet of backfill height. This seismic lateral earth pressure is estimated using the procedure outlined by the Structural Engineers Association of California (Lew, et al, 2010). The provided seismic lateral earth pressure is for a level backfill condition and a maximum of 10 feet in height; a sloping backfill condition and greater retaining wall heights are not anticipated. However, if a sloping backfill condition or retaining walls greater than 10 feet in height are proposed, the retaining wall designer should contact the geotechnical engineer for specific seismic lateral earth pressure increments based on the configuration of the planned retaining wall structures.

For soil bearing and lateral resistance (friction coefficient and passive resistance) is provided in Section 4.3 “Soil Bearing and Lateral Resistance”. Earthwork considerations (temporary backcuts, backfill, compaction, etc.) for retaining walls are provided in Section 4.1 “Site Earthwork” and the subsequent earthwork related sub-sections.

4.5 Corrosivity to Concrete and Metal

Although not corrosion engineers (LGC Geotechnical is not a corrosion consultant), several governing agencies in Southern California require the geotechnical consultant to determine the corrosion potential of soils to buried concrete and metal facilities. We therefore present the results of our testing with regard to corrosion for the use of the client and other consultants, as they determine necessary.

Corrosion testing of near-surface bulk samples indicated a soluble sulfate content value of 78 ppm (less than 0.02 percent) and a chloride content of 100 ppm. Based on Caltrans Corrosion Guidelines (2015), soils are considered corrosive if the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater. Based on the test results, soils are not considered corrosive using Caltrans criteria.

Based on our laboratory test results of representative site soil samples, onsite soils should be considered as having a severity categorization of "not applicable" and are designated class "S0" per ACI 318, Table 19.3.1.1, sulfate. As a result, the minimum compressive strength of the concrete shall be 2,500 psi.

Laboratory testing may need to be performed at the completion of grading by the project corrosion engineer to further evaluate the as-graded soil corrosivity characteristics. Accordingly, revision of the corrosion potential may be needed, should future test results differ substantially from the conditions reported herein. The client and/or other members of the development team should consider this during the design and planning phase of the project and formulate an appropriate course of action.

4.6 Preliminary Asphalt Concrete Pavement Sections

For the purposes of these preliminary recommendations, we have selected a preliminary design R-value of 40 and calculated pavement sections for Traffic Indices of 5.5, 6.0 and 6.5. R-value testing of the street subgrade will need to be performed to confirm our preliminary testing results/assumptions once the streets have been graded to finish subgrade elevations and the final Traffic Index is determined by the Civil Engineer. It is our understanding that the City of Ontario requires that local streets have a minimum pavement section consisting of 4 inches of asphalt over 6 inches of crushed aggregate base (CAB).

TABLE 4

Preliminary Pavement Sections

Assumed Traffic Index	5.5	6.0	6.5
R -Value Subgrade	40	40	40
AC Thickness	4.0 inches	4.0 inches	4.0 inches
CAB Thickness	6.0 inches	6.0 inches	6.0 inches

Increasing the thickness of asphalt or adding additional base material will reduce the likelihood of the pavement experiencing distress during its service life. The above recommendations are based on the assumption that proper maintenance and irrigation of the areas adjacent to the roadway will occur through the design life of the pavement. Failure to maintain a proper maintenance and/or irrigation program may jeopardize the integrity of the pavement.

Earthwork recommendations regarding aggregate base and subgrade are provided in the previous Section "Site Earthwork" and the related sub-sections of this report.

4.7 Nonstructural Concrete Flatwork

Nonstructural concrete (such as flatwork, sidewalks, patios, etc.) has a potential for cracking due to changes in soil volume related to soil-moisture fluctuations. To reduce the potential for excessive cracking and lifting, concrete should be designed in accordance with the minimum guidelines outlined in Table 5 below. These guidelines will reduce the potential for irregular cracking and promote cracking along construction joints but will not eliminate all cracking or lifting. Thickening the concrete and/or adding additional reinforcement will further reduce cosmetic distress.

TABLE 5

Preliminary Geotechnical Parameters for Nonstructural Concrete Flatwork Placed on Very Low to Low Expansion Potential Subgrade

	Homeowner Sidewalks	**Private Drives**	**Patios/Entryways**	**City Sidewalk Curb and Gutters**
Minimum Thickness (in.)	4 (nominal)	4 (full)	4 (full)	City/Agency Standard
Presoaking	Wet down prior to placing	Wet down prior to placing	Wet down prior to placing	City/Agency Standard
Reinforcement	—	No. 3 at 24 inches on centers	No. 3 at 24 inches on centers	City/Agency Standard
Thickened Edge (in.)	—	8 x 8	—	City/Agency Standard
Crack Control Joints	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	City/Agency Standard
Maximum Joint Spacing	5 feet	10 feet or quarter cut whichever is closer	6 feet	City/Agency Standard
Aggregate Base Thickness (in.)	—	—	—	City/Agency Standard

To reduce the potential for driveways to separate from the garage slab, the builder may elect to install dowels to tie these two elements together. Similarly, future homeowners should

consider the use of dowels to connect flatwork to the foundation.

4.8 Subsurface Water Infiltration

Recent regulatory changes have occurred that mandate storm water be infiltrated below grade rather than collected in a conventional storm drain system. Typically, a combination of methods are implemented to reduce surface water runoff and increase infiltration including; permeable pavements/pavers for roadways and walkways, directing surface water runoff to grass-lined swales, retention areas, and/or drywells, etc. It should be noted that collecting and concentrating surface water for the purpose of intentionally infiltrating below grade, conflicts with the geotechnical engineering objective of directing surface water away from slopes, structures and other improvements. The geotechnical stability and integrity of a site is reliant upon appropriately handling surface water. In general, we do not recommend that surface water be intentionally infiltrated into the subsurface soils.

Considering the results of the infiltration testing, if required, stormwater may be infiltrated into the subsurface soils at the depths tested below existing grade, using the values presented in Table 1 and the appropriate County of Riverside Flood Control (2011) safety factors. The Civil Engineer should determine the appropriate safety factor applicable to the proposed infiltration system. Results of field infiltration testing are provided in Appendix D.

The following should be considered for design of any required infiltration system:

- Water discharge from any infiltration systems should not occur within the zone of influence of foundation footings (column and load bearing wall locations). For preliminary purposes we recommend a minimum setback of 15 feet from the structural improvements, or the County recommended minimum setback, whichever is more conservative.
- An adequate setback distance between any infiltration facility and adjacent private property should be maintained.
- It may be prudent to provide an overflow system directly connected to the storm drain system in order to prevent failure of the infiltration system, either as a result of lower than anticipated infiltration and/or very high flow volumes. It should be noted that if pretreatment of runoff to remove debris, soil particles, etc., cannot be performed, design infiltration rates may need to be further reduced. Over time, siltation and plugging may reduce the infiltration rate and subsequent effectiveness of the infiltration system.
- Any designed infiltration system will require routine periodic maintenance.
- As with any systems that are designed to concentrate the surface flow and direct the water into the subsurface soils, some type of nuisance water and/or other water-related issues should be expected.

LGC Geotechnical should be provided with details for any planned required infiltration system early in the design process for geotechnical input.

4.9 Control of Surface Water and Drainage Control

From a geotechnical perspective, we recommend that compacted finished grade soils adjacent to proposed structures be sloped away from the proposed structures and towards an approved drainage device or unobstructed swale. Drainage swales, wherever feasible, should not be constructed within 5 feet of buildings. Where lot and building geometry necessitates that drainage swales be routed closer than 5 feet to structural foundations, we recommend the use of area drains together with drainage swales. Drainage swales used in conjunction with area drains should be designed by the project civil engineer so that a properly constructed and maintained system will prevent ponding within 5 feet of the foundation. Code compliance of grades is not the purview of the geotechnical consultant.

Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided.

4.10 Supplemental Field Explorations

It should be noted that a portion in the northwestern corner of the site was not accessible at the time of our field evaluation (see Figure 2). This area was not explored and did not receive testing for near surface organic rich soils. We recommend performing a future evaluation addressing the organic content of the area prior to the export of high organic "soils" from the site.

4.11 Geotechnical Plan Review

Project plans (grading, foundation, etc.) should be reviewed by this office prior to construction to verify that our geotechnical recommendations have been incorporated. Additional or modified geotechnical recommendations may be required based on the proposed layout.

4.12 Geotechnical Observation and Testing

The recommendations provided in this report are based on limited subsurface observations and geotechnical analysis. The interpolated subsurface conditions should be checked in the field during construction by a representative of LGC Geotechnical. Geotechnical observation and testing is required per Section 1705 of the 2019 California Building Code (CBC).

Geotechnical observation and/or testing should be performed by LGC Geotechnical at the following stages:

- During grading (removal bottoms, fill placement, etc.);
- During retaining wall backfill and compaction;
- During utility trench backfill and compaction;

- After presoaking building pad and other concrete-flatwork subgrades, and prior to placement of aggregate base or concrete;
- Preparation of pavement subgrade and placement of aggregate base;
- After building and wall footing excavation and prior to placement of steel reinforcement and/or concrete; and
- When any unusual soil conditions are encountered during any construction operation subsequent to issuance of this report.

5.0 LIMITATIONS

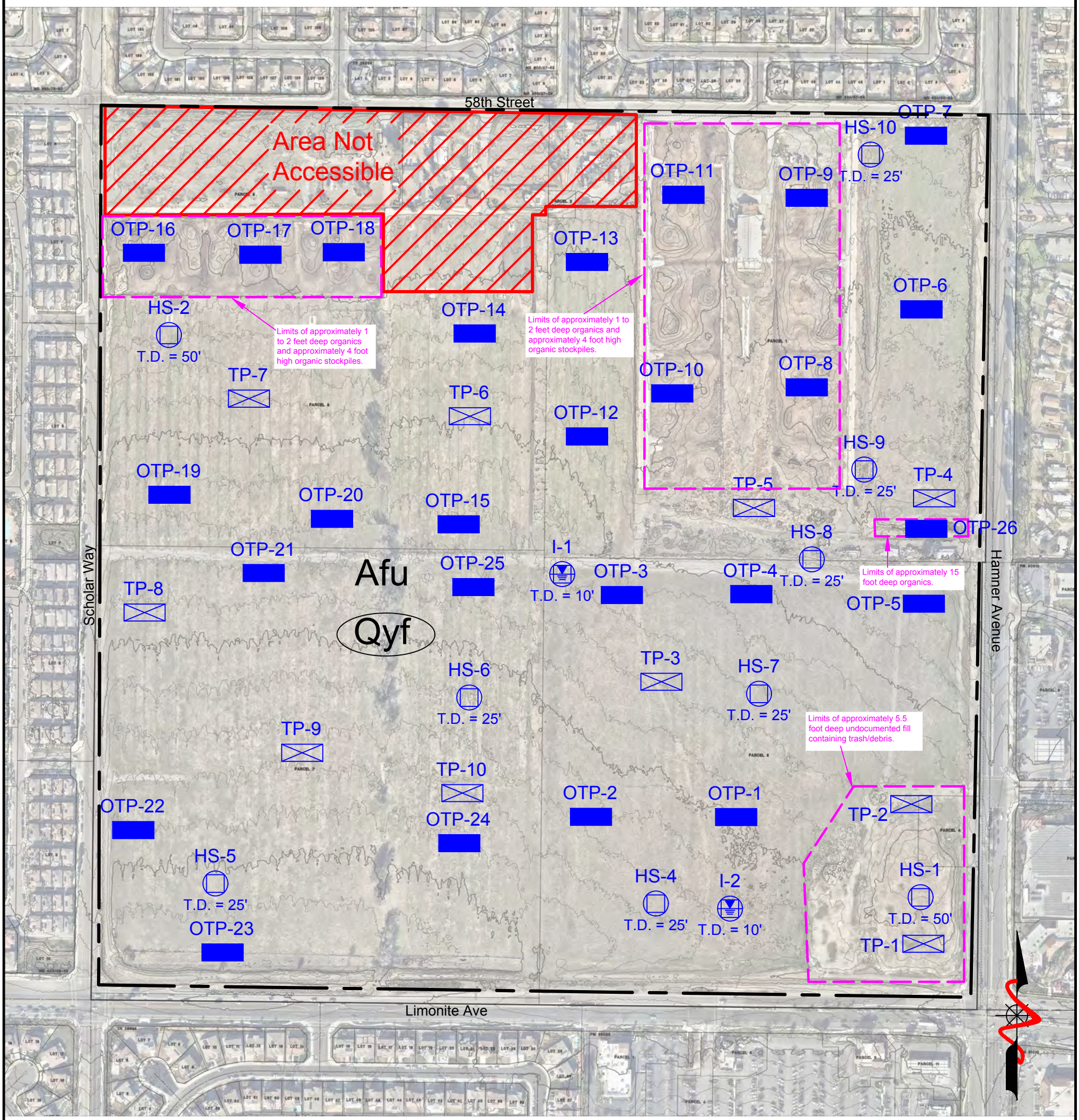
Our services were performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable soils engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

This report is based on data obtained from limited observations of the site, which have been extrapolated to characterize the site. While the scope of services performed is considered suitable to adequately characterize the site geotechnical conditions relative to the proposed development, no practical evaluation can completely eliminate uncertainty regarding the anticipated geotechnical conditions in connection with a subject site. Variations may exist and conditions not observed or described in this report may be encountered during grading and construction.

This report is issued with the understanding that it is the responsibility of the owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of the other consultants (at a minimum the civil engineer, structural engineer, landscape architect) and incorporated into their plans. The contractor should properly implement the recommendations during construction and notify the owner if they consider any of the recommendations presented herein to be unsafe, or unsuitable.

The findings of this report are valid as of the present date. However, changes in the conditions of a site can and do occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. The findings, conclusions, and recommendations presented in this report can be relied upon only if LGC Geotechnical has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site. This report is intended exclusively for use by the client, any use of or reliance on this report by a third party shall be at such party's sole risk.

In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and modification.



Legend

SCALE: 1"=300'

300' 0 300' 600'

Afu	Artificial Fill - Undocumented
Qyf	Quaternary Alluvial Fan/Eolian Deposits - Undifferentiated (Circled Where Buried)
----	Approximate Limits of This Report
OTP-26	Approximate Location of Organic Test Pit
TP-10	Approximate Location of Geotechnical Test Pit
HS-10 T.D. = 25'	Approximate Location of Hollow Stem Auger Boring by LGC Geotechnical, Inc, with Total Depth in Feet
I-2 T.D. = 10'	Approximate Location of Hollow Stem Auger Infiltration Boring by LGC Geotechnical, Inc, with Total Depth in Feet

LGC Geotechnical, Inc.
131 Calle Iglesia, Ste. 200
San Clemente, CA 92672
TEL (949) 369-6141 FAX (949) 369-6142

FIGURE 2
Geotechnical Map

PROJECT NAME	TNHC - Eastvale
PROJECT NO.	21116-01
ENG. / GEOL.	BJE / BPG
SCALE	1" = 300'
DATE	June 2021

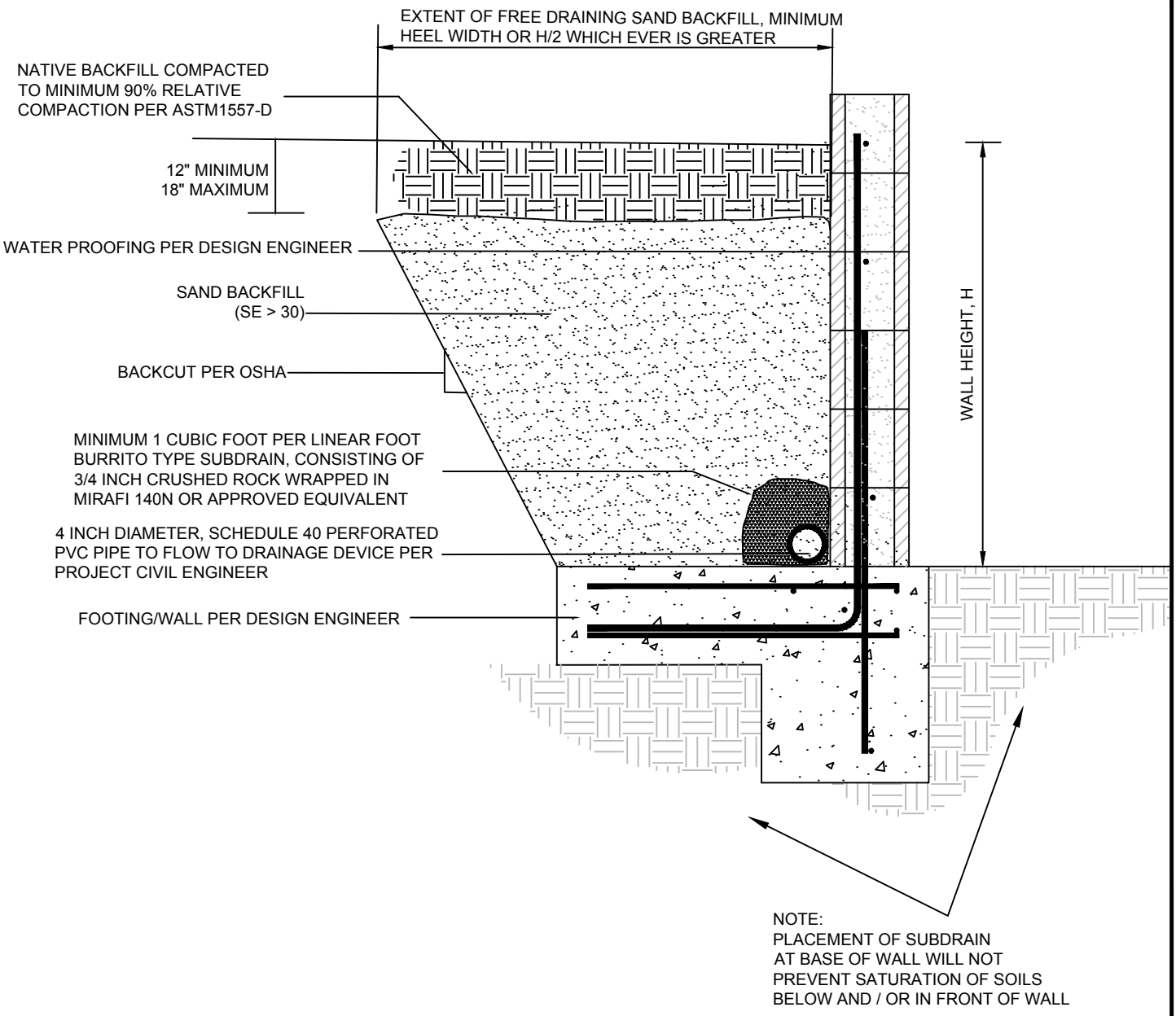


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FIGURE 3
Retaining Wall Backfill Detail Option 1

PROJECT NAME	The New Home Company - Eastvale
PROJECT NO.	21116-01
ENG./GEO.	BJE/BPG
SCALE	Not to Scale
DATE	June 2021

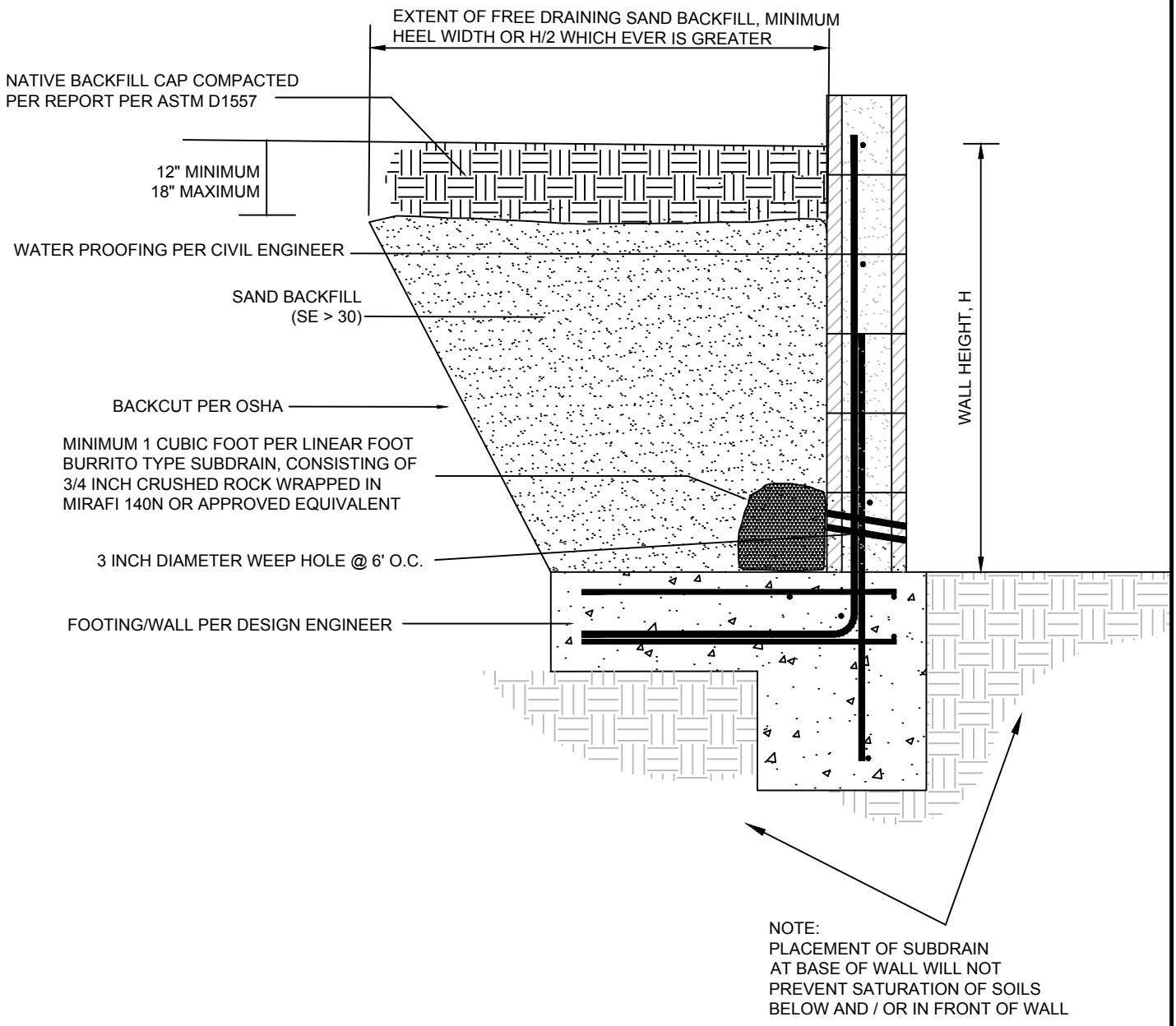

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FIGURE 4
Retaining Wall Backfill Detail Option 2

PROJECT NAME	The New Home Company - Eastvale
PROJECT NO.	21116-01
ENG./GEO.	BJE/BPG
SCALE	Not to Scale
DATE	June 2021

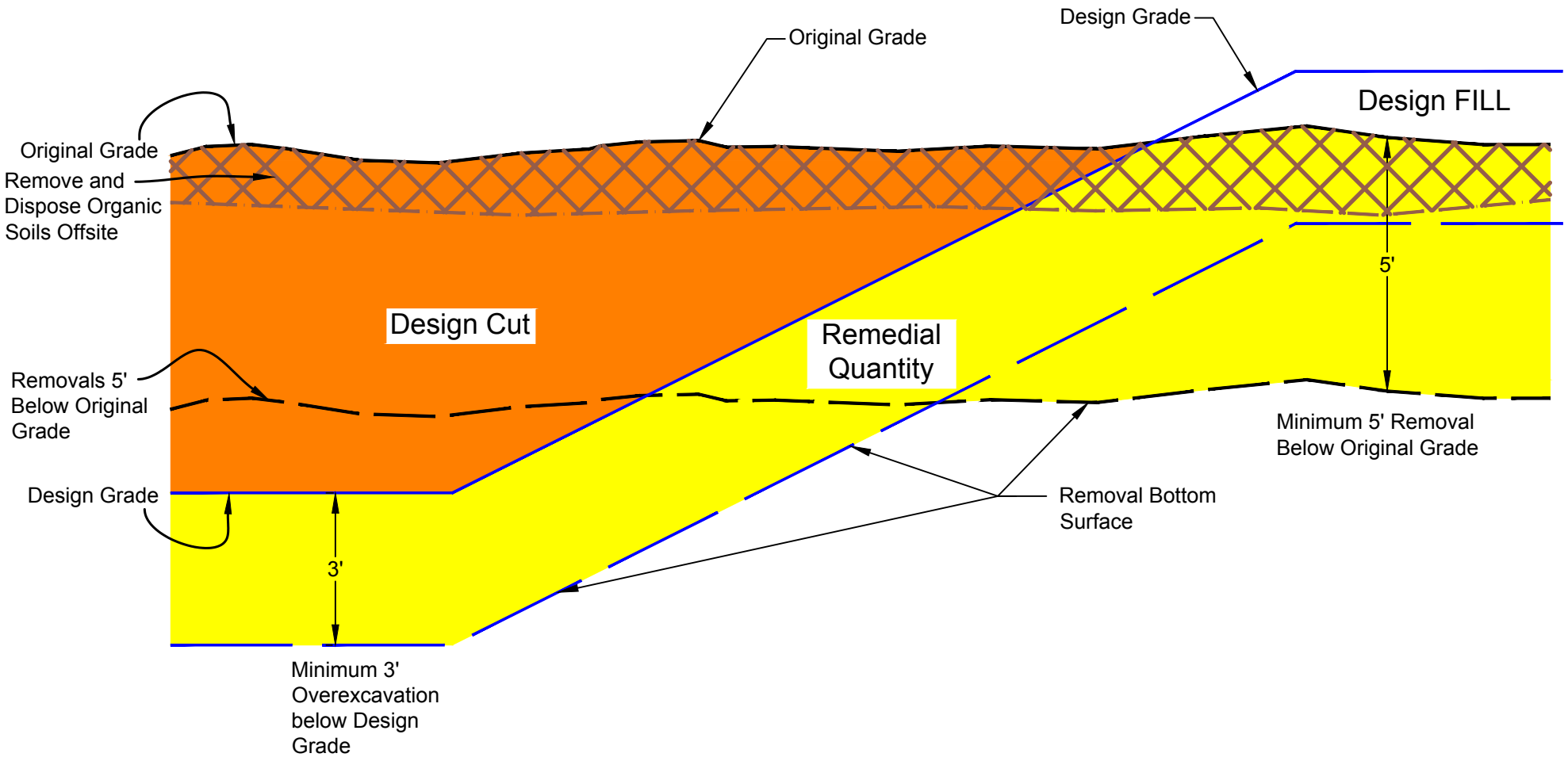

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FIGURE 5
Remedial Grading Diagram

PROJECT NAME	The New Home Company - Eastvale
PROJECT NO.	21116-01
ENG. / GEOL.	BJE/BPG
SCALE	NTS
DATE	June 2021

Appendix A
References

APPENDIX A

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Appendix B
Boring, CPT & Geotechnical Trench Logs

Geotechnical Boring Log Borehole HS-1

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~671' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 2

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
670	0							**@ 0 to 7.5' - <u>Undocumented Artificial Fill (Afu)</u>**	
			R-1	18 20 28	116.7	4.2	SM	@2.5' Silty SAND: light brown, slightly moist, dense	
665	5	B-1	SPT-1	4 6 9		2.9	SP	@5' SAND: gray to brown, slightly moist, medium dense **@ 7.5' to 40' - <u>Quaternary Young Alluvial Fan deposits (Qyf)</u>**	
			R-2	4 9 12				@7.5' Silty SAND: brown, slightly moist, medium dense	
660	10		SPT-2	2 7 9		10.7	SM	@10' Silty SAND: olive brown, slightly moist, medium dense	
655	15		R-3	7 18 22	110.6	13.3		@15' Silty SAND: orangish olive brown, slightly moist, medium dense	
650	20		SPT-3	6 9 9		21.3	CL	@20' CLAY with sand: light brown, moist, medium dense	
645	25		R-4	8 15 22	115.0	17.4	SM	@25' Silty SAND w/ Clay: brown, moist, medium dense	
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-1

Date: 5/21/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~671' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
640	30		SPT-4	3 5 7		23.5	CL	@30' Sandy Lean CLAY: brown, moist, medium dense	
635	35		R-5	8 10 15	103.3	23.2	CL	@35' Sandy Lean CLAY: light brown, moist, very stiff	
								@ 40' to T.D. - <u>Quaternary Very Old Alluvial Channel deposits (Qvoa)</u>	
630	40		SPT-5	10 18 20		9.2	SC	@40' Clayey SAND: orange brown, moist, dense	
625	45		R-6	15 19 27	120.2	15.3	SM/ML	@45' Silty SAND/Sandy SILT: reddish brown, moist, dense	
620	50		SPT-6	16 19 25		9.1	SM	@50' Silty SAND: orangish brown, moist, very dense	
615	55							Total Depth = 51.5' Groundwater Not Encountered Backfilled with Cuttings on 5/21/2021	
	60								

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SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

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MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Geotechnical Boring Log Borehole HS-2

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~673' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 2

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							**@0' to 5' <u>Artificial Undocumented Fill</u>**	
670			R-1	9 11 18	104.1	5.4	SM	@2.5' Silty SAND with Gravel: light gray, slightly moist, medium dense	
								@5' to T.D. <u>Quaternary Young Alluvial Fan Deposits</u>	
	5	B-1	SPT-1	6 9 13		11.7	SM/ML	@5' Sandy SILT: light gray, slightly moist, very stiff	
665			R-2	12 15 21	118.8	14.1	SM	@7.5' Silty SAND: grayish light brown, slightly moist, medium dense	
	10		SPT-2	9 9 15		13.6		@10' Silty SAND: grayish light brown, moist, medium dense	
660									
	15		R-3	9 12 19	122.1	8.5		@15' Silty SAND: brown, moist, medium dense	
655									
	20		SPT-3	10 12 15		3.7	SP	@20' SAND with Gravel: grayish light brown, moist, dense, poorly graded	
650									
	25		R-4	12 15 19	99.7	14.9	SP/SM	@25' Silty CLAY transition to Silty SAND to Sandy SILT: olive gray to orangish brown, moist, verty stiff to medium dense	
645									
	30								

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THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

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MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-2

Date: 5/21/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~673' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	30		SPT-4	9 9 12		20.2	SC	@30' Clayey SAND: orangish light brown, moist, medium dense	
640									
	35		R-5	9 12 20	111.7	16.9	SM	@35' Silty SAND to Sandy SILT: brown, moist, medium dense to very stiff	
635									
	40		SPT-5	12 15 21		19.6	CL	@40' Sandy Lean CLAY: brown, moist, dense	
630									
	45		R-6	27 25 50/4"	118.5	6.0	SP	@45' SAND: brown, moist, very dense, poorly graded	
625									
	50		SPT-6	8 12 15		28.3	CL	@50' CLAY w/ Sand: light brown, moist, hard	
620								Total Depth = 51.5' Groundwater Not Encountered Backfilled with Cuttings on 5/21/2021	
	55								
615									
	60								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Geotechnical Boring Log Borehole HS-3

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~667' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
665	0	B-1	R-1	12 28 34	116.3	5.2	SM	**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D. Quaternary Young Fan Deposits (Qyf)** @2.5' Silty SAND: light gray, slightly moist, dense	
	5		SPT-1	10 12 15		6.8		@5' Silty SAND: light gray, slightly moist, dense	
660			R-2	10 15 19	103.2	3.2	SM	@7.5' Silty SAND: light gray, slightly moist, medium dense	
	10		SPT-2	7 9 11		2.1	SP	@10' SAND: grayish light brown, slightly moist, medium dense	
655									
	15		R-3	13 19 22	105.5	12.6	SC	@15' Clayey SAND: orangish light brown, slightly moist, dense	
650									
	20		SPT-3	8 12 16		22.2	ML	@20' Sandy SILT: light brown, moist, dense	
645									
	25		R-4	9 12 13	105.8	22.7	ML	@25' Sandy SILT: light brown, moist, medium dense	
640								Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/21/2021	
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
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S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-4

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~663' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By MJG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
660	0	B-1	R-1	8 8 13	106.7	1.9	SM	**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D. Quaternary Young Fan Deposits (Qyf)** @2.5' Silty SAND: light brown, slightly moist, medium dense	
	5		SPT-1	6 7 9		4.0		@5' Silty SAND: grayish light brown, slightly moist, medium dense	
655			R-2	12 15 21	114.8	7.0	CL	@7.5' Sandy CLAY: grayish light brown, slightly moist, medium dense	
	10		SPT-2	6 9 11		12.3	SM	@10' Silty SAND: light brown, slightly moist, medium dense	
650									
	15		R-3	12 18 20	107.7	8.0	SC	@15' Clayey SAND: light brown, slightly moist, medium dense	
645									
	20		SPT-3	9 10 15		32	CL	@20' CLAY: light brown, moist, medium dense to very stiff	
640									
	25		R-4	12 50/5"	118.9	12.8	CL	@25' Sandy CLAY: brown, moist, hard to very dense	
635								Total Depth = 26' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	
	30								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-5

Date: 5/24/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~659' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By MJG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D. Quaternary Young Fan Deposits (Qyf)**	
			R-1	9 14 17	108.3	2.9	SM	@2.5' Silty SAND: grayish light brown, slightly moist, medium dense	
655									
	5	B-1	SPT-1	5 9 9		8.2	SM	@5' Silty SAND: light brown, slightly moist, medium dense	
			R-2	8 12 14	103.0	13.1	SC	@7.5' Clayey SAND: light brown, slightly moist, medium dense	
650									
	10		SPT-2	4 4 6		25.2	ML	@10' Sandy SILT: olive light brown, moist, medium dense to stiff	
645									
	15		R-3	27 38 50/4"	113.2	1.5	SP	@15' Poorly Graded SAND: light gray, slightly moist, very dense	
640									
	20		SPT-3	4 5 6		25.4	ML	@20' Sandy SILT: brown, moist, stiff to medium dense	
635									
	25		R-4	9 12 18	103.0	18.9	SC	@25' Clayey SAND: brown, moist, very stiff to medium dense	
630	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

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THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-6

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~665' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map |

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							**@0' to 2.5' Undocumented Artificial Fill (Afu)**	
								@2.5' to T.D.' Quaternary Young Fan Deposits (Qyf)	
			R-1	7 9 9	115.3	5.1	ML	@2.5' SILT: light gray, slightly moist, medium dense	
660	5	B-1	SPT-1	5 7 9		6.4	SM	@5' Silty SAND: grayish light brown, slightly moist, medium dense	
			R-2	7 9 12				@7.5' Silty SAND: grayish light brown, slightly moist, medium dense	
655	10		SPT-2	12 18 21		2.3	SP	@10' SAND w/ Gravel: brown, moist, dense, poorly graded	
650	15		R-3	10 12 18	97.9	19.6	ML	@15' SILT: olive light brown, moist, very stiff	
645	20		SPT-3	8 10 10		21.4	ML	@20' Sandy SILT to SILT: olive brown, moist, very stiff	
640	25		R-4	12 15 19	90.5	25.5	ML	@25' Sandy SILT: orangish brown, moist, medium dense	
	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-7

Date: 5/24/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~668' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0						**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D.' Quaternary Young Fan Deposits (Qyf)**	
665		R-1	9 12 12	104.1	3.6	SM	@2.5' Silty SAND: light gray, slightly moist, medium dense	
	5	SPT-1	9 10 10		8.3		@5' Silty SAND: light gray, slightly moist, medium dense	
660		R-2	7 9 12	106.3	7.2	SM	@7.5' Silty SAND: light gray, slightly moist, medium dense	
	10	SPT-2	7 7 9		8.3		@10' Silty SAND to Sandy SILT: light brown, slightly moist, medium dense to very stiff	
655								
	15	R-3	12 18 22	111.4	5.3		@15' Silty SAND: light brown, slightly moist, medium dense	
650								
	20	SPT-3	5 7 9		24.4	CL	@20' Sandy CLAY: light brown, moist, very stiff	
645								
	25	R-4	9 12 18	95.4	27.1	CL	@25' CLAY: light brown, moist, very stiff	
640							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	
	30							

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-8

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~671' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
670	0							**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D.' Quaternary Young Fan Deposits (Qyf)**	
			R-1	4 7 9	110.2	1.9	SM	@2.5' Silty SAND: light gray, slightly moist, medium dense	
665	5		SPT-1	4 4 7		8.6		@5' Silty SAND: light gray, slightly moist, medium dense	
			R-2	9 10 15	103.0	9.6	ML	@7.5' Sandy SILT: light gray, slightly moist, medium dense to very stiff	
660	10		SPT-2	5 7 9		10.6	CL	@10' CLAY: light gray, slightly moist, very stiff	
655	15		R-3	12 19 21	94.8	15.5	MH	@15' SILT: light gray, slightly moist, very stiff	
650	20		SPT-3	15 19 19		3.8	SP	@20' SAND: brownish light gray, slightly moist, dense, poorly graded	
645	25		R-4	14 15 19	115.3	15.2	SC/CL	@25' Clayey SAND transition to Silty SAND w/ Clay: brown, slightly moist, medium dense	
	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-9

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~676' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
675	0							**@0' to 5' Undocumented Artificial Fill (Afu)**	
			R-1	6 6 6	112.1	9.8	SM	@2.5' Silty SAND: light brown, slightly moist, loose	
								@5' to T.D.' Quaternary Young Eolian Deposits (Qye)	
670	5	B-1	SPT-1	4 6 9		8.2		@5' Silty SAND: grayish light brown, slightly moist, medium dense	
			R-2	9 13 17	118.1	12.3	SM/ML	@7.5' Silty SAND to Sandy SILT: gray, slightly moist, medium dense to very stiff	
665	10		SPT-2	5 7 9		17.0	ML	@10' Sandy SILT: brownish gray, slightly moist, very stiff	
660	15		R-3	12 18 21	120.4	8.1	SM	@15' SAND: brown, slightly moist, medium dense	
655	20		SPT-3	9 9 13		17.8	CL	@20' Sandy CLAY: orangish brown, moist, medium dense	
650	25		R-4	10 11 15	109.0	8.0	SM	@25' Silty SAND: orangish brown to brown, moist, medium dense to very stiff	
	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-10

Date: 5/24/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~682' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0						**@0' to 5' Undocumented Artificial Fill (Afu)**	
680		R-1	9 7 9	105.6	8.2	SM	@2.5' Silty SAND: light brown, slightly moist, medium dense	
	5	SPT-1	4 7 7		13.0	SM	**@5' to T.D.' Quaternary Young Eolian Deposits (Qye)** @5' Silty SAND: grayish light brown, slightly moist, medium dense	
675		R-2	12 14 15	113.2	15.1	CL/SC	@7.5' CLAY/Clayey Silty SAND: grayish brown, moist, medium dense	
	10	SPT-2	3 5 5		25.8	ML	@10' Sandy SILT: orangish brown, moist, stiff	
670								
	15	R-3	13 16 21	115.4	6.0	SM	@15' Silty SAND: brown, moist, medium dense	
665								
	20	SPT-3	5 7 8		20.1	CL	@20' Sandy CLAY: brown, moist, medium dense to stiff	
660								
	25	R-4	9 15 21	111.7	8.9	SM	@25' Silty SAND: light brown, moist, very stiff to medium dense	
655							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	
	30							

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole I-1

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~668' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	Logged By SHH Sampled By SHH Checked By BJE DESCRIPTION	Type of Test
665	0							**@0 to .5' - <u>Undocumented Artificial Fill</u> (Afu)** **@.5 to T.D. - <u>QuaternaryAlluvial Fan Deposits</u>**	
660	5		SPT-1	4 6 7		3.9	SM	@7.5' SAND with Gravel: light gray, slightly moist, medium dense	
655	10							Total Depth = 10' Groundwater Not Encountered 3" Perforated Pipe Surrounded by Gravel Installed on 5/21/2021 and Presoaked on 5/24/2021 Backfilled with Cuttings on 5/25/2021	
650	15								
645	20								
640	25								
	30								

Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole I-2

Date: 5/21/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~663' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map | Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
660	0							**@0 to .5' - Undocumented Artificial Fill (Afu)** **@.5 to T.D. - QuaternaryAlluvial Fan Deposits**	
655	5		SPT-1	4 6 6		9.8	CL	@7.5' CLAY with Sand: light gray, slightly moist, medium dense	
650	10							Total Depth = 10' Groundwater Not Encountered 3" Perforated Pipe Surrounded by Gravel Installed on 5/21/2021 and Presoaked on 5/24/2021 Backfilled with Cuttings on 5/25/2021	
645	15								
640	20								
635	25								
	30								

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

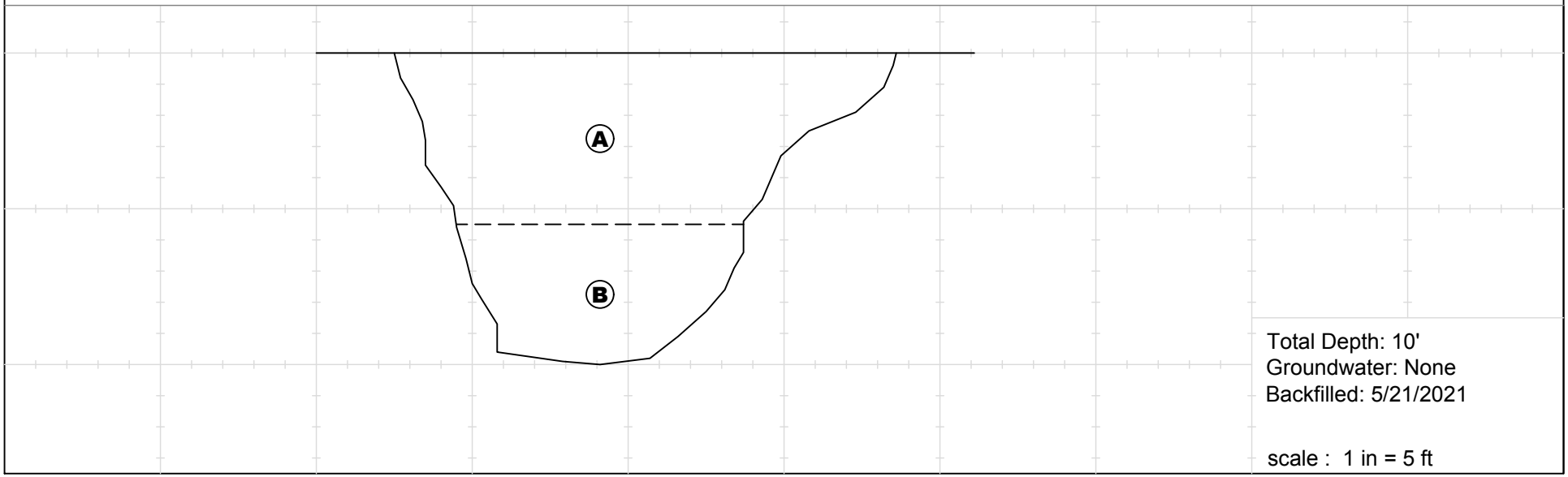
DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-1
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' to 5.5' - Artifical Fill - Undocumented (Afu) @ 0' - Silty SAND with gravel: gray, dry, loose to medium dense, trash down to 5' to 5.5' (nails, tarps, plastic, etc.)	Afu		G-1		
	B	@ 5.5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf) @ 5.5' - SAND: light brown to gray, slightly moist to moist, loose, fine grained	Qyf		G-2, G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**

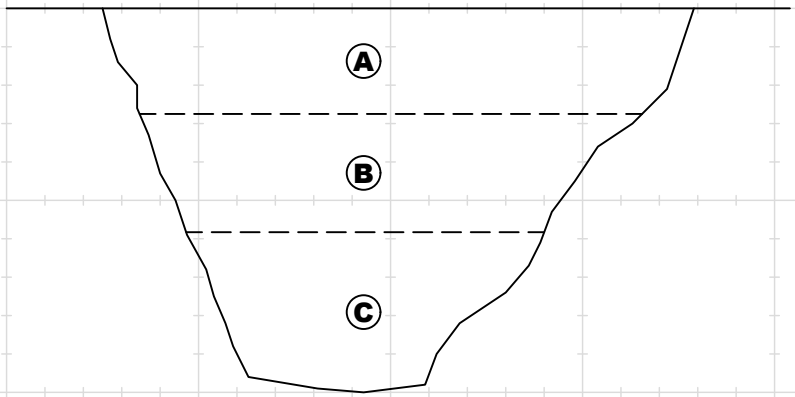


Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-2
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 5.83' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND with gravel: gray, dry, loose in upper 1'-2' then medium dense beyond 2', rootlets, minor trash present, some cobbles (~3" diameter)	Afu	SM	G-1		
	B	@ 2.75' - SAND/SAND with Silt: gray to light brown, dry to slightly moist, medium dense, (~10") metal pipe running north to south through trench at ~3.25' below the surface			G-2, B-1		
		@ 5.83' to T.D. - Quaternary Young Eolian deposits (Qye)					
	C	@ 5.83' - Silty SAND/Sandy SILT: dark gray, moist, fine sand	Qye		G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 668 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/21/2021

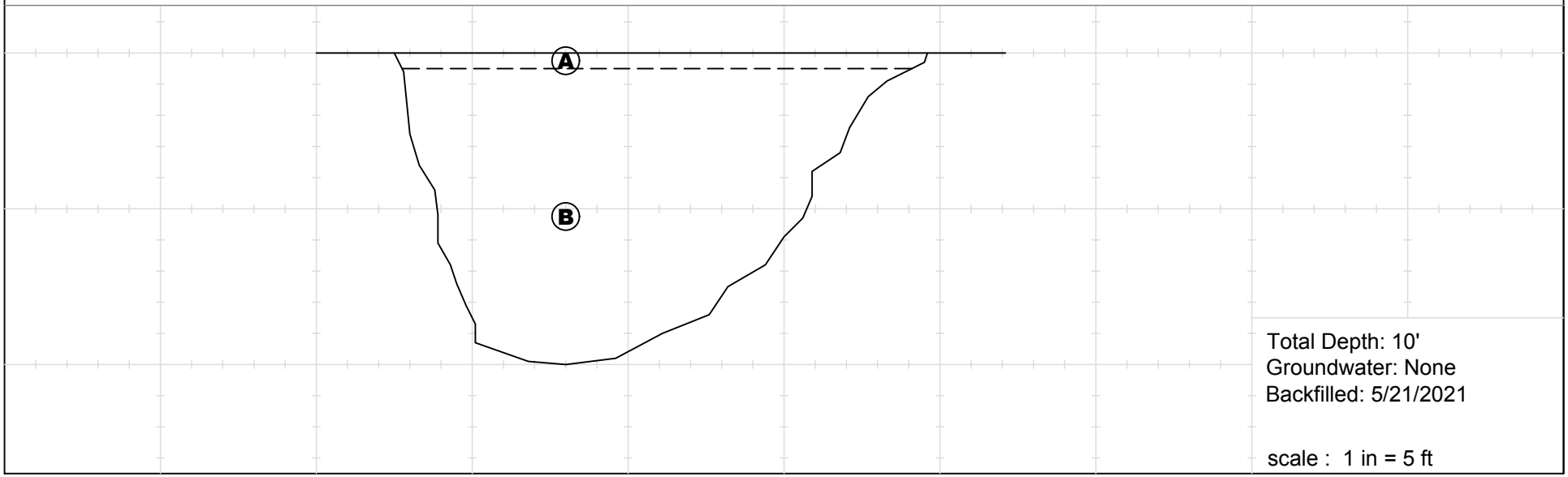
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-3
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' to .5' - Artificial Fill - Undocumented (Afu) @ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM			
	B	@ .5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf) @ 0.5' - Silty SAND to Silt: gray with white mottle, moist, varied density with depth, ~6" layer of softer moist sand at 7' grading into a stiffer silt.	Qyf		G-1, G-2, G-3, B-1		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 667 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**

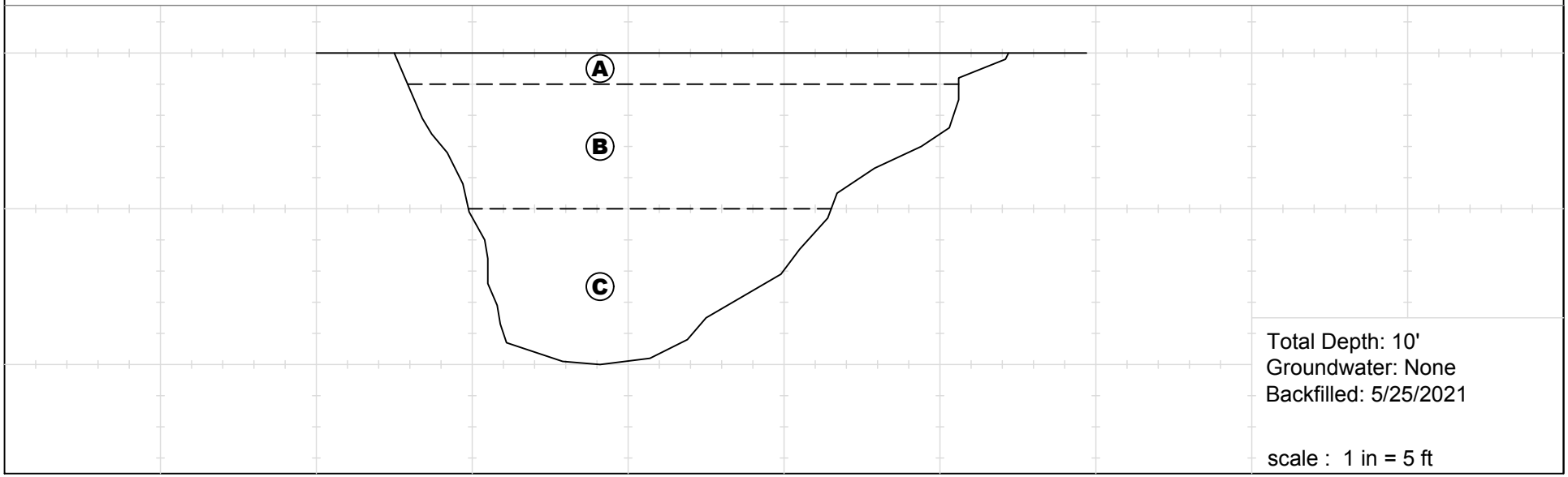


Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-4	
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 5' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND/ Sandy Silt: gray, slightly moist, loose, roots	Afu	SM			
	B	@ 1' Silty SAND: olive gray, slightly moist to moist, trash (tarp, rope, charcoal)			G-1, G-2		
		@ 5' to T.D. - Quaternary Young Eolian deposits (Qye)					
	C	@ 5' Silty SAND: olive gray to gray, slightly moist, medium dense, some cobbles	Qye		G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 677 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**

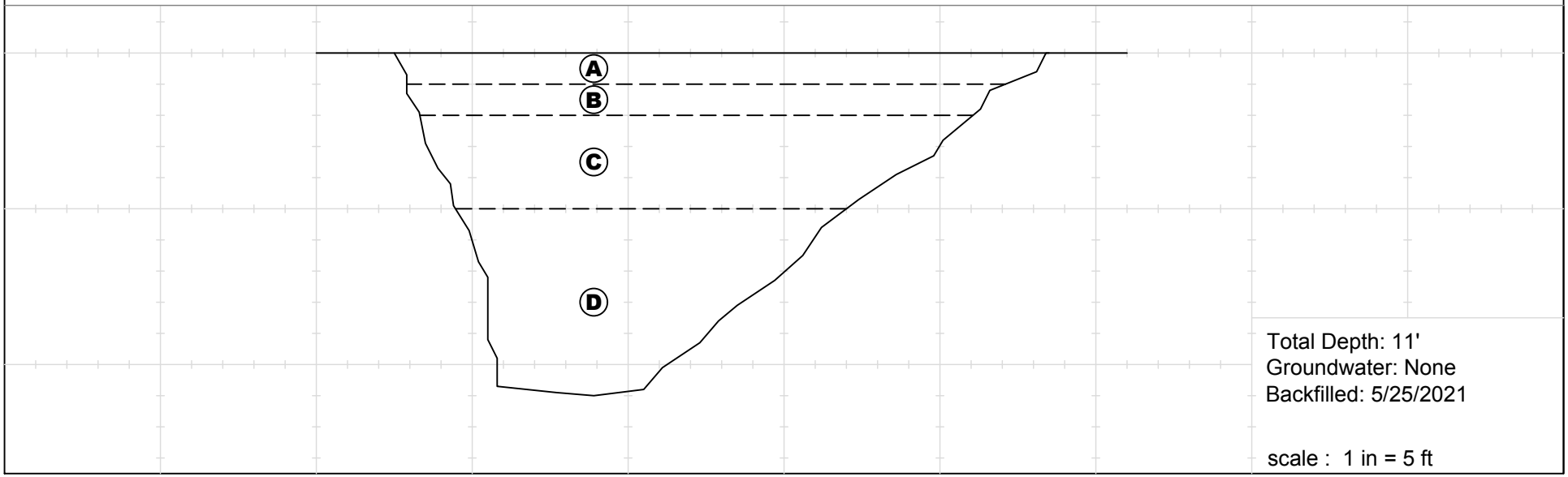


Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-5
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to T.D. - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Pure cow dung down to 6", mixed organics and silt past 6" to 1'. dry and loose overall	Afu		G-1		
	B	@ 1' - Silty SAND with gravel: olive gray, moist to slightly moist, medium dense, gravel, roots, grading into unit "C"		SM	G-2		
		@ 2' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	C	@ 2' - Silty SAND: olive gray, slightly moist, dense, minor gravel present	Qyf		G-3		
	D	@ 5' Silt: gray to olive gray, slightly moist, dense, some oxidation		ML	G-4		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 672 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**

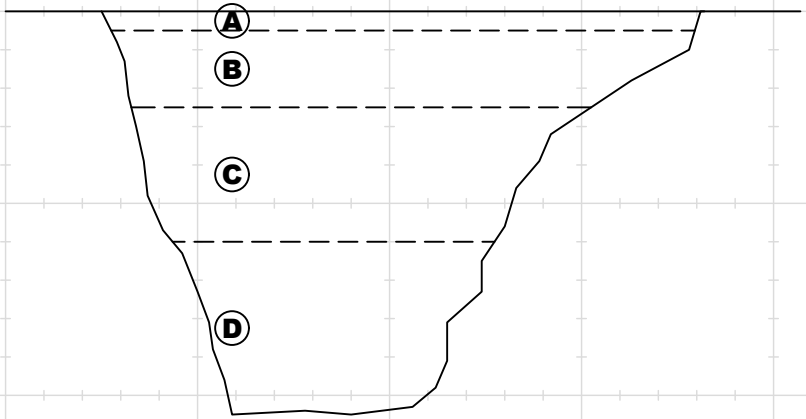


Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-6	
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 2.5' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND: light brown to light gray, dead vegetation, dry, loose	Afu	SM			
	B	@ 0.5' - Silty SAND: light gray, dry, charcoal pieces, medium dense, mixed gravel, disturbed appearance			G-1		
		@ 2.5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)	Qyf		G-2, B-5		
	C	@ 2.5' - Silty SAND: gray, dry to slightly moist (moisture increases with depth), medium dense					
				SP	G-3		
	D	@ 6' - SAND: gray sand transitioning into 6" thick layer of finer sand which is oxidized along the bottom, this grades back into the coarser gray sand, layer is friable, with visible moisture darkening material at 10' and the 6" finer sand layer					

GRAPHICAL REPRESENTATION BELOW: **Elevation : 672 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10.5'
Groundwater: None
Backfilled: 5/25/2021

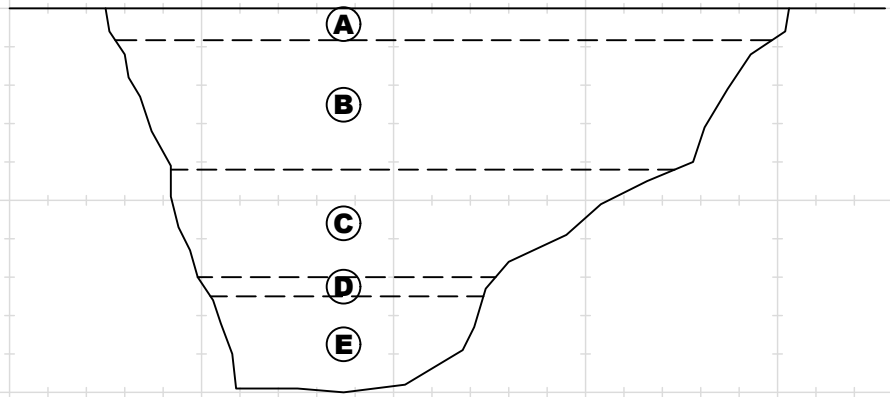
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-7	
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 4.2' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND: light brown, gray, dry, loose, dead vegetation and roots	Afu	SM			
	B	@ 0.83' - SILT: white to gray, dry, slightly indurated, porous (~5%), rootlets		ML	G-1, B-1		
		@ 4.2' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)	Qyf		G-2		
	C	@ 4.2' - SILT: olive gray, few pores, roots, dry, medium dense					
	D	@ 7' - 6" thick clay seam - dark gray, slightly moist, low plasticity, medium dense		CL	G-3		
	E	@ 7.5' - Silty SAND: olive gray, slightly moist, less dense than previous layers		SM	G-4		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 671 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

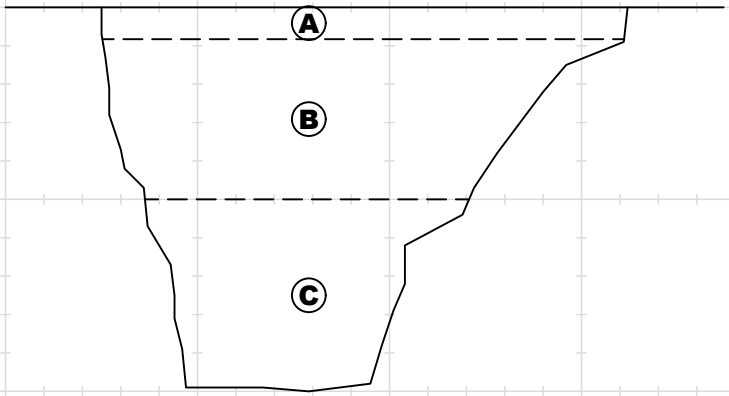
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-8
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 0.83' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND: light gray, dry, dead vegetation, rootlets	Afu				
		@ 0.83' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	B	@ 0.83' - SILT: gray, roots, mildly porous, dry, medium dense, grades into "C"	Qyf	ML	G-1		
	C	@ 5' - SAND: light gray, loose, dry, some caving, coarse grained with tightly packed layers of 3" rocks, rounded to subangular		SP	G-2, G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 666 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

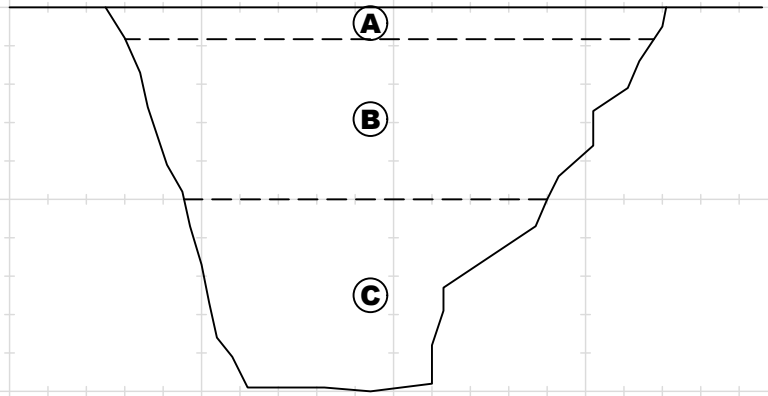
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-9	LGC Geotechnical, Inc.
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 5' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND: light gray, dead vegetation, dry, loose	Afu	SM			
	B	@ 0.83' - SILT: light gray to brown, porous (~5-10%), charcoal pieces, rootlets, 10" concrete pipe filled with mud runs north to south through trench			G-1, G-2		
		@ 5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	C	@ 5' - SILT: olive gray, slightly moist, dense to medium dense	Qyf	ML	G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 662 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

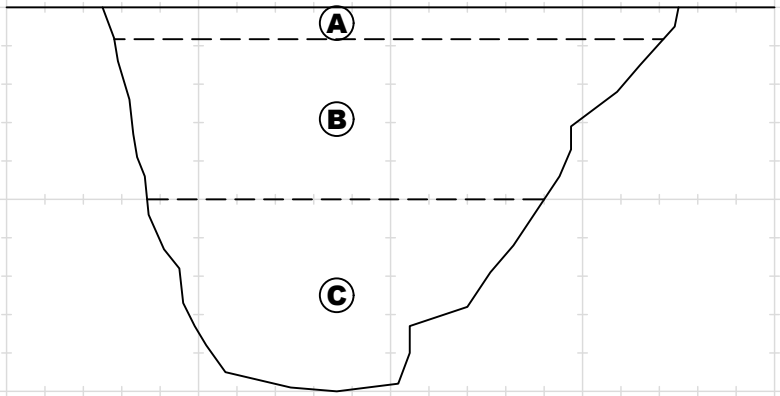
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-10	
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 0.83' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - SILT: light gray, dry, cracked, dead vegetation and roots, loose	Afu	ML			
		@ 0.83' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	B	@ 0.83' - SILT: light gray, dry, slightly porous, minor rootlets, dense to medium dense, some mottled white mineralization & oxidation stains @ contact with "C"	Qyf		G-1, B-1		
	C	@ 5' - SILT - olive gray, light gray, dry to slightly moist, decrease in density from "B" iron oxide.			G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 662 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

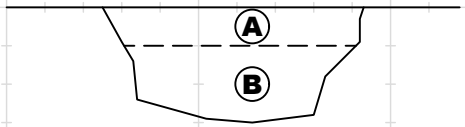
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-1
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Sandy SILT: dry, gray brown, loose, rootlets, sand is fine grained	Afu	SM	G1		
	B	@ 1' - SILT: white, dry, medium dense to dense, minor rootlets		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 665 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

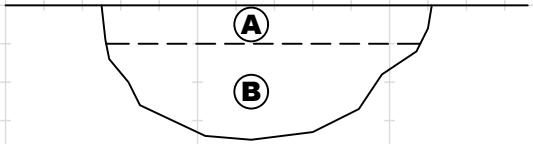
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: OTP-2**
Project Number : 21116-01	**Date : 5/21/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM	G-1		
	B	@ 1' - Silt: light gray, medium dense, dry		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 664 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

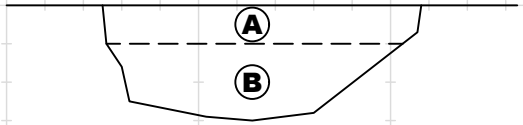
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-3
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Silty SAND: light brown, loose, dry @ 1' - SILT: gray, medium dense, white mottle, minor rootlets, dry	Afu	SM ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 669 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

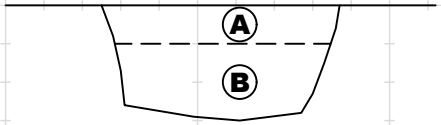
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-4
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM	G-1		
	B	@ 1' - SILT: gray, dry, medium dense, slightly porous (<5%)	Qyf	ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

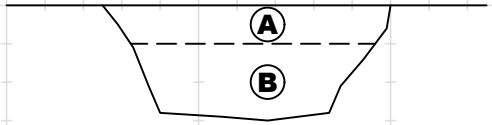
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-5
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM	G-1		
	B	@ 1' - SILT: light gray, slightly moist, medium dense	Qyf	ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 672 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

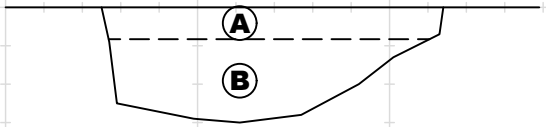
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: OTP-6**
Project Number : 21116-01	**Date : 5/21/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: brown to gray, dry, loose	Afu	SM	G-1		
	B	@ 0.83' - Silty SAND: light gray brown, dry to slightly moist		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 679 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

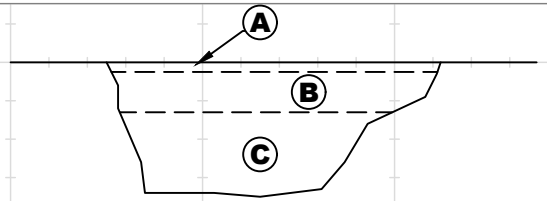
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-7
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B C	@ 0' - Asphalt section @ 0.25' - Compacted base @ 1.3' - SILT: moist, gray, dense	Afu	ML	G-1		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 682 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

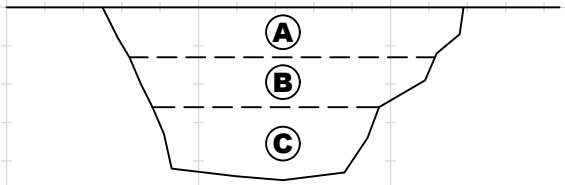
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-8
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Cow Dung					
	B	@ 1.3' - Silty SAND: olive gray, slightly moist, some white mineralization	Afu	SM	G-1, G-2		
	C	@ 2.6' - SAND with gravel: olive gray, slightly moist, medium dense	Qyf	SP	G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 676 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-9
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

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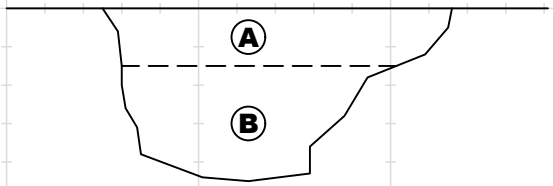
Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1.5' - SILT: olive gray, slightly moist, trace of gravel at bottom of trench	Afu	ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 680 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/21/2021

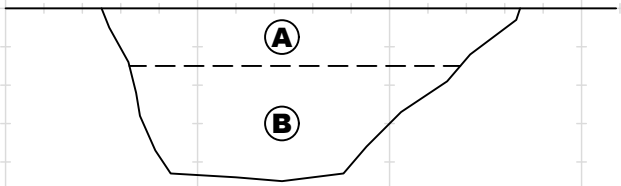
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-10
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1.5' - Silty SAND: olive brown, dry to slightly moist, slight gravel presence, medium dense to dense	Afu	ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

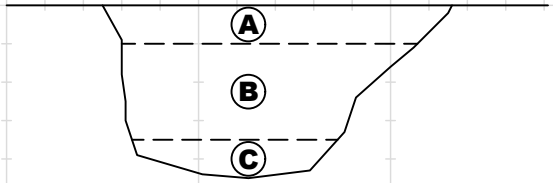
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-11
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Cow Dung					
	B	@ 1' - SILT: olive gray, slightly moist, medium dense to dense	Afu	ML	G-1		
	C	@ 3.5' - SAND: gray, loose, slightly moist, gravel	Qyf	SP	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 679 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

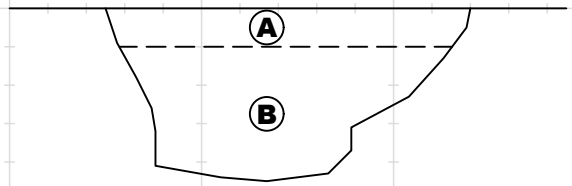
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-12
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Silty SAND: brown, dry, loose, rootlets @ 1' - SILT: dry, medium dense to dense, some gravel, slightly disturbed appearance	Afu	SM ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

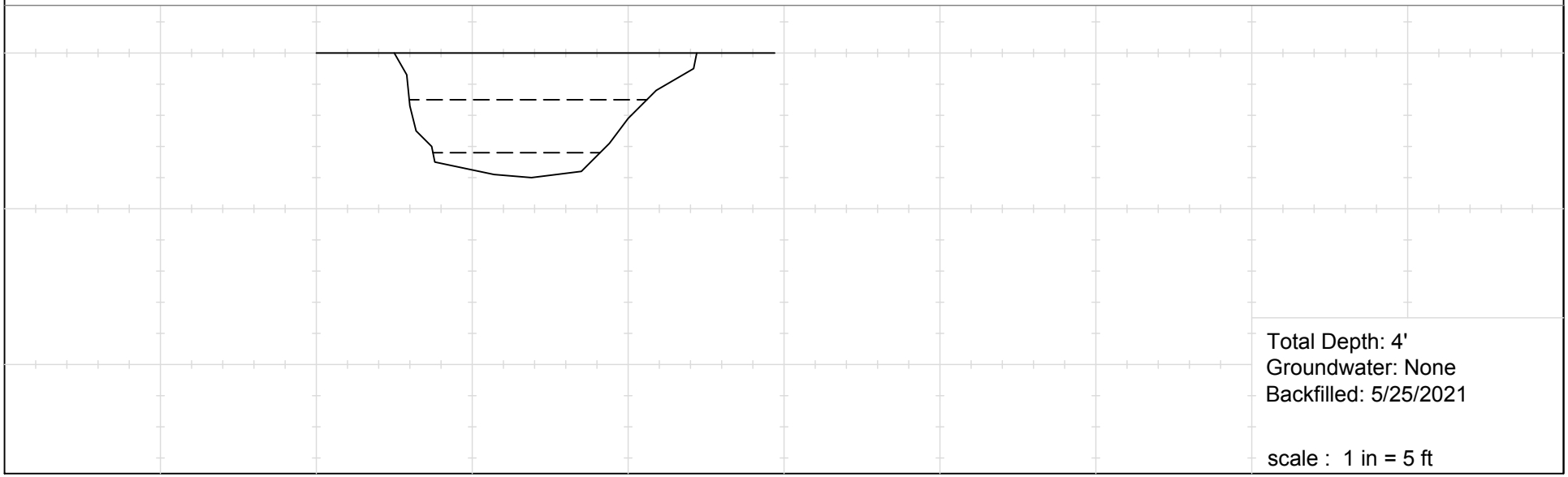
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-13
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' - Silty SAND: light brown, dry, loose, dead vegetation and rootlets		SM	G-1		
		@ 1.5' - Silty SAND: olive gray, dry, medium dense, some minor rootlets			G-2		
		@ 3.2' - SILT: gray, dry, medium dense	Qyf	ML	G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



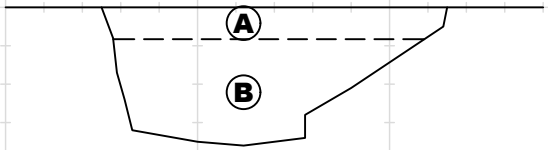
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: OTP-14**
Project Number : 21116-01	**Date : 5/25/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - SILT: light brown, dry, loose, rootlets, dead vegetation	Afu	ML			
	B	@ 0.83' - SILT: olive gray, dry to slightly moist, medium dense, roots to total depth, minor gravel presence			G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 673 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.6'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

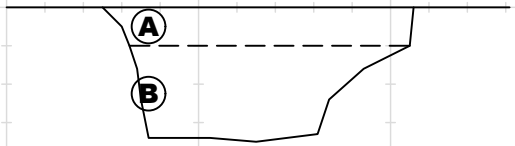
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-15
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silt: light gray, dry to loose, roots/dead vegetation, grades into "B"	Afu	ML	G-1		
	B	@ 1' - SILT: light gray, dry, medium dense to dense, slightly porous, some random gravel fragments, bottom 10" grades into olive gray silt			G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

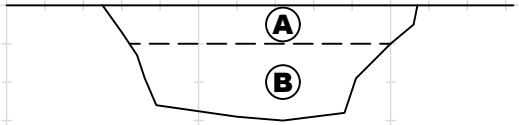
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-16
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Cow Dung	Afu		G-1		
	B	@ 1' - SILT: olive gray, slightly moist, dense		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

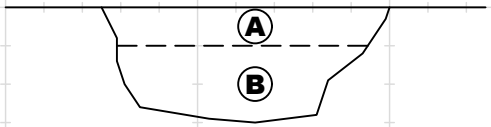
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-17
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1' - SILT: olive gray, slightly moist, trace gravel, slightly porous	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/25/2021

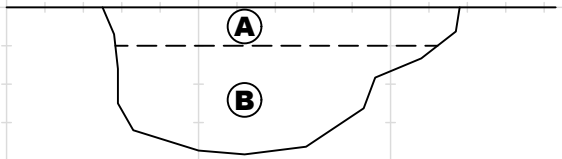
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-18
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1' - SILT: olive gray, medium dense, slightly moist, upper 3' is disturbed, lower 10" appears undisturbed and free of debris	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 676 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.83'
Groundwater: None
Backfilled: 5/25/2021

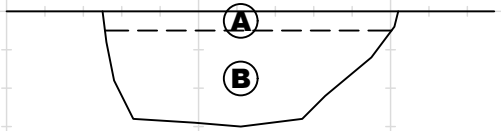
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-19
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, dry, loose, rootlets @ 0.5' - SILT: light gray, dry, medium dense to dense, slightly porous (5-10%)	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

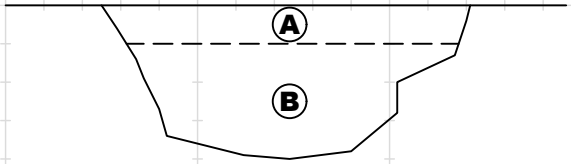
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-20
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' SILT: light gray, dry, loose, rootlets @ 1' SILT: light gray, dry, dense, slightly porous	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 668 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4'
Groundwater: None
Backfilled: 5/26/2021

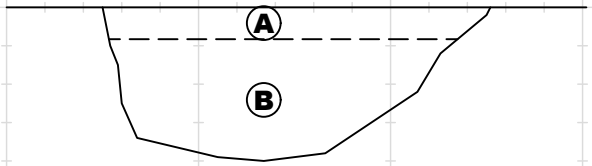
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-21
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - SILT: light brown to gray, dry, loose, dead vegetation	Afu				
	B	@ 0.83' - SILT: gray to light gray, dry, medium dense, slightly porous (~10%) looks disturbed, rootlets		ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 667 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4'
Groundwater: None
Backfilled: 5/26/2021

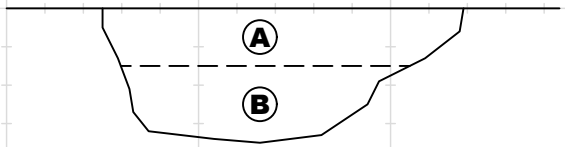
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-22
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - SILT: light brown to gray, dry, loose, dead vegetation, roots	Afu		G-1		
	B	@ 1.5' - SILT: light gray, slightly moist, porous (5-10%)		SM	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 661 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/26/2021

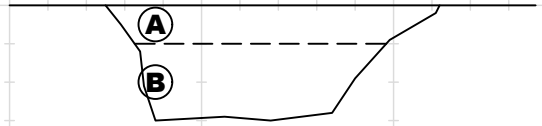
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-23
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, loose, dead grass, dry @ 1'- SILT: light gray, dry, dense, roots, porous (~10%)	Afu	SM	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 659 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

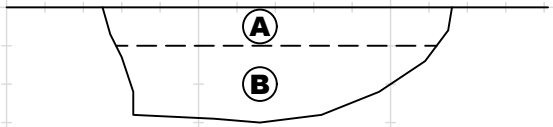
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-24
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, dry, loose, cracked, roots @ 1' - SILT: light gray, dry, medium dense looks disturbed, porous (~5-10%), transitions to olive gray silt at 2' which is slightly moist.	Afu	SM	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 660 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

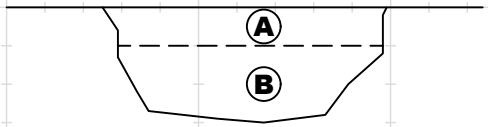
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-25
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, dry, cracked, loose @ 1' - SILT: light gray, dry, dense, slightly disturbed from 1'-2', past 2' begins to transition to an undisturbed olive gray silt which persists to the bottom of the trench.	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 666 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

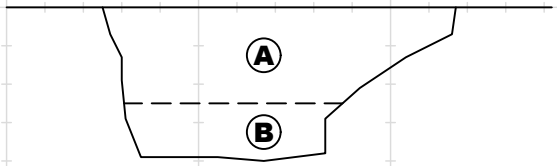
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-26
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: dry, gray, loose @ 2.5' - Cow Dung, farmer stated there is a stockpile of cow dung 15' deep beyond this point	Afu	ML			

GRAPHICAL REPRESENTATION BELOW: **Elevation : 674 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

Last Edited: 6/10/2021

Appendix C
Laboratory Test Results

APPENDIX C

Laboratory Test Results

The laboratory testing program was directed towards providing quantitative data relating to the relevant engineering properties of the site soils. Samples considered representative of site conditions were tested in general accordance with American Society for Testing and Materials (ASTM) procedure and/or California Test Methods (CTM), where applicable. The following summary is a brief outline of the test type and a table summarizing the test results.

Moisture and Density Determination Tests: Moisture content (ASTM D2216) and dry density determinations (ASTM D2937) were performed on driven samples obtained from the test borings. The results of these tests are presented in the boring logs. Where applicable, only moisture content was determined from undisturbed or disturbed samples.

Grain Size Distribution/Fines Content: Representative samples were dried, weighed, and soaked in water until individual soil particles were separated (per ASTM D421) and then washed on a No. 200 sieve (ASTM D1140). Where applicable, the portion retained on the No. 200 sieve was dried and then sieved on a U.S. Standard brass sieve set in accordance with ASTM D6913 (sieve).

Sample Location	Description	% Passing # 200 Sieve
I-2	Clay with Sand	83

Atterberg Limits: The liquid and plastic limits ("Atterberg Limits") were determined per ASTM D4318 for engineering classification of fine-grained material and presented in the table below. The USCS soil classification indicated in the table below is based on the portion of sample passing the No. 40 sieve and may not necessarily be representative of the entire sample. The plot is provided in this Appendix.

Sample Location	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	USCS Soil Classification
HS-8 @ 7.5 ft	32	21	11	CL

Consolidation: One consolidation test was performed per ASTM D2435. A sample (2.4 inches in diameter and 1-inch in height) was placed in a consolidometer and increasing loads were applied. The sample was allowed to consolidate under "double drainage" and total deformation for each loading step were recorded. The percent consolidation for each load step was recorded as the ratio of the amount of vertical compression to the original sample height. The consolidation pressure curve is provided in this Appendix.

Collapse/Swell Potential: One collapse test was performed per ASTM D4546. A sample (2.4 inches in diameter and 1-inch in height) was placed in a consolidometer and loaded to the approximate in-situ effective stress. The curve is presented in this Appendix.

Maximum Density Tests: The maximum dry density and optimum moisture content of a typical material was determined in accordance with ASTM D1557. The result of this test is presented in the table below:

Sample Location	Sample Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
HS-3 @ 0-5 ft	Brown Silty Sand	125.0	8.5

Expansion Index: The expansion potential of selected representative samples was evaluated by the Expansion Index Test per ASTM D4829.

Sample Location	Expansion Index	Expansion Potential*
HS-2 @ 0-5 ft	11	Very Low

* Per ASTM D4829

Soluble Sulfates: The soluble sulfate content of a select sample was determined by standard geochemical methods (CTM 417). The test result is presented in the table below.

Sample Location	Sulfate Content, ppm
HS-1 @ 0-5 ft	78

Chloride Content: Chloride content was tested per CTM 422. The results are presented below.

Sample Location	Chloride Content, ppm
HS-1 @ 0-5 ft	100

Organic Matter Content of Soils: Organic matter content tests were performed in general accordance with ASTM D 2974 (Test Methods A & C). The results are presented in this Table 6.

TP-1	
Depth (ft)	% Organics
6'-9'	0.3

TP-2	
Depth (ft)	% Organics
4'-5.17'	0.2

TP-5	
Depth (ft)	% Organics
0.5'-1.5'	16.3
1.5'-2'	0.9
3'-5'	0.8

TP-9	
Depth (ft)	% Organics
1'-2'	1.4
3'-4'	0.5
7'-8'	0.4

OTP-1	
Depth (ft)	% Organics
0'-1'	6.5
1'-3'	0.4

OTP-2	
Depth (ft)	% Organics
0'-1'	12.9
1'-3'	0.5

OTP-3	
Depth (ft)	% Organics
0'-1'	7.0
1'-3'	0.7

OTP-4	
Depth (ft)	% Organics
0'-0.5'	15.8
0.5'-3'	0.4

OTP-5	
Depth (ft)	% Organics
0'-1'	8.2
1'-3'	0.7

OTP-6	
Depth (ft)	% Organics
0'-0.83'	8.8
0.83'-3'	0.8

OTP-7	
Depth (ft)	% Organics
3.5'	0.8

OTP-8*	
Depth (ft)	% Organics
0'-1'	>10
1.5'	2.3
2'-2.6'	0.5
3'-4.5'	0.2

OTP-9	
Depth (ft)	% Organics
0'-1'	1.5
1'-3'	0.6

OTP-10*	
Depth (ft)	% Organics
0'-1'	>10
1.5'-2'	1.2
2'-4.5'	0.5

OTP-11*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	0.9
3.5'-4.5'	0.1

OTP-12	
Depth (ft)	% Organics
0'-1'	10.0
1'-3.5'	0.9

OTP-13	
Depth (ft)	% Organics
0'-1'	8.7
1'-3'	0.6
4'	0.5

OTP-14*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	0.6
2'-3'	0.5

OTP-15	
Depth (ft)	% Organics
0'-1'	3.0
1'-3.5'	0.6

OTP-16	
Depth (ft)	% Organics
0'-1'	33.2
1'-3'	1.2

OTP-17*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.2
2'-3'	1.3

OTP-18*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.2
3'-3.5'	0.8

OTP-19	
Depth (ft)	% Organics
1'-2'	1.4
2'-3'	0.9

OTP-20	
Depth (ft)	% Organics
1'-2'	0.9
2'-4'	0.6

OTP-21*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.0
2'-4'	0.5

OTP-22*	
Depth (ft)	% Organics
0'-1'	>10
1'-1.5'	2.8
2'-3'	0.7

OTP-23*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.1
2'-3'	0.8

OTP-24	
Depth (ft)	% Organics
1'-2'	0.8
2'-3'	0.4

OTP-25	
Depth (ft)	% Organics
1'-2'	0.8
2'-3'	0.9

Legend

> 5%	Recommended for Offsite Removal
2 to 5%	Recommended for Mixing/Blending with "Clean" Soils
< 2%	"Clean" Soils

Note: * Indicates Soil Visually Confirmed to Have greater than 10% Organics at 0'-1'

LGC Geotechnical, Inc.

Table 6
Summary of Measured Organic Content vs Depth of Sample

Project Name	TNHC - Eastvale
Project Number	21116-01
ENG./GEOL.	BJE/BPG
Date	Jun-21

Appendix D
Infiltration Test Data

Infiltration Test Data Sheet

LGC Geotechnical, Inc
131 Calle Iglesia Suite 200, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: Eastvale
Project Number: 21116-01
Date: 5/25/2021
Boring Number: I-1

Test hole dimensions (if circular)	
Boring Depth (feet)*:	10
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

*measured at time of test

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

*Pre-Test (Sandy Soil Criteria)**

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Greater Than or Equal to 0.5 feet (yes/no)
1	9:14	9:39	25.0	7.53	9.10	1.57	Yes
2	9:40	10:05	25.0	7.65	9.33	1.68	Yes

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight, and then obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25 inches

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Observed Infiltration Rate(in/hr)
1	10:06	10:16	10.0	7.90	8.45	0.55	3.3
2	10:17	10:27	10.0	7.82	8.33	0.51	2.9
3	10:28	10:38	10.0	8.11	8.67	0.56	3.8
4	10:39	10:49	10.0	8.00	8.53	0.53	3.3
5	10:50	11:00	10.0	7.85	8.47	0.62	3.7
6	11:01	11:11	10.0	7.91	8.52	0.61	3.8

Observed Infiltration Rate (Does Not Include Any Factor of Safety) **3.8**

Sketch:

Notes:

Infiltration Test Data Sheet

LGC Geotechnical, Inc
131 Calle Iglesia Suite 200, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: Eastvale
Project Number: 21116-01
Date: 5/25/2021
Boring Number: I-2

Test hole dimensions (if circular)	
Boring Depth (feet)*:	10
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

*measured at time of test

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

*Pre-Test (Sandy Soil Criteria)**

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Greater Than or Equal to 0.5 feet (yes/no)
1	7:03	7:28	25.0	7.56	7.82	0.26	No
2	7:29	7:54	25.0	7.63	7.89	0.26	No

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight, and then obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25 inches

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Observed Infiltration Rate(in/hr)
1	8:50	9:20	30.0	7.60	7.99	0.39	0.7
2	9:21	9:51	30.0	7.63	8.00	0.37	0.6
3	9:52	10:22	30.0	7.59	7.91	0.32	0.5
4	10:23	10:53	30.0	7.61	7.95	0.34	0.6
5	10:54	11:24	30.0	7.65	7.93	0.28	0.5
6	11:25	11:55	30.0	7.60	7.93	0.33	0.5
7	11:56	12:26	30.0	7.64	7.95	0.31	0.5
8	12:27	12:57	30.0	7.65	7.94	0.29	0.5
9	12:58	13:28	30.0	7.61	7.96	0.35	0.6
10	13:29	13:59	30.0	7.58	7.89	0.31	0.5
11	14:00	14:30	30.0	7.58	7.91	0.33	0.5
12	14:31	15:01	30.0	7.62	7.95	0.33	0.6

Observed Infiltration Rate (Does Not Include Any Factor of Safety) **0.6**

Sketch:

Notes:

Appendix E
General Earthwork and Grading Specifications for Rough Grading

General Earthwork and Grading Specifications for Rough Grading

1.0 General

1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ a qualified Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to confirm that the attained level of compaction is being accomplished as specified. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the project plans and specifications. The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of “equipment” of work and the estimated quantities of daily earthwork

contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the
Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate personnel will be available for observation and testing. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified. It is the contractor's sole responsibility to provide proper fill compaction.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed. The contractor is responsible for all hazardous waste relating to his work. The Geotechnical Consultant does not have expertise in this area. If hazardous waste is a concern, then the Client should acquire the services of a qualified environmental assessor.

2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be over-excavated as specified in the following section. Scarification shall continue until soils are broken down and free of oversize material and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Over-excavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of the geotechnical consultant. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.5 Compaction Testing

Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than
5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 The Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over

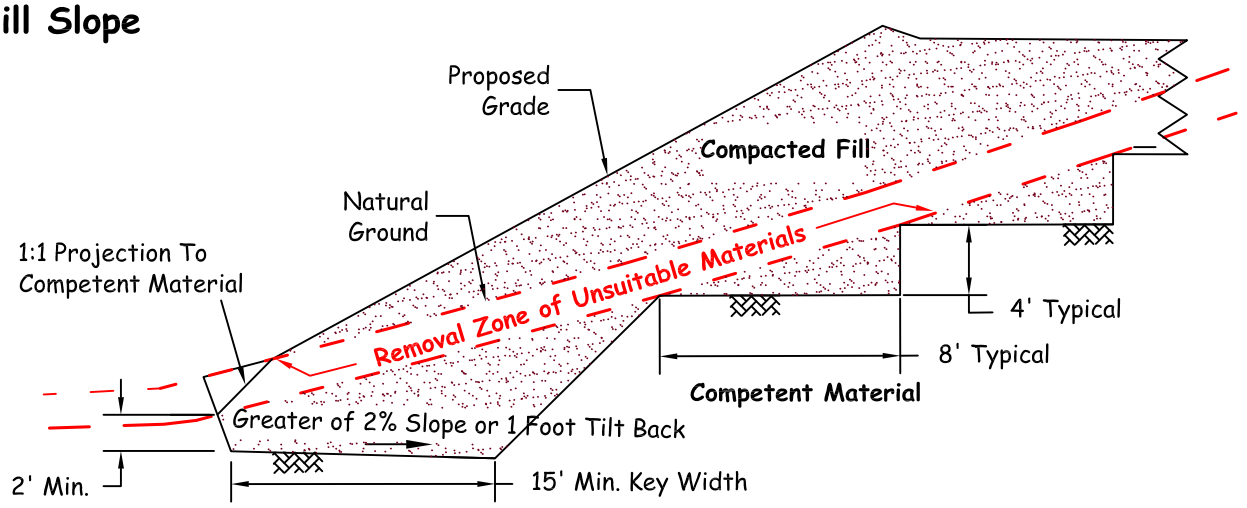
the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

7.3 The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

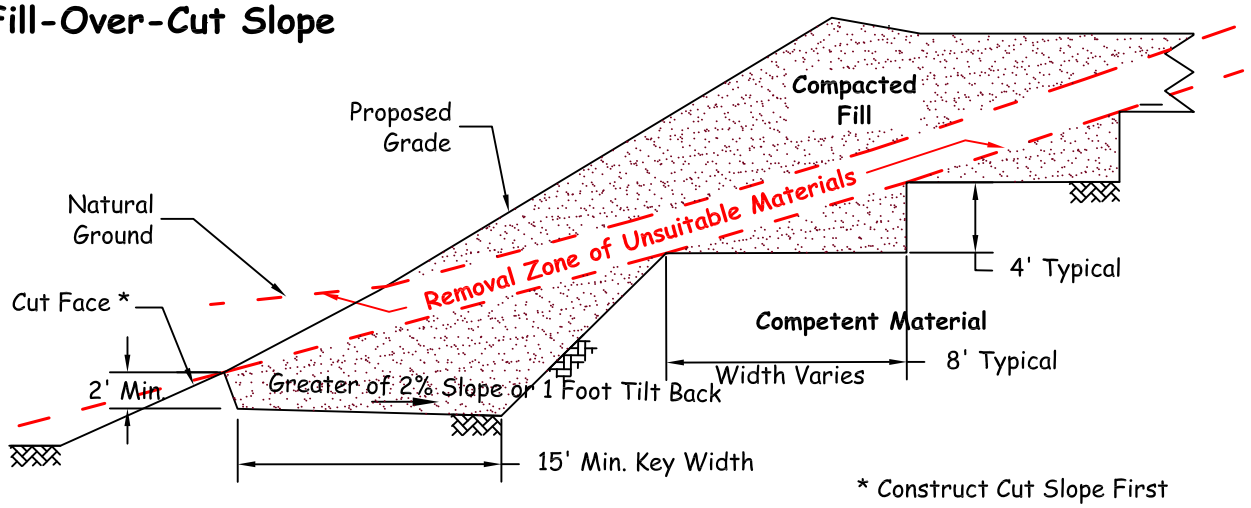
7.4 The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

Fill Slope

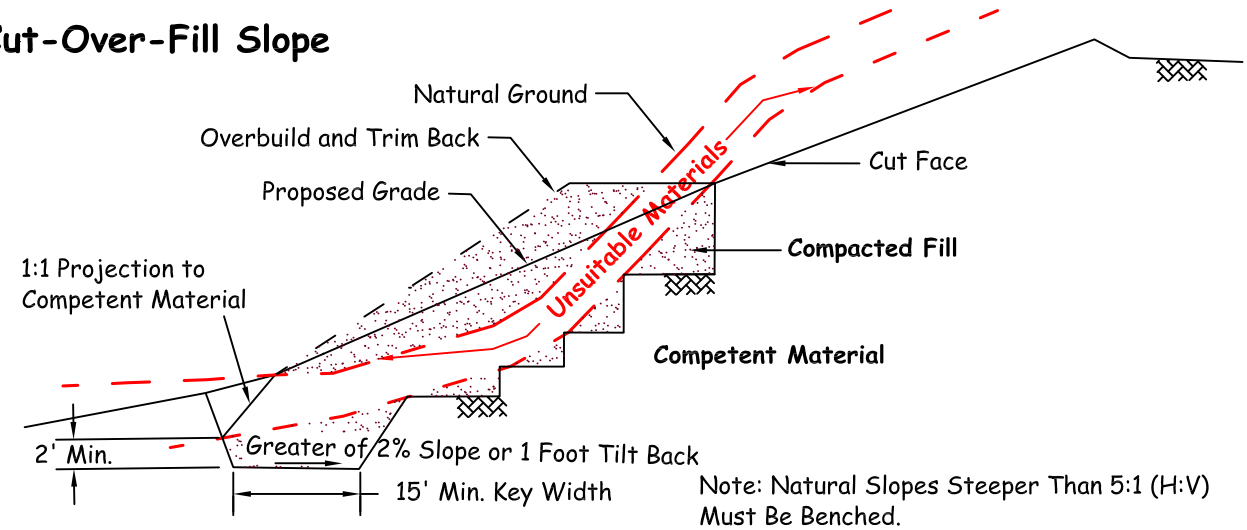


Fill-Over-Cut Slope



* Construct Cut Slope First

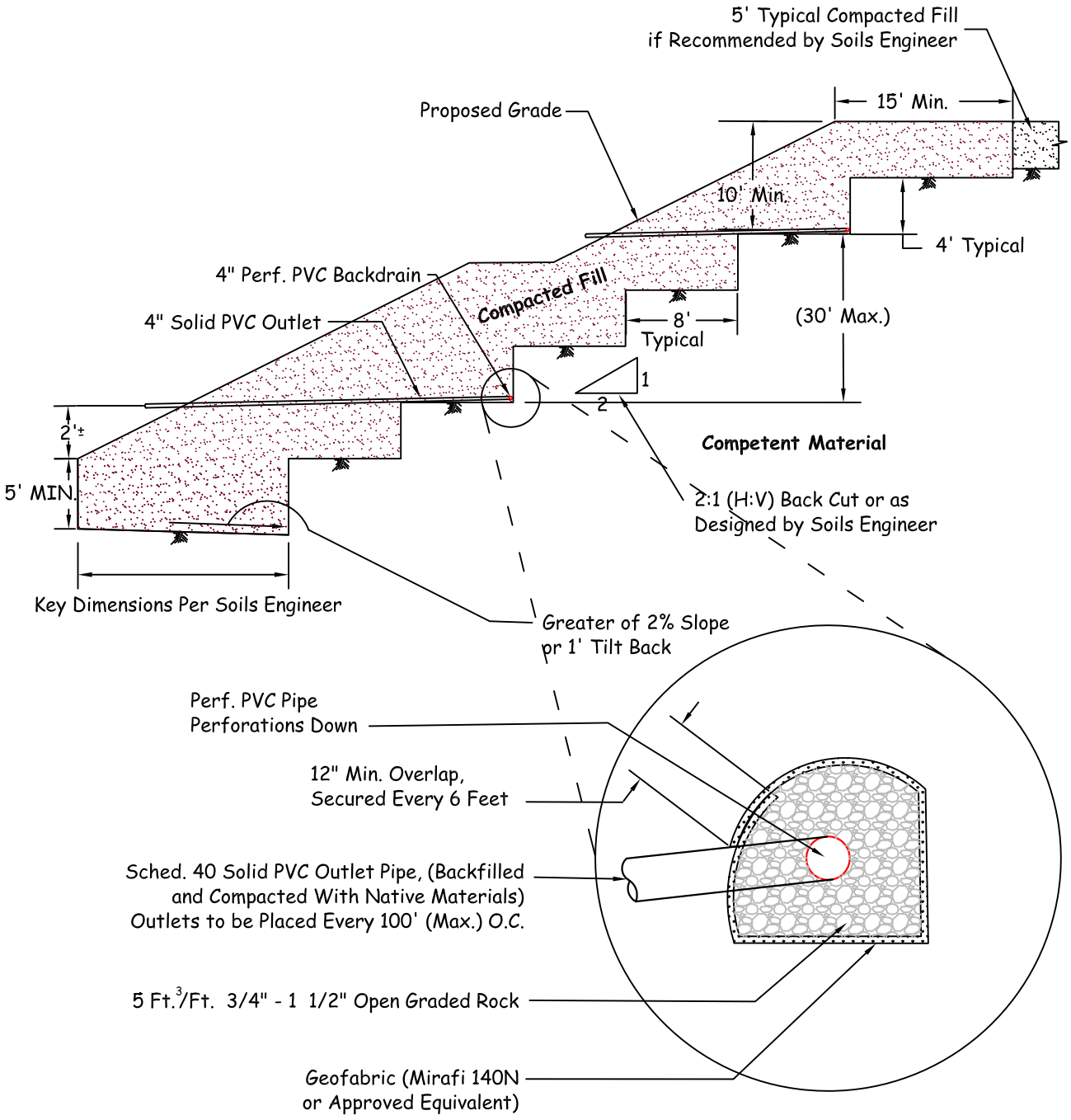
Cut-Over-Fill Slope



Note: Natural Slopes Steeper Than 5:1 (H:V) Must Be Benched.

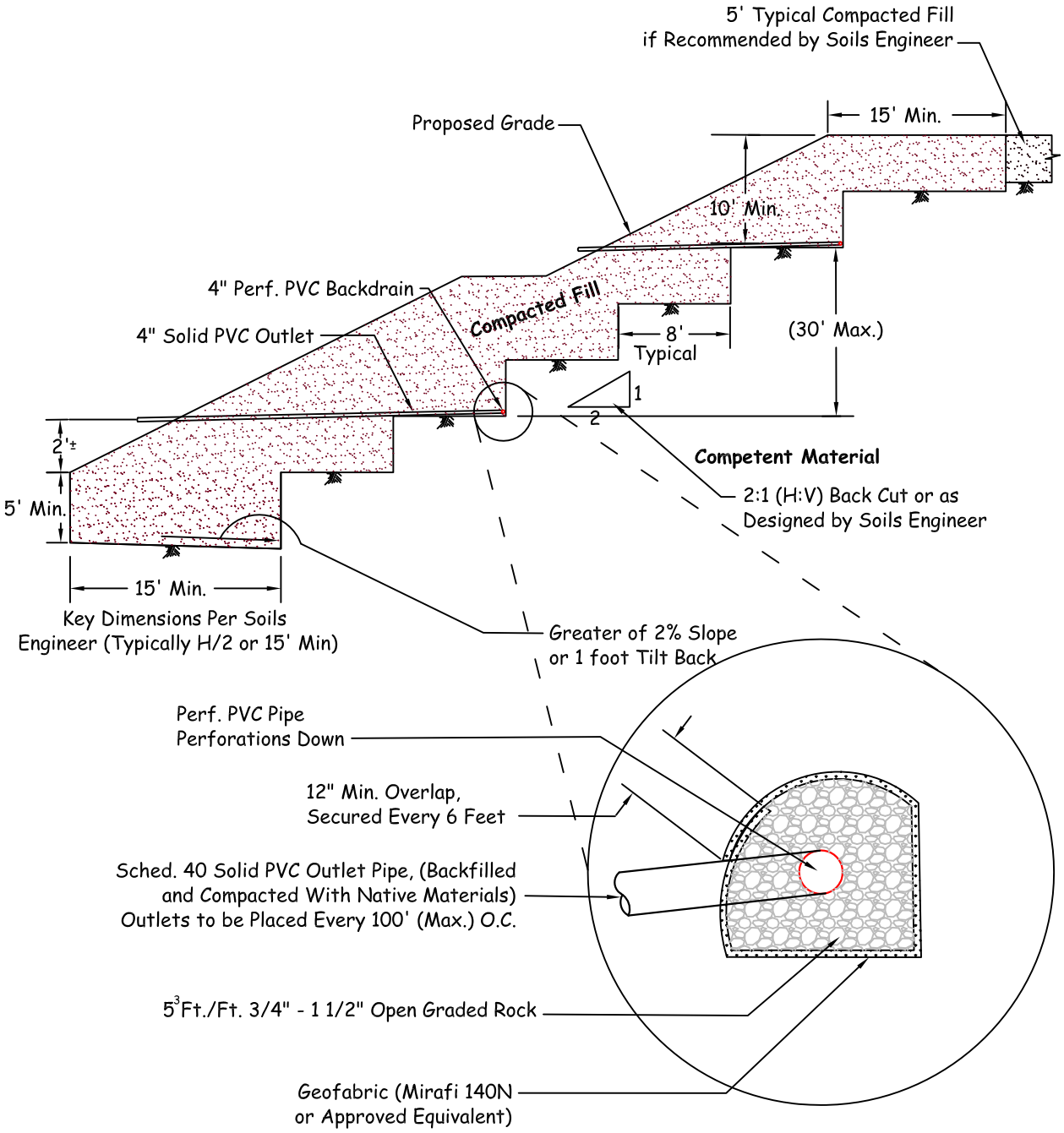
LGC Geotechnical, Inc.

KEYING AND BENCHING



LGC Geotechnical, Inc.

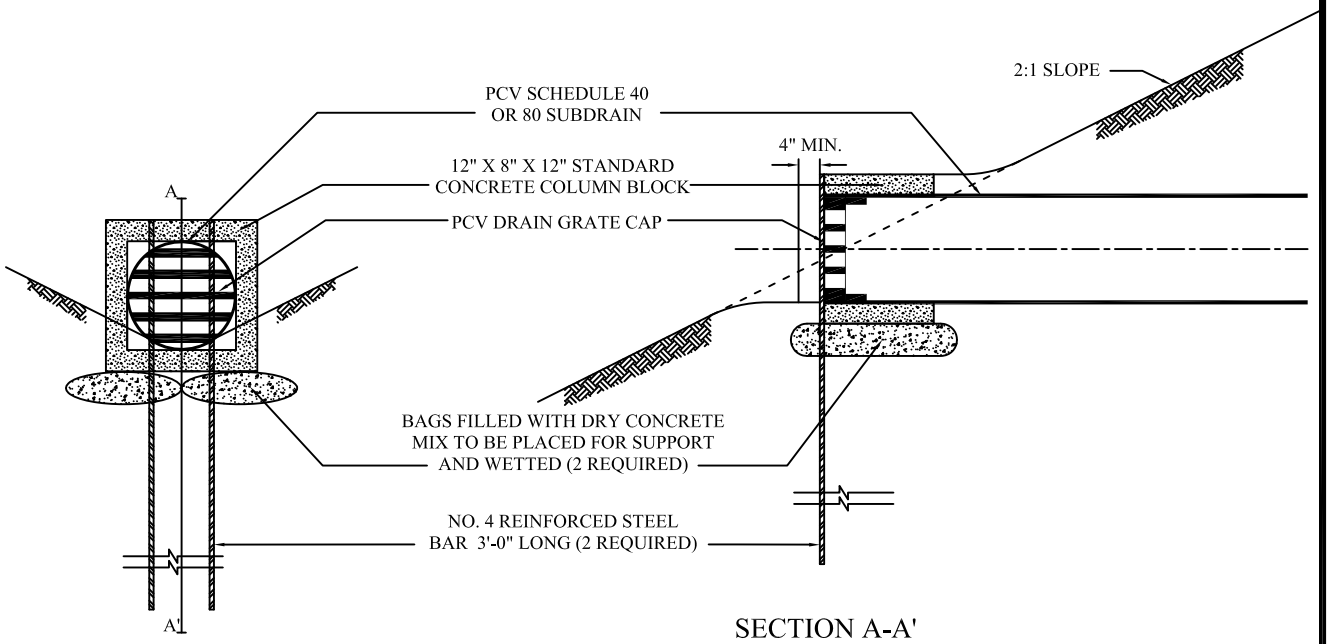
TYPICAL BUTTRESS DETAIL



LGC Geotechnical, Inc.

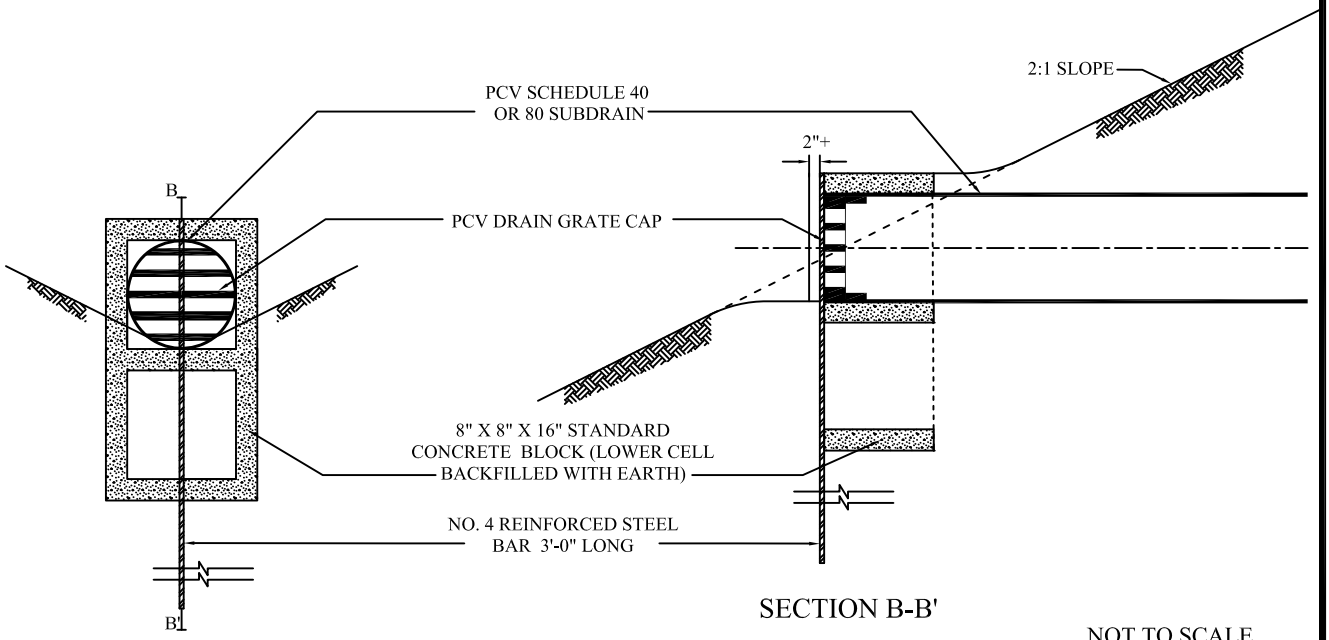
TYPICAL STABILIZATION FILL DETAIL

SUBDRAIN OUTLET MARKER -6" & 8" PIPE



SECTION A-A'

SUBDRAIN OUTLET MARKER -4" PIPE



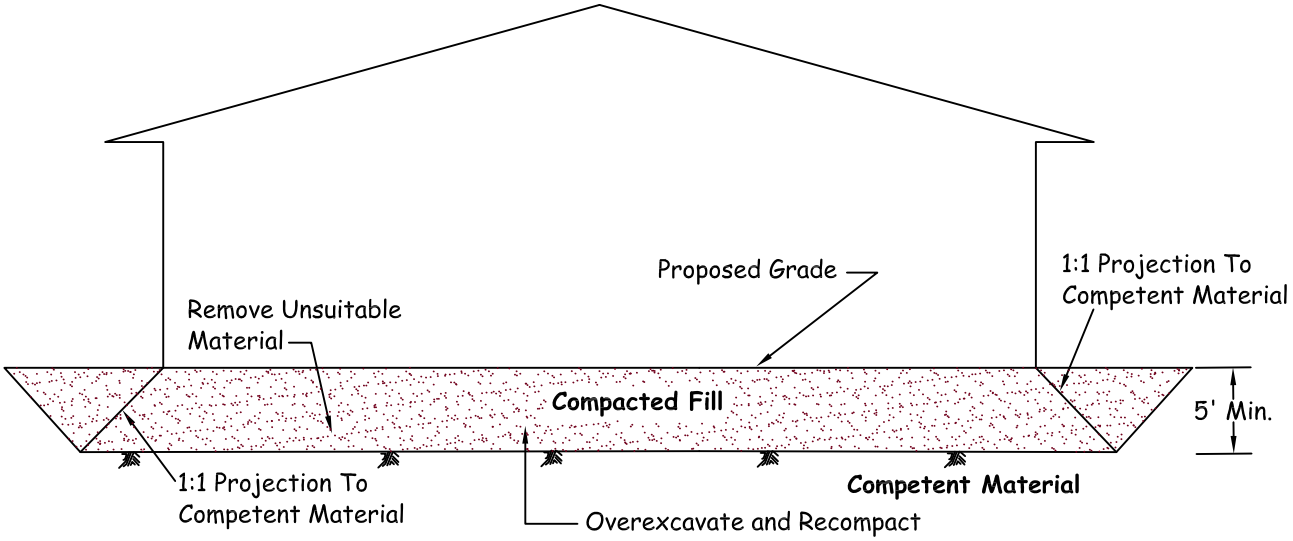
SECTION B-B'

NOT TO SCALE

LGC Geotechnical, Inc.

SUBDRAIN OUTLET MARKER DETAIL

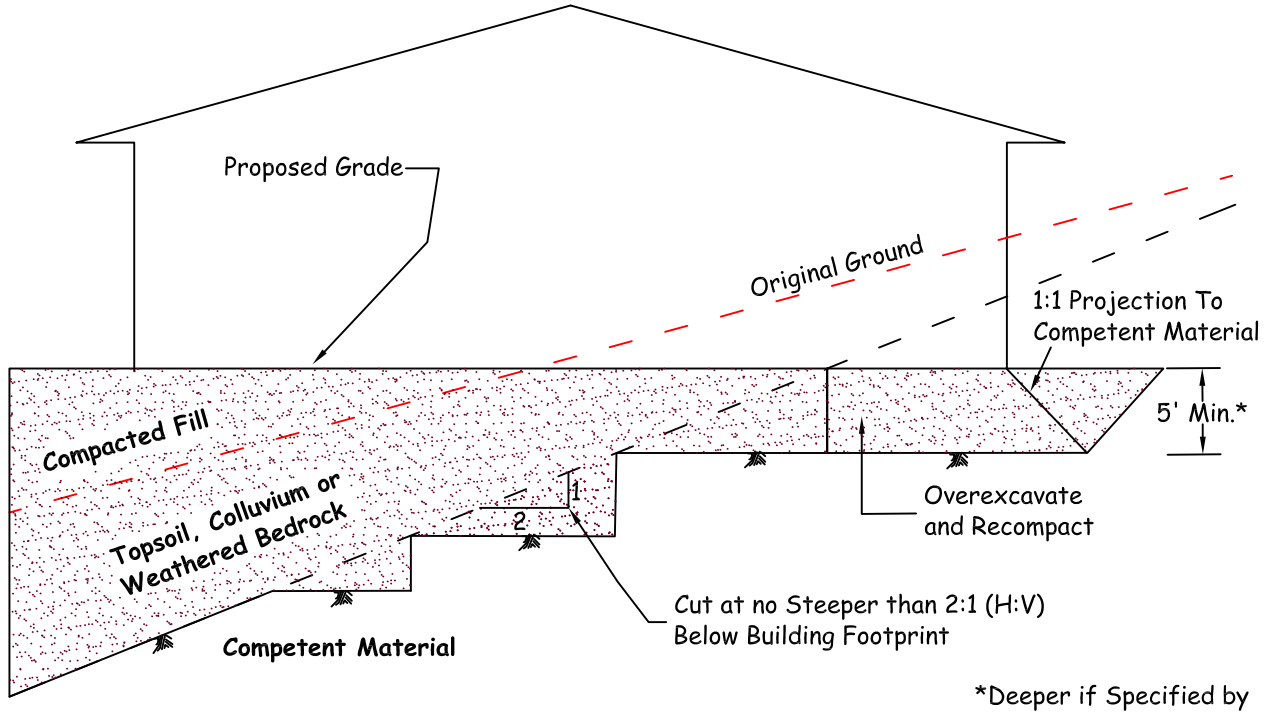
Cut Lot
(Exposing Unsuitable Soils at Design Grade)



Note 1: Removal Bottom Should be Graded With Minimum 2% Fall Towards Street or Other Suitable Area (as Determined by Soils Engineer) to Avoid Ponding Below Building

Note 2: Where Design Cut Lots are Excavated Entirely Into Competent Material, Overexcavation May Still be Required for Hard-Rock Conditions or for Materials With Variable Expansion Characteristics.

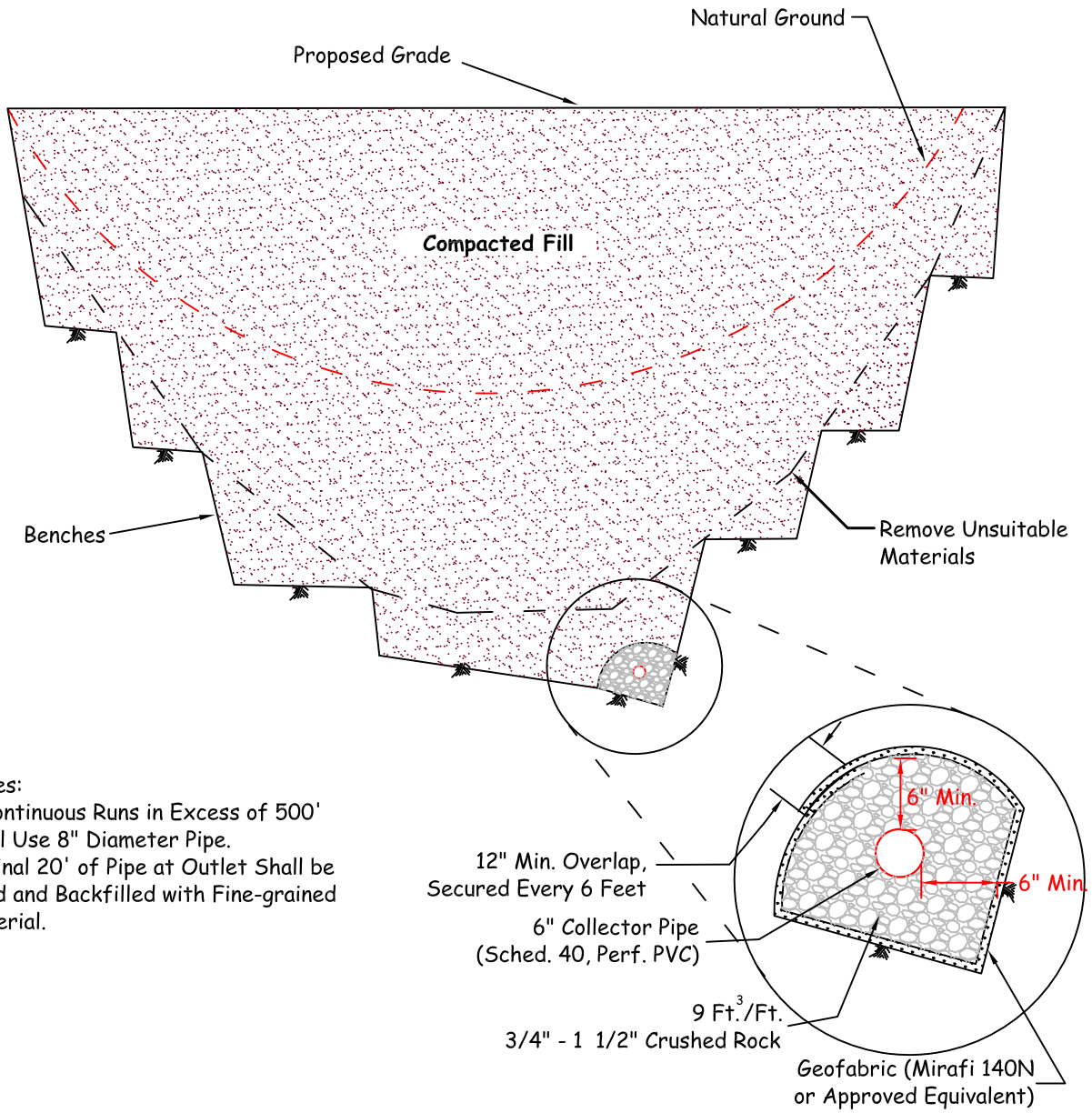
Cut/Fill Transition Lot



*Deeper if Specified by Soils Engineer

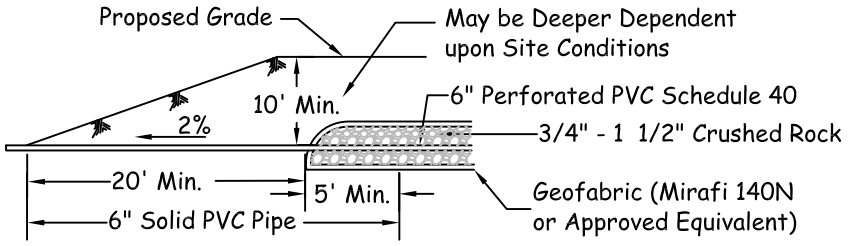
LGC Geotechnical, Inc.

CUT AND TRANSITION LOT OVEREXCAVATION DETAIL



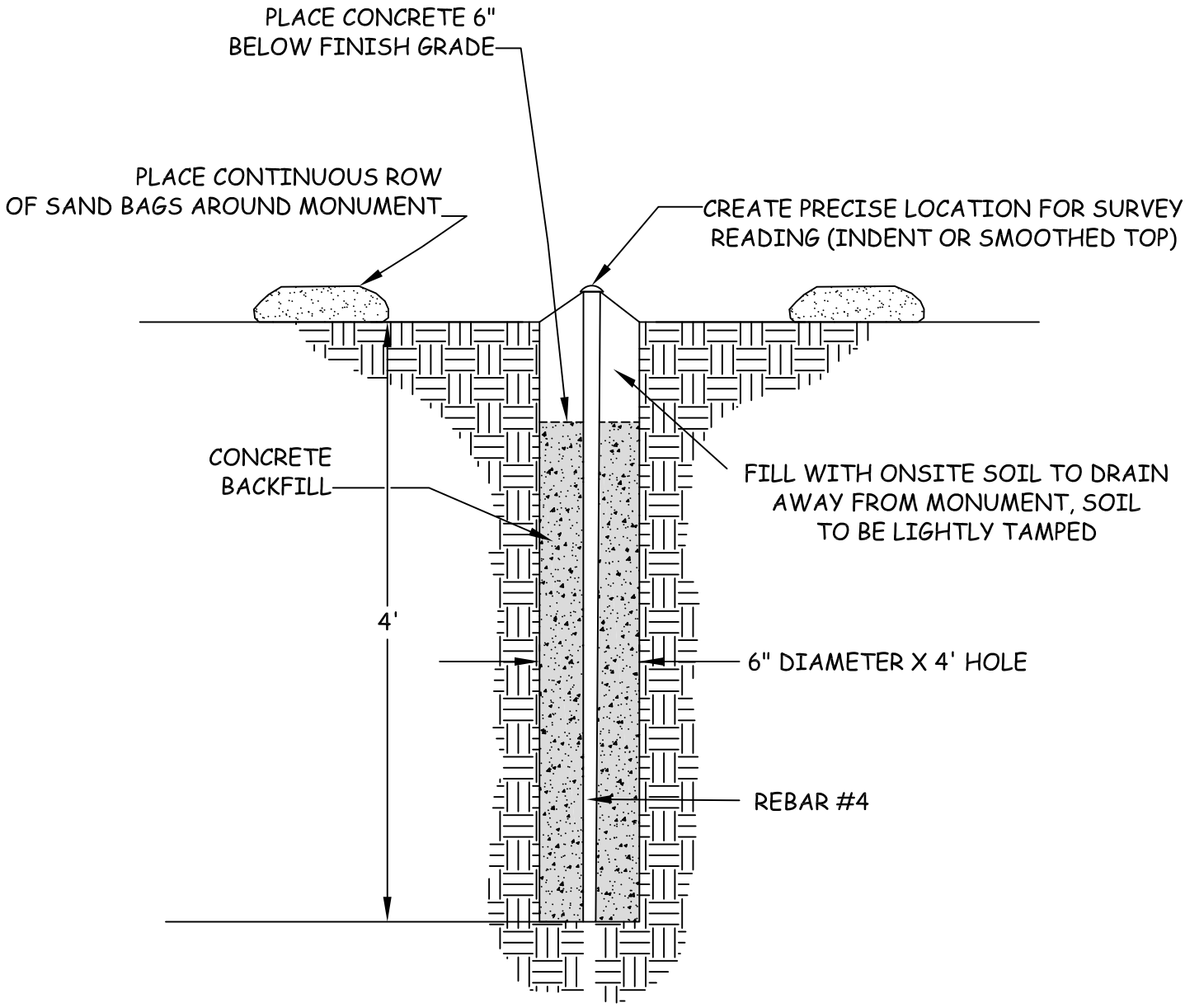
Notes:
1) Continuous Runs in Excess of 500' Shall Use 8" Diameter Pipe.
2) Final 20' of Pipe at Outlet Shall be Solid and Backfilled with Fine-grained Material.

Proposed Outlet Detail



LGC Geotechnical, Inc.

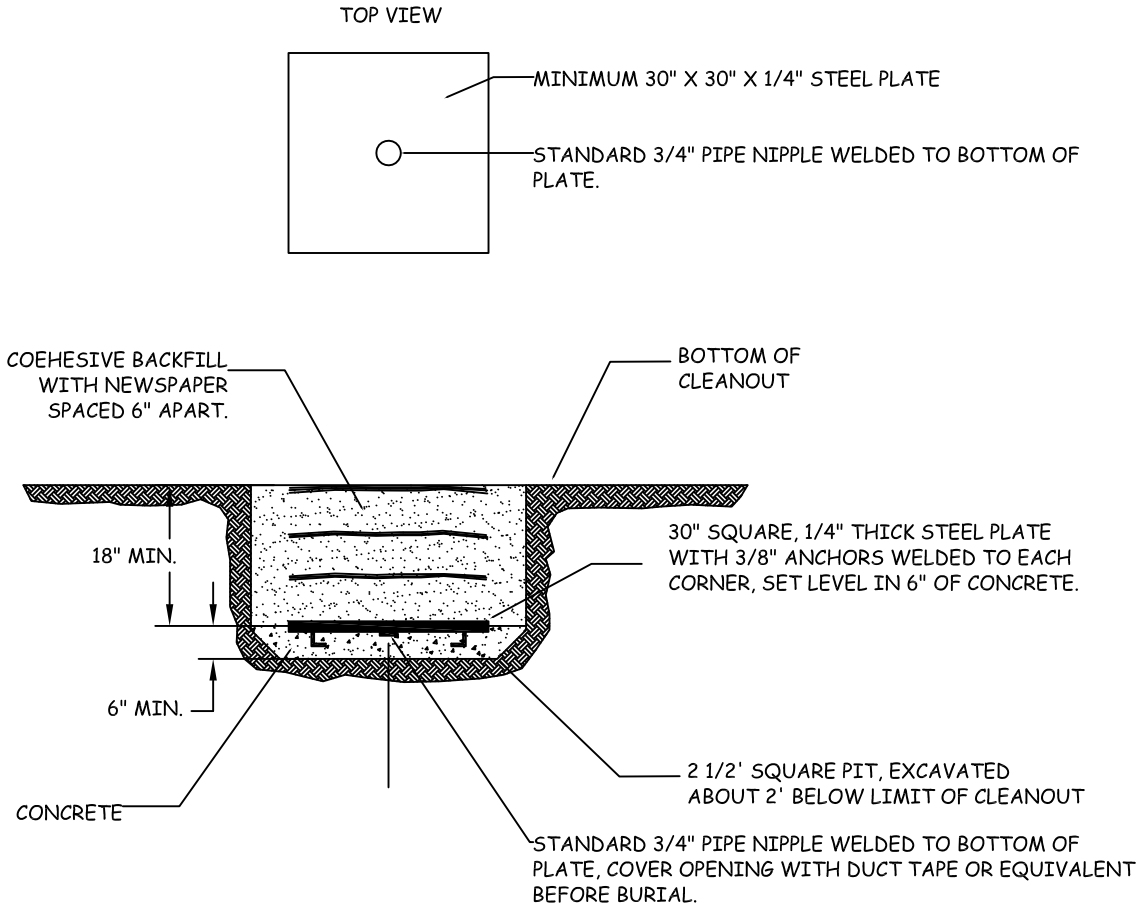
CANYON SUBDRAINS



NO CONSTRUCTION EQUIPMENT WITHIN 25 FEET
OF ANY INSTALLED SETTLEMENT MONUMENTS

LGC Geotechnical, Inc.

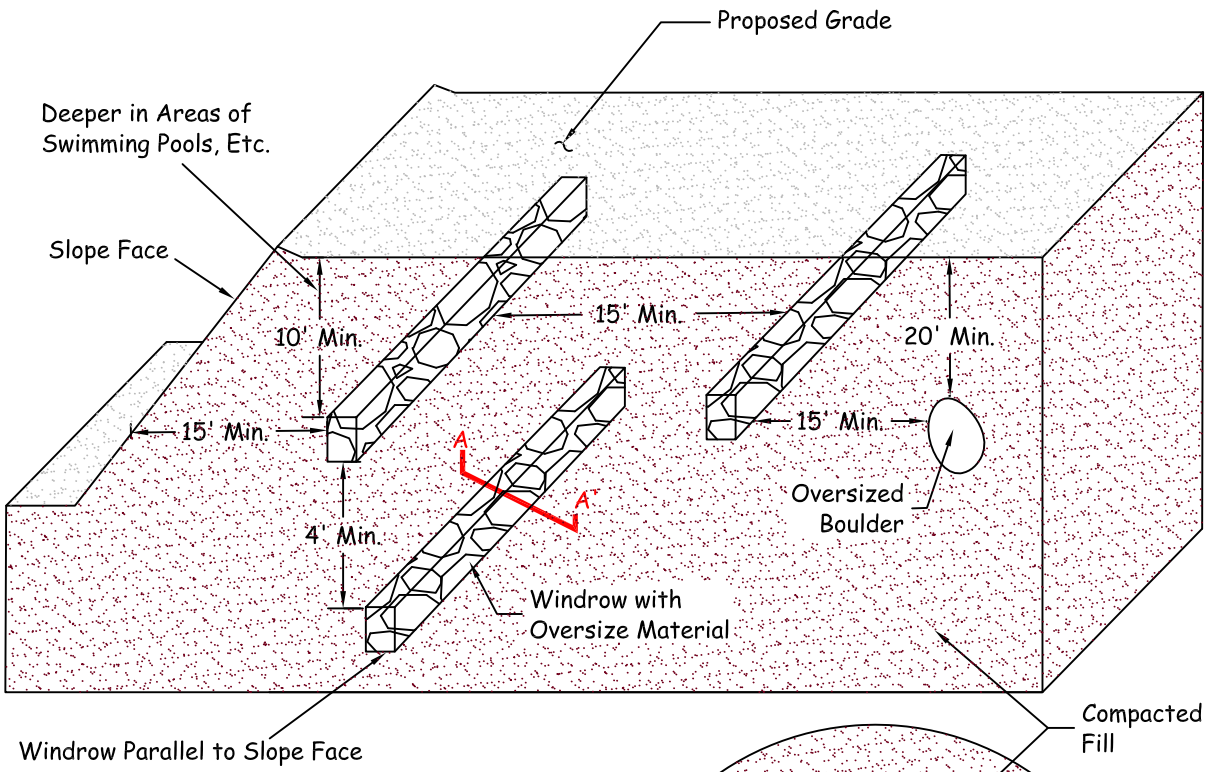
TYPICAL SURFACE SETTLEMENT MONUMENT

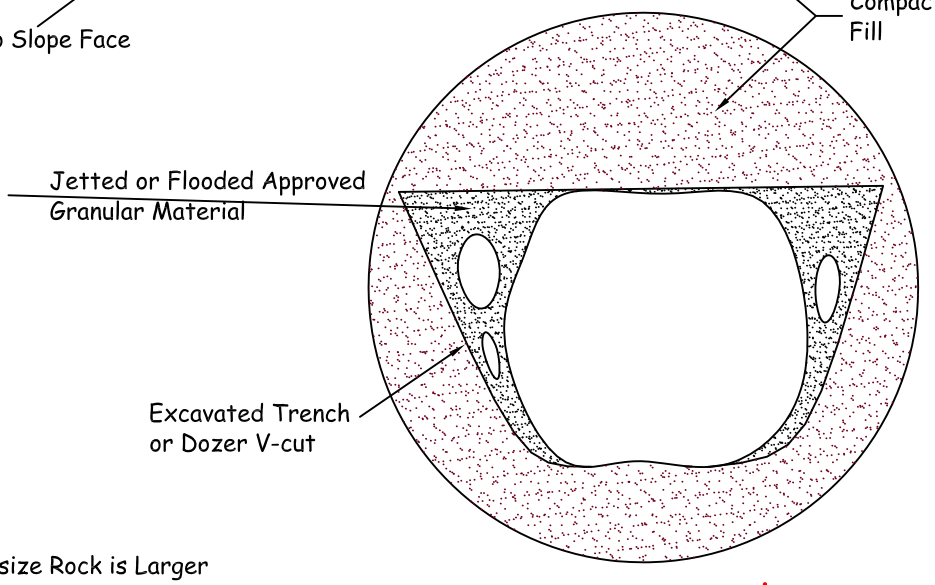


1. SURVEY FOR HORIZONTAL AND VERTICAL LOCATION TO NEAREST .01 INCH PRIOR TO BACKFILL USING KNOW LOCATIONS THAT WILL REMAIN INTACT DURING THE DURATION OF THE MONITORING PROGRAM. KNOW POINTS EXPLICITELY NOT ALLOWED ARE THOSE LOCATED ON FILL OR THAT WILL BE DESTROYED DURING GRADING.
2. IN THE EVENT OF DAMAGE TO SETTLEMENT PLATE DURING GRADING, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE GEOTECHNICAL ENGINEER AND SHALL BE RESPONSIBLE FOR RESTORING THE SETTLEMENT PLATES TO WORKING ORDER.
3. DRILL TO RECOVER AND ATTACH RISER PIPE.

LGC Geotechnical, Inc.

TYPICAL SETTLEMENT PLATE AND RISER





Note: Oversize Rock is Larger
than 8" in Maximum Dimension.

Section A-A'

LGC Geotechnical, Inc.

OVERSIZE ROCK DISPOSAL DETAIL

April 5, 2022 Project No. 21116-01

Mr. A.J. Jarvis
The New Home Company
85 Enterprise, Suite 450
Aliso Viejo, CA 92656

Subject: ***Geotechnical Responses to City Reviewer Geotechnical Review Comments dated February 16, 2022 for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California***

Introduction

In accordance with your request, LGC Geotechnical, Inc. has prepared this geotechnical response-report to the Eastvale City Reviewer's (Michael Baker International) geotechnical review comments dated February 16, 2022 (Michael Baker, 2022) regarding the proposed approximately 160-acre residential development located known as "Leal" in the City of Eastvale, California. It is our understanding the review comments are based on the review of the referenced geotechnical evaluation (LGC Geotechnical, 2021).

This response report should be considered as part of the project design documents in conjunction with our referenced geotechnical report (LGC Geotechnical, 2021). In the case of conflict, the recommendations contained herein should supersede those provided in our previous reports. The remaining recommendations provided in our reference geotechnical reports (LGC Geotechnical, 2021) remain valid and applicable.

GEOTECHNICAL REVIEW COMMENT DATED February 16, 2022

For your convenience, the geotechnical review comments have been repeated below along with our response.

First Comment

"Suggest including a brief description of potential erosion impacts.in response to CEQA Appendix G Checklist question for Geology and Soils b) "Would the project result in substantial soil erosion of the loss of topsoil?"

Response to First Comment

The proposed grading activities that will be part of the development of the subject site will include removal of the topsoil across the site and replacement with engineered fill material. The proposed grading plan does not have any natural or steep slopes that would be subject to excessive erosion. The ground surface at the completion of grading will be engineered fill with typical site drainage and typical slope inclinations.

Second Comment

"Please indicate whether the project site has a low or high potential for expansive soil."

Response to Second Comment

As mentioned within sections 1.4, 3.0 and 4.2, along with the lab test result presented in Appendix C, of the provided geotechnical report (LGC, 2021) the site soils expansion potential is classified as "Very Low".

Should you have any questions regarding this report, please do not hesitate to contact this office.

Sincerely,

LGC Geotechnical, Inc.



Blake J. Elliott, RCE 70705
Project Engineer

BJE

Attachments: References
Review Comments

Distribution: (1) Addressee (electronic copy)
(1) Carlson Strategic Land Solutions
Attn: Mr. Peter Carlson

References

LGC Geotechnical, Inc., 2021, Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California, Project No. 21116-01, dated June 21, 2021

Michael Baker International, 2022, Leal Master Plan EIR Addendum Peer Review, dated February 16, 2022

Appendix F

HILLMANN
CONSULTING

PHASE I ENVIRONMENTAL SITE ASSESSMENT



Leal Ranch
12741 and 12745 Limonite Avenue and 12740 58th Street
Eastvale, California 92880

Prepared For:

The New Home Company
15231 Laguna Canyon Road, Suite 250
Irvine, California 92618

September 20, 2021
Revised March 23, 2022

Hillmann Project Number C3-8458

HILLMANN
CONSULTING

September 20, 2021

Mr. Matt Gibson
The New Home Company
15231 Laguna Canyon Road, Suite 250
Irvine, California 92618

RE: Phase I Environmental Site Assessment
Leal Ranch
12741 and 12745 Limonite Avenue and 12740 58th Street
Eastvale, California 92880
Hillmann Project No: C3-8458

Dear Mr. Gibson:

Hillmann Consulting LLC is pleased to provide the results of our Phase I Environmental Site Assessment of the above referenced property. This assessment was performed in general accordance with the scope and limitations of ASTM Practice E1527-13, which is the latest version of the E1527 standard published by the ASTM.

We appreciate the opportunity to provide environmental due diligence services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact our office at 714-634-9500.

Sincerely,

Hillmann Consulting, LLC

Gabriela Cyrulik
Environmental Technician

Ryan Terwilliger
Western Operations Manager

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List of Abbreviations/Acronyms

Hillmann may use the following abbreviations and acronyms for common terminology described in our report. Not all abbreviations or acronyms may be applicable to this report:

ACM	– Asbestos Containing Material
AOC	– Area of Concern
AST	– Aboveground Storage Tank
ASTM	– American Society for Testing Materials
BER	– Business Environmental Risk
CEA	– Classification Exception Area
CERCLA	– Comprehensive Environmental Response Compensation and Liability Act
CERCLIS	– Comprehensive Environmental Response Compensation and Liability Information System
CESQG	– Conditionally Exempt Small Quantity Generator
COC	– Chemicals of Concern
CORRACTS	– Corrective Action Sites
CREC	– Controlled Recognized Environmental Condition
DNPL	– Delisted National Priority List
DTSC	– Department of Toxic Substances Control
ENG	– Engineering
ERNS	– Emergency Response Notification System
FDEP	– Florida Department of Environmental Protection
FDNY	– Fire Department, City of New York
FDOT	– Florida Department of Transportation
FOI/FOIA/FOIL	– Freedom of Information / Freedom of Information Act / Freedom of Information Letter
HVAC	– Heating Ventilation & Air Conditioning
HREC	– Historic Recognized Environmental Condition
IAQ	– Indoor Air Quality
ISRA	– Industrial Site Recovery Act
LBP	– Lead-Based Paint
LQG	– Large Quantity Generator
LTANK	– Leaking Storage Tank
LUST	– Leaking Underground Storage Tank
MassDEP	– Massachusetts Department of Environmental Protection
SDS/MSDS	– Safety Data Sheet / Material Safety Data Sheet
NA	– Not Applicable
NCDOH	– Nassau County Department of Health
NFA	– No Further Action
NFRAP	– No Further Remedial Actions Planned
NJDEP	– New Jersey Department of Environmental Protection
NPDES	– National Pollutant Discharge Elimination System
NPL	– National Priority List
NYCDEP	– New York City Department of Environmental Protection
NYCDOB	– New York City Department of Buildings
NYCOER	– New York City Office of Environmental Remediation
NYSDEC	– New York State Department of Environmental Conservation
OPRA	– Open Public Records Act
PADEP	– Pennsylvania Department of Environmental Protection
PAH	– Polycyclic Aromatic Hydrocarbon
PCE	– Perchloroethylene
RAO	– Response Action Outcome
RCRA	– Resource Conservation and Recovery Act
RCRIS	– Resource Conservation and Recovery Information System
REC	– Recognized Environmental Condition
RWQCB	– Regional Water Quality Control Board
SCAQMD	– South Coast Air Quality Management District
SCDHS	– Suffolk County Department of Health Services
SDG	– Significant Data Gap
SEMS	– Superfund Enterprise Management System
SRP	– Site Remediation Program
SQG	– Small Quantity Generator
SVOC	– Semi-Volatile Organic Compound
TCE	– Trichloroethylene
TSDF	– Treatment Storage and/or Disposal Facility
USEPA	– United States Environmental Protection Agency
UST	– Underground Storage Tank
VEC	– Vapor Encroachment Condition
VOC	– Volatile Organic Compound

1.0 FINDINGS, OPINIONS, AND CONCLUSIONS

Hillmann Consulting, LLC (Hillmann) performed a Phase I Environmental Site Assessment (ESA) of 12741 and 12745 Limonite Avenue and 12740 58th Street, Eastvale, California (the "Property"). The assessment has been conducted in accordance with our contracted scope of work and the ASTM Standard Practice E 1527-13 for Phase I Environmental Site Assessments and All Appropriate Inquiries (AAI) Final Rule 40 CFR Part 312. This section contains a summary of findings, opinions and conclusions made by this assessment. However, this section, alone, does not constitute the complete assessment. The report must be read in its entirety.

1.1 Summary of Project Details

Primary Street Address:		12741 and 12745 Limonite Avenue and 12740 58th Street			
City:	Eastvale	**County:**	Riverside	**State:**	California
Tax ID/Parcel Number:		164030010, 164030012, 164030013, 164030014, 164030024, 162030025			
Property Owner:		James Borba			
Zoning Designation:		Leal Master Plan			
Approx. Property Area:		153.3 acres			
Buildings/# of Floors		Five (5), residential structures/single-story Dairy Barn Horse Barn Maintenance/Repair Structure			
Approx. Building Area:		N/A			
Approx. Year Built:		1931			
Commercial Occupants:		None			
Current Use:		Dairy farm with five (5) residential structures			
Prior Uses:		Dairy farm, horse ranch, orchard			
Inspected By:		Ms. Gabriela Cyrulik			
Site Contact/Company:		Mr. Matt Gibbson/New Home Company			
Site Escort/Company:		Mr. Craig Leal/Property Owner			
Inspection Date:		June 21, 2021			
Weather Conditions:		Sunny, 81 degrees F			

1.2 Findings Summary Table

Assessment Subject	No REC	REC	CREC	HREC	Rpt. Ref.
Property Regulatory Records Review:	X				4.3
Property Historical Records Review:	X				4.2
Bulk Petroleum Storage:	X				5.3
On-Site Operations:	X				5.3
On-Site Haz-Mat Storage/Use/Spills:	X				5.3
Transformers/Hydraulic Systems:	X				5.3
Waste Discharges:	X				5.3
Interviews:	X				6.0
Adjoining & Nearby Properties:	X				4.3 5.2
Prior Env. Reports/User Provided Info:	X				3.0
Data Gaps:	X				2.3

1.3 Findings, Opinions and Conclusions

1.3.1 Recognized Environmental Conditions

Hillmann has performed a Phase I Environmental Site Assessment in accordance with the scope and limitations of ASTM Practice E1527-13 of the Property as described in Section 2 of this report. Any additions to, exceptions to, or deletions from this practice are also described in Section 2 of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the Property, except for the following:

RECOGNIZED ENVIRONMENTAL CONDITIONS	
	No RECs were identified.
HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS	
	No HRECs were identified.
CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS	
	No CRECs were identified.
SIGNIFICANT DATA GAPS	
	No SDGs were identified.

1.3.2 REC Response Action Recommendations

The following table presents recommended response actions to the issues noted for further investigation and/or corrective action:

REC RESPONSE ACTION SUMMARY TABLE	
REC	**Response Action**
	None identified

1.3.3 Notable Environmental Conditions / *De Minimis* Conditions

The following environmental conditions were identified, but are not considered to be a REC in connection with the Property:

NOTABLE ENVIRONMENTAL CONDITIONS / DE MINIMIS CONDITIONS	
1.	Leal Ranches at 12740 58th Street (Property) is listed on the FINDS, ECHO, ENF, CIWQS, CERS database. The FINDS listing is associated with the facility being registered as a NPDES point source. Available records identified no violations. The ECHO listing is related to the Clean Water Act compliance as administered by the state of California. No violations were noted for the past five years. The ENF listing is associated with an apparent violation observed and corrected during a 2008 inspection. The CIWQS listing identified no violations observed in the past five years. The CERS listing is associated with an inspection of the facility in accordance with the California Water Code. Violations were noted in 2007, 2008, and 2010 associated with animal waste disposal documentation and associated with implementing the BMP (Best Management Practices) for the facility. No additional violations were noted in the record. Because these listings do not indicate a material threat of a release, Hillmann concludes they are unlikely to represent an environmental concern to the Property and recommends no further investigation regarding this issue.
2.	Portions of the Property were utilized for dairy operations from approximately the 1970s to 2019. Hillmann observed areas of residual livestock waste accumulations on the east and west portions of the Property. Elevated concentrations of methane gas are sometimes associated with areas where livestock wastes accumulate, and can sometimes give rise to the need for mitigation prior to development. A methane survey was conducted in July of 2021, which indicated that most samples had insignificant concentrations of subsurface methane gas, and field screening indicated just three (3) samples (of 15) had detectable concentrations of methane. However, it is important to note that the methane distribution is not widespread and that the areas investigated are still covered with animal waste. This material should be removed in connection with site development activities. Ultimately, Hillmann concludes that the residual livestock does not indicate a REC with connection to the Property.
3.	The Property is registered as having a 550-gallon historical fuel UST present on the Property in 1988. The Property owner indicated that the UST was removed from the ground in the late 1980s and subsequently utilized as an AST. The former UST was reported to have been located on the northern portion of the Property. No tank closure records for the former were available. However, a Limited Phase II Investigation and GPR Investigation was conducted in July 2021 within the vicinity of the former UST. Soil and soil gas samples were collected within the historical UST, which indicated no detectable concentrations of petroleum hydrocarbons or VOC (*i.e.*, the results were "non-detect"), and no heavy metal concentrations exceeding residential screening levels. The results from soil gas sampling in these areas indicated no VOC concentrations exceeding current residential screening levels and these very low concentrations likely do not pose a significant environmental or human health concern for the proposed residential use. Additionally, the GPR Investigation identified no evidence of the presence of the former UST. Therefore, the historical 550-gallon UST on the Property does not indicate a REC with connection to the Property and Hillmann recommends no further investigation regarding this issue.
4.	Maintenance and repair of farm equipment and vehicles appear to have been conducted for an extended period of time in an area of the northern portion of the Property. Hillmann observed a significant amount of equipment, vehicles, trash, drums, and other materials in this area. Soil staining was observed within the vicinity of the maintenance repair area, and by the entrance of the dairy barn at 12741 Limonite Avenue. However, a Limited Phase II Investigation was conducted in July 2021 within the vicinity of the former maintenance repair area. Soil and soil gas samples were collected within the targeted areas of the Property. Results from soil sampling in the maintenance areas were "non-detect" for petroleum hydrocarbons and VOCs, and no heavy metal concentrations were detected at levels exceeding residential screening levels. The results from soil gas sampling in these areas indicated no VOC concentrations exceeding current residential screening levels, and the very low

	concentrations of detected chemicals are unlikely to represent an environmental or human health concern for the proposed residential use. Therefore, the historical maintenance operations do not indicate a REC with connection to the Property and Hillmann recommends no further investigation regarding this issue.
5.	The Property was utilized as orchards since approximately 1931 to the 1950s. Concentrations of pesticides are commonly associated with shallow soils at sites with historical agricultural use. In addition, there is a potential for pesticide impacts to soil in the vicinity of the older farm structures along the northern perimeter of the Property where pesticide storage and mixing may have occurred. Accordingly, ninety-six (96) individual samples were collected, and analyzed for OCPs and Title 22 Metals, which are sometimes associated with the application of heavy-metal containing herbicides. Results of the OCP analysis indicated low levels of 4,4'-DDE and 4,4'-DDT which were below the applicable RSLs for residential applications. The results from heavy metal analysis indicate the samples had low, naturally-occurring background levels of metals, which did not exceed the applicable RSLs for residential applications. Therefore, the historical orchard operations on the Property do not indicate a REC with connection to the Property and Hillmann recommends no further investigation regarding this issue.
6.	Hillmann observed the presence of discarded drums located in the maintenance repair area. The drums indicated a concern due to the unknown content and possibility of undocumented chemical spills/releases to have occurred in the past and/or occur when the site is cleared for development. However, a Limited Phase II Investigation was conducted in July 2021 within the vicinity of the discarded industrial drums. Soil samples that were collected within the area indicated no detectable concentrations of petroleum hydrocarbons or VOCs, and no heavy metal concentrations exceeding residential screening levels. The results from soil gas sampling in these areas indicated no VOC concentrations exceeding current residential screening levels. These very low concentrations likely do not pose a significant environmental or human health concern for the proposed residential use. Therefore, the historical discarded industrial drums on the Property did not indicate a REC with connection to the Property. Hillmann recommends no further investigation regarding this issue.
7.	Hillmann observed piles of concrete, abandoned drums, heavy machinery, equipment, cars, tires, furniture, and other miscellaneous trash and debris present throughout the northern boundary of the Property. These features do not appear to represent an environmental concern to the Property. It is recommended all trash and debris be properly disposed off-site during Property redevelopment. Otherwise, Hillmann recommends no further action or investigation regarding this issue.
8.	Septic systems are present on the north side of the Property by the former residential homes. The Property owner indicated that there are two (2) 1,500-gallon, and one (1) 500-gallon septic tanks on the northern area of the Property, and that the tanks are utilized for the residential structures on the Property. Based on their use, these features appear unlikely to represent an environmental concern and Hillmann recommends no further investigation regarding this issue.
9.	Harada Elementary School - Echeverria Dairy/Cleveland Ave is listed on the Envirostor, LUST, SCH database. The site is adjacent to the southwest and is down gradient relative to the Property. The facility is incorrectly reported as being adjacent to the Property. The school is located approximately 1,200 feet south, and the facility has been investigated for potential contaminants of concern including arsenic, DDD, DDE, DDT and methane with a no further action status received. The LUST record is associated with a historic gasoline UST located approximately 1 mile south of the Property at the Eastvale Elementary School property. These issues do not represent an environmental concern and Hillmann recommends no further investigation regarding this issue.
10.	Ralphs Grocery #45 Fuel Center-12618 Limonite Avenue, is listed on the UST, CERS HAZ WASTE, CERS TANKS, HAZNET, CERS, HWTS, RCRA-LQG, CHMIRS databases. The site is adjacent to the south and is down-gradient relative to the Property. The facility is registered and currently operates as an automotive filling station utilizing USTs for petroleum storage. Minor violations associated with the fuel dispensing systems were historically noted and returned to compliance. A release of seven gallons of gasoline was reported to the concrete and asphalt and was cleaned up by a contractor. The waste disposal records did not identify any violations or releases to the Property. Based on the down-gradient location and lack of leaking UST database listings, the adjoining filling station is not considered to be a REC in connection to the Property. Hillmann recommends no further investigation regarding this issue.
11.	Vons Fuel Center #2688 at 6110 Hamner Ave is listed on the UST, CERS HAZ WASTE, CERS TANKS, HAZNET, CERS, HWTS, RCRA NonGen/NLR databases. The site is adjacent to the east, and is down-gradient relative to the Property. The facility operates a vehicular fuel dispensary utilizing USTs for petroleum distillate storage. The records indicate the facility is in compliance. A surficial, *de minimis* release of two (2) gallons of gasoline was reported in 2012. A surficial, *de minimis* release of four (4) gallons of diesel was reported in 2006.

	Minor violations associated with the fuel dispensing systems were historically noted and returned to compliance. No releases to soil or groundwater were identified. The waste disposal records did not identify any violations or releases to the Property. Based on the down-gradient location and lack of leaking UST database listings, the adjoining filling station is not considered to be a REC in connection to the Property.

1.3.4 Environmental Professional Statement

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a *property* of the nature, history and setting of the subject *property*. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



_____
Ryan Terwilliger
Environmental Professional

1.4 Business Environmental Risks / Non-ASTM Scope

Hillmann has performed a limited review of the following potential Business Environmental Risks (BER), also known as "Non-ASTM Scope concerns", in accordance with the contracted scope of work scope for this assessment. The following is a summary of findings for applicable BERs. For a more detailed discussion of the findings and contracted scope of work, please see the referenced report section.

BUSINESS ENVIRONMENTAL RISKS / NON-ASTM SCOPE			
Subject	**Findings**	**Not Appl.**	**Rpt. Ref.**
Asbestos	Existing dwelling and farm structures may contain ACM and should undergo asbestos surveys and abatement prior to demolition. Suspected ACM noted during a cursory visual screening included sheetrock wall systems, brick and mastic, floor tile with associated mastics, and roofing materials.		7.1
Lead Paint	Existing dwelling and farm structures may have components coated with lead containing paint, and undergo testing to determine appropriate worker safety and waste handling/disposal practices.		7.2
Radon	Property is located in the USEPA radon designation Zone 2 or 'moderate risk' area for radon. According to the CA Radon database, fifteen (15) recorded tests in zip code 92880 recorded 1 pCi/L indoor concentrations. Radon appears unlikely to represent an environmental concern.		7.3
Mold / Microbial Damage	Hillmann did not observe any evidence of significant problems with moisture intrusion or mold/microbial growth at the Property.		7.4
NWI Wetlands	No mapped wetland areas were depicted at the Property by NWI wetland maps.		7.5

Lead in Drinking Water	Potable water at the Property is provided via an on-site well installed in 2010. No water quality testing of the well water was available.		7.6

2.0 INTRODUCTION

2.1 Purpose and Scope

This assessment was conducted utilizing generally accepted Phase I ESA industry standards in accordance with the ASTM Standard Practice E1527-13. The ASTM describes these methodologies as representing good commercial and customary practice in the United States of America for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner or bona fide prospective purchaser limitations on CERCLA liability (hereinafter, the "landowner liability protections," or "LLPs"): that is, the practice that constitutes all appropriate inquiries into the previous ownership and uses the property consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35) (B). The primary goal of the processes established by ASTM E1527-13 is to identify *recognized environmental conditions* in connection with the Property.

The term *recognized environmental condition (REC)* is defined by the ASTM as the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

The ASTM has also defined the terms *historical recognized environmental conditions* and *controlled recognized environmental conditions* as two additional types of RECs. The term *historical recognized environmental condition (HREC)* is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the Property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the Property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls or engineering controls).

The term *controlled recognized environmental condition (CREC)* is defined as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

Conditions determined to be *"de minimis conditions"* are not considered to be RECs, HRECs or CRECs. *De minimis condition* is defined by the ASTM, "…as a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

The chief components of this assessment are generally described as follows:

- A non-invasive visual reconnaissance of the Property and adjoining properties in accordance with ASTM guidelines for evidence of RECs.
- Interviews of past and present owners and occupants and state and local government officials, seeking information related to the potential presence of RECs at the Property.

- A review of standard physical record sources for available topographic, geologic and groundwater data.

- A review of standard historic record sources, such as fire insurance maps, city directories, aerial photographs, prior reports and interviews, etc., to determine prior uses of the Property from the present, back to the Property's first developed use, or back to 1940, whichever is earlier.

- A review of standard environmental record sources including federal and state environmental databases, and additional environmental record sources, to identify potential regulatory concerns with the Property, adjoining properties and properties located within the surrounding area.

An evaluation of environmental or other regulatory compliance matters is excluded from the scope of this assessment.

These methodologies are described as representing good commercial and customary practice for conducting an Environmental Site Assessment of a property for the purpose of identifying recognized environmental conditions.

2.1.1 Business Environmental Risks/Non-ASTM Scope Considerations

In accordance with our contract agreement, Hillmann may have addressed the following potential environmental subject matters that are outside of the requirements of the ASTM E1527-13 standard:

Asbestos-Containing Materials (ACM): A non-intrusive visual screening for the presence of suspect ACM within the accessed areas of buildings built prior to 1990 on the Property. It is emphasized that this non-intrusive visual screening does not constitute an asbestos survey/inspection of the premises. An asbestos survey/inspection should be sought by the report User(s) if more certainty is desired regarding ACM and potential asbestos hazards at the Property. Furthermore, a review of regulatory compliance matters pertaining to asbestos is excluded from the scope of work.

Lead-Based Paint (LBP): A non-intrusive visual screening of the condition of painted surfaces in the accessed areas of residential buildings/units built prior to 1980 on the Property. It is emphasized that this non-intrusive visual screening does not constitute a comprehensive survey for LBP or potential lead hazards. A comprehensive inspection should be sought by the report User(s) if more certainty is desired regarding LBP at the Property. Furthermore, a review of regulatory compliance matters pertaining to lead-based paint is excluded from the scope of work.

USEPA Designated Radon Potential: Review of general non-site specific data published by the USEPA regarding the Radon Zone classification for the area of the Property.

Mold/Microbial Damage: A non-intrusive visual screening within the accessed areas of buildings on the Property for evidence of systemic microbial problems, including visible mold growth, water damaged building materials or musty odors. It is emphasized that this non-intrusive visual screening does not constitute a comprehensive survey for moisture/mold/microbial damage. A more comprehensive inspection should be sought by the report User(s) if more certainty is desired regarding the potential for moisture/mold/microbial damages at the Property.

NWI Wetlands: Review of US Fish and Wildlife Service National Wetland Inventory digitized data of mapped wetlands as presented in the attached EDR Radius Map plus Geocheck Report.

It is emphasized that, regardless of the wetlands data obtained via the EDR Geocheck-Physical Setting Source Addendum, a delineation of regulated wetlands by a qualified professional would be warranted to determine the presence or absence of regulated wetlands at the Property.

Lead in Drinking Water: Review of the potential for elevated levels of lead in the drinking water by determining the source of the drinking water supply and a review of available testing or compliance data reports.

2.2 Property Location/Legal Description

Property location and legal description details are described as follows:

Primary Street Address:	12741 and 12745 Limonite Avenue and 12740 58th Street				
City:	Eastvale	**County:**	Riverside	**State:**	California
Tax ID/Parcel Number:	164030010, 164030012, 164030013, 164030014, 164030024, 162030025				
Approx. Land Area:	153.3 acres				
Apprx. Latitude/Longitude:	North 33.9791850 degrees/West 117.5629320 degrees				
Additional Details (if appl.):	N/A				
Property Owner:	James Borba				
Zoning Designation:	Leal Master Plan				

2.3 Data Gaps

A *data gap* is defined by the ASTM as a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. A data gap is only significant if other information and/or professional experience raises reasonable concerns involving the data gap and the ability to determine the presence or absence of recognized

environmental conditions. The following table summarizes data gaps encountered during the assessment as well as a discussion of their significance.

Data Gap:	Significant (Yes/No)?	Discussion
Historical records data failure	No	The date and/or type of the first developed use of the Property was not documented. Record gaps exceeding five years were encountered; however, no significant site use changes are suspected during these intervals. The lack of this information does not represent a significant data gap.
Response to agency records requests not received as of date of report.	No	Any additional information indicative of a REC will be forwarded upon receipt. Based on its review of information from other sources, however, Hillmann believes the lack of this information is unlikely to affect the conclusions or recommendations of this report. The lack of this information does not represent a significant data gap.

2.4 User Reliance

This report is for the exclusive use of the User(s) named on the front cover. No other party(ies) shall have any right to rely on the content of this report without first obtaining the consent of the original report User; and without obtaining written consent from Hillmann in the form of a letter of reliance or report recertification.

2.5 Significant Assumptions

The following significant assumptions are made:

- The site operations at the time of the site visit are assumed to reflect typical site conditions relative to potential environmental conditions and that no concealment of environmental conditions or releases by site owners or occupants has occurred. Likewise, it is assumed that no areas of the Property with potential environmental concerns or RECs were concealed or otherwise not reported, intentionally or unknowingly, by the Property owners/occupants and/or site escort at the time of the site visit.

- For the purpose of estimating the approximate direction of groundwater flow in the absence of site specific groundwater data, unless indicated otherwise, an assumption has been made that the gradient of groundwater flow follows the surface topography of the Property and immediate surrounding area.

2.6 General Limitations and Exceptions

2.6.1 Limitations

The report turnaround time specified by the contract agreement for this assessment may present a limitation to the availability of pertinent regulatory agency records. Such limitations, if encountered, are further specified in Section 4.4.

Significant limitations related to the condition or accessibility of the Property at the time of the site reconnaissance, if encountered, are reported in Section 5.1.

2.6.2 Other Exceptions or Deletions

No other exceptions or deletions from the ASTM Standard E1527-13 are reported.

2.6.3 Special Terms and Conditions

This Phase I Environmental Site Assessment has been prepared using reasonable efforts in each phase of its work to identify recognized environmental conditions associated with hazardous substances, wastes and petroleum products at the Property. Findings within this report are based on information collected from observations made on the day of the site reconnaissance and from reasonably ascertainable information obtained from governing public agencies and private sources.

This report is not definitive and should not be assumed to be a complete or specific definition of the conditions above or below grade. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, site development, redevelopment, or other construction purposes. No representation or warranty is made that the past or current operations at the Property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes.

Findings, conclusions and recommendations presented in this report are based on visual observations of the Property, interviews conducted, the records reviewed, information provided by the Client, and/or a review of readily available and supplied drawings and documents. The accuracy and completeness of information obtained during the assessment, whether written, graphic or verbal, provided by the Property contact(s) or as shown on any documents reviewed or received from the Property contact, owner or agent, or government agency source can neither be warranted nor guaranteed. Independent verification of the accuracy or completeness of all information reviewed or received during the course of this assessment is not made and excluded from the scope of work for this assessment. No warranty or guarantee is made of the accuracy or completeness of information that was obtained from ostensibly knowledgeable individuals, regulatory agency representatives or other secondary sources.

Regardless of the findings stated in this report, Hillmann is not responsible for consequences or conditions arising from facts that were concealed, withheld or not fully disclosed at the time the assessment was conducted.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

The regulatory database report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The regulatory research is designed to meet the requirements of ASTM Standard E1527-13. Hillmann can neither warrant nor guarantee the accuracy or completeness of the information obtained from the regulatory database report provider during the course of this assessment.

Subsurface conditions may differ from the conditions implied by the surface observations and can only be reliably evaluated through intrusive techniques.

Reasonable efforts have been made during this assessment to identify aboveground and underground storage tanks and ancillary equipment. Reasonable efforts are limited to information gained from visual observation of largely unobstructed areas, recorded database information held in public record and available information gathered from interviews. Such methods may not identify surficial and subsurface features that may have been hidden from view due to parked automobiles and other vehicles, snow cover, vegetative growth, pavement, construction or debris pile storage or incorrect information from sources.

No guarantee, explicit or implied, is made that the records pertaining to historical ownership or occupancy which were reviewed represent a comprehensive or precise delineation of past Property ownership or tenancy for legal purposes.

The ASTM E1527-13 standard states that recommendations are not required to be included in a Phase I ESA report; however, further that recommendations are an additional service that may be useful in the User's analysis of landowner liability protections or business environmental risks; and that the User should consider whether recommendations for additional inquiries or other services are desired.

The recommended response actions to the identified RECs presented in Section 1.3, if any, are not intended to represent the only course(s) of action to take; nor does it imply any opinion as to the timing of the action. Furthermore, it is emphasized that additional response actions may become warranted depending on the outcome of the initial action(s) taken. Hillmann advises that consultation with legal counsel familiar with environmental and real estate law may be beneficial to the decision making process for the type and timing of a response action to identified RECs, if any.

Due to the limited nature of our review of potential Business Environmental Risks, the User of the report should consider whether to take additional action(s) to further define, properly manage and/or mitigate potential BERs.

In the event of any conflict between the terms and conditions of this report and the terms and conditions of the consulting services agreement for this project, the consulting services agreement shall control.

3.0 USER PROVIDED INFORMATION

The term "User" is defined by ASTM as the party seeking to use Practice E1527 to complete an environmental site assessment of the Property; specifically, the entities named on the front cover to which the report has been addressed.

3.1 Prior Environmental Reports/Documentation

No prior environmental reports/documentation were provided.

3.2 User Questionnaire

Section 6 of the ASTM E1527-13 standard describes certain tasks required to be performed by the report User in order to qualify for landowner liability protections to CERCLA liability. To assist the report User to meet these requirements, the ASTM E1527-13 standard recommends a questionnaire of inquiries (User Questionnaire) specified in 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31 be provided to the original report User. The following is a summary of the User's response:

Question:	Yes/No:	Detail:
Environmental liens that are filed or recorded against the property: Did a search of recorded land title records identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?	No	
Activity and use limitations that are in place on the property or that have been filed or recorded against the property: Did a search of recorded land title records (or judicial records where appropriate, identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?	No	
Specialized knowledge or experience of the person seeking to qualify for the LLP: Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	No	
Relationship of the purchase price to the fair market value of the property if it were not contaminated: Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?	Yes	

Commonly Known or Reasonably Ascertainable Information: Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,		
-Do you know the past uses of the property?	Yes	Dairy Farm
-Do you know of specific chemicals that are present or were once present at the property?	No	
-Do you know of spills or other chemical releases that have taken place at the property?	No	
-Do you know of any environmental cleanups that have taken place at the property?	No	
The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation: Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?	No	
Litigation/Administrative Proceedings/Government Notices As the User of this ESA, do you have knowledge of (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.	No	

NR-no response

3.3 Reason for Performing Phase I ESA

The User did not indicate the purpose of the assessment. In accordance with ASTM E1527-13, it is assumed that the Phase I ESA was being performed in order to qualify for landowner liability protection to CERCLA liability.

4.0 RECORDS REVIEW

4.1 Physical Setting Sources

The following physical setting sources were reviewed:

Source	Discussion
USGS 7.5 minute Topographic Map Data: (EDR Geocheck-Physical Setting Source Addendum)	The Property lies at an elevation of approximately 669 feet above mean sea level. An interpretation of topographic contour lines as well as a review of the EDR Geocheck-General Topographic Gradient suggested terrain sloping downward towards the south-southwest. The closest down-gradient waterbody is the Santa Ana River, located approximately 1.8 miles to the southeast.
USDA SCS Soil Data: (EDR Geocheck-Physical Setting Source Addendum)	The primary soil type at the Property is classified as "Hilmar". This soil type is described as soils with moderate infiltration rates, with deep and moderately deep, moderately well drained soils, loamy fine sand with a moderately coarse grain texture.
Geologic Data: (EDR Geocheck-Physical Setting Source Addendum)	The geologic formation in the vicinity of the Property is described as a stratified sequence of the Cenozoic Era, Quaternary System, and Quaternary Series.
Prior Env. Reports: (Section 3.1)	No additional relevant site specific geologic data was noted from a review of the prior environmental reports listed in Section 3.1.
Additional Sources/ Data:	No additional physical setting sources or data was obtained.
Groundwater Flow Discussion:	Based on a review of the above information as well as observation of the site, the direction of shallow groundwater flow at the site is inferred to be towards the south-southwest.
NWI Wetlands Data: (EDR Geocheck-Physical Setting Source Addendum)	No NWI mapped wetlands areas were depicted at the Property.

4.2 Historical Use – Property and Adjoining Properties

Research has been conducted in an attempt to develop a history of the previous uses of the property and surrounding area, in order to help identify the likelihood of past uses having led to RECs in connection with the property. Standard historical sources have been sought in an attempt to document the past uses of the Property as far back as it can be shown that the Property contained structures; or from the time the Property was first used for residential, agricultural, commercial, industrial or governmental purposes.

4.2.1 Fire Insurance Maps

A Certified Sanborn Map Report was obtained from EDR for a review of published historic fire insurance maps for the Property and surrounding area. The following is a summary of site uses and notable details depicted by the available maps:

Year(s)	Prop/Adj	Depicted Use(s)	Notable Details
	Property:	(No coverage)	
	Adjoining:		

A copy of the Certified Sanborn Map Report is attached in Appendix D.

4.2.2 City Directories

An EDR City Directory Abstract report was reviewed for data of former occupants of the Property's street address. The following is a generalized summary of the findings of city directory research for past occupants of the Property.

Property	
Use(s) / Occupant(s):	**Years**
12740 58th Street – John Leal	2017
Jese Zunig	2014
Leal Ranches	2009
Leight Medbury	1999 - 2009
Sterling Silver Trucking	2009

The EDR City Directory Abstract report was also reviewed for listings of historical occupants of the adjoining properties. The following is a general summary of listings of historic adjoining property occupants:

Adjoining Properties	
Use and/or Occupant(s)	**Years**
12569 Limonite Avenue - Multi-tenant Commercial Shopping Plaza such as; restaurants, supermarket, banks, and retail stores	2009 – 2017
12762 Limonite Avenue - Cloverdale Marketplace, Soccer Warehouse, and Waba Grill	2014 - 2017
Residential	1999 – 2017

A copy of the EDR City Directory report is attached in Appendix D.

4.2.3 Historical Topographic Maps

Historical topographic maps of the Property and vicinity obtained from an EDR Historical Topographic Map report (as attached in Appendix D) have been reviewed. The following interpretation of land usage was made by review of the maps:

Year(s)	Summary of Interpretation	
1902	**Property:**	A roadway is depicted running from north to south in the eastern portion. A roadway is depicted in the southeast corner.
	Adjoining:	No improvements and/or special depictions are shown.
1942	**Property:**	A structure is depicted in the north central portion. An unimproved road is depicted running through the western portion then east along the north boundary.
	Adjoining:	An improved roadway is depicted to the east and south. Several structures are present to the south. An unimproved road is depicted to the east with a structure to the northeast.
1947	**Property:**	Four (4) structures are depicted on the north central portion. An orchard is depicted on the Property. The previous access road is depicted.
	Adjoining:	As previously described, orchards are depicted to the south and west. An unimproved roadway is present along the northern boundary connecting to the eastern roadway. A well is depicted in the southeast corner.

1954	**Property:**	Four (4) structures are depicted in the north central portion.
	Adjoining:	Shading indicative of orchards is present to the north and east. Several structures are depicted south of the improved roadway (Cloverdale Road). An unimproved road is present to the east with a structure depicted to the northwest.
1967	**Property:**	Five (5) structures are depicted in the north central portion. An access road is depicted on the western half terminating at the northern unimproved road. An unimproved road, indicative of a horse track, is depicted on the southeastern portion, looping around a previously identified well.
	Adjoining:	As previously described, Swan Lake Trailer Park is depicted to the east.
1973	**Property:**	As previously described, six (6) new structures are present in the northeast portion, consistent with the current dairy barn present today. A small pond is depicted in the east center portion.
	Adjoining:	As previously described, additional buildings are depicted to the southeast and south. An orchard is depicted to the northeast.
1981	**Property:**	As previously described, unimproved roadways are now depicted on the eastern portion around the presumed dairy barn. A structure is depicted in the east central portion at the apex of the presumed horse track on the southeast.
	Adjoining:	As previously described.
2012	**Property:**	Roadways are illustrated in the north portion.
	Adjoining:	Roadways are depicted on adjacent properties to the east and north.

4.2.4 Historical Aerial Photographs

Historical aerial photographs of the Property and vicinity obtained from an EDR Aerial Photo Decade Package report, as attached in Appendix D, were reviewed. The following interpretation of land usage was made by review of the aerial photographs:

Additional aerial photographs were reviewed online at the Riverside County Map My County website (Map My County v10 (countyofriverside.us))

Year(s)	Summary of Interpretation	
1931, 1938, 1948	**Property:**	Appears to be an active orchard, farm structures, and dwellings appear in north central portion. Apparent barns are present in north central portion. Parcel 064030013 appears densely vegetated and structures are present.
	Adjoining:	Orchards, residences, barns, row crops.
1953	**Property:**	As previously described, the eastern 2/3 of the orchard has been cleared and appears planted with row crops.
	Adjoining:	As previously described.
1967	**Property:**	Orchards no longer present; horse track is in southeast portion. Parcel 064030013 now cleared and part of the presumed horse track.
	Adjoining:	As previously described, adjacent eastern property now developed with trailer homes.
1975, 1985, 1989, 1990, 1994, 1996	**Property:**	As previously described, northeast portion now developed with a barn and apparent feeding shelters. Borrow area appears in central portion of west side.
	Adjoining:	As previously described.
2002	**Property:**	As previously described, portions of the northwest appear to be used as an equipment lay down area.
	Adjoining:	As previously described, northern properties are being or have been developed with residential structures.

2004, 2006, 2007, 2012	**Property:**	As previously described.
	Adjoining:	Residential to the north, northeast, and southwest. Shopping centers and out parcels to the south and south east, agriculture to the west. Commercial operation to the south, west portion. Apparent gasoline dispensary present to the east in 2007, and one (1) under construction to the south clearly visible in 2012.
2016	**Property:**	As previously described.
	Adjoining:	As previously described, residential structures and residential development to the west.
2019	**Property:**	As previously described.
	Adjoining:	As previously described.

4.2.5 EDR High-Risk Historical Records

The EDR Radius Map™ report, which is discussed in greater detail in Section 4.3, provided a search of proprietary databases of potential historical high-risk uses at or in the vicinity of the Property. These databases include EDR Historic Cleaners – a database of property addresses with records of historical occupancy by suspected cleaners businesses; EDR Historic Auto – a database of property addresses with records of historical occupancy by potential automotive gas/filling stations and repair facilities; and EDR MGP- a database of sites historically occupied by manufactured gas plants and related facilities.

EDR Database	On-site Listings:	Adjoining/Off-Site Listings
Historic Cleaners: (on-site/adjoining only)	None	None
Historic Auto: (on-site/adjoining only)	None	Tierra Fina, 12672 Limonite Ave; which adjoins the Property to southeast was listed as a gasoline service station for the year 2014.
MGP: (1-mile distance)	None	None

4.2.6 Petroleum/Natural Gas Well Review

The historical record sources and the California Geologic Energy Management Division (CalGEM) online mapping application were reviewed for records of historic petroleum and/or natural gas wells at the Property. No record of any historical petroleum/natural gas wells at or adjoining the Property was identified.

4.2.7 Additional Historical Data

Where applicable, the following additional pertinent historical data was obtained:

Interviews/Anecdotal:	The following additional pertinent historical data was obtained: Mr. Craig Leal, Property owner, indicated that a UST containing oil was excavated from the northern boundary of the Property in 1980. He indicated the UST was then utilized as an AST; however, there is no records associated with the closure documents for the historical UST. (Note: a Phase II subsurface investigation was subsequently performed in the specified area, the results of which are discussed herein.)

	Additionally, Mr. Leal indicated that the Property currently has two (2) 1,500-gallon septic tanks, and one (1) 500-gallon septic tank location within the vicinity of residential homes on the northern boundary of the Property.
Local Gov't Records:	No additional pertinent historical data was obtained.
Prior Env. Reports: (Section 3.1)	Not applicable; no prior reports were provided.
Site Observations:	Indications of historic uses of the Property or adjoining properties were not observed during the site reconnaissance.
Other Sources:	No additional pertinent historical data was obtained.

4.2.8 Summary of Identified Historic Uses

The following table presents a summary of the types and approximate date ranges of identified prior uses of the Property:

Property	
Date Range	**Use**
1931 to 1953	Orchard
1967 – 1975	Horse farm
2009	Trucking company; however, Property owner indicated that no trucking activities were done on the Property
1975 – Present	Dairy farm

The following table presents a summary of the types of identified prior uses of the adjoining properties:

Adjoining Properties	
Date Range	**Use**
1931 – 1953	Agriculture
1957 - 1996	Agriculture/residential
2002 – Present	Residential/commercial (shopping center, outparcels, gasoline station)

4.2.9 Historical Records Data Failure

The ASTM E1527-13 standard defines data failure as a failure to achieve the ASTM specified historical research objectives after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. The objective is to identify all obvious uses of the property from the present, back to the property's first developed use, or back to 1940, whichever is earlier. Furthermore, records of historic use/conditions should be sought in intervals no less than approximately five years, unless the property conditions appear unchanged over a longer interval.

Objective	Met?	Detail	Significant?
First developed use/date determined?	No	The earliest documented use of the Property was as orchards circa 1930s, the lack of further information does not represent a significant data gap.	No
Record sources at 5-year intervals back to 1940 or first developed use?	No	Historical record gaps exceeding five years were encountered. However, significant site-use changes or undiscovered site uses appear unlikely to have occurred	No

		during the record gaps. The lack of further information does not represent a significant data gap.	
All obvious prior uses identified?	Yes	See Section 4.2.8.	NA

Please refer to Section 2.3 for additional discussion of data gaps and their significance to the findings of the assessment.

4.2.10 Potential Environmental Issues Evaluated by Subsurface Investigation

- The Property was utilized as orchards since approximately 1931 to the 1950s. Concentrations of pesticides are commonly associated with shallow soils at sites with historical agricultural use. In addition, there is a potential for pesticide impacts to soil in the vicinity of the older farm structures along the northern perimeter of the Property where pesticide storage and mixing may have occurred. Accordingly, ninety-six (96) individual samples were collected, and analyzed for OCPs and Title 22 Metals, which are sometimes associated with the application of heavy-metal containing herbicides. Results of the OCP analysis indicated low levels of 4,4'-DDE and 4,4'-DDT which were below the applicable RSLs for residential applications. The results from heavy metal analysis indicate the samples had low, naturally-occurring background levels of metals, which did not exceed the applicable RSLs for residential applications. Therefore, the historical orchard operations on the Property do not indicate a REC with connection to the Property and Hillmann recommends no further investigation regarding this issue.

- Maintenance and repair of farm equipment and vehicles appear to have been conducted for an extended period of time in an area of the northern portion of the Property. Hillmann observed a significant amount of equipment, vehicles, trash, drums, and other materials in this area. Soil staining was observed within the vicinity of the maintenance repair area, and by the entrance of the dairy barn at 12741 Limonite Avenue. However, a Limited Phase II Investigation was conducted in July 2021 within the vicinity of the former maintenance repair area. Soil and soil gas samples were collected within the targeted areas of the Property. Results from soil sampling in the maintenance areas were "non-detect" for petroleum hydrocarbons and VOCs, and no heavy metal concentrations were detected at levels exceeding residential screening levels. The results from soil gas sampling in these areas indicated no VOC concentrations exceeding current residential screening levels, and the very low concentrations of detected chemicals are unlikely to represent an environmental or human health concern for the proposed residential use. Therefore, the historical maintenance operations do not indicate a REC with connection to the Property and Hillmann recommends no further investigation regarding this issue.

- The Property is registered as having a 550-gallon historical fuel UST present on the Property in 1988. The Property owner indicated that the UST was removed from the ground in the late 1980s and subsequently utilized as an AST. The former UST was reported to have been located on the northern portion of the Property. No tank closure records for the former were available. However, a Limited Phase II Investigation and GPR Investigation was conducted in July 2021 within the vicinity of the former UST. Soil and soil gas samples were collected

within the historical UST, which indicated no detectable concentrations of petroleum hydrocarbons or VOC (*i.e.*, the results were "non-detect"), and no heavy metal concentrations exceeding residential screening levels. The results from soil gas sampling in these areas indicated no VOC concentrations exceeding current residential screening levels and these very low concentrations likely do not pose a significant environmental or human health concern for the proposed residential use. Additionally, the GPR Investigation identified no evidence of the presence of the former UST. Therefore, the historical 550-gallon UST on the Property does not indicate a REC with connection to the Property and Hillmann recommends no further investigation regarding this issue.

- Portions of the Property were utilized for dairy operations from approximately the 1970s to 2019. Hillmann observed areas of residual livestock waste accumulations on the east and west portions of the Property. Elevated concentrations of methane gas are sometimes associated with areas where livestock wastes accumulate, and can sometimes give rise to the need for mitigation prior to development. A methane survey was conducted in July of 2021, which indicated that most samples had insignificant concentrations of subsurface methane gas, and field screening indicated just three (3) samples (of 15) had detectable concentrations of methane. However, it is important to note that the methane distribution is not widespread and that the areas investigated are still covered with animal waste. This material should be removed in connection with site development activities. Ultimately, Hillmann concludes that the residual livestock does not indicate a REC with connection to the Property.

- Hillmann observed the presence of discarded drums located in the maintenance repair area. The drums indicated a concern due to the unknown content and possibility of undocumented chemical spills/releases to have occurred in the past and/or occur when the site is cleared for development. However, a Limited Phase II Investigation was conducted in July 2021 within the vicinity of the discarded industrial drums. Soil samples that were collected within the area indicated no detectable concentrations of petroleum hydrocarbons or VOCs, and no heavy metal concentrations exceeding residential screening levels. The results from soil gas sampling in these areas indicated no VOC concentrations exceeding current residential screening levels. These very low concentrations likely do not pose a significant environmental or human health concern for the proposed residential use. Therefore, the historical discarded industrial drums on the Property did not indicate a REC with connection to the Property. Hillmann recommends no further investigation regarding this issue.

The Property was utilized as a dairy farm since approximately the 1970s. During the site visit, Mr. Leal, Property owner, indicated the dairy farm operational ceased in October 2019.

The review of historical records did not indicate evidence of a REC in connection with the Property.

4.3 Standard Environmental Record Sources

A regulatory database report, titled EDR Radius Map™ Report, prepared by Environmental Data Resources of Shelton, CT was obtained and reviewed. The report provided a search of standard

environmental record sources for listings of the Property, adjoining properties and sites within the surrounding area; and has been reviewed for the purpose of identifying listings suggesting a potential impact to the Property due to presence or migration of hazardous substances and/or petroleum products. Additional descriptions of the meaning and significance of the regulatory databases can be found in the regulatory database report in Appendix E. The EDR Radius Map™ Report provided a search of the following database categories in accordance with the requirements of the ASTM Standard E1527-13:

Regulatory Database	Search Distance
Fed. National Priorities List (NPL/a.k.a. "Superfund" sites) & Proposed NPL	1-mile
Fed. Delisted NPL	½-mile
Fed. Superfund Enterprise Management System (SEMS; formerly CERCLIS)	½-mile
Fed. SEMS-ARCHIVE (formerly known as CERCLIS NFRAP)	½-mile
Fed. RCRA Corrective Action Sites (CORRACTS)	1-mile
Fed. RCRA Transport/Storage/Disposal (TSD) sites	½-mile
Fed. RCRA Generators (LQG, SGQ & CESQG)	Site & Adjoining
Fed. Institutional Control/Engineering Control (IC/EC) Registries	Site only
Fed. Emergency Response Notification System (ERNS)	Site only
State/Tribal Hazardous Waste Sites (SHWS)	1-mile
State/Tribal Landfill and/or Solid Waste Disposal (LF/SWF)	½-mile
State/Tribal Leaking Storage Tanks	½-mile
State/Tribal Registered Storage Tanks	Site & Adjoining
State/Tribal IC/EC Registries	Site
State/Tribal Voluntary Cleanup Sites	½-mile
State/Tribal Brownfields	½-mile
Additional Federal, State, Tribal and Local Environmental Databases	Variable

Reported distances for adjoining listings discussed in Section 4.3.4, if applicable, are approximate and indicative of the presence of a public roadway or right-of-way between the adjoining site and Property.

The reported gradients indicated where applicable in Sections 4.3.4 and 4.3.5 have been estimated based on a number of factors including but not necessarily limited to field observation, review of topographic maps, database listing details and/or site specific geo-technical data.

4.3.1 Supplemental Database Listings

The regulatory database report was also reviewed for listings on supplemental databases, in addition to the Standard Environmental Record Sources. Any property or adjoining property listings on such databases of significant concern, if identified, is discussed in Sections 4.3.3 and 4.3.4. Otherwise, none of the other supplemental database listings identified by the regulatory database report are considered to be a REC in connection with the Property.

4.3.2 Limited Tier I Vapor Encroachment Screening

Limited analysis of the details of on-site, adjoining and vicinity database sites was conducted to identify potential sources of sub-surface vapor encroachment. This review was based on elements of the ASTM "Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions" (ASTM E 2600-15); and also on elements of "Methodology for Identifying the Area of Concern Around a Property Potentially Impacted by Vapor Migration from Nearby Contaminated Sources" (Buonicore, 2011-S-103-AWMA). Vicinity database sites pertaining to non-petroleum product releases within 1,760 feet of the Property in the up-gradient direction, 365 feet of the Property in the cross gradient direction and 100 feet of the Property in the down gradient direction; and vicinity database sites pertaining to petroleum product releases within 528 feet of the Property in the up-gradient direction, 165 feet of the Property in the cross gradient direction and 100 feet of the Property in the down gradient direction were reviewed to identify active contamination sites with the potential to affect subsurface vapor conditions at the subject property. The potential for vapor encroachment was considered in assessing whether or not a REC exists in connection with the Property when reviewing applicable sites within those distances.

Regulatory database sites with active petroleum or non-petroleum releases that have the potential to constitute a vapor encroachment condition (VEC) to the Property, if any, are evaluated in Sections 4.3.3, 4.3.4 and 4.3.5, below. Ultimately, Hillmann concludes that there are no VECs in relation to the Property.

4.3.3 Property Listings

The following listings of the Property were identified:

Name/Address:	Leal Ranches/12740 58th Street
Database(s):	FINDS, ECHO, ENF, CIWQS, CERS
Data Discussion:	The FINDS listing is associated with the facility being registered as a NPDES point source. Available records did not identify any violations. The ECHO listing is related to the Clean Water Act compliance as administered by the state of California. No violations were noted for the past five years. The ENF listing is associated with an apparent violation observed and corrected during a 2008 inspection. The CIWQS listing did not identify any violations observed in the past five years. The CERS listing is associated with an inspection of the facility in accordance with the California Water Code. Violations were noted in 2007, 2008, 2010 associated with animal waste disposal documentation and associated with implementing the BMP for the facility. No additional violations were noted in the record.
REC Discussion:	Based on the details provided above, this issue does not represent a REC.
VEC Discussion:	Based on the available data, this issue does not represent a VEC.

Name/Address:	Leal Ranches/12714 Cloverdale Ave.
Database(s):	HIST UST
Data Discussion:	The facility is registered as operating a 550-gallon gasoline UST in 1988. No records of spills, cleanup, or removal were identified.
REC Discussion:	Based on the details provided above, a REC is not suspected in connection with the Property.
VEC Discussion:	Based on the available data, a VEC is not suspected.

4.3.4 Adjoining Property Listings

The following adjoining property listings were identified. Reported distances, where applicable, are approximate and indicative of the presence of a public roadway or right-of-way between the adjoining site and Property. The reported gradient has been estimated based on a number of factors including but not necessarily limited to field observation, review of topographic maps, database listing details and/or site specific geo-technical data.

Name/Address:	Harada Elementary School - Echeverria Dairy/Cleveland Ave				
Database(s):	Envirostor, LUST, SCH				
Distance in feet:	1200	**Direction:**	SW	**Gradient:**	Down
Data Discussion:	The facility is incorrectly reported as adjacent to the Property, the school is actually located 1,200 feet to the south. The facility has been investigated for potential contaminants of concern including arsenic, DDD, DDE, DDT, and methane with a no further action status. The LUST record is associated with a historical gasoline UST located approximately 1 mile south of the Property at the Eastvale Elementary School property.				
REC Discussion:	Based on the details provided above, this issue does not represent a REC.				
VEC Discussion:	Based on the available data, this site does not represent a VEC.				

Name/Address:	Western Sky Dairy/6500 Hamner				
Database(s):	ENF, HIST CORTESE, NPDES, WDS, CIQS				
Distance in feet:	118	**Direction:**	SE	**Gradient:**	Down
Data Discussion:	The facility historically operated to the southeast. The facility is closed and has been redeveloped into residential subdivisions.				
REC Discussion:	Based on the details provided above, the facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Mountain View Tire & Service/6080 Hamner Ave. #105				
Database(s):	CERS HAZ WASTE, CERS, RCRA NonGen/NLR,				
Distance in feet:	122	**Direction:**	E	**Gradient:**	Up
Data Discussion:	The facility is registered as a CERS hazardous waste generator. An inspection in 2020 identified a violation, which was that a bung cap was not present on an anti-freeze. Additionally, a violation for not inspecting hazardous waste storage weekly was noted. The records indicated the facility was in compliance eight days after the violations were noted. The RCRA NonGen/NLR listing is associated with the facility being a universal waste generator. No violations were reported.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Ralphs Grocery #45 Fuel Center/12618 Limonite Ave				
Database(s):	UST, CERS HAZ WASTE, CERS TANKS, HAZNET, CERS, HWTS, RCRA-LQG CHMIRS				
Distance in feet:	126	**Direction:**	S	**Gradient:**	Down
Data Discussion:	The facility is registered and currently operates as a vehicular fuel dispensary utilizing USTs for petroleum distillate storage. The records indicate the facility is in compliance. Minor violations associated with the fuel dispensing systems were historically noted and returned to compliance. A release of seven (7) gallons of gasoline was reported to the concrete and asphalt and was cleaned up by a contractor. The waste disposal records did not identify any violations or releases to the Property.				

REC Discussion:	Based on the details provided above, this facility does not represent a REC.
VEC Discussion:	Based on the available data, this facility does not represent a VEC.

Name/Address:	Ralphs Grocery #45/12618 Limonite Ave				
Database(s):	RCRA NonGen/NLR, CERS HAZ WASTE, CERS, HAZNET, HWTS				
Distance in feet:	463	**Direction:**	S	**Gradient:**	Down
Data Discussion:	The facility is identified as a USEPA non generator of hazardous waste. No violations were identified. The records identified that the facility disposes of pharmaceutical waste, off spec, aged or surplus organics, liquids with a pH <=2, other organic solids, aqueous solution containing reactive anions, alkaline solution without metals. No violations were noted.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Vons Fuel Center #2688/6110 Hamner Ave.				
Database(s):	UST, CERS HAZ WASTE, CERS TANKS, HAZNET, CERS, HWTS, RCRA NonGen/NLR				
Distance in feet:	122	**Direction:**	E	**Gradient:**	Up
Data Discussion:	The facility operates a vehicular fuel dispensary utilizing USTs for petroleum distillate storage. The records indicate the facility is in compliance. A surficial release of two (2) gallons of gasoline was reported in 2012. A surficial release of four (4) gallons of diesel was reported in 2006. Minor violations associated with the fuel dispensing systems were historically noted and returned to compliance. No releases to soil or groundwater were identified. The waste disposal records did not identify any violations or releases to the Property.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Vons A Safeway Company #2688/6110 Hamner Ave.				
Database(s):	CERS HAZ WASTE, CERS RCRA LQG, FINDS				
Distance in feet:	122	**Direction:**	E	**Gradient:**	Up
Data Discussion:	The records identify that the facility is designated as a state hazardous waste generator, chemical storage facility. Paperwork and filing violations were historically identified and promptly rectified. The RCRA LQG and FINDS listings did not identify any violations.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Pulte Homes Company, LLC/12774 Limonite Ave				
Database(s):	RCRA NonGen/NLR				
Distance in feet:	142	**Direction:**	S	**Gradient:**	Down
Data Discussion:	This listing is for a historic facility associated with the development of the residential community to the south. No violations were noted.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Walgreens #13657/12574 Limonite Ave				
Database(s):	RCRA NonGen/NLR, CERS HAZ WASTE, HAZNET, HWTS				
Distance in feet:	142	**Direction:**	S	**Gradient:**	Down
Data Discussion:	This listing is associated with an operating drug store. The data indicated the facility was listed as a Small Quantity Generator. and a Conditionally Exempt Small Quantity Generator. The records identified that the facility disposes of pharmaceutical waste, off spec, aged or surplus organics, liquids with a pH <=2, other organic solids, aqueous solution containing reactive anions, alkaline solution without metals. No violations were noted.				

REC Discussion:	Based on the details provided above, this facility does not represent a REC.
VEC Discussion:	Based on the available data, this facility does not represent a VEC.

Name/Address:	Riverside Medical Clinic/12742 Limonite Ave				
Database(s):	RCRA NonGen/NLR				
Distance in feet:	144	**Direction:**	S	**Gradient:**	Down
Data Discussion:	This listing is described as an office of all other miscellaneous health practitioners. The data indicated the facility not a generator of hazardous waste. No violations were noted.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Bright Now Dental A Dental Office of Sahawneh Dent/12636 Limonite Ave				
Database(s):	RCRA NonGen/NLR				
Distance in feet:	556	**Direction:**	S	**Gradient:**	Down
Data Discussion:	This listing is described as an offices of dentists. The data indicated the facility as not a generator of hazardous waste. No violations were noted.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

Name/Address:	Home Depot USA Inc HD1084/6140 Hamner Avenue				
Database(s):	RCRA SQG, CERS HAZ WASTE, CERS, HAZNET, HWTS				
Distance in feet:	463	**Direction:**	S	**Gradient:**	Down
Data Discussion:	The facility is identified as a USEPA small quantity generator of hazardous waste. No violations were identified. Further, the state records identified that the facility disposes of waste oil, unspecified solvent mixtures, other inorganic solid waste, unspecified organic liquid mixtures, off spec, aged or surplus organics, alkaline solution without metals, paperwork and filing violations were historically identified and promptly rectified. No violations associated with on-site releases were noted.				
REC Discussion:	Based on the details provided above, this facility does not represent a REC.				
VEC Discussion:	Based on the available data, this facility does not represent a VEC.				

4.3.5 ASTM Search Distance Findings

The following is a discussion of non-adjoining sites identified as located within the ASTM specified search distance surrounding the Property. In order to keep this discussion informative and concise, discussion(s) is/are provided of the listed site(s) for each database category that appears most likely to impact the Property based on distance, area topography and/or regulatory status. Listings of sites within the applicable search distances not specifically discussed below were reviewed and concluded not to be RECs in connection with the Property or VECs based on various factors including distance, area topography, known or inferred groundwater flow direction and/or regulatory status. Listings for the following databases, if identified, have been discussed above in Sections 4.3.3 and 4.3.4: Registered Storage Tanks, Federal RCRA Generators, Federal and State EC/IC, ERNS. A copy of the full regulatory database report, including available details of all listed sites, is included in Appendix E.

Federal NPL				**# of sites:**	0	**Search Distance:**	1-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal Delisted NPL				**# of sites:**	0	**Search Distance:**	1-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal SEMS				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal SEMS-ARCHIVE				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal CORRACTS				**# of sites:**	0	**Search Distance:**	1-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

Federal RCRA-TSD				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

State HAZARDOUS WASTE SITE				**# of sites:**	0	**Search Distance:**	1-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							

VEC Discussion:	

State SOLID WASTE FACILITY/LANDFILL				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

State LEAKING STORAGE TANKS				**# of sites:**	3	**Search Distance:**	½-mile
Notable Listing:	Texaco Swan Lake/5800 Hamner Avenue						
Distance in feet:	1417	**Direction:**	ENE	**Gradient:**	Up		
Data Discussion:	The closest LUST listing is described in Section 4.3.4. The second closest LUST listing indicated that soil was contaminated at the site with gasoline from a leaking UST, with a leak first being detected on August 1988; however, the contaminated soil was excavated and disposed off-site, and the Property was granted a no further action letter as of 12/12/1991.						
REC Discussion:	Based on the details provided above, this facility does not represent a REC.						
VEC Discussion:	Based on the available data, this facility does not represent a VEC.						

State VOLUNTARY CLEANUP SITES				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

State BROWNFIELD SITES				**# of sites:**	0	**Search Distance:**	½-mile
Notable Listing:	None						
Distance in feet:		**Direction:**		**Gradient:**			
Data Discussion:							
REC Discussion:							
VEC Discussion:							

UNMAPPED/ORPHAN LIST SITES	
	Hillmann has also reviewed a list of unmapped sites (a.k.a. "Orphan List" sites) indicated by the database report. Unmapped sites that were identified as falling within an applicable specific search distance or warranting discussion have either been discussed in the preceding tables or are detailed below:
Notable Listings:	None

4.4 Additional Environmental Record Sources

Requests have been submitted to local, municipal and state agencies for pertinent records pertaining to the Property, particularly with regard to potential environmental concerns such as petroleum storage tanks, storage and usage of hazardous substances and petroleum products, and/or known or suspected environmental contamination. Where applicable, internet research of government

environmental regulatory databases was also conducted, as well as a general cursory internet search of the Property address, for information indicative of a REC. The following table summarizes the findings of the research:

Source	Type of Request	Outcome
EPA MyProperty	Online search	Hillmann searched online for records pertaining to the Property. No records pertaining to the property were found.
EPA Envirofacts	Online search	Hillmann searched online for records pertaining to the Property. No records pertaining to the property were found.
CA SWRCB (GeoTracker)	FOI request	Hillmann searched online for records pertaining to the Property. No records pertaining to the property were found.
CA DTSC (Envirostor)	FOI request	A response was recieved stating that no records were found.
Regional Water Quality Control Board (RWQCB)	FOI request	A response was recieved stating that no records were found.
South Coast Air Quality Management District (SCAQMD)	FOI request	A response was recieved stating that no records were found.
Fire Prevention/Marshall and Hazardous Material	FOI request	No response was received prior to report issuance.
Riverside Agricultural Commission	FOI request	A response was recieved stating that no records were found.
Health Department	FOI request	No response was received prior to report issuance.
Internet Search Engine	Online search	Hillmann searched online for records pertaining to the Property. No records pertaining to the property were found.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

The site reconnaissance consisted of visual and/or physical observations of the Property and improvements, adjoining properties as viewed from the Property boundaries and the surrounding area based on visual observations from adjoining public thoroughfares. Building exteriors were observed at ground level, unless otherwise indicated. Where applicable, representative areas of building interiors were accessed and observed to the extent they were made safely accessible with the cooperation of the site escort.

Site Inspection Personnel:	Ms. Gabriela Cyrulik
Property Escort/Company:	Mr. Craig Leal/Property Owner
Inspection Date:	June 21, 2021
Weather Conditions:	Sunny, 81 degrees F

5.1.1 Significant Inaccessible Areas

The following significant areas of the Property were not accessed at the time of the site visit:

Hillmann did not gain access into the five (5) occupied residential structures on the Property.

5.1.2 Significant Limiting Site Conditions

No significant limiting site conditions were noted at the time of the site reconnaissance.

5.2 General Site Setting

5.2.1 Site and Vicinity Characteristics

Abutting Roadways:	58th Street to the north; Hamner Avenue to the east; Limonite Avenue to the south; Scholar Way to the west
Current Property Use:	Dairy farm with five (5) residential structures
Evidence of Past Property Uses:	Remnants of cattle maneuver were observed on the northeast and northwest corner of the Property
Evidence of Past Adjoining Property Uses:	None observed
Surrounding Area Uses:	Residential, commercial shopping plazas and institutional uses (i.e., Harada Elementary School)

5.2.2 Current Adjoining Property Uses

Dir	Street Address	Description
N	Rancho Vista Road	Residential
E	Swan Lake Apartments	Residential
S/SE	Limonite & Hamner Ave	Multi-tenant commercial shopping plaza with restaurants, retail stores, gas stations, banks
W	Scholar Way	Residential

No visual observations indicative of a potential environmental concern were noted on the adjoining properties.

5.2.3 Topographic Characteristics

Terrain:	Flat to gently sloping
Direction of Downward Slope:	Towards the south
On-site Water Bodies:	None observed
Other Significant Features:	None observed

5.2.4 General Description of Structures

Buildings/# of Floors	Five (5) residential structures/single-story
Approx. Building Area:	N/A
Approx. Year Built:	1931
Ancillary Structures:	None observed
Sources of Heating & Cooling:	Natural gas fired heating systems/no central cooling systems noted
Potable Water/Sewage Disposal:	Potable well and septic system. See Sections 5.3.15 and 5.3.16 for additional details.

5.3 Interior & Exterior Observations

5.3.1 Storage/Usage of Hazardous Substances and Petroleum Products

The following hazardous substances and petroleum products were observed to be stored and used by property occupants:

Occupant	Substance	Qty/Container Type	Storage Conditions
Leal Ranch	Hydraulic fluid	1-gallon/one	Good
Leal Ranch	Machine lubricant	5-gallon/one	Good

5.3.2 Drums

The following hazardous substance or petroleum product drums were noted on the Property:

Hillmann observed seven (7) unidentified drums stored in the same location, and in one area outside the maintenance repair station, along the northern perimeter of the Property. Seven (7) of the unidentified containers were located without secondary containment, and were placed on the pavement. Hillmann observed that one (1) of the unidentified substance containers was leaking and had stained the pavement along the maintenance repair area on the northeastern corner of the repair shop on the Property. This area was evaluated by a Phase II subsurface investigation and determined to not represent a Recognized Environmental Condition.

5.3.3 Unidentified Substance Containers

The following unidentified substance containers suspected of containing hazardous substance or petroleum product were noted on the Property:

Hillmann observed that drums described in Section 5.3.2 were unlabeled and unidentified, and could contain hazardous substance and/or petroleum products. In addition, Hillmann noted several unlabeled one-gallon and five-gallon containers in the maintenance repair area, within the northern perimeter of the Property. As discussed in this report, these features were determined to not represent a concern.

5.3.4 Other Hazardous Substances/Petroleum Products

No other containers of hazardous substances or petroleum products were noted on the Property.

5.3.5 Bulk Petroleum/Hazardous Material Storage Tanks

The following storage tanks for bulk petroleum or hazardous material storage were identified or reported to be present; or are suspected to be present based on visual observations:

AST/ UST	Product	Capacity	Construction	Year Installed	Status	Location/Notes
UST	Gasoline	550-gallon	Double-walled steel	1970s	Excavated	Mr. Leal indicated the UST was excavated in the late 1980s. Hillmann observed an unlabeled and unidentified UST along the Horse Barn on the north perimeter of the Property
AST	Petroleum	600-gallon	Metal	N/A	N/A	Located in the maintenance repair area

5.3.6 PCBs in Oil Filled Electrical/Hydraulic Equipment

No oil-filled electrical or hydraulic equipment was identified at the Property.

5.3.7 Odors

No strong, pungent or noxious odors were noted at the Property.

5.3.8 Pools of Liquid

No standing water or pools of liquid likely to contain hazardous substances or petroleum products were noted at the Property.

5.3.9 Interior Stains or Corrosion

The following interior stains and/or corrosion due to hazardous substance/petroleum products spills/releases were noted at the Property:

Hillmann observed spills/releases from one (1) out of seven (7) unidentified hazardous drums stored outside the northwest corner of the maintenance repair shop, along the northern perimeter of the Property. Additionally, another spill/release was observed within the vicinity of the Dairy Barn (12741 Limonite Ave), located on the gravel at the northeastern corner of the Property by the entrance of the building. The staining is considered to be *de minimis.*

5.3.10 Interior Drains/Sumps

No floor drains or sump pits were noted at the Property other than for storm water or sewage management.

5.3.11 Exterior Pits/Ponds/Lagoons

No exterior pits, ponds or lagoons was identified on the Property in connection with waste treatment or disposal.

5.3.12 Stained Soil, Pavement/Stressed Vegetation

The following stained soil, pavement and/or stressed vegetation was observed at the Property:

Hillmann observed tall grass and vegetation present throughout the southern perimeter of the Property.

5.3.13 On-Site Solid Waste Disposal/Fill Material

The following evidence of on-site solid waste dumping/disposal was observed:

Hillmann observed piles of concrete, abandoned drums, farm machinery/equipment, cars, tires, furniture, piping, wood, and other miscellaneous trash and debris present along two isolated on the northeastern and northwestern perimeter of the Property. As discussed in this report, these features are unlikely to represent an environmental concern.

5.3.14 Waste Water

Sanitary sewage generated at the Property is discharged via an on-site septic system. See Section 5.3.15 for additional details regarding the septic system.

5.3.15 Septic Systems

A septic system is present and utilized for on-site disposal of sanitary sewage. The system is located to the north side of the Property by the former residential homes. Mr. Leal, Property Owner, indicated that there is two (2) 1,500-gallon, and one (1) 500-gallon septic tanks located on the northern area of the Property, and utilized for the residential structures on the Property.

5.3.16 Wells

The following groundwater wells were identified at the Property:

Hillmann observed a water well on the east-southeast perimeter of the Property. Additionally, another groundwater production well, and storage cistern were observed on the northern perimeter of the Property.

5.3.17 Railroad Spurs

No railroad spurs were identified on the Property.

6.0 INTERVIEWS

6.1 Interviews with Past and Present Owners and Occupants

Subject	Name/Affiliation	Summary
Property Owner / Representative	Mr. Craig Leal/Property Owner	Mr. Leal was provided with an environmental questionnaire, and was interviewed during the site inspection. However, a completed environmental questionnaire has not been returned prior to report issuance.
Property Occupants	Not applicable	Property was occupied by Leal Ranch.
Past Owners, Occupants, Operators	Not applicable	Past owners/occupants of the Property were not available for interview at the time of the assessment.
Owners/Occupants of Adjoining or Nearby Properties	Not applicable	The Property was not an abandoned property with evidence of unauthorized uses or uncontrolled access; therefore, interviews with adjoining or nearby property owners or occupants were not conducted.

6.2 Interviews with State and/or Local Government Officials

Written and on-line requests for environmental records of the Property from State and Local governmental agencies are detailed in Section 4.4.

7.0 BUSINESS ENVIRONMENTAL RISKS

In accordance with the contract agreement for this assessment, Hillmann has performed cursory reviews of several potential Business Environmental Risks (also known as "Non-Scope Considerations"). The ASTM E1527-13 standard defines the term business environmental risk (BER) as, *"a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice."*

7.1 Asbestos-Containing Material (ACM)

The contracted scope of work included a cursory visual screening of the accessed portions of buildings at the Property built prior to 1990 for suspect asbestos containing materials (ACM). The information provided in this section, where applicable, is limited to identification of potential suspect materials in the readily accessible and observed areas of the building, and their general condition. This is not intended to be a comprehensive survey for the presence of ACM, and no testing has been conducted.

Suspected ACM noted during a cursory visual screening included sheetrock wall systems, brick and mastic, and floor tile with associated mastics. Although not observed, the roofing materials may contain asbestos. Additional types of suspect ACM may exist in enclosed areas or areas not accessed during the assessment. It is emphasized that this limited screening does not constitute a comprehensive asbestos survey of the premises and is meant only to provide a cursory evaluation regarding the potential presence of ACM at the Property.

7.2 Lead-Based Paint

The contracted scope of work included a cursory visual screening of the condition of painted surfaces in the accessed areas of residential buildings/units built prior to 1980. This is not intended to constitute a comprehensive survey for LBP or potential lead hazards, and no testing has been conducted.

No access was available into the on-site dwelling structures. Dwelling and farm structures at the Property have the potential to have components coated with lead containing paint.

7.3 Radon

Data compiled by the USEPA, as summarized by the regulatory database report, indicated that the Property is located in an area classified as Zone 2 or 'moderate risk' area for radon. Radon testing was not included in the scope of this assessment. According to the CA Radon database, fifteen recorded tests in zip code 92880 recorded 1 pCi/L indoor concentrations. Radon appears unlikely to represent an environmental concern.

7.4 Mold/Microbial Damage

As per the contracted scope of work, Hillmann conducted a cursory visual screening of the accessed areas of the building for evidence of significant damage to building materials and finishes as result of moisture intrusion and/or mold/microbial growth. Hillmann did not observe evidence of significant problems with moisture intrusion or mold/microbial growth at the Property.

7.5 NWI Mapped Wetlands

As indicated in the Physical Setting Source table of Section 4.1, no NWI mapped wetlands areas were depicted at the Property by the EDR Geocheck-Physical Setting Source Addendum (attached in Appendic E).

The scope of work for this assessment excludes a visual determination of regulated wetlands at the Property. It is emphasized that, regardless of the wetlands data obtained via the EDR Geocheck-Physical Setting Source Addendum, a delineation of regulated wetlands by a qualified professional would be warranted to determine the presence or absence of regulated wetlands at the Property.

7.6 Lead in Drinking Water

The scope of work for this assessment included a review of the potential for elevated levels of lead in drinking water by determining the source of the drinking water supply and a review of available compliance or testing data.

Potable water service at the Property is provided by a utility connection with the Western Municipal Water District. A recently published water quality report from the utility indicated compliance with USEPA water quality standards for lead in drinking water. A copy of the report has been attached in Appendix F.

8.0 REFERENCES

ASTM E1527-13-Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process; ASTM International, 2013

ASTM E12600-15-Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transaction, ASTM International, 2015

EDR Radius Map Report with GeoCheck™, Environmental Data Resources, 2020

EDR City Directory Abstract Report, Environmental Data Resources, 2020

EDR Sanborn Map Report, Environmental Data Resources, 2020

Methodology for Identifying the Area of Concern Around a Property Potentially Impacted by Vapor Migration from Nearby Contaminated Sources; A. Buonicore, 2011

9.0 APPENDICES

Appendix A	Site Diagram / Vicinity Map
Appendix B	Site Photographs
Appendix C	Questionnaires / User Provided Information
Appendix D	Historical Records Documentation
Appendix E	Regulatory Records Documentation
Appendix F	Other Documents / Lab Results
Appendix G	Project Personnel Qualifications

APPENDIX A

MAPS / DIAGRAMS

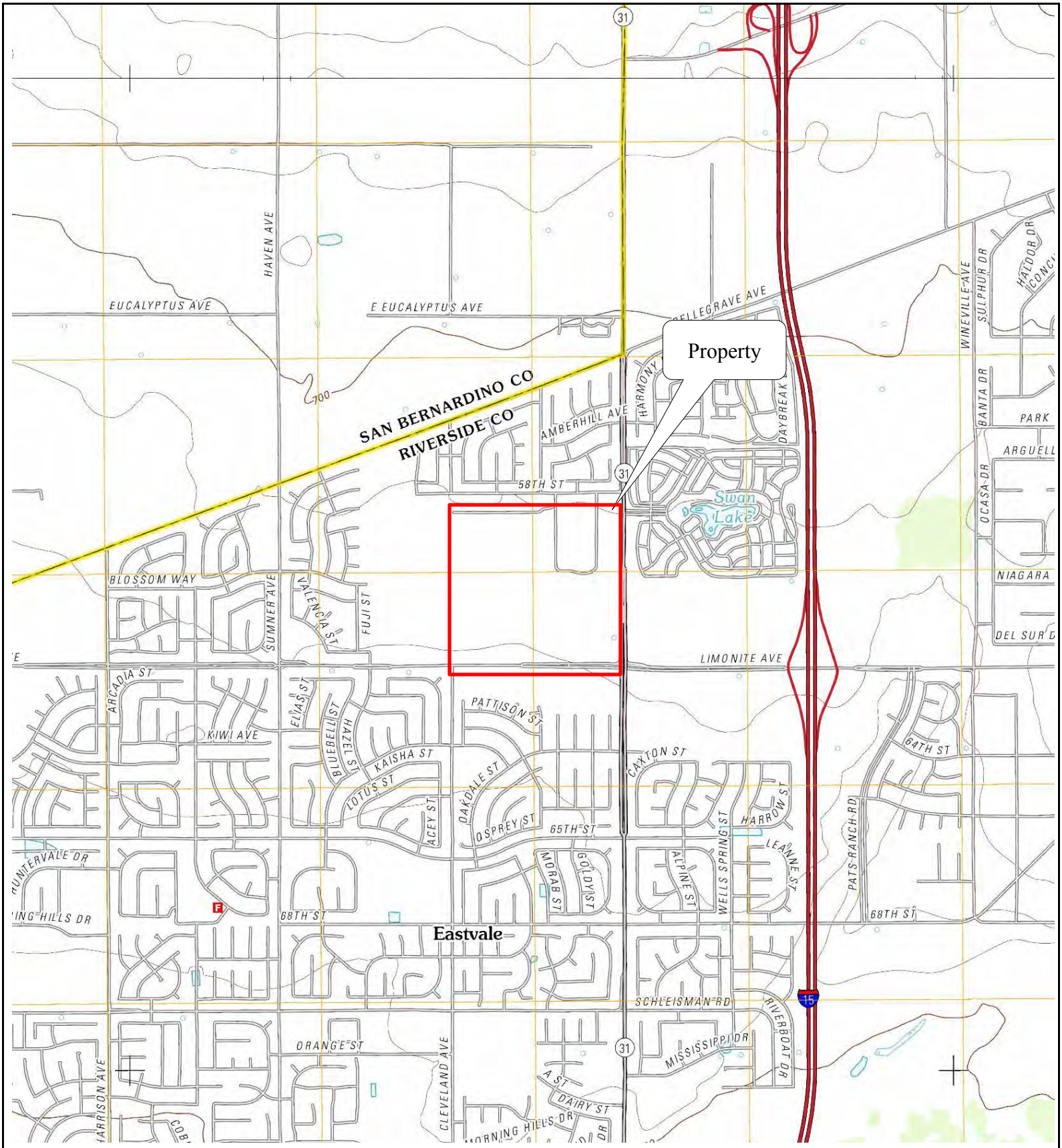

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Figure 1: Site Vicinity Map

12741 and 12745 Limonite Avenue and 12740 58th Street
Eastvale, California

N

SCALE: (NOT TO SCALE)

PROJECT No.: C3-84[illegible]



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Figure 2: Site Diagram

12741 and 12745 Limonite Avenue and 12740 58th Street
Eastvale, California

N

SCALE: (NOT TO SCALE)

PROJECT No.: C3-8458

APPENDIX B

SITE PHOTOGRAPHS

SITE PHOTOGRAPHS



Milking barn located at the northeast corner of the Property



Water tank located by the milking barn



Eastern perimeter of the Property, facing west



View of fried cattle manure located on the eastern boundary of the Property



Dark staining on gravel located by the milking barn on the northeast area of the Property



Vehicles and equipment at the east-northeastern perimeter of the Property

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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SITE PHOTOGRAPHS



Concrete remnants of farm structures on the northeastern portion of Property



Concrete remnants of farm structures on the northeastern portion of Property



Residential structures located on the mid-eastern portion of the Property



Residential structure located on the mid-eastern portion of the Property



View of the Property facing southeast



View of concrete slabs, tires, wood, drums, trash and debris located at the northwest boundary of the Property

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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SITE PHOTOGRAPHS



Northwestern area; farm remnants



View of the HIST UST located along the horse barn



Northwest adjoining properties



View of the Property facing southwest



Unoccupied residential structure #1 located on the northwest area of the Property



Barn/storage structure at northwestern Property area

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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SITE PHOTOGRAPHS



Interior view of the barn/storage structure



Occupied residential structure #2 located on the northern boundary of the Property



Interior of horse stable located at northern area of the Property



Former livestock pen at the northern area of the Property



Farm structure located at northern area of the Property



Occupied residential structure #3 located on the northern area of the Property

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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SITE PHOTOGRAPHS



Farm equipment/cistern at the northern area of the Property



Unoccupied residential structure #4 located at the northwest area of the Property



View of a well located by the maintenance repair area



Maintenance area on the northern portion of the Property



View of abandon drums located in the mechanical repair area with oil staining on the asphalt



Closer view of oil staining by the drums

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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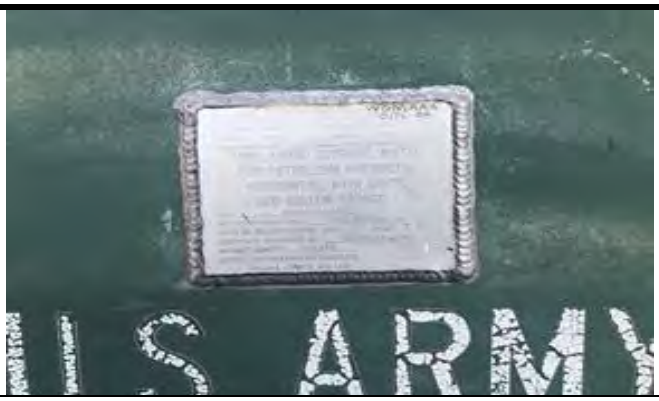
SITE PHOTOGRAPHS



600-g AST located in the maintenance area



600-g AST placard



Interior view of the maintenance auto repair shed



Maintenance area, misc. equipment, trash and storage



Equipment in maintenance shop



Equipment and machinery located in the maintenance area

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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SITE PHOTOGRAPHS



View of an abandon drum located by maintenance shop



View of concrete trash and debris present throughout the Property



View of the Property facing south



View of the Property facing northeast



View of the milking barn structure facing south



View of a historical well located on the east-southeast boundary of the Property

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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SITE PHOTOGRAPHS



View of the Property facing southwest



View of the southern boundary of the Property facing northeast



View of the southern boundary of the Property facing north



View of the southern boundary of the Property facing northwest



View of the southeast adjoining gas station



View of the southeast adjoining gas station

PHASE I ESA - SITE PHOTOGRAPHS

12741 and 12745 Limonite Avenue and 12740 58th Street,
Eastvale, California

Project No.:	C3-8458

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APPENDIX C

QUESTIONNAIRES/USER PROVIDED DOCUMENTATION

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ASTM E 1527-13/AAI - USER QUESTIONNAIRE

Instructions: This form should be completed by a representative of the USER of the Phase I ESA report and returned to Hillmann via email or in-person. **The report USER is the entity on whose behalf the assessment is being prepared and that will be relying on the report for liability protections.**

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"),188 the USER must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The user should provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete. Please complete the following questionnaire and provide any of the referenced information (if available) to Hillmann.

USER Company Name:	The New Home Company Southern California LLC	**USER Mailing Address:**	15231 Laguna Canyon Rd, suite 250 Irvine CA 92618
Respondent Name & Email Address:	Matt Blain mblain@nwhm.com	**Date of Completion:**	09/14/2021

Property Address:	12745 Limonite Avenue, Eastvale CA	**YES**	**NO**	**DETAIL (optional):**
Environmental liens that are filed or recorded against the property: Did a search of recorded land title records identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?		☐	☑	
Activity and use limitations that are in place on the property or that have been filed or recorded against the property: Did a search of recorded land title records (or judicial records where appropriate, identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?		☐	☑	
Specialized knowledge or experience of the person seeking to qualify for the LLP: Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?		☐	☑	
Relationship of the purchase price to the fair market value of the property if it were not contaminated: Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?		☑	☐	

HILLMANN CONSULTING

Property Address:	12745 Limonite Avenue, Eastvale CA	YES	NO	DETAIL (optional):
Commonly Known or Reasonably Ascertainable Information: Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? **ANSWER BELOW**				
- Do you know the past uses of the property?		☑	☐	Dairy Farm
- Do you know of specific chemicals that are present or were once present at the property?		☐	☑	
- Do you know of spills or other chemical releases that have taken place at the property?		☐	☑	
- Do you know of any environmental cleanups that have taken place at the property?		☐	☑	
The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation: Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?		☐	☑	
Litigation/Administrative Proceedings/Government Notices As the User of this ESA, do you have knowledge of (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.		☐	☑	

Additional Details, if applicable:

APPENDIX D

HISTORICAL RECORDS DOCUMENTATION

Hamer Ave and 58th Street

Hamer Ave and 58th Street

Corona, CA 92880

Inquiry Number: 6529777.8

June 09, 2021

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

06/09/21

Site Name:

Hamer Ave and 58th Street
Hamer Ave and 58th Street
Corona, CA 92880
EDR Inquiry # 6529777.8

Client Name:

Hillmann Environmental Co.
1745 W Orangewood Avenue
Orange, CA 92868-0000
Contact: Gabby Cyrulik

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2002	1"=500'	Acquisition Date: January 01, 2002	USGS/DOQQ
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1990	1"=500'	Flight Date: August 29, 1990	USDA
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: July 28, 1985	USDA
1975	1"=500'	Flight Date: August 01, 1975	USGS
1967	1"=500'	Flight Date: May 15, 1967	USDA
1953	1"=500'	Flight Date: February 02, 1953	USDA
1948	1"=500'	Flight Date: July 10, 1948	USGS
1938	1"=500'	Flight Date: May 30, 1938	USDA
1931	1"=500'	Flight Date: September 18, 1931	FAIR

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INQUIRY #: 6529777.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 2006
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 2002
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 1994
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 1990
= 500'
N
EDR


Borrow Area
INQUIRY #: 6529777.8
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 1985
= 500'
N
EDR


INQUIRY #: 6529777.8
YEAR: 1975
= 500'
N
EDR



INQUIRY #: 6529777.8

YEAR: 1967

= 500'

N

EDR

970



INQUIRY #: 6529777.8

YEAR: 1953

= 500'

N

EDR


INQUIRY #: 6529777.8
YEAR: 1948
= 500'
N
EDR



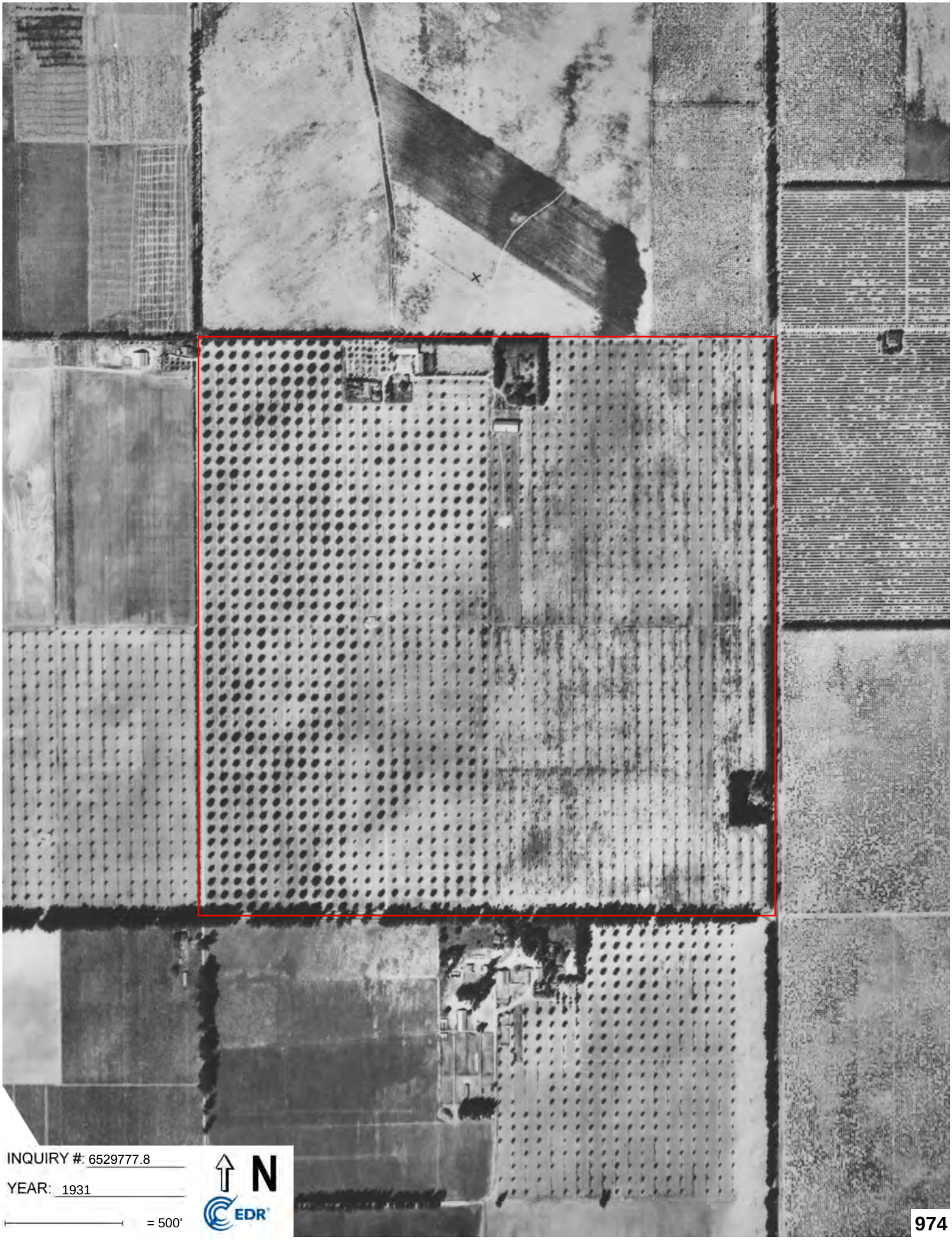
INQUIRY #: 6529777.8

YEAR: 1938

= 500'

N

EDR



INQUIRY #: 6529777.8

YEAR: 1931

= 500'

N

EDR

Hamer Ave and 58th Street

Hamer Ave and 58th Street

Corona, CA 92880

Inquiry Number: 6529777.4

June 09, 2021

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

06/09/21

Site Name:

Hamer Ave and 58th Street
Hamer Ave and 58th Street
Corona, CA 92880
EDR Inquiry # 6529777.4

Client Name:

Hillmann Environmental Co.
1745 W Orangewood Avenue
Orange, CA 92868-0000
Contact: Gabby Cyrulik

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Hillmann Environmental Co. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# Schoiar Way, 58th Ave, Hamne
Project: C3-8458

Coordinates:

Latitude:	33.979185 33° 58' 45" North
Longitude:	-117.562932 -117° 33' 47" West
UTM Zone:	Zone 11 North
UTM X Meters:	448001.46
UTM Y Meters:	3759990.82
Elevation:	669.00' above sea level

Maps Provided:

2012
1981
1973
1967
1953, 1954
1947
1942
1902

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Corona North
2012
7.5-minute, 24000



Guasti
2012
7.5-minute, 24000

1981 Source Sheets



Guasti
1981
7.5-minute, 24000
Aerial Photo Revised 1978



Corona North
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1973 Source Sheets



Guasti
1973
7.5-minute, 24000
Aerial Photo Revised 1973



Corona North
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1967 Source Sheets



Corona North
1967
7.5-minute, 24000
Aerial Photo Revised 1966

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1953, 1954 Source Sheets



Guasti
1953
7.5-minute, 24000
Aerial Photo Revised 1952



Corona North
1954
7.5-minute, 24000
Aerial Photo Revised 1952

1947 Source Sheets



CORONA
1947
15-minute, 50000

1942 Source Sheets



Corona and Vicinity
1942
7.5-minute, 31680

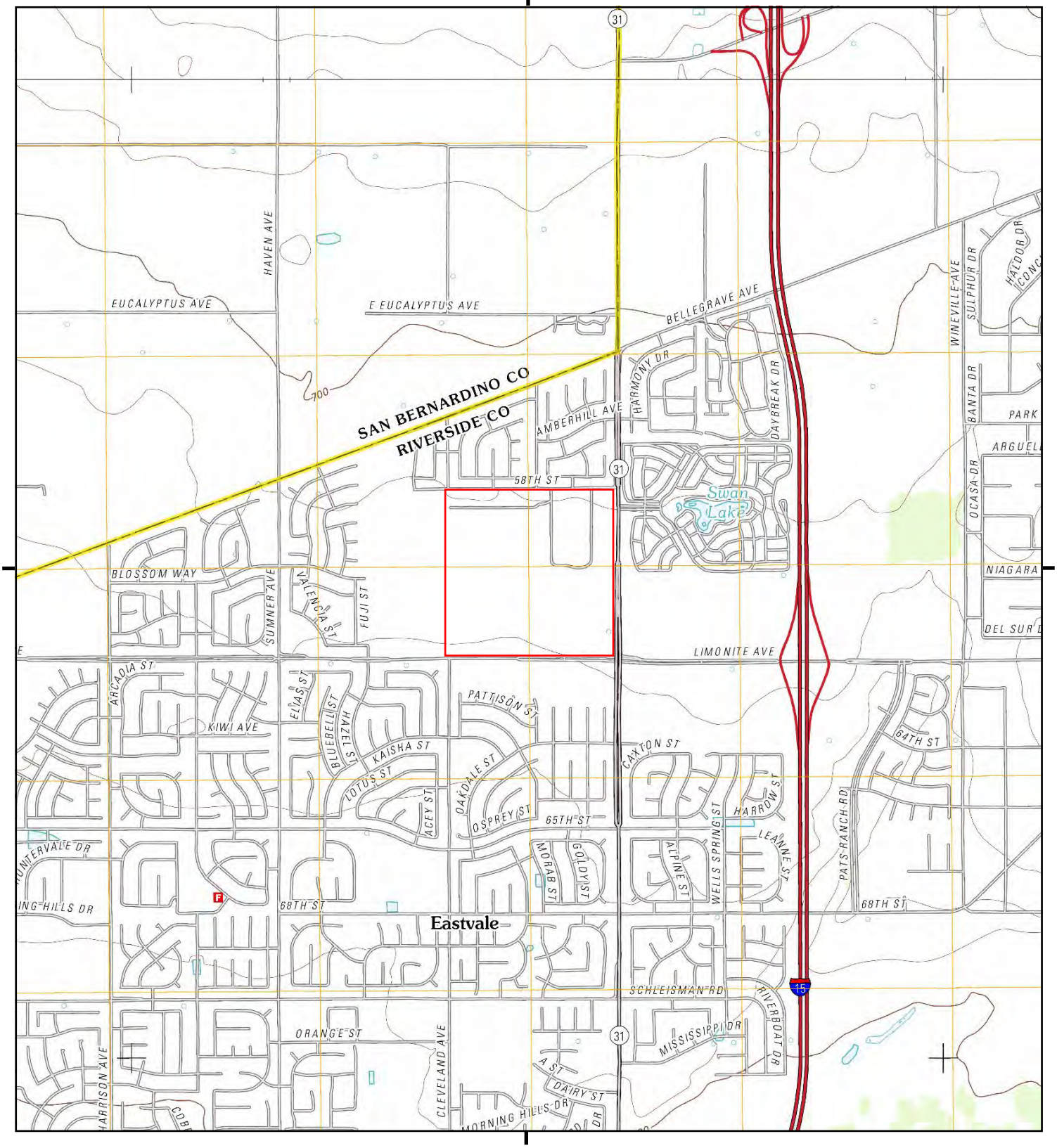
1902 Source Sheets



Corona
1902
30-minute, 125000

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

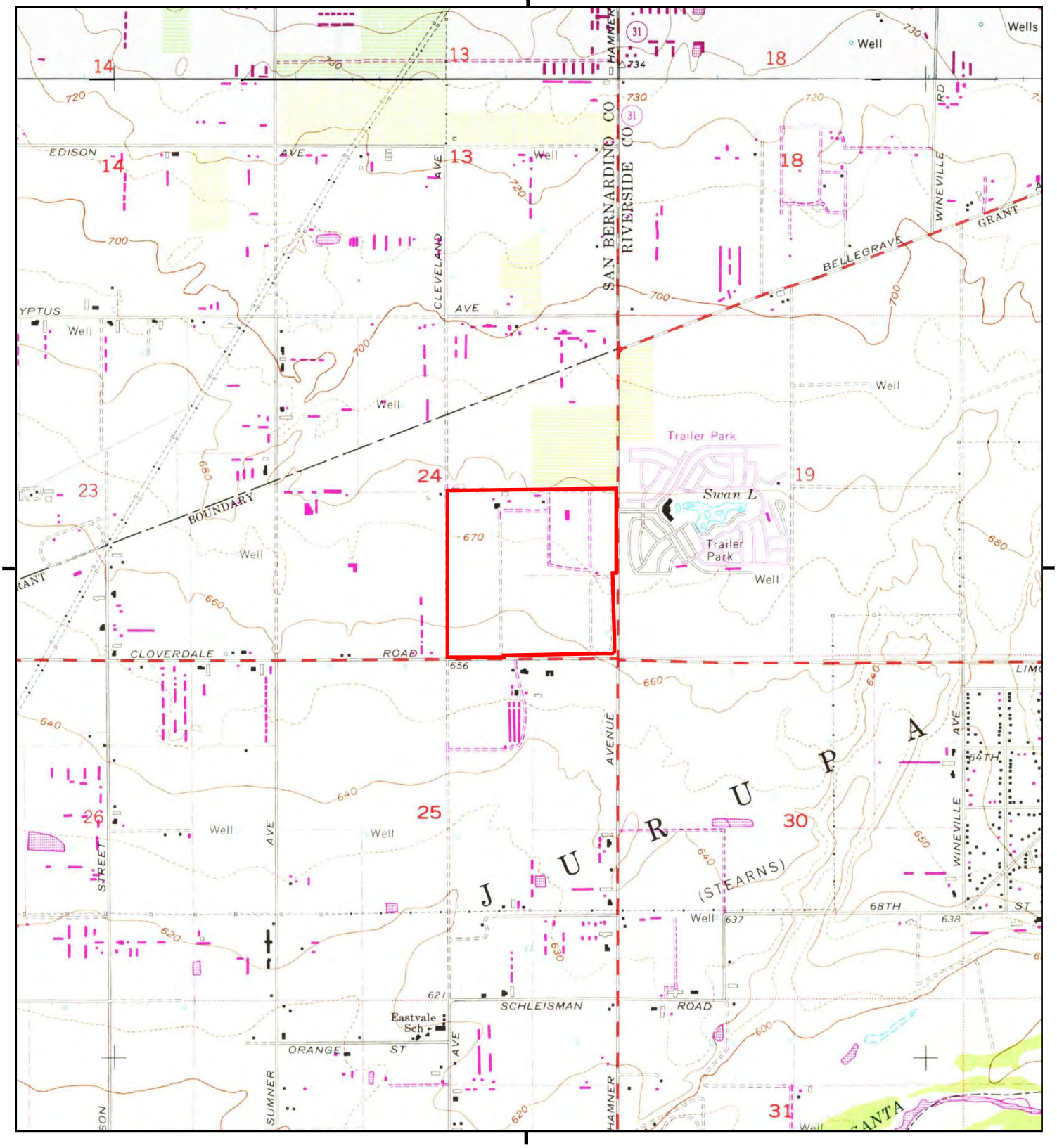
TP, Corona North, 2012, 7.5-minute
N, Guasti, 2012, 7.5-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N

Historical Topo Map

1981



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

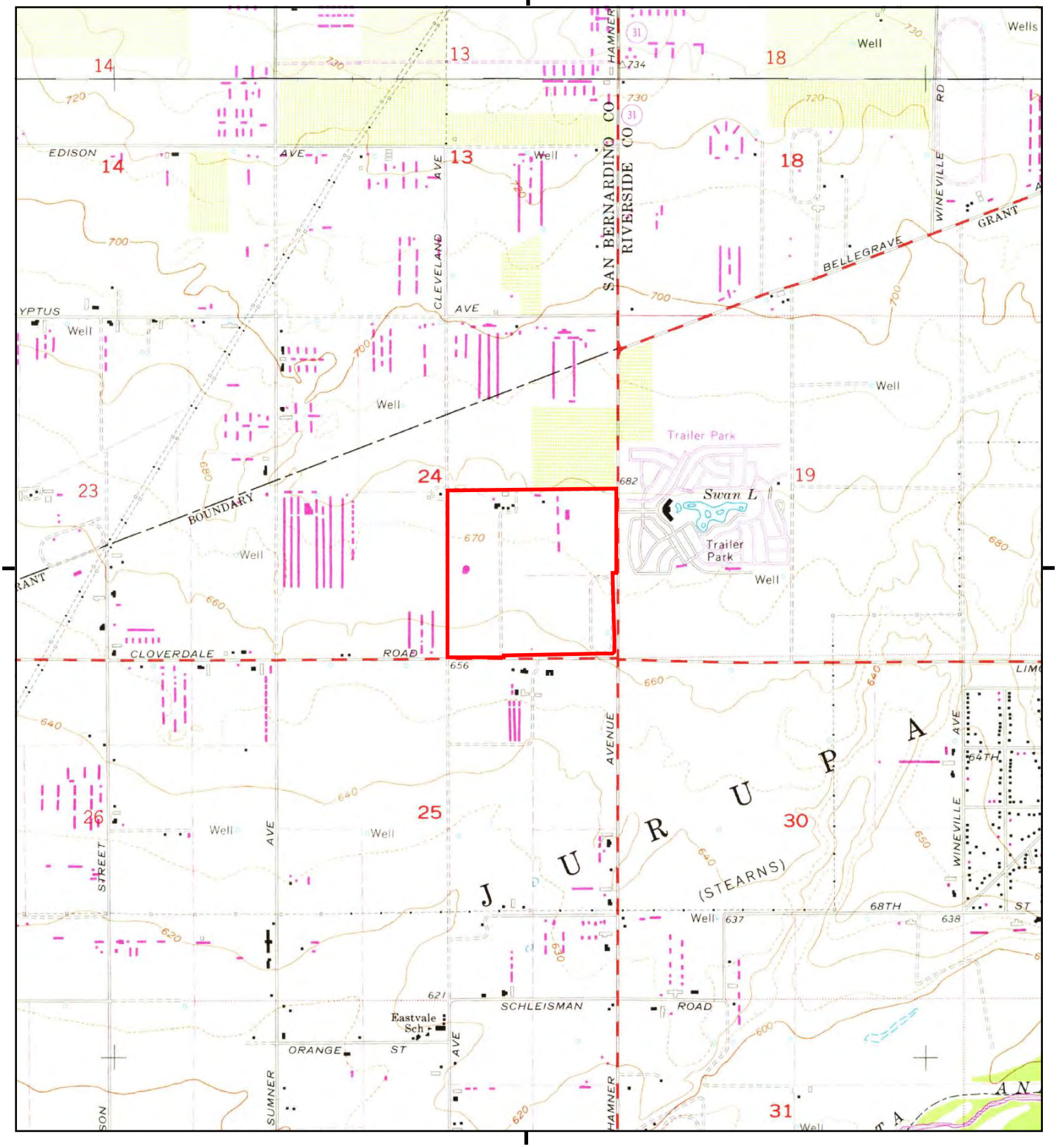
TP, Corona North, 1981, 7.5-minute
N, Guasti, 1981, 7.5-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

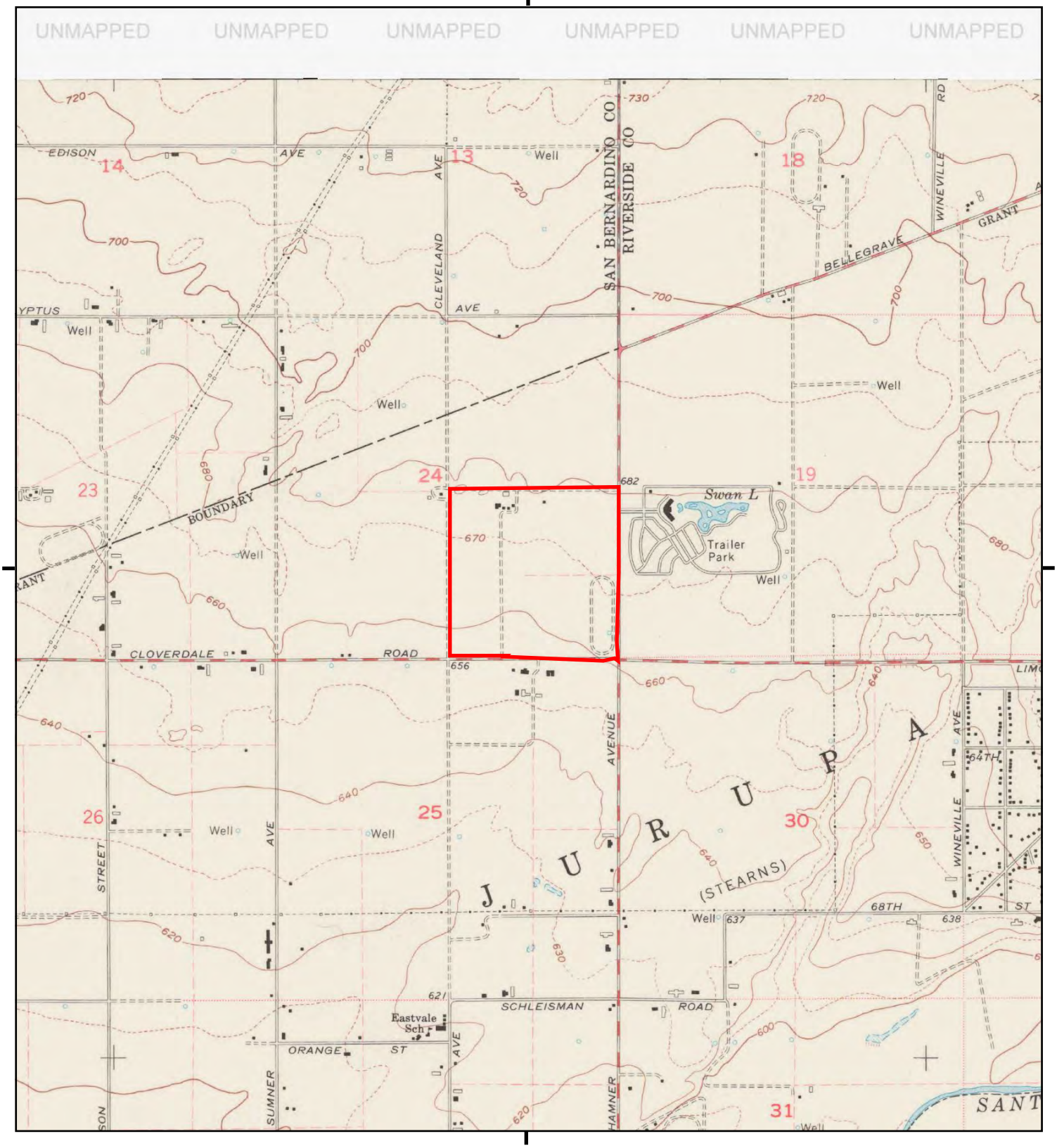
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona North, 1973, 7.5-minute
N, Guasti, 1973, 7.5-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

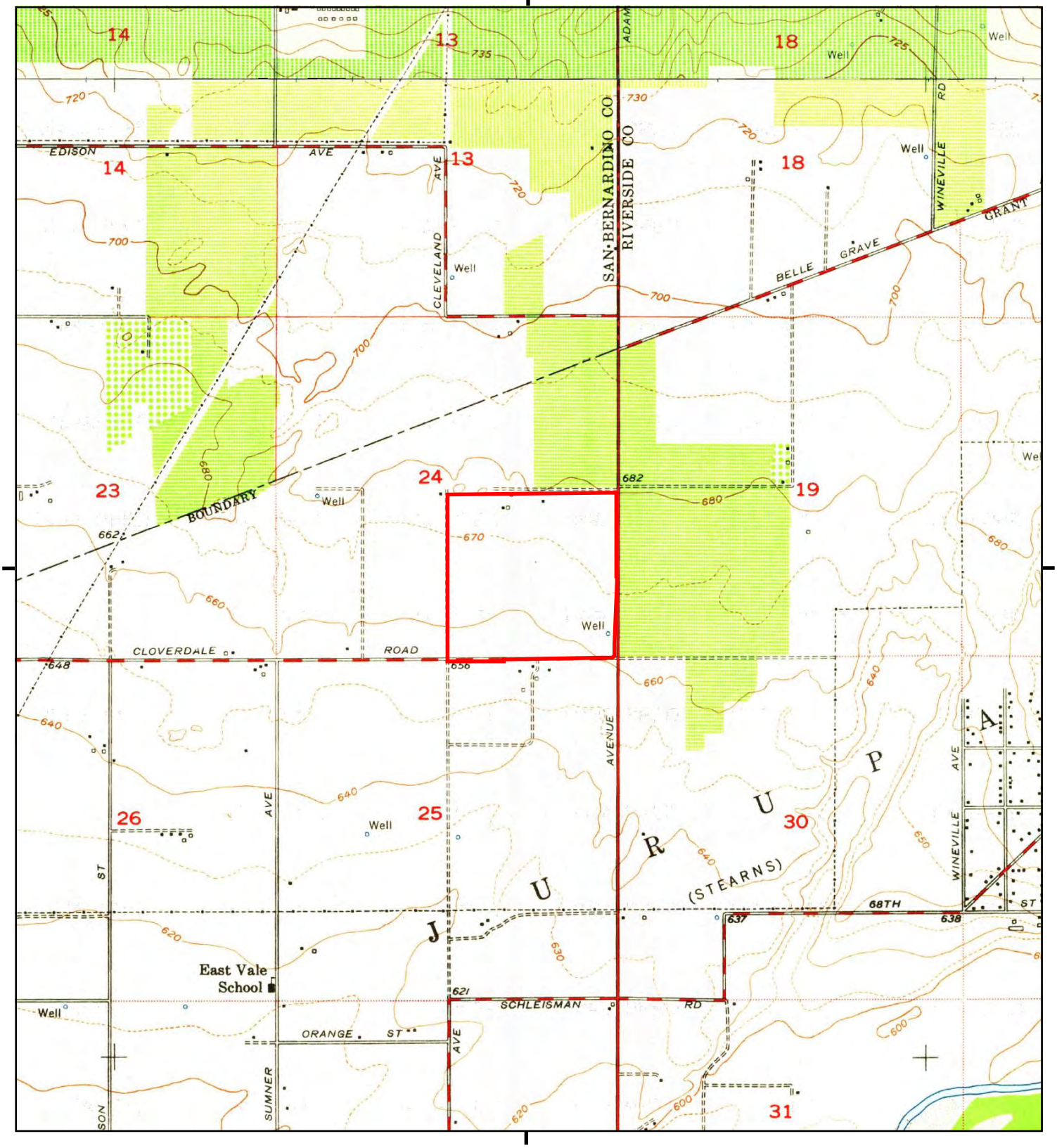
TP, Corona North, 1967, 7.5-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N

Historical Topo Map

1953, 1954



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona North, 1954, 7.5-minute
N, Guasti, 1953, 7.5-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N

Historical Topo Map

1947



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

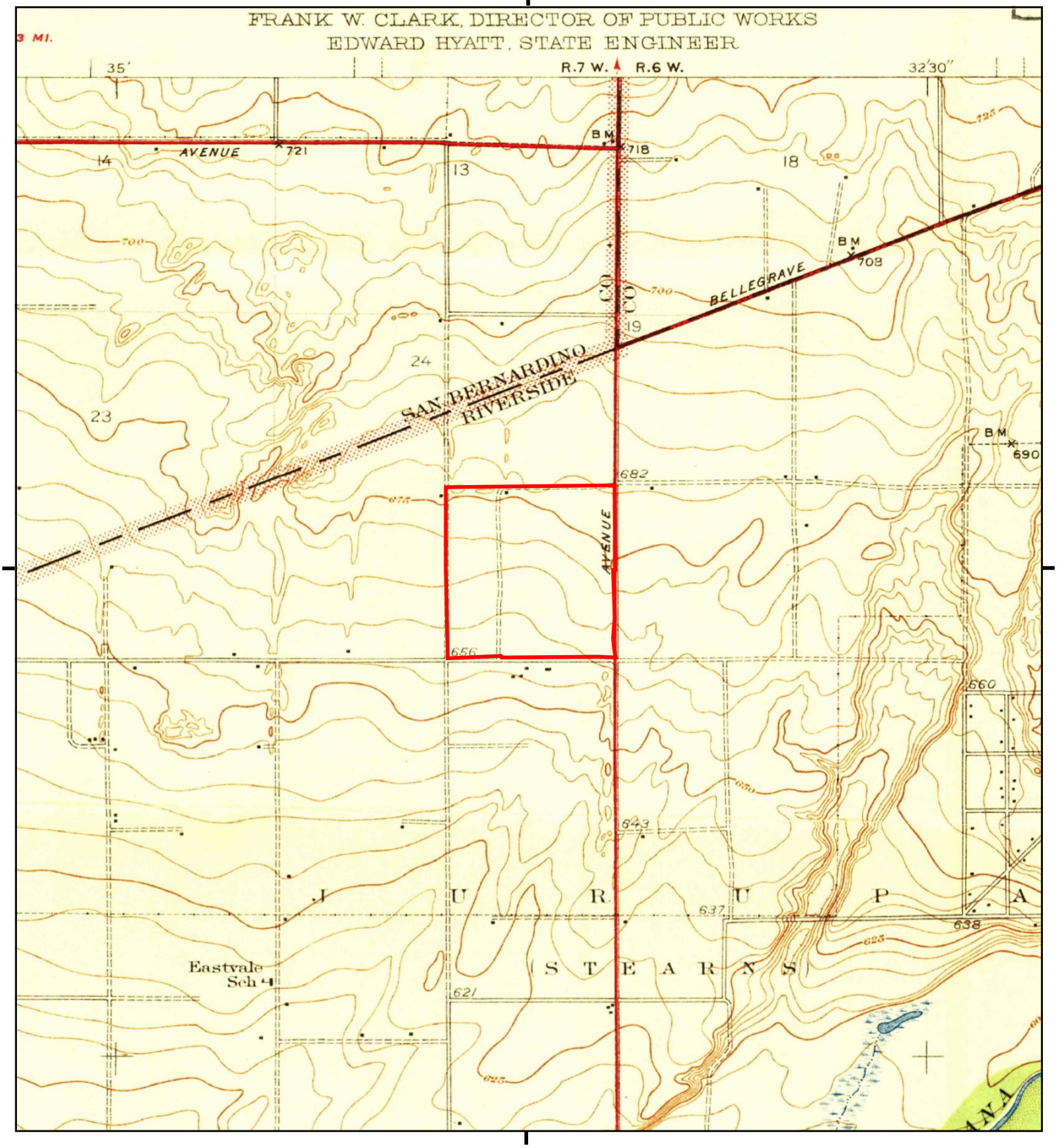
TP, CORONA, 1947, 15-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N

Historical Topo Map

1942



This report includes information from the following map sheet(s).

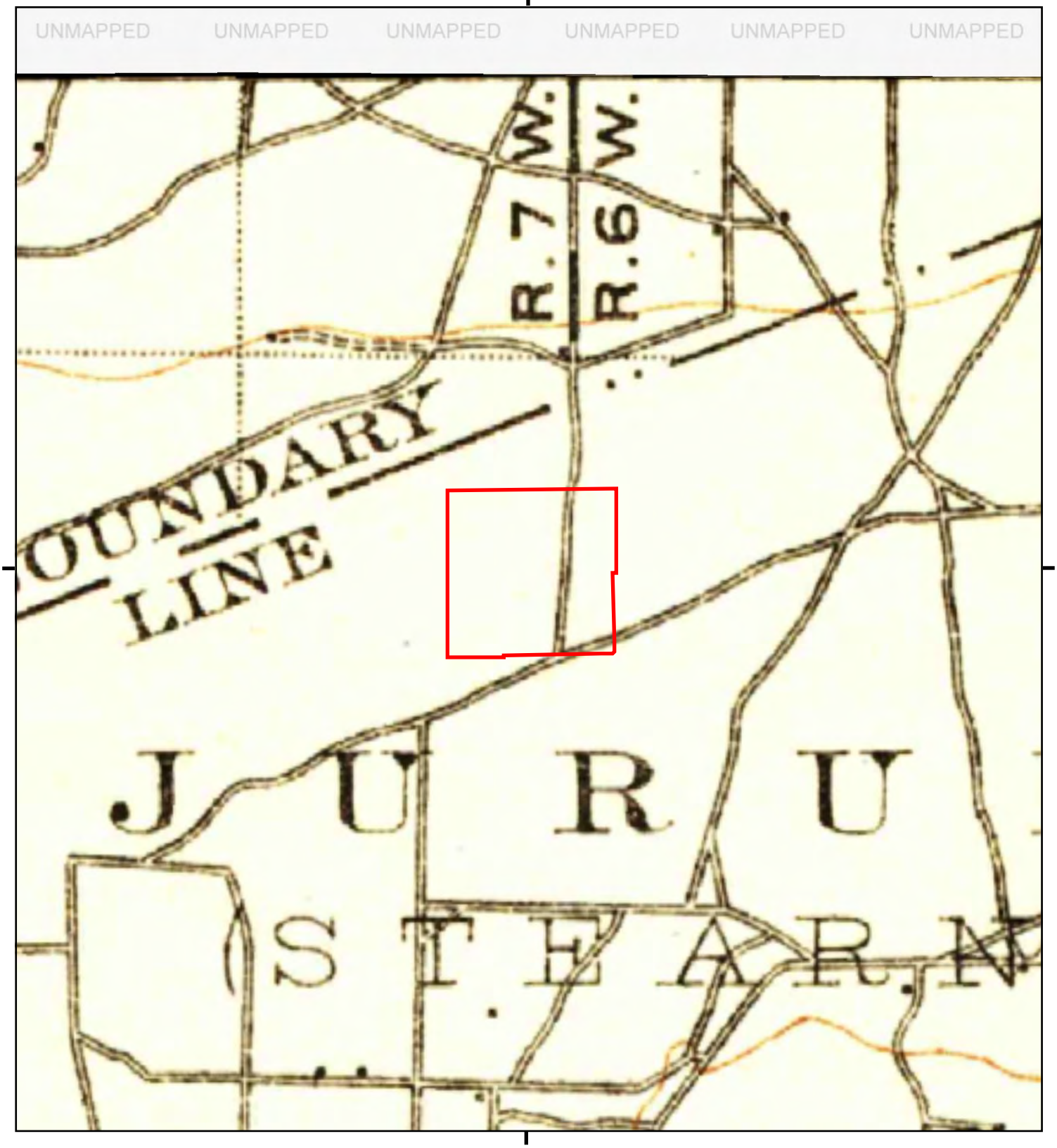
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona and Vicinity, 1942, 7.5-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corona, 1902, 30-minute

SITE NAME: Hamer Ave and 58th Street
ADDRESS: Hamer Ave and 58th Street
Corona, CA 92880
CLIENT: Hillmann Environmental Co.

N

Hamer Ave and 58th Street

Hamer Ave and 58th Street

Corona, CA 92880

Inquiry Number: 6529777.3

June 09, 2021

Certified Sanborn® Map Report

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Shelton, CT 06484
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Certified Sanborn® Map Report

06/09/21

Site Name:

Hamer Ave and 58th Street
Hamer Ave and 58th Street
Corona, CA 92880
EDR Inquiry # 6529777.3

Client Name:

Hillmann Environmental Co.
1745 W Orangewood Avenue
Orange, CA 92868-0000
Contact: Gabby Cyrulik

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 46C5-4AEA-9674

PO # Schoiar Way, 58th Ave, Hamner

Project C3-8458

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 46C5-4AEA-9674

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Hamer Ave and 58th Street
Hamer Ave and 58th Street
Corona, CA 92880

Inquiry Number: 6529777.5
June 21, 2021

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1921 through 2017. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 2640 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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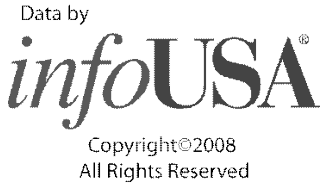

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2017	Cole Information Services	-	X	X	-
2014	Cole Information Services	-	X	X	-
2009	Cole Information Services	-	X	X	-
2004	Cole Information Services	-	X	X	-
2002	SBC PACIFIC BELL	-	X	X	-
2001	Haines & Company, Inc.	-	X	X	-
1999	Cole Information Services	-	X	X	-
1996	Pacific Bell	-	X	X	-
1994	Cole Information Services	-	X	X	-
1993	Pacific Bell	-	X	X	-
1990	Pacific Bell	-	X	X	-
1986	Pacific Bell Yellow Pages	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1981	Pacific Telephone	-	X	X	-
1977	Pacific Telephone	-	X	X	-
1970	Pacific Telephone	-	X	X	-
1967	Luskey Brothers & Co.	-	-	-	-
1966	Luskey Brothers & Company Inc.	-	X	X	-
1961	Luskey Brothers & Co.	-	-	-	-
1960	Luskeys Brothers & Co., Publishers	-	-	-	-
1956	Luskey Brothers & Co.	-	X	X	-
1955	Luskeys Brothers Co., Publishers	-	-	-	-
1951	Los Angeles Directory Co.	-	-	-	-
1946	Southern California Telephone Company	-	-	-	-
1945	Los Angeles Directory Co.	-	-	-	-
1941	Pacific Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1936	Los Angeles Directory Co.	-	-	-	-
1931	Southern California Telephone Co.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1927	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	-	-	-
1924	Kaasen Directory Co.	-	-	-	-
1921	Riverside Directory Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

Hamer Ave and 58th Street
Corona, CA 92880

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

58TH ST

12740 58TH ST

Year	Uses	Source
2017	JOHN LEAL	Cole Information Services
2014	JESE ZUNIGA	Cole Information Services
2009	LEAL RANCHES	Cole Information Services
	LEIGH MEDBURY	Cole Information Services
	STERLING SILVER TRUCKING	Cole Information Services
1999	LEIGH MEDBURY	Cole Information Services

ALEXANDRIA AVE

5509 ALEXANDRIA AVE

Year	Uses	Source
2017	MICHELE CINQUE	Cole Information Services
2014	WILLIAM BAIRD	Cole Information Services
2009	WILLIAM BAIRD	Cole Information Services
2004	JUDY NEGRI	Cole Information Services
1999	WILLIAM BAIRD	Cole Information Services

5514 ALEXANDRIA AVE

Year	Uses	Source
2017	BRADLEY MORTON	Cole Information Services
2014	BRADLEY MORTON	Cole Information Services
2009	BRADLEY MORTON	Cole Information Services
2004	BRADLEY MORTON	Cole Information Services
1999	BRADLEY MORTON	Cole Information Services

5519 ALEXANDRIA AVE

Year	Uses	Source
2017	SAMMIE CAYTON	Cole Information Services
2014	SAMMIE CAYTON	Cole Information Services
2009	QUICK TIME TRUCKING	Cole Information Services
2004	SAMMIE CAYTON	Cole Information Services
	QUICK TIME TRUCKING	Cole Information Services

FINDINGS

5524 ALEXANDRIA AVE

Year	Uses	Source
2017	DEBRA SOLIZ	Cole Information Services
2014	LORETO CARMONA	Cole Information Services
2009	VICTOR CARMONA	Cole Information Services
2004	RAMON CASTRO	Cole Information Services

5529 ALEXANDRIA AVE

Year	Uses	Source
2017	KEITH GREEN	Cole Information Services
2014	KEITH GREEN	Cole Information Services
2009	KEITH GREEN	Cole Information Services
2004	KEITH GREEN	Cole Information Services
1999	KEITH GREEN	Cole Information Services

5534 ALEXANDRIA AVE

Year	Uses	Source
2017	BARRY CHAPPELL	Cole Information Services
2014	BARRY CHAPPELL	Cole Information Services
2009	BARRY CHAPPELL	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	BARRY CHAPPELL	Cole Information Services

5539 ALEXANDRIA AVE

Year	Uses	Source
2017	JOSHUA BATES	Cole Information Services
2014	JOSHUA BATES	Cole Information Services
2009	JOSHUA BATES	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	JOSHUA BATES	Cole Information Services

5544 ALEXANDRIA AVE

Year	Uses	Source
2017	HEIDI BRUGGEMAN	Cole Information Services
2014	HEIDI BRUGGEMAN	Cole Information Services
2009	HEIDI BRUGGEMAN	Cole Information Services
2004	HEIDI BRUGGEMAN	Cole Information Services
1999	HEIDI BRUGGEMAN	Cole Information Services

FINDINGS

5549 ALEXANDRIA AVE

Year	Uses	Source
2014	KELLY DOMINICE	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	RAYMOND DOMINICE	Cole Information Services

5554 ALEXANDRIA AVE

Year	Uses	Source
2017	RAMON PENA	Cole Information Services
2014	RAMON PENA	Cole Information Services
2009	JOSE ARELLANO	Cole Information Services
2004	JOSE ARELLANO	Cole Information Services
1999	JOSE ARELLANO	Cole Information Services

5559 ALEXANDRIA AVE

Year	Uses	Source
2017	OLUBUKOLA OGUNPOLA	Cole Information Services
2014	JAMES DOUGLAS	Cole Information Services
2009	OLUBUKOLA OGUNPOLA	Cole Information Services
2004	OLUBUKOLA OGUNPOLA	Cole Information Services
1999	OLUBUKOLA OGUNPOLA	Cole Information Services

5564 ALEXANDRIA AVE

Year	Uses	Source
2017	RAUL FONSECA	Cole Information Services
2014	RAUL FONSECA	Cole Information Services
2009	EDWARD BLAZER	Cole Information Services
2004	EDWARD BLAZER	Cole Information Services
1999	EDWARD BLAZER	Cole Information Services

5569 ALEXANDRIA AVE

Year	Uses	Source
2017	QIWEN WU	Cole Information Services
2014	OWEN LAYUGAN	Cole Information Services
2009	JAMES LAYUGAN	Cole Information Services
2004	ROBERT NEGRI	Cole Information Services
1999	JAMES LAYUGAN	Cole Information Services

5574 ALEXANDRIA AVE

Year	Uses	Source
2017	BETTY KNIGHT	Cole Information Services

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	CYNTHIA HARMON	Cole Information Services

5579 ALEXANDRIA AVE

Year	Uses	Source
2017	NICHOLAS MARTINEZ	Cole Information Services
2014	LUIS MARTINEZ	Cole Information Services
2009	LUIS MARTINEZ	Cole Information Services
2004	LUIS MARTINEZ	Cole Information Services

5584 ALEXANDRIA AVE

Year	Uses	Source
2017	EDWARD BRUGGEMAN	Cole Information Services
2014	EDWARD BRUGGEMAN	Cole Information Services
2009	EDWARD BRUGGEMAN	Cole Information Services
2004	EDWARD BRUGGEMAN	Cole Information Services
1999	EDWARD BRUGGEMAN	Cole Information Services

5589 ALEXANDRIA AVE

Year	Uses	Source
2017	FELICIA MA	Cole Information Services
2014	QIN LUO	Cole Information Services
2009	RANDOLPH LASCURAIN	Cole Information Services
2004	RANDOLPH LASCURAIN	Cole Information Services
1999	RANDOLPH LASCURAIN	Cole Information Services

5594 ALEXANDRIA AVE

Year	Uses	Source
2017	JULIE TRAXLER	Cole Information Services
2014	JOSH SOKOLOFF	Cole Information Services
2009	HELEN MALSTER	Cole Information Services
2004	ERIC ROSENTHAL	Cole Information Services

5599 ALEXANDRIA AVE

Year	Uses	Source
2017	DIANA BEACH	Cole Information Services
2014	ANTONIO BAEZ	Cole Information Services
2004	GLEN CONRAD	Cole Information Services

FINDINGS

5604 ALEXANDRIA AVE

Year	Uses	Source
2017	JACQUELINE MCGILL	Cole Information Services
2014	JOHN GARCIA	Cole Information Services
2009	JOHN GARCIA	Cole Information Services
2004	EDDIE SHANNON	Cole Information Services
1999	JOHN GARCIA	Cole Information Services

5609 ALEXANDRIA AVE

Year	Uses	Source
2017	RICHARD VILLASENOR	Cole Information Services
2014	RICHARD VILLASENOR	Cole Information Services
2009	RICHARD VILLASENOR	Cole Information Services
2004	RICHARD VILLASENOR	Cole Information Services
1999	RICHARD VILLASENOR	Cole Information Services

5614 ALEXANDRIA AVE

Year	Uses	Source
2017	BOK CHOE	Cole Information Services
2014	HYON CHOE	Cole Information Services
2009	HYON CHOE	Cole Information Services
2004	HYON CHOE	Cole Information Services
1999	HYON CHOE	Cole Information Services

5619 ALEXANDRIA AVE

Year	Uses	Source
2017	ARWIN PABLO	Cole Information Services
2014	ARWIN PABLO	Cole Information Services
2009	ARWIN PABLO	Cole Information Services
1999	ARWIN PABLO	Cole Information Services

5629 ALEXANDRIA AVE

Year	Uses	Source
2017	HAROLD GARCEZ	Cole Information Services
2014	HAROLD GARCEZ	Cole Information Services
2009	STEPHEN BROOKS	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	STEPHEN BROOKS	Cole Information Services

FINDINGS

5639 ALEXANDRIA AVE

Year	Uses	Source
2017	HELMUTH ARAYA	Cole Information Services
2014	HELMUTH ARAYA	Cole Information Services
2009	LEOBARDO MARTINEZ	Cole Information Services
2004	JASON UNDERHILL	Cole Information Services

5644 ALEXANDRIA AVE

Year	Uses	Source
2017	ARMANDO GARCIA	Cole Information Services
2014	ARMANDO GARCIA	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services

5649 ALEXANDRIA AVE

Year	Uses	Source
2017	SCOTT JOINES	Cole Information Services
2014	SCOTT JOINES	Cole Information Services
2009	SCOTT JOINES	Cole Information Services
2004	TROY DAVIS	Cole Information Services
1999	SCOTT JOINES	Cole Information Services

5654 ALEXANDRIA AVE

Year	Uses	Source
2017	ZEHRA HANIF	Cole Information Services
2014	DAVID MCCULLY	Cole Information Services
2009	JORGE RAMIREZ	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	JORGE RAMIREZ	Cole Information Services

5659 ALEXANDRIA AVE

Year	Uses	Source
2017	WILLIAM DOUTHIT	Cole Information Services
2014	WILLIAM DOUTHIT	Cole Information Services
2009	JOHN DOUTHIT	Cole Information Services
2004	HOWARD DOUTHIT	Cole Information Services
1999	JOHN DOUTHIT	Cole Information Services

5664 ALEXANDRIA AVE

Year	Uses	Source
2017	TREVOR PAINTON	Cole Information Services
2014	TREVOR PAINTON	Cole Information Services

FINDINGS

Year	Uses	Source
2004	TREVOR PAINTON	Cole Information Services

5669 ALEXANDRIA AVE

Year	Uses	Source
2017	ISMAEL MARTIN	Cole Information Services
2014	ISMAEL MARTIN	Cole Information Services
2009	ISMAEL MARTIN	Cole Information Services
2004	ISMAEL MARTIN	Cole Information Services

5674 ALEXANDRIA AVE

Year	Uses	Source
2014	LELAND SPARKS	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	LELAND SPARKS	Cole Information Services

5684 ALEXANDRIA AVE

Year	Uses	Source
2017	MELISSA HORTON	Cole Information Services
2014	EVERETT SMIT	Cole Information Services
2009	JOSEPH HORTON	Cole Information Services
2004	EVERETT SMIT	Cole Information Services
1999	JOSEPH HORTON	Cole Information Services

5694 ALEXANDRIA AVE

Year	Uses	Source
2017	MARK ESTEP	Cole Information Services
2014	MARK ESTEP	Cole Information Services
2009	MARK ESTEP	Cole Information Services
2004	JOSE DELATORRE	Cole Information Services
1999	MARK ESTEP	Cole Information Services

5704 ALEXANDRIA AVE

Year	Uses	Source
2017	JOSHUA MORGAN	Cole Information Services
2014	JOSHUA MORGAN	Cole Information Services
2009	JOSHUA MORGAN	Cole Information Services
2004	JOSHUA MORGAN	Cole Information Services
1999	JOSHUA MORGAN	Cole Information Services

FINDINGS

5709 ALEXANDRIA AVE

Year	Uses	Source
2017	MICHAEL MCGROARTY	Cole Information Services
2009	JOHN MCGROARTY	Cole Information Services
1999	JOHN MCGROARTY	Cole Information Services

5714 ALEXANDRIA AVE

Year	Uses	Source
2017	MARK HERNANDEZ	Cole Information Services
2014	SANDER LAVAU	Cole Information Services
2009	SANDER LAVAU	Cole Information Services
2004	SANDER LAVAU	Cole Information Services
1999	SANDER LAVAU	Cole Information Services

5719 ALEXANDRIA AVE

Year	Uses	Source
2017	KIET NGUYEN	Cole Information Services
2014	KIET NGUYEN	Cole Information Services
2009	ERIN BRILEY	Cole Information Services
1999	ERIN BRILEY	Cole Information Services

5724 ALEXANDRIA AVE

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	JASON MCCARRON	Cole Information Services
2004	MICHAEL MCCARRON	Cole Information Services
1999	JASON MCCARRON	Cole Information Services

5729 ALEXANDRIA AVE

Year	Uses	Source
2017	HENRY CAMPBELL	Cole Information Services
2014	JACQUELYN JONES	Cole Information Services
2009	JACQUELYN JONES	Cole Information Services
1999	JACQUELYN JONES	Cole Information Services

5734 ALEXANDRIA AVE

Year	Uses	Source
2017	BONNIE MOORE	Cole Information Services
2014	BONNIE MOORE	Cole Information Services
2009	BONNIE MOORE	Cole Information Services
2004	BONNIE MOORE	Cole Information Services

Year	Uses	Source
1999	BONNIE MOORE	Cole Information Services

5744 ALEXANDRIA AVE

Year	Uses	Source
2017	PAMELA BRADFORD	Cole Information Services
2014	REGINA STONE	Cole Information Services
2009	PAMELA BRADFORD	Cole Information Services
2004	PAMELA BRADFORD	Cole Information Services
1999	PAMELA BRADFORD	Cole Information Services

5749 ALEXANDRIA AVE

Year	Uses	Source
2017	ROBERTO SANCHEZ	Cole Information Services
2014	ROBERTO SANCHEZ	Cole Information Services
2009	ROBERTO SANCHEZ	Cole Information Services
1999	ROBERTO SANCHEZ	Cole Information Services

5754 ALEXANDRIA AVE

Year	Uses	Source
2017	CHARLES MCDOUGALL	Cole Information Services
2014	CHARLES MCDOUGALL	Cole Information Services
2009	ERIN CARROLL	Cole Information Services
	CHARLES MCDOUGALL	Cole Information Services
2004	DERRIC WAGNER	Cole Information Services
1999	CHARLES MCDOUGALL	Cole Information Services

5759 ALEXANDRIA AVE

Year	Uses	Source
2017	ADAM FORT	Cole Information Services
2014	ADAM FORT	Cole Information Services
2009	AARON HALLENBECK	Cole Information Services
1999	AARON HALLENBECK	Cole Information Services

5764 ALEXANDRIA AVE

Year	Uses	Source
2017	STACY FULLER	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	SPRING MCWATERS	Cole Information Services
2004	JOEL MCWATERS	Cole Information Services
1999	SPRING MCWATERS	Cole Information Services

FINDINGS

5769 ALEXANDRIA AVE

Year	Uses	Source
2017	THEODORE TIPTON	Cole Information Services
2014	CESAR TLILAYATZI	Cole Information Services
2009	LILIA TLILAYATZI	Cole Information Services
1999	LILIA TLILAYATZI	Cole Information Services

5774 ALEXANDRIA AVE

Year	Uses	Source
2017	JOHN SCRANTON	Cole Information Services
2014	JOHN SCRANTON	Cole Information Services
2009	JEFFREY SCRANTON	Cole Information Services
2004	JEFFREY SCRANTON	Cole Information Services
1999	JEFFREY SCRANTON	Cole Information Services

5779 ALEXANDRIA AVE

Year	Uses	Source
2017	TITO STOKES	Cole Information Services
2014	ROBERT YOUNG	Cole Information Services
2009	RUBY SMOAK	Cole Information Services
1999	RUBY SMOAK	Cole Information Services

5784 ALEXANDRIA AVE

Year	Uses	Source
2017	ARMANDO FREGOSO	Cole Information Services
2014	ARMANDO ALVAREZ	Cole Information Services
2009	ALEJANDRO JIMENEZ	Cole Information Services
2004	ALEJANDRO JIMENEZ	Cole Information Services
1999	ALEJANDRO JIMENEZ	Cole Information Services

5789 ALEXANDRIA AVE

Year	Uses	Source
2017	ENRIQUETA BUSTAMANTE	Cole Information Services
2014	ELI PRITCHARD	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5799 ALEXANDRIA AVE

Year	Uses	Source
2017	CLAIRA VILLARCE	Cole Information Services
2014	CLAIRA VILLARCE	Cole Information Services
2009	STEVEN WALLER	Cole Information Services

Year	Uses	Source
1999	STEVEN WALLER	Cole Information Services

AMBER DR

688 AMBER DR

Year	Uses	Source
2001	ADSPCLTYMDSGCO	Haines & Company, Inc.

689 AMBER DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

690 AMBER DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	SMITH, WILLIAM P	Cole Information Services
1986	Smith William P	Pacific Bell Yellow Pages

691 AMBER DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Ball Goldie	Pacific Bell Yellow Pages

692 AMBER DR

Year	Uses	Source
2004	JOSE BARBOA	Cole Information Services
2001	OLDHAMDaryl M	Haines & Company, Inc.

693 AMBER DR

Year	Uses	Source
2001	ZEPEDAFedenco	Haines & Company, Inc.
1986	Kennedy Paul & Donna	Pacific Bell Yellow Pages

694 AMBER DR

Year	Uses	Source
2004	LAURA LOZANO	Cole Information Services
2001	LOZANO Laura E	Haines & Company, Inc.

FINDINGS

695 AMBER DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Cooper Geo E	Pacific Bell Yellow Pages

696 AMBER DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Plitt Paul K	Pacific Bell Yellow Pages

697 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Peel Rex A	Pacific Bell Yellow Pages
	Peel Richard J	Pacific Bell Yellow Pages

698 AMBER DR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services

699 AMBER DR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services

700 AMBER DR

Year	Uses	Source
2004	ANTHONY RICE	Cole Information Services

701 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

702 AMBER DR

Year	Uses	Source
2004	NICOLE HANKINSON	Cole Information Services
1994	MAREAN, JULIA	Cole Information Services

703 AMBER DR

Year	Uses	Source
2004	NICOLE SOLDAN	Cole Information Services

FINDINGS

704 AMBER DR

Year	Uses	Source
2004	ROSE ROSAS	Cole Information Services
	BRENT TEGTMEYER	Cole Information Services
2001	TEGTMEYERBren IS	Haines & Company, Inc.

705 AMBER DR

Year	Uses	Source
2004	MAXIMO OLLADO	Cole Information Services

706 AMBER DR

Year	Uses	Source
2004	ALFONSO ARREOLA	Cole Information Services
2001	ARREOLAAIlonso	Haines & Company, Inc.

707 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Frazier Wm A	Pacific Bell Yellow Pages
	Frazier Wm	Pacific Bell Yellow Pages

708 AMBER DR

Year	Uses	Source
2004	ANTONIA DELL	Cole Information Services
1986	Bentley Toni	Pacific Bell Yellow Pages
	Williams Mark	Pacific Bell Yellow Pages

709 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

710 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Beuthlen Howard	Pacific Bell Yellow Pages

711 AMBER DR

Year	Uses	Source
2004	DEREK KING	Cole Information Services
2001	GOULDBruce	Haines & Company, Inc.

Year	Uses	Source
1994	GOULD, BRUCE	Cole Information Services
1986	Gould Bruce	Pacific Bell Yellow Pages

712 AMBER DR

Year	Uses	Source
2004	TOD HASLAM	Cole Information Services
1986	Peterson T	Pacific Bell Yellow Pages

713 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	RIVERABIanca 90 B	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services

714 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2002	Birenbaum Dawn	SBC PACIFIC BELL
2001	XXXX	Haines & Company, Inc.

715 AMBER DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Klelty Frank M	Pacific Bell Yellow Pages

716 AMBER DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Wertens Douglas & Conchita	Pacific Bell Yellow Pages
1981	Country Style Mobile Homes Inc	Pacific Telephone

782 AMBER DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

AMBERHILL AVE

12602 AMBERHILL AVE

Year	Uses	Source
2017	WALTER RIOS	Cole Information Services

Year	Uses	Source
2014	BO CHEN	Cole Information Services
2009	ALEX ATILANO	Cole Information Services
2004	ALEX ATILANO	Cole Information Services
1999	ALEX ATILANO	Cole Information Services

12614 AMBERHILL AVE

Year	Uses	Source
2017	JAMES HARRIS	Cole Information Services
2014	JAMES HARRIS	Cole Information Services
2009	JAMES HARRIS	Cole Information Services
2004	JAMES HARRIS	Cole Information Services
1999	JAMES HARRIS	Cole Information Services

12626 AMBERHILL AVE

Year	Uses	Source
2017	LORENZO MARTINEZ	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	LUIS MARTINEZ	Cole Information Services
2004	LORENZO MARTINEZ	Cole Information Services

12633 AMBERHILL AVE

Year	Uses	Source
2017	CHRISTINE CARLOS	Cole Information Services
2014	STEPHEN VALDEZ	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JOSE CHAVEZ	Cole Information Services

12638 AMBERHILL AVE

Year	Uses	Source
2017	ELVIA TAMAYO	Cole Information Services
2014	ELVIA TAMAYO	Cole Information Services
2009	ANTONINO TAMAYO	Cole Information Services
2004	GRACIELA TAMAYO	Cole Information Services
1999	ANTONINO TAMAYO	Cole Information Services

12645 AMBERHILL AVE

Year	Uses	Source
2017	AARON PAN	Cole Information Services
2014	AARON PAN	Cole Information Services
2009	MATTHEW TURNER	Cole Information Services

Year	Uses	Source
1999	MATTHEW TURNER	Cole Information Services

12657 AMBERHILL AVE

Year	Uses	Source
2017	OSCAR MANALO	Cole Information Services
2014	OSCAR MANALO	Cole Information Services
2009	OSCAR MANALO	Cole Information Services
2004	OSCAR MANALO	Cole Information Services

12662 AMBERHILL AVE

Year	Uses	Source
2017	MATT RAMIREZ	Cole Information Services
2014	COURTNEY LUONG	Cole Information Services
2004	COURTNEY LUONG	Cole Information Services

12669 AMBERHILL AVE

Year	Uses	Source
2017	MICHELLE LOCKETT	Cole Information Services
2014	FRANK LOCKETT	Cole Information Services
2009	FRANK LOCKETT	Cole Information Services
2004	FRANK LOCKETT	Cole Information Services
1999	FRANK LOCKETT	Cole Information Services

12674 AMBERHILL AVE

Year	Uses	Source
2017	HUNG LE	Cole Information Services
2014	HUNG LE	Cole Information Services
2009	KOHNSON CHAN	Cole Information Services
2004	CHRIS CHAN	Cole Information Services
1999	KOHNSON CHAN	Cole Information Services

12681 AMBERHILL AVE

Year	Uses	Source
2017	JASPER LIM	Cole Information Services
2014	JASPER LIM	Cole Information Services
2009	JASPER LIM	Cole Information Services
2004	JASPER LIM	Cole Information Services
1999	JASPER LIM	Cole Information Services

FINDINGS

12686 AMBERHILL AVE

Year	Uses	Source
2017	RONALD WELCH	Cole Information Services
2014	RONALD WELCH	Cole Information Services
2009	RONALD WELCH	Cole Information Services
2004	RONALD WELCH	Cole Information Services
1999	RONALD WELCH	Cole Information Services

12693 AMBERHILL AVE

Year	Uses	Source
2017	JUAN HARO	Cole Information Services
2014	JUAN HARO	Cole Information Services
2009	GLORIA HARO	Cole Information Services
2004	JUAN HARO	Cole Information Services
1999	GLORIA HARO	Cole Information Services

12698 AMBERHILL AVE

Year	Uses	Source
2014	SHENG LIU	Cole Information Services
2009	SHENG LIU	Cole Information Services
2004	SHENG LIU	Cole Information Services
1999	SHENG LIU	Cole Information Services

12705 AMBERHILL AVE

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	YOUNG KIM	Cole Information Services
2004	FRANK LIN	Cole Information Services
1999	YOUNG KIM	Cole Information Services

12717 AMBERHILL AVE

Year	Uses	Source
2014	BIANCA AVALOS	Cole Information Services
2009	HONG DU	Cole Information Services
2004	DUNG QUACH	Cole Information Services
1999	HONG DU	Cole Information Services

12722 AMBERHILL AVE

Year	Uses	Source
2017	BALVANT GORAJIA	Cole Information Services
2014	BALVANT GORAJIA	Cole Information Services

Year	Uses	Source
2009	BALVANT GORAJIA	Cole Information Services
2004	BALVANT GORAJIA	Cole Information Services
1999	BALVANT GORAJIA	Cole Information Services

12729 AMBERHILL AVE

Year	Uses	Source
2017	BARBARA WOOD	Cole Information Services
2014	JANET GOTOC	Cole Information Services
2009	RODOLFO VICTORIO	Cole Information Services
2004	JEFFREY MURILLO	Cole Information Services
1999	RODOLFO VICTORIO	Cole Information Services

12734 AMBERHILL AVE

Year	Uses	Source
2017	GARY PRATT	Cole Information Services
2014	CHAD DECKER	Cole Information Services
2009	ACCURATE COMPUTER SOLUTIONS IN	Cole Information Services
	CHAD DECKER	Cole Information Services
2004	E FLEMMING	Cole Information Services
1999	CHAD DECKER	Cole Information Services

12753 AMBERHILL AVE

Year	Uses	Source
2017	LANREI CHUARN	Cole Information Services
2014	JAMES GIBSON	Cole Information Services
2009	TUAN QUACH	Cole Information Services
2004	TUAN QUACH	Cole Information Services
1999	TUAN QUACH	Cole Information Services

12758 AMBERHILL AVE

Year	Uses	Source
2017	KURT KNIEPKAMP	Cole Information Services
2009	KURT KNIEPKAMP	Cole Information Services
2004	KURT KNIEPKAMP	Cole Information Services
1999	KURT KNIEPKAMP	Cole Information Services

12765 AMBERHILL AVE

Year	Uses	Source
2017	LOI TRAN	Cole Information Services
2009	LOI TRAN	Cole Information Services

Year	Uses	Source
1999	LOI TRAN	Cole Information Services

12776 AMBERHILL AVE

Year	Uses	Source
2017	NATALIE WRAY	Cole Information Services
2014	NATALIE WRAY	Cole Information Services
2004	RAYMOND DOMINICE	Cole Information Services

12777 AMBERHILL AVE

Year	Uses	Source
2017	ESTELA BRITO	Cole Information Services
2014	FRANCISCO CAMARENA	Cole Information Services
2009	ESTELA BRITO	Cole Information Services
2004	MY LO	Cole Information Services
1999	ESTELA BRITO	Cole Information Services

12789 AMBERHILL AVE

Year	Uses	Source
2017	CAROL BROADWELL	Cole Information Services
2014	NORBERT BREITKOPF	Cole Information Services
2009	NORBERT BREITKOPF	Cole Information Services
2004	NORBERT BREITKOPF	Cole Information Services
1999	NORBERT BREITKOPF	Cole Information Services

ANNANDALE PL

5537 ANNANDALE PL

Year	Uses	Source
2017	TRENT SPAULDING	Cole Information Services
2014	TRENT SPAULDING	Cole Information Services
2009	TRAVIS WOOLDRIDGE	Cole Information Services
2004	TRAVIS WOOLDRIDGE	Cole Information Services
1999	TRAVIS WOOLDRIDGE	Cole Information Services

5542 ANNANDALE PL

Year	Uses	Source
2017	JOSE HUERTA	Cole Information Services
2014	JOSE HUERTA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JOSE HUERTA	Cole Information Services

FINDINGS

5547 ANNANDALE PL

Year	Uses	Source
2017	PAULO BETTENCOURT	Cole Information Services
2014	PAULO BETTENCOURT	Cole Information Services
2009	PAULO BETTENCOURT	Cole Information Services
2004	PAULO BETTENCOURT	Cole Information Services
1999	PAULO BETTENCOURT	Cole Information Services

5552 ANNANDALE PL

Year	Uses	Source
2017	REGINALD STALLWORTH	Cole Information Services
2014	DERRICK STALLWORTH	Cole Information Services
2009	SHAREN STALLWORTH	Cole Information Services
2004	SHAREN STALLWORTH	Cole Information Services
1999	SHAREN STALLWORTH	Cole Information Services

5557 ANNANDALE PL

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	TRUNITA KNIGHTON	Cole Information Services
2004	CHRIS KNIGHTON	Cole Information Services
1999	TRUNITA KNIGHTON	Cole Information Services

5567 ANNANDALE PL

Year	Uses	Source
2017	RICHARD SORIANO	Cole Information Services
2014	JESUS SORIANO	Cole Information Services
2009	MARIA GONZALEZ	Cole Information Services
1999	MARIA GONZALEZ	Cole Information Services

5572 ANNANDALE PL

Year	Uses	Source
2017	ELISSA HEATH	Cole Information Services
2014	ELISSA HEATH	Cole Information Services
2009	FRED VARGAS	Cole Information Services
2004	MARC LAUREN	Cole Information Services
1999	FRED VARGAS	Cole Information Services

5577 ANNANDALE PL

Year	Uses	Source
2017	CHRIS WEBB	Cole Information Services

Year	Uses	Source
2014	CHRISTOPHER HADNOT	Cole Information Services
2009	CHRISTOPHER HADNOT	Cole Information Services
2004	CHRISTOPHER HADNOT	Cole Information Services
1999	CHRISTOPHER HADNOT	Cole Information Services

5582 ANNANDALE PL

Year	Uses	Source
2017	RAMIRO DIAZ	Cole Information Services
2014	RAMIRO DIAZ	Cole Information Services
2009	RAMIRO DIAZ	Cole Information Services
1999	RAMIRO DIAZ	Cole Information Services

5587 ANNANDALE PL

Year	Uses	Source
2017	JOHN PITT	Cole Information Services
2014	JOHN PITT	Cole Information Services
2009	JOHN PITT	Cole Information Services
1999	JOHN PITT	Cole Information Services

5597 ANNANDALE PL

Year	Uses	Source
2017	ROBERTO TORRES	Cole Information Services
2014	JEFFREY QUAM	Cole Information Services
2009	JEFFREY QUAM	Cole Information Services
2004	JEFFREY QUAM	Cole Information Services
	LEGACY GIFTS	Cole Information Services
1999	JEFFREY QUAM	Cole Information Services

5602 ANNANDALE PL

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	HUGO VIRUETE	Cole Information Services
2004	VIRUETE ELVIRA	Cole Information Services
1999	HUGO VIRUETE	Cole Information Services

5607 ANNANDALE PL

Year	Uses	Source
2017	JERYKA EMMONS	Cole Information Services
2014	MOISES MARTIN	Cole Information Services
2009	MOISES MARTIN	Cole Information Services

Year	Uses	Source
2004	ESEQUIEL OCHOA	Cole Information Services

5612 ANNANDALE PL

Year	Uses	Source
2017	ANTHONY RODRIGUEZ	Cole Information Services
2014	ANTONIO RAMIREZ	Cole Information Services
2009	ADAM RAMIREZ	Cole Information Services
2004	TONY RAMIREZ	Cole Information Services
1999	ADAM RAMIREZ	Cole Information Services

5617 ANNANDALE PL

Year	Uses	Source
2017	JACOB COPELAND	Cole Information Services
2014	JACOB COPELAND	Cole Information Services
2009	SUSAN HAZBUON	Cole Information Services
2004	SUSAN HAZBUON	Cole Information Services
1999	SUSAN HAZBUON	Cole Information Services

5622 ANNANDALE PL

Year	Uses	Source
2017	AMIT ANGRISH	Cole Information Services
2014	MARLEN RUELAS	Cole Information Services
2009	DANIEL SEYMOUR	Cole Information Services
2004	DANIEL SEYMOUR	Cole Information Services
1999	DANIEL SEYMOUR	Cole Information Services

5642 ANNANDALE PL

Year	Uses	Source
2017	ALEX VAZQUEZ	Cole Information Services
2014	ALEX VAZQUEZ	Cole Information Services
2009	ALEX VAZQUEZ	Cole Information Services
2004	ALEX VAZQUEZ	Cole Information Services
	DENNIS FOLLIOTT	Cole Information Services
1999	ALEX VAZQUEZ	Cole Information Services

5647 ANNANDALE PL

Year	Uses	Source
2017	THOMAS MUMMERT	Cole Information Services
2014	MICHAEL WHITTEN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

Year	Uses	Source
2009	TOMS AMERICAN FIRE SAFETY	Cole Information Services

5667 ANNANDALE PL

Year	Uses	Source
2017	RICK MORTON	Cole Information Services
2014	M FONNET	Cole Information Services
2009	JUDITH FLEISCHHACKER	Cole Information Services
2004	JESUS SORIANO	Cole Information Services
1999	JUDITH FLEISCHHACKER	Cole Information Services

5672 ANNANDALE PL

Year	Uses	Source
2017	ERICK ESTRADA	Cole Information Services
2014	ERICK ESTRADA	Cole Information Services
2009	LATRINA WADDIS	Cole Information Services
2004	KELVIN YOUNG	Cole Information Services
1999	LATRINA WADDIS	Cole Information Services

5677 ANNANDALE PL

Year	Uses	Source
2017	MICHAEL BAILEY	Cole Information Services
2014	DANIEL FLORES	Cole Information Services
2009	GUADALUPE ZAZUETA	Cole Information Services
2004	MICHAEL BAILEY	Cole Information Services
1999	GUADALUPE ZAZUETA	Cole Information Services

5687 ANNANDALE PL

Year	Uses	Source
2017	LYDIA DELTORO	Cole Information Services
2014	MARKE MEDINA	Cole Information Services
2009	JULIAN MEDINA	Cole Information Services
2004	JULIAN MEDINA	Cole Information Services
1999	JULIAN MEDINA	Cole Information Services

5692 ANNANDALE PL

Year	Uses	Source
2017	TONY GARCIA	Cole Information Services
2014	ROBERT SANDOVAL	Cole Information Services
2009	JOSE CASTILLO	Cole Information Services
2004	MILTON DONERSON	Cole Information Services

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5707 ANNANDALE PL

Year	Uses	Source
2017	ROBERT GONZALEZ	Cole Information Services
2014	CELERINO CASTRO	Cole Information Services
2009	CELERINO CASTRO	Cole Information Services
2004	JUAN CASTRO	Cole Information Services

5712 ANNANDALE PL

Year	Uses	Source
2017	JENNIFER MAYVILLE	Cole Information Services
2014	EDMUND ZENDEJAS	Cole Information Services
2009	ZOILA LOZANO	Cole Information Services
2004	JAMES BUTLER	Cole Information Services
1999	ZOILA LOZANO	Cole Information Services

5727 ANNANDALE PL

Year	Uses	Source
2014	RANDOLPH CARDONA	Cole Information Services
2009	EMILLIANO CASTILLO	Cole Information Services
2004	MISAEL RIVERA	Cole Information Services

5732 ANNANDALE PL

Year	Uses	Source
2014	PABLO MENDOZA	Cole Information Services
2009	PABLO MENDOZA	Cole Information Services
2004	ULYSSES SANTANA	Cole Information Services
1999	PABLO MENDOZA	Cole Information Services

5737 ANNANDALE PL

Year	Uses	Source
2017	WILL SLATER	Cole Information Services
2014	MACY CHUNG	Cole Information Services
2009	MINDY CHAI	Cole Information Services
2004	STEVEN LONG	Cole Information Services
1999	MINDY CHAI	Cole Information Services

5742 ANNANDALE PL

Year	Uses	Source
2017	JOSEPH SANTOS	Cole Information Services
2014	JOSEPH SANTOS	Cole Information Services
2009	JOSEPH SANTOS	Cole Information Services

Year	Uses	Source
2004	JOSEPH SANTOS	Cole Information Services
	JLB PRODUCTIONS	Cole Information Services
1999	JOSEPH SANTOS	Cole Information Services

5747 ANNANDALE PL

Year	Uses	Source
2014	VICTOR LAINEZ	Cole Information Services
2004	VICTOR LAINEZ	Cole Information Services

5752 ANNANDALE PL

Year	Uses	Source
2017	DONALD MALLOY	Cole Information Services
2014	EMAD BENJAMIN	Cole Information Services
2009	MOODA MANTARA	Cole Information Services
2004	MOODA MANTARA	Cole Information Services

5757 ANNANDALE PL

Year	Uses	Source
2017	ENRIQUE OCHOA	Cole Information Services
2014	AUGUSTIN MAGANA	Cole Information Services
2009	AGUSTINE RAYA	Cole Information Services
2004	BEDELIA BARRAGAN	Cole Information Services
1999	AGUSTINE RAYA	Cole Information Services

5762 ANNANDALE PL

Year	Uses	Source
2017	RUBEN FERNANDEZ	Cole Information Services
2014	RUBEN FERNANDEZ	Cole Information Services
2009	RUBEN FERNANDEZ	Cole Information Services
2004	RUBEN FERNANDEZ	Cole Information Services
1999	RUBEN FERNANDEZ	Cole Information Services

5767 ANNANDALE PL

Year	Uses	Source
2017	RUSS BROWN	Cole Information Services
2014	RUSS BROWN	Cole Information Services
2009	SWIM CLEAN POOL & SPA SERVICE	Cole Information Services
	RUSS BROWN	Cole Information Services
2004	RUSS BROWN	Cole Information Services
1999	RUSS BROWN	Cole Information Services

5772 ANNANDALE PL

Year	Uses	Source
2017	MAXINE HALL	Cole Information Services
2014	PATRICE STREET	Cole Information Services
2009	RICHARD STREET	Cole Information Services
2004	RICHARD STREET	Cole Information Services
1999	RICHARD STREET	Cole Information Services

5777 ANNANDALE PL

Year	Uses	Source
2017	JOHN METTER	Cole Information Services
2014	JOHN METTERS	Cole Information Services
2009	SAMS COMPUTER SERVICE	Cole Information Services
	SAMUEL MATTERS	Cole Information Services
2004	RAMIRO CASTRO	Cole Information Services
	SWIM CLEAN POOL & SPA SERV	Cole Information Services

5782 ANNANDALE PL

Year	Uses	Source
2017	CHARLES OFORAH	Cole Information Services
2014	CHARLES OFORAH	Cole Information Services
2009	CHARLES OFORAH	Cole Information Services
2004	CHARLES OFORAH	Cole Information Services
1999	CHARLES OFORAH	Cole Information Services

5787 ANNANDALE PL

Year	Uses	Source
2014	RANDY BOEHMER	Cole Information Services
2009	MATTHEW HERNANDEZ	Cole Information Services
2004	ANTONIO MORALES	Cole Information Services
1999	MATTHEW HERNANDEZ	Cole Information Services

5797 ANNANDALE PL

Year	Uses	Source
2014	AGUSTIN RAYA	Cole Information Services

ASHWELL CT

5605 ASHWELL CT

Year	Uses	Source
2014	SEAN BRADY	Cole Information Services

Year	Uses	Source
2009	SEAN BRADY	Cole Information Services
1999	SEAN BRADY	Cole Information Services

5617 ASHWELL CT

Year	Uses	Source
2017	JOSEPH MALTESE	Cole Information Services
2014	JOSEPH MALTESE	Cole Information Services
2009	JOSEPH MALTESE	Cole Information Services

5620 ASHWELL CT

Year	Uses	Source
2017	ANTHONY ARCHER	Cole Information Services
2014	ANTHONY ARCHER	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5629 ASHWELL CT

Year	Uses	Source
2017	RICHARD VALENZUELA	Cole Information Services
2014	RICHARD VALENZUELA	Cole Information Services
2009	RICHARD VALENZUELA	Cole Information Services
1999	RICHARD VALENZUELA	Cole Information Services

5632 ASHWELL CT

Year	Uses	Source
2014	DONEL COULSON	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5641 ASHWELL CT

Year	Uses	Source
2017	SONG JIN	Cole Information Services
2014	SONG JIN	Cole Information Services
2009	LISA TAING	Cole Information Services
1999	LISA TAING	Cole Information Services

5644 ASHWELL CT

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	KARLENE DAVIS	Cole Information Services
1999	KARLENE DAVIS	Cole Information Services

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5653 ASHWELL CT

Year	Uses	Source
2017	MARIE GOFF	Cole Information Services
2014	NGUI QUAN	Cole Information Services
2009	MARYELIZA QUAN	Cole Information Services
1999	MARYELIZA QUAN	Cole Information Services

5656 ASHWELL CT

Year	Uses	Source
2017	ROBERT MCCULLOUGH	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	ALEJANDRO DELCAMPO	Cole Information Services
1999	ALEJANDRO DELCAMPO	Cole Information Services

5677 ASHWELL CT

Year	Uses	Source
2017	VINEET VYAS	Cole Information Services
2014	VINEET VYAS	Cole Information Services
2009	VINEET VYAS	Cole Information Services
1999	VINEET VYAS	Cole Information Services

5680 ASHWELL CT

Year	Uses	Source
2014	JONATHAN DUAG	Cole Information Services
2009	JONATHAN DUAG	Cole Information Services
1999	JONATHAN DUAG	Cole Information Services

5689 ASHWELL CT

Year	Uses	Source
2017	RYDELL PRESCOTT	Cole Information Services
2014	ROBERTO ROMAN	Cole Information Services
2009	JON LEE	Cole Information Services
1999	JON LEE	Cole Information Services

5692 ASHWELL CT

Year	Uses	Source
2017	ADOLFO LLAMAS	Cole Information Services
2014	ADOLFO LLAMAS	Cole Information Services
2009	ADOLFO LLAMAS	Cole Information Services
1999	ADOLFO LLAMAS	Cole Information Services

FINDINGS

5701 ASHWELL CT

Year	Uses	Source
2017	QUINCY LEJAY	Cole Information Services
2014	QUINCY LEJAY	Cole Information Services
2009	JIMMY LEJAY	Cole Information Services
1999	JIMMY LEJAY	Cole Information Services

5704 ASHWELL CT

Year	Uses	Source
2017	MONFREEDD GUATEMALA	Cole Information Services
2014	MONFREEDD GUATEMALA	Cole Information Services
2009	MONFREEDD GUATEMALA	Cole Information Services
1999	MONFREEDD GUATEMALA	Cole Information Services

5713 ASHWELL CT

Year	Uses	Source
2017	GLENN CLEMENTE	Cole Information Services
2014	GLENN CLEMENTE	Cole Information Services
2009	GLENN CLEMENTE	Cole Information Services
1999	GLENN CLEMENTE	Cole Information Services

5716 ASHWELL CT

Year	Uses	Source
2017	HONG WANG	Cole Information Services
2014	HONG WANG	Cole Information Services
2009	BAIYANG LIU	Cole Information Services
	JIANG DAI	Cole Information Services
	HONG WANG	Cole Information Services
1999	HONG WANG	Cole Information Services
	BAIYANG LIU	Cole Information Services
	JIANG DAI	Cole Information Services

5725 ASHWELL CT

Year	Uses	Source
2017	JOSHUA TAYLOR	Cole Information Services
2014	JOSHUA TAYLOR	Cole Information Services
2009	MARCOS RIOS	Cole Information Services
1999	MARCOS RIOS	Cole Information Services

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5728 ASHWELL CT

Year	Uses	Source
2017	RICARDO VELASCO	Cole Information Services
2014	VERONICA MARTIN	Cole Information Services
2009	LUHUI PENG	Cole Information Services
1999	LUHUI PENG	Cole Information Services

5740 ASHWELL CT

Year	Uses	Source
2017	JOSE LOPEZ	Cole Information Services
2014	JOSE LOPEZ	Cole Information Services
2009	JOSE LOPEZ	Cole Information Services
1999	JOSE LOPEZ	Cole Information Services

5752 ASHWELL CT

Year	Uses	Source
2017	MICHAEL PINGOL	Cole Information Services
2014	MICHAEL PINGOL	Cole Information Services
2009	MICHAEL PINGOL	Cole Information Services
1999	MICHAEL PINGOL	Cole Information Services

5764 ASHWELL CT

Year	Uses	Source
2014	ISHAK IHMUD	Cole Information Services
2009	ISHAK IHMUD	Cole Information Services
1999	ISHAK IHMUD	Cole Information Services

5776 ASHWELL CT

Year	Uses	Source
2017	ERNESTO CASAS	Cole Information Services
2014	ERNESTO CASAS	Cole Information Services
2009	ERNESTO CASAS	Cole Information Services

5788 ASHWELL CT

Year	Uses	Source
2017	JOSHUA LEMIEUX	Cole Information Services
2014	JOSHUA LEMIEUX	Cole Information Services
2009	MANDY LEMIEUX	Cole Information Services
1999	MANDY LEMIEUX	Cole Information Services

FINDINGS

5800 ASHWELL CT

Year	Uses	Source
2014	ROBERT FIRMAN	Cole Information Services
2009	ROBERT SANDOVAL	Cole Information Services
1999	ROBERT SANDOVAL	Cole Information Services

BAY ST

6219 BAY ST

Year	Uses	Source
2017	MARIO LOPEZ	Cole Information Services
2014	JOSEPH LOPEZ	Cole Information Services
2009	ANGEL LOPEZ	Cole Information Services
1999	ANGEL LOPEZ	Cole Information Services

6229 BAY ST

Year	Uses	Source
2017	JORGE OLVERA	Cole Information Services
2014	JORGE OLVERA	Cole Information Services
2009	FELIPE MARTINEZ	Cole Information Services

6239 BAY ST

Year	Uses	Source
2017	ANASTASIA GLASHEEN	Cole Information Services
2014	ANASTASIA GLASHEEN	Cole Information Services
2009	GREGORY PRAVEDNIKOV	Cole Information Services
1999	GREGORY PRAVEDNIKOV	Cole Information Services

6249 BAY ST

Year	Uses	Source
2014	TRACEY PONDILLO	Cole Information Services

6259 BAY ST

Year	Uses	Source
2017	CECILIA RIVERA	Cole Information Services
2014	JOSE SAUCEDO	Cole Information Services
2009	JOSE GONZALES	Cole Information Services
1999	JOSE GONZALES	Cole Information Services

FINDINGS

BEACHWOOD DR

665 BEACHWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

674 BEACHWOOD DR

Year	Uses	Source
2004	DAN KENNEDY	Cole Information Services
2001	KENNEDYDan	Haines & Company, Inc.
1977	Singdale Stewart W	Pacific Telephone

675 BEACHWOOD DR

Year	Uses	Source
2001	BELMONT	Haines & Company, Inc.
1994	BELMONTE, MARY	Cole Information Services
1986	Belmonte Mary	Pacific Bell Yellow Pages
1981	Belmonte Mary	Pacific Telephone

676 BEACHWOOD DR

Year	Uses	Source
2001	NORVELLWayne A	Haines & Company, Inc.

677 BEACHWOOD DR

Year	Uses	Source
2004	MANEZHA MOQIMI	Cole Information Services
1981	Burreo AG	Pacific Telephone

678 BEACHWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Thomas John P & Vera C	Pacific Bell Yellow Pages
	Thomas Johnnie	Pacific Bell Yellow Pages
1981	Thomas John P & Vera C	Pacific Telephone

679 BEACHWOOD DR

Year	Uses	Source
2001	FOREMAN JR	Haines & Company, Inc.
	FOREMAN JR	Haines & Company, Inc.
1986	Marfleet Donald	Pacific Bell Yellow Pages
1981	Marfleet Donald	Pacific Telephone

FINDINGS

680 BEACHWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Hanrahan Frank S	Pacific Bell Yellow Pages
1981	Henrehan Frank S	Pacific Telephone

681 BEACHWOOD DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

682 BEACHWOOD DR

Year	Uses	Source
2004	MIKE LIPKE	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Boucek Kenneth	Pacific Bell Yellow Pages
	Boucher Fernand	Pacific Bell Yellow Pages
	Bouchard P	Pacific Bell Yellow Pages
	Boucher Craig	Pacific Bell Yellow Pages

683 BEACHWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

684 BEACHWOOD DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1981	Carstensen Gerald W	Pacific Telephone

685 BEACHWOOD DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

686 BEACHWOOD DR

Year	Uses	Source
2004	RAMZY HENEIN	Cole Information Services
1994	RYAN, HAROLD C	Cole Information Services
1986	Ryan Harold C	Pacific Bell Yellow Pages
1981	Ryan Harold C	Pacific Telephone

687 BEACHWOOD DR

Year	Uses	Source
2004	JANICE MASON	Cole Information Services

Year	Uses	Source
1986	Berthelot Joseph & Maudryn	Pacific Bell Yellow Pages

BOXWOOD DR

556 BOXWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

638 BOXWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

646 BOXWOOD DR

Year	Uses	Source
2001	SHOOKW	Haines & Company, Inc.
1994	SHOOK, W A	Cole Information Services
1977	Shook W A	Pacific Telephone

647 BOXWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Igo T P	Pacific Bell Yellow Pages
1981	Piper K F	Pacific Telephone

648 BOXWOOD DR

Year	Uses	Source
2004	DANIEL FERNANDEZ	Cole Information Services
2001	DEMASE	Haines & Company, Inc.
1994	DEMASE, JOE	Cole Information Services
1986	De Mase Joe & Ann	Pacific Bell Yellow Pages
1981	De Mase Joe & Ann	Pacific Telephone

649 BOXWOOD DR

Year	Uses	Source
2004	FRANCES FOSTER	Cole Information Services
1986	Shindelus D	Pacific Bell Yellow Pages
	Shine Gary & Brian	Pacific Bell Yellow Pages
1981	Seitz H Gregg	Pacific Telephone

FINDINGS

650 BOXWOOD DR

Year	Uses	Source
2004	BLANCA RIVERA	Cole Information Services
2001	BATTEN Essoe M	Haines & Company, Inc.

651 BOXWOOD DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1981	Leighty Neal	Pacific Telephone

652 BOXWOOD DR

Year	Uses	Source
2001	MEADDR	Haines & Company, Inc.
	MEADKJ	Haines & Company, Inc.
1986	Ritzman Vernon G	Pacific Bell Yellow Pages
1981	Ritzman Vernon G	Pacific Telephone

653 BOXWOOD DR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Taylor Riter C	Pacific Telephone

654 BOXWOOD DR

Year	Uses	Source
2004	FEDORA E HARRIS	Cole Information Services
	FEDORA HARRIS	Cole Information Services
2001	EVELYN	Haines & Company, Inc.
	HARRIS FEDORA	Haines & Company, Inc.
1999	HARRIS FEDORA EVELYN	Cole Information Services
	OCCUPANT UNKNOWN	Cole Information Services
1994	CRAVENS, MARY	Cole Information Services
1986	Hoeft Merlin E	Pacific Bell Yellow Pages

656 BOXWOOD DR

Year	Uses	Source
2004	BASILIO URENA	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Gibbs Derren	Pacific Bell Yellow Pages
1977	Moody Florence M	Pacific Telephone

657 BOXWOOD DR

Year	Uses	Source
2004	ALFRED MCCARTHY	Cole Information Services
1986	Easton R	Pacific Bell Yellow Pages
	Easton Paul	Pacific Bell Yellow Pages
1981	Easton Paul & Geneva	Pacific Telephone
1977	Rock Martin G	Pacific Telephone

659 BOXWOOD DR

Year	Uses	Source
2004	CHARLES SMITH	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1994	LITTLE, JOHN G	Cole Information Services

BRIAR ST

13112 BRIAR ST

Year	Uses	Source
2017	RICHARD GABRIEL	Cole Information Services
2014	RICHARD GABRIEL	Cole Information Services
2009	RICHARD GABRIEL	Cole Information Services
1999	RICHARD GABRIEL	Cole Information Services

13115 BRIAR ST

Year	Uses	Source
2017	PAUL FLITCRAFT	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	ALEJANDRO GARCIA	Cole Information Services
1999	ALEJANDRO GARCIA	Cole Information Services

13122 BRIAR ST

Year	Uses	Source
2017	STEPHEN GRAVES	Cole Information Services
2014	STEPHEN GRAVES	Cole Information Services
2009	STEPHEN GRAVES	Cole Information Services
1999	STEPHEN GRAVES	Cole Information Services

13125 BRIAR ST

Year	Uses	Source
2017	JESUS GARIBAY	Cole Information Services
2014	JESSICA MORAN	Cole Information Services

Year	Uses	Source
2009	JESUS GARIBAY	Cole Information Services
1999	JESUS GARIBAY	Cole Information Services

13132 BRIAR ST

Year	Uses	Source
2017	ROLLAND KORNBLAU	Cole Information Services
2014	ANTONIO CASTRO	Cole Information Services
2009	RICHARD HAWKINS	Cole Information Services
1999	RICHARD HAWKINS	Cole Information Services

13135 BRIAR ST

Year	Uses	Source
2017	NATHAN ISAAC	Cole Information Services
2014	JIM RICKER	Cole Information Services
2009	FRANCISCO ZUBIATE	Cole Information Services
1999	FRANCISCO ZUBIATE	Cole Information Services

BRIDGEWATER DR

12605 BRIDGEWATER DR

Year	Uses	Source
2017	ANTONIO TORRES	Cole Information Services
2014	ANTONIO TORRES	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

12611 BRIDGEWATER DR

Year	Uses	Source
2017	SERGIO TOPETE	Cole Information Services
2014	SERGIO TOPETE	Cole Information Services
2009	JOAN DAWSON	Cole Information Services
2004	ANTHONY DAWSON	Cole Information Services
1999	JOAN DAWSON	Cole Information Services

12617 BRIDGEWATER DR

Year	Uses	Source
2017	ROBERT BUSTOS	Cole Information Services
2014	ROBERT BUSTOS	Cole Information Services
2009	WARREN WEAVER	Cole Information Services
2004	WARREN WEAVER	Cole Information Services
1999	WARREN WEAVER	Cole Information Services

FINDINGS

12629 BRIDGEWATER DR

Year	Uses	Source
2017	ARTURO RUBIO	Cole Information Services
2014	ARTURO RUBIO	Cole Information Services
2009	ARTURO RUBIO	Cole Information Services
2004	ARTURO RUBIO	Cole Information Services
1999	ARTURO RUBIO	Cole Information Services

12641 BRIDGEWATER DR

Year	Uses	Source
2017	PATRICK BIRKETT	Cole Information Services
2014	A ALVARADO	Cole Information Services
2009	ALEX ALVARADO	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	ALEX ALVARADO	Cole Information Services

12653 BRIDGEWATER DR

Year	Uses	Source
2017	RONALD TZALL	Cole Information Services
2014	RONALD TZALL	Cole Information Services
2009	RONALD TZALL	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	RONALD TZALL	Cole Information Services

12665 BRIDGEWATER DR

Year	Uses	Source
2017	MARKUS MALDONADO	Cole Information Services
2014	FRANCISCO BENTO	Cole Information Services
2009	FRANCISCO BENTO	Cole Information Services
1999	FRANCISCO BENTO	Cole Information Services

12677 BRIDGEWATER DR

Year	Uses	Source
2017	JOHN MIELE	Cole Information Services
2014	SUSAN CRAFA	Cole Information Services
2009	SUSAN CRAFA	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	SUSAN CRAFA	Cole Information Services

FINDINGS

12682 BRIDGEWATER DR

Year	Uses	Source
2017	JAMES BENTSON	Cole Information Services
2014	PATTI SUBIA	Cole Information Services
2009	EMILY PERDREAUVILLE	Cole Information Services
1999	EMILY PERDREAUVILLE	Cole Information Services

12694 BRIDGEWATER DR

Year	Uses	Source
2017	PARKER BERRY	Cole Information Services
2014	SHIRLEY KENT	Cole Information Services
2004	CAREN SERGUIFF	Cole Information Services

12701 BRIDGEWATER DR

Year	Uses	Source
2017	GARY HUMMEL	Cole Information Services
2014	GARY HUMMEL	Cole Information Services
2009	GARY HUMMEL	Cole Information Services
2004	GARY HUMMEL	Cole Information Services
1999	GARY HUMMEL	Cole Information Services

12706 BRIDGEWATER DR

Year	Uses	Source
2017	ROBERTO SANCHEZ	Cole Information Services
2014	ROBERTO SANCHEZ	Cole Information Services
2004	ROBERTO SANCHEZ	Cole Information Services

12713 BRIDGEWATER DR

Year	Uses	Source
2017	SUSIE SUN	Cole Information Services
2014	SUSIE SUN	Cole Information Services
2009	SUSIE SUN	Cole Information Services
2004	TINA SUN	Cole Information Services
1999	SUSIE SUN	Cole Information Services

12718 BRIDGEWATER DR

Year	Uses	Source
2017	CHRISTOPHER GRAJEDA	Cole Information Services
2014	GABRIEL DUENAS	Cole Information Services
2009	GABRIEL DUENAS	Cole Information Services
2004	JAMIE LOPEZ	Cole Information Services

Year	Uses	Source
1999	GABRIEL DUENAS	Cole Information Services

12725 BRIDGEWATER DR

Year	Uses	Source
2017	ROBERT AGDEPPA	Cole Information Services
2014	SHERILL AGDEPPA	Cole Information Services
2009	SHERILL AGDEPPA	Cole Information Services
2004	SHERILL AGDEPPA	Cole Information Services
1999	SHERILL AGDEPPA	Cole Information Services

12730 BRIDGEWATER DR

Year	Uses	Source
2017	RYAN JUNSAY	Cole Information Services
2014	WENDELYN DELGADO	Cole Information Services
2009	ALFRED ALBARRAN	Cole Information Services
2004	ALFRED SIXTOS	Cole Information Services
1999	ALFRED ALBARRAN	Cole Information Services

12737 BRIDGEWATER DR

Year	Uses	Source
2017	LINDA FLORES	Cole Information Services
2014	LINDA MAZUR	Cole Information Services
2009	LINDA FLORES	Cole Information Services
2004	LINDA MAZUR	Cole Information Services
1999	LINDA FLORES	Cole Information Services

12742 BRIDGEWATER DR

Year	Uses	Source
2017	DOUGLAS KIM	Cole Information Services
2014	YING BAI	Cole Information Services
2009	P LEE	Cole Information Services
2004	P LEE	Cole Information Services
1999	P LEE	Cole Information Services

12749 BRIDGEWATER DR

Year	Uses	Source
2017	GEORGE KAN	Cole Information Services
2014	ERNIE PADEREZ	Cole Information Services
2009	ERNIE PADEREZ	Cole Information Services
2004	JUI TSENG	Cole Information Services

Year	Uses	Source
1999	ERNIE PADEREZ	Cole Information Services

12755 BRIDGEWATER DR

Year	Uses	Source
2017	ELISEO RENTERIA	Cole Information Services
2014	ELISEO RENTERIA	Cole Information Services
2009	ELISEO RENTERIA	Cole Information Services
2004	ELISEO RENTERIA	Cole Information Services
1999	ELISEO RENTERIA	Cole Information Services

12761 BRIDGEWATER DR

Year	Uses	Source
2017	MARIO MARQUEZ	Cole Information Services
2014	MARIO MARQUEZ	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	RUVEN MARQUEZ	Cole Information Services

12767 BRIDGEWATER DR

Year	Uses	Source
2017	ALBERTO GARNICA	Cole Information Services
2014	ALBERTO GARNICA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JESUS ROMERO	Cole Information Services

12779 BRIDGEWATER DR

Year	Uses	Source
2017	GEORGE GIORGETTI	Cole Information Services
2014	GEORGE GIORGETTI	Cole Information Services
2009	G & A INVESTMENTS	Cole Information Services
	GEORGE GIORGETTI	Cole Information Services
2004	GEORGE GIORGETTI	Cole Information Services
1999	GEORGE GIORGETTI	Cole Information Services

12791 BRIDGEWATER DR

Year	Uses	Source
2017	MICHAEL WHITTEN	Cole Information Services
2014	ANGELA KATSILIANOS	Cole Information Services
2009	MICHAEL WHITTEN	Cole Information Services
2004	MICHAEL WHITTEN	Cole Information Services
1999	MICHAEL WHITTEN	Cole Information Services

12797 BRIDGEWATER DR

Year	Uses	Source
2017	MICHAEL MANERI	Cole Information Services
2014	MICHAEL MANERI	Cole Information Services
2009	MICHAEL MANERI	Cole Information Services
2004	MICHAEL MANERI	Cole Information Services

CAIRO CT

5758 CAIRO CT

Year	Uses	Source
2014	CARL BOOKER	Cole Information Services
2009	CARL BOOKER	Cole Information Services
2004	CARL BOOKER	Cole Information Services
1999	CARL BOOKER	Cole Information Services

5763 CAIRO CT

Year	Uses	Source
2017	JINSONG WU	Cole Information Services
2009	ESTEBAN MARTINEZ	Cole Information Services
2004	FRANK RIVERA	Cole Information Services

5766 CAIRO CT

Year	Uses	Source
2017	TAM NGUYEN	Cole Information Services
2014	TAM NGUYEN	Cole Information Services
2009	KURT ZIOLA	Cole Information Services
2004	KURT ZIOLA	Cole Information Services
1999	KURT ZIOLA	Cole Information Services

5771 CAIRO CT

Year	Uses	Source
2017	CORONA CORY	Cole Information Services
2014	LING ZHOU	Cole Information Services
2009	MICHAEL GRAYCHIK	Cole Information Services
2004	RAY GUO	Cole Information Services
1999	MICHAEL GRAYCHIK	Cole Information Services

5774 CAIRO CT

Year	Uses	Source
2017	JOHN MARTINEZ	Cole Information Services

Year	Uses	Source
2014	JOHN MARTINEZ	Cole Information Services
2009	JOHN MARTINEZ	Cole Information Services
2004	NORCO REGENT	Cole Information Services

5779 CAIRO CT

Year	Uses	Source
2017	CASPER FREEMAN	Cole Information Services
2014	ALEXIS LUNNEY	Cole Information Services
2009	ADRIAN KOVAL	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	ADRIAN KOVAL	Cole Information Services

5782 CAIRO CT

Year	Uses	Source
2017	JOHN VU	Cole Information Services
2014	JOHN VU	Cole Information Services
2009	JOHN VU	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	JOHN VU	Cole Information Services

5787 CAIRO CT

Year	Uses	Source
2017	RUSSELL BECKER	Cole Information Services
2014	RUSSELL BECKER	Cole Information Services
2009	RUSSELL BECKER	Cole Information Services
2004	RUSSELL BECKER	Cole Information Services
1999	RUSSELL BECKER	Cole Information Services

5790 CAIRO CT

Year	Uses	Source
2014	RUDA SIREGAR	Cole Information Services
2009	RUDA SIREGAR	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	RUDA SIREGAR	Cole Information Services

5795 CAIRO CT

Year	Uses	Source
2017	NOEL LOPEZ	Cole Information Services
2014	DARIUS JAMISON	Cole Information Services
2009	UNIQUE TRENDZ	Cole Information Services

Year	Uses	Source
2009	MARK FITZPATRICK	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	MARK FITZPATRICK	Cole Information Services

5798 CAIRO CT

Year	Uses	Source
2017	RAMA KUMAR	Cole Information Services
2014	REGINALD KUMAR	Cole Information Services
2009	REGINALD KUMAR	Cole Information Services
2004	REGINALD KUMAR	Cole Information Services
1999	REGINALD KUMAR	Cole Information Services

CALITERRA CT

5650 CALITERRA CT

Year	Uses	Source
2017	RUBEN MAGANA	Cole Information Services
2014	RUBEN MAGANA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5662 CALITERRA CT

Year	Uses	Source
2017	CELY COBIAN	Cole Information Services
2014	CELY COBIAN	Cole Information Services
2009	LEONARD COBIAN	Cole Information Services
1999	LEONARD COBIAN	Cole Information Services

5671 CALITERRA CT

Year	Uses	Source
2017	BRYAN PEASE	Cole Information Services
2014	BRYAN PEASE	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5674 CALITERRA CT

Year	Uses	Source
2017	ROBERT FREIRE	Cole Information Services
2014	JIM HANSON	Cole Information Services
2009	JIM HANSON	Cole Information Services
1999	JIM HANSON	Cole Information Services

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5683 CALITERRA CT

Year	Uses	Source
2017	JASON OLVERA	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	MARY CODILLA	Cole Information Services
1999	MARY CODILLA	Cole Information Services

5686 CALITERRA CT

Year	Uses	Source
2017	BRIAN KALLAHER	Cole Information Services
2014	BRIAN KALLAHER	Cole Information Services
2009	BRIAN KALLAHER	Cole Information Services
1999	BRIAN KALLAHER	Cole Information Services

5695 CALITERRA CT

Year	Uses	Source
2017	EDDIE ROCHA	Cole Information Services
2014	KAREN MALDONADO	Cole Information Services
2009	KELLY ROCHA	Cole Information Services
1999	KELLY ROCHA	Cole Information Services

5698 CALITERRA CT

Year	Uses	Source
2014	ALDO SANTOS	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5707 CALITERRA CT

Year	Uses	Source
2017	DANILO DUELAS	Cole Information Services
2014	DAN DUELAS	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5710 CALITERRA CT

Year	Uses	Source
2017	JOAQUIN FRANCO	Cole Information Services
2014	JOAQUIN FRANCO	Cole Information Services
2009	JOAQUIN FRANCO	Cole Information Services
1999	JOAQUIN FRANCO	Cole Information Services

5719 CALITERRA CT

Year	Uses	Source
2017	ALFREDO CASTILLO	Cole Information Services
2014	ALFREDO CASTILLO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5722 CALITERRA CT

Year	Uses	Source
2014	BARBARA SALAS	Cole Information Services
2009	ELIZABETH SANTILAN	Cole Information Services
1999	ELIZABETH SANTILAN	Cole Information Services

5731 CALITERRA CT

Year	Uses	Source
2017	JOHN MOUSAW	Cole Information Services
2014	JOHN MOUSAW	Cole Information Services
2009	JOHN MOUSAW	Cole Information Services
1999	JOHN MOUSAW	Cole Information Services

5734 CALITERRA CT

Year	Uses	Source
2017	CHENGHAO ZHANG	Cole Information Services
2014	ALAN PESCHANSKY	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5743 CALITERRA CT

Year	Uses	Source
2017	ALEJANDRO CORIA	Cole Information Services
2014	ALEJANDRO CORIA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5746 CALITERRA CT

Year	Uses	Source
2017	JOHN LOPEZ	Cole Information Services
2014	CYNTHIA LOPEZ	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

5755 CALITERRA CT

Year	Uses	Source
2017	LAWRENCE GAN	Cole Information Services
2014	AMBER SCHAAF	Cole Information Services

Year	Uses	Source
2009	OCCUPANT UNKNOWN	Cole Information Services

5758 CALITERRA CT

Year	Uses	Source
2017	LEO RAMOS	Cole Information Services
2014	MARTIN PALOS	Cole Information Services
2009	MARTIN R PALOS	Cole Information Services
	PALSOFT INC	Cole Information Services
	MARTIN PALOS	Cole Information Services
1999	MARTIN PALOS	Cole Information Services

5767 CALITERRA CT

Year	Uses	Source
2014	IGNACIO CASTRO	Cole Information Services
2009	IGNACIO CASTRO	Cole Information Services

5779 CALITERRA CT

Year	Uses	Source
2017	LOWIGIE BATHAN	Cole Information Services
2014	MARIA DINGLE	Cole Information Services
2009	JENNY RAMIREZ	Cole Information Services
1999	JENNY RAMIREZ	Cole Information Services

5791 CALITERRA CT

Year	Uses	Source
2017	SOURIDETH SIHANANTHARA	Cole Information Services
2014	CLIFFORD CULLEN	Cole Information Services
2009	KIM THACH	Cole Information Services
1999	KIM THACH	Cole Information Services

CAMBRIA DR

5621 CAMBRIA DR

Year	Uses	Source
2017	JEFF CLARKE	Cole Information Services
2014	MELISSA BIAZO	Cole Information Services
2009	PATRICK CAMPBELL	Cole Information Services
1999	PATRICK CAMPBELL	Cole Information Services

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5626 CAMBRIA DR

Year	Uses	Source
2017	CARLA DAVIS	Cole Information Services
2014	CARLA DAVIS	Cole Information Services
	MARION EARLS	Cole Information Services
	MARY FINNIE	Cole Information Services
2009	MARION EARLS	Cole Information Services
1999	MARION EARLS	Cole Information Services

5629 CAMBRIA DR

Year	Uses	Source
2017	MARVIS ALEXANDER	Cole Information Services
2014	MIGUEL GONZALEZ	Cole Information Services
2009	MIGUEL GONZALEZ	Cole Information Services
1999	MIGUEL GONZALEZ	Cole Information Services

5634 CAMBRIA DR

Year	Uses	Source
2017	HAI SU	Cole Information Services
2014	HAI SU	Cole Information Services
2009	RICHARD FANN	Cole Information Services
1999	RICHARD FANN	Cole Information Services

5637 CAMBRIA DR

Year	Uses	Source
2014	JAMES LEE	Cole Information Services
2009	JEREMY LYE	Cole Information Services
1999	JEREMY LYE	Cole Information Services

5642 CAMBRIA DR

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	SHAWN CALDARELLA	Cole Information Services
1999	SHAWN CALDARELLA	Cole Information Services

5645 CAMBRIA DR

Year	Uses	Source
2017	FRANK SILVEIRA	Cole Information Services
2014	FRANK SILVEIRA	Cole Information Services
2009	FRANK SILVEIRA	Cole Information Services
1999	FRANK SILVEIRA	Cole Information Services

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5650 CAMBRIA DR

Year	Uses	Source
2017	CHRISTINA GARCIA	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	T VO	Cole Information Services
1999	T VO	Cole Information Services

5653 CAMBRIA DR

Year	Uses	Source
2017	VOLTAIRE PEREZ	Cole Information Services
2014	MARCELINO PEREZ	Cole Information Services
2009	CARLOS FUENTES	Cole Information Services
1999	CARLOS FUENTES	Cole Information Services

5658 CAMBRIA DR

Year	Uses	Source
2014	FRANK TORRES	Cole Information Services
2009	JENNIFER WIENS	Cole Information Services
1999	JENNIFER WIENS	Cole Information Services

5674 CAMBRIA DR

Year	Uses	Source
2017	CARLOS RIOS	Cole Information Services
2014	CARLOS RIOS	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5677 CAMBRIA DR

Year	Uses	Source
2017	CARLOS MUNOZ	Cole Information Services
2014	CARLOS MUNOZ	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5682 CAMBRIA DR

Year	Uses	Source
2017	MOMO KIMURA	Cole Information Services
2014	CHAD BLOTZER	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5685 CAMBRIA DR

Year	Uses	Source
2014	DAVID SCOW	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5686 CAMBRIA DR

Year	Uses	Source
2017	LINO ARTEAGA	Cole Information Services
2014	CELESTE JIMENEZ	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5689 CAMBRIA DR

Year	Uses	Source
2017	JULIO KUNHARDT	Cole Information Services
2014	JULIO KUNHARDT	Cole Information Services

5690 CAMBRIA DR

Year	Uses	Source
2017	DANNY CHOW	Cole Information Services
2014	DANNY CHOW	Cole Information Services

5693 CAMBRIA DR

Year	Uses	Source
2017	VICTOR SALAS	Cole Information Services
2014	VICTOR SALAS	Cole Information Services

5698 CAMBRIA DR

Year	Uses	Source
2017	HESHAM HASSAN	Cole Information Services
2014	HESHAM HASSAN	Cole Information Services

CAROLINAS LN

5703 CAROLINAS LN

Year	Uses	Source
2017	FRANCISCO ZARABIA	Cole Information Services
2014	BOBBY ALVARADO	Cole Information Services
2009	BOBBY ALVARADO	Cole Information Services
2004	BOBBY ALVARADO	Cole Information Services

Year	Uses	Source
1999	BOBBY ALVARADO	Cole Information Services

5713 CAROLINAS LN

Year	Uses	Source
2017	ENRIQUE LOPEZ	Cole Information Services
2014	FRANCES HIDALGO	Cole Information Services
2009	MARIA RODRIGUEZ	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	MARIA RODRIGUEZ	Cole Information Services

5723 CAROLINAS LN

Year	Uses	Source
2017	DAVID CAMARGO	Cole Information Services
2014	DAVID CAMARGO	Cole Information Services
2009	DAVID CAMARGO	Cole Information Services
2004	DAVID CAMARGO	Cole Information Services

5733 CAROLINAS LN

Year	Uses	Source
2014	MAI YANG	Cole Information Services
2009	LUIS CHAVEZ	Cole Information Services
2004	LUIS CHAVEZ	Cole Information Services
	LRC & ASSOCS	Cole Information Services
1999	LUIS CHAVEZ	Cole Information Services

5743 CAROLINAS LN

Year	Uses	Source
2017	RAYMOND ROSAS	Cole Information Services
2014	CHITO DIMACULANGAN	Cole Information Services
2009	CHITO DIMACULANGAN	Cole Information Services
2004	CHITO DIMACULANGAN	Cole Information Services
1999	CHITO DIMACULANGAN	Cole Information Services

5753 CAROLINAS LN

Year	Uses	Source
2017	CHARLIE CHENG	Cole Information Services
2014	CHARLIE CHENG	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	LOUIS MANGENE	Cole Information Services

5763 CAROLINAS LN

Year	Uses	Source
2017	SANDRA GOOD	Cole Information Services
2014	SANDRA MARTINEZ-GOOD	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JOHN GOOD	Cole Information Services

5773 CAROLINAS LN

Year	Uses	Source
2017	BRIAN FRILOUX	Cole Information Services
2014	STEPHANIE HASLERIG	Cole Information Services
2009	TINA GALLAWAY	Cole Information Services
2004	CARLOS VASQUEZ	Cole Information Services
1999	TINA GALLAWAY	Cole Information Services

5783 CAROLINAS LN

Year	Uses	Source
2014	HARRY GREEN	Cole Information Services
2009	HARRY GREEN	Cole Information Services
2004	HARRY GREEN	Cole Information Services
1999	HARRY GREEN	Cole Information Services

CASTLE CREST DR

612 CASTLE CREST DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	CHAVEZJuan J	Haines & Company, Inc.
1986	Norman Geneva M	Pacific Bell Yellow Pages
1981	Norman Geneva M	Pacific Telephone
	Norman Geneva M	Pacific Telephone

613 CASTLE CREST DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Navarro Mitzie B	Pacific Bell Yellow Pages
1981	Navarro Mitzie B	Pacific Telephone

614 CASTLE CREST DR

Year	Uses	Source
2004	FRANCES BRODA	Cole Information Services

Year	Uses	Source
2001	BRODAFA	Haines & Company, Inc.
1986	Stephens R	Pacific Bell Yellow Pages
1981	Stephens R	Pacific Telephone

615 CASTLE CREST DR

Year	Uses	Source
2004	SHIRLEY MCINTOSH	Cole Information Services
2001	JAGOStacy A	Haines & Company, Inc.
1994	GRAVITT, LLOYD M	Cole Information Services
1986	Gravitt Lloyd M	Pacific Bell Yellow Pages
1981	Williams Jack Mrs	Pacific Telephone

616 CASTLE CREST DR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services

617 CASTLE CREST DR

Year	Uses	Source
2004	GERARD KELLY	Cole Information Services
2001	XXXX	Haines & Company, Inc.

618 CASTLE CREST DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

619 CASTLE CREST DR

Year	Uses	Source
2004	CHARLES KEEL	Cole Information Services
1986	Keel Chas H	Pacific Bell Yellow Pages
1981	Keel Chas H	Pacific Telephone

620 CASTLE CREST DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Hammer R A	Pacific Bell Yellow Pages
1981	Hammer R A	Pacific Telephone

621 CASTLE CREST DR

Year	Uses	Source
1986	Newby Dale & Doris	Pacific Bell Yellow Pages

622 CASTLE CREST DR

Year	Uses	Source
2004	JOSE RIVERA	Cole Information Services
1994	HANCOCK, JOHN	Cole Information Services
1986	ancock John	Pacific Bell Yellow Pages
1981	Hancock John	Pacific Telephone

623 CASTLE CREST DR

Year	Uses	Source
2004	MICHAEL HASKINS	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Palm Arthur A	Pacific Telephone

624 CASTLE CREST DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

625 CASTLE CREST DR

Year	Uses	Source
2004	LILLYAM MORAN	Cole Information Services

660 CASTLE CREST DR

Year	Uses	Source
1999	EUNICE MALONE	Cole Information Services
1986	Martin Bernard	Pacific Bell Yellow Pages

661 CASTLE CREST DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	GRAY, L N	Cole Information Services
1986	Gray L N	Pacific Bell Yellow Pages
1981	Gray L N	Pacific Telephone

662 CASTLE CREST DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Thomas W C	Pacific Telephone

663 CASTLE CREST DR

Year	Uses	Source
2004	EVELYN COOK	Cole Information Services

Year	Uses	Source
1986	Horten Lawrence E	Pacific Bell Yellow Pages

664 CASTLE CREST DR

Year	Uses	Source
2004	SCOTT EAST	Cole Information Services
1986	Mason Jack M & Sarah M	Pacific Bell Yellow Pages
1981	Skinner J M	Pacific Telephone

CASTLE VREST DR

612 CASTLE VREST DR

Year	Uses	Source
1994	PRADO, R	Cole Information Services

CATTLEMAN DR

6245 CATTLEMAN DR

Year	Uses	Source
2014	KRISH WHITE	Cole Information Services

6274 CATTLEMAN DR

Year	Uses	Source
2014	PRESCIOUS VALDES	Cole Information Services
2009	TAM TRINH	Cole Information Services
1999	TAM TRINH	Cole Information Services

6277 CATTLEMAN DR

Year	Uses	Source
2017	MICHELLE SNOWBALL	Cole Information Services
2014	ATHENIA CHIN	Cole Information Services
2009	HATHENIA CHIN	Cole Information Services
1999	HATHENIA CHIN	Cole Information Services

6282 CATTLEMAN DR

Year	Uses	Source
2017	NATHAN MUSTAFA	Cole Information Services
2014	NATHAN MUSTAFA	Cole Information Services

6285 CATTLEMAN DR

Year	Uses	Source
2017	LAZARO ECHEVERRIA	Cole Information Services

Year	Uses	Source
2014	DAVID GARCIA	Cole Information Services
2009	TRACY ENRIQUEZ	Cole Information Services
1999	TRACY ENRIQUEZ	Cole Information Services

6290 CATTLEMAN DR

Year	Uses	Source
2017	JACKSON LAI	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	LAI JACKSON	Cole Information Services
1999	LAI JACKSON	Cole Information Services

6293 CATTLEMAN DR

Year	Uses	Source
2017	LAYNE HOANG	Cole Information Services
2014	LAYNE HOANG	Cole Information Services
2009	LAYNE HOANG	Cole Information Services
1999	LAYNE HOANG	Cole Information Services

CHAPARRAL DR

586 CHAPARRAL DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Wright Robt P & Edna	Pacific Bell Yellow Pages
1981	Wright Robt	Pacific Telephone
	Wright Robt	Pacific Telephone
1977	Mackenzie John B	Pacific Telephone

587 CHAPARRAL DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1994	KOSSOUDJI, CRAIG	Cole Information Services
1986	Maupln Fred E	Pacific Bell Yellow Pages
1981	Maupin Fred E	Pacific Telephone
1977	Perysian Lawrence	Pacific Telephone

588 CHAPARRAL DR

Year	Uses	Source
2004	MANUEL PEREZ	Cole Information Services
2001	PEREZManuee	Haines & Company, Inc.

Year	Uses	Source
1986	Darrah Wallace & Katherine	Pacific Bell Yellow Pages

589 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1994	ANDREWS, C E	Cole Information Services
1986	Andrews C E	Pacific Bell Yellow Pages

590 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Briggs E M	Pacific Bell Yellow Pages
1981	Briggs E M	Pacific Telephone

626 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	SWARTOUTDarhane	Haines & Company, Inc.
1986	Seps David L	Pacific Bell Yellow Pages
1981	Seps David L	Pacific Telephone

627 CHAPARRAL DR

Year	Uses	Source
2004	VERNETTA GREEN	Cole Information Services
2001	MAYO Frank M	Haines & Company, Inc.
1999	FRANK MAYO	Cole Information Services
1994	MAYO, FRANK M	Cole Information Services
1986	Mayo Frank M	Pacific Bell Yellow Pages
1977	Mayo Frank M	Pacific Telephone

628 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	WHITE, GLENDA J	Cole Information Services
1977	Beukelman Ned	Pacific Telephone

629 CHAPARRAL DR

Year	Uses	Source
2004	DONALD CHRISTY	Cole Information Services
2002	Roundtree Mark	SBC PACIFIC BELL

630 CHAPARRAL DR

Year	Uses	Source
2004	MATTHEW CASTROREALE	Cole Information Services
2001	XXXX	Haines & Company, Inc.

631 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

632 CHAPARRAL DR

Year	Uses	Source
2004	ROBBIE BROWN	Cole Information Services
	LARRY BROOKS	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1994	PHILLIPS, DANIEL L	Cole Information Services
1986	Reed Claire C	Pacific Bell Yellow Pages
1981	Reed Claire C	Pacific Telephone
1977	Reed Claire C	Pacific Telephone

633 CHAPARRAL DR

Year	Uses	Source
2004	JOHN JACKSON	Cole Information Services
1986	Root Julia	Pacific Bell Yellow Pages
1981	Root Julia	Pacific Telephone

634 CHAPARRAL DR

Year	Uses	Source
2004	CORA JACKSON	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Tomkins Gertrude	Pacific Bell Yellow Pages
1981	Tomkins Gertrude	Pacific Telephone

635 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

636 CHAPARRAL DR

Year	Uses	Source
2004	TIMOTHY ORMONDE	Cole Information Services
1994	JAIME, GERARDO	Cole Information Services
1981	Rockwell M	Pacific Telephone

637 CHAPARRAL DR

Year	Uses	Source
2004	RICHARD ARIAS	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Christie Isabel L	Pacific Telephone
1977	Christie Isabel L L	Pacific Telephone

639 CHAPARRAL DR

Year	Uses	Source
2004	BILLY ROLES	Cole Information Services
1986	Taylor Riter C	Pacific Bell Yellow Pages

640 CHAPARRAL DR

Year	Uses	Source
2004	CHRIS MCCLOUD	Cole Information Services
2001	ROMEROCeba L	Haines & Company, Inc.

641 CHAPARRAL DR

Year	Uses	Source
2004	BRANDY LEE	Cole Information Services
1986	Rogahn Harry A	Pacific Bell Yellow Pages
1981	Rogahn Harry A	Pacific Telephone

642 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	PONCEKelly	Haines & Company, Inc.
	PONCE Ben 909 6 B	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	IHaskvitz Harry & Rose	Pacific Bell Yellow Pages
1981	Haskvitz Harry & Rose	Pacific Telephone

643 CHAPARRAL DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

644 CHAPARRAL DR

Year	Uses	Source
2004	GENE WHITTINGTON	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

645 CHAPARRAL DR

Year	Uses	Source
2004	LETICIA GUERRERO	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Rehm Robt H	Pacific Bell Yellow Pages
1981	Rehm Robt H	Pacific Telephone
1977	Rehm Robt H	Pacific Telephone

CLOVERDALE RD

12741 CLOVERDALE RD

Year	Uses	Source
1956	Hamson A L	Luskey Brothers & Co.
	Hamsons Clocerdale Rnch	Luskey Brothers & Co.
	Lamb J H	Luskey Brothers & Co.

12745 CLOVERDALE RD

Year	Uses	Source
1956	Barcus N W	Luskey Brothers & Co.

12774 CLOVERDALE RD

Year	Uses	Source
2002	HARADA FARMS	SBC PACIFIC BELL
1996	Harada Gary	Pacific Bell
	HARADA FARMS	Pacific Bell
1993	Harada Farms	Pacific Bell
	Harada Gary	Pacific Bell
	Harada Hisako	Pacific Bell
1990	HARADA FARMS	Pacific Bell
	Harada Gary	Pacific Bell
1981	Harada Brothers	Pacific Telephone
	Harado Speed Adams Av & Cloverdale Rd @Corona@	Pacific Telephone
1977	Harada Brothers	Pacific Telephone
	Harada Roy Y	Pacific Telephone

Year	Uses	Source
1977	Harado Speed Adams Av&Cloverdale Rd @Corona@	Pacific Telephone
1970	Harada Brothers	Pacific Telephone
	Harada Jas	Pacific Telephone
	Bosma Cattle Co	Pacific Telephone
1956	Bockemann C O	Luskey Brothers & Co.
	Poulson D A	Luskey Brothers & Co.
	Eldridge F L	Luskey Brothers & Co.
	Premier Rnch	Luskey Brothers & Co.

CLOVERDALE ST

12745 CLOVERDALE ST

Year	Uses	Source
2001	LEALJohn 00 C	Haines & Company, Inc.

12774 CLOVERDALE ST

Year	Uses	Source
2001	RAYGOZARober 00 C	Haines & Company, Inc.
	HARADA FARMS	Haines & Company, Inc.
1977	Crown Feed Products Inc	Pacific Telephone

CYPRESS DR

665 CYPRESS DR

Year	Uses	Source
1981	Jenkins Geo D Jr	Pacific Telephone
1977	Clay M H	Pacific Telephone

666 CYPRESS DR

Year	Uses	Source
2004	JOHN COLEMAN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Hasten A	Pacific Bell Yellow Pages
	Hasten B J	Pacific Bell Yellow Pages
	Hasten Mike	Pacific Bell Yellow Pages
1981	Hasten Norman & Anita	Pacific Telephone

667 CYPRESS DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Bagaeff John	Pacific Bell Yellow Pages
	Bagby Ken H	Pacific Bell Yellow Pages
1981	Begaeff John	Pacific Telephone

668 CYPRESS DR

Year	Uses	Source
1986	Murrell Vivien L	Pacific Bell Yellow Pages
1981	Faith Norman	Pacific Telephone

669 CYPRESS DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

670 CYPRESS DR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	St Hill Kenneth I	Pacific Telephone

671 CYPRESS DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

673 CYPRESS DR

Year	Uses	Source
1986	Maynard Dan & Cindi	Pacific Bell Yellow Pages
	Maynard A	Pacific Bell Yellow Pages
	Maynarl D L	Pacific Bell Yellow Pages
	Maymon Robt	Pacific Bell Yellow Pages
1977	Maymon Robt	Pacific Telephone

CYPRESS DR MIRA LMNIA

670 CYPRESS DR MIRA LMNIA

Year	Uses	Source
1986	Rueter Vern E	Pacific Bell Yellow Pages

FINDINGS

DANCY ST

13228 DANCY ST

Year	Uses	Source
2017	ROBERT BORNEMANN	Cole Information Services
2014	ROBERT BORNEMANN	Cole Information Services

DAPHNE ST

6308 DAPHNE ST

Year	Uses	Source
2017	PIPPO SALVIA	Cole Information Services
2014	PIPPO SALVIA	Cole Information Services
2009	PIPPO SALVIA	Cole Information Services
1999	PIPPO SALVIA	Cole Information Services

6318 DAPHNE ST

Year	Uses	Source
2017	CLINT CAVANESS	Cole Information Services
2014	CLINT CAVANESS	Cole Information Services
2009	CLINT CAVANESS	Cole Information Services

DEL MAR CIR

113 DEL MAR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Mone Frank	Pacific Bell Yellow Pages
1981	Hoover Roscoe	Pacific Telephone
1977	Schnur eldon T	Pacific Telephone

114 DEL MAR CIR

Year	Uses	Source
2004	ZULMA PEREZ	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Blessin Chas W	Pacific Telephone

115 DEL MAR CIR

Year	Uses	Source
2001	TURCZENE	Haines & Company, Inc.
1986	Turczen E	Pacific Bell Yellow Pages
1981	Turczen E	Pacific Telephone

116 DEL MAR CIR

Year	Uses	Source
2001	CLENNYAM	Haines & Company, Inc.
1986	Clenny A M	Pacific Bell Yellow Pages
	Cteo	Pacific Bell Yellow Pages
1981	Cenny A M	Pacific Telephone
1977	Liliibridge M E	Pacific Telephone

117 DEL MAR CIR

Year	Uses	Source
2001	SANCHEZDebra K	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services

118 DEL MAR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Shelford Wm T	Pacific Bell Yellow Pages
1981	Shelford Wm T	Pacific Telephone

119 DEL MAR CIR

Year	Uses	Source
2004	DANIEL PEREZ	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Ray Roland	Pacific Bell Yellow Pages
1977	Pettibone Donald S	Pacific Telephone

120 DEL MAR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Stembridge N	Pacific Bell Yellow Pages
	Stelzner Sam I	Pacific Bell Yellow Pages
1981	Stelzner Sam I	Pacific Telephone
1977	Stelzner Sam I	Pacific Telephone

FINDINGS

121 DEL MAR CIR

Year	Uses	Source
1977	Hunter W	Pacific Telephone
1970	Newcombe Le Roy	Pacific Telephone

122 DEL MAR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	SEEDORF, RUDY	Cole Information Services
1986	Pool M	Pacific Bell Yellow Pages
1981	Pool Myrtle	Pacific Telephone
	Pool aark L	Pacific Telephone
1977	Pool Clark L	Pacific Telephone
	Pool Myrtle	Pacific Telephone

123 DEL MAR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1977	Majewski Ann	Pacific Telephone

124 DEL MAR CIR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Hendrickson Don	Pacific Bell Yellow Pages
1981	Hendrickson C F	Pacific Telephone
1977	Hendrickson C F	Pacific Telephone

125 DEL MAR CIR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Roche Leo	Pacific Bell Yellow Pages
	Roche Robt P Jr	Pacific Bell Yellow Pages
1977	Company	Pacific Telephone

126 DEL MAR CIR

Year	Uses	Source
2004	WILLIE ABARCA	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

127 DEL MAR CIR

Year	Uses	Source
2004	VALERIE DELTORO	Cole Information Services
1981	Rolen Raymond F	Pacific Telephone

128 DEL MAR CIR

Year	Uses	Source
2004	HERIBERTA VARGAS	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	CLAYTON, T	Cole Information Services
1986	Turner International Exports P O Box	Pacific Bell Yellow Pages
	Turner Geo A	Pacific Bell Yellow Pages
1981	Turner Geo A	Pacific Telephone
1977	Turner Geo A	Pacific Telephone

129 DEL MAR CIR

Year	Uses	Source
2004	CHARLES FREEMAN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1977	Benbow Dora	Pacific Telephone

130 DEL MAR CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Long Wm S	Pacific Bell Yellow Pages
	Long Willard E	Pacific Bell Yellow Pages
1981	Long Willard E	Pacific Telephone
1977	Long Willard E	Pacific Telephone

131 DEL MAR CIR

Year	Uses	Source
2004	MANUEL RODRIGUEZ	Cole Information Services
2001	ORTIZJIoe	Haines & Company, Inc.
1981	Fox Ira	Pacific Telephone
1977	Santarini Elmo	Pacific Telephone

132 DEL MAR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Scott Geo K	Pacific Bell Yellow Pages
1981	Scott Geo K	Pacific Telephone
1977	Scott Geo K	Pacific Telephone

133 DEL MAR CIR

Year	Uses	Source
2004	JIMMY CHRISTIAN	Cole Information Services
2001	CHRISTIANC	Haines & Company, Inc.
1986	Reed Carl M	Pacific Bell Yellow Pages
	Reed Chas & Lynda @Grand Terrace@	Pacific Bell Yellow Pages
1981	Reed Carl M	Pacific Telephone
1977	Ratchford Howard	Pacific Telephone
	Ratchford Howard	Pacific Telephone

DEL MAR WAY

107 DEL MAR WAY

Year	Uses	Source
2001	BOOREPeggy	Haines & Company, Inc.
	GANCARCZYKKen	Haines & Company, Inc.
	BOOREGregory	Haines & Company, Inc.

113 DEL MAR WAY

Year	Uses	Source
1970	Schnur Seldon T	Pacific Telephone

114 DEL MAR WAY

Year	Uses	Source
1970	Downing Kenneth P	Pacific Telephone

116 DEL MAR WAY

Year	Uses	Source
1970	Fischer Paul	Pacific Telephone

118 DEL MAR WAY

Year	Uses	Source
1970	Shelford Wm T	Pacific Telephone

FINDINGS

119 DEL MAR WAY

Year	Uses	Source
1970	Oehmcke Richard R	Pacific Telephone

120 DEL MAR WAY

Year	Uses	Source
1970	Stelzner Saml	Pacific Telephone

121 DEL MAR WAY

Year	Uses	Source
1970	Hunter W J	Pacific Telephone
	Newcombe Le Roy	Pacific Telephone

124 DEL MAR WAY

Year	Uses	Source
1970	Haueter Otto	Pacific Telephone

125 DEL MAR WAY

Year	Uses	Source
1970	Truscott Arthur R	Pacific Telephone

126 DEL MAR WAY

Year	Uses	Source
1970	Reynolds Ralph	Pacific Telephone

127 DEL MAR WAY

Year	Uses	Source
1970	Turner Geo A	Pacific Telephone

129 DEL MAR WAY

Year	Uses	Source
1970	Snavely Listle L	Pacific Telephone
	Dawson Jack L	Pacific Telephone

131 DEL MAR WAY

Year	Uses	Source
1970	Santarini Elmo	Pacific Telephone

132 DEL MAR WAY

Year	Uses	Source
1970	Scott Geo K	Pacific Telephone

DORSETT GOLDEN ST

13204 DORSETT GOLDEN ST

Year	Uses	Source
2017	TENGJIANG YANG	Cole Information Services
2014	HERBERT SMITH	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

13207 DORSETT GOLDEN ST

Year	Uses	Source
2017	SHAUN GLENN	Cole Information Services
2014	JIMMY HWANG	Cole Information Services
2009	OLADELE AINA	Cole Information Services
1999	OLADELE AINA	Cole Information Services

DRAKE DR

566 DRAKE DR

Year	Uses	Source
2004	ROGER MANIS	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	HOEFS, K C	Cole Information Services
1993	Hoefs K C	Pacific Bell
1986	Hoefs K C	Pacific Bell Yellow Pages
1981	Hoets K C	Pacific Telephone
	Hoefs K C	Pacific Telephone
1977	Hoefs Louis N	Pacific Telephone
	Hoefs Kathleen	Pacific Telephone

567 DRAKE DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Busby L F	Pacific Bell Yellow Pages
1977	Bundy Mildred	Pacific Telephone

568 DRAKE DR

Year	Uses	Source
2004	RANDALL SMITH	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1977	Pecher Dorothy	Pacific Telephone

569 DRAKE DR

Year	Uses	Source
2004	MARY BARNES	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Barnes Mary C	Pacific Bell Yellow Pages
1981	Barnes Mary C	Pacific Telephone
1977	Ehrnman Austin W	Pacific Telephone

570 DRAKE DR

Year	Uses	Source
2004	EVELYN MAKI	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Feldmann Merrick R	Pacific Bell Yellow Pages
1981	Feldmann Merrick R	Pacific Telephone

571 DRAKE DR

Year	Uses	Source
2004	MARCY RICHARDSON	Cole Information Services
1994	GRIFFITHS, LLOYD	Cole Information Services
1986	Griffiths Lloyd	Pacific Bell Yellow Pages
1981	Griffiths Lloyd	Pacific Telephone

572 DRAKE DR

Year	Uses	Source
1986	Miller Harold	Pacific Bell Yellow Pages
1981	Miller Harold	Pacific Telephone
1977	Miller Harold	Pacific Telephone

573 DRAKE DR

Year	Uses	Source
1986	Hughes Geo	Pacific Bell Yellow Pages
1981	Hughes Geo	Pacific Telephone
1977	Hughes Geo	Pacific Telephone

574 DRAKE DR

Year	Uses	Source
2001	BAKER Kenneth W	Haines & Company, Inc.
1986	Baker Kenneth W	Pacific Bell Yellow Pages
1981	Baker Kenneth W	Pacific Telephone
1977	Baker Kenneth W	Pacific Telephone

575 DRAKE DR

Year	Uses	Source
2004	ALICIA RAMOS	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	WALTER, RALPH H	Cole Information Services
1986	Walter Ralph H	Pacific Bell Yellow Pages
1981	Snider Geoffrey H	Pacific Telephone
1977	Snider Geoffrey H	Pacific Telephone

576 DRAKE DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	BERG, L R	Cole Information Services
1986	Berg L R	Pacific Bell Yellow Pages
1977	Berg Ken	Pacific Telephone

577 DRAKE DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

578 DRAKE DR

Year	Uses	Source
2004	PAULA MORROW	Cole Information Services
1994	GARDNER, EUGENE F	Cole Information Services
1981	Gardner Eugene F	Pacific Telephone
1977	Gardner Eugene F	Pacific Telephone

579 DRAKE DR

Year	Uses	Source
2001	MOCZULSKIJohn	Haines & Company, Inc.
	MOCZULSKI Elwand	Haines & Company, Inc.
1993	I Moczulski John & Elwanda	Pacific Bell
1986	From Corona Telephones Call	Pacific Bell Yellow Pages

580 DRAKE DR

Year	Uses	Source
2004	GABRIELA HERRERA	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

FINDINGS

581 DRAKE DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	PEREZRaudel	Haines & Company, Inc.
1994	CASSELBERRY, GILBERT II	Cole Information Services
1986	Casselberry Gilbert II	Pacific Bell Yellow Pages
1981	Casselberry Gilbert II	Pacific Telephone

582 DRAKE DR

Year	Uses	Source
2004	PHILIP DENNY	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1981	Wylie Wm	Pacific Telephone
1977	Wylie Wm	Pacific Telephone

583 DRAKE DR

Year	Uses	Source
2004	ROSA CALDERON	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Mc Cluskey B E	Pacific Bell Yellow Pages
	Mc Cluskey Casey J	Pacific Bell Yellow Pages
1981	Mc Cluskey B E	Pacific Telephone
1977	Mc Cluskey B E	Pacific Telephone

584 DRAKE DR

Year	Uses	Source
2004	ELISA PALOMARES	Cole Information Services
2002	Palomares Elisa	SBC PACIFIC BELL
1986	Hellwagen Everett	Pacific Bell Yellow Pages
1981	Hellwegen Everett	Pacific Telephone

585 DRAKE DR

Year	Uses	Source
2004	JEFFERY VICK	Cole Information Services
2002	Vick Jeffery	SBC PACIFIC BELL
1994	HAILE, WILLIAM	Cole Information Services
1986	Haile J	Pacific Bell Yellow Pages
	Hailey Chas D Jr	Pacific Bell Yellow Pages
1981	Halle J	Pacific Telephone
1977	Haile J	Pacific Telephone
	Haile J	Pacific Telephone

FINDINGS

DRAKE DR MIRALMA

578 DRAKE DR MIRALMA

Year	*Uses*	*Source*
1986	Gardner Eugene F	Pacific Bell Yellow Pages

DRIFTW QOD CIR

182 DRIFTW QOD CIR

Year	*Uses*	*Source*
1977	Denison Ethel 3347 A Bernard	Pacific Telephone

DRIFTWOOD CIR

163 DRIFTWOOD CIR

Year	*Uses*	*Source*
2001	BARNSTerry	Haines & Company, Inc.
1986	Sayre Edwin D	Pacific Bell Yellow Pages
1981	Sayre Edwni D	Pacific Telephone

164 DRIFTWOOD CIR

Year	*Uses*	*Source*
2004	OCCUPANT UNKNOWN	Cole Information Services

165 DRIFTWOOD CIR

Year	*Uses*	*Source*
2004	SHANE DUBYAK	Cole Information Services
2001	ROORIGUEZCecrtla	Haines & Company, Inc.
1986	Tenney Leeland R	Pacific Bell Yellow Pages
	Tennies M C	Pacific Bell Yellow Pages
1981	Tenney Leeland R	Pacific Telephone
1977	Tenney Leeland R	Pacific Telephone

167 DRIFTWOOD CIR

Year	*Uses*	*Source*
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Stroberg Christine L DVM	Pacific Bell Yellow Pages
	Strobehn Floyd T	Pacific Bell Yellow Pages
1977	Matchett Robt S	Pacific Telephone

FINDINGS

168 DRIFTWOOD CIR

Year	Uses	Source
1977	Leamon Katherine L b	Pacific Telephone
	Nelson Jean B	Pacific Telephone

169 DRIFTWOOD CIR

Year	Uses	Source
2004	PATRICIA HIDALGO	Cole Information Services
1986	Smith Louise B Mrs	Pacific Bell Yellow Pages
1981	Smith Louise B Mrs	Pacific Telephone
1977	Smith Louise B Mrs	Pacific Telephone

170 DRIFTWOOD CIR

Year	Uses	Source
1981	Rorick Jay T	Pacific Telephone
1977	Rorick Jay T	Pacific Telephone

174 DRIFTWOOD CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	BARNARD, KENNETH	Cole Information Services
1981	Wirtz Richard J	Pacific Telephone

175 DRIFTWOOD CIR

Year	Uses	Source
1986	Leochner Orval G	Pacific Bell Yellow Pages
1981	Leochner Orval G	Pacific Telephone
1977	Leochner Orval G	Pacific Telephone

176 DRIFTWOOD CIR

Year	Uses	Source
2004	DENNIS BUSSARD	Cole Information Services

177 DRIFTWOOD CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	KOCH, LONA M	Cole Information Services
1986	Koch L	Pacific Bell Yellow Pages
1981	Koch L	Pacific Telephone
1977	Koch Rudolf John	Pacific Telephone

178 DRIFTWOOD CIR

Year	Uses	Source
2001	HERNANDEZJohnny	Haines & Company, Inc.
1986	Foster Vera A	Pacific Bell Yellow Pages
1981	Foster Vera A	Pacific Telephone
1977	Foster Vera A	Pacific Telephone

179 DRIFTWOOD CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1977	Nanfito Sam N	Pacific Telephone

180 DRIFTWOOD CIR

Year	Uses	Source
1986	La Sarge E	Pacific Bell Yellow Pages
1981	La Sarge W	Pacific Telephone
	Johnston C E	Pacific Telephone
1977	La Sarge W	Pacific Telephone

181 DRIFTWOOD CIR

Year	Uses	Source
2004	JOSHUA BOWERS	Cole Information Services

182 DRIFTWOOD CIR

Year	Uses	Source
1986	Denison Guy L	Pacific Bell Yellow Pages
1981	Denison Guy L	Pacific Telephone

183 DRIFTWOOD CIR

Year	Uses	Source
2004	ALVARO CASTELLANOS	Cole Information Services
1981	Steel Homer J	Pacific Telephone
1977	Steel Homer J	Pacific Telephone

184 DRIFTWOOD CIR

Year	Uses	Source
2001	AYERSP	Haines & Company, Inc.
1986	Guilfoyle Thos F	Pacific Bell Yellow Pages
1981	Guilfoyle Thos F	Pacific Telephone
1977	Meehan Robt E	Pacific Telephone

185 DRIFTWOOD CIR

Year	Uses	Source
2004	GLORIA VILLALPA	Cole Information Services
	MAGDALENA CABALLERO	Cole Information Services
1977	Johnston C E	Pacific Telephone

186 DRIFTWOOD CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Mahoney D	Pacific Bell Yellow Pages
	Mahnkey C	Pacific Bell Yellow Pages
	Mahnken R M	Pacific Bell Yellow Pages
1981	Mahnken R M	Pacific Telephone
1977	Mahnken R M	Pacific Telephone

187 DRIFTWOOD CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

DRIFTWOOD ST

117 DRIFTWOOD ST

Year	Uses	Source
1977	Coombes Lester J Jr O	Pacific Telephone

163 DRIFTWOOD ST

Year	Uses	Source
1970	Gambell Lester O	Pacific Telephone
	Sayre Edwin D	Pacific Telephone

165 DRIFTWOOD ST

Year	Uses	Source
1970	Tenney Leeland R	Pacific Telephone

167 DRIFTWOOD ST

Year	Uses	Source
1970	Matejovsky Wm J	Pacific Telephone

168 DRIFTWOOD ST

Year	Uses	Source
1970	Leamon Katherine L	Pacific Telephone
	Nelson Jean B	Pacific Telephone

169 DRIFTWOOD ST

Year	Uses	Source
1970	Cummings N Geo	Pacific Telephone

173 DRIFTWOOD ST

Year	Uses	Source
1970	Tegethoff August	Pacific Telephone

175 DRIFTWOOD ST

Year	Uses	Source
1970	Hoeveke S Jean	Pacific Telephone

176 DRIFTWOOD ST

Year	Uses	Source
1970	Phillips Grace D	Pacific Telephone

177 DRIFTWOOD ST

Year	Uses	Source
1970	Koch Rudolf John	Pacific Telephone

178 DRIFTWOOD ST

Year	Uses	Source
1970	Schuster John E	Pacific Telephone

179 DRIFTWOOD ST

Year	Uses	Source
1970	Nanfito Sam N	Pacific Telephone

180 DRIFTWOOD ST

Year	Uses	Source
1970	La Sarge W	Pacific Telephone

181 DRIFTWOOD ST

Year	Uses	Source
1970	Moody Ralph C	Pacific Telephone

182 DRIFTWOOD ST

Year	Uses	Source
1970	Denison Guy L	Pacific Telephone

183 DRIFTWOOD ST

Year	Uses	Source
1970	Argus Oliver J	Pacific Telephone

184 DRIFTWOOD ST

Year	Uses	Source
1970	Meehan Robt E	Pacific Telephone

185 DRIFTWOOD ST

Year	Uses	Source
1970	Seares Robert	Pacific Telephone

186 DRIFTWOOD ST

Year	Uses	Source
1970	Hohn W C	Pacific Telephone

EARLY CRIMSON ST

13208 EARLY CRIMSON ST

Year	Uses	Source
2017	JAIME ONEAL	Cole Information Services
2014	T HARGROVE	Cole Information Services

13215 EARLY CRIMSON ST

Year	Uses	Source
2017	RALPH AMARATUNGA	Cole Information Services
2014	RALPH AMARATUNGA	Cole Information Services
2009	HECTOR CARDENAS	Cole Information Services

13225 EARLY CRIMSON ST

Year	Uses	Source
2017	RUBEN ZUNIGA	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	MARIA FLORES	Cole Information Services
1999	MARIA FLORES	Cole Information Services

EDGEMONT DR

557 EDGEMONT DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.

558 EDGEMONT DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

Year	Uses	Source
1986	Spinelli M	Pacific Bell Yellow Pages
1981	Spinelli M	Pacific Telephone
1977	Spinelli M	Pacific Telephone

559 EDGEMONT DR

Year	Uses	Source
2001	HORTEMILLERGM	Haines & Company, Inc.
1986	Hughes L J	Pacific Bell Yellow Pages
1981	Hughes L J	Pacific Telephone

560 EDGEMONT DR

Year	Uses	Source
2004	JACK WYTTENBACH	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Conrad Frank J	Pacific Bell Yellow Pages
1981	Conrad Frank J	Pacific Telephone

561 EDGEMONT DR

Year	Uses	Source
2004	DANTE MEDINA	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Appel A	Pacific Bell Yellow Pages
1981	Appel A	Pacific Telephone

562 EDGEMONT DR

Year	Uses	Source
2004	SHALONDA DOMASIN	Cole Information Services
2002	Domasin Shalonda	SBC PACIFIC BELL
	Domasini Shalonda	SBC PACIFIC BELL
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	COUCH, TOMMY	Cole Information Services
1981	Hiayashlbara Wayne & S	Pacific Telephone
1977	Gorsuch Donald	Pacific Telephone

563 EDGEMONT DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1981	Redman David F	Pacific Telephone

564 EDGEMONT DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Jura Michael E	Pacific Bell Yellow Pages
1981	Jura Michael E	Pacific Telephone
1977	Jura Michael E	Pacific Telephone

565 EDGEMONT DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

FAIRLANE CIR

134 FAIRLANE CIR

Year	Uses	Source
2004	TIMOTHY LINEHAN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	MADALLANES, MARIA	Cole Information Services
1986	Miller Frank L & June F	Pacific Bell Yellow Pages
	Miller G	Pacific Bell Yellow Pages
	Miller G	Pacific Bell Yellow Pages
	Miller Fred L	Pacific Bell Yellow Pages

135 FAIRLANE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Wolfe M K	Pacific Telephone
1977	Wolfe M K	Pacific Telephone

136 FAIRLANE CIR

Year	Uses	Source
2004	PATSY TAYLOR	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services

137 FAIRLANE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Gilligan C	Pacific Telephone

138 FAIRLANE CIR

Year	Uses	Source
2004	JUAN MARTINEZ	Cole Information Services
1981	Lapins Marion A	Pacific Telephone
1977	Lapins Marion A	Pacific Telephone

139 FAIRLANE CIR

Year	Uses	Source
2004	HANNA URIBES	Cole Information Services
2002	Uribes Casey	SBC PACIFIC BELL
1981	Casey Margaret I	Pacific Telephone
	Casey Jas S	Pacific Telephone
1977	Casey Margaret I	Pacific Telephone
	Casey Jas S	Pacific Telephone

140 FAIRLANE CIR

Year	Uses	Source
2004	PATRICK HOY	Cole Information Services
2001	NUNEZSnora	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	SORENSEN, LARRY	Cole Information Services
1986	Sorensen Larry	Pacific Bell Yellow Pages
1981	Mayer Alfred & Irene	Pacific Telephone
1977	Stern Sidney	Pacific Telephone

141 FAIRLANE CIR

Year	Uses	Source
2002	Kincaid Sarah	SBC PACIFIC BELL
2001	ROGERSJennifer E	Haines & Company, Inc.
1986	Pulliam Harold H	Pacific Bell Yellow Pages
1981	Pulliam Harold H	Pacific Telephone
1977	Pulliam Harold H	Pacific Telephone

142 FAIRLANE CIR

Year	Uses	Source
2004	MATTHEW HASKINS	Cole Information Services

143 FAIRLANE CIR

Year	Uses	Source
1986	Sheldon Lyle M	Pacific Bell Yellow Pages
1981	Sheldon Lyle MI	Pacific Telephone
1977	Sheldon Lyle M	Pacific Telephone

144 FAIRLANE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Schnur Frances	Pacific Bell Yellow Pages
1981	Schnur Frances	Pacific Telephone

145 FAIRLANE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1981	Risolo Marie	Pacific Telephone
1977	Risner Henry C	Pacific Telephone

146 FAIRLANE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Landis Harold R	Pacific Bell Yellow Pages
	Landis Kenneth E	Pacific Bell Yellow Pages
1981	Landis Harold R	Pacific Telephone
1977	Landis Harold R	Pacific Telephone

147 FAIRLANE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1981	Nelson G K	Pacific Telephone
1977	Whitneck Ralph	Pacific Telephone

148 FAIRLANE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1994	HEGGEM, C	Cole Information Services
1986	Mc Whorter Chas H	Pacific Bell Yellow Pages
1981	Mc Whorter Chas H	Pacific Telephone
1977	Mc Waters David	Pacific Telephone
	Mc Whorter Margaret I	Pacific Telephone

FAIRLANE CT

134 FAIRLANE CT

Year	Uses	Source
1970	Crabtree R L	Pacific Telephone

136 FAIRLANE CT

Year	Uses	Source
1970	Huber W F	Pacific Telephone

139 FAIRLANE CT

Year	Uses	Source
1970	Hay W W Jr	Pacific Telephone

140 FAIRLANE CT

Year	Uses	Source
1970	Thomas F A	Pacific Telephone

141 FAIRLANE CT

Year	Uses	Source
1970	Pulliam Harold H	Pacific Telephone

142 FAIRLANE CT

Year	Uses	Source
1970	Alleman F J	Pacific Telephone

143 FAIRLANE CT

Year	Uses	Source
1970	Palmer Howard C	Pacific Telephone

145 FAIRLANE CT

Year	Uses	Source
1970	Haueter Paul	Pacific Telephone

146 FAIRLANE CT

Year	Uses	Source
1970	Landis Harold R	Pacific Telephone

147 FAIRLANE CT

Year	Uses	Source
1970	Morris Orvil N	Pacific Telephone

148 FAIRLANE CT

Year	Uses	Source
1970	Mc Whorter Chas H	Pacific Telephone
	Mc Whorter Margaret	Pacific Telephone

FUJI ST

6031 FUJI ST

Year	Uses	Source
2014	ADOLFO GAMINO	Cole Information Services
2009	YOLANDA VERNON	Cole Information Services
1999	YOLANDA VERNON	Cole Information Services

6038 FUJI ST

Year	Uses	Source
2017	SUONG LEE	Cole Information Services
2014	SUONG LEE	Cole Information Services
2009	ALEJANDRO CARMONA	Cole Information Services

6041 FUJI ST

Year	Uses	Source
2017	RICARDO DEGUZMAN	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	FRANCISCO BENITEZ	Cole Information Services
1999	FRANCISCO BENITEZ	Cole Information Services

6048 FUJI ST

Year	Uses	Source
2017	KATHLEEN LACKSON	Cole Information Services
2014	STACI MIXON	Cole Information Services
2009	KEN BORG	Cole Information Services
1999	KEN BORG	Cole Information Services

6051 FUJI ST

Year	Uses	Source
2017	SANDRA BLANTON	Cole Information Services
2014	CHIN CHIANG	Cole Information Services
2009	STEPHANIE BRADLEY	Cole Information Services
1999	STEPHANIE BRADLEY	Cole Information Services

FINDINGS

6058 FUJI ST

Year	Uses	Source
2017	SCOTT JUE	Cole Information Services
2014	SCOTT JUE	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

6068 FUJI ST

Year	Uses	Source
2017	SILVIA LOPEZ	Cole Information Services
2014	SILVIA LOPEZ	Cole Information Services
2009	URBANO CRUZ	Cole Information Services
1999	URBANO CRUZ	Cole Information Services

6071 FUJI ST

Year	Uses	Source
2017	BRENDA KELLY	Cole Information Services
2014	BRENDA KELLY	Cole Information Services
2009	NATHAN HERNANDEZ	Cole Information Services
1999	NATHAN HERNANDEZ	Cole Information Services

6078 FUJI ST

Year	Uses	Source
2017	ADRIANA MIRANDA	Cole Information Services
2014	ALEJANDRO VILLEGAS	Cole Information Services
2009	ALEJANDRO VILLEGAS	Cole Information Services
1999	ALEJANDRO VILLEGAS	Cole Information Services

6081 FUJI ST

Year	Uses	Source
2014	PHILIP LE	Cole Information Services
2009	STEVE MILLER	Cole Information Services
1999	STEVE MILLER	Cole Information Services

6088 FUJI ST

Year	Uses	Source
2017	SAM KHUMOORO	Cole Information Services
2014	SAM KHUMOORO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

FINDINGS

6091 FUJI ST

Year	Uses	Source
2017	BARRETT KUETHEN	Cole Information Services
2014	BARRETT KUETHEN	Cole Information Services
2009	LEMUEL BRADFORD	Cole Information Services
1999	LEMUEL BRADFORD	Cole Information Services

6098 FUJI ST

Year	Uses	Source
2017	BRIAN AXUP	Cole Information Services
2014	JAMES WALTON	Cole Information Services
2009	JAMES WALTON	Cole Information Services
1999	JAMES WALTON	Cole Information Services

6101 FUJI ST

Year	Uses	Source
2017	SANDRA SAPIEN	Cole Information Services
2014	RUDOLFO SAPIEN	Cole Information Services
2009	RUDOLFO SAPIEN	Cole Information Services
1999	RUDOLFO SAPIEN	Cole Information Services

6108 FUJI ST

Year	Uses	Source
2017	JOSE MARCONI	Cole Information Services
2014	JOSE MARCONI	Cole Information Services
2009	ALVARO HUERTA	Cole Information Services
1999	ALVARO HUERTA	Cole Information Services

6111 FUJI ST

Year	Uses	Source
2017	STEPHANIE NAVARRO	Cole Information Services
2014	STEPHANIE NAVARRO	Cole Information Services
2009	MIGUEL NAVARRO	Cole Information Services
1999	MIGUEL NAVARRO	Cole Information Services

6118 FUJI ST

Year	Uses	Source
2017	ROBERT CARBAJAL	Cole Information Services
2014	ROBERT CARBAJAL	Cole Information Services
2009	MARIDZA SANCHEZ	Cole Information Services
1999	MARIDZA SANCHEZ	Cole Information Services

FINDINGS

6121 FUJI ST

Year	Uses	Source
2017	EDIH LOPEZ	Cole Information Services
2014	EMILY JUNG	Cole Information Services
2009	CHRISTOPHER RUNYAN	Cole Information Services
1999	CHRISTOPHER RUNYAN	Cole Information Services

6128 FUJI ST

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

6131 FUJI ST

Year	Uses	Source
2017	GRADY RISNER	Cole Information Services
2014	GRADY RISNER	Cole Information Services
2009	GRADY RISNER	Cole Information Services
1999	GRADY RISNER	Cole Information Services

6138 FUJI ST

Year	Uses	Source
2017	C HERNANDEZ	Cole Information Services
2014	MARK CARTER	Cole Information Services
2009	JOSE RAMIREZ	Cole Information Services
1999	JOSE RAMIREZ	Cole Information Services

6141 FUJI ST

Year	Uses	Source
2017	RUDOLFO ANACOSTA	Cole Information Services
2014	ELIZABETH MIRANDA	Cole Information Services
2009	RODOLFO AMACOSTA	Cole Information Services
1999	RODOLFO AMACOSTA	Cole Information Services

6148 FUJI ST

Year	Uses	Source
2017	LUKE ISBELL	Cole Information Services
2014	BRIAN ISBELL	Cole Information Services
2009	B ISBELL	Cole Information Services
1999	B ISBELL	Cole Information Services

6151 FUJI ST

Year	Uses	Source
2017	ANTHONY VEGA	Cole Information Services
2014	ANTON FLECKLIN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

6158 FUJI ST

Year	Uses	Source
2017	CORIE HARDIN	Cole Information Services
2014	ERIC RUBIO	Cole Information Services

6168 FUJI ST

Year	Uses	Source
2017	JUAN CERVANTES	Cole Information Services
2014	MANUEL FERNANDEZ	Cole Information Services
2009	MANUEL FERNANDEZ	Cole Information Services
1999	MANUEL FERNANDEZ	Cole Information Services

HAMNER AVE

5240 HAMNER AVE

Year	Uses	Source
1986	Hettinga Wilbur	Pacific Bell Yellow Pages
1977	Hettiriga Wilbur	Pacific Telephone

5780 HAMNER AVE

Year	Uses	Source
1981	Evans Martin J	Pacific Telephone

5800 HAMNER AVE

Year	Uses	Source
2017	EVA FLORES	Cole Information Services
	BOUNMY VONGAMATH	Cole Information Services
	STEVEN AGUILAR	Cole Information Services
	NANCY ALMAZAN	Cole Information Services
	ALVARO ALTAMIRANO	Cole Information Services
	RAMONA ANGULO	Cole Information Services
	OSCAR ARREOLA	Cole Information Services
	EDNA OBANDO	Cole Information Services
	PATRICIA OSORIO	Cole Information Services
	ROBERT PEARSON	Cole Information Services

FINDINGS

Year	Uses	Source
2017	SUZANNE PEBLEY	Cole Information Services
	JACKELINE HERNANDEZ	Cole Information Services
	NICASIO HERNANDEZ	Cole Information Services
	BENITA HOLLOWAY	Cole Information Services
	ANDRE HUNT	Cole Information Services
	CARL JAMES	Cole Information Services
	SANDOVAL LIDIA	Cole Information Services
	SHIRLEY MCINTOSH	Cole Information Services
	MARTIN MORENO	Cole Information Services
	FRANK GOYTIA	Cole Information Services
	BRIAN GREEN	Cole Information Services
	SWAN LAKE MOBILE COUNTRY ESTATES	Cole Information Services
	LAKE MARK	Cole Information Services
	COMMUNITY MOBILE HOME SALES	Cole Information Services
	THOMAS FERGUSON	Cole Information Services
	ERICKA FLORES	Cole Information Services
	ZEPEDA XICOTENCATL	Cole Information Services
	MARGARITA AHUMADA	Cole Information Services
	ERNEST ASCENCIO	Cole Information Services
	ARMANDO ASCENCIO	Cole Information Services
	I AYAU	Cole Information Services
	MARGARITA MUNOZ	Cole Information Services
	CARLOS NISTHAL	Cole Information Services
	MICHELLE NUNEZ	Cole Information Services
	DENNIS OMBAO	Cole Information Services
	LOUISE ORTIZ	Cole Information Services
	VERONICA PICAZO	Cole Information Services
	KIRBY LOFTON	Cole Information Services
	ROBERT SETTLES	Cole Information Services
	MICHELLE SIMMONS	Cole Information Services
	SALDANA LUIS	Cole Information Services
	MARIA MCHUGH	Cole Information Services
	JORGE FUNES	Cole Information Services
	JOSE GARCIA	Cole Information Services
	JEANNINE GOMEZ	Cole Information Services
	SANTIAGO GUERRERO	Cole Information Services
	WILLIAM HENRIQUEZ-JR	Cole Information Services
	ADRIAN SANDOVAL	Cole Information Services

FINDINGS

Year	Uses	Source
2017	JOHN BARRAZA	Cole Information Services
	JOSE BELTRAN	Cole Information Services
	EVELYN CALDERAS	Cole Information Services
	SHAWN CHAVEZ	Cole Information Services
	NOEMI CISNEROS	Cole Information Services
	RAMON CORNEJO	Cole Information Services
	AILEEN STEVENS	Cole Information Services
	JUNKOZ SZALAI	Cole Information Services
	TONY THEUS	Cole Information Services
	JOSEPH VALDEZ	Cole Information Services
	MARIA VALENCIA	Cole Information Services
	VICTORIA VASQUEZ	Cole Information Services
	GUSTAVO VAZQUEZ	Cole Information Services
	MARCO DAVILA	Cole Information Services
	LETICIA DELATORRE	Cole Information Services
	DANIEL DIAZ	Cole Information Services
	ROBERT SETSER	Cole Information Services
	MARIA MARTINEZ	Cole Information Services
	JOSE MARTINEZ	Cole Information Services
	JESUS MINCE	Cole Information Services
	ROSALBA GONZALEZ	Cole Information Services
	DINA HARTLEY	Cole Information Services
	MARGARITA HERNANDEZ	Cole Information Services
	JOSE RITO	Cole Information Services
	JUVENAL SAABEDRA	Cole Information Services
	JESUS SANTIAGO	Cole Information Services
	CRAIG BENNETT	Cole Information Services
	FRANCISCO CAMPOS	Cole Information Services
	JENKYNS CANDIA	Cole Information Services
	BRIANDA CELIS	Cole Information Services
	PATSY TAYLOR	Cole Information Services
	DOROTHY THATJE	Cole Information Services
	EVA VARGAS	Cole Information Services
	EDGAR VELASCO	Cole Information Services
	DEMETRIO VENEGAS	Cole Information Services
	MARIA CORTEZ	Cole Information Services
	ALEJANDRO CUENCA	Cole Information Services
	RUBEN DELATORRE	Cole Information Services

FINDINGS

Year	Uses	Source
2017	JOSEPH DELEON	Cole Information Services
	JUAN DESANTIAGO	Cole Information Services
	ANDREW KISTER	Cole Information Services
	TERESA LAVAU	Cole Information Services
	CAROLINE LEVICK	Cole Information Services
	LUIS LISAMA	Cole Information Services
	AGUILAR LUIS	Cole Information Services
	ELLEN MCCRAW	Cole Information Services
	TRACY MEDINA	Cole Information Services
	SABINO GONZALEZ	Cole Information Services
	FERNANDO GUTIERREZ	Cole Information Services
	NORMA REYES	Cole Information Services
	PHILIP RICHEY	Cole Information Services
	JACOB ROBERTSON	Cole Information Services
	JERROLD RODMAN	Cole Information Services
	TEODORO SALDANA	Cole Information Services
	MATTHEW SANCHEZ	Cole Information Services
	JOSE SANCHEZ	Cole Information Services
	SAMUEL SANTIAGO	Cole Information Services
	RAYMUNDO BONILLA	Cole Information Services
	PABLO CHINCHILLA	Cole Information Services
	ROSE SMITH	Cole Information Services
	CHRISTOPHER SOLOMON	Cole Information Services
	EFRAIN SORIANO	Cole Information Services
	ROBERT STEIGLEMAN	Cole Information Services
	MICHELLE STEPHENS	Cole Information Services
	GIMMI TREJO	Cole Information Services
	PENNY DEBRECENI	Cole Information Services
	RAFAEL DIAZ	Cole Information Services
	SHANNON ESTRADA	Cole Information Services
	TAMARA ANDERSON	Cole Information Services
	THOMAS ANGLIN	Cole Information Services
	EULALIO APARICIO	Cole Information Services
	ARTHUR AYERS	Cole Information Services
	BOBADILLA MUNOZ	Cole Information Services
	CARMEN ORTIZ	Cole Information Services
	KAREN IBARRA	Cole Information Services
	AMMAR LEBEN	Cole Information Services

FINDINGS

Year	Uses	Source
2017	ENEDINA LOPEZ	Cole Information Services
	RAMON MADRIGAL	Cole Information Services
	DELFINO MANJARREZ	Cole Information Services
	WILLIAM MARRISON	Cole Information Services
	FUENTE GUARDADO	Cole Information Services
	JOSE GUTIERREZ	Cole Information Services
	DAWNEEN HANES	Cole Information Services
	MONTY HENDERSON	Cole Information Services
	LINDA REAVES	Cole Information Services
	ANACLETO REYES	Cole Information Services
	ANGEL RIVAS	Cole Information Services
	ORLANDO ROBLEDO	Cole Information Services
	MARIO RODRIGUEZ	Cole Information Services
	JOSUE SALAZAR	Cole Information Services
	ROSA SALDANA	Cole Information Services
	LOURDES BRIONES	Cole Information Services
	SAMUEL BULLARD	Cole Information Services
	GORDON CARLSON	Cole Information Services
	JESUS CASTRO	Cole Information Services
	LINDA CLARK	Cole Information Services
	MICHELLE COLIN	Cole Information Services
	STYLIANO SMITH	Cole Information Services
	MARIBEL SOLIS	Cole Information Services
	SAMANTHA SPENCER	Cole Information Services
	RONALD STRIETZEL	Cole Information Services
	SUSAN TERRELL	Cole Information Services
	SOFIA VARGAS	Cole Information Services
	RONNIE CUNNIFF	Cole Information Services
	GILBERT FLORES	Cole Information Services
	ROBERT WAINWRIGHT	Cole Information Services
	GAIL WALLACE	Cole Information Services
	CARLOS ARREOLA	Cole Information Services
	TOM ASCENSIO	Cole Information Services
	NOE MOTTA	Cole Information Services
	PAMELA NORTON	Cole Information Services
	BASILIO PADILLA	Cole Information Services
	JUAN PEREZ	Cole Information Services
	ERICA QUINTANA	Cole Information Services

FINDINGS

Year	Uses	Source
2017	TEROY HILL	Cole Information Services
	GOLDIE HORTEMILLER	Cole Information Services
	OLYMPIA IBARRA	Cole Information Services
	MORGAN ISAACS	Cole Information Services
	MARNIE KING	Cole Information Services
	BEN LAMAS	Cole Information Services
	MARIA LOERA	Cole Information Services
	ARLENE MARTINEZ	Cole Information Services
	STEVEN MCGEORGE	Cole Information Services
	ELVIA MENDOZA	Cole Information Services
	HENRY MONCAYO	Cole Information Services
	GILBERT MORALES	Cole Information Services
	JOAQUIN MORALES	Cole Information Services
	EDWIN GARCIA	Cole Information Services
	MARIA GOMEZ	Cole Information Services
	MIGUEL GUTIERREZ	Cole Information Services
	NANCY HARRIS	Cole Information Services
	ERNESTO ROBLES	Cole Information Services
	FRANCISCO RUIZ	Cole Information Services
	ANTONIO SANCHEZ	Cole Information Services
	MARGRET BRIGGER	Cole Information Services
	JESSE CALDERON	Cole Information Services
	ANN CAMPBELL	Cole Information Services
	STEPHANIE CEJA	Cole Information Services
	JEFF CLEPPE	Cole Information Services
	JOHN COLEMAN	Cole Information Services
	JOSE TAPIA	Cole Information Services
	PABLO VAZQUEZ	Cole Information Services
	MELISSA VELAZQUEZ	Cole Information Services
	FRANCISCA VILLALPANDO	Cole Information Services
	RAUL ESTRELLA	Cole Information Services
	JACQUE FOREMAN	Cole Information Services
	VAO FUIMAONO	Cole Information Services
	WILLI VO	Cole Information Services
	LINDSAY WILSON	Cole Information Services
	JONATHAN ANAYA	Cole Information Services
	PAOLA ARAYALES	Cole Information Services
	JOSE BARBOA	Cole Information Services

FINDINGS

Year	Uses	Source
2017	BONIFACIO BARDALES	Cole Information Services
	LETICIA BARRAGAN	Cole Information Services
	DAVID NEZ	Cole Information Services
	JOHN OBRITZ	Cole Information Services
	GEORGE PADILLA	Cole Information Services
	GASTON PALMA	Cole Information Services
	WILLIAM PEARSON	Cole Information Services
	OLA PHILLIPS	Cole Information Services
	MIGUEL RAMIREZ	Cole Information Services
	FEDERICO RAMIREZ	Cole Information Services
	RAFAEL HERNANDEZ	Cole Information Services
	MARIA HERNANDEZ	Cole Information Services
	MELISSA HERNANDEZ	Cole Information Services
	SONIA JIMENEZ	Cole Information Services
	SERGIO JIMENEZ	Cole Information Services
	MARK JIMENEZ	Cole Information Services
	PAULA MORROW	Cole Information Services
	NAOMI GALLEGOS	Cole Information Services
	YADIRA GALVAN	Cole Information Services
	GABRIELA GALVEZ	Cole Information Services
	TERESA GARCIA	Cole Information Services
	KRYSTELYN GONZALES	Cole Information Services
	RAYMUNDO GONZALEZ	Cole Information Services
	JOSE RIVERA	Cole Information Services
	ROGER SCHMIDT	Cole Information Services
	RAMOS BAZAVILVAZO	Cole Information Services
	ISMAEL BECERRA	Cole Information Services
	STEPHEN BUNHAM	Cole Information Services
	THOMAS STEENBOCK	Cole Information Services
	DAVID TRAMELL	Cole Information Services
	HERNANDEZ VASQUEZ	Cole Information Services
	ANITA DAWSON	Cole Information Services
	GRISELDA DELAROSA	Cole Information Services
	NHU DO	Cole Information Services
	RICHARD ESSLINGER	Cole Information Services
	YVONNE EVANS	Cole Information Services
	KEVIN FALOON	Cole Information Services
	CASTRO FLORES	Cole Information Services

FINDINGS

Year	Uses	Source
2017	LILIANA FLORES	Cole Information Services
	JOSEPH FULCINITI	Cole Information Services
	DAMIAN AGUILAR	Cole Information Services
	CHARLES ARTRY	Cole Information Services
	FRANCES NADEAU	Cole Information Services
	PEDRO OMANA	Cole Information Services
	SARAI PALOMAREZ	Cole Information Services
	DEBBIE PYYKKO	Cole Information Services
	RAMIRO RAMIREZ	Cole Information Services
	MARIA IBARRA	Cole Information Services
	TANISHA JARMON-FLORES	Cole Information Services
	ELIZABETH SERRATO	Cole Information Services
	DANTE LONGINOS	Cole Information Services
	DAVID LYLE	Cole Information Services
	GRAGEOLA MADEL	Cole Information Services
	JOSE MARAVILLA	Cole Information Services
	GUADALUPE MARIN	Cole Information Services
	CHRISTOPHER MARTINEZ	Cole Information Services
	CLARA MCDONALD	Cole Information Services
	LEONARD MODEN	Cole Information Services
	OLLIE MOORE	Cole Information Services
	EDITH MORALES	Cole Information Services
	IVA MORGAN	Cole Information Services
	JOSE GOMEZ	Cole Information Services
	GOETHE GONZALEZ	Cole Information Services
	DEBBIE GUERRERO	Cole Information Services
	GUADALUPE HERNANDEZ	Cole Information Services
	MACEDONIOJUAN HERNANDEZ	Cole Information Services
	JOSE RAZO	Cole Information Services
	VIRGINIA RAZO	Cole Information Services
	FREDDY REYES	Cole Information Services
	FELIX RODRIGUEZ	Cole Information Services
	ANA SANCHEZ	Cole Information Services
	JENNIFER BENNET	Cole Information Services
	JULIAN BUTRON	Cole Information Services
	JANICE CAMERON	Cole Information Services
	JOSE CASTRO	Cole Information Services
	IRENE CONTRERAS	Cole Information Services

FINDINGS

Year	Uses	Source
2017	JAMES THOMPSON	Cole Information Services
	JOSE TORNERO	Cole Information Services
	REGINA TRUJILLO	Cole Information Services
	FRANCISCO DELARACORTES	Cole Information Services
	LEANDRO GARCIA	Cole Information Services
	HERNANDEZ GARRIDO	Cole Information Services
	EDMUNDO GOMEZ	Cole Information Services
	MARIO GONZALES	Cole Information Services
	PAULA GONZALEZ	Cole Information Services
	BILL HAMILTON	Cole Information Services
	ZULVI REYES	Cole Information Services
	WILLIAM ROBERTSON	Cole Information Services
	MANUEL ROBLES	Cole Information Services
	IBETH RUVALCABA	Cole Information Services
	ADELA SAAD	Cole Information Services
	SARA BRAY	Cole Information Services
	ANGEL CAZARES	Cole Information Services
	JOSE CHAVEZ	Cole Information Services
	REN CHAY	Cole Information Services
	SONJA COLACION	Cole Information Services
	NUBIA VAZQUEZ	Cole Information Services
	FLOR VEGA	Cole Information Services
	JESSICA DAVIDSOM	Cole Information Services
	DEBRA DICKEY	Cole Information Services
	PAUL EKLUND	Cole Information Services
	CARLOS FLORES	Cole Information Services
	AARON WALL	Cole Information Services
	JAIME YANEZ	Cole Information Services
	RANGEL ZARATE	Cole Information Services
	ERNESTO ZARATE	Cole Information Services
	WILLIAMS ABARCA	Cole Information Services
	MANUEL ALEJANDRE	Cole Information Services
	ROSENDO ALVAREZ	Cole Information Services
	PACHITA ALVAREZ	Cole Information Services
	ELIZABETH AUSTIN	Cole Information Services
	CHRISTIAN PALACIOS	Cole Information Services
	TERRY PERRY	Cole Information Services
	YANCY RAMIREZ	Cole Information Services

FINDINGS

Year	Uses	Source
2017	PATRICK HOY	Cole Information Services
	IVANA HUDSON	Cole Information Services
	KASHEED JOHNSON	Cole Information Services
	JOANIE KELL	Cole Information Services
	EDWARD KENNEDY	Cole Information Services
	SAM KIM	Cole Information Services
	MARISOL VILLEDA	Cole Information Services
	WILLIAM DALTON	Cole Information Services
	EMILIA ESCOBEDO	Cole Information Services
	STEVEN FELTS	Cole Information Services
	ELOISA FERNANDEZ	Cole Information Services
	ALICE FRIETZE	Cole Information Services
	FIDEL VIRAMONTES	Cole Information Services
	RAUL ALCARRAZ	Cole Information Services
	IGNACIO ALVAREZ	Cole Information Services
	HECTOR ANAYA	Cole Information Services
	YOLANDA ARCEO	Cole Information Services
	RAUL NAVARRETE	Cole Information Services
	ESTHER OCHOA	Cole Information Services
	DAISY OLIVAS	Cole Information Services
	JERRON PACK	Cole Information Services
	DARRYL PINK	Cole Information Services
	LYSA HUNT	Cole Information Services
	CORAZON LAGAT	Cole Information Services
	ALEJANDRA LEYVA	Cole Information Services
	RAUL LOPEZ	Cole Information Services
	LAZORO MARIN	Cole Information Services
	ELODIA MARTINEZ	Cole Information Services
	BERTHA MEREZKO	Cole Information Services
	EZEQUIEL MONTES	Cole Information Services
2014	JOSE RIVERA	Cole Information Services
	ANITA ROMERO-DAWSON	Cole Information Services
	ROGER SCHMIDT	Cole Information Services
	ROBERT SPEAKES	Cole Information Services
	RICHARD SUPPES	Cole Information Services
	AMALIA ALDAMA	Cole Information Services
	ROSENDO ALVAREZ	Cole Information Services
	ELIZABETH AUSTIN	Cole Information Services

FINDINGS

Year	Uses	Source
2014	SUSAN BOWERS	Cole Information Services
	JOSE CHAVEZ	Cole Information Services
	REN CHAY	Cole Information Services
	SONJA COLACION	Cole Information Services
	PAUL EKLUND	Cole Information Services
	STEVE FELTS	Cole Information Services
	CARLOS FLORES	Cole Information Services
	LORA FRIETZE	Cole Information Services
	TERRY GARKOW	Cole Information Services
	CHANCE HANES	Cole Information Services
	PATRICK HOY	Cole Information Services
	JOANIE KELL	Cole Information Services
	EDWARD KENNEDY	Cole Information Services
	SAM KIM	Cole Information Services
	JOSIE LEAL	Cole Information Services
	JOHN LEITLEIN	Cole Information Services
	ROBERT LEMMONS	Cole Information Services
	DAVID LYLE	Cole Information Services
	JOSE MARAVILLA	Cole Information Services
	EDUARDO MARTINEZ	Cole Information Services
	DANNY MORENO	Cole Information Services
	R NORTHCUTT	Cole Information Services
	CHRISTIAN PALACIOS	Cole Information Services
	ISAIAS PEREZ	Cole Information Services
	TERRY PERRY	Cole Information Services
	MICHAEL PRYCE	Cole Information Services
	JOSE RAMIREZGARCIA	Cole Information Services
	WILLIAM ROBERTSON	Cole Information Services
	TANIA SEYMOUR	Cole Information Services
	JACK THOMPSON	Cole Information Services
	AARON WALL	Cole Information Services
	ERNESTO ZARATE	Cole Information Services
	T SIMON	Cole Information Services
	JAMES THOMPSON	Cole Information Services
	REGINA TRUJILLO	Cole Information Services
	VIRGINIA VALENZUELA	Cole Information Services
	ROBERT WAINWRIGHT	Cole Information Services
	GAIL WALLACE	Cole Information Services

FINDINGS

Year	Uses	Source
2014	IGNACIO ALVAREZ	Cole Information Services
	MICHAEL AMACHER	Cole Information Services
	MARGRET BRIGGER	Cole Information Services
	JEFF CLEPPE	Cole Information Services
	JOHN COLEMAN	Cole Information Services
	CHARLES CRAWHORN	Cole Information Services
	WILLIAM DALTON	Cole Information Services
	SUSAN DRAKE	Cole Information Services
	BRENDA FARLEY	Cole Information Services
	ELOISA FERNANDEZ	Cole Information Services
	NOEMI GALLEGO	Cole Information Services
	MANUEL GARCIA	Cole Information Services
	MARIA GOMEZ	Cole Information Services
	DENNISE HERNANDEZ	Cole Information Services
	MARICELA HUERTA	Cole Information Services
	ARLENE MARTINEZ	Cole Information Services
	EDIS MARTINEZ	Cole Information Services
	STEVEN MCGEORGE	Cole Information Services
	KARA MCQUISTON	Cole Information Services
	KARI MEAD	Cole Information Services
	ELVIA MENDOZA	Cole Information Services
	HENRY MONCAYO	Cole Information Services
	GILBERT MORALES	Cole Information Services
	JOHN PECK	Cole Information Services
	DUNG PHAN	Cole Information Services
	JUAN RODRIGUEZ	Cole Information Services
	ALEJANDRO ROMERO	Cole Information Services
	FRANCISCO RUIZ	Cole Information Services
	RUBEN SAAVEDRA	Cole Information Services
	DAWNDI TRAMELL	Cole Information Services
	MANUELA VALENCIANA	Cole Information Services
	REBECCA VARGAS	Cole Information Services
	PABLO VAZQUEZ	Cole Information Services
	FRANCISCA VILLALPANDO	Cole Information Services
	FIDEL VIRAMONTES	Cole Information Services
	BEVERLY BARTILET	Cole Information Services
	ISMAEL BECERRA	Cole Information Services
	PEGGY BUSHMAN	Cole Information Services

FINDINGS

Year	Uses	Source
2014	HERMAN COLLINS	Cole Information Services
	GRISELDA DELAROSA	Cole Information Services
	RICHARD ESSLINGER	Cole Information Services
	KEVIN FALOON	Cole Information Services
	TISHA GAYTON	Cole Information Services
	LAWANDA GILMOUR	Cole Information Services
	KAYLA GINTHER	Cole Information Services
	SEGOVIA GONZALEZ	Cole Information Services
	ANGELA HILDERBRAND	Cole Information Services
	MARIA IBARRA	Cole Information Services
	FRANK LIGHT	Cole Information Services
	RAUL LOPEZ	Cole Information Services
	SABAS MARISCAL	Cole Information Services
	SANDRA MERCADO	Cole Information Services
	EZEQUIEL MONTES	Cole Information Services
	PAULA MORROW	Cole Information Services
	PEDRO OMANA	Cole Information Services
	RAUL PADILLA	Cole Information Services
	RAMIRO RAMIREZ	Cole Information Services
	RUVIE RIOS	Cole Information Services
	CARL STANLEY	Cole Information Services
	TONY THEUS	Cole Information Services
	MARIA TORNERO	Cole Information Services
	JOSEPH VALDEZ	Cole Information Services
	CARLOS VERDIN	Cole Information Services
	JOSE AMADOR	Cole Information Services
	ARTHUR AYERS	Cole Information Services
	JOHANA CORTEZ	Cole Information Services
	MARCO CORTEZ	Cole Information Services
	ROBERT CRAIG	Cole Information Services
	PENNY DEBRECENI	Cole Information Services
	ENRIQUE DIAZ	Cole Information Services
	RAFAEL DIAZ	Cole Information Services
	GRACE ESCOBEDO	Cole Information Services
	SHANNON ESTRADA	Cole Information Services
	MIKE FINN	Cole Information Services
	FERNANDO GUTIERREZ	Cole Information Services
	WILLIAM HENRIQUEZ	Cole Information Services

FINDINGS

Year	Uses	Source
2014	LINDA KHACHATOORIAN	Cole Information Services
	CLAUDE LOFTON	Cole Information Services
	AGUILAR LUIS	Cole Information Services
	ELLEN MCCRAW	Cole Information Services
	TERRENCE MCHATTEN	Cole Information Services
	JORGE MILLAN	Cole Information Services
	MANUEL PENAFLOR	Cole Information Services
	LUIS RODRIGUEZ	Cole Information Services
	CHRISTOPHER SOLOMON	Cole Information Services
	EFRAIN SORIANO	Cole Information Services
	ROBERT STEIGLEMAN	Cole Information Services
	CURTIS TAYLOR	Cole Information Services
	BARRY WEISENBERG	Cole Information Services
	D WINKELMAN	Cole Information Services
	CARLOS ARREOLA	Cole Information Services
	TOM ASCENSIO	Cole Information Services
	MARIA AVALOS	Cole Information Services
	JAIME BARBOSA	Cole Information Services
	SANDRA BAUTISTA	Cole Information Services
	DANIEL BOUGHNER	Cole Information Services
	FRANCES BRODA	Cole Information Services
	SUE BROWN	Cole Information Services
	EDUARDO CALLEROS	Cole Information Services
	M CAROLYN	Cole Information Services
	JOSE CASTRO	Cole Information Services
	ISRAEL CUEVA	Cole Information Services
	FRANCISCO DELARACORTES	Cole Information Services
	KURT DOWNEY	Cole Information Services
	VICTOR ESPINOZA	Cole Information Services
	JOSE GOMEZ	Cole Information Services
	MARIA HERMOSILLO	Cole Information Services
	TEROY HILL	Cole Information Services
	TIMOTHY JASPER	Cole Information Services
	MAGDALENA JIMENEZ	Cole Information Services
	MARIA JIMENEZ	Cole Information Services
	CHARLES KEEL	Cole Information Services
	BEN LAMAS	Cole Information Services
	DAVID LONGCOR	Cole Information Services

FINDINGS

Year	Uses	Source
2014	DELFINO MANJARREZ	Cole Information Services
	WILLIAM MARRISON	Cole Information Services
	LEONARD MODEN	Cole Information Services
	AMATO MULITALO	Cole Information Services
	JULIE NUGENT	Cole Information Services
	OSCAR PADILLA	Cole Information Services
	AMANDA PENA	Cole Information Services
	RALPH RODARTE	Cole Information Services
	GORDON CARLSON	Cole Information Services
	JOSE CASTANEDA	Cole Information Services
	MICHELLE COLIN	Cole Information Services
	KIMBERLY EDWARDS	Cole Information Services
	CASHION ELENA	Cole Information Services
	FRED FUCHS	Cole Information Services
	ROSA GONZALES	Cole Information Services
	FRANK GOYTIA	Cole Information Services
	BRIAN GREEN	Cole Information Services
	HENRY HARRIS	Cole Information Services
	BRANDY JACKSON	Cole Information Services
	ARMANDO JUAREZ	Cole Information Services
	SHEILA LATHAM	Cole Information Services
	SHIRLEY MCINTOSH	Cole Information Services
	CHARLES MAKI	Cole Information Services
	SHELBY MCMASTER	Cole Information Services
	MARGARITA MUNOZ	Cole Information Services
	CARLOS NISTHAL	Cole Information Services
	LOUISE ORTIZ	Cole Information Services
	VERONICA PICAZO	Cole Information Services
	DAVID POLUS	Cole Information Services
	CARLOS RAMIREZ	Cole Information Services
	ANACLETO REYES	Cole Information Services
	MARCY RICHARDSON	Cole Information Services
	ORLANDO ROBLEDO	Cole Information Services
	MARIO RODRIGUEZ	Cole Information Services
	ROSA SALDANA	Cole Information Services
	TOM SELBY	Cole Information Services
	HELEN STONE	Cole Information Services
	TAMI ANDERSON	Cole Information Services

FINDINGS

Year	Uses	Source
2014	JOSE BARBOA	Cole Information Services
	JOHN BARRAZA	Cole Information Services
	JOSE BELTRAN	Cole Information Services
	EVELYN CALDERAS	Cole Information Services
	DANIEL CAMPANA	Cole Information Services
	NOEMI CISNEROS	Cole Information Services
	RAMON CORNEJO	Cole Information Services
	STEPHANIE DARLEY	Cole Information Services
	ELIZABETH DURAN	Cole Information Services
	GOMEZ EDMUNDO	Cole Information Services
	RAUL ESTRELLA	Cole Information Services
	ABRAHAM FUENTES	Cole Information Services
	JORGE FUNES	Cole Information Services
	GUADALUPE GOMEZ	Cole Information Services
	DOLORES HERNANDEZ	Cole Information Services
	MELISSA HERNANDEZ	Cole Information Services
	FLOYD KAMMERER	Cole Information Services
	ANDREW KISTER	Cole Information Services
	ANGEL LEMUS	Cole Information Services
	CLAUDIA LOPEZ	Cole Information Services
	EVERETT MALONE	Cole Information Services
	TONY MARTINEZ	Cole Information Services
	RANDY MICHAEL	Cole Information Services
	JESSICA OCANA	Cole Information Services
	GASTON PALMA	Cole Information Services
	MIGUEL RAMIREZ	Cole Information Services
	FEDERICO RAMIREZ	Cole Information Services
	PHILLIP REAMS	Cole Information Services
	CESAR REGALADO	Cole Information Services
	MARIA RICO	Cole Information Services
	ROSALIO ROBLES	Cole Information Services
	SALVADOR ROSEL	Cole Information Services
	JOSE SALAZAR	Cole Information Services
	ROBERT SETTLES	Cole Information Services
	MONA AGUILAR	Cole Information Services
	NANCY ALMAZAN	Cole Information Services
	YURI BALDERRAMA	Cole Information Services
	JOSEPH BENNETT	Cole Information Services

FINDINGS

Year	Uses	Source
2014	JENKYNS CANDIA	Cole Information Services
	MARYBELL CANTORAL	Cole Information Services
	ISRAEL CHAVEZ	Cole Information Services
	FAUSTINO CONTRERAS	Cole Information Services
	JUAN DESANTIAGO	Cole Information Services
	SCOTT DEWBERRY	Cole Information Services
	JOSEPH DELEON	Cole Information Services
	CATALINA DOW	Cole Information Services
	JOSE ESCOBAR	Cole Information Services
	RAUL FLORES	Cole Information Services
	JASON FOREMAN	Cole Information Services
	DINA HARTLEY	Cole Information Services
	NICASIO HERNANDEZ	Cole Information Services
	BENITA HOLLOWAY	Cole Information Services
	TYANA JACKSON	Cole Information Services
	CARL JAMES	Cole Information Services
	KEITH JOHNSON	Cole Information Services
	KATHRYN LEWIS	Cole Information Services
	JOSE MARTINEZ	Cole Information Services
	ERNEST MARTINEZ	Cole Information Services
	CARLOS ORTEGA	Cole Information Services
	SUZANNE PEBLEY	Cole Information Services
	JUANA PEREZ	Cole Information Services
	ALICIA RIOS	Cole Information Services
	MOEVASA SAGAPOLUTELE	Cole Information Services
	MICHAEL SANTARO	Cole Information Services
	JESUS SANTIAGO	Cole Information Services
	ROBERT SETSER	Cole Information Services
	DOROTHY THATJE	Cole Information Services
	BOUNMY VONGAMATH	Cole Information Services
	JUDY WULFF	Cole Information Services
	MARGARITA AHUMADA	Cole Information Services
	MICHAEL ANASTASI	Cole Information Services
	I AYAU	Cole Information Services
	AARON BLANCA	Cole Information Services
	LOURDES BRIONES	Cole Information Services
	SAMUEL BULLARD	Cole Information Services
	DANELLE CARLSEN	Cole Information Services

FINDINGS

Year	Uses	Source
2014	SWAN LAKE MOBILE COUNTRY ESTATES	Cole Information Services
	LAKE MART	Cole Information Services
	COMMUNITY MOBILE HOME SALES	Cole Information Services
2009	KARLA FRAZIER	Cole Information Services
	DARWIN FRINT	Cole Information Services
	FRANK LIGHT	Cole Information Services
	RAUL LOPEZ	Cole Information Services
	KEITH WALSH	Cole Information Services
	JAMES WRAY	Cole Information Services
	ABEL CALDERAS	Cole Information Services
	MARIA CAMBERO	Cole Information Services
	PRISCILA CASTLE	Cole Information Services
	ARABELIA CAZARES	Cole Information Services
	JUAN CONTRERAS	Cole Information Services
	RAUL PADILLA	Cole Information Services
	GUSTAVO PANTOJA	Cole Information Services
	DIEGO NEGRETE	Cole Information Services
	DOLORES JENKYNS	Cole Information Services
	THELMA BELTRAN	Cole Information Services
	TINOCO ZOLORZANO	Cole Information Services
	TIM ANHAISER	Cole Information Services
	ROSENDO ALVAREZ	Cole Information Services
	JOSE MARAVILLA	Cole Information Services
	FRANK MAYO	Cole Information Services
	ERNESTO MORENO	Cole Information Services
	ORLANDO SANTIAGO	Cole Information Services
	TANIA SEYMOUR	Cole Information Services
	SAM KIM	Cole Information Services
	JOSE RAMIREZGARCIA	Cole Information Services
	ANTONIO RAZOS	Cole Information Services
	GLORIA ROBLEDO	Cole Information Services
	ALVARO ROBLEDO	Cole Information Services
	MARCO RODAS	Cole Information Services
	MANUEL RODRIGUEZ	Cole Information Services
	STEVEN ROMO	Cole Information Services
	JOSE RICO	Cole Information Services
	WANDA HARRIS	Cole Information Services
	BLANCA HERNANDEZ	Cole Information Services

FINDINGS

Year	Uses	Source
2009	JOSE HERNANDEZ	Cole Information Services
	PATRICK HOY	Cole Information Services
	RUTH TRUJILLO	Cole Information Services
	POZO DEL	Cole Information Services
	CRAIG DAYTON	Cole Information Services
	C DURAN	Cole Information Services
	DEBRA DICKEY	Cole Information Services
	MARINA GARCIA	Cole Information Services
	GERALD GARCIA	Cole Information Services
	EDUARDO GARCIA	Cole Information Services
	PAUL EKLUND	Cole Information Services
	LORNE GOODWON	Cole Information Services
	ADOLFO GELLI	Cole Information Services
	LESTER GREEN	Cole Information Services
	JOHN LEITLEIN	Cole Information Services
	ROBERT LEMMONS	Cole Information Services
	KATHERYN LEWIS	Cole Information Services
	MATTHEW LANE	Cole Information Services
	DAVID LYLE	Cole Information Services
	AARON WALL	Cole Information Services
	JENNIFER WONDERS	Cole Information Services
	KENNETH WULFF	Cole Information Services
	BRIAN CANNON	Cole Information Services
	ANDRES CASTILLO	Cole Information Services
	REN CHAY	Cole Information Services
	SONJA COLACION	Cole Information Services
	JOSE CUEVA	Cole Information Services
	TERRY PERRY	Cole Information Services
	MICHAEL PRYCE	Cole Information Services
	SUSAN BOWERS	Cole Information Services
	CHRISTINA ZUNIGA	Cole Information Services
	FRANCES BRODA	Cole Information Services
	MICHELLE BRUNSLOMA	Cole Information Services
	DANIEL BOUGHNER	Cole Information Services
	MICHAEL AMACHER	Cole Information Services
	MICKI MACINTOSH	Cole Information Services
	KARI MEAD	Cole Information Services
	ROBBIE MENDES	Cole Information Services

FINDINGS

Year	Uses	Source
2009	STEVEN MCGEORGE	Cole Information Services
	KARA MCQUISTON	Cole Information Services
	HENRY MONCAYO	Cole Information Services
	MARIA MORALES	Cole Information Services
	ANA MORENO	Cole Information Services
	RICHARD MIRAMONTES	Cole Information Services
	SUSAN STRAWBRIDGE	Cole Information Services
	LILIANA VILLA	Cole Information Services
	ISAAC VIRAMONTES	Cole Information Services
	MANUELA VALENCIANA	Cole Information Services
	GILBERTO VELASCO	Cole Information Services
	NICK KING	Cole Information Services
	GILBERT RAMIREZ	Cole Information Services
	DENNISE HERNANDEZ	Cole Information Services
	LAURA HOLST	Cole Information Services
	HOUSTON THOMPSON	Cole Information Services
	MARIA ORNELAS	Cole Information Services
	WILLIAM DALTON	Cole Information Services
	SUSAN DRAKE	Cole Information Services
	MARLENE DYE	Cole Information Services
	NOEMI GALLEGO	Cole Information Services
	SANDRA GOMEZ	Cole Information Services
	SANDRA GERLACH	Cole Information Services
	JILLIAN CARDIEL	Cole Information Services
	JEFF CLEPPE	Cole Information Services
	JOHN COLEMAN	Cole Information Services
	JOANNE CORLISS	Cole Information Services
	BRANDY CORONA	Cole Information Services
	DUNG PHAN	Cole Information Services
	LEON PIERCE	Cole Information Services
	CANDIA JENKYNS	Cole Information Services
	BECKY BABCOCK	Cole Information Services
	MARGRET BRIGGER	Cole Information Services
	MARCIE FONSECA	Cole Information Services
	ALICE FRIETZE	Cole Information Services
	D FUNES	Cole Information Services
	GINNA AGULARA	Cole Information Services
	MARGARET MATINIAN	Cole Information Services

FINDINGS

Year	Uses	Source
2009	PREDENCIO MENDOZA	Cole Information Services
	EZEQUIEL MONTES	Cole Information Services
	LOURDES MOTA	Cole Information Services
	COVARRUBIAS SAL	Cole Information Services
	JUNE SETSER	Cole Information Services
	ROBERT SPEAKES	Cole Information Services
	EDUARDA VINALAY	Cole Information Services
	PEDRO RODRIGUEZ	Cole Information Services
	JOHN ROHRER	Cole Information Services
	JUANA REYES	Cole Information Services
	WILLIAM HARRIS	Cole Information Services
	SERAFIN HERNANDEZ	Cole Information Services
	ANGELA HILDERBRAND	Cole Information Services
	J THIELEN	Cole Information Services
	RICHARD DELPOZO	Cole Information Services
	JUAN GARCIA	Cole Information Services
	DAVID GARDNER	Cole Information Services
	RICHARD ESSLINGER	Cole Information Services
	LAWANDA GILMOUR	Cole Information Services
	OMAR LOPEZ	Cole Information Services
	ALFREDO CALDERON	Cole Information Services
	ELENA CASHION	Cole Information Services
	LILI CAZARES	Cole Information Services
	GARY WILSON	Cole Information Services
	THOMAS YOUNG	Cole Information Services
	ROBERT CRAIG	Cole Information Services
	JUNE CROSS	Cole Information Services
	JONATHAN PORTER	Cole Information Services
	NANCY BRISTTON	Cole Information Services
	BRAD FLETCHER	Cole Information Services
	MIKE FINN	Cole Information Services
	CHRIS BUSH	Cole Information Services
	RANDI FOLEY	Cole Information Services
	ROSE FUQUA	Cole Information Services
	MIGUEL ALFARO	Cole Information Services
	JOSE ARGUETA	Cole Information Services
	P AYERS	Cole Information Services
	RAMON MADRIGAL	Cole Information Services

FINDINGS

Year	Uses	Source
2009	WILLIAM MARRISON	Cole Information Services
	TOM ASCENSIO	Cole Information Services
	MARIA AVALOS	Cole Information Services
	AIDA AVILA	Cole Information Services
	MABEL MCGILL	Cole Information Services
	OLLIE MOORE	Cole Information Services
	BEATRIZ MOSQUEDA	Cole Information Services
	PATRICK SATTERFIELD	Cole Information Services
	OLYMPIA IBARRA	Cole Information Services
	JOSE VALDERRAMA	Cole Information Services
	VIRGINIA VALENZUELA	Cole Information Services
	VERN VANDERVEEN	Cole Information Services
	MORGAN ISAACS	Cole Information Services
	CHARLES KEEL	Cole Information Services
	DAN KENNEDY	Cole Information Services
	GORDON RAY	Cole Information Services
	ROSA ROSAS	Cole Information Services
	MARIA HERMOSILLO	Cole Information Services
	MANUELA HERRERA	Cole Information Services
	DAVID HIXON	Cole Information Services
	JOSE TORNERO	Cole Information Services
	DANIEL TOSSOUNIAN	Cole Information Services
	JAMES THOMPSON	Cole Information Services
	KURT DOWNEY	Cole Information Services
	JOHN GARCIA	Cole Information Services
	VICTOR ESPINOZA	Cole Information Services
	SERGIO LEYVA	Cole Information Services
	DEBBIE GUERRERO	Cole Information Services
	CESAR GUERRERO	Cole Information Services
	MIDA LONGCOR	Cole Information Services
	T LOPEZ	Cole Information Services
	ROBERT WAINWRIGHT	Cole Information Services
	EDUARDO CALLEROS	Cole Information Services
	LARRY WIDENER	Cole Information Services
	C CHRISTIAN	Cole Information Services
	L YOUNG	Cole Information Services
	IRENE CONTRERAS	Cole Information Services
	JUAN CORTEZ	Cole Information Services

FINDINGS

Year	Uses	Source
2009	ASAIS NOBERTO	Cole Information Services
	CORA JACKSON	Cole Information Services
	TIMOTHY JASPER	Cole Information Services
	DAVE BACKHAUS	Cole Information Services
	RUPERTO BARRERA	Cole Information Services
	SANDRA BAUTISTA	Cole Information Services
	JENNIFER BENNET	Cole Information Services
	SONIA MORALES	Cole Information Services
	RANDY MICHAEL	Cole Information Services
	STEVEN STAHL	Cole Information Services
	MARCIA VICK	Cole Information Services
	CARLOS VERDIN	Cole Information Services
	ANDREW KISTER	Cole Information Services
	JOSE RAMIREZ	Cole Information Services
	FEDERICO RAMIREZ	Cole Information Services
	MICHAEL ROBERTS	Cole Information Services
	JACQUELINE HAGEMAN	Cole Information Services
	MICHAEL HANER	Cole Information Services
	MODESTO HERNANDEZ	Cole Information Services
	GABRIELA HERRERA	Cole Information Services
	BEVERLY THIBODEAU	Cole Information Services
	KIDA THOMPSON	Cole Information Services
	ESTHER THOMPSON	Cole Information Services
	RAUL ESTRELLA	Cole Information Services
	GUADALUPE GOMEZ	Cole Information Services
	PATRICK LEE	Cole Information Services
	EUGENE WHITTINGTON	Cole Information Services
	ESPERANZA WONG	Cole Information Services
	ALEJANDRO CAISEDO	Cole Information Services
	EVELYN CALDERAS	Cole Information Services
	HEATHER WILLIAMS	Cole Information Services
	GUERRERO CESAR	Cole Information Services
	RAMON CORNEJO	Cole Information Services
	MARIA CRUZ	Cole Information Services
	GEORGE PADILLA	Cole Information Services
	CLARENCE PILARCZYK	Cole Information Services
	CRUZ BARBOA	Cole Information Services
	BONIFACIO BARDALES	Cole Information Services

FINDINGS

Year	Uses	Source
2009	MARY BARNES	Cole Information Services
	JOHN BARRAZA	Cole Information Services
	DOMINGA BONILLA	Cole Information Services
	VALINDA BURNFIN	Cole Information Services
	ABRAHAM FUENTES	Cole Information Services
	KIMBERLY MEANS	Cole Information Services
	JOSEFINA MELENDEZ	Cole Information Services
	JAMES MODEN	Cole Information Services
	JORGE MILLAN	Cole Information Services
	APOLINAR SANCHEZ	Cole Information Services
	CHRISTOPHER SOLOMON	Cole Information Services
	EFRAIN SORIANO	Cole Information Services
	ROBERT STEIGLEMAN	Cole Information Services
	IRENE SUMMONS	Cole Information Services
	ROSA VILLASANA	Cole Information Services
	LUIS QUIROZ	Cole Information Services
	GRACIELA INIGUEZ	Cole Information Services
	LINDA KHACHATOORIAN	Cole Information Services
	SHARON ROBERTSON	Cole Information Services
	LISA REED	Cole Information Services
	G HORTEMILLER	Cole Information Services
	CURTIS TAYLOR	Cole Information Services
	SANDOR DEBRECENI	Cole Information Services
	SHANE DUBYAK	Cole Information Services
	ENRIQUE DIAZ	Cole Information Services
	HECTOR DIOSDADO	Cole Information Services
	JANICE DIXON	Cole Information Services
	GRACE ESCOBEDO	Cole Information Services
	OLIVIA GOMEZ	Cole Information Services
	FERNANDO GUTIERREZ	Cole Information Services
	GUADALUPE GUTIERREZ	Cole Information Services
	CLAUDE LOFTON	Cole Information Services
	GERARDO LOPEZ	Cole Information Services
	VELIZA AMAYA	Cole Information Services
	I AYAU	Cole Information Services
	CHARLES MAKI	Cole Information Services
	GERARDO MANZON	Cole Information Services
	ANITA MERRYMAN	Cole Information Services

FINDINGS

Year	Uses	Source
2009	TERRANCE MCHATTEN	Cole Information Services
	SHIRLEY MCINTOSH	Cole Information Services
	GUADALUPE SAENZ	Cole Information Services
	ROSA SALDANA	Cole Information Services
	FRANCISCO SILVA	Cole Information Services
	ENRIQUE SOLIS	Cole Information Services
	BOB SWEARINGEN	Cole Information Services
	ESTEBAN VILLAR	Cole Information Services
	CATHY KAMMERER	Cole Information Services
	MARIA KARR	Cole Information Services
	DANETTE VERA	Cole Information Services
	KENNETH KINNEY	Cole Information Services
	PRISCILLA RAMOS	Cole Information Services
	TINA ROBICHAU	Cole Information Services
	ROBERT ROSS	Cole Information Services
	MARCY RICHARDSON	Cole Information Services
	ANTHONY HODGE	Cole Information Services
	BILLIE HOLGUIN	Cole Information Services
	DOLORES HOUSTON	Cole Information Services
	PANADDA THINASOOK	Cole Information Services
	MARIA OROZCO	Cole Information Services
	MARIA ORTIZ	Cole Information Services
	JOSE DEJESUS	Cole Information Services
	PAMELLA DUNCANTELL	Cole Information Services
	HELEN GOMEZ	Cole Information Services
	JESSIE GOODNIGHT	Cole Information Services
	FRANK GOYTIA	Cole Information Services
	ALBERTA ECHEVARRIA	Cole Information Services
	JOSE LARA	Cole Information Services
	SARAH LARIOS	Cole Information Services
	JOHN WELLER	Cole Information Services
	RICHARD WELLS	Cole Information Services
	MICHELLE LOMELI	Cole Information Services
	RICHARD WORLEY	Cole Information Services
	GORDON CARLSON	Cole Information Services
	KIRK WINTER	Cole Information Services
	LONNITA WIRT	Cole Information Services
	SALVADOR COVARRUBIAN	Cole Information Services

FINDINGS

Year	Uses	Source
2009	REBECA COVARRUBIAS	Cole Information Services
	JESUS CURIEL	Cole Information Services
	DAVID POLUS	Cole Information Services
	CARLOS NISTHAL	Cole Information Services
	VICKY NORTON	Cole Information Services
	BRANDY JACKSON	Cole Information Services
	MAGDELENA JIMENEZ	Cole Information Services
	JAMES BEAL	Cole Information Services
	ISMAEL BELLO	Cole Information Services
	HEIDI BLUFF	Cole Information Services
	CHRISTINE BRAUN	Cole Information Services
	LOURDES BRIONES	Cole Information Services
	MICHELLE FLICK	Cole Information Services
	TYRONNE FERNANDO	Cole Information Services
	KIMBERLY FALOON	Cole Information Services
	SAMUEL BULLARD	Cole Information Services
	ALFONSO ARREOLA	Cole Information Services
	TONY MARTINEZ	Cole Information Services
	MARIA MCHUGH	Cole Information Services
	ARAGON MONICA	Cole Information Services
	JENNIFER MONTEON	Cole Information Services
	OPEN SESAME OVERHEAD DOOR CO	Cole Information Services
	RAEL TRANSPORTS	Cole Information Services
	MOBILE COMMUNITY MANAGEMENT CO	Cole Information Services
	TAHQUITZ COMPUTER SERVICES	Cole Information Services
	CLASSIC HOMES	Cole Information Services
	ADT	Cole Information Services
	LAKE MART	Cole Information Services
	COMMUNITY MOBILE HOME SALES	Cole Information Services
	HARRIS FEDORA EVELYN	Cole Information Services
	HECTOR AGUIRRE	Cole Information Services
	JOSE MARTINEZ	Cole Information Services
	JUDY MARVAL	Cole Information Services
	LARRY MEREGILLANO	Cole Information Services
	JOSE MEZA	Cole Information Services
	RENE MONROY	Cole Information Services
	MICHAEL SANTARO	Cole Information Services
	JESUS SANTIAGO	Cole Information Services

FINDINGS

Year	Uses	Source
2009	PAUL SCHIPPNICK	Cole Information Services
	MARIA SOLIS	Cole Information Services
	CAROLYN SMITH	Cole Information Services
	GUADALUPE VALENCIANA	Cole Information Services
	LUZ ITURBIDE	Cole Information Services
	BOUNMY VONGAMATH	Cole Information Services
	LUIS RAMOS	Cole Information Services
	DONNA RICHEY	Cole Information Services
	WENDY RINCON	Cole Information Services
	ALICIA RIOS	Cole Information Services
	JOSE RITO	Cole Information Services
	GEORGE REYNOLDS	Cole Information Services
	DINA HARTLEY	Cole Information Services
	BENITA HOLLOWAY	Cole Information Services
	C THOMPSON	Cole Information Services
	RAFAEL DELATORRE	Cole Information Services
	JOSEPH DELEON	Cole Information Services
	HELEN DAVIS	Cole Information Services
	CATALINA DOW	Cole Information Services
	CHUCK EVANS	Cole Information Services
	ALIDA EBENOW	Cole Information Services
	JACKIE GONZALEZ	Cole Information Services
	JESUS LUPERCIO	Cole Information Services
	FRANK GUERRERO	Cole Information Services
	ROBERTO GUERRERO	Cole Information Services
	RON WELDEN	Cole Information Services
	PATRICK LOADER	Cole Information Services
	STACY LOPEZ	Cole Information Services
	CECILIA LOPEZ	Cole Information Services
	ISRAEL CHAVEZ	Cole Information Services
	FAUSTINO CONTRERAS	Cole Information Services
	IGNACIO PANGELINAN	Cole Information Services
	VICTOR PAREDES	Cole Information Services
	ROBERT PEARSON	Cole Information Services
	SUZANNE PEBLEY	Cole Information Services
	EDGAR PENA	Cole Information Services
	KAREN PENCE	Cole Information Services
	JUANA PEREZ	Cole Information Services

FINDINGS

Year	Uses	Source
2009	CECILIA NAVA	Cole Information Services
	CARL JAMES	Cole Information Services
	JANET BEARDEN	Cole Information Services
	RICHARD JOHNS	Cole Information Services
	EVA FLORES	Cole Information Services
	JEAN FARRA	Cole Information Services
	LIVIA BURGUENO	Cole Information Services
	JASON FOREMAN	Cole Information Services
	MICHAEL ANASTASI	Cole Information Services
2004	CHRISTOPHER STEPHENS	Cole Information Services
	GILBERT STUEVE	Cole Information Services
	RONALD SMITH	Cole Information Services
	MARY VICUNA	Cole Information Services
	JEFF KLEPPE	Cole Information Services
	ENRIQUE RAMIREZ	Cole Information Services
	PRISCILLA RAMOS	Cole Information Services
	BOB SWEARINGEN	Cole Information Services
	DIANE VANTREASE	Cole Information Services
	ISRAEL RODRIGUEZ	Cole Information Services
	BILLIE HOLGUIN	Cole Information Services
	PANADDA THINASOOK	Cole Information Services
	DAVID HEAPS	Cole Information Services
	JILL HERNANDEZ	Cole Information Services
	JOHN HERNANDEZ	Cole Information Services
	HECTOR HERNANDEZ	Cole Information Services
	DEAN DALESIO	Cole Information Services
	DORETHA DAVIS	Cole Information Services
	HECTOR ESTRADA	Cole Information Services
	PAMELLA DUNCANTELL	Cole Information Services
	EDUARADO GOMEZ	Cole Information Services
	GORDON CARLSON	Cole Information Services
	INLAND EMPIRE CMNCTN SRVC	Cole Information Services
	JL CO	Cole Information Services
	LAKE MART	Cole Information Services
	SWAN LAKE MOBILE COUNTRY ESTT	Cole Information Services
	SHILO COX	Cole Information Services
	BEN NORVELL	Cole Information Services
	GARY BRONSART	Cole Information Services

FINDINGS

Year	Uses	Source
2004	JEFFREY ZUPAN	Cole Information Services
	LEONA BUSKER	Cole Information Services
	ALICIA SANCHEZ	Cole Information Services
	PHILLIP VARGAS	Cole Information Services
	LUIS RODRIGUEZ	Cole Information Services
	HAROLD THOMAS	Cole Information Services
	TIM ORMONDE	Cole Information Services
	ENRIQUE DIAZ	Cole Information Services
	ALBERTO DELAHUERTA	Cole Information Services
	ANGELO DENOFRIO	Cole Information Services
	VICTORIA ESPINOZA	Cole Information Services
	JERRY DUNN	Cole Information Services
	CLAUDE LOFTON	Cole Information Services
	JOHN LOFTON	Cole Information Services
	JOSE GONZALES	Cole Information Services
	SUSAN WELLS	Cole Information Services
	THOMAS YOUNG	Cole Information Services
	KELLY PONCE	Cole Information Services
	KENNETH JACK	Cole Information Services
	MIKE FINN	Cole Information Services
	CARRIE BURGESS	Cole Information Services
	ORLANDO AGUILAR	Cole Information Services
	CARLOS ARREOLA	Cole Information Services
	RAMON MADRIGAL	Cole Information Services
	WILLIAM MAGALLON	Cole Information Services
	LEONARD MODEN	Cole Information Services
	BILL SCOTT	Cole Information Services
	PATRICK SATTERFIELD	Cole Information Services
	MICHELE SUDDERTH	Cole Information Services
	HECTOR AGUIRRE	Cole Information Services
	RAUL MARISCAL	Cole Information Services
	DONNA MONTRIE	Cole Information Services
	XIOMARA MORALES	Cole Information Services
	JUAN MORAN	Cole Information Services
	HECTOR MORENO	Cole Information Services
	MICHAEL SANTARO	Cole Information Services
	CHAUNTEL KELLEY	Cole Information Services
	GEORGE REYNOLDS	Cole Information Services

FINDINGS

Year	Uses	Source
2004	WILLIAM ROMERO	Cole Information Services
	SERGIO HURTADO	Cole Information Services
	EMMA HERNANDEZ	Cole Information Services
	HELEN DAVIS	Cole Information Services
	ANSELMO GARCIA	Cole Information Services
	RONALD EPPERSON	Cole Information Services
	JOSE ESCOBAR	Cole Information Services
	JILL ECKER	Cole Information Services
	ANGELICA GOMEZ	Cole Information Services
	RICHARD LIPSEY	Cole Information Services
	ARTHUR LAWRENCE	Cole Information Services
	ISRAEL CHAVEZ	Cole Information Services
	ALEJANDRO CUENCA	Cole Information Services
	DAWN PRATT	Cole Information Services
	EDGAR PENA	Cole Information Services
	SUSAN PENNINGTON	Cole Information Services
	CLIFFORD JOHNSON	Cole Information Services
	THERESA BLONDI	Cole Information Services
	RAUL FLORES	Cole Information Services
	JEAN FARRA	Cole Information Services
	CHARLES MAKI	Cole Information Services
	VALERIE SHEARER	Cole Information Services
	MARTHA SRISAMAI	Cole Information Services
	HENRY MONCAYO	Cole Information Services
	GILBERT MORALES	Cole Information Services
	ELDA SUAREZ	Cole Information Services
	DONNA SMITH	Cole Information Services
	ISAAC VIRAMONTES	Cole Information Services
	JOHNNIE RAMIREZ	Cole Information Services
	EFRAIN RAMIREZ	Cole Information Services
	MARICELA HUERTA	Cole Information Services
	LORI EVANS	Cole Information Services
	JOHN ELLISON	Cole Information Services
	GERARDO GUERRERO	Cole Information Services
	GLORIA GUTIERREZ	Cole Information Services
	JOSE LOPEZ	Cole Information Services
	DIANA WILLIAMS	Cole Information Services
	BRYAN PARKER	Cole Information Services

FINDINGS

Year	Uses	Source
2004	IRENE NELSON	Cole Information Services
	DONALD POULTER	Cole Information Services
	MARCIE FONSECA	Cole Information Services
	RALPH MARTINEZ	Cole Information Services
	EZEQUIEL MONTES	Cole Information Services
	MARTA REYES	Cole Information Services
	TIM VANOUS	Cole Information Services
	JUAN VAREZ	Cole Information Services
	BRENDA ROBINSON	Cole Information Services
	LYN ROWLEY	Cole Information Services
	PENELOPE HODGE	Cole Information Services
	DAVID TRAMELL	Cole Information Services
	BRYAN GUERRERO	Cole Information Services
	JAMES LAWSON	Cole Information Services
	BLANCA CALDERON	Cole Information Services
	ANTONIO CASTILLO	Cole Information Services
	PRISCILA CASTLE	Cole Information Services
	MARIA NAVARRO	Cole Information Services
	HUGHY PHILLIPS	Cole Information Services
	DANIEL PEREZ	Cole Information Services
	CHRISTINE BRAUN	Cole Information Services
	MICHELLE FLICK	Cole Information Services
	ROBERT BINGER	Cole Information Services
	FRED FUCHS	Cole Information Services
	SAMUEL BULLARD	Cole Information Services
	BENJAMIN ABADINES	Cole Information Services
	JOAN MCCABE	Cole Information Services
	SCOTT MARTINEZ	Cole Information Services
	RANDALL MICHAEL	Cole Information Services
	MARTIN SETTLES	Cole Information Services
	ANA SMITH	Cole Information Services
	SHEILA VEGA	Cole Information Services
	BEVERLY RANDALL	Cole Information Services
	ANDREW KISTER	Cole Information Services
	DOLORES HERNANDEZ	Cole Information Services
	ROSIE HERNANDEZ	Cole Information Services
	BERTHA TELEVARA	Cole Information Services
	RICHARD OGLE	Cole Information Services

FINDINGS

Year	Uses	Source
2004	NASH TURNER	Cole Information Services
	RICHARD TURNER	Cole Information Services
	JOSE GARCIA	Cole Information Services
	RAUL ESTRELLA	Cole Information Services
	JOHN DUNN	Cole Information Services
	ELEANOR LOPEZ	Cole Information Services
	JEFFREY CARLSEN	Cole Information Services
	ROGELIO CASTRO	Cole Information Services
	GLENN PALENSKY	Cole Information Services
	WANDA CROWSON	Cole Information Services
	GEORGE PADILLA	Cole Information Services
	BERTHA PADILLA	Cole Information Services
	STANLEY NEWMAN	Cole Information Services
	MABEL BARBER	Cole Information Services
	WILLIAM BIGGERS	Cole Information Services
	PEGGY BUSHMAN	Cole Information Services
	ELIZABETH AUSTIN	Cole Information Services
	EFREN MONROY	Cole Information Services
	EDWARD KENNEDY	Cole Information Services
	FANNIE RAMOS	Cole Information Services
	MANUEL ROBLES	Cole Information Services
	MANUEL RODRIGUEZ	Cole Information Services
	JOSE RICO	Cole Information Services
	PATRICK HOY	Cole Information Services
	ELBY HUFF	Cole Information Services
	JOSE HERNANDEZ	Cole Information Services
	RONALD DALTON	Cole Information Services
	JERRY GARCIA	Cole Information Services
	FRANCISCO GARCIA	Cole Information Services
	MOISES GOMEZ	Cole Information Services
	AARON WALL	Cole Information Services
	RICHARD WILDE	Cole Information Services
	MICHAEL WILLIAMS	Cole Information Services
	DAVID LYLE	Cole Information Services
	TINA WOODS	Cole Information Services
	FRANK WOOLEY	Cole Information Services
	KISHA WRIGHT	Cole Information Services
	KATHLEEN COLE	Cole Information Services

FINDINGS

Year	Uses	Source
2004	JESUS CORONA	Cole Information Services
	DOUGLAS PROULX	Cole Information Services
	JUAN PULIDO	Cole Information Services
	TERRY PERRY	Cole Information Services
	STEVE FELTS	Cole Information Services
	CHARLES SMITH	Cole Information Services
	ELWYN ROBINSON	Cole Information Services
	JOSE ROMERO	Cole Information Services
	BASILIO ROSALES	Cole Information Services
	FRANCISCO ROSAS	Cole Information Services
	JULIO DOMINGUEZ	Cole Information Services
	JUDITH DOOKIE	Cole Information Services
	KURT DOWNEY	Cole Information Services
	HAL DEMPSEY	Cole Information Services
	REGINA TRUJILLO	Cole Information Services
	LUPE GARCIA	Cole Information Services
	ELIZABETH DUBYAK	Cole Information Services
	DEBRA GRAHM	Cole Information Services
	MONIQUE GUTIERREZ	Cole Information Services
	ELDORA LOPEZ	Cole Information Services
	JAMES LEFFLER	Cole Information Services
	HENRY WATERS	Cole Information Services
	CECILIA LUNA	Cole Information Services
	KITTRELL WIRT	Cole Information Services
	BASILIO PADILLA	Cole Information Services
	HECTOR PEREZ	Cole Information Services
	JUAN PEREZ	Cole Information Services
	DANIEL BOUGHNER	Cole Information Services
	FRANCES BRODA	Cole Information Services
	JAMES BROWN	Cole Information Services
	MICHELLE BRUNSLOMA	Cole Information Services
	JOSE FIGUEROA	Cole Information Services
	MICHAEL AMACHER	Cole Information Services
	ERNEST AGUILAR	Cole Information Services
	ANASTASIA ANDERSON	Cole Information Services
	CHARLES MAGANA	Cole Information Services
	MARTIN MARIN	Cole Information Services
2002	COMMUNITY MOBILE HOME	SBC PACIFIC BELL

FINDINGS

Year	Uses	Source
2002	SALES	SBC PACIFIC BELL
	Bautista Sandra	SBC PACIFIC BELL
	Clenny A M	SBC PACIFIC BELL
	LAKEMART	SBC PACIFIC BELL
	Whittington Eugene	SBC PACIFIC BELL
	Bright David	SBC PACIFIC BELL
	Aguilar Mona	SBC PACIFIC BELL
	APARTMENTS	SBC PACIFIC BELL
	Joyce Bob	SBC PACIFIC BELL
	Cadena M	SBC PACIFIC BELL
	Brown Willie	SBC PACIFIC BELL
	Loader Patrick J	SBC PACIFIC BELL
	Acosta Anthony	SBC PACIFIC BELL
	Gama Yesenia	SBC PACIFIC BELL
	Davis Helen J	SBC PACIFIC BELL
	Rosales Jose G	SBC PACIFIC BELL
	Hernandez Rosie R	SBC PACIFIC BELL
	Navarro Jose	SBC PACIFIC BELL
	Houston Dolores A	SBC PACIFIC BELL
	Mercado Maria	SBC PACIFIC BELL
	Gardella David	SBC PACIFIC BELL
	Berlin Christina A	SBC PACIFIC BELL
	Perez Hector	SBC PACIFIC BELL
	Lauder Michelle E E	SBC PACIFIC BELL
	Hernandez Jose	SBC PACIFIC BELL
	Lopresto Joanna	SBC PACIFIC BELL
	Mc Mahan C & S	SBC PACIFIC BELL
	FC SWAN LAKE MOBILE COUNTRY	SBC PACIFIC BELL
	ESTATES	SBC PACIFIC BELL
	Covarrubias Maria M	SBC PACIFIC BELL
	Estrada Humberto	SBC PACIFIC BELL
	Edwardson Valerie J	SBC PACIFIC BELL
	Andrus Lorityn	SBC PACIFIC BELL
	Walker Robert J	SBC PACIFIC BELL
	Deltoro Valerie	SBC PACIFIC BELL
	Christian C	SBC PACIFIC BELL
	Haskins Matthew V Mrs	SBC PACIFIC BELL
	Garcia Jose	SBC PACIFIC BELL

FINDINGS

Year	Uses	Source
2002	Richey Raymond L	SBC PACIFIC BELL
	Hidalgo Patricia	SBC PACIFIC BELL
	Bussard Dennis R	SBC PACIFIC BELL
	Fletcher Walter E	SBC PACIFIC BELL
	Hines Willa	SBC PACIFIC BELL
	Ayala Lailani	SBC PACIFIC BELL
	Hodge Penelope F	SBC PACIFIC BELL
	Frietze Alice G	SBC PACIFIC BELL
	Thompson Jack & Anna May	SBC PACIFIC BELL
	Pence Karen	SBC PACIFIC BELL
	Pence Karen	SBC PACIFIC BELL
	Barrionuevo Martin	SBC PACIFIC BELL
	Leon Anna L	SBC PACIFIC BELL
	Bright David	SBC PACIFIC BELL
	Palensky Glenn L	SBC PACIFIC BELL
	Palensky Glenn L	SBC PACIFIC BELL
	Walsh Keith	SBC PACIFIC BELL
	Dodson Timothy J	SBC PACIFIC BELL
	Taylor Graham & Laurene	SBC PACIFIC BELL
	Zarate Marisela	SBC PACIFIC BELL
	Devore Robert	SBC PACIFIC BELL
	Lawson James	SBC PACIFIC BELL
	Lancaster David W	SBC PACIFIC BELL
	Barker Jack	SBC PACIFIC BELL
	Veyna Apolonio	SBC PACIFIC BELL
	Summons T I	SBC PACIFIC BELL
	Nixon Nicole	SBC PACIFIC BELL
	Gomez Moises & Christine	SBC PACIFIC BELL
	Cass M	SBC PACIFIC BELL
	Jones Ethel L	SBC PACIFIC BELL
	Medina Oscar	SBC PACIFIC BELL
	HAMMER AV CONT D	SBC PACIFIC BELL
	Cont d	SBC PACIFIC BELL
	Aguayo Guadalupe	SBC PACIFIC BELL
	St Amant Louis	SBC PACIFIC BELL
	Robinson Brenda	SBC PACIFIC BELL
	Thompson Greg	SBC PACIFIC BELL
	Vickers Howard Jr	SBC PACIFIC BELL

FINDINGS

Year	Uses	Source
2002	Smith Mark R	SBC PACIFIC BELL
	Hickman David M	SBC PACIFIC BELL
	Hernandez Salvador	SBC PACIFIC BELL
	Frazier Karla	SBC PACIFIC BELL
	Stewart Thomas R	SBC PACIFIC BELL
	Martinez Martin Marin	SBC PACIFIC BELL
	Strange Edward	SBC PACIFIC BELL
	Holmes David S	SBC PACIFIC BELL
	Medina Rodriguez Ismael	SBC PACIFIC BELL
	TAHQUITZ COMPUTER	SBC PACIFIC BELL
	SERVICES	SBC PACIFIC BELL
	Longcor David W & Mida R	SBC PACIFIC BELL
	Guterrez Arturo	SBC PACIFIC BELL
	Gutierrez Arturo	SBC PACIFIC BELL
	Cleppe Jeff W	SBC PACIFIC BELL
	Blanco Rocio	SBC PACIFIC BELL
	Little Jeri	SBC PACIFIC BELL
	Jozwiak David	SBC PACIFIC BELL
	De Baene Albert A	SBC PACIFIC BELL
	Wall Aaron S	SBC PACIFIC BELL
	Garcia Jose	SBC PACIFIC BELL
	Kister Andrew	SBC PACIFIC BELL
	Chavez Israel	SBC PACIFIC BELL
	Hernandez Raul A	SBC PACIFIC BELL
	Quinn Joyce M	SBC PACIFIC BELL
	Sak Dolores D	SBC PACIFIC BELL
	Ward Lanett & Jay	SBC PACIFIC BELL
	Thibodeau Beverly	SBC PACIFIC BELL
	Swearingen Theresa M	SBC PACIFIC BELL
	Gallegos Naomi	SBC PACIFIC BELL
	Lofton Claude	SBC PACIFIC BELL
	Cheros Debbie	SBC PACIFIC BELL
	Boughner Daniel R	SBC PACIFIC BELL
	Setser June	SBC PACIFIC BELL
	Bayles John E II	SBC PACIFIC BELL
	Ray Winona	SBC PACIFIC BELL
	Thompson James	SBC PACIFIC BELL
	Thompson James	SBC PACIFIC BELL

FINDINGS

Year	Uses	Source
2002	Salvatierra Constantino	SBC PACIFIC BELL
	Domelina	SBC PACIFIC BELL
	Faloon Kimberly J	SBC PACIFIC BELL
	Duncatell Paulette	SBC PACIFIC BELL
	Catalan Elizabeth	SBC PACIFIC BELL
	Mulkey Keith A	SBC PACIFIC BELL
	Martin C	SBC PACIFIC BELL
	Roman Lee B	SBC PACIFIC BELL
	Campbell Norma	SBC PACIFIC BELL
	Snyder Michael W Bill	SBC PACIFIC BELL
	Taylor Curtis	SBC PACIFIC BELL
	Torres Eugene M	SBC PACIFIC BELL
	Hernandez Edguardo	SBC PACIFIC BELL
	Guteiurez Ramona	SBC PACIFIC BELL
	Welden Ron	SBC PACIFIC BELL
	Marrison Wm R	SBC PACIFIC BELL
	Aguirre Hector N	SBC PACIFIC BELL
	Aguirre Daisy	SBC PACIFIC BELL
	Wright Keisha	SBC PACIFIC BELL
	Munar David	SBC PACIFIC BELL
	Falace Endora	SBC PACIFIC BELL
	Debreceni Penny	SBC PACIFIC BELL
	Hernandez Emma	SBC PACIFIC BELL
	Burnfin Valinda	SBC PACIFIC BELL
	Beal Carolyn & James	SBC PACIFIC BELL
	Williams Jeffery	SBC PACIFIC BELL
	Joya Yolanda	SBC PACIFIC BELL
	Dovel Opal R	SBC PACIFIC BELL
	Dominguez Eric	SBC PACIFIC BELL
	Brown Mary A	SBC PACIFIC BELL
	Hortemiller G M	SBC PACIFIC BELL
	Medina Dante E	SBC PACIFIC BELL
	Manis Roger	SBC PACIFIC BELL
	Smjth Randy	SBC PACIFIC BELL
	Baker Kenneth W	SBC PACIFIC BELL
	Moczulski John & Elwanda	SBC PACIFIC BELL
	Herrera Gabriela	SBC PACIFIC BELL
	Proulx Douglas E	SBC PACIFIC BELL

FINDINGS

Year	Uses	Source
2002	Beier Melissa L	SBC PACIFIC BELL
	Anderson Apollo	SBC PACIFIC BELL
	Garibay Pedro	SBC PACIFIC BELL
	Burda B	SBC PACIFIC BELL
	Chavez Juan J	SBC PACIFIC BELL
	Broda FA	SBC PACIFIC BELL
	Stephens Chris	SBC PACIFIC BELL
	Swartout Darlene	SBC PACIFIC BELL
	Ormonde Timothy	SBC PACIFIC BELL
	Ponce Ben & Kelly	SBC PACIFIC BELL
	Shook W A	SBC PACIFIC BELL
	Mead KJ & DR	SBC PACIFIC BELL
	HAMNER AV	SBC PACIFIC BELL
	Cont d	SBC PACIFIC BELL
	HARRIS FEDORA EVELYN	SBC PACIFIC BELL
	Briones Incoencio	SBC PACIFIC BELL
	Patel Mukeshbhai L	SBC PACIFIC BELL
	Kennedy Dan	SBC PACIFIC BELL
	Belmonte Mary	SBC PACIFIC BELL
	Foreman JR	SBC PACIFIC BELL
	Foreman JR	SBC PACIFIC BELL
	Oldham Daryl M	SBC PACIFIC BELL
	Lozano Laura E	SBC PACIFIC BELL
	Hankinson Nicole	SBC PACIFIC BELL
	Soldan Nicole	SBC PACIFIC BELL
	Tegtmeyer Brent S	SBC PACIFIC BELL
	Arreola Alfonso	SBC PACIFIC BELL
	Dell Antonia	SBC PACIFIC BELL
	Neeiey Victoria	SBC PACIFIC BELL
	Franco Sergio	SBC PACIFIC BELL
	CLUB MAPLE RIDGE MOBILE	SBC PACIFIC BELL
	HOMES INC	SBC PACIFIC BELL
2001	COMNTYMOBILHM	Haines & Company, Inc.
	SLS EV 1 AS CANDLELIGHT	Haines & Company, Inc.
	TREASURES HASKINS Matthew Mrs	Haines & Company, Inc.
	JOHNSONE	Haines & Company, Inc.
	LAKEMART	Haines & Company, Inc.
	MAPLERIDGE MOBILE	Haines & Company, Inc.

FINDINGS

Year	Uses	Source
2001	HOMES INC SWANLKMBL	Haines & Company, Inc.
	ESTATES WHITTINGTON Eugene	Haines & Company, Inc.
1999	ROBERT LEMMONS	Cole Information Services
	KATHERYN LEWIS	Cole Information Services
	MATTHEW LANE	Cole Information Services
	DAVID LYLE	Cole Information Services
	LESTER GREEN	Cole Information Services
	AARON WALL	Cole Information Services
	JENNIFER WONDERS	Cole Information Services
	KENNETH WULFF	Cole Information Services
	BRIAN CANNON	Cole Information Services
	ANDRES CASTILLO	Cole Information Services
	SONJA COLACION	Cole Information Services
	REN CHAY	Cole Information Services
	TERRY PERRY	Cole Information Services
	JOSE CUEVA	Cole Information Services
	MICHAEL PRYCE	Cole Information Services
	SUSAN BOWERS	Cole Information Services
	KARLA FRAZIER	Cole Information Services
	DARWIN FRINT	Cole Information Services
	CHRISTINA ZUNIGA	Cole Information Services
	PREDENCIO MENDOZA	Cole Information Services
	ROBERT SPEAKES	Cole Information Services
	JUNE SETSER	Cole Information Services
	COVARRUBIAS SAL	Cole Information Services
	EDUARDA VINALAY	Cole Information Services
	PEDRO RODRIGUEZ	Cole Information Services
	JOHN ROHRER	Cole Information Services
	JUANA REYES	Cole Information Services
	ANGELA HILDERBRAND	Cole Information Services
	WILLIAM HARRIS	Cole Information Services
	SERAFIN HERNANDEZ	Cole Information Services
	J THIELEN	Cole Information Services
	RICHARD DELPOZO	Cole Information Services
	LAWANDA GILMOUR	Cole Information Services
	RICHARD ESSLINGER	Cole Information Services
	JUAN GARCIA	Cole Information Services
	DAVID GARDNER	Cole Information Services

FINDINGS

Year	Uses	Source
1999	FRANK LIGHT	Cole Information Services
	RAUL LOPEZ	Cole Information Services
	KEITH WALSH	Cole Information Services
	JAMES WRAY	Cole Information Services
	PRISCILA CASTLE	Cole Information Services
	ARABELIA CAZARES	Cole Information Services
	ABEL CALDERAS	Cole Information Services
	MARIA CAMBERO	Cole Information Services
	JUAN CONTRERAS	Cole Information Services
	RAUL PADILLA	Cole Information Services
	GUSTAVO PANTOJA	Cole Information Services
	DIEGO NEGRETE	Cole Information Services
	THELMA BELTRAN	Cole Information Services
	DOLORES JENKYNS	Cole Information Services
	TINOCO ZOLORZANO	Cole Information Services
	ROSENDO ALVAREZ	Cole Information Services
	JOSE MARAVILLA	Cole Information Services
	FRANK MAYO	Cole Information Services
	TIM ANHAISER	Cole Information Services
	ERNESTO MORENO	Cole Information Services
	TANIA SEYMOUR	Cole Information Services
	ORLANDO SANTIAGO	Cole Information Services
	JOSE RAMIREZGARCIA	Cole Information Services
	ANTONIO RAZOS	Cole Information Services
	SAM KIM	Cole Information Services
	GLORIA ROBLEDO	Cole Information Services
	ALVARO ROBLEDO	Cole Information Services
	MARCO RODAS	Cole Information Services
	MANUEL RODRIGUEZ	Cole Information Services
	STEVEN ROMO	Cole Information Services
	JOSE RICO	Cole Information Services
	PATRICK HOY	Cole Information Services
	WANDA HARRIS	Cole Information Services
	BLANCA HERNANDEZ	Cole Information Services
	JOSE HERNANDEZ	Cole Information Services
	RUTH TRUJILLO	Cole Information Services
	POZO DEL	Cole Information Services
	CRAIG DAYTON	Cole Information Services

FINDINGS

Year	Uses	Source
1999	C DURAN	Cole Information Services
	PAUL EKLUND	Cole Information Services
	ADOLFO GELLI	Cole Information Services
	DEBRA DICKEY	Cole Information Services
	LORNE GOODWON	Cole Information Services
	MARINA GARCIA	Cole Information Services
	GERALD GARCIA	Cole Information Services
	EDUARDO GARCIA	Cole Information Services
	JOHN LEITLEIN	Cole Information Services
	CESAR GUERRERO	Cole Information Services
	MIDA LONGCOR	Cole Information Services
	ROBERT WAINWRIGHT	Cole Information Services
	T LOPEZ	Cole Information Services
	EDUARDO CALLEROS	Cole Information Services
	L YOUNG	Cole Information Services
	IRENE CONTRERAS	Cole Information Services
	JUAN CORTEZ	Cole Information Services
	LARRY WIDENER	Cole Information Services
	C CHRISTIAN	Cole Information Services
	CORA JACKSON	Cole Information Services
	TIMOTHY JASPER	Cole Information Services
	ASAIS NOBERTO	Cole Information Services
	JENNIFER BENNET	Cole Information Services
	DAVE BACKHAUS	Cole Information Services
	RUPERTO BARRERA	Cole Information Services
	SANDRA BAUTISTA	Cole Information Services
	FRANCES BRODA	Cole Information Services
	MICHELLE BRUNSLOMA	Cole Information Services
	DANIEL BOUGHNER	Cole Information Services
	MICKI MACINTOSH	Cole Information Services
	MICHAEL AMACHER	Cole Information Services
	STEVEN MCGEORGE	Cole Information Services
	KARA MCQUISTON	Cole Information Services
	HENRY MONCAYO	Cole Information Services
	MARIA MORALES	Cole Information Services
	ANA MORENO	Cole Information Services
	RICHARD MIRAMONTES	Cole Information Services
	KARI MEAD	Cole Information Services

FINDINGS

Year	Uses	Source
1999	ROBBIE MENDES	Cole Information Services
	SUSAN STRAWBRIDGE	Cole Information Services
	MANUELA VALENCIANA	Cole Information Services
	GILBERTO VELASCO	Cole Information Services
	ISAAC VIRAMONTES	Cole Information Services
	LILIANA VILLA	Cole Information Services
	GILBERT RAMIREZ	Cole Information Services
	NICK KING	Cole Information Services
	LAURA HOLST	Cole Information Services
	DENNISE HERNANDEZ	Cole Information Services
	MARIA ORNELAS	Cole Information Services
	HOUSTON THOMPSON	Cole Information Services
	WILLIAM DALTON	Cole Information Services
	MARLENE DYE	Cole Information Services
	SUSAN DRAKE	Cole Information Services
	SANDRA GERLACH	Cole Information Services
	SANDRA GOMEZ	Cole Information Services
	NOEMI GALLEGO	Cole Information Services
	JILLIAN CARDIEL	Cole Information Services
	JOHN COLEMAN	Cole Information Services
	JOANNE CORLISS	Cole Information Services
	BRANDY CORONA	Cole Information Services
	DUNG PHAN	Cole Information Services
	JEFF CLEPPE	Cole Information Services
	LEON PIERCE	Cole Information Services
	CANDIA JENKYNS	Cole Information Services
	BECKY BABCOCK	Cole Information Services
	MARGRET BRIGGER	Cole Information Services
	ALICE FRIETZE	Cole Information Services
	MARCIE FONSECA	Cole Information Services
	D FUNES	Cole Information Services
	GINNA AGULARA	Cole Information Services
	MARGARET MATINIAN	Cole Information Services
	EZEQUIEL MONTES	Cole Information Services
	LOURDES MOTA	Cole Information Services
	LINDA KHACHATOORIAN	Cole Information Services
	SHARON ROBERTSON	Cole Information Services
	LISA REED	Cole Information Services

FINDINGS

Year	Uses	Source
1999	LUIS QUIROZ	Cole Information Services
	G HORTEMILLER	Cole Information Services
	CURTIS TAYLOR	Cole Information Services
	SANDOR DEBRECENI	Cole Information Services
	SHANE DUBYAK	Cole Information Services
	ENRIQUE DIAZ	Cole Information Services
	HECTOR DIOSDADO	Cole Information Services
	JANICE DIXON	Cole Information Services
	OLIVIA GOMEZ	Cole Information Services
	GRACE ESCOBEDO	Cole Information Services
	FERNANDO GUTIERREZ	Cole Information Services
	GUADALUPE GUTIERREZ	Cole Information Services
	GERARDO LOPEZ	Cole Information Services
	OMAR LOPEZ	Cole Information Services
	CLAUDE LOFTON	Cole Information Services
	ELENA CASHION	Cole Information Services
	LILI CAZARES	Cole Information Services
	ALFREDO CALDERON	Cole Information Services
	THOMAS YOUNG	Cole Information Services
	GARY WILSON	Cole Information Services
	ROBERT CRAIG	Cole Information Services
	JUNE CROSS	Cole Information Services
	JONATHAN PORTER	Cole Information Services
	CHRIS BUSH	Cole Information Services
	NANCY BRISTTON	Cole Information Services
	BRAD FLETCHER	Cole Information Services
	MIKE FINN	Cole Information Services
	RANDI FOLEY	Cole Information Services
	ROSE FUQUA	Cole Information Services
	P AYERS	Cole Information Services
	MIGUEL ALFARO	Cole Information Services
	JOSE ARGUETA	Cole Information Services
	MARIA AVALOS	Cole Information Services
	AIDA AVILA	Cole Information Services
	RAMON MADRIGAL	Cole Information Services
	WILLIAM MARRISON	Cole Information Services
	MABEL MCGILL	Cole Information Services
	OLLIE MOORE	Cole Information Services

FINDINGS

Year	Uses	Source
1999	BEATRIZ MOSQUEDA	Cole Information Services
	TOM ASCENSIO	Cole Information Services
	PATRICK SATTERFIELD	Cole Information Services
	OLYMPIA IBARRA	Cole Information Services
	VIRGINIA VALENZUELA	Cole Information Services
	VERN VANDERVEEN	Cole Information Services
	JOSE VALDERRAMA	Cole Information Services
	MORGAN ISAACS	Cole Information Services
	GORDON RAY	Cole Information Services
	CHARLES KEEL	Cole Information Services
	DAN KENNEDY	Cole Information Services
	ROSA ROSAS	Cole Information Services
	DAVID HIXON	Cole Information Services
	MARIA HERMOSILLO	Cole Information Services
	MANUELA HERRERA	Cole Information Services
	JAMES THOMPSON	Cole Information Services
	JOSE TORNERO	Cole Information Services
	DANIEL TOSSOUNIAN	Cole Information Services
	KURT DOWNEY	Cole Information Services
	VICTOR ESPINOZA	Cole Information Services
	JOHN GARCIA	Cole Information Services
	SERGIO LEYVA	Cole Information Services
	DEBBIE GUERRERO	Cole Information Services
	VICKY NORTON	Cole Information Services
	CARLOS NISTHAL	Cole Information Services
	JAMES BEAL	Cole Information Services
	ISMAEL BELLO	Cole Information Services
	MAGDELENA JIMENEZ	Cole Information Services
	SAMUEL BULLARD	Cole Information Services
	CHRISTINE BRAUN	Cole Information Services
	LOURDES BRIONES	Cole Information Services
	HEIDI BLUFF	Cole Information Services
	MICHELLE FLICK	Cole Information Services
	KIMBERLY FALOON	Cole Information Services
	TYRONNE FERNANDO	Cole Information Services
	ALFONSO ARREOLA	Cole Information Services
	TONY MARTINEZ	Cole Information Services
	MARIA MCHUGH	Cole Information Services

FINDINGS

Year	Uses	Source
1999	ARAGON MONICA	Cole Information Services
	JENNIFER MONTEON	Cole Information Services
	SONIA MORALES	Cole Information Services
	RANDY MICHAEL	Cole Information Services
	STEVEN STAHL	Cole Information Services
	CARLOS VERDIN	Cole Information Services
	MARCIA VICK	Cole Information Services
	JOSE RAMIREZ	Cole Information Services
	FEDERICO RAMIREZ	Cole Information Services
	ANDREW KISTER	Cole Information Services
	MICHAEL ROBERTS	Cole Information Services
	JACQUELINE HAGEMAN	Cole Information Services
	MICHAEL HANER	Cole Information Services
	MODESTO HERNANDEZ	Cole Information Services
	GABRIELA HERRERA	Cole Information Services
	KIDA THOMPSON	Cole Information Services
	ESTHER THOMPSON	Cole Information Services
	BEVERLY THIBODEAU	Cole Information Services
	GUADALUPE GOMEZ	Cole Information Services
	RAUL ESTRELLA	Cole Information Services
	PATRICK LEE	Cole Information Services
	ESPERANZA WONG	Cole Information Services
	EUGENE WHITTINGTON	Cole Information Services
	ALEJANDRO CAISEDO	Cole Information Services
	EVELYN CALDERAS	Cole Information Services
	RAMON CORNEJO	Cole Information Services
	GUERRERO CESAR	Cole Information Services
	HEATHER WILLIAMS	Cole Information Services
	MARIA CRUZ	Cole Information Services
	GEORGE PADILLA	Cole Information Services
	CLARENCE PILARCZYK	Cole Information Services
	CRUZ BARBOA	Cole Information Services
	BONIFACIO BARDALES	Cole Information Services
	MARY BARNES	Cole Information Services
	JOHN BARRAZA	Cole Information Services
	VALINDA BURNFIN	Cole Information Services
	DOMINGA BONILLA	Cole Information Services
	ABRAHAM FUENTES	Cole Information Services

FINDINGS

Year	Uses	Source
1999	JAMES MODEN	Cole Information Services
	JORGE MILLAN	Cole Information Services
	KIMBERLY MEANS	Cole Information Services
	JOSEFINA MELENDEZ	Cole Information Services
	APOLINAR SANCHEZ	Cole Information Services
	ROBERT STEIGLEMAN	Cole Information Services
	CHRISTOPHER SOLOMON	Cole Information Services
	EFRAIN SORIANO	Cole Information Services
	IRENE SUMMONS	Cole Information Services
	GRACIELA INIGUEZ	Cole Information Services
	ROSA VILLASANA	Cole Information Services
	ISRAEL CHAVEZ	Cole Information Services
	ROBERT PEARSON	Cole Information Services
	SUZANNE PEBLEY	Cole Information Services
	EDGAR PENA	Cole Information Services
	KAREN PENCE	Cole Information Services
	JUANA PEREZ	Cole Information Services
	CARL JAMES	Cole Information Services
	IGNACIO PANGELINAN	Cole Information Services
	VICTOR PAREDES	Cole Information Services
	CECILIA NAVA	Cole Information Services
	JANET BEARDEN	Cole Information Services
	RICHARD JOHNS	Cole Information Services
	LIVIA BURGUENO	Cole Information Services
	EVA FLORES	Cole Information Services
	JASON FOREMAN	Cole Information Services
	JEAN FARRA	Cole Information Services
	I AYAU	Cole Information Services
	CHARLES MAKI	Cole Information Services
	GERARDO MANZON	Cole Information Services
	VELIZA AMAYA	Cole Information Services
	MICHAEL ANASTASI	Cole Information Services
	TERRANCE MCHATTEN	Cole Information Services
	SHIRLEY MCINTOSH	Cole Information Services
	ANITA MERRYMAN	Cole Information Services
	GUADALUPE SAENZ	Cole Information Services
	ROSA SALDANA	Cole Information Services
	FRANCISCO SILVA	Cole Information Services

FINDINGS

Year	Uses	Source
1999	ENRIQUE SOLIS	Cole Information Services
	DANETTE VERA	Cole Information Services
	ESTEBAN VILLAR	Cole Information Services
	PRISCILLA RAMOS	Cole Information Services
	KENNETH KINNEY	Cole Information Services
	BOB SWEARINGEN	Cole Information Services
	TINA ROBICHAU	Cole Information Services
	ROBERT ROSS	Cole Information Services
	CATHY KAMMERER	Cole Information Services
	MARIA KARR	Cole Information Services
	ANTHONY HODGE	Cole Information Services
	BILLIE HOLGUIN	Cole Information Services
	MARCY RICHARDSON	Cole Information Services
	DOLORES HOUSTON	Cole Information Services
	MARIA OROZCO	Cole Information Services
	MARIA ORTIZ	Cole Information Services
	ALBERTA ECHEVARRIA	Cole Information Services
	PANADDA THINASOOK	Cole Information Services
	JOSE DEJESUS	Cole Information Services
	PAMELLA DUNCANTELL	Cole Information Services
	HELEN GOMEZ	Cole Information Services
	JESSIE GOODNIGHT	Cole Information Services
	FRANK GOYTIA	Cole Information Services
	SARAH LARIOS	Cole Information Services
	JOSE LARA	Cole Information Services
	RICHARD WORLEY	Cole Information Services
	MICHELLE LOMELI	Cole Information Services
	GORDON CARLSON	Cole Information Services
	JOHN WELLER	Cole Information Services
	RICHARD WELLS	Cole Information Services
	SALVADOR COVARRUBIAN	Cole Information Services
	REBECA COVARRUBIAS	Cole Information Services
	KIRK WINTER	Cole Information Services
	LONNITA WIRT	Cole Information Services
	BRANDY JACKSON	Cole Information Services
	JESUS CURIEL	Cole Information Services
	DAVID POLUS	Cole Information Services
	HECTOR AGUIRRE	Cole Information Services

FINDINGS

Year	Uses	Source
1999	JOSE MARTINEZ	Cole Information Services
	JUDY MARVAL	Cole Information Services
	RENE MONROY	Cole Information Services
	LARRY MEREGILLANO	Cole Information Services
	JOSE MEZA	Cole Information Services
	PAUL SCHIPPNICK	Cole Information Services
	MICHAEL SANTARO	Cole Information Services
	JESUS SANTIAGO	Cole Information Services
	MARIA SOLIS	Cole Information Services
	CAROLYN SMITH	Cole Information Services
	LUZ ITURBIDE	Cole Information Services
	GUADALUPE VALENCIANA	Cole Information Services
	BOUNMY VONGAMATH	Cole Information Services
	LUIS RAMOS	Cole Information Services
	GEORGE REYNOLDS	Cole Information Services
	BENITA HOLLOWAY	Cole Information Services
	DONNA RICHEY	Cole Information Services
	WENDY RINCON	Cole Information Services
	ALICIA RIOS	Cole Information Services
	JOSE RITO	Cole Information Services
	DINA HARTLEY	Cole Information Services
	C THOMPSON	Cole Information Services
	RAFAEL DELATORRE	Cole Information Services
	JOSEPH DELEON	Cole Information Services
	HELEN DAVIS	Cole Information Services
	ALIDA EBENOW	Cole Information Services
	CATALINA DOW	Cole Information Services
	JACKIE GONZALEZ	Cole Information Services
	ROBERTO GUERRERO	Cole Information Services
	FRANK GUERRERO	Cole Information Services
	CHUCK EVANS	Cole Information Services
	JESUS LUPERCIO	Cole Information Services
	STACY LOPEZ	Cole Information Services
	CECILIA LOPEZ	Cole Information Services
	PATRICK LOADER	Cole Information Services
	RON WELDEN	Cole Information Services
	FAUSTINO CONTRERAS	Cole Information Services
	SWAN LAKE MOBILE COUNTRY ESTATES	Cole Information Services

FINDINGS

Year	Uses	Source
1999	LAKE MART	Cole Information Services
	COMMUNITY MOBILE HOME SALES	Cole Information Services
	MAPLE RIDGE MOBILE HOMES INCORPORATED	Cole Information Services
1994	MIDDLETON, MARYE E	Cole Information Services
	MAPLE RIDGE MOBILE HOMES INC	Cole Information Services
	MARTIN, ARTHUR	Cole Information Services
	WHITTINGTON, EUGENE	Cole Information Services
	DRUCKER, PAUL	Cole Information Services
	HOFFMAN, ORVILLE E	Cole Information Services
	PARRIERA, WILLIE L	Cole Information Services
	POLLARD, D M	Cole Information Services
	GRACEY, HARRY	Cole Information Services
	STIFF, V	Cole Information Services
	HASKINS, MATTHEW V	Cole Information Services
	LAKE MART MARKET	Cole Information Services
	ELVIAS BEAUTY BOUTQ	Cole Information Services
	SWAN LAKE SECURITY	Cole Information Services
	SWAN LAKE MOBILE COUNTRY ESTS	Cole Information Services
	DURST, CRAIG	Cole Information Services
1986	Drucker P & G	Pacific Bell Yellow Pages
	Rohrs James	Pacific Bell Yellow Pages
	A & W Cart Service	Pacific Bell Yellow Pages
	B & J Cart Shop	Pacific Bell Yellow Pages
	Bednarske Richard	Pacific Bell Yellow Pages
	Bennett R G W & Clover	Pacific Bell Yellow Pages
	Blackburn Marie M	Pacific Bell Yellow Pages
	Blair Fred Real Estate & Construction	Pacific Bell Yellow Pages
	Blajda Joseph Marian	Pacific Bell Yellow Pages
	Brody C E	Pacific Bell Yellow Pages
	Casady Robt W	Pacific Bell Yellow Pages
	Casagranda D	Pacific Bell Yellow Pages
	Cavanaugh William B	Pacific Bell Yellow Pages
	Durst Craig & Mary	Pacific Bell Yellow Pages
	Durst Kenneth W	Pacific Bell Yellow Pages
	Easter J D	Pacific Bell Yellow Pages
	Easter PS Central Av	Pacific Bell Yellow Pages
	Elvias Beauty Boutique	Pacific Bell Yellow Pages
	Elwell A	Pacific Bell Yellow Pages

FINDINGS

Year	Uses	Source
1986	Gracey Harry	Pacific Bell Yellow Pages
	Greenawalt John	Pacific Bell Yellow Pages
	Haskins Matthew V Mrs	Pacific Bell Yellow Pages
	Haskins R A	Pacific Bell Yellow Pages
	Hellrich N M	Pacific Bell Yellow Pages
	Hoffman Orville E	Pacific Bell Yellow Pages
	Hoffman R	Pacific Bell Yellow Pages
	Lackey Doyle & Norma	Pacific Bell Yellow Pages
	Lake Mart Mkt	Pacific Bell Yellow Pages
	Layden M M	Pacific Bell Yellow Pages
	Little John G	Pacific Bell Yellow Pages
	Locken Francis	Pacific Bell Yellow Pages
	Mc Callum John D Sr	Pacific Bell Yellow Pages
	Middleton Joseph H	Pacific Bell Yellow Pages
	Middleton Marye E	Pacific Bell Yellow Pages
	Montello Carmen W	Pacific Bell Yellow Pages
	Nichols Everett D	Pacific Bell Yellow Pages
	Parriera W L	Pacific Bell Yellow Pages
	Pollard D M	Pacific Bell Yellow Pages
	Pollard G	Pacific Bell Yellow Pages
	Pullin Thos L	Pacific Bell Yellow Pages
	Rienderhoff Bert & Wilhelmina	Pacific Bell Yellow Pages
	Ring Richard L	Pacific Bell Yellow Pages
	Ruffin L P	Pacific Bell Yellow Pages
	Shook W A	Pacific Bell Yellow Pages
	Subsurface Electric	Pacific Bell Yellow Pages
	From Corona Telephones Call	Pacific Bell Yellow Pages
	Swan Lake Sales Inc	Pacific Bell Yellow Pages
	Swan Lake Security	Pacific Bell Yellow Pages
	Tru illo M	Pacific Bell Yellow Pages
	Tru illo Max	Pacific Bell Yellow Pages
	Vanderwork Owen	Pacific Bell Yellow Pages
	Vibert L C	Pacific Bell Yellow Pages
	Watkins Herbert & Beverly	Pacific Bell Yellow Pages
	Whittington Eugene	Pacific Bell Yellow Pages
	Witten Carl	Pacific Bell Yellow Pages
	Young Robt B & Opal J	Pacific Bell Yellow Pages
1981	Robertson J W	Pacific Telephone

FINDINGS

Year	*Uses*	*Source*
1981	Waters M	Pacific Telephone
	Blajda Joseph Marian	Pacific Telephone
	Brody C E	Pacific Telephone
	Easter J I	Pacific Telephone
	Elvias Beauty Boutique	Pacific Telephone
	Feldmann Alice J	Pacific Telephone
	Graaf A	Pacific Telephone
	Gracey Harry	Pacific Telephone
	Graham AL Shorty	Pacific Telephone
	Greenawalt John	Pacific Telephone
	Hoffman Orville E	Pacific Telephone
	Jenson Wilford W	Pacific Telephone
	Land Frank	Pacific Telephone
	La Plante Ernest E	Pacific Telephone
	Leprechaun Gifts	Pacific Telephone
	Lindenberg Ethel M	Pacific Telephone
	Martin Arthur	Pacific Telephone
	Martin Margaret	Pacific Telephone
	Mc Guire Harold W & Ruth E I	Pacific Telephone
	Middleton Joseph H	Pacific Telephone
	Middleton Peyton G	Pacific Telephone
	Mohnkem E	Pacific Telephone
	Mumford	Pacific Telephone
	Rienderhoff Bert & Wilheimina	Pacific Telephone
	Ring Richard L	Pacific Telephone
	Sak Leo J	Pacific Telephone
	Shook W A	Pacific Telephone
	S KYROOM THE	Pacific Telephone
	Souders Uoyd Jack	Pacific Telephone
	Swan E E Fashions	Pacific Telephone
	Swan Lake Sales Inc	Pacific Telephone
	Swan Lake Security	Pacific Telephone
	Sweeney Harold J	Pacific Telephone
	Toussaint Peggy	Pacific Telephone
	Vanderwork Owen	Pacific Telephone
	Watkins Herbert & Beverly	Pacific Telephone
	Whlttlngton Eugene	Pacific Telephone
	Witten Carl	Pacific Telephone

FINDINGS

Year	Uses	Source
1981	Witten Marie	Pacific Telephone
	Young Robt B & Opal J	Pacific Telephone
	Shook W A	Pacific Telephone
	Graham Doris L	Pacific Telephone
	Sak Leo	Pacific Telephone
	Skyroom The	Pacific Telephone
	Swan Lake	Pacific Telephone
	Swan Lake Security	Pacific Telephone
	Waters M	Pacific Telephone
	Watkns	Pacific Telephone
1977	C &S Gifts NThings	Pacific Telephone
	Elvias Beauty Boutique	Pacific Telephone
	Flint Bud	Pacific Telephone
	Jones Pearl L	Pacific Telephone
	Kurtz Clarence C	Pacific Telephone
	Lake Mart Mkt	Pacific Telephone
	Loyd Chas C	Pacific Telephone
	Martin Arthur	Pacific Telephone
	Martin Marcy	Pacific Telephone
	Middleton Peyton G I	Pacific Telephone
	Norman Lee	Pacific Telephone
	S KYROOM THE	Pacific Telephone
	Storch Gerald R	Pacific Telephone
	S W AN LAKE	Pacific Telephone
	Swan Lake Rentals	Pacific Telephone
	Swan Lake Security	Pacific Telephone
	Wiggins Virgil A	Pacific Telephone
	Flint Bud	Pacific Telephone
	Flint Shirl	Pacific Telephone
	Skyroom The	Pacific Telephone
	Swan Lake	Pacific Telephone

5888 HAMNER AVE

Year	Uses	Source
2014	JAMIE WILLIAMS	Cole Information Services
2009	JAMIE WILLIAMS	Cole Information Services
1999	JAMIE WILLIAMS	Cole Information Services

FINDINGS

5890 HAMNER AVE

Year	Uses	Source
2014	ELIZABETH ORTIZ	Cole Information Services
2009	ELIZABETH ORTIZ	Cole Information Services
2004	ELIZABETH ORTIZ	Cole Information Services
1999	ELIZABETH ORTIZ	Cole Information Services

6020 HAMNER AVE

Year	Uses	Source
2017	TUTOR TIME	Cole Information Services
2014	TUTOR TIME	Cole Information Services
2009	TUTOR TIME CHILD CARE LEARNING CENTE	Cole Information Services

6060 HAMNER AVE

Year	Uses	Source
2017	CHASE	Cole Information Services
2014	CHASE	Cole Information Services
	CHASE BANK	Cole Information Services
2009	WASHINGTON MUTUAL	Cole Information Services

6080 HAMNER AVE

Year	Uses	Source
2017	MOUNTAIN VIEW TIRES	Cole Information Services
	MOUNTAIN VIEW TIRE & AUTO SERVICE	Cole Information Services
	GM REALTY & MGMT	Cole Information Services
2014	MOUNTAIN VIEW TIRES	Cole Information Services
	DV URGENT CARE & OCCUPATIONAL HEAL	Cole Information Services

6140 HAMNER AVE

Year	Uses	Source
2017	THE HOME DEPOT	Cole Information Services
	HOME SERVICES AT THE HOME DEPOT	Cole Information Services
2014	THE HOME DEPOT	Cole Information Services
2009	HOME DEPOT U S A INC	Cole Information Services
	THE HOME DEPOT	Cole Information Services

6170 HAMNER AVE

Year	Uses	Source
2017	US BANK	Cole Information Services
	VONS	Cole Information Services
	STARBUCKS COFFEE	Cole Information Services
2014	VONS	Cole Information Services
	US BANK	Cole Information Services
2009	VONS	Cole Information Services
	VONS PHARMACY 2688	Cole Information Services
	U S BANK	Cole Information Services

6323 HAMNER AVE

Year	Uses	Source
1981	Af n	Pacific Telephone

HARMONY DR

5628 HARMONY DR

Year	Uses	Source
2017	NELSON PEREDIA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5631 HARMONY DR

Year	Uses	Source
2017	ANDY RAMIREZ	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5639 HARMONY DR

Year	Uses	Source
2017	Q LETHANH	Cole Information Services
2014	Q LETHANH	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5655 HARMONY DR

Year	Uses	Source
2017	ANTHONY DIAZ	Cole Information Services
2014	RICARDO CHACON	Cole Information Services

Year	Uses	Source
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5663 HARMONY DR

Year	Uses	Source
2017	BRANDON BRIDGEFORD	Cole Information Services
2014	BRANDON BRIDGEFORD	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

5671 HARMONY DR

Year	Uses	Source
2017	AHMED ELMLKI	Cole Information Services
2014	AHMED ELMLKI	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

IRIS CT

6310 IRIS CT

Year	Uses	Source
2017	MARK ROBLES	Cole Information Services
2014	MICHAEL HINES	Cole Information Services
2009	MICHAEL JUDD	Cole Information Services
2004	BILL BARELLA	Cole Information Services
1999	MICHAEL JUDD	Cole Information Services

6313 IRIS CT

Year	Uses	Source
2017	WEI HO	Cole Information Services
2014	WEI HO	Cole Information Services
2009	JAMES WICKHAM	Cole Information Services
2004	JAMES WICKHAM	Cole Information Services
1999	JAMES WICKHAM	Cole Information Services

6320 IRIS CT

Year	Uses	Source
2017	MARTIN SERRANO	Cole Information Services
2014	ARMANDO LEYVA	Cole Information Services
2009	JEROME RIDEAUX	Cole Information Services

Year	Uses	Source
2004	JEROME RIDEAUX	Cole Information Services
1999	JEROME RIDEAUX	Cole Information Services

6323 IRIS CT

Year	Uses	Source
2017	JARED ROLLINS	Cole Information Services
2014	TIM WIDENER	Cole Information Services
2009	ROBERT THOMPSON	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	ROBERT THOMPSON	Cole Information Services

6330 IRIS CT

Year	Uses	Source
2017	HONGMIN LI	Cole Information Services
2014	NGOC TRINH	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	K KVENBO	Cole Information Services

6333 IRIS CT

Year	Uses	Source
2017	MARCO RODRIGUEZ	Cole Information Services
2014	MARCO RODRIGUEZ	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	DANIEL TARQUE	Cole Information Services
2002	Franco Maria T	SBC PACIFIC BELL

6340 IRIS CT

Year	Uses	Source
2014	SAPNA GANDHI	Cole Information Services
2009	ARUN GANDHI	Cole Information Services
2004	ARUN GANDHI	Cole Information Services
1999	ARUN GANDHI	Cole Information Services

6343 IRIS CT

Year	Uses	Source
2017	KENNETH AGUAYO	Cole Information Services
2014	TIMOTHY FARRELL	Cole Information Services
2004	TIMOTHY FARREL	Cole Information Services

FINDINGS

6350 IRIS CT

Year	Uses	Source
2017	SARABJIT KAUR	Cole Information Services
2014	SARABJIT KAUR	Cole Information Services
2009	JAVIER FIGUEROA	Cole Information Services
2004	JAVIER FIGUEROA	Cole Information Services
1999	JAVIER FIGUEROA	Cole Information Services

6353 IRIS CT

Year	Uses	Source
2017	TERI SHERMAN	Cole Information Services
2014	TERI SHERMAN	Cole Information Services
2009	TERI SHERMAN	Cole Information Services
2004	TERI SHERMAN	Cole Information Services
1999	TERI SHERMAN	Cole Information Services

6360 IRIS CT

Year	Uses	Source
2017	ELITE BALLOON DESIGN	Cole Information Services
2014	ELITE BALLOON DESIGN	Cole Information Services
	OCCUPANT UNKNOWN	Cole Information Services
2009	TIMOTHY CROME	Cole Information Services
2004	VICTOR MILLER	Cole Information Services
1999	TIMOTHY CROME	Cole Information Services

6363 IRIS CT

Year	Uses	Source
2017	RYAN TUCKER	Cole Information Services
2014	RYAN TUCKER	Cole Information Services
2009	RYAN TUCKER	Cole Information Services
2004	SABRINA HYOUNG	Cole Information Services
2002	IRIS GROVE	SBC PACIFIC BELL
	CLOVERDALE FARMS	SBC PACIFIC BELL
2001	CLOVERDALE FARMS	Haines & Company, Inc.
1999	RYAN TUCKER	Cole Information Services

6370 IRIS CT

Year	Uses	Source
2017	IWAN SAFIE	Cole Information Services
2014	YU ZHANG	Cole Information Services
2009	IWAN SAFIE	Cole Information Services

Year	Uses	Source
2004	TUYET NGUYEN	Cole Information Services
1999	IWAN SAFIE	Cole Information Services

6373 IRIS CT

Year	Uses	Source
2017	JIAQUAN DING	Cole Information Services
2014	ALLEN WILSON	Cole Information Services
2009	ALLEN WILSON	Cole Information Services
2004	ALLEN WILSON	Cole Information Services
1999	ALLEN WILSON	Cole Information Services

6380 IRIS CT

Year	Uses	Source
2017	EVANGELINA JIMENEZ	Cole Information Services
2014	EVANGELINA JIMENEZ	Cole Information Services
2009	EVANGELINA JIMENEZ	Cole Information Services
2004	ARTURO BUSTOS	Cole Information Services
1999	EVANGELINA JIMENEZ	Cole Information Services

6383 IRIS CT

Year	Uses	Source
2017	ALEXANDER MENDENHALL	Cole Information Services
2014	ALEXANDER MENDENHALL	Cole Information Services
2009	ALEX MENDENHALL	Cole Information Services
2004	LAURA PESTANO	Cole Information Services
1999	ALEX MENDENHALL	Cole Information Services

6390 IRIS CT

Year	Uses	Source
2017	PETER MCGOWAN	Cole Information Services
2014	PETER MCGOWAN	Cole Information Services
2009	PETER MCGOWAN	Cole Information Services
2004	LARRY SIMPSON	Cole Information Services
1999	PETER MCGOWAN	Cole Information Services

6393 IRIS CT

Year	Uses	Source
2017	EDUARDO BRIBIESCA	Cole Information Services
2014	EDUARDO BRIBIESCA	Cole Information Services
2009	VICTOR MARTINEZ	Cole Information Services

Year	Uses	Source
2004	SATPAL TOORAY	Cole Information Services
	OCCUPANT UNKNOWN	Cole Information Services

JAMESTOWN AVE

5621 JAMESTOWN AVE

Year	Uses	Source
2014	BRITTANY DITOMASSO	Cole Information Services
2009	ROBERT MCGARY	Cole Information Services
2004	ROBERT MCGRAY	Cole Information Services
1999	ROBERT MCGARY	Cole Information Services

5631 JAMESTOWN AVE

Year	Uses	Source
2014	STEVEN BEATTY	Cole Information Services
2009	MICHAEL DITOMASSO	Cole Information Services
2004	MALCOLM PAICE	Cole Information Services
1999	MICHAEL DITOMASSO	Cole Information Services

5641 JAMESTOWN AVE

Year	Uses	Source
2017	ALICIA STONE	Cole Information Services
2014	ALICIA STONE	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services

5651 JAMESTOWN AVE

Year	Uses	Source
2017	WILLIAM DEMOLAY	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	MINDY FINCHER	Cole Information Services
2004	ROOSEVELT ANDERSON	Cole Information Services
1999	MINDY FINCHER	Cole Information Services

5661 JAMESTOWN AVE

Year	Uses	Source
2017	EUGENIO VARGAS	Cole Information Services
2014	EUGENIO VARGAS	Cole Information Services
2009	EDWIN VARGAS	Cole Information Services
2004	CHRISTOPHER YONTS	Cole Information Services
	CHRISTOPHER M YONTS CASH RGSTR	Cole Information Services

Year	Uses	Source
1999	EDWIN VARGAS	Cole Information Services

5671 JAMESTOWN AVE

Year	Uses	Source
2017	JOSE BERCIAN	Cole Information Services
2014	RIGOBERTO OCHOA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	MICHAEL MA	Cole Information Services

5681 JAMESTOWN AVE

Year	Uses	Source
2017	RYAN POWELL	Cole Information Services
2014	ROBERT HERNANDEZ	Cole Information Services
2009	DANIEL MERRITT	Cole Information Services
2004	ROBERT HERNANDEZ	Cole Information Services
1999	DANIEL MERRITT	Cole Information Services

5691 JAMESTOWN AVE

Year	Uses	Source
2017	ANTONIO JAUREGUI	Cole Information Services
2014	JOEL GARCIA	Cole Information Services
2009	ANTONIO JAUREGUI	Cole Information Services
1999	ANTONIO JAUREGUI	Cole Information Services

5701 JAMESTOWN AVE

Year	Uses	Source
2017	GARY BOYSE	Cole Information Services
2014	GARY BOYSE	Cole Information Services
2009	PEDRO RONCANCIO	Cole Information Services
1999	PEDRO RONCANCIO	Cole Information Services

5711 JAMESTOWN AVE

Year	Uses	Source
2017	MOHAMMED WARAICH	Cole Information Services
2004	IQBAL WARAICH	Cole Information Services

5721 JAMESTOWN AVE

Year	Uses	Source
2017	STEVEN WAGERS	Cole Information Services
2014	STEVEN WAGERS	Cole Information Services

Year	Uses	Source
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	GLENN JOHNSON	Cole Information Services

5731 JAMESTOWN AVE

Year	Uses	Source
2017	HARDEEP SAMBI	Cole Information Services
2014	GLENN VELASCO	Cole Information Services
2009	OCTAVIO SILVA	Cole Information Services
2004	MIKE QUINN	Cole Information Services
1999	OCTAVIO SILVA	Cole Information Services

5741 JAMESTOWN AVE

Year	Uses	Source
2017	JEFFREY MICHAELS	Cole Information Services
2014	JEFFREY MICHAELS	Cole Information Services
2009	HUGO FRANCO	Cole Information Services
2004	HUGO FRANCO	Cole Information Services
1999	HUGO FRANCO	Cole Information Services

5751 JAMESTOWN AVE

Year	Uses	Source
2017	ROBERT QUESADA	Cole Information Services
2014	NOVELLA QUESADA	Cole Information Services
2009	MICHAEL KOZINSKI	Cole Information Services
2004	RONALD HOGAN	Cole Information Services
1999	MICHAEL KOZINSKI	Cole Information Services

5761 JAMESTOWN AVE

Year	Uses	Source
2017	FRANCISGIL CRUZ	Cole Information Services
2014	QUIN TOLBERT	Cole Information Services
2009	DENISE HALLION	Cole Information Services
2004	DENISE TOLBERT	Cole Information Services
1999	DENISE HALLION	Cole Information Services

5771 JAMESTOWN AVE

Year	Uses	Source
2017	IN CHANG	Cole Information Services
2014	IN CHANG	Cole Information Services
2009	INMO CHANG	Cole Information Services

Year	Uses	Source
2004	INMO CHANG	Cole Information Services
1999	INMO CHANG	Cole Information Services

5781 JAMESTOWN AVE

Year	Uses	Source
2017	JASON FLUM	Cole Information Services
2014	KRISTAL FLUM	Cole Information Services
2009	JASON FLUM	Cole Information Services
2004	PAUL PEREA	Cole Information Services
1999	JASON FLUM	Cole Information Services

5791 JAMESTOWN AVE

Year	Uses	Source
2017	RAUL HEREDERO	Cole Information Services
2014	FRANK HEREDERO	Cole Information Services
2009	GARY HOPPER	Cole Information Services
1999	GARY HOPPER	Cole Information Services

KARA CT

13209 KARA CT

Year	Uses	Source
2017	PEREZ GONZALEZ	Cole Information Services
2014	JOSE PEREZ	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

13216 KARA CT

Year	Uses	Source
2017	NANCY ACOSTA	Cole Information Services
2014	MOSTAFA HABBAS	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

13219 KARA CT

Year	Uses	Source
2017	JOHN DRUM	Cole Information Services
2014	DALE BOYD	Cole Information Services
2009	DALE BOYD	Cole Information Services
1999	DALE BOYD	Cole Information Services

13226 KARA CT

Year	Uses	Source
2017	ALBERT CEZAR	Cole Information Services
2014	ANTONIO REYES	Cole Information Services
2009	PETER SALGADO	Cole Information Services
1999	PETER SALGADO	Cole Information Services

LAKEVW CIR

263 LAKEVW CIR

Year	Uses	Source
1970	Johnston Merkle	Pacific Telephone

LARKDALE CIR

39 LARKDALE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Meyer Frank & Martha	Pacific Bell Yellow Pages
1981	Walton Rena Mrs	Pacific Telephone
1977	Walton Rena Mfs	Pacific Telephone

40 LARKDALE CIR

Year	Uses	Source
1981	Webster H H	Pacific Telephone
	Webster H H	Pacific Telephone
1977	Webster HH	Pacific Telephone

41 LARKDALE CIR

Year	Uses	Source
2001	NAVARROJose	Haines & Company, Inc.
1986	Mc Dowell E B	Pacific Bell Yellow Pages
1981	Mc Dowell E B	Pacific Telephone
1977	Mc Dowell Hugh	Pacific Telephone
	Mc Dowell Ella	Pacific Telephone

42 LARKDALE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Goreham Grace	Pacific Bell Yellow Pages
	Gorham	Pacific Bell Yellow Pages

Year	Uses	Source
1981	Goreham Grace	Pacific Telephone
1977	Goreham Grace	Pacific Telephone

43 LARKDALE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Lisko John	Pacific Bell Yellow Pages
1981	Lisko John	Pacific Telephone
1977	Lisko John	Pacific Telephone

44 LARKDALE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	CARDOZA, RICHARD	Cole Information Services
1986	Warren Larry	Pacific Bell Yellow Pages
1977	Mc Namee Ben H	Pacific Telephone

45 LARKDALE CIR

Year	Uses	Source
2004	JUSTIN TISDALE	Cole Information Services
1986	Shaver Rexey	Pacific Bell Yellow Pages
1981	Shaver Rexey	Pacific Telephone
1977	Shaver Rexey	Pacific Telephone

46 LARKDALE CIR

Year	Uses	Source
2004	DAVID FARRAR	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

47 LARKDALE CIR

Year	Uses	Source
2004	JONATHAN WOODS	Cole Information Services
1981	Hester H C	Pacific Telephone
1977	Hester HC	Pacific Telephone

48 LARKDALE CIR

Year	Uses	Source
2001	BENGSON Karen	Haines & Company, Inc.

49 LARKDALE CIR

Year	Uses	Source
2004	DANIEL MACIAS	Cole Information Services
2001	KERN Judy M	Haines & Company, Inc.
1986	Burns Scott	Pacific Bell Yellow Pages
1981	Haskins Paul E	Pacific Telephone

50 LARKDALE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.

51 LARKDALE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Feldmann Alice J	Pacific Bell Yellow Pages
1977	Eppard Vern	Pacific Telephone

52 LARKDALE CIR

Year	Uses	Source
2004	JOSE TINOCO	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Barbknecht Lee L	Pacific Bell Yellow Pages
1977	Barringer Sam I G	Pacific Telephone

53 LARKDALE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1981	Thoemmes Geo F	Pacific Telephone
1977	Thoemmes Geo F	Pacific Telephone

54 LARKDALE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Phillips Sarah L	Pacific Bell Yellow Pages
1981	Phillips Sarah	Pacific Telephone

55 LARKDALE CIR

Year	Uses	Source
2004	DOLORES HOUSTON	Cole Information Services
1981	Lipscomb Edw	Pacific Telephone

56 LARKDALE CIR

Year	Uses	Source
1986	Richards Jess	Pacific Bell Yellow Pages
	Richards Jewelers	Pacific Bell Yellow Pages
1981	Richards Jess	Pacific Telephone

57 LARKDALE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	IWiggins Tom	Pacific Bell Yellow Pages
	Wiggins M M	Pacific Bell Yellow Pages
1981	Wiggins Virgil A	Pacific Telephone

58 LARKDALE CIR

Year	Uses	Source
2004	RAFAEL HERNANDEZ	Cole Information Services
2002	Missildine Melissa P	SBC PACIFIC BELL
1994	NICHOLS, CHUCK	Cole Information Services
1986	Nichols Chuck & Wanda	Pacific Bell Yellow Pages
	Nichols Damon	Pacific Bell Yellow Pages
	Nichols D	Pacific Bell Yellow Pages
1977	Cowing Jas A	Pacific Telephone

59 LARKDALE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	HALLCrai O	Haines & Company, Inc.
1977	Johnson Louise	Pacific Telephone

60 LARKDALE CIR

Year	Uses	Source
2004	DAVID GARDELLA	Cole Information Services
1981	Misch Chas	Pacific Telephone

61 LARKDALE CIR

Year	Uses	Source
2004	SANDRA BAUTISTA	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1994	THOMPSON, FLOYD C	Cole Information Services
1986	Thompson Floyd C	Pacific Bell Yellow Pages
1981	Thompson Floyd C	Pacific Telephone

62 LARKDALE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1981	Sterling Theodore R	Pacific Telephone

63 LARKDALE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services

LARKDLE CIR

39 LARKDLE CIR

Year	Uses	Source
1970	Walton Rena Mrs	Pacific Telephone

41 LARKDLE CIR

Year	Uses	Source
1970	Mc Dowell Ella	Pacific Telephone
	Mc Dowell Hugh	Pacific Telephone

43 LARKDLE CIR

Year	Uses	Source
1970	Jeschke Dorothy C	Pacific Telephone

44 LARKDLE CIR

Year	Uses	Source
1970	Fast Henry K	Pacific Telephone

45 LARKDLE CIR

Year	Uses	Source
1970	Shaver Rexey	Pacific Telephone

46 LARKDLE CIR

Year	*Uses*	*Source*
1970	Martin Chas E	Pacific Telephone

48 LARKDLE CIR

Year	*Uses*	*Source*
1970	Mason Jessie S	Pacific Telephone
	Wood Judson H	Pacific Telephone

49 LARKDLE CIR

Year	*Uses*	*Source*
1970	Haskins Paul E	Pacific Telephone

50 LARKDLE CIR

Year	*Uses*	*Source*
1970	Milwood Thos R	Pacific Telephone

52 LARKDLE CIR

Year	*Uses*	*Source*
1970	Barringer Saml G	Pacific Telephone

53 LARKDLE CIR

Year	*Uses*	*Source*
1970	Turner N M	Pacific Telephone

56 LARKDLE CIR

Year	*Uses*	*Source*
1970	Holt Sophie K	Pacific Telephone

59 LARKDLE CIR

Year	*Uses*	*Source*
1970	Johnson Louise	Pacific Telephone

60 LARKDLE CIR

Year	*Uses*	*Source*
1970	Misch Chas	Pacific Telephone

61 LARKDLE CIR

Year	*Uses*	*Source*
1970	Thompson Floyd C	Pacific Telephone

LAVENDER

6316 LAVENDER

Year	Uses	Source
2002	Harada Gary	SBC PACIFIC BELL

6346 LAVENDER

Year	Uses	Source
2002	Mock Travuth	SBC PACIFIC BELL

6349 LAVENDER

Year	Uses	Source
2002	Johnson Todd & Diane	SBC PACIFIC BELL

6356 LAVENDER

Year	Uses	Source
2002	Gilley Tina M	SBC PACIFIC BELL

6359 LAVENDER

Year	Uses	Source
2002	Navas Lillian	SBC PACIFIC BELL
	Navas Lillian	SBC PACIFIC BELL

6369 LAVENDER

Year	Uses	Source
2002	Chaprnan Terry & Pam	SBC PACIFIC BELL

6386 LAVENDER

Year	Uses	Source
2002	Rocha Joe J	SBC PACIFIC BELL

6389 LAVENDER

Year	Uses	Source
2002	Coopel MIary	SBC PACIFIC BELL

6396 LAVENDER

Year	Uses	Source
2002	Crowde Matthew	SBC PACIFIC BELL

6399 LAVENDER

Year	Uses	Source
2002	Morris Catalina R	SBC PACIFIC BELL

LAVENDER ST

6316 LAVENDER ST

Year	Uses	Source
2017	GEORGE HARADA	Cole Information Services
2014	GEORGE HARADA	Cole Information Services
2009	GARY HARADA	Cole Information Services
2004	GARY HARADA	Cole Information Services
2001	HARADAGary	Haines & Company, Inc.
1999	GARY HARADA	Cole Information Services

6319 LAVENDER ST

Year	Uses	Source
2017	ROBERT WANG	Cole Information Services
2014	QINGLIANG WANG	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	DARLENE HARADA	Cole Information Services

6326 LAVENDER ST

Year	Uses	Source
2017	RICHARD ALEXANDER	Cole Information Services
2014	RICHARD ALEXANDER	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services

6329 LAVENDER ST

Year	Uses	Source
2017	RICARDO NAVES	Cole Information Services
2014	RICARDO NAVES	Cole Information Services
2009	RICARDO NAVES	Cole Information Services
1999	RICARDO NAVES	Cole Information Services

6336 LAVENDER ST

Year	Uses	Source
2017	RICHARD BARRON	Cole Information Services
2014	RICHARD BARRON	Cole Information Services
2009	RICHARD BARRON	Cole Information Services
2004	RICHARD BARRON	Cole Information Services
2001	BARRONC	Haines & Company, Inc.
	BARRONChanda	Haines & Company, Inc.
	BARRON Ricardo J	Haines & Company, Inc.
	BARRONF ichard J B	Haines & Company, Inc.

Year	Uses	Source
1999	RICHARD BARRON	Cole Information Services

6339 LAVENDER ST

Year	Uses	Source
2017	ANTONIO MENDOZA	Cole Information Services
2014	HENRY LIVINGS	Cole Information Services
2009	ANTONIO MENDOZA	Cole Information Services
2004	ALBERTO RAMIREZ	Cole Information Services
1999	ANTONIO MENDOZA	Cole Information Services

6346 LAVENDER ST

Year	Uses	Source
2017	TRAVUTH MOCK	Cole Information Services
2014	TRAVUTH MOCK	Cole Information Services
2009	TRAVUTH MOCK	Cole Information Services
2004	TRAVUTH MOCK	Cole Information Services
	EMPIRE 3	Cole Information Services
2001	MOCKTravulh	Haines & Company, Inc.
1999	TRAVUTH MOCK	Cole Information Services

6349 LAVENDER ST

Year	Uses	Source
2017	SCOTT SEESE	Cole Information Services
2014	KRIS INGRAM	Cole Information Services
2009	KRIS INGRAM	Cole Information Services
2004	TODD JOHNSON	Cole Information Services
2001	JOHNSON Todd	Haines & Company, Inc.
	JOHNSON Dane	Haines & Company, Inc.
1999	KRIS INGRAM	Cole Information Services

6356 LAVENDER ST

Year	Uses	Source
2014	JEFF GILLEY	Cole Information Services
2009	JEFF GILLEY	Cole Information Services
2004	JEFF GILLEY	Cole Information Services
	USADK	Cole Information Services
2001	GILLEYTina M	Haines & Company, Inc.
1999	JEFF GILLEY	Cole Information Services

FINDINGS

6359 LAVENDER ST

Year	Uses	Source
2017	AHMAD NAVAS	Cole Information Services
2014	AHMAD NAVAS	Cole Information Services
2009	AHMAD AL-MISHARI	Cole Information Services
2004	LILLIAN NAVAS	Cole Information Services
2001	NAVAS Lillian	Haines & Company, Inc.
	NAVAS Lillan	Haines & Company, Inc.
1999	AHMAD AL-MISHARI	Cole Information Services

6366 LAVENDER ST

Year	Uses	Source
2017	YAOLIN WANG	Cole Information Services
2014	DAVID RICE	Cole Information Services
2009	RICHARD CLEMMER	Cole Information Services
2004	RICHARD CLEMMER	Cole Information Services
2001	CISNEROSBea Irice	Haines & Company, Inc.
1999	RICHARD CLEMMER	Cole Information Services

6369 LAVENDER ST

Year	Uses	Source
2017	TERRY CHAPMAN	Cole Information Services
2014	TERRY CHAPMAN	Cole Information Services
2009	TERRY CHAPMAN	Cole Information Services
2004	TERRY CHAPMAN	Cole Information Services
2001	CHAPMAN Pam	Haines & Company, Inc.
	CHAPMAN Terry	Haines & Company, Inc.
1999	TERRY CHAPMAN	Cole Information Services

6376 LAVENDER ST

Year	Uses	Source
2017	JR BANKS	Cole Information Services
2014	JR BANKS	Cole Information Services
2009	LONNIE BANKS	Cole Information Services
2004	LONNIE BANKS	Cole Information Services
1999	LONNIE BANKS	Cole Information Services

6379 LAVENDER ST

Year	Uses	Source
2017	LEITH CHACON	Cole Information Services
2014	JOSEPH HOATS	Cole Information Services

Year	Uses	Source
2009	JASON LUNTZ	Cole Information Services
2004	LINDA LUNTZ	Cole Information Services
1999	JASON LUNTZ	Cole Information Services

6386 LAVENDER ST

Year	Uses	Source
2017	JOE ROCHA	Cole Information Services
2014	JOE ROCHA	Cole Information Services
2009	JOE ROCHA	Cole Information Services
2004	JOE ROCHA	Cole Information Services
2001	ROCHAJoe J	Haines & Company, Inc.
1999	JOE ROCHA	Cole Information Services

6389 LAVENDER ST

Year	Uses	Source
2017	SCOTT COOPER	Cole Information Services
2014	SCOTT COOPER	Cole Information Services
2009	SCOTT COOPER	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	SCOTT COOPER	Cole Information Services

6396 LAVENDER ST

Year	Uses	Source
2017	MATTHEW CROWDER	Cole Information Services
2014	MATTHEW CROWDER	Cole Information Services
2009	MATTHEW CROWDER	Cole Information Services
2004	MATTHEW CROWDER	Cole Information Services
2001	CROWDER Matlhew	Haines & Company, Inc.
1999	MATTHEW CROWDER	Cole Information Services

6399 LAVENDER ST

Year	Uses	Source
2014	MORRIS CHACON	Cole Information Services
2009	CATALINA CHACON	Cole Information Services
2004	JEFFREY MORRIS	Cole Information Services
2001	MORRIS Calalma R	Haines & Company, Inc.
1999	CATALINA CHACON	Cole Information Services

LAVONDA ST

13100 LAVONDA ST

Year	Uses	Source
2017	CORRINE ALVAREZ	Cole Information Services
2014	CORRINE ALVAREZ	Cole Information Services
2009	AMIT MANCHANDA	Cole Information Services

13103 LAVONDA ST

Year	Uses	Source
2017	BRANT SANDOVAL	Cole Information Services
2014	MARK SANDOVAL	Cole Information Services
2009	MARK SANDOVAL	Cole Information Services
1999	MARK SANDOVAL	Cole Information Services

13110 LAVONDA ST

Year	Uses	Source
2017	MICHAEL ESCOBEDO	Cole Information Services
2014	JOSHUA ESCOBEDO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

13113 LAVONDA ST

Year	Uses	Source
2017	JOSE RUIZ	Cole Information Services
2014	JOSE RUIZ	Cole Information Services
2009	JOSE RUIZ	Cole Information Services
1999	JOSE RUIZ	Cole Information Services

13120 LAVONDA ST

Year	Uses	Source
2017	AUGUSTINE JUAREZ	Cole Information Services
2014	AARON JUAREZ	Cole Information Services
2009	AUGUSTINE JUAREZ	Cole Information Services
1999	AUGUSTINE JUAREZ	Cole Information Services

13123 LAVONDA ST

Year	Uses	Source
2017	SYLVIA STRYKOWSKA	Cole Information Services
2014	SYLVIA STRYKOWSKA	Cole Information Services
2009	SYLVIA STRYKOWSKA	Cole Information Services
1999	SYLVIA STRYKOWSKA	Cole Information Services

FINDINGS

13130 LAVONDA ST

Year	Uses	Source
2017	BRENT ROBERSON	Cole Information Services
2014	RODRIGO DURAN	Cole Information Services
2009	KUMARAN PRAKASH	Cole Information Services
1999	KUMARAN PRAKASH	Cole Information Services

13133 LAVONDA ST

Year	Uses	Source
2017	LIHUA SHEN	Cole Information Services
2014	LIHUA SHEN	Cole Information Services
2009	LIHUA SHEN	Cole Information Services
1999	LIHUA SHEN	Cole Information Services

13140 LAVONDA ST

Year	Uses	Source
2017	CLINT KROESE	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	YI LU	Cole Information Services
1999	YI LU	Cole Information Services

13143 LAVONDA ST

Year	Uses	Source
2017	LORENA ESCOBAR	Cole Information Services
2014	LORENA ESCOBAR	Cole Information Services
2009	IVIS ESCOBAR	Cole Information Services
1999	IVIS ESCOBAR	Cole Information Services

13150 LAVONDA ST

Year	Uses	Source
2017	CASEY WALLEVAND	Cole Information Services
2014	MICHELE DEAN	Cole Information Services
2009	MICHELE DEAN	Cole Information Services
1999	MICHELE DEAN	Cole Information Services

13153 LAVONDA ST

Year	Uses	Source
2017	STEVEN LEFFLER	Cole Information Services
2014	MARC ALPHIN	Cole Information Services
2009	TONI NICOTERA	Cole Information Services
1999	TONI NICOTERA	Cole Information Services

13163 LAVONDA ST

Year	Uses	Source
2017	ALAN ROJO	Cole Information Services
2014	ALAN ROJO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

13173 LAVONDA ST

Year	Uses	Source
2017	ZHEN XIA	Cole Information Services
2014	RONALD HIGHFILL	Cole Information Services
2009	RONALD HIGHFILL	Cole Information Services
1999	RONALD HIGHFILL	Cole Information Services

LIMONITE AVE

12421 LIMONITE AVE

Year	Uses	Source
2009	LYLE PARKS JR INC	Cole Information Services
2004	LYLE PARKS JR INC	Cole Information Services

12423 LIMONITE AVE

Year	Uses	Source
2017	ULTA	Cole Information Services
	GSTAGE	Cole Information Services
2014	ULTA	Cole Information Services

12435 LIMONITE AVE

Year	Uses	Source
2017	PERALTA THE LOCKSMITH	Cole Information Services
	SUNRISE OPTOMETRY	Cole Information Services
	LEWIS OPERATING CORP	Cole Information Services
	CARTERS	Cole Information Services
	KAY JEWELERS	Cole Information Services
	MASSAGE ENVY EASTVALE	Cole Information Services
	TMOBILE	Cole Information Services
	GSTAGE	Cole Information Services
2014	TMOBILE	Cole Information Services
	SUNRISE OPTOMETRY	Cole Information Services
	G STAGE	Cole Information Services
	MASSAGE ENVY EASTVALE	Cole Information Services
	LEWIS OPERATING CORP	Cole Information Services

Year	Uses	Source
2014	TMOBILE MIRA LOMA	Cole Information Services
2009	SUNRISE OPTOMETRY	Cole Information Services

12447 LIMONITE AVE

Year	Uses	Source
2017	CARINOS ITALIAN GRILL	Cole Information Services
2014	CARINOS ITALIAN GRILL	Cole Information Services
2009	CARINOS ITALIAN GRILL	Cole Information Services

12459 LIMONITE AVE

Year	Uses	Source
2017	RADIOSHACK	Cole Information Services
	ORANGE THEORY FITNESS EASTVALE	Cole Information Services
	VERIZON WIRELESS	Cole Information Services
2014	VERIZON WIRELESS	Cole Information Services
	RADIOSHACK	Cole Information Services

12471 LIMONITE AVE

Year	Uses	Source
2017	FANTASTIC SAMS	Cole Information Services
	AT&T	Cole Information Services
	BANK OF AMERICA	Cole Information Services
	CHIPOTLE MEXICAN GRILL	Cole Information Services
	DRESSBARN	Cole Information Services
	CVS PHAMACY	Cole Information Services
	DOMINOS PIZZA	Cole Information Services
	PICK UP STIX	Cole Information Services
	RADIOSHACK	Cole Information Services
	TJ MAXX	Cole Information Services
	JOHNNY ROCKETS	Cole Information Services
	NUTRISHOP EASTVALE GATEWAY	Cole Information Services
	TARGET	Cole Information Services
	ULTA	Cole Information Services
	GAMESTOP	Cole Information Services
	SPORT CHALET	Cole Information Services
	TUTTI FRUTTI	Cole Information Services
	BUFFALO WILD WINGS GRILL & BAR	Cole Information Services
	APPLEBEES NEIGHBORHOOD GRILL & BAR	Cole Information Services

Year	Uses	Source
2017	DV URGENT CARE EASTVALE GATEWAY	Cole Information Services
	EDWARDS CINEMAS EASTVALE GATEWAY	Cole Information Services
	GNC	Cole Information Services
	STAPLES EASTVALE GATEWAY	Cole Information Services
	WORKFORCE OUTSOURCING EASTVALE GATEW	Cole Information Services
	TRAN TANNIE OD	Cole Information Services
2014	GEMMAS JEWELERS EASTVALE GATEWAY	Cole Information Services
	EDWARDS CINEMAS EASTVALE GATEWAY	Cole Information Services
	FANTASTIC SAMS EASTVALE GATEWAY	Cole Information Services
	DRESS BARN EASTVALE GATEWAY	Cole Information Services
	CITY OF EASTVALE EASTVALE GATEWAY	Cole Information Services
	BANK OF AMERICA EASTVALE GATEWAY	Cole Information Services
	VERIZON WIRELESS EASTVALE GATEWAY	Cole Information Services
	THAI BAMBOO BISTRO EASTVALE GATEWAY	Cole Information Services
	TARGET	Cole Information Services
	NUTRISHOP EASTVALE GATEWAY	Cole Information Services
	WORKFORCE OUTSOURCING EASTVALE GATEW	Cole Information Services
	THE JOINT CHIROPRACTIC PLACE EASTVAL	Cole Information Services
	BUFFALO WILD WINGS GRILL & BAR EAS	Cole Information Services
2009	TARGET PHARMACY 1961	Cole Information Services

12483 LIMONITE AVE

Year	Uses	Source
2017	PETSMART	Cole Information Services
2014	PETSMART	Cole Information Services
2009	BANFIELD THE PET HOSPITAL	Cole Information Services

12495 LIMONITE AVE

Year	Uses	Source
2017	STAPLES	Cole Information Services
	VERIZON WIRELESS	Cole Information Services

Year	Uses	Source
2017	STAPLES PRINT & MARKETING	Cole Information Services
2014	STAPLES	Cole Information Services

12511 LIMONITE AVE

Year	Uses	Source
2017	BANK OF AMERICA FINANCIAL CENTER	Cole Information Services
	BANK OF AMERICA	Cole Information Services
2014	BANK OF AMERICA	Cole Information Services
2009	STAPLES THE OFFICE SUPERSTORE LLC	Cole Information Services

12523 LIMONITE AVE

Year	Uses	Source
2017	BRADY & BRADY LLC	Cole Information Services
	EASTVALE OPTOMETRY	Cole Information Services
	FANTASTIC SAMS CUT & COLOR	Cole Information Services
	THE UPS STORE	Cole Information Services
	FOOT REFLEXOLOGY	Cole Information Services
	LUNA GRILL	Cole Information Services
	STAR NAILS & SPA	Cole Information Services
	GNC	Cole Information Services
	BLACK BELT INVESTORS	Cole Information Services
	DISH NETWORK	Cole Information Services
	FANTASTIC SAMS	Cole Information Services
	BLAZE	Cole Information Services
	HAIR ELEGANCE	Cole Information Services
	VALLEY PACIFIC LANDSCAPE INC	Cole Information Services
2014	JASON SALYWODA	Cole Information Services
	STAR NAILS & SPA	Cole Information Services
	CARMEN JOHNSON	Cole Information Services
	LESLIE PHELAN	Cole Information Services
	STEFAN RENER	Cole Information Services
	DYANN LANSING	Cole Information Services
	ERIC LEE	Cole Information Services
	JACK SHELBY	Cole Information Services
	RICHARD GILLILAND	Cole Information Services
	JESSICA JANUS	Cole Information Services
	BERNARDO BARRERA	Cole Information Services
	THOMAS FRY	Cole Information Services

FINDINGS

Year	Uses	Source
2014	BRADY & BRADY LLC	Cole Information Services
	EASTVALE OPTOMETRY	Cole Information Services
	BLOCKBUSTER	Cole Information Services
	THE UPS STORE	Cole Information Services
	FOOT REFLEXOLOGY	Cole Information Services
	AMERICAN SERVCO IMAGING SYSTEMS	Cole Information Services
	GNC	Cole Information Services
	VALLEY PACIFIC LANDSCAPE INC	Cole Information Services
	HAIR ELEGANCE	Cole Information Services
	PATTI MCNABB	Cole Information Services
2009	EASTVALE OPTOMETRY	Cole Information Services
	THOMAS FRY	Cole Information Services
	TUFF INC	Cole Information Services
	BLOCKBUSTER VIDEO	Cole Information Services
	GENERAL NUTRITION CENTER	Cole Information Services
	CALIFORNIA HAIR PHASES INTERNATIONAL	Cole Information Services
	ULTIMATE GEAR	Cole Information Services
	AUTOMATED CASH MGMT SYSTEMS	Cole Information Services
	HAIR ELEGANCE	Cole Information Services
	GILLILAND REAL ESTATE NETWORK	Cole Information Services
	STAR NAILS & SPA	Cole Information Services
	TIFFANY CHIZMAR	Cole Information Services
	VERONICA MADRIGAL	Cole Information Services
	ALBERT HAUSER	Cole Information Services
	BRENT WILLIAMS	Cole Information Services
	ANDREA CONTRERAS	Cole Information Services
	SHARON MORRISON	Cole Information Services
	CHOONG LEE	Cole Information Services
	TONY CHUNG	Cole Information Services
	MARYS HALLMARK SHOP	Cole Information Services
1999	TIFFANY CHIZMAR	Cole Information Services
	VERONICA MADRIGAL	Cole Information Services
	ALBERT HAUSER	Cole Information Services
	BRENT WILLIAMS	Cole Information Services
	TONY CHUNG	Cole Information Services
	SHARON MORRISON	Cole Information Services
	CHOONG LEE	Cole Information Services

Year	Uses	Source
1999	THOMAS FRY	Cole Information Services
	ANDREA CONTRERAS	Cole Information Services

12525 LIMONITE AVE

Year	Uses	Source
2014	MARILYN MASON	Cole Information Services

12545 LIMONITE AVE

Year	Uses	Source
2017	FARMER BOYS	Cole Information Services
2014	FARMER BOYS	Cole Information Services

12569 LIMONITE AVE

Year	Uses	Source
2017	THE HABIT BURGER GRILL	Cole Information Services
	OCEANVIEW WIRELESS LLC	Cole Information Services
	JERSEY MIKES SUBS	Cole Information Services
	AT&T AUTHORIZED RETAILER	Cole Information Services
	DICKEYS BARBECUE PIT	Cole Information Services
	COLD STONE CREAMERY	Cole Information Services
2014	JERSEY MIKES SUBS	Cole Information Services
	DICKEYS BARBECUE PIT	Cole Information Services
	COLD STONE CREAMERY	Cole Information Services
	HABIT RESTAURANTS LLC	Cole Information Services
	OCEANVIEW WIRELESS LLC	Cole Information Services
2009	COFFEE BEAN & TEA LEAF	Cole Information Services
	RED BRICK PIZZA	Cole Information Services
	COLD STONE CREAMERY	Cole Information Services
	PLANET MARS FAST FOOD INC	Cole Information Services

12571 LIMONITE AVE

Year	Uses	Source
2017	PICK UP STIX	Cole Information Services
	EASTVALE DENTAL GROUP	Cole Information Services
	WELLS FARGO ATM	Cole Information Services
	EASTVALE GATEWAY	Cole Information Services
	RAMI DIMITRI DDS	Cole Information Services
	CPR CELL PHONE REPAIR EASTVALE	Cole Information Services
	SUPERCUTS	Cole Information Services

Year	Uses	Source
2017	GATEWAY DENTAL GROUP & ORTHODONTIC	Cole Information Services
	CHARLES RODGERS DDS	Cole Information Services
	C2 EDUCATION	Cole Information Services
	PIOS MEXICAN RESTAURANT	Cole Information Services
2014	PICK UP STIX	Cole Information Services
	DIMITRI RAMI DDS	Cole Information Services
	C2 EDUCATION	Cole Information Services
	GATEWAY DENTAL GROUP	Cole Information Services
	TUTTI FRUTTI	Cole Information Services
	EASTVALE GATEWAY	Cole Information Services
	EASTVALE DENTAL GROUP	Cole Information Services
	CHARLES RODGERS DDS	Cole Information Services
	SUPERCUTS	Cole Information Services
2009	COOL CUTS 4 KIDS	Cole Information Services
	L & L HAWAIIAN BBQ	Cole Information Services
	CELLULAR WORLD	Cole Information Services
	MARKETPLACE CLEANERS	Cole Information Services
	RODGERS DENTAL CORP	Cole Information Services
	JEWELRY HEAVEN	Cole Information Services

12700 LIMONITE AVE

Year	Uses	Source
2017	STARBUCKS COFFEE	Cole Information Services
	STARBUCKS	Cole Information Services
2014	STARBUCKS COFFEE	Cole Information Services

12732 LIMONITE AVE

Year	Uses	Source
2017	THE PRETTY KITTY INC	Cole Information Services
	GOLDEN SPOON FROZEN YOGURT	Cole Information Services
2014	THE PRETTY KITTY INC	Cole Information Services
	GOLDEN SPOON FROZEN YOGURT	Cole Information Services
2009	GOLDEN SPOON FROZEN YOGURT	Cole Information Services

12741 LIMONITE AVE

Year	Uses	Source
2014	BRAD LEAL	Cole Information Services
2009	JOHN LEAL	Cole Information Services
	HAIMAN SHANDRA	Cole Information Services

Year	Uses	Source
1999	JOHN LEAL	Cole Information Services

12754 LIMONITE AVE

Year	Uses	Source
2017	THE LEARNING EXPERIENCE	Cole Information Services
	CLOVERDALE MARKETPLACE LLC	Cole Information Services
2014	THE LEARNING EXPERIENCE	Cole Information Services
	CLOVERDALE MARKETPLACE LLC	Cole Information Services

12762 LIMONITE AVE

Year	Uses	Source
2017	CLOVERDALE MARKETPLACE LLC	Cole Information Services
	SOCCER WEARHOUSE	Cole Information Services
	WABA GRILL	Cole Information Services
2014	CLOVERDALE MARKETPLACE LLC	Cole Information Services
	SOCCER WEARHOUSE	Cole Information Services
	WABA GRILL	Cole Information Services

12768 LIMONITE AVE

Year	Uses	Source
2017	PONINOS PIZZARENA	Cole Information Services
2014	PONINOS PIZZARENA	Cole Information Services

12774 LIMONITE AVE

Year	Uses	Source
2017	BRENDA GUZMAN	Cole Information Services
2014	BRENDA GUZMAN	Cole Information Services
2009	HARADA FARMS	Cole Information Services
	GIHA TRANSPORT INC	Cole Information Services

LONGHORNE DR

12601 LONGHORNE DR

Year	Uses	Source
2017	ANDY GARCIA	Cole Information Services
2014	ANDY GARCIA	Cole Information Services
2009	ANDY GARCIA	Cole Information Services
2004	ANDY GARCIA	Cole Information Services
1999	ANDY GARCIA	Cole Information Services

12613 LONGHORNE DR

Year	Uses	Source
2017	DIEGO CARRILLO	Cole Information Services
2014	DIEGO CARRILLO	Cole Information Services
2009	DIEGO CARRILLO	Cole Information Services
2004	EDEANNE LINK	Cole Information Services

12625 LONGHORNE DR

Year	Uses	Source
2017	TOMMY NGUYEN	Cole Information Services
2014	MINH NGUYEN	Cole Information Services
2009	MINHMERIT NGUYEN	Cole Information Services
2004	MINH NGUYEN	Cole Information Services
1999	MINHMERIT NGUYEN	Cole Information Services

12637 LONGHORNE DR

Year	Uses	Source
2014	RAMY GHABOUR	Cole Information Services
2009	RAMY GHABOUR	Cole Information Services
2004	RAMY GHABOUR	Cole Information Services
1999	RAMY GHABOUR	Cole Information Services

12649 LONGHORNE DR

Year	Uses	Source
2014	MARIA BRAVO	Cole Information Services
2009	JOSE DAVALOS	Cole Information Services
2004	MICHAEL RANDALL	Cole Information Services
1999	JOSE DAVALOS	Cole Information Services

12654 LONGHORNE DR

Year	Uses	Source
2017	KENT ROBERTS	Cole Information Services
2014	KENT ROBERTS	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	NORCO REGENT	Cole Information Services

12661 LONGHORNE DR

Year	Uses	Source
2017	SON CHIEM	Cole Information Services
2014	SON CHIEM	Cole Information Services
2009	SON CHIEM	Cole Information Services

Year	Uses	Source
2004	SON CHIEM	Cole Information Services
1999	SON CHIEM	Cole Information Services

12666 LONGHORNE DR

Year	Uses	Source
2017	JANES TWYFORD	Cole Information Services
2014	JANES TWYFORD	Cole Information Services
2009	JIM TWYFORD MAINTENANCE CO	Cole Information Services
	JIM TWYFORD	Cole Information Services
2004	JIM TWYFORD	Cole Information Services
1999	JIM TWYFORD	Cole Information Services

12673 LONGHORNE DR

Year	Uses	Source
2017	MARK BELL	Cole Information Services
2014	MARK BELL	Cole Information Services
2009	MARK BELL	Cole Information Services
2004	MARK BELL	Cole Information Services
1999	MARK BELL	Cole Information Services

12678 LONGHORNE DR

Year	Uses	Source
2017	VUI HUYNH	Cole Information Services
2014	TERESA CHANG	Cole Information Services
2009	YOUNG CHANG	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	YOUNG CHANG	Cole Information Services

12685 LONGHORNE DR

Year	Uses	Source
2017	QUANG VO	Cole Information Services
	V Q	Cole Information Services
2014	QUANG VO	Cole Information Services
2009	QUANG VO	Cole Information Services
2004	LEMA NGUYEN	Cole Information Services
1999	QUANG VO	Cole Information Services

12690 LONGHORNE DR

Year	Uses	Source
2017	CECILIA MENDOZA	Cole Information Services

Year	Uses	Source
2014	NANCY MENDOZA	Cole Information Services
2009	WON HAM	Cole Information Services
2004	WILLIAM QUINONEZ	Cole Information Services
1999	WON HAM	Cole Information Services

12702 LONGHORNE DR

Year	Uses	Source
2017	DENNIS JAMES	Cole Information Services
2014	DENNIS JAMES	Cole Information Services
2009	DENNIS JAMES	Cole Information Services
2004	JAMES BERG	Cole Information Services
1999	DENNIS JAMES	Cole Information Services

12714 LONGHORNE DR

Year	Uses	Source
2017	GARY THOMPSON	Cole Information Services
2014	GARY THOMPSON	Cole Information Services
2009	GARY THOMPSON	Cole Information Services
2004	GARY THOMPSON	Cole Information Services
1999	GARY THOMPSON	Cole Information Services

12726 LONGHORNE DR

Year	Uses	Source
2017	CARLOS ESCUDERO	Cole Information Services
2014	CARLOS ESCUDERO	Cole Information Services
2009	CARLOS ESCUDERO	Cole Information Services
2004	CARLOS ESCUDERO	Cole Information Services
1999	CARLOS ESCUDERO	Cole Information Services

12733 LONGHORNE DR

Year	Uses	Source
2017	VIET HUYNH	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	VIET HUYNH	Cole Information Services
2004	VIET HUYNH	Cole Information Services
1999	VIET HUYNH	Cole Information Services

12738 LONGHORNE DR

Year	Uses	Source
2017	ABHISHEK JOSHI	Cole Information Services

Year	Uses	Source
2014	ABHISHEK JOSHI	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JOHN PRIOR	Cole Information Services

12745 LONGHORNE DR

Year	Uses	Source
2017	PETRONILO MEDINA	Cole Information Services
2014	PETRONILO MEDINA	Cole Information Services
2009	PETRONILO MEDINA	Cole Information Services
2004	PETRONILO MEDINA	Cole Information Services
1999	PETRONILO MEDINA	Cole Information Services

12757 LONGHORNE DR

Year	Uses	Source
2017	MANUEL VIRAMONTES	Cole Information Services
2014	MANUEL VIRAMONTES	Cole Information Services
2009	MANUEL VIRAMONTES	Cole Information Services
2004	MANUEL VIRAMONTES	Cole Information Services
1999	MANUEL VIRAMONTES	Cole Information Services

12762 LONGHORNE DR

Year	Uses	Source
2017	DAVID LEITAO	Cole Information Services
2014	DAVID LEITAO	Cole Information Services
2009	GEORGE GARIBAY	Cole Information Services
2004	DAVID LEITAO	Cole Information Services
1999	GEORGE GARIBAY	Cole Information Services

12769 LONGHORNE DR

Year	Uses	Source
2017	JOSEPHINE PORRECA	Cole Information Services
2014	JOSEPHINE PORRECA	Cole Information Services
2009	JOSEPHINE PORRECA	Cole Information Services
2004	WILLIAM PORRECA	Cole Information Services
1999	JOSEPHINE PORRECA	Cole Information Services

12774 LONGHORNE DR

Year	Uses	Source
2017	IL CHOI	Cole Information Services
2014	IL CHOI	Cole Information Services

Year	Uses	Source
2009	CHOICE TRADING CO INC	Cole Information Services
	DUCK CHOI	Cole Information Services
2004	DUCK CHOI	Cole Information Services
1999	DUCK CHOI	Cole Information Services

12786 LONGHORNE DR

Year	Uses	Source
2017	NHO VO	Cole Information Services
2009	NHO VO	Cole Information Services
2004	NHO VO	Cole Information Services
1999	NHO VO	Cole Information Services

12793 LONGHORNE DR

Year	Uses	Source
2017	SHAOTANG GUO	Cole Information Services
2014	PAUL CUMMINS	Cole Information Services
2009	PAUL CUMMINS	Cole Information Services
	JMP DESIGNS	Cole Information Services
2004	PAUL CUMMINS	Cole Information Services
1999	PAUL CUMMINS	Cole Information Services

12798 LONGHORNE DR

Year	Uses	Source
2017	MICHAEL PAYNE	Cole Information Services
2014	MICHAEL PAYNE	Cole Information Services
2009	MICHAEL PAYNE	Cole Information Services
1999	MICHAEL PAYNE	Cole Information Services

MARIGOLD

6325 MARIGOLD

Year	Uses	Source
2002	Beyers James	SBC PACIFIC BELL

6335 MARIGOLD

Year	Uses	Source
2002	Carletello Dawn	SBC PACIFIC BELL

6352 MARIGOLD

Year	Uses	Source
2002	Policky John S	SBC PACIFIC BELL

6362 MARIGOLD

Year	Uses	Source
2002	Jessop H Lynn	SBC PACIFIC BELL

6385 MARIGOLD

Year	Uses	Source
2002	Bow Andrew	SBC PACIFIC BELL

6392 MARIGOLD

Year	Uses	Source
2002	Dewhurst Roger	SBC PACIFIC BELL

MARIGOLD DR

6325 MARIGOLD DR

Year	Uses	Source
2001	BEYERSJames	Haines & Company, Inc.

6352 MARIGOLD DR

Year	Uses	Source
2001	POLICKYJohn S	Haines & Company, Inc.

6382 MARIGOLD DR

Year	Uses	Source
2001	JESSOPHLynn	Haines & Company, Inc.

6385 MARIGOLD DR

Year	Uses	Source
2001	BOWAndrew	Haines & Company, Inc.

6392 MARIGOLD DR

Year	Uses	Source
2001	DEWHURST Roger	Haines & Company, Inc.

MARIGOLD ST

6312 MARIGOLD ST

Year	Uses	Source
2017	ROBERT JACKSON	Cole Information Services
2014	ROBERT JACKSON	Cole Information Services
2009	ROBERT JACKSON	Cole Information Services

Year	Uses	Source
2009	PEOPLE PROVIDING TRAINING SOLUTIONS	Cole Information Services
2004	ROBERT JACKSON	Cole Information Services
1999	ROBERT JACKSON	Cole Information Services

6315 MARIGOLD ST

Year	Uses	Source
2017	SANDRA NUNEZ	Cole Information Services
2014	EZEQUIEL VALENCIA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	DANIEL SALLARD	Cole Information Services

6322 MARIGOLD ST

Year	Uses	Source
2014	BRUCE SCHILLER	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JOHN CROSSE	Cole Information Services

6325 MARIGOLD ST

Year	Uses	Source
2017	HONGBING YU	Cole Information Services
2014	JAMES BEYERS	Cole Information Services
2009	JAMES BEYERS	Cole Information Services
2004	JAMES BEYERS	Cole Information Services
1999	JAMES BEYERS	Cole Information Services

6328 MARIGOLD ST

Year	Uses	Source
2009	KENNETH GIDNEY	Cole Information Services
1999	KENNETH GIDNEY	Cole Information Services

6332 MARIGOLD ST

Year	Uses	Source
2017	THANG NGUYEN	Cole Information Services
2014	THANG NGUYEN	Cole Information Services
2009	THANG NGUYEN	Cole Information Services
2004	LAVAUGHN HARRIS	Cole Information Services
1999	THANG NGUYEN	Cole Information Services

FINDINGS

6335 MARIGOLD ST

Year	Uses	Source
2017	JOHN CARLETELLO	Cole Information Services
2014	JOHNNY CARLETELLO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services

6342 MARIGOLD ST

Year	Uses	Source
2017	JERRY WOOD	Cole Information Services
2014	JERRY WOOD	Cole Information Services
2009	JERRY WOOD	Cole Information Services
1999	JERRY WOOD	Cole Information Services

6345 MARIGOLD ST

Year	Uses	Source
2017	EDGAR NOICE	Cole Information Services
2014	EDGAR NOICE	Cole Information Services
2009	EDGAR NOICE	Cole Information Services
2004	EDGAR NOICE	Cole Information Services
1999	EDGAR NOICE	Cole Information Services

6352 MARIGOLD ST

Year	Uses	Source
2017	ANDRE YANCEY	Cole Information Services
2014	MANUEL JAIME	Cole Information Services
2009	MANUEL JAIME	Cole Information Services
2004	CORINNA BAKER	Cole Information Services
1999	MANUEL JAIME	Cole Information Services

6355 MARIGOLD ST

Year	Uses	Source
2017	MANUEL CID	Cole Information Services
2014	MANUEL CID	Cole Information Services
2009	MANUEL CID	Cole Information Services
2004	DANIELLE CAROCCIA	Cole Information Services
1999	MANUEL CID	Cole Information Services

6358 MARIGOLD ST

Year	Uses	Source
2009	ANDREW BOW	Cole Information Services

Year	Uses	Source
2004	ANDREW BOW	Cole Information Services
1999	ANDREW BOW	Cole Information Services

6362 MARIGOLD ST

Year	Uses	Source
2017	JASON BOSCH	Cole Information Services
2014	JASON BOSCH	Cole Information Services
2009	JASON BOSCH	Cole Information Services
2004	LOREN BJORN	Cole Information Services
1999	JASON BOSCH	Cole Information Services

6365 MARIGOLD ST

Year	Uses	Source
2017	TANYA AQUINO	Cole Information Services
2014	TANYA AQUINO	Cole Information Services
2009	JOSE PENA	Cole Information Services
2004	MORRIS SHUBIN	Cole Information Services
1999	JOSE PENA	Cole Information Services

6372 MARIGOLD ST

Year	Uses	Source
2017	TINA YBARRA	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	EASTVALE CLEANING SERVICES	Cole Information Services
	MELISSA TACKER	Cole Information Services
2004	NORMAN WARE	Cole Information Services
	PARALEGAL FINDERS	Cole Information Services
1999	MELISSA TACKER	Cole Information Services

6375 MARIGOLD ST

Year	Uses	Source
2014	GREGORY GALLINGTON	Cole Information Services
2009	GREGORY GALLINGTON	Cole Information Services
2004	GREGORY GALLINGTON	Cole Information Services
1999	GREGORY GALLINGTON	Cole Information Services

6382 MARIGOLD ST

Year	Uses	Source
2017	ROGELIO MELENDEZ	Cole Information Services
2014	ROGELIO MELENDEZ	Cole Information Services

Year	Uses	Source
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	KENNETH GIDNEY	Cole Information Services

6385 MARIGOLD ST

Year	Uses	Source
2017	MOHAMMAD IRFAN	Cole Information Services
2014	MOHAMMAD IRFAN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	NADIA ARIF	Cole Information Services

6392 MARIGOLD ST

Year	Uses	Source
2017	KRISTY CORTEZ	Cole Information Services
2014	RAUL CASANOVA	Cole Information Services
2009	SHANI PANGANIBAN	Cole Information Services
2004	ROGER DEWHURST	Cole Information Services
1999	SHANI PANGANIBAN	Cole Information Services

6395 MARIGOLD ST

Year	Uses	Source
2017	ROBERT SHELDON	Cole Information Services
2014	ROBERT SHELDON	Cole Information Services
2009	ROBERT SHELDON	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	ROBERT SHELDON	Cole Information Services

MARK TWAIN CT

5713 MARK TWAIN CT

Year	Uses	Source
2017	KYLE HILL	Cole Information Services
2014	KYLE HILL	Cole Information Services
2009	DEBORAH BALIJA	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	DEBORAH BALIJA	Cole Information Services

5716 MARK TWAIN CT

Year	Uses	Source
2017	ERNESTO NAVARRO	Cole Information Services
2014	ERNELYN NAVARRO	Cole Information Services

Year	Uses	Source
2009	KENNETH CHEUNG	Cole Information Services
2004	ERNELYN NAVARRO	Cole Information Services
1999	KENNETH CHEUNG	Cole Information Services

5719 MARK TWAIN CT

Year	Uses	Source
2017	LAURA MACIAS	Cole Information Services
2014	RUBEN MACIAS	Cole Information Services
2009	FLOYD HENRY	Cole Information Services
2004	FLOYD HENRY	Cole Information Services
1999	FLOYD HENRY	Cole Information Services

5722 MARK TWAIN CT

Year	Uses	Source
2014	ALEX ALVARADO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services

5725 MARK TWAIN CT

Year	Uses	Source
2017	JOHN WOO	Cole Information Services
2014	JOHN WOO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JOSE ROSALES	Cole Information Services

5728 MARK TWAIN CT

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	CURTIS ROBERSON	Cole Information Services
1999	CURTIS ROBERSON	Cole Information Services

5731 MARK TWAIN CT

Year	Uses	Source
2014	MY BUI	Cole Information Services
2009	BRIAN TRAN	Cole Information Services
2004	BRIAN TRAN	Cole Information Services
1999	BRIAN TRAN	Cole Information Services

FINDINGS

5734 MARK TWAIN CT

Year	Uses	Source
2017	ROBERTO HULSEY	Cole Information Services
2014	ROBERTO HULSEY	Cole Information Services
2009	ROBERTO HULSEY	Cole Information Services
2004	ROBERTO HULSEY	Cole Information Services
1999	ROBERTO HULSEY	Cole Information Services

5737 MARK TWAIN CT

Year	Uses	Source
2017	JAMES TOBIN	Cole Information Services
2014	JAMES TOBIN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JAMES TOBIN	Cole Information Services
	JET ELECTRICAL CO	Cole Information Services

5740 MARK TWAIN CT

Year	Uses	Source
2017	ALFRED HORTA	Cole Information Services
2014	ALFRED HORTA	Cole Information Services
2009	JOSE HORTA	Cole Information Services
2004	JOSE HORTA	Cole Information Services
1999	JOSE HORTA	Cole Information Services

5743 MARK TWAIN CT

Year	Uses	Source
2017	PISETH CHRIN	Cole Information Services
2014	PISETH CHRIN	Cole Information Services
2009	MARGIE CHRIN	Cole Information Services
2004	MARGIE CHRIN	Cole Information Services
1999	MARGIE CHRIN	Cole Information Services

5749 MARK TWAIN CT

Year	Uses	Source
2017	JOHN RUBIO	Cole Information Services
2014	JOHN RUBIO	Cole Information Services
2009	ROBERT FIGUEROA	Cole Information Services
2004	JESUS MENA	Cole Information Services
1999	ROBERT FIGUEROA	Cole Information Services

5755 MARK TWAIN CT

Year	Uses	Source
2017	SERGIO GONZALEZ	Cole Information Services
2014	DENISIA TALAVERA	Cole Information Services
2009	ALBERT LAPP	Cole Information Services
2004	ALBERT LAPP	Cole Information Services
1999	ALBERT LAPP	Cole Information Services

5761 MARK TWAIN CT

Year	Uses	Source
2017	EFREN DELGADO	Cole Information Services
2014	EFREN DELGADO	Cole Information Services
2009	EFREN DELGADO	Cole Information Services
2004	MICHAEL CONLEY	Cole Information Services
1999	EFREN DELGADO	Cole Information Services

5767 MARK TWAIN CT

Year	Uses	Source
2017	SHARON FLETCHER	Cole Information Services
2014	SHARON FLETCHER	Cole Information Services
2009	L CARDENAS	Cole Information Services
2004	SHARON FLETCHER	Cole Information Services

5773 MARK TWAIN CT

Year	Uses	Source
2017	RYAN CHRISTIAN	Cole Information Services
2014	RYAN CHRISTIAN	Cole Information Services
2009	RYAN CHRISTIAN	Cole Information Services
2004	RYAN CHRISTIAN	Cole Information Services
1999	RYAN CHRISTIAN	Cole Information Services

MARYLAND AVE

12830 MARYLAND AVE

Year	Uses	Source
2014	ELIZABETH SANTILLAN	Cole Information Services
2009	TODD NICHOLS	Cole Information Services
2004	TODD NICHOLS	Cole Information Services
1999	TODD NICHOLS	Cole Information Services

FINDINGS

12835 MARYLAND AVE

Year	Uses	Source
2017	RUSSELITO ALMANZOR	Cole Information Services
2014	RUSSELITO ALMANZOR	Cole Information Services
2009	RON HOGAN	Cole Information Services
1999	RON HOGAN	Cole Information Services

12840 MARYLAND AVE

Year	Uses	Source
2017	JAVIER SANTANA	Cole Information Services
2014	JAVIER SANTANA	Cole Information Services
2009	BLINDS TODAY	Cole Information Services
	OCCUPANT UNKNOWN	Cole Information Services
2004	JAVIER SANTANA	Cole Information Services

12845 MARYLAND AVE

Year	Uses	Source
2017	CHEERAPORN CHAIYASIT	Cole Information Services
2014	CHEERAPORN CHAIYASIT	Cole Information Services
2009	CHEERAPORN CHAIYASIT	Cole Information Services
1999	CHEERAPORN CHAIYASIT	Cole Information Services

12850 MARYLAND AVE

Year	Uses	Source
2014	ERNESTINE BROWNING	Cole Information Services
2009	ERICK DOUGLAS	Cole Information Services
2004	DERRICK BROWNING	Cole Information Services
1999	ERICK DOUGLAS	Cole Information Services

12855 MARYLAND AVE

Year	Uses	Source
2017	JUNG KIM	Cole Information Services
2014	HYUN KIM	Cole Information Services
2009	TODSPORN BUNYAPANASARN	Cole Information Services
1999	TODSPORN BUNYAPANASARN	Cole Information Services

12860 MARYLAND AVE

Year	Uses	Source
2014	JORGE MEDRANO	Cole Information Services
2009	JORGE MEDRANO	Cole Information Services
2004	JORGE MEDRANO	Cole Information Services

Year	Uses	Source
1999	JORGE MEDRANO	Cole Information Services

12865 MARYLAND AVE

Year	Uses	Source
2017	JOSE MAGALLON	Cole Information Services
2014	JOSE MAGALLON	Cole Information Services
2009	JOSE MAGALLON	Cole Information Services

12875 MARYLAND AVE

Year	Uses	Source
2017	BERNADETTE EZEKWE	Cole Information Services
2014	BERNADETTE EZEKWE	Cole Information Services
2009	ARTURO VASQUEZ	Cole Information Services
1999	ARTURO VASQUEZ	Cole Information Services

12885 MARYLAND AVE

Year	Uses	Source
2017	A AZILA	Cole Information Services
2014	CINDY AVILA	Cole Information Services
2009	RAMANI KETHIREDDY	Cole Information Services
1999	RAMANI KETHIREDDY	Cole Information Services

12895 MARYLAND AVE

Year	Uses	Source
2014	JOAN CUDE	Cole Information Services
2009	D RODRIGUEZ	Cole Information Services
1999	D RODRIGUEZ	Cole Information Services

12915 MARYLAND AVE

Year	Uses	Source
2017	DAVID BOSWELL	Cole Information Services
2014	DAVID BOSWELL	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	DAVID BOSWELL	Cole Information Services

12925 MARYLAND AVE

Year	Uses	Source
2017	JOSE MONTOYA	Cole Information Services
2014	ELIZABETH DIAZ	Cole Information Services
2009	TAIL WAG N FUN MOBILE PET SPAW	Cole Information Services

Year	Uses	Source
2009	DONALD OCONNELL	Cole Information Services
2004	DONALD OCONNELL	Cole Information Services

12935 MARYLAND AVE

Year	Uses	Source
2017	JENNIFER MAURICIO	Cole Information Services
2014	JENNIFER MAURICIO	Cole Information Services
2009	RYAN PRITCHARD	Cole Information Services
2004	RYAN PRITCHARD	Cole Information Services
1999	RYAN PRITCHARD	Cole Information Services

12945 MARYLAND AVE

Year	Uses	Source
2014	ERNESTO GARCIA	Cole Information Services
2009	ERNESTO GARCIA	Cole Information Services
2004	MARTIN ESTRADA	Cole Information Services
	MCL ENTERPRISES	Cole Information Services
1999	ERNESTO GARCIA	Cole Information Services

12955 MARYLAND AVE

Year	Uses	Source
2017	TIMOTHY POLICY	Cole Information Services
2014	TIMOTHY POLICY	Cole Information Services
2009	TIMOTHY POLICY	Cole Information Services
2004	TIMOTHY POLICY	Cole Information Services
	TIMS WATER SERVICE	Cole Information Services
1999	TIMOTHY POLICY	Cole Information Services

12965 MARYLAND AVE

Year	Uses	Source
2017	GIOVANNI GHENT	Cole Information Services
2014	GIOVANNI GHENT	Cole Information Services
2009	GIOVANNI GHENT	Cole Information Services
2004	GIOVANNI GHENT	Cole Information Services
1999	GIOVANNI GHENT	Cole Information Services

12975 MARYLAND AVE

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	RICK ROOKER	Cole Information Services

Year	Uses	Source
2004	RICK ROOKER	Cole Information Services
1999	RICK ROOKER	Cole Information Services

12985 MARYLAND AVE

Year	Uses	Source
2017	MARTIN ZATARAIN	Cole Information Services
2014	MARTIN ZATARAIN	Cole Information Services
2009	MARTIN ZATARAIN	Cole Information Services
1999	MARTIN ZATARAIN	Cole Information Services

12995 MARYLAND AVE

Year	Uses	Source
2014	DAVE BOSWELL	Cole Information Services

MAYFAIR CIR

10 MAYFAIR CIR

Year	Uses	Source
1977	Manders Elmer F	Pacific Telephone

11 MAYFAIR CIR

Year	Uses	Source
1986	Hubbard Thos N	Pacific Bell Yellow Pages

96 MAYFAIR CIR

Year	Uses	Source
2004	LORETTA HERNANDEZ	Cole Information Services
1977	Papaleo Cataldo T	Pacific Telephone

97 MAYFAIR CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1994	STALLINGS, WILLIAM E	Cole Information Services
1986	Stallings Wm Earl	Pacific Bell Yellow Pages
1981	Stallings Wm Earl	Pacific Telephone
1977	Blue L M	Pacific Telephone

98 MAYFAIR CIR

Year	Uses	Source
2002	Gomez Angelica	SBC PACIFIC BELL
2001	GOMEZAngelica	Haines & Company, Inc.

Year	Uses	Source
1986	Staerkel N E	Pacific Bell Yellow Pages
1981	Staerkel N E	Pacific Telephone
1977	Staerkel N E	Pacific Telephone

99 MAYFAIR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.

100 MAYFAIR CIR

Year	Uses	Source
2004	ANOTHER PLANT PLACE	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Conrad Clyde	Pacific Bell Yellow Pages
1977	Conrad Clyde	Pacific Telephone

101 MAYFAIR CIR

Year	Uses	Source
2004	JENNY HILL	Cole Information Services
2002	Hill Joe	SBC PACIFIC BELL

102 MAYFAIR CIR

Year	Uses	Source
2004	MARIA COVARRUBIAS	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1981	Callahan Lloyd J	Pacific Telephone
1977	Mc Quown P J	Pacific Telephone

103 MAYFAIR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
	HONDUMEX	Cole Information Services
1981	Reed John M	Pacific Telephone
1977	Reed John M	Pacific Telephone

104 MAYFAIR CIR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	LAYTON, HENRY L	Cole Information Services
1986	Layton Henry L	Pacific Bell Yellow Pages

Year	Uses	Source
1977	Layton Henry L	Pacific Telephone
	Layton Grace L	Pacific Telephone

105 MAYFAIR CIR

Year	Uses	Source
2004	JESUS LUPERCIO	Cole Information Services
2002	Lupercio Jesus	SBC PACIFIC BELL
2001	LUPERCIOJesus	Haines & Company, Inc.
1994	ANDERSON, DAVID	Cole Information Services
1977	Berger Clifford F	Pacific Telephone

106 MAYFAIR CIR

Year	Uses	Source
2017	PAULINE FLIPPO	Cole Information Services
2014	REGINA TRVJILLO	Cole Information Services
	PAULINE FLIPPO	Cole Information Services
2009	RAY TRVJILLO	Cole Information Services
2004	RAY TRVJILLO	Cole Information Services
2001	MORGAN Melissa L	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
	RAY TRVJILLO	Cole Information Services
1994	BOGDANOFF, NICK	Cole Information Services
	FUCHS, PAUL	Cole Information Services
1986	Fuchs Paul	Pacific Bell Yellow Pages
1981	Fuchs Paul	Pacific Telephone
1977	Fuchs Paul	Pacific Telephone

107 MAYFAIR CIR

Year	Uses	Source
2004	ALVARO ROBLEDO	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Beaver Pat	Pacific Bell Yellow Pages
1981	Nelson L H	Pacific Telephone
1977	Nelson Lee C	Pacific Telephone

108 MAYFAIR CIR

Year	Uses	Source
2004	HUMBERTO ESTRADA	Cole Information Services
2001	ESTRADAHum	Haines & Company, Inc.
1977	Heimerl Jos	Pacific Telephone

109 MAYFAIR CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Faulkner Danny & Toni	Pacific Bell Yellow Pages
1981	Hicks Braden W	Pacific Telephone
1977	Hicks Braden W	Pacific Telephone

110 MAYFAIR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1981	Manders Elmer F	Pacific Telephone

111 MAYFAIR CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1977	Novotny Arthur	Pacific Telephone

112 MAYFAIR CIR

Year	Uses	Source
2004	STEVEN ROMO	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Fitzgerald Bill	Pacific Bell Yellow Pages
1981	Pongetti Louis A	Pacific Telephone

MONTEREY CIR

149 MONTEREY CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1994	GORMLEY, LEE	Cole Information Services
1986	Gormley Lee	Pacific Bell Yellow Pages
1981	Gormley Lee	Pacific Telephone

150 MONTEREY CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1981	Seely Jinks	Pacific Telephone
1977	Seely Jas H	Pacific Telephone
	Seely Jinks	Pacific Telephone

151 MONTEREY CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.

152 MONTEREY CIR

Year	Uses	Source
2004	JACK THOMPSON	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Manning Harold A	Pacific Telephone
1977	Manning Harold A	Pacific Telephone
	Manning J	Pacific Telephone

153 MONTEREY CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	MILLER, ELMER L	Cole Information Services
1986	Miller Elmer Lefty	Pacific Bell Yellow Pages
1981	Miller Elmer Lefty	Pacific Telephone
1977	Miller Elmer Lefty	Pacific Telephone

154 MONTEREY CIR

Year	Uses	Source
2004	RAYMOND RICHEY	Cole Information Services
2001	RICHEY Raymond L	Haines & Company, Inc.
1994	RICHEY, RAYMOND L	Cole Information Services
	RICHEY RAYMOND L	Cole Information Services
1986	Richey Raymond L	Pacific Bell Yellow Pages
1977	Morton Oscar W	Pacific Telephone

155 MONTEREY CIR

Year	Uses	Source
2004	ELIZABETH CASTRO	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1981	Moran Russell F	Pacific Telephone
1977	Moran Russell F	Pacific Telephone

156 MONTEREY CIR

Year	Uses	Source
1981	Hart Earl W	Pacific Telephone
1977	Hart Earl W	Pacific Telephone

157 MONTEREY CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Macy Jas D Sr	Pacific Bell Yellow Pages
	Macy H M	Pacific Bell Yellow Pages

158 MONTEREY CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	LOCKWOOD, VERNON C	Cole Information Services
1986	Lockwood Vernon C	Pacific Bell Yellow Pages
1981	Schanbacher FE	Pacific Telephone
1977	Schanbacher F E	Pacific Telephone

159 MONTEREY CIR

Year	Uses	Source
2004	ROBERT SCHIELKE	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Snyder B V	Pacific Bell Yellow Pages
1981	Snyder B V	Pacific Telephone
1977	Snyder B V	Pacific Telephone

160 MONTEREY CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Penton Chas E	Pacific Bell Yellow Pages
	Pentoney Ken	Pacific Bell Yellow Pages
1981	Penton Chas E	Pacific Telephone
1977	Pentland Jeff	Pacific Telephone

161 MONTEREY CIR

Year	Uses	Source
2004	FRANCISCO RUIZ	Cole Information Services

162 MONTEREY CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Coker Wm C	Pacific Bell Yellow Pages
1981	Coker Wm C	Pacific Telephone

Year	Uses	Source
1981	Coker Wm C	Pacific Telephone

MONTEREY LN

150 MONTEREY LN

Year	Uses	Source
1970	Fogliasso Jinks	Pacific Telephone

151 MONTEREY LN

Year	Uses	Source
1970	Peek Robt Earl	Pacific Telephone

152 MONTEREY LN

Year	Uses	Source
1970	Bristow Wm A Lt Col	Pacific Telephone

153 MONTEREY LN

Year	Uses	Source
1970	Parker Chas S	Pacific Telephone

154 MONTEREY LN

Year	Uses	Source
1970	Morton Oscar W	Pacific Telephone

155 MONTEREY LN

Year	Uses	Source
1970	Cuddeback Du Wayne	Pacific Telephone
	Moran Russell F	Pacific Telephone

157 MONTEREY LN

Year	Uses	Source
1970	Dehlin Carl O	Pacific Telephone

158 MONTEREY LN

Year	Uses	Source
1970	Schanbacher F E	Pacific Telephone

160 MONTEREY LN

Year	Uses	Source
1970	Collins Edwin H	Pacific Telephone

161 MONTEREY LN

Year	Uses	Source
1970	Halliday John Sr	Pacific Telephone

162 MONTEREY LN

Year	Uses	Source
1970	Beutler Floyd	Pacific Telephone

MOUNTAIN VIEW CIR

1 MOUNTAIN VIEW CIR

Year	Uses	Source
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services

2 MOUNTAIN VIEW CIR

Year	Uses	Source
2009	RIGOBERTO MUNOZ	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	RIGOBERTO MUNOZ	Cole Information Services
	OCCUPANT UNKNOWN	Cole Information Services
1986	Meier V	Pacific Bell Yellow Pages
	Meier S E	Pacific Bell Yellow Pages
1981	Meier S E	Pacific Telephone

3 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

4 MOUNTAIN VIEW CIR

Year	Uses	Source
1981	Thibodeaux Lois Diane	Pacific Telephone
1977	Paris Clifford L	Pacific Telephone

5 MOUNTAIN VIEW CIR

Year	Uses	Source
2001	JOYCE Bob	Haines & Company, Inc.

Year	Uses	Source
1986	Kufleitner John	Pacific Bell Yellow Pages
1981	Kufleitner John	Pacific Telephone

6 MOUNTAIN VIEW CIR

Year	Uses	Source
2009	ROBERT MONTENEGRO	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	CADENAM	Haines & Company, Inc.
1999	ROBERT MONTENEGRO	Cole Information Services
1981	Vandal Archie J	Pacific Telephone
1977	Gidney N HM	Pacific Telephone

7 MOUNTAIN VIEW CIR

Year	Uses	Source
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Watson T A	Pacific Bell Yellow Pages
1981	Watson T A	Pacific Telephone
1977	Hearn Jas R	Pacific Telephone
	Hearn Jas R	Pacific Telephone

8 MOUNTAIN VIEW CIR

Year	Uses	Source
1981	Porter Millburn	Pacific Telephone
1977	Porter Millburn	Pacific Telephone

9 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1981	Carlson Carl R	Pacific Telephone
1977	Carlson Carl R	Pacific Telephone

10 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	IPPOLITO, N M	Cole Information Services
1981	Ippolito Nicholas M	Pacific Telephone

11 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Nousianen W W	Pacific Telephone

12 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	WILLIE BROWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Naber J	Pacific Bell Yellow Pages
1981	Naber J	Pacific Telephone
1977	N V Fashions	Pacific Telephone

13 MOUNTAIN VIEW CIR

Year	Uses	Source
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Myrdahl Jerry Paul Jr	Pacific Bell Yellow Pages

14 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	SAMANTHA SPENCER	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

15 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1977	Mertz S J	Pacific Telephone

16 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	M RAY	Cole Information Services
1994	RAY, M	Cole Information Services
1977	Carsell Haldon	Pacific Telephone

17 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	MARIA JIMEMEZ	Cole Information Services
2002	Jimemez Maria	SBC PACIFIC BELL
2001	XXXX	Haines & Company, Inc.
1986	Brown Harry H	Pacific Bell Yellow Pages

Year	Uses	Source
1981	Brown Harry H	Pacific Telephone
1977	Brown Harry H	Pacific Telephone

18 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	ANTHONY ACOSTA	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1994	ACOSTA, ANTHONY J	Cole Information Services
1981	Rheberg Jos R	Pacific Telephone

19 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	ANTHONY MARQUEZ	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	LUIS MARTINEZ	Cole Information Services
1986	Vinding Betty	Pacific Bell Yellow Pages
	Vinding Donald A	Pacific Bell Yellow Pages
1977	Elkins OE	Pacific Telephone

20 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	YESENIA GAMA	Cole Information Services
1986	Robertson Earl R	Pacific Bell Yellow Pages
1981	Robertson Earl R	Pacific Telephone
1977	Robertson Earl R	Pacific Telephone
1970	Robertson Earl R	Pacific Telephone

21 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	HERMAN COLLINS	Cole Information Services
1981	Yocum Mel F	Pacific Telephone
1977	Yocum Mel F	Pacific Telephone

22 MOUNTAIN VIEW CIR

Year	Uses	Source
1986	Hinson Lester A	Pacific Bell Yellow Pages
1981	Hinson Lester A	Pacific Telephone
1977	Williams Jack Mrs	Pacific Telephone

23 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Dougan David P	Pacific Bell Yellow Pages
1981	Dougan David P	Pacific Telephone
1977	Dougan David P	Pacific Telephone

24 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	NANCEE AVILA	Cole Information Services
1994	CURTIS, ANDY	Cole Information Services
1986	Foster Lloyd G	Pacific Bell Yellow Pages
1981	Foster Lloyd G	Pacific Telephone
1977	Westra Albert	Pacific Telephone

25 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	CHRISTINA RIVERA	Cole Information Services
1986	Davis Leland & Iva	Pacific Bell Yellow Pages
	Davis Argie L	Pacific Bell Yellow Pages
1981	Davs Argie L	Pacific Telephone
	Davis Leland & Iva	Pacific Telephone

26 MOUNTAIN VIEW CIR

Year	Uses	Source
1986	Drumm B R	Pacific Bell Yellow Pages
1981	Drumm B R	Pacific Telephone
1977	Drumm B R	Pacific Telephone

27 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	SILVADesiree	Haines & Company, Inc.
1986	Haskins Dale	Pacific Bell Yellow Pages
1981	Haskins Dale	Pacific Telephone
1977	Haskett Wm L	Pacific Telephone

28 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	RONALD DICKY	Cole Information Services
2002	Dickey Debra	SBC PACIFIC BELL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Bamberg B J	Pacific Bell Yellow Pages
	Balzer Max P	Pacific Bell Yellow Pages
1981	Balzer Max P	Pacific Telephone
1977	Baizer Max P	Pacific Telephone

29 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	PATRICK LEE	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1994	COZAD, ROBERT	Cole Information Services
1986	Cook Donald & Viola	Pacific Bell Yellow Pages

30 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	RUBEN BERNAL	Cole Information Services
	AMERICAN CENTRAL	Cole Information Services
1986	Callahan Jas E	Pacific Bell Yellow Pages
1981	Callahan Jas E	Pacific Telephone
1977	Callahan Jas E I	Pacific Telephone

31 MOUNTAIN VIEW CIR

Year	Uses	Source
2001	BLAZINA Peter	Haines & Company, Inc.
1986	Blazina Peter	Pacific Bell Yellow Pages
1981	Blazina Peter	Pacific Telephone
1977	Biazina Peter	Pacific Telephone

32 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	JUANITA STRAIT	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Plunkett J E	Pacific Bell Yellow Pages
	Plummer Walter B	Pacific Bell Yellow Pages
1981	Plummer Walter B	Pacific Telephone
1977	Plummer Walter B	Pacific Telephone

33 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.

34 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Schesser Jasper	Pacific Bell Yellow Pages
1981	Schesser Jasper	Pacific Telephone
1977	De Mouth Melvin R	Pacific Telephone

35 MOUNTAIN VIEW CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Ricard Norman & Janice	Pacific Bell Yellow Pages
1981	Ricard Norman & Janice	Pacific Telephone
1977	Walls Rachel	Pacific Telephone

36 MOUNTAIN VIEW CIR

Year	Uses	Source
1986	Fellwock Walter A	Pacific Bell Yellow Pages
1981	Fellwock Walter A	Pacific Telephone
1977	Fellwock Walter A	Pacific Telephone

37 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1981	Claytor Geo V	Pacific Telephone
1977	Swearingen Jas F	Pacific Telephone

38 MOUNTAIN VIEW CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	TAMM, ROSE	Cole Information Services
1986	Tamm Rose Mrs	Pacific Bell Yellow Pages
1981	Tamm Rose Mrs	Pacific Telephone
1977	Tamm Rose Mrs	Pacific Telephone

MOUNTAIN VIEW DR

8 MOUNTAIN VIEW DR

Year	Uses	Source
2001	9 AKER Wiliam B 90 B	Haines & Company, Inc.

MOUNTN VIEW CIR

12 MOUNTN VIEW CIR

Year	Uses	Source
1970	Gillespie Geo H	Pacific Telephone

15 MOUNTN VIEW CIR

Year	Uses	Source
1970	Hanson Walter	Pacific Telephone

17 MOUNTN VIEW CIR

Year	Uses	Source
1970	Brown Harry H	Pacific Telephone

18 MOUNTN VIEW CIR

Year	Uses	Source
1970	Rheberg Jos R	Pacific Telephone

19 MOUNTN VIEW CIR

Year	Uses	Source
1970	Elkins Olive	Pacific Telephone

20 MOUNTN VIEW CIR

Year	Uses	Source
1970	Robertson Earl R	Pacific Telephone

21 MOUNTN VIEW CIR

Year	Uses	Source
1970	Yocum Mel F	Pacific Telephone

22 MOUNTN VIEW CIR

Year	Uses	Source
1970	Voorhies John H	Pacific Telephone

23 MOUNTN VIEW CIR

Year	Uses	Source
1970	Dougan David P	Pacific Telephone

24 MOUNTN VIEW CIR

Year	Uses	Source
1970	Westra Albert	Pacific Telephone

25 MOUNTN VIEW CIR

Year	Uses	Source
1970	Braman Chas D	Pacific Telephone

26 MOUNTN VIEW CIR

Year	Uses	Source
1970	Hurley Gertrude M	Pacific Telephone

27 MOUNTN VIEW CIR

Year	Uses	Source
1970	Thomas Clayton	Pacific Telephone

28 MOUNTN VIEW CIR

Year	Uses	Source
1970	Cumming Estelle	Pacific Telephone

29 MOUNTN VIEW CIR

Year	Uses	Source
1970	Gidney Hallie M	Pacific Telephone

30 MOUNTN VIEW CIR

Year	Uses	Source
1970	Callahan Jas E	Pacific Telephone

31 MOUNTN VIEW CIR

Year	Uses	Source
1970	Mc Avoy Chas E	Pacific Telephone

32 MOUNTN VIEW CIR

Year	Uses	Source
1970	Plummer Walter B	Pacific Telephone

33 MOUNTN VIEW CIR

Year	Uses	Source
1970	Atwood Park G	Pacific Telephone

34 MOUNTN VIEW CIR

Year	Uses	Source
1970	Scovotti Timinado	Pacific Telephone

35 MOUNTN VIEW CIR

Year	Uses	Source
1970	Ringoot M L	Pacific Telephone

37 MOUNTN VIEW CIR

Year	Uses	Source
1970	Swearingen Jas F	Pacific Telephone

38 MOUNTN VIEW CIR

Year	Uses	Source
1970	Tamm Rose Mrs	Pacific Telephone

NASSAU CT

12969 NASSAU CT

Year	Uses	Source
2017	ANDRES GONZALES	Cole Information Services
2014	ANDRES GONZALES	Cole Information Services
2009	EARL ALLISON	Cole Information Services
2004	EARL ALLISON	Cole Information Services
1999	EARL ALLISON	Cole Information Services

12974 NASSAU CT

Year	Uses	Source
2014	MICHAEL MEEHAN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

12979 NASSAU CT

Year	Uses	Source
2014	JOESPH LAMARCHE	Cole Information Services
2009	BRITTANY HOOK	Cole Information Services
1999	BRITTANY HOOK	Cole Information Services

12984 NASSAU CT

Year	Uses	Source
2017	JEFFREY GENTILE	Cole Information Services
2014	JEFFREY GENTILE	Cole Information Services
2009	GERALD BETHURUM	Cole Information Services

Year	Uses	Source
2004	GERALD BETHURUM	Cole Information Services
1999	GERALD BETHURUM	Cole Information Services

12989 NASSAU CT

Year	Uses	Source
2017	ROY JOU	Cole Information Services
2014	JAMES KELLY	Cole Information Services
2009	GERARD NAPOLSKE	Cole Information Services
1999	GERARD NAPOLSKE	Cole Information Services

12994 NASSAU CT

Year	Uses	Source
2017	ANTHONY BELLONIO	Cole Information Services
2014	DARLENE WAYNE	Cole Information Services
2009	DANIEL HERRERA	Cole Information Services
1999	DANIEL HERRERA	Cole Information Services

OAK CREST DR

226 OAK CREST DR

Year	Uses	Source
1966	Location Not Occupied	Luskey Brothers & Company Inc.
	8 Vacant	Luskey Brothers & Company Inc.

243 OAK CREST DR

Year	Uses	Source
1981	Le Roy Robt E	Pacific Telephone

OAKDALE

12643 OAKDALE

Year	Uses	Source
2002	Rello Robert M	SBC PACIFIC BELL

12653 OAKDALE

Year	Uses	Source
2002	Brooks Gary R	SBC PACIFIC BELL

OAKDALE ST

12613 OAKDALE ST

Year	Uses	Source
2017	JORGE TALAVERA	Cole Information Services
2014	JORGE TALAVERA	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	JORGE TALAVERA	Cole Information Services

12623 OAKDALE ST

Year	Uses	Source
2017	ROBERT MARQUEZ	Cole Information Services
2014	DANNY GALINDO	Cole Information Services
2009	MUHAMMAD SARWAR	Cole Information Services
2004	GEORGE ORTIZ	Cole Information Services
1999	MUHAMMAD SARWAR	Cole Information Services

12633 OAKDALE ST

Year	Uses	Source
2017	RAMESH PATEL	Cole Information Services
2014	ASHISH PATEL	Cole Information Services
2009	SITA SONI	Cole Information Services
2004	BELINDA FREDERIC	Cole Information Services
1999	SITA SONI	Cole Information Services

12643 OAKDALE ST

Year	Uses	Source
2017	ROBERT RELLO	Cole Information Services
2014	ROBERT RELLO	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services

12653 OAKDALE ST

Year	Uses	Source
2017	GARY BROOKS	Cole Information Services
2014	GARY BROOKS	Cole Information Services
2009	GARY BROOKS	Cole Information Services
2004	ANITA JARAMILLO	Cole Information Services
	GARY BROOKS	Cole Information Services
1999	GARY BROOKS	Cole Information Services

12673 OAKDALE ST

Year	Uses	Source
2017	ROBERT MOTTS	Cole Information Services
2014	ROBERT MOTTS	Cole Information Services
2009	IGNACIO GALLARDO	Cole Information Services
2004	NOUREDDINE CHOURAFA	Cole Information Services
1999	IGNACIO GALLARDO	Cole Information Services

12683 OAKDALE ST

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	STEVE NULL	Cole Information Services
	NULL TRUCKING	Cole Information Services

12693 OAKDALE ST

Year	Uses	Source
2017	MARK TRUJILLO	Cole Information Services
2014	BRANT DEAN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	RALPH DEAN	Cole Information Services

12703 OAKDALE ST

Year	Uses	Source
2017	RYAN SMITH	Cole Information Services
2014	JEFF STUART	Cole Information Services
2009	JEFF STUART	Cole Information Services
2004	DELWYN ORR	Cole Information Services
1999	JEFF STUART	Cole Information Services

12713 OAKDALE ST

Year	Uses	Source
2017	GEORGE CIPOLLONE	Cole Information Services
2014	GEORGE CIPOLLONE	Cole Information Services
2009	GEORGE CIPOLLONE	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	GEORGE CIPOLLONE	Cole Information Services

12723 OAKDALE ST

Year	Uses	Source
2017	RAUL VALDEZ	Cole Information Services

Year	Uses	Source
2009	RAUL VALDEZ	Cole Information Services
2004	BENJAMIN SHEEN	Cole Information Services
1999	RAUL VALDEZ	Cole Information Services

12803 OAKDALE ST

Year	Uses	Source
2017	SHOU WU	Cole Information Services
2014	HONG YOW	Cole Information Services
2009	ALLAN HOEFER	Cole Information Services
1999	ALLAN HOEFER	Cole Information Services

12809 OAKDALE ST

Year	Uses	Source
2014	JENIFFER HORN	Cole Information Services
2009	TOM ESPINAS	Cole Information Services
1999	TOM ESPINAS	Cole Information Services

12812 OAKDALE ST

Year	Uses	Source
2017	BRIAN TROUDY	Cole Information Services
2014	BRIAN TROUDY	Cole Information Services
2009	JUSTIN MONTGOMERY	Cole Information Services
1999	JUSTIN MONTGOMERY	Cole Information Services

12815 OAKDALE ST

Year	Uses	Source
2017	FRANK CASTREJON	Cole Information Services
2014	FRANK CASTREJON	Cole Information Services
2009	FRANK CASTREJON	Cole Information Services

PALM C!R

87 PALM C!R

Year	Uses	Source
1977	Quant Gwen	Pacific Telephone

PALM CIR

81 PALM CIR

Year	Uses	Source
2004	ADOLFO GELLI	Cole Information Services

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1994	READINGER, PAT	Cole Information Services
1986	Gibson J C	Pacific Bell Yellow Pages
1977	Gibson J C	Pacific Telephone

82 PALM CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1981	Mc Millan Lawrence	Pacific Telephone
1977	Mc Millan Lawrence A I	Pacific Telephone

83 PALM CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	ESTRADA H	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	DEUSTUA, EDUARDO	Cole Information Services

84 PALM CIR

Year	Uses	Source
2004	MARY MERIWEATHER	Cole Information Services
1986	Grubaugh Harry B	Pacific Bell Yellow Pages
1981	Grubaugh Harry B	Pacific Telephone
1977	Grubaugh Harry B	Pacific Telephone

85 PALM CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1993	Govig Melvin	Pacific Bell
1986	Govig Melvin	Pacific Bell Yellow Pages
1981	Govig Melvin	Pacific Telephone
	Govig Mclvin	Pacific Telephone

86 PALM CIR

Year	Uses	Source
2004	ROSIE GONZALES	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	RAPHAEL, LEONARD A	Cole Information Services

Year	Uses	Source
1986	Raphael Leonard A	Pacific Bell Yellow Pages
1981	Rapattoi Construction Co	Pacific Telephone
1977	Raphael Lillian	Pacific Telephone

87 PALM CIR

Year	Uses	Source
1986	Quartana Peter J	Pacific Bell Yellow Pages
1981	Quartana Peter J	Pacific Telephone

88 PALM CIR

Year	Uses	Source
2001	HERNANDE	Haines & Company, Inc.

89 PALM CIR

Year	Uses	Source
2004	JOANNA LOPRESTO	Cole Information Services

90 PALM CIR

Year	Uses	Source
1986	Gilligan Robt J	Pacific Bell Yellow Pages
1981	Gitligan Robt J	Pacific Telephone
1977	Biddlngton Franklin H	Pacific Telephone

91 PALM CIR

Year	Uses	Source
2004	HENRY HARRIS	Cole Information Services
2001	HARRIS	Haines & Company, Inc.
1994	HARRIS, HENRY	Cole Information Services
1986	Harris Henry	Pacific Bell Yellow Pages
1981	Harris Henry	Pacific Telephone

92 PALM CIR

Year	Uses	Source
2004	RICHARD HARRELL	Cole Information Services
2001	HARRELL Richard C	Haines & Company, Inc.
1977	Norwidat Geo	Pacific Telephone

93 PALM CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	MCMAHANC	Haines & Company, Inc.

Year	Uses	Source
2001	MCMAHANS	Haines & Company, Inc.
1986	Ford F F	Pacific Bell Yellow Pages
1981	Ford F F	Pacific Telephone
1977	Ford F F	Pacific Telephone

94 PALM CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Webb Jessie J	Pacific Bell Yellow Pages
	Dupree John W	Pacific Bell Yellow Pages
1981	Webb Jessie J	Pacific Telephone
	Webb Jessie J	Pacific Telephone
1977	Beach Donald P	Pacific Telephone

95 PALM CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	GOMEZEduardo	Haines & Company, Inc.

PETER WILKS CT

5730 PETER WILKS CT

Year	Uses	Source
2014	FRANK VEGA	Cole Information Services
2009	NINA ROMO	Cole Information Services
1999	NINA ROMO	Cole Information Services

5733 PETER WILKS CT

Year	Uses	Source
2017	MANUEL JAINE	Cole Information Services
2014	MANUEL JAIME	Cole Information Services
2004	JOSE MORANO	Cole Information Services

5736 PETER WILKS CT

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	SILINEAR	Cole Information Services
	ARTHUR SILER	Cole Information Services
2004	GLORIA FILER	Cole Information Services
1999	ARTHUR SILER	Cole Information Services

5739 PETER WILKS CT

Year	Uses	Source
2014	THOMAS POER	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	THOMAS POER	Cole Information Services

5742 PETER WILKS CT

Year	Uses	Source
2017	STUART MOFFITT	Cole Information Services
2014	STUART MOFFITT	Cole Information Services
2009	JACCEES BOUTIQUE	Cole Information Services
	ARTHUR KINSLOW	Cole Information Services
2004	JACCEES BOUTIQUE	Cole Information Services
	ARTHUR KINSLOW	Cole Information Services
1999	ARTHUR KINSLOW	Cole Information Services

5745 PETER WILKS CT

Year	Uses	Source
2017	ROSALYN KIDD	Cole Information Services
2014	TROY HORN	Cole Information Services
2009	THERESA BAUGH	Cole Information Services
2004	TERESA ATWOOD	Cole Information Services
1999	THERESA BAUGH	Cole Information Services

POMEGRANATE CT

6314 POMEGRANATE CT

Year	Uses	Source
2017	JAMES CHON	Cole Information Services
2014	KENNETH JOHNSON	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	KEITH HUFFSTUTLER	Cole Information Services
2002	Ramelb Jeffrey A	SBC PACIFIC BELL

6317 POMEGRANATE CT

Year	Uses	Source
2017	ROMUALDO CREUS	Cole Information Services
2014	DOMINADOR FELARCA	Cole Information Services
2009	DOMINADOR FELARCA	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
	ALPINE ELECTRONICS OF AMERICA	Cole Information Services

Year	Uses	Source
1999	DOMINADOR FELARCA	Cole Information Services

6324 POMEGRANATE CT

Year	Uses	Source
2017	PATRICK EARHART	Cole Information Services
2014	PATRICK EARHART	Cole Information Services
2009	PATRICK EARHART	Cole Information Services
2004	PATRICK EARHART	Cole Information Services
2002	Earheart Carol	SBC PACIFIC BELL
2001	EARTHEART	Haines & Company, Inc.
1999	PATRICK EARHART	Cole Information Services

6327 POMEGRANATE CT

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	HARRY TOOLEY	Cole Information Services
2004	JAMES SIMPSON	Cole Information Services
1999	HARRY TOOLEY	Cole Information Services

6334 POMEGRANATE CT

Year	Uses	Source
2017	MANUEL HERNANDEZ	Cole Information Services
2014	ARTURO PEREZ	Cole Information Services
2009	STEVEN COOK	Cole Information Services
2004	RICHARD ZEGERS	Cole Information Services
	JEANNE HANLEY	Cole Information Services
1999	STEVEN COOK	Cole Information Services

6337 POMEGRANATE CT

Year	Uses	Source
2017	SEAN KENNEDY	Cole Information Services
2014	RICHARD LEYBA	Cole Information Services
2009	ROBERTO MARES	Cole Information Services
2004	CHRIS VONNIEDA	Cole Information Services
2002	Rash John	SBC PACIFIC BELL
	Rash Jon J	SBC PACIFIC BELL
2001	RASH John	Haines & Company, Inc.
	RASHJon J	Haines & Company, Inc.

FINDINGS

6344 POMEGRANATE CT

Year	Uses	Source
2017	L BRUNO	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	TIMOTHY HUGHES	Cole Information Services
2004	TIMOTHY HUGHES	Cole Information Services
1999	TIMOTHY HUGHES	Cole Information Services

6347 POMEGRANATE CT

Year	Uses	Source
2017	KENYA NELSON	Cole Information Services
2014	KENYA NELSON	Cole Information Services
2009	KENYA NELSON	Cole Information Services
2004	KEVIN BIGGS	Cole Information Services
1999	KENYA NELSON	Cole Information Services

6354 POMEGRANATE CT

Year	Uses	Source
2017	KOSI MOLELI	Cole Information Services
2014	KOSI MOLELI	Cole Information Services
2009	PENINA PESE	Cole Information Services
2004	FUATAI MAIAVA	Cole Information Services
2002	Maiava Fuatai	SBC PACIFIC BELL
2001	MAIAVAFuatio	Haines & Company, Inc.
1999	PENINA PESE	Cole Information Services

6357 POMEGRANATE CT

Year	Uses	Source
2017	MARK SEGURA	Cole Information Services
2014	STEPHEN SEGURA	Cole Information Services
2009	MARK SEGURA	Cole Information Services
2004	MARK SEGURA	Cole Information Services
1999	MARK SEGURA	Cole Information Services

6364 POMEGRANATE CT

Year	Uses	Source
2017	INOSCENIO RUIZ	Cole Information Services
2014	INOSCENIO RUIZ	Cole Information Services
2009	INOSCENIO RUIZ	Cole Information Services
2004	INOSCENIO RUIZ	Cole Information Services
1999	INOSCENIO RUIZ	Cole Information Services

6367 POMEGRANATE CT

Year	Uses	Source
2017	SHIELAH CREUS	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	SHIELAH CREUS	Cole Information Services
2004	CREUS & ASSOCS	Cole Information Services
	ROMUALDO CREUS	Cole Information Services
1999	SHIELAH CREUS	Cole Information Services

6374 POMEGRANATE CT

Year	Uses	Source
2017	JOSE SANCHEZ	Cole Information Services
2014	JOSE SANCHEZ	Cole Information Services
2009	ANTONIO SANCHEZ	Cole Information Services
2004	JOSE SANCHEZ	Cole Information Services
	SLS PROFESSIONALS INC	Cole Information Services
2002	SLS PROFESSIONALS INC	SBC PACIFIC BELL
1999	ANTONIO SANCHEZ	Cole Information Services

6377 POMEGRANATE CT

Year	Uses	Source
2014	DAVID GLUTH	Cole Information Services
2009	DAVID GLUTH	Cole Information Services
2004	DAVID GLUTH	Cole Information Services
1999	DAVID GLUTH	Cole Information Services

6384 POMEGRANATE CT

Year	Uses	Source
2017	DAGOBERTO MELENDEZ	Cole Information Services
2014	DAGOBERTO MELENDEZ	Cole Information Services
2009	HENRY MELENDEZ	Cole Information Services
2004	DANIEL MCNEVIN	Cole Information Services
1999	HENRY MELENDEZ	Cole Information Services

6387 POMEGRANATE CT

Year	Uses	Source
2017	SUSAN KIEMA	Cole Information Services
2014	MANUEL PORTILLO	Cole Information Services
2009	VICTORIA ESCOBAR	Cole Information Services
2004	JANE NGUBA	Cole Information Services
1999	VICTORIA ESCOBAR	Cole Information Services

6394 POMEGRANATE CT

Year	Uses	Source
2017	JERI MILLERON	Cole Information Services
2014	JERI MILLERON	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	RICHARD LONG	Cole Information Services

6397 POMEGRANATE CT

Year	Uses	Source
2017	MAURICE RAMSEY	Cole Information Services
2014	SAMANTHA LARSON	Cole Information Services
2009	SCOTT RUPERTO	Cole Information Services
2004	SCOTT RUPERTO	Cole Information Services
1999	SCOTT RUPERTO	Cole Information Services

RAFT CIR

5717 RAFT CIR

Year	Uses	Source
2017	BING LI	Cole Information Services
2014	HEUNG KIM	Cole Information Services
2009	HEUNG KIM	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	HEUNG KIM	Cole Information Services

5720 RAFT CIR

Year	Uses	Source
2017	RUDOLF SCHUURMANS	Cole Information Services
2014	RUDOLF SCHUURMANS	Cole Information Services
2009	RUDOLF SCHUURMANS	Cole Information Services
2004	RUDOLF SCHUURMANS	Cole Information Services
1999	RUDOLF SCHUURMANS	Cole Information Services

5723 RAFT CIR

Year	Uses	Source
2017	DAVID JIMENEZ	Cole Information Services
2014	DAVID JIMENEZ	Cole Information Services
2009	ALFRED HERRERA	Cole Information Services
2004	ROBERT JIMENEZ	Cole Information Services
1999	ALFRED HERRERA	Cole Information Services

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5726 RAFT CIR

Year	Uses	Source
2017	SOCORRO MORALES	Cole Information Services
2014	RAFAEL MORALES	Cole Information Services
2009	SOCORRO MORALES	Cole Information Services
2004	RAFAEL MORALES	Cole Information Services
1999	SOCORRO MORALES	Cole Information Services

5729 RAFT CIR

Year	Uses	Source
2017	ILDEFONSA JOYA	Cole Information Services
2014	HUGO ALVARADO	Cole Information Services
2009	HUGO ALVARADO	Cole Information Services
2004	ELIZAR BAXA	Cole Information Services
1999	HUGO ALVARADO	Cole Information Services

5732 RAFT CIR

Year	Uses	Source
2014	DARNESHA MILNER	Cole Information Services
2009	MARTIN SWEED	Cole Information Services
2004	MARTIN SWEED	Cole Information Services
1999	MARTIN SWEED	Cole Information Services

5735 RAFT CIR

Year	Uses	Source
2017	BYRON WOODS	Cole Information Services
2014	BYRON WOODS	Cole Information Services
2009	BYRON WOODS	Cole Information Services
2004	NEILA WILSON	Cole Information Services
1999	BYRON WOODS	Cole Information Services

5744 RAFT CIR

Year	Uses	Source
2017	CHRISTOPHER GEACH	Cole Information Services
2014	CHRISTOPHER GEACH	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	FRANK SZCZESNIAK	Cole Information Services

ROSECLIFF CIR

12823 ROSECLIFF CIR

Year	Uses	Source
2017	STEPHANIE RAMIREZ	Cole Information Services
2014	JESSICA MENDEZ	Cole Information Services
2009	CHUCK COMPTON	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	CHUCK COMPTON	Cole Information Services

12833 ROSECLIFF CIR

Year	Uses	Source
2017	JESUS VAZQUEZ	Cole Information Services
2014	JESUS VAZQUEZ	Cole Information Services
2009	JESUS VAZQUEZ	Cole Information Services
2004	JESUS VAZQUEZ	Cole Information Services
1999	JESUS VAZQUEZ	Cole Information Services

12838 ROSECLIFF CIR

Year	Uses	Source
2017	EDUARDO GUEVARA	Cole Information Services
2014	FRANCISCO BARBA	Cole Information Services

12843 ROSECLIFF CIR

Year	Uses	Source
2017	RAFAEL AVILA	Cole Information Services
2014	RAFAEL AVILA	Cole Information Services
2009	RAFAEL AVILA	Cole Information Services
2004	MARK WALLACE	Cole Information Services
1999	RAFAEL AVILA	Cole Information Services

12848 ROSECLIFF CIR

Year	Uses	Source
2017	JUSTIN TRAN	Cole Information Services
2014	JUSTIN TRAN	Cole Information Services
2009	JUSTIN TRAN	Cole Information Services
1999	JUSTIN TRAN	Cole Information Services

12853 ROSECLIFF CIR

Year	Uses	Source
2017	ANTWANE SHOLES	Cole Information Services

Year	Uses	Source
2014	GINA CARSON	Cole Information Services
2009	ANGELA ALEXENDER	Cole Information Services
2004	DAVID RANDALL	Cole Information Services
1999	ANGELA ALEXENDER	Cole Information Services

12858 ROSECLIFF CIR

Year	Uses	Source
2017	NICK BARTOLOME	Cole Information Services
2014	NICK BARTOLOME	Cole Information Services
2009	SOOWAN KIM	Cole Information Services
1999	SOOWAN KIM	Cole Information Services

RUBY CT

13202 RUBY CT

Year	Uses	Source
2017	BOLA HAYNES	Cole Information Services
2014	BOLA HAYNES	Cole Information Services
2009	M PLANT	Cole Information Services
1999	M PLANT	Cole Information Services

13212 RUBY CT

Year	Uses	Source
2017	JAMES BUCHMILLER	Cole Information Services
2014	JAMES BUCHMILLER	Cole Information Services

13215 RUBY CT

Year	Uses	Source
2017	RICKPAUL VANDER	Cole Information Services
2014	ASHISH PATEL	Cole Information Services
2009	TONY LOURENCO	Cole Information Services
1999	TONY LOURENCO	Cole Information Services

13216 RUBY CT

Year	Uses	Source
2014	AVANI PATEL	Cole Information Services
2009	BHUPENDRA PATEL	Cole Information Services
1999	BHUPENDRA PATEL	Cole Information Services

13222 RUBY CT

Year	Uses	Source
2017	LI KANG	Cole Information Services
2014	LI KANG	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services

13225 RUBY CT

Year	Uses	Source
2017	JAMES LEWIS	Cole Information Services
2014	EDWIN LU	Cole Information Services
2009	ZHENG WEI	Cole Information Services
1999	ZHENG WEI	Cole Information Services

S MAYFAIR CIR

10 S MAYFAIR CIR

Year	Uses	Source
1986	Berger Gordon	Pacific Bell Yellow Pages
	Berger H M	Pacific Bell Yellow Pages
1981	Berger Gordon	Pacific Telephone

SILAS PHELPS DR

12607 SILAS PHELPS DR

Year	Uses	Source
2017	BRIAN KUDER	Cole Information Services
2014	BRIAN KUDER	Cole Information Services
2009	BRIAN KUDER	Cole Information Services
2004	ALFRED KUDER	Cole Information Services
1999	BRIAN KUDER	Cole Information Services

12619 SILAS PHELPS DR

Year	Uses	Source
2017	BRIAN CLARKSON	Cole Information Services
2014	BRIAN CLARKSON	Cole Information Services
2009	BRIAN CLARKSON	Cole Information Services
2004	BRIAN CLARKSON	Cole Information Services
1999	BRIAN CLARKSON	Cole Information Services

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12631 SILAS PHELPS DR

Year	Uses	Source
2017	WEI ZHU	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	STEPHEN MALDONADO	Cole Information Services
2004	JOSEPH SIMONETTA	Cole Information Services

12643 SILAS PHELPS DR

Year	Uses	Source
2017	GUERDA MENDEZ	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	LARRY MILLER	Cole Information Services

12667 SILAS PHELPS DR

Year	Uses	Source
2017	YOUNG CHUNG	Cole Information Services
2014	YOUNG CHUNG	Cole Information Services
2009	JAMES CHUNG	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	JAMES CHUNG	Cole Information Services

12679 SILAS PHELPS DR

Year	Uses	Source
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	DANIEL CHAN	Cole Information Services

12691 SILAS PHELPS DR

Year	Uses	Source
2017	RONALD SMITH	Cole Information Services
2014	RONALD SMITH	Cole Information Services
2009	RONALD SMITH	Cole Information Services
2004	RONALD SMITH	Cole Information Services
1999	RONALD SMITH	Cole Information Services

12702 SILAS PHELPS DR

Year	Uses	Source
2009	KI JUN	Cole Information Services
2004	KI JUN	Cole Information Services
1999	KI JUN	Cole Information Services

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12703 SILAS PHELPS DR

Year	Uses	Source
2017	ARSALOON ARIF	Cole Information Services
2014	ARSALOON ARIF	Cole Information Services
2009	ARSALOON ARIF	Cole Information Services
2004	YOUNG LEE	Cole Information Services
1999	ARSALOON ARIF	Cole Information Services

12708 SILAS PHELPS DR

Year	Uses	Source
2017	DENNIS STOCKHAUSEN	Cole Information Services
2014	MARGARET TOFFOLI	Cole Information Services
2009	DENNIS STOCKHAUSEN	Cole Information Services
2004	DENNIS STOCKHAUSEN	Cole Information Services
1999	DENNIS STOCKHAUSEN	Cole Information Services

12715 SILAS PHELPS DR

Year	Uses	Source
2017	KYLE MURAMOTO	Cole Information Services
2014	KYLE MURAMOTO	Cole Information Services
2004	KA ENTERPRISES LLC	Cole Information Services
	KENNETH AHN	Cole Information Services

12720 SILAS PHELPS DR

Year	Uses	Source
2017	DANIEL ZHOU	Cole Information Services
2014	DANIEL ZHOU	Cole Information Services
2009	PHOEUT KEO	Cole Information Services
2004	STEVE GEBHART	Cole Information Services
1999	PHOEUT KEO	Cole Information Services

12727 SILAS PHELPS DR

Year	Uses	Source
2017	MICHAEL TRAN	Cole Information Services
2014	MICHAEL TRAN	Cole Information Services
2009	MICHAEL TRAN	Cole Information Services
2004	MICHAEL TRAN	Cole Information Services
1999	MICHAEL TRAN	Cole Information Services

12732 SILAS PHELPS DR

Year	Uses	Source
2017	CARLOS SANDOVAL	Cole Information Services
2014	CARLOS SANDOVAL	Cole Information Services
2009	CARLOS SANDOVAL	Cole Information Services
1999	CARLOS SANDOVAL	Cole Information Services

12739 SILAS PHELPS DR

Year	Uses	Source
2017	SHIN LEE	Cole Information Services
2014	SHIN LEE	Cole Information Services
2009	SHIN LEE	Cole Information Services
2004	SHIN LEE	Cole Information Services
1999	SHIN LEE	Cole Information Services

12744 SILAS PHELPS DR

Year	Uses	Source
2017	ESPERANZA MENES	Cole Information Services
2014	ESPERANZA MENES	Cole Information Services
2009	JOSE MENES	Cole Information Services
2004	JOSE MENES	Cole Information Services
1999	JOSE MENES	Cole Information Services

12751 SILAS PHELPS DR

Year	Uses	Source
2017	PEGGY VANDYK	Cole Information Services
2014	PEGGY VANDYK	Cole Information Services
2009	JIM VANDYK	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	JIM VANDYK	Cole Information Services

SUNRISE CIR

64 SUNRISE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Tweedy John M	Pacific Bell Yellow Pages
1981	Tweedy John M	Pacific Telephone
1977	TUXIES Self Service Drive In	Pacific Telephone

65 SUNRISE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	COSTA, MICHAEL J	Cole Information Services
1981	Mc Comb Richard A	Pacific Telephone
1977	Scott Malcolm	Pacific Telephone

66 SUNRISE CIR

Year	Uses	Source
2004	CHRISTINA BERLIN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Graubner P G	Pacific Bell Yellow Pages
	Grauer Gerry & Toni	Pacific Bell Yellow Pages
	Grauer Eugene A Lt Col Ret	Pacific Bell Yellow Pages
1981	Graubner P G	Pacific Telephone
1977	Gratwick Stephen	Pacific Telephone

67 SUNRISE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1994	BETCHER, MELVIN	Cole Information Services
1986	Beth M	Pacific Bell Yellow Pages
	Betcher Melvin	Pacific Bell Yellow Pages
1981	Betcher Melvin	Pacific Telephone
1977	Betcher Melvin	Pacific Telephone

68 SUNRISE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Signorelli M	Pacific Bell Yellow Pages
	Signs By John Patrick	Pacific Bell Yellow Pages
1981	Signorelli Joseph Mrs	Pacific Telephone
1977	Mc Comb Richard A	Pacific Telephone

69 SUNRISE CIR

Year	Uses	Source
2001	X 0 XX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	FRANCIS, DANIEL	Cole Information Services
1986	Cullen John M & Margo	Pacific Bell Yellow Pages

Year	Uses	Source
1981	Cuilen John M	Pacific Telephone
1977	Cullen John M	Pacific Telephone

70 SUNRISE CIR

Year	Uses	Source
2004	BLANCHE MORAN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Davis C	Pacific Bell Yellow Pages

71 SUNRISE CIR

Year	Uses	Source
2004	HECTOR PEREZ	Cole Information Services
2001	PEREZHec Ior	Haines & Company, Inc.
1981	Dupree John W	Pacific Telephone
	Dupree John W	Pacific Telephone

72 SUNRISE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	GRANT, HILDA V	Cole Information Services
1986	Grant Hilda V	Pacific Bell Yellow Pages
1981	Grant Hilda V	Pacific Telephone
1977	Grant Hilda V	Pacific Telephone

73 SUNRISE CIR

Year	Uses	Source
2001	LAUDER Michelle E	Haines & Company, Inc.
1986	Case La Mar T Sr	Pacific Bell Yellow Pages
	Case Michael	Pacific Bell Yellow Pages
	CAS E POW E R & E QUIPME N T	Pacific Bell Yellow Pages
1977	Mc Nulty John R	Pacific Telephone

74 SUNRISE CIR

Year	Uses	Source
2004	JUSTIN MOTTER	Cole Information Services
	JAIME GROSS	Cole Information Services
	STEPHANIE REY	Cole Information Services
2002	Gross Jaime	SBC PACIFIC BELL

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1977	Nosek Anton G Jr	Pacific Telephone

75 SUNRISE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1986	Dildine Richard	Pacific Bell Yellow Pages
1981	Dildine Richard	Pacific Telephone
1977	Dildine Richard	Pacific Telephone

76 SUNRISE CIR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Marquis Elizabeth	Pacific Bell Yellow Pages
1981	Marquis Elizabeth	Pacific Telephone
	Marquis Elizabeth	Pacific Telephone
1977	Marquis Elizabeth	Pacific Telephone
	Marquis Elizabeth	Pacific Telephone

77 SUNRISE CIR

Year	Uses	Source
2004	ROGER CUMMINGS	Cole Information Services
2001	CUMMINGS Roger	Haines & Company, Inc.
	CUMMINGS Cindy	Haines & Company, Inc.
1986	Tucker Chris	Pacific Bell Yellow Pages
	Tucker Beverly J	Pacific Bell Yellow Pages
1981	Tucker Lois E	Pacific Telephone
	Tucker Lois E	Pacific Telephone
1977	Tucker Lois E	Pacific Telephone
	Tucker Lois E	Pacific Telephone
1970	Williams Etheldra D Mrs	Pacific Telephone

78 SUNRISE CIR

Year	Uses	Source
2002	Young Dale A	SBC PACIFIC BELL
2001	XXXX	Haines & Company, Inc.
1981	Mac Leod Angus	Pacific Telephone
1977	Mac Leod Angus	Pacific Telephone

79 SUNRISE CIR

Year	Uses	Source
2004	JIM MILLER	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1994	MILLER, JIM	Cole Information Services
1986	Titus D W Col	Pacific Bell Yellow Pages
1981	Titus D W Col	Pacific Telephone
1977	Titus D W Col	Pacific Telephone

80 SUNRISE CIR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Viles May	Pacific Bell Yellow Pages
1981	Viles May	Pacific Telephone
1977	Viles May	Pacific Telephone

87 SUNRISE CIR

Year	Uses	Source
2001	STRANGE Edward	Haines & Company, Inc.

TERRITORY LN

5764 TERRITORY LN

Year	Uses	Source
2017	FABIAN VARGAS	Cole Information Services
2014	FABIAN VARGAS	Cole Information Services
2009	FABIAN VARGAS	Cole Information Services
2004	ANDREW BEQUER	Cole Information Services
1999	FABIAN VARGAS	Cole Information Services

5769 TERRITORY LN

Year	Uses	Source
2017	XIAOYUN TAN	Cole Information Services
2014	FRED BERNAL	Cole Information Services
2009	FRED BERNAL	Cole Information Services
2004	FRED BERNAL	Cole Information Services
1999	FRED BERNAL	Cole Information Services

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5772 TERRITORY LN

Year	Uses	Source
2017	LUIS GONZALEZ	Cole Information Services
2014	LUIS GONZALEZ	Cole Information Services
2009	CATALINA AGUILAR	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	CATALINA AGUILAR	Cole Information Services

5777 TERRITORY LN

Year	Uses	Source
2017	LARRY WALKER	Cole Information Services
2014	KYLE WALKER	Cole Information Services
2009	LARRY WALKER	Cole Information Services
1999	LARRY WALKER	Cole Information Services

5780 TERRITORY LN

Year	Uses	Source
2017	GORDON SCHAER	Cole Information Services
2014	GORDON SCHAER	Cole Information Services
2009	R CLARK	Cole Information Services
2004	BRUCE THOMPSON	Cole Information Services
1999	R CLARK	Cole Information Services

5785 TERRITORY LN

Year	Uses	Source
2017	IMELDA CERVANTES	Cole Information Services
2014	EDDIE DORANTES	Cole Information Services
2009	JEREMY RAMSEY	Cole Information Services
2004	NORCO REGENT	Cole Information Services
1999	JEREMY RAMSEY	Cole Information Services

5788 TERRITORY LN

Year	Uses	Source
2014	ERIC MCNAMARA	Cole Information Services
2009	ALL CITY HEATING & AIR	Cole Information Services
	DAVID TROUTWINE	Cole Information Services
1999	DAVID TROUTWINE	Cole Information Services

5793 TERRITORY LN

Year	Uses	Source
2014	RONALD SCOTT	Cole Information Services

Year	Uses	Source
2009	RONALD SCOTT	Cole Information Services
2004	YVONNE ARAKELIAN	Cole Information Services
1999	RONALD SCOTT	Cole Information Services

5796 TERRITORY LN

Year	Uses	Source
2017	RICARDO RAMIREZ	Cole Information Services
2014	MARCH RAMIREZ	Cole Information Services
2009	MARCH RAMIREZ	Cole Information Services
2004	DANTE LAMASTRA	Cole Information Services
1999	MARCH RAMIREZ	Cole Information Services

WESTCHESTER WAY

5710 WESTCHESTER WAY

Year	Uses	Source
2017	GARY NABARRETTE	Cole Information Services
2014	MARSHALL SAUBHAYANA	Cole Information Services
2009	GARY NABARRETE	Cole Information Services
2004	GARY NABARRETE	Cole Information Services
1999	GARY NABARRETE	Cole Information Services

5715 WESTCHESTER WAY

Year	Uses	Source
2017	DEL COLDIVAR	Cole Information Services
2009	DEL HEROD	Cole Information Services
2004	WARREN HACKET	Cole Information Services
1999	DEL HEROD	Cole Information Services

5720 WESTCHESTER WAY

Year	Uses	Source
2017	ELLENA WILLIAMS	Cole Information Services
2014	ELLENA WILLIAMS	Cole Information Services
2009	OCCUPANT UNKNOWN	Cole Information Services
2004	RICARDO RODRIGUEZ	Cole Information Services

5725 WESTCHESTER WAY

Year	Uses	Source
2017	JOSH RYDBECK	Cole Information Services
2014	MARY BUN	Cole Information Services

Year	Uses	Source
2009	JOSH RYDBECK	Cole Information Services
2004	JOSHUA RYDBECK	Cole Information Services
1999	JOSH RYDBECK	Cole Information Services

5730 WESTCHESTER WAY

Year	Uses	Source
2017	GIOVANNI COSTA	Cole Information Services
2014	GIOVANNI COSTA	Cole Information Services
2009	TAE LEE	Cole Information Services
2004	TAE LEE	Cole Information Services
1999	TAE LEE	Cole Information Services

5735 WESTCHESTER WAY

Year	Uses	Source
2014	SHARON STARKS	Cole Information Services
2009	ADRIANA RODRIGUEZ	Cole Information Services
2004	ADRIANA RODRIGUEZ	Cole Information Services
1999	ADRIANA RODRIGUEZ	Cole Information Services

5740 WESTCHESTER WAY

Year	Uses	Source
2017	BRIAN RUSSELL	Cole Information Services
2014	BRIAN RUSSELL	Cole Information Services
2009	BRIAN RUSSELL	Cole Information Services
2004	BRIAN RUSSELL	Cole Information Services
1999	BRIAN RUSSELL	Cole Information Services

5745 WESTCHESTER WAY

Year	Uses	Source
2017	VICTOR LONGORIA	Cole Information Services
2014	JERRY ADELL	Cole Information Services
2009	JERRY ADELL	Cole Information Services
2004	JERRY ADELL	Cole Information Services
1999	JERRY ADELL	Cole Information Services

5750 WESTCHESTER WAY

Year	Uses	Source
2017	KEITH BOWEN	Cole Information Services
2014	KYLER KREBS	Cole Information Services
2009	KYLER KREBS	Cole Information Services

Year	Uses	Source
2004	KYLER KREBS	Cole Information Services
1999	KYLER KREBS	Cole Information Services

5755 WESTCHESTER WAY

Year	Uses	Source
2017	QUOC TRAN	Cole Information Services
2014	QUOCTUAN TRAN	Cole Information Services
2009	CUONG TRAN	Cole Information Services
2004	CUONG TRAN	Cole Information Services
1999	CUONG TRAN	Cole Information Services

5760 WESTCHESTER WAY

Year	Uses	Source
2017	NASSER MORCOS	Cole Information Services
2014	NESREEN GRACE	Cole Information Services
2009	PHYSICIANS BILLINGS SOLUTIONS	Cole Information Services
	MEDHAT GRACE	Cole Information Services
2004	MEDHAT GRACE	Cole Information Services
	PHYSICIANS BILLINGS SOLUTIONS	Cole Information Services
1999	MEDHAT GRACE	Cole Information Services

5765 WESTCHESTER WAY

Year	Uses	Source
2017	KELLY SWIFT	Cole Information Services
2014	KELLY SWIFT	Cole Information Services
2009	SWIFT DESIGN SOLUTIONS	Cole Information Services
	JAMES SWIFT	Cole Information Services
2004	JAMES SWIFT	Cole Information Services
1999	JAMES SWIFT	Cole Information Services

5770 WESTCHESTER WAY

Year	Uses	Source
2017	CANFU MEI	Cole Information Services
2014	STEVE SCHNAKENBERG	Cole Information Services
2009	STEVE SCHNAKENBERG	Cole Information Services
2004	STEVE SCHNAKENBERG	Cole Information Services
1999	STEVE SCHNAKENBERG	Cole Information Services

5775 WESTCHESTER WAY

Year	Uses	Source
2017	ANTHONY SMITH	Cole Information Services
2014	OCCUPANT UNKNOWN	Cole Information Services
2009	CYNTHIA SMITH	Cole Information Services
2004	CYNTHIA SMITH	Cole Information Services
1999	CYNTHIA SMITH	Cole Information Services

5780 WESTCHESTER WAY

Year	Uses	Source
2017	MATTHEW MILLER	Cole Information Services
2014	DEBORAH MILLER	Cole Information Services
2009	DJC SOLUTIONS	Cole Information Services
	GREGORY MILLER	Cole Information Services
2004	GREGORY MILLER	Cole Information Services
	DJC SOLUTIONS	Cole Information Services
1999	GREGORY MILLER	Cole Information Services

5785 WESTCHESTER WAY

Year	Uses	Source
2017	GEORGE TALAVERA	Cole Information Services
2014	ETIENNE GRAY	Cole Information Services
2009	JOSEPH MCNEILL	Cole Information Services
2004	JOSEPH MCNEILL	Cole Information Services
1999	JOSEPH MCNEILL	Cole Information Services

WESTPORT CIR

12826 WESTPORT CIR

Year	Uses	Source
2017	FAKHRUDDI ARFI	Cole Information Services
2014	RAFAELA ANGULO	Cole Information Services
2009	WAQAR RAJPUT	Cole Information Services
	FORECAST HOMES	Cole Information Services
2004	FORECAST HOMES	Cole Information Services
1999	WAQAR RAJPUT	Cole Information Services

12831 WESTPORT CIR

Year	Uses	Source
2017	GATES ADAMS	Cole Information Services
2014	T HEALY	Cole Information Services

Year	Uses	Source
2009	RUTH HARTMAN	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	RUTH HARTMAN	Cole Information Services

12836 WESTPORT CIR

Year	Uses	Source
2017	MARINA MAGDAELNO	Cole Information Services
2014	FRANCISCO PLACENCIA	Cole Information Services
2009	JOSE GONZALEZ	Cole Information Services
1999	JOSE GONZALEZ	Cole Information Services

12841 WESTPORT CIR

Year	Uses	Source
2017	PETER KIM	Cole Information Services
2014	DEAN BUI	Cole Information Services
2009	AGUSTIN CELIS	Cole Information Services
1999	AGUSTIN CELIS	Cole Information Services

12846 WESTPORT CIR

Year	Uses	Source
2017	WILLIAM ELLIOTT	Cole Information Services
2014	WILLIAM ELLIOTT	Cole Information Services
2009	KATE ELLIOTT	Cole Information Services
1999	KATE ELLIOTT	Cole Information Services

12851 WESTPORT CIR

Year	Uses	Source
2017	HANI HADDADIN	Cole Information Services
2014	HANI HADDADIN	Cole Information Services
2009	HANI HADDADIN	Cole Information Services
1999	HANI HADDADIN	Cole Information Services

12856 WESTPORT CIR

Year	Uses	Source
2017	MARCIA NUNEZ	Cole Information Services
2014	JODIE HUANG	Cole Information Services
2004	OCCUPANT UNKNOWN	Cole Information Services

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WOODLAND DR

568 WOODLAND DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.

591 WOODLAND DR

Year	Uses	Source
2001	BATES Adair D	Haines & Company, Inc.

592 WOODLAND DR

Year	Uses	Source
2004	JOHN MANNING	Cole Information Services
2001	BROWN 8 N	Haines & Company, Inc.

593 WOODLAND DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Laguna Richard L & Shirley	Pacific Bell Yellow Pages
1981	Pearson Jim	Pacific Telephone

594 WOODLAND DR

Year	Uses	Source
2004	ROBBIE MENDES	Cole Information Services
2001	LOURENCOCarlos W	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services

595 WOODLAND DR

Year	Uses	Source
2001	LIMONAnnette E	Haines & Company, Inc.
1986	Leggett Leo	Pacific Bell Yellow Pages
	Leggett M	Pacific Bell Yellow Pages
1981	Leggett Leo	Pacific Telephone

596 WOODLAND DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Schilling S I	Pacific Bell Yellow Pages
1981	Schilling SI	Pacific Telephone

597 WOODLAND DR

Year	Uses	Source
2004	APOLLO ANDERSON	Cole Information Services
2001	ANDERSON Apollo	Haines & Company, Inc.
1977	Siberell Jas	Pacific Telephone

598 WOODLAND DR

Year	Uses	Source
1986	Iverson Harry & Audrey	Pacific Bell Yellow Pages
1981	Smith Howard E	Pacific Telephone

599 WOODLAND DR

Year	Uses	Source
2004	PEDRO GARIBAY	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	De Carlo Drew & Mary	Pacific Bell Yellow Pages
	de Camp V	Pacific Bell Yellow Pages

600 WOODLAND DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1981	Hollmig Edwin J	Pacific Telephone

601 WOODLAND DR

Year	Uses	Source
2004	DAVID BEGHTEL	Cole Information Services

602 WOODLAND DR

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1986	Hoogeveen Bep	Pacific Bell Yellow Pages

603 WOODLAND DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Bealer Laurence	Pacific Bell Yellow Pages

604 WOODLAND DR

Year	Uses	Source
2004	MELVIN BANKS	Cole Information Services
2001	VAN Monica	Haines & Company, Inc.
	VAN Monica	Haines & Company, Inc.
1999	OCCUPANT UNKNOWN	Cole Information Services
1994	MONROE, ROBERT E	Cole Information Services
1986	Monroe Robt E	Pacific Bell Yellow Pages

605 WOODLAND DR

Year	Uses	Source
2001	FIEN Arnold	Haines & Company, Inc.
1986	Paxton Li	Pacific Bell Yellow Pages
	Paxton John E	Pacific Bell Yellow Pages

606 WOODLAND DR

Year	Uses	Source
2004	JAMES LEFFLER	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services

607 WOODLAND DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	FRANK MACIAS	Cole Information Services

608 WOODLAND DR

Year	Uses	Source
2004	YOLANDA OLIVER	Cole Information Services
2001	ABARCAYolanda	Haines & Company, Inc.
1986	De Loach Harold & Anne	Pacific Bell Yellow Pages
1981	De Loach Harold & Anne	Pacific Telephone

609 WOODLAND DR

Year	Uses	Source
2004	OCCUPANT UNKNOWN	Cole Information Services
1999	OCCUPANT UNKNOWN	Cole Information Services
1986	Bradfield Paul C & Dorothy	Pacific Bell Yellow Pages
	Bradfield Lester	Pacific Bell Yellow Pages
1981	Bradfield Lester	Pacific Telephone

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610 WOODLAND DR

Year	*Uses*	*Source*
2004	BLANCHE BURDA	Cole Information Services
2001	BURDAB	Haines & Company, Inc.
1994	BURDA, BLANCHE	Cole Information Services
1986	Burda B	Pacific Bell Yellow Pages
1981	Burda B	Pacific Telephone

611 WOODLAND DR

Year	*Uses*	*Source*
2004	ELWYN ROBINSON	Cole Information Services
2001	XXXX	Haines & Company, Inc.
1986	Armstrong Dale	Pacific Bell Yellow Pages

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
1 MOUNTAIN VIEW CIR	2017, 2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
10 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
10 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
10 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
10 S MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
100 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
100 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
101 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
101 MAYFAIR CIR	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
102 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
102 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
103 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
103 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
104 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
104 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
105 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
105 MAYFAIR CIR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
106 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
106 MAYFAIR CIR	2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
107 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
107 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
107 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
108 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
108 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
109 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
11 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
11 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
11 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
110 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
110 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
111 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
111 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
112 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
112 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
113 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
113 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
113 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
114 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
114 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
114 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
115 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
116 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
116 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
117 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
117 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
117 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
118 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
118 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
118 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
119 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
119 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
119 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
120 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
120 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
120 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
121 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
121 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
122 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
122 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
123 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
123 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
124 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
124 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
124 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12421 LIMONITE AVE	2017, 2014, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12423 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12435 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12447 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12459 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12471 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12483 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12495 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
125 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
125 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
125 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12511 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12523 LIMONITE AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12525 LIMONITE AVE	2017, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12545 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12569 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12571 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
126 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
126 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12601 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12602 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12605 BRIDGEWATER DR	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12607 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12611 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12613 LONGHORNE DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12613 OAKDALE ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12614 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12617 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12619 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12623 OAKDALE ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12625 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12626 AMBERHILL AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12629 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12631 SILAS PHELPS DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12633 AMBERHILL AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12633 OAKDALE ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12637 LONGHORNE DR	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12638 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12641 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12643 OAKDALE	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12643 OAKDALE ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12643 SILAS PHELPS DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12645 AMBERHILL AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12649 LONGHORNE DR	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12653 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12653 OAKDALE	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12653 OAKDALE ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12654 LONGHORNE DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12657 AMBERHILL AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12661 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12662 AMBERHILL AVE	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12665 BRIDGEWATER DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12666 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12667 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12669 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12673 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12673 OAKDALE ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12674 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12677 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12678 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12679 SILAS PHELPS DR	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12681 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12682 BRIDGEWATER DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12683 OAKDALE ST	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12685 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12686 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12690 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12691 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12693 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12693 OAKDALE ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12694 BRIDGEWATER DR	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12698 AMBERHILL AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
127 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
127 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
127 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12700 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12701 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12702 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12702 SILAS PHELPS DR	2017, 2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12703 OAKDALE ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12703 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12705 AMBERHILL AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12706 BRIDGEWATER DR	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12708 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12713 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12713 OAKDALE ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12714 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12715 SILAS PHELPS DR	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12717 AMBERHILL AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12718 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12720 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12722 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12723 OAKDALE ST	2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12725 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12726 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12727 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12729 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12730 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12732 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12732 SILAS PHELPS DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12733 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12734 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12737 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12738 LONGHORNE DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12739 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12740 58TH ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12741 CLOVERDALE RD	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12741 LIMONITE AVE	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12742 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12744 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12745 CLOVERDALE RD	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12745 CLOVERDALE ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12745 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12749 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12751 SILAS PHELPS DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12753 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12754 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12755 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12757 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12758 AMBERHILL AVE	2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12761 BRIDGEWATER DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12762 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12762 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12765 AMBERHILL AVE	2014, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12767 BRIDGEWATER DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12768 LIMONITE AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12769 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12774 CLOVERDALE RD	2017, 2014, 2009, 2004, 2001, 1999, 1994, 1986, 1967, 1966, 1961, 1960, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12774 CLOVERDALE ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12774 LIMONITE AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12774 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12776 AMBERHILL AVE	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12777 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12779 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12786 LONGHORNE DR	2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12789 AMBERHILL AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12791 BRIDGEWATER DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12793 LONGHORNE DR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12797 BRIDGEWATER DR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12798 LONGHORNE DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
128 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
128 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12803 OAKDALE ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12809 OAKDALE ST	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12812 OAKDALE ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12815 OAKDALE ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12823 ROSECLIFF CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12826 WESTPORT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12830 MARYLAND AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12831 WESTPORT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12833 ROSECLIFF CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12835 MARYLAND AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12836 WESTPORT CIR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12838 ROSECLIFF CIR	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12840 MARYLAND AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12841 WESTPORT CIR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12843 ROSECLIFF CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12845 MARYLAND AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12846 WESTPORT CIR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12848 ROSECLIFF CIR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12850 MARYLAND AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12851 WESTPORT CIR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12853 ROSECLIFF CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12855 MARYLAND AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12856 WESTPORT CIR	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12858 ROSECLIFF CIR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12860 MARYLAND AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12865 MARYLAND AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12875 MARYLAND AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12885 MARYLAND AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12895 MARYLAND AVE	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
129 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
129 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
129 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12915 MARYLAND AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12925 MARYLAND AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12935 MARYLAND AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12945 MARYLAND AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12955 MARYLAND AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12965 MARYLAND AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12969 NASSAU CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12974 NASSAU CT	2017, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12975 MARYLAND AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12979 NASSAU CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12984 NASSAU CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
12985 MARYLAND AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12989 NASSAU CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12994 NASSAU CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
12995 MARYLAND AVE	2017, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
130 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
130 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
131 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
131 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
131 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13100 LAVONDA ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13103 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13110 LAVONDA ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13112 BRIAR ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13113 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13115 BRIAR ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

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Address Researched	Address Not Identified in Research Source
13120 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13122 BRIAR ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13123 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13125 BRIAR ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13130 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13132 BRIAR ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13133 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13135 BRIAR ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13140 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13143 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13150 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13153 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13163 LAVONDA ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13173 LAVONDA ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
132 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
132 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
132 DEL MAR WAY	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
13202 RUBY CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13204 DORSETT GOLDEN ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13207 DORSETT GOLDEN ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13208 EARLY CRIMSON ST	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13209 KARA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13212 RUBY CT	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13215 EARLY CRIMSON ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13215 RUBY CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13216 KARA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13216 RUBY CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13219 KARA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13222 RUBY CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13225 EARLY CRIMSON ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13225 RUBY CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13226 KARA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
13228 DANCY ST	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
133 DEL MAR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
133 DEL MAR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
134 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
134 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
134 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
135 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
135 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
136 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
136 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
136 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
137 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
137 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
138 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
138 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
139 FAIRLANE CIR	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
139 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
139 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
14 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
140 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
140 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
140 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
141 FAIRLANE CIR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
141 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
142 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
142 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
143 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
143 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
144 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
144 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
145 FAIRLANE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
145 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
145 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
146 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
146 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
147 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
147 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
148 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
148 FAIRLANE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
148 FAIRLANE CT	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
149 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
149 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
15 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
15 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
15 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
150 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
150 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
150 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
151 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
151 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
151 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
152 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
152 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
152 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
153 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
153 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
153 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
154 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
154 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
154 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
155 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
155 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
155 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
156 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
157 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
157 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
157 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
158 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
158 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
158 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
159 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
159 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
16 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
16 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
160 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
160 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
160 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
161 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
161 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
162 MONTEREY CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
162 MONTEREY CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
162 MONTEREY LN	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
163 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
163 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
164 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
165 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
165 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
165 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
167 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
167 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
167 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
168 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
168 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
169 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
169 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
169 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
17 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
17 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
17 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
170 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
173 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
174 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
174 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
175 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
175 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
176 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
176 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
177 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
177 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
177 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
178 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
178 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
179 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
179 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
179 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
18 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
18 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
18 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
180 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
180 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
181 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
181 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
182 DRIFTW QOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
182 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
182 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
183 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
183 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
183 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
184 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
184 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
185 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
185 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
185 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
186 DRIFTWOOD CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
186 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
186 DRIFTWOOD ST	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
187 DRIFTWOOD CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
19 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
19 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
19 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
2 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
2 MOUNTAIN VIEW CIR	2017, 2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
20 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
20 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
20 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
21 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
21 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
21 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
22 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
22 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
226 OAK CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
23 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
23 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
23 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
24 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
24 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
24 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
243 OAK CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
25 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
25 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
25 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
26 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
26 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
263 LAKEVW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
27 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
27 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
27 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
28 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
28 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
28 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
29 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
29 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
29 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
3 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
30 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
30 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
30 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
31 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
31 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
32 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
32 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
32 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
33 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
33 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
33 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
34 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
34 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
34 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
35 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
35 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
35 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
36 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
37 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
37 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
37 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
38 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
38 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
38 MOUNTN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
39 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
39 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
4 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
40 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
41 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
41 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
42 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
43 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
43 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
44 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
44 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
44 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
45 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
45 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
45 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
46 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
46 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
47 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
47 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
48 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
48 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
49 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
49 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
49 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
50 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
50 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
50 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
51 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
51 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
52 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
52 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
52 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5240 HAMNER AVE	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
53 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
53 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
53 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
54 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
54 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
55 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
55 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5509 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5514 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5519 ALEXANDRIA AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5524 ALEXANDRIA AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5529 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5534 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5537 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5539 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5542 ANNANDALE PL	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5544 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5547 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5549 ALEXANDRIA AVE	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5552 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5554 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5557 ANNANDALE PL	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5559 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
556 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5564 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5567 ANNANDALE PL	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5569 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
557 EDGEMONT DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
557 EDGEMONT DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5572 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5574 ALEXANDRIA AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5577 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5579 ALEXANDRIA AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
558 EDGEMONT DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5582 ANNANDALE PL	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5584 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5587 ANNANDALE PL	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5589 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
559 EDGEMONT DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5594 ALEXANDRIA AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5597 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5599 ALEXANDRIA AVE	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
56 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
56 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
560 EDGEMONT DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
560 EDGEMONT DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5602 ANNANDALE PL	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5604 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5605 ASHWELL CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5607 ANNANDALE PL	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5609 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
561 EDGEMONT DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
561 EDGEMONT DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5612 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5614 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5617 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5617 ASHWELL CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5619 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
562 EDGEMONT DR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
562 EDGEMONT DR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5620 ASHWELL CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5621 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5621 JAMESTOWN AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5622 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5626 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5628 HARMONY DR	2014, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5629 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5629 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5629 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
563 EDGEMONT DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
563 EDGEMONT DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5631 HARMONY DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5631 JAMESTOWN AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5632 ASHWELL CT	2017, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5634 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5637 CAMBRIA DR	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5639 ALEXANDRIA AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5639 HARMONY DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
564 EDGEMONT DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
564 EDGEMONT DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5641 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5641 JAMESTOWN AVE	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5642 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5642 CAMBRIA DR	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5644 ALEXANDRIA AVE	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5644 ASHWELL CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5645 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5647 ANNANDALE PL	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5649 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
565 EDGEMONT DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5650 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5650 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5651 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5653 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5653 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5654 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5655 HARMONY DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5656 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5658 CAMBRIA DR	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5659 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
566 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
566 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5661 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5662 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5663 HARMONY DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5664 ALEXANDRIA AVE	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5667 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5669 ALEXANDRIA AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
567 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5671 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5671 HARMONY DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5671 JAMESTOWN AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5672 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5674 ALEXANDRIA AVE	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5674 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5674 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5677 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5677 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5677 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
568 DRAKE DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
568 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
568 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5680 ASHWELL CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5681 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5682 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5683 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5684 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5685 CAMBRIA DR	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5686 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5686 CAMBRIA DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5687 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5689 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5689 CAMBRIA DR	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
569 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
569 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5690 CAMBRIA DR	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5691 JAMESTOWN AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5692 ANNANDALE PL	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5692 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5693 CAMBRIA DR	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5694 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5695 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5698 CALITERRA CT	2017, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5698 CAMBRIA DR	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
57 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
57 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
570 DRAKE DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
570 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5701 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5701 JAMESTOWN AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5703 CAROLINAS LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5704 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5704 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5707 ANNANDALE PL	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5707 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5709 ALEXANDRIA AVE	2014, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
571 DRAKE DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
571 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5710 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5710 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5711 JAMESTOWN AVE	2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5712 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5713 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5713 CAROLINAS LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5713 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5714 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5715 WESTCHESTER WAY	2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5716 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5716 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5717 RAFT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5719 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5719 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5719 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
572 DRAKE DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5720 RAFT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5720 WESTCHESTER WAY	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5721 JAMESTOWN AVE	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5722 CALITERRA CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5722 MARK TWAIN CT	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5723 CAROLINAS LN	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5723 RAFT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5724 ALEXANDRIA AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5725 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5725 MARK TWAIN CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5725 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5726 RAFT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5727 ANNANDALE PL	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5728 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5728 MARK TWAIN CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5729 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5729 RAFT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
573 DRAKE DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5730 PETER WILKS CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5730 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5731 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5731 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5731 MARK TWAIN CT	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5732 ANNANDALE PL	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5732 RAFT CIR	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5733 CAROLINAS LN	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5733 PETER WILKS CT	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5734 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5734 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5734 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5735 RAFT CIR	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5735 WESTCHESTER WAY	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5736 PETER WILKS CT	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5737 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5737 MARK TWAIN CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5739 PETER WILKS CT	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
574 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5740 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5740 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5740 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5741 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5742 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5742 PETER WILKS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5743 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5743 CAROLINAS LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5743 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5744 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5744 RAFT CIR	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5745 PETER WILKS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5745 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5746 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5747 ANNANDALE PL	2017, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5749 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5749 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
575 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
575 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5750 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5751 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5752 ANNANDALE PL	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5752 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5753 CAROLINAS LN	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5754 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5755 CALITERRA CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5755 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5755 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5757 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5758 CAIRO CT	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5758 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5759 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
576 DRAKE DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
576 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5760 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5761 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5761 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5762 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5763 CAIRO CT	2014, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5763 CAROLINAS LN	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5764 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5764 ASHWELL CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5764 TERRITORY LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5765 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5766 CAIRO CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5767 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5767 CALITERRA CT	2017, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5767 MARK TWAIN CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5769 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5769 TERRITORY LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
577 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5770 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5771 CAIRO CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5771 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5772 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5772 TERRITORY LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5773 CAROLINAS LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5773 MARK TWAIN CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5774 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5774 CAIRO CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5775 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5776 ASHWELL CT	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5777 ANNANDALE PL	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5777 TERRITORY LN	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5779 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5779 CAIRO CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5779 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
578 DRAKE DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
578 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
578 DRAKE DR MIRALMA	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5780 HAMNER AVE	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5780 TERRITORY LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5780 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5781 JAMESTOWN AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5782 ANNANDALE PL	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5782 CAIRO CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5783 CAROLINAS LN	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5784 ALEXANDRIA AVE	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5785 TERRITORY LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5785 WESTCHESTER WAY	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5787 ANNANDALE PL	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5787 CAIRO CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5788 ASHWELL CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5788 TERRITORY LN	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5789 ALEXANDRIA AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
579 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
5790 CAIRO CT	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5791 CALITERRA CT	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5791 JAMESTOWN AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5793 TERRITORY LN	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5795 CAIRO CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5796 TERRITORY LN	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5797 ANNANDALE PL	2017, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5798 CAIRO CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5799 ALEXANDRIA AVE	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
58 LARKDALE CIR	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
58 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
580 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5800 ASHWELL CT	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5800 HAMNER AVE	2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5800 HAMNER AVE	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
581 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
581 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
582 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
582 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
583 DRAKE DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
583 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
584 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
584 DRAKE DR	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
585 DRAKE DR	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
585 DRAKE DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
586 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
587 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
587 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
588 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
588 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5888 HAMNER AVE	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
589 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
589 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
5890 HAMNER AVE	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
59 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
59 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
59 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
590 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
590 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
591 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
592 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
592 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
593 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
593 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
594 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
594 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
595 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
596 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
596 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
597 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
597 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
598 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
599 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
599 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6 MOUNTAIN VIEW CIR	2017, 2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
60 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
60 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
60 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
600 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
600 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
601 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
602 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6020 HAMNER AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
603 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
603 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6031 FUJI ST	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6038 FUJI ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
604 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
604 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6041 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6048 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
605 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6051 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6058 FUJI ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
606 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6060 HAMNER AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6068 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
607 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6071 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6078 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
608 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
608 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6080 HAMNER AVE	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6081 FUJI ST	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6088 FUJI ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
609 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
609 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6091 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6098 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
61 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
61 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
61 LARKDLE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
610 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
610 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6101 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6108 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
611 WOODLAND DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
611 WOODLAND DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6111 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6118 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
612 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
612 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
612 CASTLE VREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6121 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6128 FUJI ST	2017, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
613 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6131 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6138 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
614 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
614 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6140 HAMNER AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6141 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6148 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
615 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
615 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6151 FUJI ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6158 FUJI ST	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
616 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6168 FUJI ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
617 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
617 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6170 HAMNER AVE	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
618 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
619 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
619 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
62 LARKDALE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
620 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
620 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
621 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6219 BAY ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
622 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
622 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6229 BAY ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
623 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
623 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6239 BAY ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
624 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6245 CATTLEMAN DR	2017, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6249 BAY ST	2017, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
625 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6259 BAY ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
626 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
626 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
627 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
627 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6274 CATTLEMAN DR	2017, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6277 CATTLEMAN DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
628 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
628 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6282 CATTLEMAN DR	2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6285 CATTLEMAN DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
629 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
629 CHAPARRAL DR	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6290 CATTLEMAN DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6293 CATTLEMAN DR	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
63 LARKDALE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
630 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
630 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6308 DAPHNE ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
631 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6310 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6312 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6313 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6314 POMEGRANATE CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6314 POMEGRANATE CT	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6315 MARIGOLD ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6316 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6316 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6316 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6317 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6318 DAPHNE ST	2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6319 LAVENDER ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
632 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
632 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6320 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6322 MARIGOLD ST	2017, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6323 HAMNER AVE	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6323 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6324 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6324 POMEGRANATE CT	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6325 MARIGOLD	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6325 MARIGOLD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6325 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6326 LAVENDER ST	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6327 POMEGRANATE CT	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6328 MARIGOLD ST	2017, 2014, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6329 LAVENDER ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
633 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
633 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6330 IRIS CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6332 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6333 IRIS CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6333 IRIS CT	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6334 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6335 MARIGOLD	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6335 MARIGOLD ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6336 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6336 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6337 POMEGRANATE CT	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6337 POMEGRANATE CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6339 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
634 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
634 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6340 IRIS CT	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6342 MARIGOLD ST	2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6343 IRIS CT	2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6344 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6345 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6346 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6346 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6346 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6347 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6349 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6349 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6349 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
635 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6350 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6352 MARIGOLD	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6352 MARIGOLD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6352 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6353 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6354 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6354 POMEGRANATE CT	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6355 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6356 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6356 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6356 LAVENDER ST	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6357 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6358 MARIGOLD ST	2017, 2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6359 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6359 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6359 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
636 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
636 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6360 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6362 MARIGOLD	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6362 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6363 IRIS CT	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6363 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6364 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6365 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6366 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6366 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6367 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6369 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6369 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6369 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
637 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
637 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6370 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6372 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6373 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6374 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6374 POMEGRANATE CT	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6375 MARIGOLD ST	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6376 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6377 POMEGRANATE CT	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6379 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
638 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6380 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6382 MARIGOLD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6382 MARIGOLD ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6383 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6384 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6385 MARIGOLD	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6385 MARIGOLD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6385 MARIGOLD ST	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6386 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6386 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6386 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6387 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6389 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6389 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
639 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
639 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6390 IRIS CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6392 MARIGOLD	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6392 MARIGOLD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6392 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6393 IRIS CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6394 POMEGRANATE CT	2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6395 MARIGOLD ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6396 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6396 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6396 LAVENDER ST	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6397 POMEGRANATE CT	2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6399 LAVENDER	2017, 2014, 2009, 2004, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
6399 LAVENDER ST	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
6399 LAVENDER ST	2017, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
64 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
64 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
640 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
640 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
641 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
641 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
642 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
642 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
643 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
644 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
645 CHAPARRAL DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
645 CHAPARRAL DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
646 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
646 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
647 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
648 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
648 BOXWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
649 BOXWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
649 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
65 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
65 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
650 BOXWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
650 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
651 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
652 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
653 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
653 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
654 BOXWOOD DR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
654 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
656 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
656 BOXWOOD DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
657 BOXWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
657 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
659 BOXWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
659 BOXWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
66 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
66 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
660 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
660 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
661 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
661 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
662 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
662 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
663 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
663 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
664 CASTLE CREST DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
664 CASTLE CREST DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
665 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
665 CYPRESS DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
666 CYPRESS DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
666 CYPRESS DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
667 CYPRESS DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
667 CYPRESS DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
668 CYPRESS DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
669 CYPRESS DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
67 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
67 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
670 CYPRESS DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
670 CYPRESS DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
670 CYPRESS DR MIRA LMNIA	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
671 CYPRESS DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
673 CYPRESS DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
674 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
674 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
675 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
675 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
676 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
677 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
677 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
678 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
679 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
68 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
68 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
680 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
681 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
682 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
682 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
683 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
684 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
684 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
685 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
686 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
686 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
687 BEACHWOOD DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
687 BEACHWOOD DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
688 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
689 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
69 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
69 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
690 AMBER DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
690 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
691 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
692 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
692 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
693 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
694 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
694 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
695 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
696 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
697 AMBER DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
697 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
698 AMBER DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
699 AMBER DR	2017, 2014, 2009, 2004, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
7 MOUNTAIN VIEW CIR	2017, 2014, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
7 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
70 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
70 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
700 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
701 AMBER DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
702 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
703 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
704 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
704 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
705 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
706 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
706 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
707 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
707 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
708 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
708 AMBER DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
709 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
71 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
71 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
710 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
710 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
711 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
711 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
712 AMBER DR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
712 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
713 AMBER DR	2017, 2014, 2009, 2002, 2001, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
713 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
714 AMBER DR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
714 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
715 AMBER DR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
715 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
716 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
72 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
72 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
73 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
74 SUNRISE CIR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
74 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
75 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
75 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
76 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
77 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
77 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
78 SUNRISE CIR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
782 AMBER DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
79 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
79 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
8 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
8 MOUNTAIN VIEW DR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
80 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
80 SUNRISE CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
81 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
81 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
82 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
82 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
83 PALM CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
83 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
84 PALM CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
84 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
85 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
86 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
86 PALM CIR	2017, 2014, 2009, 2002, 2001, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
87 PALM C!R	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
87 PALM CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
87 SUNRISE CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
88 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
89 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
9 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
9 MOUNTAIN VIEW CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
90 PALM CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
91 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
91 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
92 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
92 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
93 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
93 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
94 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
95 PALM CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
95 PALM CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
96 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
96 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
97 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
97 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

FINDINGS

Address Researched	Address Not Identified in Research Source
98 MAYFAIR CIR	2017, 2014, 2009, 2004, 1999, 1996, 1994, 1993, 1990, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
99 MAYFAIR CIR	2017, 2014, 2009, 2004, 2002, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921
99 MAYFAIR CIR	2017, 2014, 2009, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
Hamer Ave and 58th Street	2017, 2014, 2009, 2004, 2002, 2001, 1999, 1996, 1994, 1993, 1990, 1986, 1981, 1977, 1970, 1967, 1966, 1961, 1960, 1956, 1955, 1951, 1946, 1945, 1941, 1939, 1936, 1931, 1930, 1927, 1925, 1924, 1921

APPENDIX E

REGULATORY RECORDS DOCUMENTATION

Hamer Ave and 58th Street
Hamer Ave and 58th Street
Corona, CA 92880

Inquiry Number: 06529777.2r
June 09, 2021

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-PVC

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Physical Setting Source Map Findings	A-12
Physical Setting Source Records Searched	PSGR-1

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

HAMER AVE AND 58TH STREET
CORONA, CA 92880

COORDINATES

Latitude (North):	33.9791850 - 33° 58' 45.06''
Longitude (West):	117.5629320 - 117° 33' 46.55''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	448000.3
UTM Y (Meters):	3759796.5
Elevation:	669 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140603
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
HAMER AVE AND 58TH STREET
CORONA, CA 92880

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LEAL RANCHES	12740 58TH STREET	FINDS, ECHO	Higher	1 ft.
A2	LEAL RANCHES	12740 58TH STREET	ENF, CIWQS	Higher	1 ft.
A3	LEAL RANCHES	12740 58TH	CERS	Higher	1 ft.
4	ECHEVERRIA DAIRY	CLEVELAND AVE	ENVIROSTOR, LUST, SCH	Lower	7, 0.001, SW
B5	LEAL RANCHES	12714 CLOVERDALE	HIST UST	Lower	72, 0.014, SE
B6	WESTERN SKY DAIRY	6500 HAMNER	ENF, HIST CORTESE, NPDES, WDS, CIWQS	Lower	118, 0.022, SE
C7	MOUNTAIN VIEW TIRE	6080 HAMNER AVE #105	CERS HAZ WASTE, CERS	Higher	122, 0.023, ESE
C8	MOUNTAIN VIEW TIRE &	6080 HAMNER AVE STE	RCRA NonGen / NLR	Higher	122, 0.023, ESE
B9	RALPHS GROCERY # 45	12618 LIMONITE AVE	CERS HAZ WASTE, CERS TANKS, HAZNET, CERS, HWTS	Lower	126, 0.024, SE
B10	RALPHS GROCERY COMPA	12618 LIMONITE AVE	RCRA-LQG	Lower	126, 0.024, SE
C11	VONS FUEL CENTER #26	6110 HAMNER AVE	UST	Higher	138, 0.026, ESE
C12	VONS FUEL #2688	6110 HAMNER AVE	RCRA NonGen / NLR	Higher	138, 0.026, ESE
C13	VONS FUEL CENTER #26	6110 HAMNER AVE	CERS HAZ WASTE, CERS TANKS, CHMIRS, CERS	Higher	138, 0.026, ESE
C14	VONS FUEL #2688	6110 HAMNER AVE	RCRA NonGen / NLR	Higher	138, 0.026, ESE
D15	PULTE HOMES COMPANY,	12774 LIMONITE	RCRA NonGen / NLR	Lower	142, 0.027, SSE
D16	RIVERSIDE MEDICAL CL	12742 LIMONITE AVE	RCRA NonGen / NLR	Lower	144, 0.027, SSE
B17	RALPH'S #45 FUEL CEN	12618 LIMONITE AVE	UST	Lower	225, 0.043, SE
E18	WALGREENS #13657	12574 LIMONITE AVE	RCRA NonGen / NLR	Lower	329, 0.062, SE
E19	WALGREENS #13657	12574 LIMONITE AVE	CERS HAZ WASTE, HAZNET, HWTS	Lower	329, 0.062, SE
D20	TIERRA FINA	12672 LIMONITE AVE	EDR Hist Auto	Lower	384, 0.073, SSE
F21	2688 VONS A SAFEWAY	6170 HAMNER AVE	CERS HAZ WASTE, CERS	Lower	405, 0.077, ESE
F22	VONS 2688	6170 HAMNER AVE	RCRA-LQG, FINDS	Lower	405, 0.077, ESE
G23	RALPHS GROCERY #45	12660 LIMONITE AVE	RCRA NonGen / NLR	Lower	463, 0.088, SSE
G24	SUNSET RECYCLING CEN	12660 LIMONITE	SWRCY	Lower	463, 0.088, SSE
G25	RALPHS GROCERY #45	12660 LIMONITE AVE	CERS HAZ WASTE, CHMIRS, HAZNET, CERS, HWTS	Lower	463, 0.088, SSE
26	THE PROCTER AND GAMB	16110 COSMOS ST	AST	Lower	494, 0.094, SW
27	BRIGHT NOW DENTAL A	12636 LIMONITE AVE S	RCRA NonGen / NLR	Lower	556, 0.105, SSE
28	HOME DEPOT USA INC H	6140 HAMNER AVE	RCRA-SQG, CERS HAZ WASTE, HAZNET, CERS, HWTS	Higher	724, 0.137, ESE
H29	PETSMART #1341	12483 LIMONITE AVE	CERS HAZ WASTE, CERS	Lower	1072, 0.203, ESE
H30	MEDICAL MNGT INTNL I	12483 LIMONITE AVE	RCRA NonGen / NLR	Lower	1072, 0.203, ESE
H31	PETSMART #1341	12483 LIMONITE AVE	RCRA NonGen / NLR	Lower	1072, 0.203, ESE
I32	STAPLES THE OFFICE S	12495 LIMONITE AVE	CERS HAZ WASTE, HAZNET, HWTS	Lower	1122, 0.213, ESE
I33	STAPLES THE OFFICE S	12495 LIMONITE AVE	RCRA NonGen / NLR	Lower	1122, 0.213, ESE
I34	TARGET STORE T1961	12471 LIMONITE AVE	RCRA-LQG	Lower	1177, 0.223, ESE
I35	TARGET T1961	12471 LIMONITE AVE	CERS HAZ WASTE, CERS	Lower	1177, 0.223, ESE
I36	CVS PHARMACY #17077	12471 LIMONITE AVE S	RCRA-VSQG, FINDS, ECHO	Lower	1177, 0.223, ESE
I37	CHEVRON STATION #210	12464 LIMONITE AVE	CERS HAZ WASTE, CERS TANKS, CERS	Lower	1199, 0.227, ESE
I38	CHEVRON STATION #210	12464 LIMONITE AVE	UST	Lower	1199, 0.227, ESE
39	PORSCHE CARS NORTH A	12567 BELLEGRAVE AVE	RCRA NonGen / NLR	Higher	1249, 0.237, NNW

MAPPED SITES SUMMARY

Target Property Address:
HAMER AVE AND 58TH STREET
CORONA, CA 92880

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	GATEWAY DENTAL GROUP	12571 LIMONITE AVE S	RCRA NonGen / NLR	Higher	1297, 0.246, East
J41	TEXACO SWAN LAKE	5800 HAMNER AVE	LUST, Cortese, HIST CORTESE, NPDES, CERS	Higher	1417, 0.268, ENE
J42	SWAN LAKE TEXACO	5800 HAMMER AVENUE	Notify 65	Higher	1417, 0.268, ENE
43	PROPOSED K-8 SCHOOL	5240 AND 5380 HAMNER	ENVIROSTOR, SCH	Higher	2304, 0.436, NNE
44	DRIFTY FARMS	5810 SUMNER	RCRA-SQG, LUST, SWEEPS UST, HIST UST, CA FID UST,...	Higher	2632, 0.498, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: A review of the RCRA-LQG list, as provided by EDR, and dated 03/22/2021 has revealed that there are 3 RCRA-LQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RALPHS GROCERY COMPA EPA ID:: CAR000260547	12618 LIMONITE AVE	SE 0 - 1/8 (0.024 mi.)	B10	11
VONS 2688 EPA ID:: CAR000242420	***6170 HAMNER AVE***	***ESE 0 - 1/8 (0.077 mi.)***	***F22***	***13***
TARGET STORE T1961 EPA ID:: CAR000218032	12471 LIMONITE AVE	ESE 1/8 - 1/4 (0.223 mi.)	I34	16

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOME DEPOT USA INC H EPA ID:: CAR000168724	***6140 HAMNER AVE***	***ESE 1/8 - 1/4 (0.137 mi.)***	***28***	***14***

RCRA-VSQG: A review of the RCRA-VSQG list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CVS PHARMACY #17077	***12471 LIMONITE AVE S***	***ESE 1/8 - 1/4 (0.223 mi.)***	***I36***	***16***
EPA ID:: CAR000259713				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: A review of the ENVIROSTOR list, as provided by EDR, and dated 01/25/2021 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PROPOSED K-8 SCHOOL	***5240 AND 5380 HAMNER***	***NNE 1/4 - 1/2 (0.436 mi.)***	***43***	***18***
Facility Id: 60000409				
Status: No Further Action				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ECHEVERRIA DAIRY	***CLEVELAND AVE***	***SW 0 - 1/8 (0.001 mi.)***	***4***	***9***
Facility Id: 33020004				
Status: No Further Action				

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TEXACO SWAN LAKE	***5800 HAMNER AVE***	***ENE 1/4 - 1/2 (0.268 mi.)***	***J41***	***17***
Database: RIVERSIDE CO. LUST, Date of Government Version: 01/13/2021				
Database: LUST REG 8, Date of Government Version: 02/14/2005				
Database: LUST, Date of Government Version: 03/08/2021				
Facility Status: 9				
Facility Status: Case Closed				
Facility Id: 89159				
Global Id: T0606500101				
Global ID: T0606500101				
Status: Completed - Case Closed				
DRIFTY FARMS	***5810 SUMNER***	***W 1/4 - 1/2 (0.498 mi.)***	***44***	***18***
Database: RIVERSIDE CO. LUST, Date of Government Version: 01/13/2021				
Database: LUST REG 8, Date of Government Version: 02/14/2005				
Database: LUST, Date of Government Version: 03/08/2021				
Facility Status: 9				
Facility Status: Case Closed				
Facility Id: 90939				

Global Id: T0606500214
Global ID: T0606500214
Status: Completed - Case Closed

Lower Elevation	Address	Direction / Distance	Map ID	Page
ECHEVERRIA DAIRY	***CLEVELAND AVE***	***SW 0 - 1/8 (0.001 mi.)***	***4***	***9***

Database: LUST REG 8, Date of Government Version: 02/14/2005
Facility Status: Remediation Plan
Global ID: T0606523936

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VONS FUEL CENTER #26	6110 HAMNER AVE	ESE 0 - 1/8 (0.026 mi.)	C11	11

Database: RIVERSIDE CO. UST, Date of Government Version: 01/13/2021
Database: UST, Date of Government Version: 03/08/2021
Facility Id: FA0046411

Lower Elevation	Address	Direction / Distance	Map ID	Page
RALPH'S #45 FUEL CEN	12618 LIMONITE AVE	SE 0 - 1/8 (0.043 mi.)	B17	12

Database: RIVERSIDE CO. UST, Date of Government Version: 01/13/2021
Database: UST, Date of Government Version: 03/08/2021
Facility Id: FA0025177

CHEVRON STATION #210	12464 LIMONITE AVE	ESE 1/8 - 1/4 (0.227 mi.)	I38	16

Database: UST, Date of Government Version: 03/08/2021
Facility Id: FA0032436

AST: A review of the AST list, as provided by EDR, has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
THE PROCTER AND GAMB	16110 COSMOS ST	SW 0 - 1/8 (0.094 mi.)	26	14

Database: AST, Date of Government Version: 07/06/2016

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A review of the SWRCY list, as provided by EDR, and dated 03/09/2021 has revealed that there

is 1 SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUNSET RECYCLING CEN Cert Id: RC296631.001	12660 LIMONITE	SSE 0 - 1/8 (0.088 mi.)	G24	14

Local Lists of Hazardous waste / Contaminated Sites

SCH: A review of the SCH list, as provided by EDR, and dated 01/25/2021 has revealed that there is 1 SCH site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ECHEVERRIA DAIRY Facility Id: 33020004 Status: No Further Action	***CLEVELAND AVE***	***SW 0 - 1/8 (0.001 mi.)***	***4***	***9***

CERS HAZ WASTE: A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/20/2021 has revealed that there are 11 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOUNTAIN VIEW TIRE	***6080 HAMNER AVE #105***	***ESE 0 - 1/8 (0.023 mi.)***	***C7***	***10***
VONS FUEL CENTER #26	***6110 HAMNER AVE***	***ESE 0 - 1/8 (0.026 mi.)***	***C13***	***11***
HOME DEPOT USA INC H	***6140 HAMNER AVE***	***ESE 1/8 - 1/4 (0.137 mi.)***	***28***	***14***

Lower Elevation	Address	Direction / Distance	Map ID	Page
RALPHS GROCERY # 45	***12618 LIMONITE AVE***	***SE 0 - 1/8 (0.024 mi.)***	***B9***	***11***
WALGREENS #13657	***12574 LIMONITE AVE***	***SE 0 - 1/8 (0.062 mi.)***	***E19***	***13***
2688 VONS A SAFEWAY	***6170 HAMNER AVE***	***ESE 0 - 1/8 (0.077 mi.)***	***F21***	***13***
RALPHS GROCERY #45	***12660 LIMONITE AVE***	***SSE 0 - 1/8 (0.088 mi.)***	***G25***	***14***
PETSMART #1341	***12483 LIMONITE AVE***	***ESE 1/8 - 1/4 (0.203 mi.)***	***H29***	***15***
STAPLES THE OFFICE S	***12495 LIMONITE AVE***	***ESE 1/8 - 1/4 (0.213 mi.)***	***I32***	***15***
TARGET T1961	***12471 LIMONITE AVE***	***ESE 1/8 - 1/4 (0.223 mi.)***	***I35***	***16***
CHEVRON STATION #210	***12464 LIMONITE AVE***	***ESE 1/8 - 1/4 (0.227 mi.)***	***I37***	***16***

Local Lists of Registered Storage Tanks

HIST UST: A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LEAL RANCHES Facility Id: 00000049612	12714 CLOVERDALE	SE 0 - 1/8 (0.014 mi.)	B5	10

CERS TANKS: A review of the CERS TANKS list, as provided by EDR, and dated 01/20/2021 has revealed that there are 3 CERS TANKS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VONS FUEL CENTER #26	***6110 HAMNER AVE***	***ESE 0 - 1/8 (0.026 mi.)***	***C13***	***11***

Lower Elevation	Address	Direction / Distance	Map ID	Page
RALPHS GROCERY # 45	***12618 LIMONITE AVE***	***SE 0 - 1/8 (0.024 mi.)***	***B9***	***11***
CHEVRON STATION #210	***12464 LIMONITE AVE***	***ESE 1/8 - 1/4 (0.227 mi.)***	***I37***	***16***

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/22/2021 has revealed that there are 13 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOUNTAIN VIEW TIRE & EPA ID:: CAL000367306	6080 HAMNER AVE STE	ESE 0 - 1/8 (0.023 mi.)	C8	10
VONS FUEL #2688 EPA ID:: CAL000442585	6110 HAMNER AVE	ESE 0 - 1/8 (0.026 mi.)	C12	11
VONS FUEL #2688 EPA ID:: CAL000288661	6110 HAMNER AVE	ESE 0 - 1/8 (0.026 mi.)	C14	12
PORSCHE CARS NORTH A EPA ID:: CAL000428608	12567 BELLEGRAVE AVE	NNW 1/8 - 1/4 (0.237 mi.)	39	17
GATEWAY DENTAL GROUP EPA ID:: CAL000429606	12571 LIMONITE AVE S	E 1/8 - 1/4 (0.246 mi.)	40	17

Lower Elevation	Address	Direction / Distance	Map ID	Page
PULTE HOMES COMPANY, EPA ID:: CAC002965887	12774 LIMONITE	SSE 0 - 1/8 (0.027 mi.)	D15	12
RIVERSIDE MEDICAL CL EPA ID:: CAL000445399	12742 LIMONITE AVE	SSE 0 - 1/8 (0.027 mi.)	D16	12
WALGREENS #13657 EPA ID:: CAL000368727	12574 LIMONITE AVE	SE 0 - 1/8 (0.062 mi.)	E18	12
RALPHS GROCERY #45 EPA ID:: CAL000302746	12660 LIMONITE AVE	SSE 0 - 1/8 (0.088 mi.)	G23	13
BRIGHT NOW DENTAL A EPA ID:: CAL000360939	12636 LIMONITE AVE S	SSE 0 - 1/8 (0.105 mi.)	27	14
MEDICAL MNGT INTNL I EPA ID:: CAL000322671	12483 LIMONITE AVE	ESE 1/8 - 1/4 (0.203 mi.)	H30	15
PETSMART #1341 EPA ID:: CAL000401531	12483 LIMONITE AVE	ESE 1/8 - 1/4 (0.203 mi.)	H31	15
STAPLES THE OFFICE S	12495 LIMONITE AVE	ESE 1/8 - 1/4 (0.213 mi.)	I33	15

EXECUTIVE SUMMARY

EPA ID:: CAL000390722

FINDS: A review of the FINDS list, as provided by EDR, and dated 02/03/2021 has revealed that there is 1 FINDS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEAL RANCHES	***12740 58TH STREET***	***0 - 1/8 (0.000 mi.)***	***A1***	***9***
Registry ID:: 110064614298				

ECHO: A review of the ECHO list, as provided by EDR, and dated 01/02/2021 has revealed that there is 1 ECHO site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEAL RANCHES	***12740 58TH STREET***	***0 - 1/8 (0.000 mi.)***	***A1***	***9***
Registry ID: 110064614298				

Cortese: A review of the Cortese list, as provided by EDR, and dated 12/17/2020 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TEXACO SWAN LAKE	***5800 HAMNER AVE***	***ENE 1/4 - 1/2 (0.268 mi.)***	***J41***	***17***
Cleanup Status: COMPLETED - CASE CLOSED				
DRIFTY FARMS	***5810 SUMNER***	***W 1/4 - 1/2 (0.498 mi.)***	***44***	***18***
Cleanup Status: COMPLETED - CASE CLOSED				

ENF: A review of the ENF list, as provided by EDR, and dated 12/31/2020 has revealed that there is 1 ENF site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEAL RANCHES	***12740 58TH STREET***	***0 - 1/8 (0.000 mi.)***	***A2***	***9***
Status: Historical				
Status: Active				
Facility Id: 236758				

HIST CORTESE: A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TEXACO SWAN LAKE	***5800 HAMNER AVE***	***ENE 1/4 - 1/2 (0.268 mi.)***	***J41***	***17***

Reg Id: 083301026T				
DRIFTY FARMS	***5810 SUMNER***	***W 1/4 - 1/2 (0.498 mi.)***	***44***	***18***
Reg Id: 083301720T				

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTERN SKY DAIRY Reg Id: 8 335298001	***6500 HAMNER***	***SE 0 - 1/8 (0.022 mi.)***	***B6***	***10***

Notify 65: A review of the Notify 65 list, as provided by EDR, and dated 03/12/2021 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SWAN LAKE TEXACO	5800 HAMMER AVENUE	ENE 1/4 - 1/2 (0.268 mi.)	J42	17

CIWQS: A review of the CIWQS list, as provided by EDR, and dated 11/30/2020 has revealed that there is 1 CIWQS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEAL RANCHES	***12740 58TH STREET***	***0 - 1/8 (0.000 mi.)***	***A2***	***9***

CERS: A review of the CERS list, as provided by EDR, and dated 01/20/2021 has revealed that there is 1 CERS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEAL RANCHES	12740 58TH	0 - 1/8 (0.000 mi.)	A3	9

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

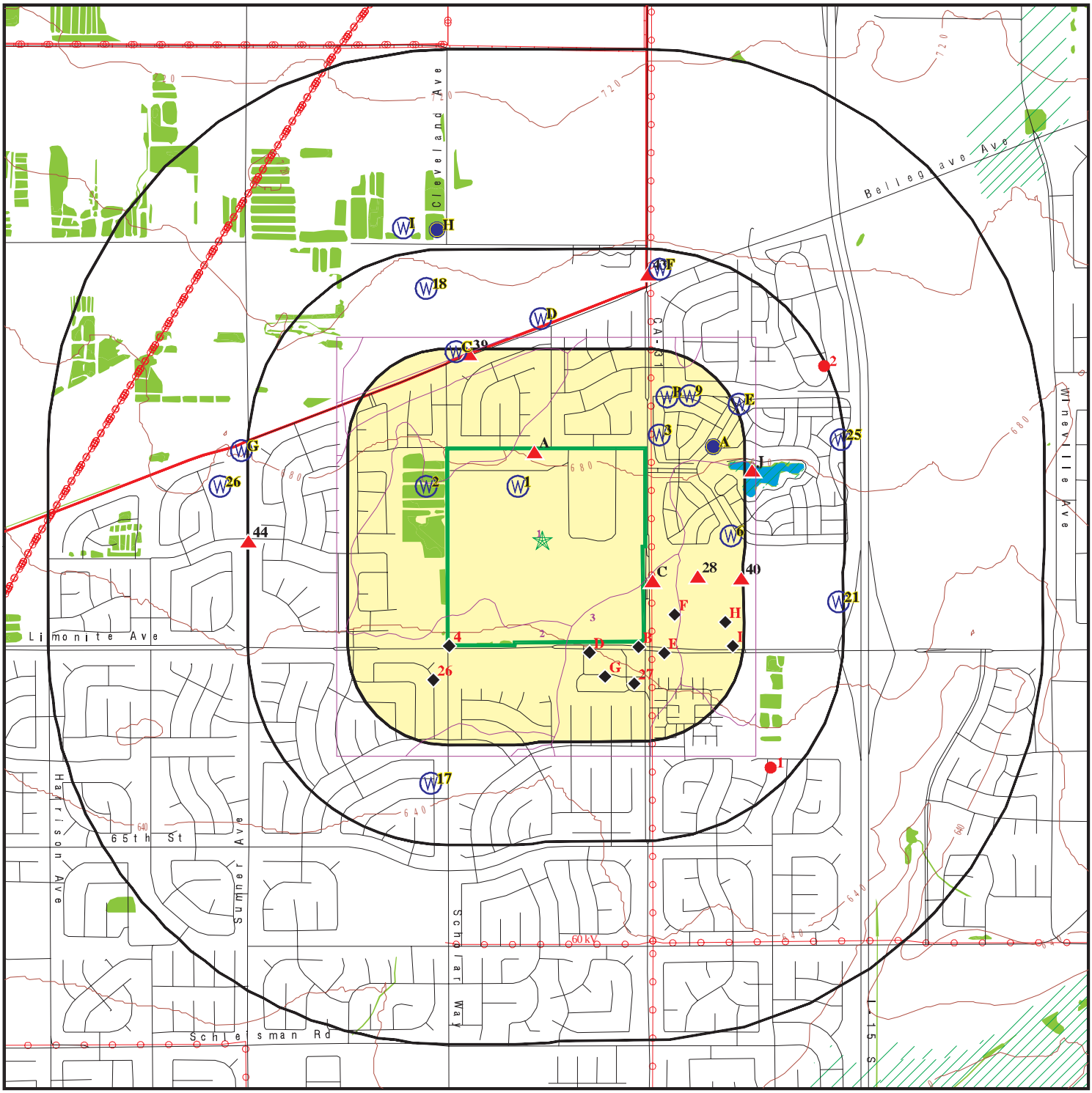
EDR Hist Auto: A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TIERRA FINA	12672 LIMONITE AVE	SSE 0 - 1/8 (0.073 mi.)	D20	13

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MIRA LOMA	S121672591	SEC LIMONITE AVE & ARCHIBALD AVE	ARCHIBLAD AVE & CLOVERDALE & L	91752	CIWQS
ONTARIO	1009508586	SO CAL GAS/ONTARIO MGP	CORNER OF CAMPUS, MARTLAND, MO	91761	EDR MGP
ONTARIO	S101481941	MILLIKEN SANITARY LANDFILL	INTERSECTION: MILLIKEN AVE & M	91761	ENVIROSTOR

OVERVIEW MAP - 06529777.2R



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Pipelines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hamer Ave and 58th Street	CLIENT: Hillmann Environmental Co.
ADDRESS: Hamer Ave and 58th Street Corona CA 92880	CONTACT: Gabby Cyrulik
LAT/LONG: 33.979185 / 117.562932	INQUIRY #: 06529777.2r DATE: June 09, 2021 2:41 pm

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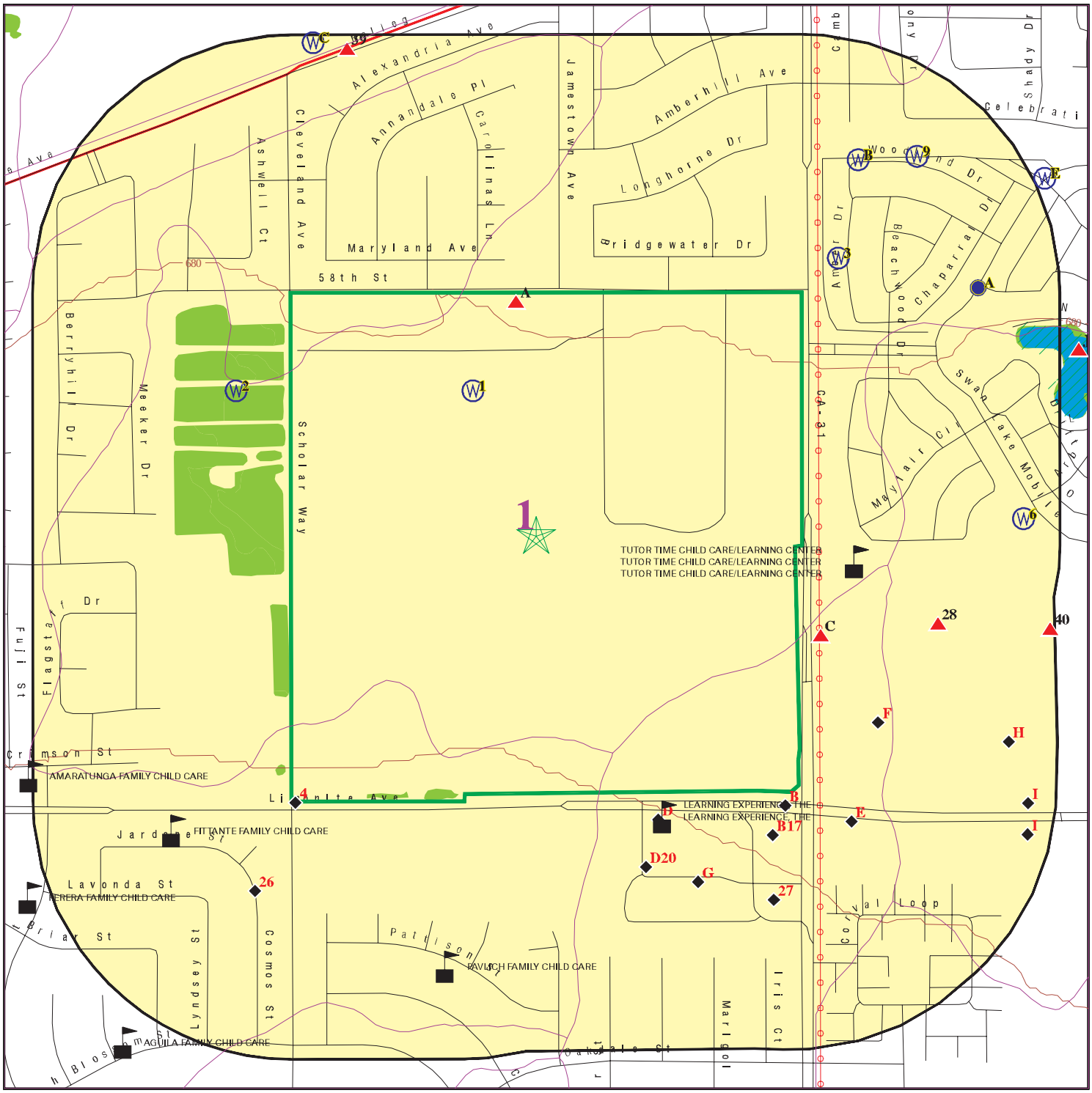
DETAIL MAP - 06529777.2R



0 1/8 1/4 1/2 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hamer Ave and 58th Street	CLIENT: Hillmann Environmental Co.
ADDRESS: Hamer Ave and 58th Street Corona CA 92880	CONTACT: Gabby Cyrulik
LAT/LONG: 33.979185 / 117.562932	INQUIRY #: 06529777.2r DATE: June 09, 2021 2:45 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		2	1	NR	NR	NR	3
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-VSQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	0	1	0	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	0	2	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		2	1	NR	NR	NR	3
AST	0.250		1	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		1	0	0	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		1	0	NR	NR	NR	1
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		6	5	NR	NR	NR	11
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		2	1	NR	NR	NR	3
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		8	5	NR	NR	NR	13
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		1	NR	NR	NR	NR	1
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		1	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	2	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		1	NR	NR	NR	NR	1
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	2	NR	NR	3
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	1	0	NR	1
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		1	NR	NR	NR	NR	1
CERS	0.001		1	NR	NR	NR	NR	1
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	33	15	8	0	0	56

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
< 1/8
1 ft.

LEAL RANCHES
12740 58TH STREET
CORONA, CA 92880

FINDS 1023199190
ECHO N/A

Relative: Higher

Click here for full text details

FINDS
Registry ID: 110064614298

ECHO
Registry ID 110064614298

A2
< 1/8
1 ft.

LEAL RANCHES
12740 58TH STREET
CORONA, CA 92880

ENF S109692893
CIWQS N/A

Relative: Higher

Click here for full text details

ENF
Status Active
Facility Id 236758
Status Historical

A3
< 1/8
1 ft.

LEAL RANCHES
12740 58TH
CORONA, CA 92880

CERS S123500605
N/A

Relative: Higher

Click here for full text details

4
SW
< 1/8
0.001 mi.
7 ft.

ECHEVERRIA DAIRY
CLEVELAND AVE
CORONA, CA 92880

ENVIROSTOR S105628777
LUST N/A
SCH

Relative: Lower

Click here for full text details

ENVIROSTOR
Facility Id 33020004
Status No Further Action

LUST
Facility Status Remediation Plan
Global ID T0606523936

SCH
Facility Id 33020004
Status No Further Action

B5
SE
< 1/8
0.014 mi.
72 ft.

Relative:
Lower

LEAL RANCHES
12714 CLOVERDALE
CORONA, CA 91720

HIST UST | **U001569146**
N/A

Click here for full text details

HIST UST
Facility Id 00000049612

B6
SE
< 1/8
0.022 mi.
118 ft.

Relative:
Lower

WESTERN SKY DAIRY
6500 HAMNER
CORONA, CA 91720

ENF
HIST CORTESE
NPDES
WDS
CIWQS
S102005719
N/A

Click here for full text details

ENF
Status Historical
Facility Id 630518
Status Historical

HIST CORTESE
Reg Id 8 335298001

WDS
Facility Id 8 335298001
Facility Status Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

C7
ESE
< 1/8
0.023 mi.
122 ft.

Relative:
Higher

MOUNTAIN VIEW TIRE
6080 HAMNER AVE #105
EASTVALE, CA 91752

CERS HAZ WASTE
CERS
S123530317
N/A

Click here for full text details

C8
ESE
< 1/8
0.023 mi.
122 ft.

Relative:
Higher

MOUNTAIN VIEW TIRE & SERVICE INC
6080 HAMNER AVE STE 105
MIRA LOMA, CA 91752

RCRA NonGen / NLR
1024831162
CAL000367306

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000367306

B9
SE
< 1/8
0.024 mi.
126 ft.

Relative:
Lower

RALPHS GROCERY # 45 (FUEL CENTER)
12618 LIMONITE AVE
CORONA, CA 92880

CERS HAZ WASTE
CERS TANKS
HAZNET
CERS
HWTS

S123625499
N/A

Click here for full text details

HAZNET
GEPAID CAL000319444

B10
SE
< 1/8
0.024 mi.
126 ft.

Relative:
Lower

RALPHS GROCERY COMPANY FUEL CENTER 45
12618 LIMONITE AVE
EASTVALE, CA 92880

RCRA-LQG

1018273845
CAR000260547

Click here for full text details

RCRA-LQG
EPA Id CAR000260547

C11
ESE
< 1/8
0.026 mi.
138 ft.

Relative:
Higher

VONS FUEL CENTER #2688
6110 HAMNER AVE
EASTVALE, CA 91752

UST

U004009968
N/A

Click here for full text details

UST
Facility Id FA0046411

C12
ESE
< 1/8
0.026 mi.
138 ft.

Relative:
Higher

VONS FUEL #2688
6110 HAMNER AVE
MIRA LOMA, CA 91752

RCRA NonGen / NLR

1024873932
CAL000442585

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000442585

C13
ESE
< 1/8
0.026 mi.
138 ft.

Relative:
Higher

VONS FUEL CENTER #2688
6110 HAMNER AVE
EASTVALE, CA 91752

CERS HAZ WASTE
CERS TANKS
CHMIRS
CERS

S109040136
N/A

Click here for full text details

CHMIRS
OES Incident Number 12-3603
OES Incident Number 6-1449

C14
ESE
< 1/8
0.026 mi.
138 ft.

Relative:
Higher

VONS FUEL #2688
6110 HAMNER AVE
MIRA LOMA, CA 91752

RCRA NonGen / NLR **1024810246**
CAL000288661

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000288661

D15
SSE
< 1/8
0.027 mi.
142 ft.

Relative:
Lower

PULTE HOMES COMPANY, LLC
12774 LIMONITE
EASTVALE, CA 92880

RCRA NonGen / NLR **1024746115**
CAC002965887

Click here for full text details

RCRA NonGen / NLR
EPA Id CAC002965887

D16
SSE
< 1/8
0.027 mi.
144 ft.

Relative:
Lower

RIVERSIDE MEDICAL CLINIC
12742 LIMONITE AVE
EASTVALE, CA 92880

RCRA NonGen / NLR **1025872278**
CAL000445399

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000445399

B17
SE
< 1/8
0.043 mi.
225 ft.

Relative:
Lower

RALPH'S #45 FUEL CENTER
12618 LIMONITE AVE
EASTVALE, CA 92880

UST **U004178983**
N/A

Click here for full text details

UST
Facility Id FA0025177

E18
SE
< 1/8
0.062 mi.
329 ft.

Relative:
Lower

WALGREENS #13657
12574 LIMONITE AVE
MIRA LOMA, CA 91752

RCRA NonGen / NLR **1016954654**
CAL000368727

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000368727

E19
SE
< 1/8
0.062 mi.
329 ft.

Relative:
Lower

WALGREENS #13657
12574 LIMONITE AVE
EASTVALE, CA 91752

CERS HAZ WASTE
HAZNET
HWTS

S113800239
N/A

Click here for full text details

HAZNET
GEPAID CAL000368727

D20
SSE
< 1/8
0.073 mi.
384 ft.

Relative:
Lower

TIERRA FINA
12672 LIMONITE AVE
CORONA, CA 92880

EDR Hist Auto

1020848439
N/A

Click here for full text details

F21
ESE
< 1/8
0.077 mi.
405 ft.

Relative:
Lower

2688 VONS A SAFEWAY COMPANY
6170 HAMNER AVE
MIRA LOMA, CA 91752

CERS HAZ WASTE
CERS

S123535444
N/A

Click here for full text details

F22
ESE
< 1/8
0.077 mi.
405 ft.

Relative:
Lower

VONS 2688
6170 HAMNER AVE
EASTVALE, CA 91752

RCRA-LQG
FINDS

1016447641
CAR000242420

Click here for full text details

RCRA-LQG
EPA Id CAR000242420

FINDS
Registry ID: 110056301005

G23
SSE
< 1/8
0.088 mi.
463 ft.

Relative:
Lower

RALPHS GROCERY #45
12660 LIMONITE AVE
CORONA, CA 92880

RCRA NonGen / NLR

1024813162
CAL000302746

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000302746

G24
SSE
< 1/8
0.088 mi.
463 ft.

Relative:
Lower

SUNSET RECYCLING CENTER — **SWRCY** — **S126254806**
12660 LIMONITE — **N/A**
CORONA, CA 92880

Click here for full text details

SWRCY
Cert Id RC296631.001

G25
SSE
< 1/8
0.088 mi.
463 ft.

Relative:
Lower

RALPHS GROCERY #45 — **CERS HAZ WASTE** — **S113140872**
12660 LIMONITE AVE — **CHMIRS** — **N/A**
CORONA, CA 92880 — **HAZNET**
CERS
HWTS

Click here for full text details

CHMIRS
OES Incident Number 17-2138

HAZNET
GEPAID CAL000302746

26
SW
< 1/8
0.094 mi.
494 ft.

Relative:
Lower

THE PROCTER AND GAMBLE DISTRIBUTING LLC - WEST COA — **AST** — **A100425253**
16110 COSMOS ST — **N/A**
MORENO VALLEY, CA 92551

Click here for full text details

27
SSE
< 1/8
0.105 mi.
556 ft.

Relative:
Lower

BRIGHT NOW DENTAL A DENTAL OFFICE OF SAHAWNEH DENT — **RCRA NonGen / NLR** — **1024828755**
12636 LIMONITE AVE STE 1A — **CAL000360939**
CORONA, CA 92880

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RCRA NonGen / NLR
EPA Id CAL000360939

28
ESE
1/8-1/4
0.137 mi.
724 ft.

Relative:
Higher

HOME DEPOT USA INC HD 1084 — **RCRA-SQG** — **1008879999**
6140 HAMNER AVE — **CERS HAZ WASTE** — **CAR000168724**
MIRA LOMA, CA 91752 — **HAZNET**
CERS
HWTS

Click here for full text details

RCRA-SQG
EPA Id CAR000168724

HAZNET
GEPAID CAR000168724

H29
ESE
1/8-1/4
0.203 mi.
1072 ft.

Relative:
Lower

PETSMART #1341
12483 LIMONITE AVE
MIRA LOMA, CA 91752

CERS HAZ WASTE
CERS

S118938010
N/A

Click here for full text details

H30
ESE
1/8-1/4
0.203 mi.
1072 ft.

Relative:
Lower

MEDICAL MNGT INTNL INC DBA BANFIELD PET HOSPITAL #
12483 LIMONITE AVE
MIRA LOMA, CA 91752

RCRA NonGen / NLR

1024817821
CAL000322671

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000322671

H31
ESE
1/8-1/4
0.203 mi.
1072 ft.

Relative:
Lower

PETSMART #1341
12483 LIMONITE AVE
MIRA LOMA, CA 91752

RCRA NonGen / NLR

1024846950
CAL000401531

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000401531

I32
ESE
1/8-1/4
0.213 mi.
1122 ft.

Relative:
Lower

STAPLES THE OFFICE SUPERSTORE EAST INC STORE 1391
12495 LIMONITE AVE
MIRA LOMA, CA 91752

CERS HAZ WASTE
HAZNET
HWTS

S118234238
N/A

Click here for full text details

HAZNET
GEPAID CAL000390722

I33
ESE
1/8-1/4
0.213 mi.
1122 ft.

Relative:
Lower

STAPLES THE OFFICE SUPERSTORE EAST INC STORE 1391
12495 LIMONITE AVE
MIRA LOMA, CA 91752

RCRA NonGen / NLR

1024841141
CAL000390722

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000390722

I34
ESE
1/8-1/4
0.223 mi.
1177 ft.

Relative:
Lower

TARGET STORE T1961
12471 LIMONITE AVE
MIRA LOMA, CA 91752

RCRA-LQG **1014465342**
CAR000218032

Click here for full text details

RCRA-LQG
EPA Id CAR000218032

I35
ESE
1/8-1/4
0.223 mi.
1177 ft.

Relative:
Lower

TARGET T1961
12471 LIMONITE AVE
MIRA LOMA, CA 91752

CERS HAZ WASTE **S113137385**
CERS **N/A**

Click here for full text details

I36
ESE
1/8-1/4
0.223 mi.
1177 ft.

Relative:
Lower

CVS PHARMACY #17077
12471 LIMONITE AVE STE B
MIRA LOMA, CA 91752

RCRA-VSQG **1018273774**
FINDS **CAR000259713**
ECHO

Click here for full text details

RCRA-VSQG
EPA Id CAR000259713

FINDS
Registry ID: 110067711140

ECHO
Registry ID 110067711140

I37
ESE
1/8-1/4
0.227 mi.
1199 ft.

Relative:
Lower

CHEVRON STATION #210408/2013
12464 LIMONITE AVE
MIRA LOMA, CA 91752

CERS HAZ WASTE **S123498716**
CERS TANKS **N/A**
CERS

Click here for full text details

I38
ESE
1/8-1/4
0.227 mi.
1199 ft.

Relative:
Lower

CHEVRON STATION #210408/2013
12464 LIMONITE AVE
MIRA LOMA, CA 91752

UST **U004264381**
N/A

Click here for full text details

UST
Facility Id FA0032436

39
NNW
1/8-1/4
0.237 mi.
1249 ft.

Relative:
Higher

PORSCHE CARS NORTH AMERICA
12567 BELLEGRAVE AVE BLDG #4
EASTVALE, CA 91752

RCRA NonGen / NLR **1025870707**
CAL000428608

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000428608

40
East
1/8-1/4
0.246 mi.
1297 ft.

Relative:
Higher

GATEWAY DENTAL GROUP AND ORTHODONTICS
12571 LIMONITE AVE STE 230
EASTVALE, CA 91752

RCRA NonGen / NLR **1024861140**
CAL000429606

Click here for full text details

RCRA NonGen / NLR
EPA Id CAL000429606

J41
ENE
1/4-1/2
0.268 mi.
1417 ft.

Relative:
Higher

TEXACO SWAN LAKE
5800 HAMNER AVE
MIRA LOMA, CA 92408

LUST **S103990108**
Cortese **N/A**
HIST CORTESE
NPDES
CERS

Click here for full text details

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 89159
Global Id T0606500101
Facility Status 9
Global ID T0606500101

Cortese
Cleanup Status COMPLETED - CASE CLOSED

HIST CORTESE
Reg Id 083301026T

J42
ENE
1/4-1/2
0.268 mi.
1417 ft.

Relative:
Higher

SWAN LAKE TEXACO
5800 HAMMER AVENUE
MIRA LOMA, CA 91752

Notify 65 **S100178727**
N/A

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43
NNE
1/4-1/2
0.436 mi.
2304 ft.

Relative:
Higher

PROPOSED K-8 SCHOOL NO. 2
5240 AND 5380 HAMNER AVENUE
MIRA LOMA, CA 91752

ENVIROSTOR **S108054398**
SCH **N/A**

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ENVIROSTOR
Facility Id 60000409
Status No Further Action

SCH
Facility Id 60000409
Status No Further Action

44
West
1/4-1/2
0.498 mi.
2632 ft.

Relative:
Higher

DRIFTY FARMS
5810 SUMNER
CHINO, CA 91710

RCRA-SQG **1000231069**
LUST **CAD981970312**
SWEEPS UST
HIST UST
CA FID UST
FINDS
ECHO
Cortese
ENF
HIST CORTESE
CIWQS
CERS
HWTS

Click here for full text details

RCRA-SQG
EPA Id CAD981970312

LUST
Facility Status Case Closed
Status Completed - Case Closed
Facility Id 90939
Global Id T0606500214
Facility Status 9
Global ID T0606500214

SWEEPS UST
Status A
Tank Status A
Comp Number 27263

HIST UST
Facility Id 00000027263

CA FID UST
Facility Id 36003104
Status A

FINDS

DRIFTY FARMS (Continued) **1000231069**

Registry ID: 110002759881

ECHO
Registry ID 110002759881

Cortese
Cleanup Status COMPLETED - CASE CLOSED

ENF
Status Historical
Facility Id 220737
Status Historical

HIST CORTESE
Reg Id 083301720T

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	12/17/2020	12/17/2020	03/09/2021
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2019	01/20/2021	04/08/2021
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	01/20/2021	01/20/2021	04/08/2021
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	01/20/2021	01/20/2021	04/08/2021
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	01/20/2021	01/20/2021	04/08/2021
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	12/31/2020	01/20/2021	04/08/2021
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	11/30/2020	12/01/2020	02/12/2021
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	12/17/2020	12/17/2020	03/09/2021
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	05/01/2019	05/14/2019	07/17/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	03/02/2021	03/03/2021	05/19/2021
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	02/26/2021	03/02/2021	05/19/2021
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	02/23/2021	02/25/2021	05/19/2021
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	03/01/2021	03/04/2021	05/20/2021
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2018	06/16/2020	08/28/2020
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	12/31/2020	01/20/2021	04/09/2021
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	02/08/2021	02/12/2021	05/05/2021
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	11/23/2020	11/23/2020	02/08/2021
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2019	04/15/2020	07/02/2020
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	02/16/2021	02/17/2021	05/10/2021
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	01/05/2021	01/05/2021	03/18/2021
CA	HWTS	Hazardous Waste Tracking System	Department of Toxic Substances Control	04/08/2021	04/09/2021	04/20/2021
CA	ICE	ICE	Department of Toxic Subsances Control	02/16/2021	02/17/2021	05/07/2021
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	03/08/2021	03/09/2021	03/31/2021
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	03/01/2021	03/03/2021	05/20/2021
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/31/2021
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	MINES	Mines Site Location Listing	Department of Conservation	03/08/2021	03/09/2021	03/30/2021
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	01/29/2021	03/03/2021	05/20/2021
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	03/12/2021	03/16/2021	06/01/2021
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	02/08/2021	02/09/2021	05/04/2021
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	03/02/2021	03/03/2021	05/20/2021
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	02/24/2021	02/24/2021	05/14/2021
CA	PROC	Certified Processors Database	Department of Conservation	03/09/2021	03/09/2021	03/31/2021
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	02/11/2021	02/11/2021	05/05/2021
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	02/08/2021	02/09/2021	05/03/2021
CA	SWRCY	Recycler Database	Department of Conservation	03/09/2021	03/09/2021	03/31/2021
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	03/08/2021	03/09/2021	03/31/2021
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	03/08/2021	03/09/2021	03/30/2021
CA	UST	Active UST Facilities	SWRCB	03/08/2021	03/09/2021	03/31/2021
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	03/05/2021	03/09/2021	04/01/2021
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	01/25/2021	01/26/2021	04/13/2021
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	11/19/2019	01/07/2020	03/09/2020
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	03/09/2021	03/09/2021	03/31/2021
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	03/08/2021	03/09/2021	03/30/2021
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	12/11/2020	12/11/2020	03/02/2021
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2017	06/22/2020	11/20/2020
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2019	12/01/2020	02/09/2021

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2020	01/13/2021	03/22/2021
US	CORRACTS	Corrective Action Report	EPA	03/22/2021	03/23/2021	05/19/2021
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	11/03/2020	11/17/2020	02/09/2021
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	Delisted NPL	National Priority List Deletions	EPA	04/27/2021	05/03/2021	05/19/2021
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	01/02/2021	01/08/2021	03/22/2021
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	12/14/2020	12/15/2020	12/22/2020
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	04/03/2019	04/05/2019	05/14/2019
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/29/2021	02/17/2021	03/22/2021
US	FINDS	Facility Index System/Facility Registry System	EPA	02/03/2021	03/03/2021	04/05/2021
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	02/11/2021	02/17/2021	04/05/2021
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	02/17/2021	02/17/2021	03/22/2021
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/16/2020	12/17/2020	03/12/2021
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	10/01/2020	12/16/2020	03/12/2021
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	11/12/2020	12/16/2020	03/12/2021
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	10/02/2020	12/18/2020	03/12/2021
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	10/07/2020	12/16/2020	03/12/2021
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/30/2020	12/22/2020	03/12/2021
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	10/09/2020	12/16/2020	03/12/2021
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	10/01/2020	12/16/2020	03/12/2021
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	10/01/2020	12/16/2020	03/12/2021
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	11/12/2020	12/16/2020	03/12/2021
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	10/02/2020	12/18/2020	03/12/2021
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	10/07/2020	12/16/2020	03/12/2021
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/08/2020	05/20/2020	08/12/2020
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/30/2020	12/22/2020	03/12/2021
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	10/09/2020	12/16/2020	03/12/2021
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	10/01/2020	12/16/2020	03/12/2021
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	04/27/2021	05/03/2021	05/19/2021
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	04/27/2021	05/03/2021	05/19/2021
US	LUCIS	Land Use Control Information System	Department of the Navy	02/09/2021	02/11/2021	03/22/2021
US	MINES MRDS	Mineral Resources Data System	USGS	04/06/2018	10/21/2019	10/24/2019
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	11/24/2020	11/30/2020	01/25/2021
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	03/08/2021	03/11/2021	05/11/2021
US	NPL	National Priority List	EPA	04/27/2021	05/03/2021	05/19/2021
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	11/19/2020	01/08/2021	03/22/2021
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	PCS	Permit Compliance System	EPA, Office of Water	07/14/2011	08/05/2011	09/29/2011
US	PCS ENF	Enforcement data	EPA	12/31/2014	02/05/2015	03/06/2015
US	PCS INACTIVE	Listing of Inactive PCS Permits	EPA	11/05/2014	01/06/2015	05/06/2015
US	PRP	Potentially Responsible Parties	EPA	12/30/2020	01/14/2021	03/05/2021
US	Proposed NPL	Proposed National Priority List Sites	EPA	04/27/2021	05/03/2021	05/19/2021
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	03/22/2021	03/23/2021	05/19/2021
US	RMP	Risk Management Plans	Environmental Protection Agency	01/22/2021	02/18/2021	05/11/2021
US	ROD	Records Of Decision	EPA	04/27/2021	05/03/2021	05/19/2021
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	04/27/2021	05/03/2021	05/19/2021
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	04/27/2021	05/03/2021	05/19/2021
US	SSTS	Section 7 Tracking Systems	EPA	01/20/2021	01/21/2021	03/22/2021
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2018	08/14/2020	11/04/2020
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/17/2020	09/10/2020
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/11/2020	12/11/2020	03/02/2021
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	12/07/2020	12/09/2020	03/02/2021
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	02/22/2021	02/23/2021	05/19/2021
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	12/14/2020	12/17/2020	03/12/2021
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	12/07/2020	12/09/2020	03/02/2021
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	02/22/2021	02/23/2021	05/19/2021
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	02/01/2021	02/24/2021	05/19/2021
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2018	07/02/2020	09/17/2020

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	10/05/2020	02/17/2021	05/10/2021
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2018	04/10/2019	05/16/2019
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/01/2019	04/29/2020	07/10/2020
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	06/30/2018	07/19/2019	09/10/2019
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2019	02/11/2021	02/24/2021
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	05/31/2018	06/19/2019	09/03/2019
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish and Wildlife			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		Endeavor Business Media			
US	Electric Power Transmission Line Data		Endeavor Business Media			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

HAMER AVE AND 58TH STREET
HAMER AVE AND 58TH STREET
CORONA, CA 92880

TARGET PROPERTY COORDINATES

Latitude (North):	33.979185 - 33° 58' 45.07''
Longitude (West):	117.562932 - 117° 33' 46.56''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	448000.3
UTM Y (Meters):	3759796.5
Elevation:	669 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640930 CORONA NORTH, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

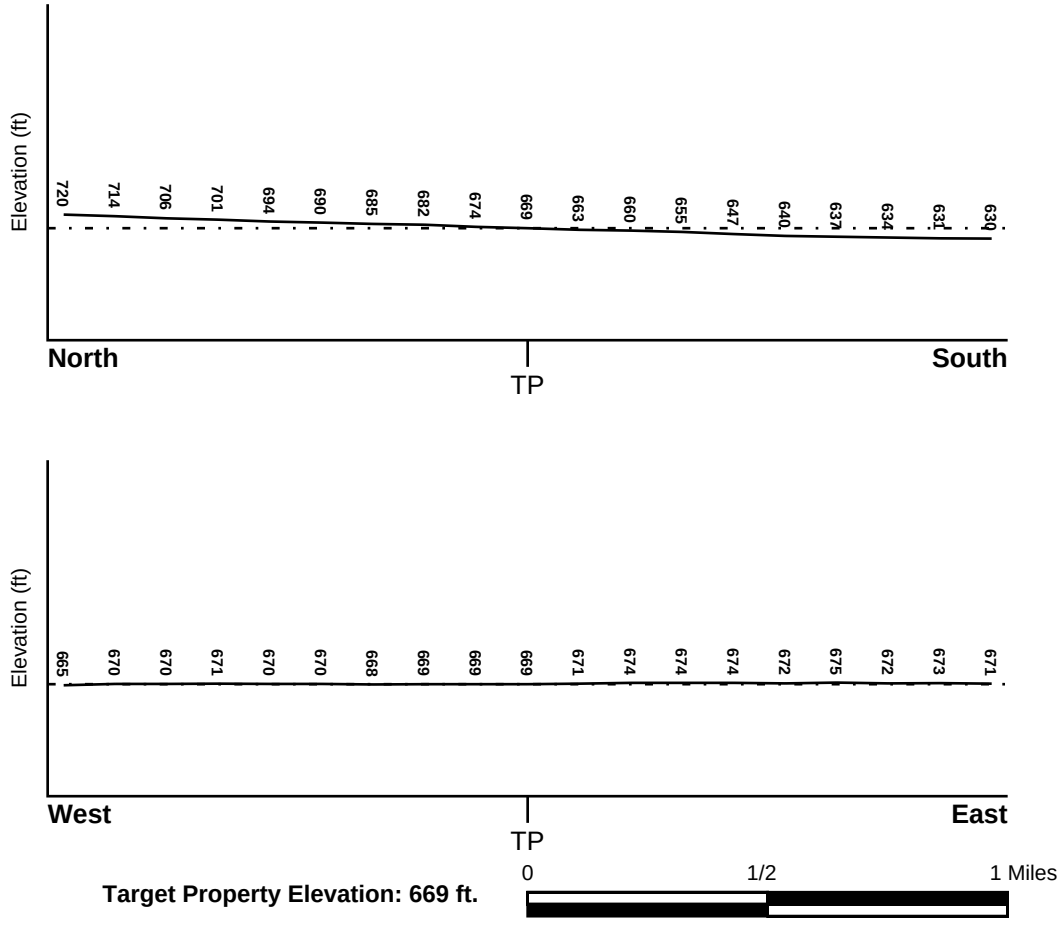
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06071C9375H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06065C0681G	FEMA FIRM Flood data
06065C0683G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CORONA NORTH	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

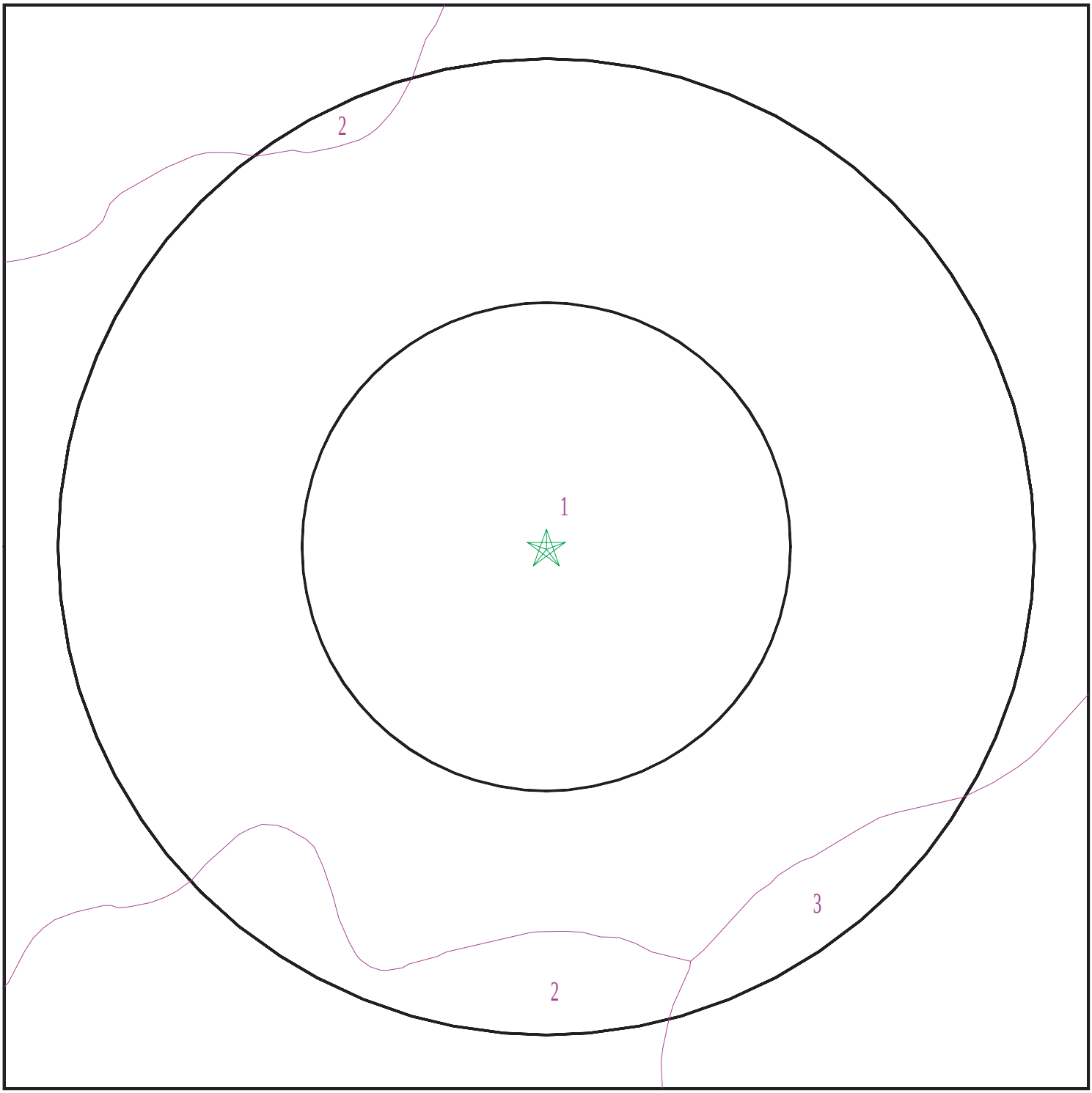
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 06529777.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Hamer Ave and 58th Street	CLIENT:	Hillmann Environmental Co.
ADDRESS:	Hamer Ave and 58th Street Corona CA 92880	CONTACT:	Gabby Cyrulik
		INQUIRY #:	06529777.2r
LAT/LONG:	33.979185 / 117.562932	DATE:	June 09, 2021 2:46 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: HILMAR

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 6.6
2	16 inches	72 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: HILMAR

Soil Surface Texture: loamy sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 9.6 Min: 8.4
2	16 inches	22 inches	stratified very fine sandy loam to silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 9.6 Min: 8.4
3	22 inches	72 inches	stratified very fine sandy loam to silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 9.6 Min: 8.4

Soil Map ID: 3

Soil Component Name: DELHI

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	9 inches	48 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
3	48 inches	59 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
3	USGS40000139537	1/4 - 1/2 Mile NE
A12	USGS40000139530	1/2 - 1 Mile ENE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H37	USGS40000139597	1/2 - 1 Mile NNW
H38	USGS40000139596	1/2 - 1 Mile NNW
H39	USGS40000139595	1/2 - 1 Mile NNW
H40	USGS40000139598	1/2 - 1 Mile NNW
H41	USGS40000139601	1/2 - 1 Mile NNW
H42	USGS40000139600	1/2 - 1 Mile NNW
H43	USGS40000139599	1/2 - 1 Mile NNW
H44	USGS40000139594	1/2 - 1 Mile NNW
H45	USGS40000139590	1/2 - 1 Mile NNW
H46	USGS40000139589	1/2 - 1 Mile NNW
H47	USGS40000139591	1/2 - 1 Mile NNW
H48	USGS40000139593	1/2 - 1 Mile NNW
H49	USGS40000139592	1/2 - 1 Mile NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CADWR0000036121	1/8 - 1/4 Mile NNW
2	CADWR0000036853	1/4 - 1/2 Mile WNW
A4	2583	1/4 - 1/2 Mile ENE
B5	CADDW0000012206	1/4 - 1/2 Mile NE
6	CADDW0000021047	1/4 - 1/2 Mile East
B7	2581	1/4 - 1/2 Mile NE
B8	CADDW0000017358	1/2 - 1 Mile NE
9	CADDW0000006675	1/2 - 1 Mile NE
C10	CADDW0000019117	1/2 - 1 Mile NNW
C11	CAPFAS000000511	1/2 - 1 Mile NNW
D13	CADDW0000013264	1/2 - 1 Mile North
D14	CAPFAS000000575	1/2 - 1 Mile North
E15	2582	1/2 - 1 Mile NE
E16	CADDW0000008868	1/2 - 1 Mile ENE
17	CADPR0000005448	1/2 - 1 Mile SSW
18	CADWR0000011820	1/2 - 1 Mile NNW
F19	CADDW0000004891	1/2 - 1 Mile NNE
F20	CAPFAS000000725	1/2 - 1 Mile NNE
21	CADWR8000006295	1/2 - 1 Mile ESE
G22	CADWR8000006311	1/2 - 1 Mile WNW
G23	CADDW0000022830	1/2 - 1 Mile WNW
G24	CAPFAS000001649	1/2 - 1 Mile WNW
25	CADDW0000022140	1/2 - 1 Mile ENE
26	CADWR0000001512	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

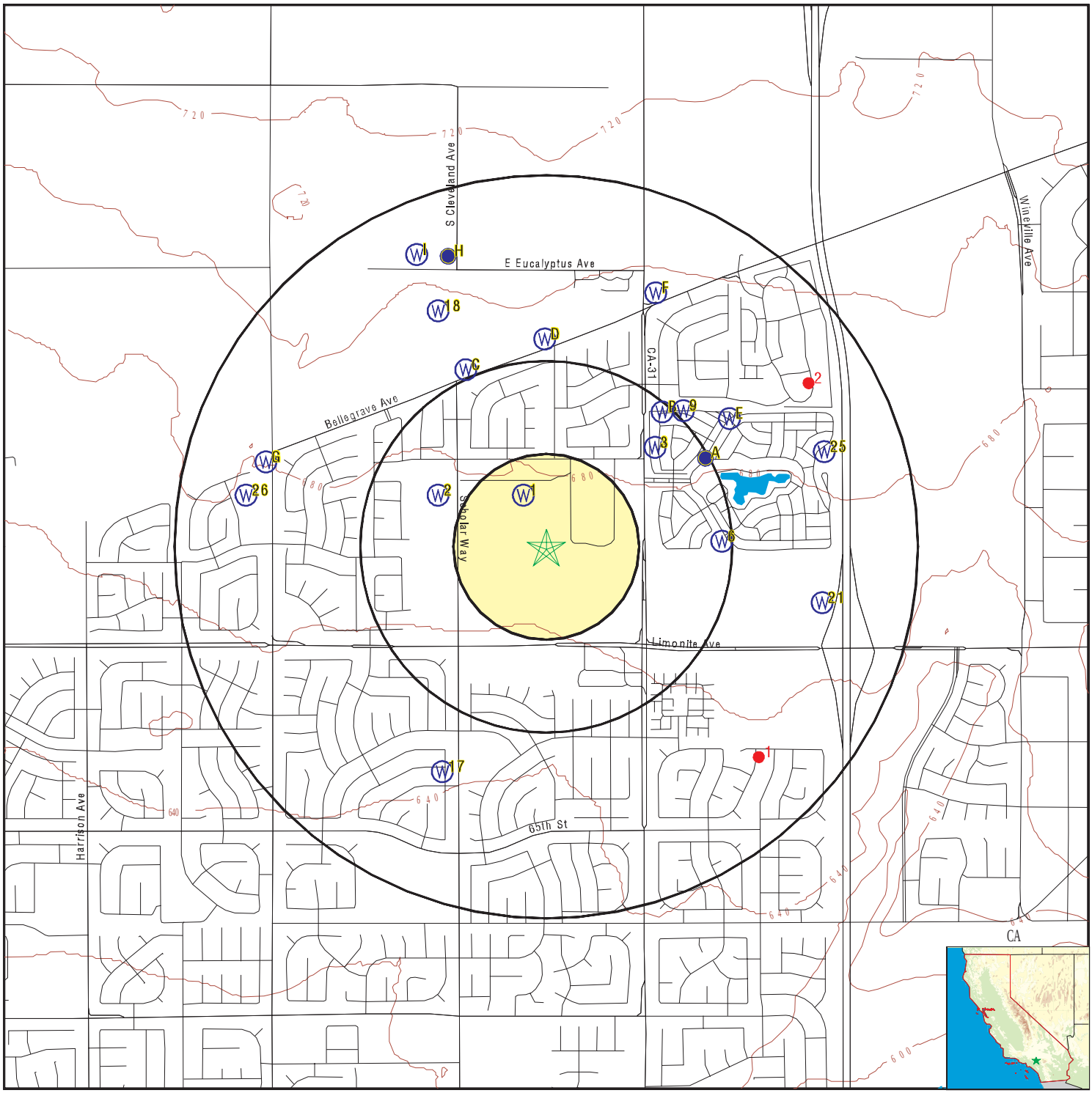
MAP ID	WELL ID	LOCATION FROM TP
H27	CAUSGSN00009264	1/2 - 1 Mile NNW
H28	CAUSGSN00007464	1/2 - 1 Mile NNW
H29	CAUSGSN00011131	1/2 - 1 Mile NNW
H30	CAUSGSN00007457	1/2 - 1 Mile NNW
H31	CAUSGSN00000786	1/2 - 1 Mile NNW
H32	CAUSGSN00016031	1/2 - 1 Mile NNW
H33	CAUSGSN00003256	1/2 - 1 Mile NNW
H34	CAUSGSN00019045	1/2 - 1 Mile NNW
H35	CAUSGSN00011745	1/2 - 1 Mile NNW
H36	CAUSGSN00002619	1/2 - 1 Mile NNW
I50	CADWR8000006331	1/2 - 1 Mile NNW
I51	CADWR8000006330	1/2 - 1 Mile NNW
I52	CADWR8000006332	1/2 - 1 Mile NNW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG14000006470	1/2 - 1 Mile SE
2	CAOG14000006473	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 06529777.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Hamer Ave and 58th Street	CLIENT:	Hillmann Environmental Co.
ADDRESS:	Hamer Ave and 58th Street Corona CA 92880	CONTACT:	Gabby Cyrulik
LAT/LONG:	33.979185 / 117.562932	INQUIRY #:	06529777.2r
		DATE:	June 09, 2021 2:45 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **SE** **1/2 - 1 Mile**	Click here for full text details	**OIL_GAS**	**CAOG14000006470**
2 **ENE** **1/2 - 1 Mile**	Click here for full text details	**OIL_GAS**	**CAOG14000006473**
1 **NNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000036121**
2 **WNW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000036853**
3 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139537**
A4 **ENE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2583**
B5 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000012206**
6 **East** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000021047**
B7 **NE** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2581**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B8 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000017358**
9 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000006675**
C10 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000019117**
C11 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAPFAS000000511**
A12 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139530**
D13 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000013264**
D14 **North** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAPFAS000000575**
E15 **NE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2582**
E16 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000008868**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
17 **SSW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**CA WELLS**	**CADPR0000005448**
18 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000011820**
F19 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000004891**
F20 **NNE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAPFAS000000725**
21 **ESE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR8000006295**
G22 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR8000006311**
G23 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000022830**
G24 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAPFAS000001649**
25 **ENE** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADDW0000022140**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
26 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR0000001512**
H27 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00009264**
H28 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00007464**
H29 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00011131**
H30 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00007457**
H31 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00000786**
H32 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00016031**
H33 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00003256**
H34 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00019045**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H35 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00011745**
H36 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CAUSGSN00002619**
H37 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139597**
H38 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139596**
H39 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139595**
H40 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139598**
H41 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139601**
H42 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139600**
H43 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139599**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
H44 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139594**
H45 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139590**
H46 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139589**
H47 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139591**
H48 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139593**
H49 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000139592**
I50 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR8000006331**
I51 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR8000006330**
I52 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADWR8000006332**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92880	15	1

Federal EPA Radon Zone for RIVERSIDE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX F

OTHER DOCUMENTS

STATE WATER RESOURCES CONTROL BOARD
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR RIVERSIDE COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
LEAL RANCHES
12714 CLOVERDALE CORONA CA 91720

II FACILITY

	MAILING ADDRESS TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR TELEPHONE	TYPE OF BUSINESS NO. OF CONTAINERS
LEAL RANCHES 12714 CLOVERDALE CORONA CA 91720 CROSS STREET : HAMMER	12714 CLOVERDALE CORONA CA 91720	BRAD W. LEAL (714) 947-6500	RANCH & DAIRY 1

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: BRAD W. LEAL (714) 947-6500 NIGHT: (640) 0 -

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000049612001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /
C. YEAR INSTALLED : UNK
D. CAPACITY (GALLONS) : 550
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: REGULAR

IS CONTAINER LOCATED ON A FARM : YES

V CONTAINER CONSTRUCTION
A. THICKNESS: B. VAULTING: UNKNOWN C. WALLING: UNKNOWN
D. MATERIAL : UNKNOWN
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING :
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VISUAL

VIII CHEMICAL COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12032 REGULAR MOTOR VEHICLE FUEL

SOUTH COAST AQMD

PUBLIC RECORDS REQUEST FORM

Request Information (For Office Use Only)

Date Stored

Time Stored

Public Record Request Nbr

Public Record Request Tracking Nbr
114919

Attention Requestor

Please fill out this form completely. You may include an attachment to the form, if necessary.

Requestor Information

Requestor Name
Gabby Cyrulik

Requestor Company
Hillmann Consulting

Requestor Email *
GCYRULIK@HILLMANNCONSULTING.COM

Requestor Phone
(714)392-5920

Requestor Address
1745 W Orangewood Avenue

Requestor City
Orange

Requestor State
CA

Requestor Zip Code
92868

Type of Requested Record(s).

REQUESTED RECORDS. **Please be as specific as possible in describing the records you are seeking.** The more specific you are, the easier it will be to determine if such records exist in District files. Please contact the Public Records Unit if you need assistance in identifying District records.

Note: Permits to Operate, Equipment Lists, Notices of Violation, Notices to Comply, and Emissions Summaries are available through SCAQMD's FIND page at http://www3.aqmd.gov/webappl/fim/prog/search.aspx (you need to copy and paste this link into your browser).

Please Enter a description of the records you are requesting here: *
Permits to operate, equipment list, notices of violation, emission summaries, UST/AST records, asbestos records and notifications

Time Period of Documents Requested

Start Date *
01/01/1929

End Date *
6/22/2021

Requested Facility or Site Information (if applicable)

Note: You may only include one Facility or Site per Form.

Facility ID (if known)

Address
12741 and 12745 Limonite Ave

Facility Name (if known)
Leal Ranch

City
Corona

Zip Code
92880

Requested Application or Permit List. (if applicable)

Please click the Add Button to the right to enter a Application/Permit Number

Authorization Letter Attachment (0)

Authorization Letter

Note: Please use the above button for attaching an Authorization Letter from the facility to release confidential information for your public records request.

Supplemental Attachments (0)

Supplemental Documents

Note: Please use the above button for attaching additional documents that will help define your public records request.

INSTRUCTIONS FOR REQUESTING RECORDS

(California Public Records Act, Govt. Code Sections 6250-6276.48)

1. In order to expedite your request, please fill out the form completely. Requests may also be submitted by phone at (909) 396-3700, by facsimile to (909) 396-3330, or by email to PublicRecordsRequests@aqmd.gov.

2. Requests must be for records prepared, owned, used, or retained by the District (Gov. Code Sec. 6252(e)). Requests should be for clearly identifiable records. The District is not required to create a new record in response to a request. The District will assist the requestor in making a request that describes reasonably identifiable records (Gov. Code Sec. 6253.1). Documents will not be provided if disclosure would infringe upon a copyright, trade secret, or is otherwise exempt in accordance with state law.

3. A search for facility records can only be conducted by one or all of the following:

-- a) Facility Name, Address, or Identification Number

-- b) Facility Application Number, or Permit to Operate Number; or

-- c) Facility Notice of Violation/Notice to Comply Number.

4. You will be notified within ten (10) days whether your request seeks copies of disclosable public records prepared, owned, used, or retained by this agency. In some cases, the District may need an additional 14 days to respond. If so, you will be notified in writing. You will also be provided an estimated date of when the records will be made available.

5. Communications regarding your request, and any records, will be provided by email, unless specified otherwise.

6. If the search for records finds the records voluminous, you will be notified of the approximate number of pages and/or length of time it will take to process your request.

7. If the records you requested have been marked confidential by the source of the record, you will be notified and given the option of continuing with the District's Trade Secret process.

8. If your request is to review records, rather than receive copies, the District will notify you once the records are gathered, and arrangements will be made for your review.

9. The charge for the direct cost of duplication is as follows: Paper Copies, $0.15/page each over 10 pages (first 10 pages are free); Copied CD's or flash drives, no charge; and Copied Audio Tapes, $5.00 each. After a preliminary estimate, advance payment may be required.

10. If the request is for information in an electronic format, the requestor shall bear the cost of producing a copy of the record, including the cost to construct the record and the cost of programming and computer services necessary to produce a copy of the record, when either of the following applies: (1) the District would be required to produce a copy of an electronic record and the record is one that is produced only at otherwise regularly scheduled intervals, or (2) the request would require data compilation, extraction, or programming to produce the record. (Gov. Code Sec. 6253.9(b)). The transfer of gathered electronic records onto CD, DVD or flash drive typically costs $10.00 each. An invoice will accompany your records when completed.

Note: For further information, please refer to the District's Guidelines for Implementing the California Public Records Act. The Guidelines are available in the lobby of the District Headquarters or on the District's web site at www.aqmd.gov.

Note: If you have questions pertaining to the submittal of a Public Records Act request, you may contact the Public Records Unit, (909) 396-3700, Tuesday through Friday, 7:00 a.m. to 5:30 p.m. Our Fax number is (909) 396-3330. Our email address is PublicRecordsRequests@aqmd.gov.

From:	LTrapp@aqmd.gov
To:	Gabriela Cyrulik
Cc:	ob_pr_support_docs@aqmd.gov
Subject:	SCAQMD Public Records Request# 1406855, -- Completion Letter
Date:	Friday, June 25, 2021 10:59:18 AM
Attachments:	ATT00001.tif

Gabby Cyrulik
Hillman Consulting
1745 W Orangewood 201
Orange, Ca 92868

Ref: Request for Records; Control No. **1406855**, Received 6/23/2021

RE: P/O'S, EQL'S, NOV'S, EMISSION SUM, & ASBESTOS/SOIL NOTIF'S FOR 12741 & 12745 LIMONITE AVE, CORONA, CA, FROM 1/1/1929-6/22/2021.

After a thorough search of this agency's records:

NO REQUESTED RECORDS WERE FOUND FOR THE ABOVE REFERENCED FACILITY OR FACILITY SITE.

Should you have any questions or need additional information, please do not hesitate to contact me at (909) 396-3700, Tuesday through Friday, between the hours of **8:00 a.m.** and **4:30 p.m.**

Sincerely,

Lora Trapp
For Colleen Paine
Public Records Coordinator
Information Management

HILLMANN
CONSULTING

June 15, 2021

State of California
Regional Water Quality Control Board – Santa Ana Region (8)
3737 Main Street, Suite #500
Riverside, CA 92501-3339
Phone (951) 782-4130
Fax (951) 781-6288
FileReview8@waterboards.ca.gov

RE: Environmental Files:

12740, 12741, 12745 and Limonite Ave
Corona, CA 92880

Dear RWQCB:

Hillmann Consulting, LLC is conducting an environmental investigation of the above referenced property. Under the Freedom of Information Act, we are requesting any information your office has regarding this property. If any records are located, we would like to obtain copies or schedule a file review. If no records are available, please contact me to confirm. Thank you.

Sincerely,

Gabriela Cyrulik
Environmental Technician
Hillmann Consulting, LLC
gcyrulik@hillmanngroup.com

From: WB-RB8-FileReview8
To: Gabriela Cyrulik
Subject: RE: 12740, 12741, 12745 and Limonite Ave
Date: Friday, June 25, 2021 9:47:09 AM

Good morning,

After careful review of our records, we show we have no files for the following site(s):

12740 Limonite Ave Corona
12741 Limonite Ave Corona
12745 Limonite Ave Corona

If we can be of further assistance, please do not hesitate to contact us again.

Thank you,
File Review Desk
3737 Main St. Suite 500
Riverside, CA 92501

From: Gabriela Cyrulik <gcyrulik@hillmannconsulting.com>
Sent: Wednesday, June 16, 2021 3:26 PM
To: WB-RB8-FileReview8 <FileReview8@waterboards.ca.gov>
Subject: 12740, 12741, 12745 and Limonite Ave

EXTERNAL:

Please see attached file

Gabriela Cyrulik
Project Manager

Hillmann Consulting, LLC
1745 W. Orangewood Avenue, Suite #201
Orange, CA 92868
Office: (714) 634-9500
Fax: (714) 634-9507
Cell: (714) 392-5920

gcyrulik@hillmannconsulting.com
www.HillmannConsulting.com



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County of Riverside
DEPARTMENT OF ENVIRONMENTAL HEALTH
www.rivcoeh.org

REQUEST FOR RECORDS

Land Use & Water Resources

PURSUANT TO CALIFORNIA GOVERNMENT CODE SECTION 6254 (F). RECORDS OF PENDING INVESTIGATION AND INFORMANTS NAMES, ADDRESSES AND TELEPHONE NUMBERS WILL NOT BE RELEASED.

REQUESTS WILL BE PROCESSED WITHIN TEN (10) BUSINESS DAYS PER CALIFORNIA GOVERNMENT CODE, SECTION 6256.

Send completed form to one of the addresses or faxes below:

Western Riverside County
3880 Lemon Street, Suite 200
Riverside, California, 92501
Phone: (951) 955-8980
Fax: (951) 955-8988
Email: landuse@rivco.org

Eastern Riverside County
47-950 Arabia St., Suite A
Indio, CA 92201
Phone: (760) 863-7570
Fax: (760) 863-7013

YOUR NAME: Gabriela Cyrulik		DATE:
MAILING ADDRESS: 1745 W Orangewood Ave, 201		PHONE: ( ) 714-392-5920
CITY: Orange	STATE: CA	ZIP: 92868
EMAIL ADDRESS: gcyrulik@hillmannconsulting.com		
INFORMATION REQUESTED: environmental records		
SITE ADDRESS: 12740, 12741, 12745 and Limonite Ave		APN: - -
CITY: Corona, CA		ZIP: 92880

THIS FORM IS FOR ACQUISITION OF ANY EXISTING RECORDS. ANY CONSULTATION IN REFERENCE TO THESE RECORDS MAY BE SUBJECT TO A CONSULTATION FEE (PURSUANT TO RIVERSIDE COUNTY ORDINANCE 640)

Gabriela Cyrulik
Signature

June 15, 2021
Date

Cash and/or credit cards are the only accepted form of payment for records requests.

FOR OFFICE USE ONLY

PROCESSING AND REPRODUCTION FEES FOR RECORDS RESEARCHED MUST BE PAID UPON RECEIPT OF RECORDS AS FOLLOWS:

EACH PAGE @ $ 0.10 TOTAL NO. OF PAGES: _____ = $ _____

TOTAL: _____

REVIEWED BY _____ TITLE _____

RECORDS RECEIVED BY _____ DATE _____

EPO-111 (REV 08/16)

RIVERSIDE COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

RUBEN J. ARROYO
AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS AND MEASURES

DELIA JIMENEZ CIOC
ASSISTANT AGRICULTURAL COMMISSIONER / SEALER
DANIEL DELGADO
DEPUTY AGRICULTURAL COMMISSIONER / SEALER
ERIK DOWNS
DEPUTY AGRICULTURAL COMMISSIONER / SEALER
MISAEL MARTINEZ
DEPUTY AGRICULTURAL COMMISSIONER / SEALER

REQUEST FOR PUBLIC RECORDS

A: REQUESTOR		DATE
Gabriela Cyrulik		June 16, 2021
COMPANY		PHONE NUMBER (DAYTIME)
Hillmann Consulting		714-392-5920
MAILING ADDRESS	CITY / STATE	ZIP CODE
1745 W Orangewood Ave	Orange	92868
EMAIL ADDRESS		
gcyrulik@hillmanngroup.com		

B: I REQUEST THE FOLLOWING RECORDS FROM THE RIVERSIDE COUNTY AGRICULTURAL COMMISSIONER'S OFFICE PERTAINING TO:

☑ WEIGHTS & MEASURES ☑ PESTICIDE REGULATION ☑ PEST EXCLUSION / NURSERY

☐ OTHER PROGRAM - PLEASE SPECIFY _____

PLEASE DESCRIBE RECORDS REQUESTED IN DETAIL:

Any pesticides records located at the Property listed below;

12740, 12741, 12745 and Limonite Ave
Corona, CA 92880

(ATTACH ADDITIONAL SHEET IF NECESSARY)

C. I REQUEST THESE RECORDS IN THE FOLLOWING FORMAT:

- ☐ REVIEW RECORDS IN PERSON NO FEE
- ☐ FAX RECORDS (EXISTING FORMAT) NO FEE
- ☐ EMAIL RECORDS (EXISTING FORMAT) NO FEE
- ☐ COPIES $0.50 PER PAGE FOR FIRST COPY; $0.50 PER COPY FOR SUBSEQUENT COPIES OF SAME PAGE (8/12" X 11" SIZE PAPER)
- ☐ DATA COMPILATION, EXTRACTION, PROGRAMMING, REFORMATTING $_____ PER HOUR

SIGNATURE OF REQUESTOR: Gabriela Cyrulik

RIVERSIDE COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

RUBEN J. ARROYO
AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS AND MEASURES

DELIA JIMENEZ CIOC
ASSISTANT AGRICULTURAL COMMISSIONER / SEALER
DANIEL DELGADO
DEPUTY AGRICULTURAL COMMISSIONER / SEALER
ERIK DOWNS
DEPUTY AGRICULTURAL COMMISSIONER / SEALER
MISAEL MARTINEZ
DEPUTY AGRICULTURAL COMMISSIONER / SEALER

RESPONSE TO REQUEST FOR PUBLIC INFORMATION

June 18, 2021

Attn: Ms. Gabriela Cyrulik
Hillmann Consulting
1745 W Orangewood Ave.,
Orange, CA 92868
gcyrulik@hillmanngroup.com

Dear Ms. Cyrulik,

On June 16, 2021 the Riverside Agricultural Commissioner / Weights & Measures office received your Public Records Act request dated June 16, 2021. There are no existing records responsive to your request for reported pesticides used for the properties located at 12740, 12741, and 12745 Limonite Ave., Corona, CA 92880.

If you have any further questions, please do not hesitate to contact us.

Sincerely,

Nicole Ortega
Agricultural & Standards Investigator
Riverside County Agricultural Commissioner's Office
Email: niortega@rivco.org
Cell: (760) 289-9971

Property Detail Report

For Property Located At :
12740 58TH ST, EASTVALE, CA 92880-3334

CoreLogic RealQuest

Owner Information

Owner Name:	**BORBA JAMES/KORTE MARK**
Mailing Address:	**12740 58TH ST, EASTVALE CA 92880-3334 R043**
Vesting Codes:	**/ /**

Location Information

Legal Description:	**28.20 ACRES M/L IN POR SE 1/4 OF SEC 24 T2S R7W FOR TOTAL DESCRIPTION SEE ASSESSORS MAPS**		
County:	**RIVERSIDE, CA**	APN:	**164-030-025**
Census Tract / Block:	**406.07 / 1**	Alternate APN:	**164-030-025**
Township-Range-Sect:	**2S-7W-24**	Subdivision:	
Legal Book/Page:		Map Reference:	**/**
Legal Lot:		Tract #:	
Legal Block:		School District:	**CORONA NORCO**
Market Area:	**248**	School District Name:	**CORONA NORCO**
Neighbor Code:		Munic/Township:	**CITY OF EASTVALE**

Owner Transfer Information

Recording/Sale Date:	**01/09/2017 / 01/03/2017**	Deed Type:	**AFFIDAVIT**
Sale Price:		1st Mtg Document #:	
Document #:	**9667**		

Last Market Sale Information

Recording/Sale Date:	**/**	1st Mtg Amount/Type:	**/**
Sale Price:		1st Mtg Int. Rate/Type:	**/**
Sale Type:		1st Mtg Document #:	
Document #:		2nd Mtg Amount/Type:	**/**
Deed Type:		2nd Mtg Int. Rate/Type:	**/**
Transfer Document #:		Price Per SqFt:	
New Construction:		Multi/Split Sale:	
Title Company:			
Lender:			
Seller Name:			

Prior Sale Information

Prior Rec/Sale Date:	**/**	Prior Lender:	
Prior Sale Price:		Prior 1st Mtg Amt/Type:	**/**
Prior Doc Number:		Prior 1st Mtg Rate/Type:	**/**
Prior Deed Type:			

Property Characteristics

Year Built / Eff:	**/**	Total Rooms/Offices		Garage Area:	
Gross Area:		Total Bedrooms:		Garage Capacity:	

Gross Area:		Total Restrooms:		Garage Capacity:	
Building Area:		Roof Type:		Parking Spaces:	
Tot Adj Area:		Roof Material:		Heat Type:	
Above Grade:		Construction:		Air Cond:	
# of Stories:		Foundation:		Pool:	
Other Improvements:	**Building Permit**	Exterior wall:		Quality:	
		Basement Area:		Condition:	

Site Information

Zoning:	**A-2-20**	Acres:	**28.20**	County Use:	**HORSE RANCH (AQ8)**
Lot Area:	**1,228,392**	Lot Width/Depth:	**x**	State Use:	**X12**
Land Use:	**RANCH**	Commercial Units:		Water Type:	
Site Influence:		Sewer Type:		Building Class:	

Tax Information

Total Value:	**$9,010,291**	Assessed Year:	**2020**	Property Tax:	**$100,849.36**
Land Value:	**$8,596,973**	Improved %:	**5%**	Tax Area:	**027002**
Improvement Value:	**$413,318**	Tax Year:	**2020**	Tax Exemption:	
Total Taxable Value:	**$9,010,291**				

From: Le, Luan (Murrieta DEH)
To: Gabriela Cyrulik
Subject: 12741 and 12745 Limonite Ave., Corona, CA 92880
Date: Thursday, July 1, 2021 9:04:55 AM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png

Hello Ms. Gyrulik,

There were no land use/water or septic records found for the above addresses. The address 12740 Limonite Ave., Corona, CA 92868 did not registered in our Map My County record search.

Sincerely,

Luan Le
Registered Environmental Health Specialist III
Riverside County Department of Environmental Health
Land Use & Water Resources Program
3880 Lemon Street, Ste 200, Riverside, CA 92501
Phone #: 951-955-8980
Fax #: 951-955-8988
E-mail: LuanLe@rivco.org
www.rivcoeh.org

"No one's better than you, but you're better than nobody"

Confidentiality Disclaimer
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County of Riverside California

County of Riverside

DEPARTMENT OF ENVIRONMENTAL HEALTH

www.rivcoeh.org

Environmental Protection & Oversight Division
Hazardous Materials Management Branch

REQUEST FOR RECORDS

Requests for review of records are processed on a first come, first serve basis and the processing time is approximately 2-4 weeks. As required by California Public Records Act Section 6250 et seq., a response will be given within ten (10) business days to confirm receipt of your request.

Pursuant to California Government Code, Section 6254 (f), records of pending investigations and informant's names, addresses, and telephone numbers, will not be released.

For access to electronic records available online, visit the Public Information section at www.rivcoeh.org for more details.

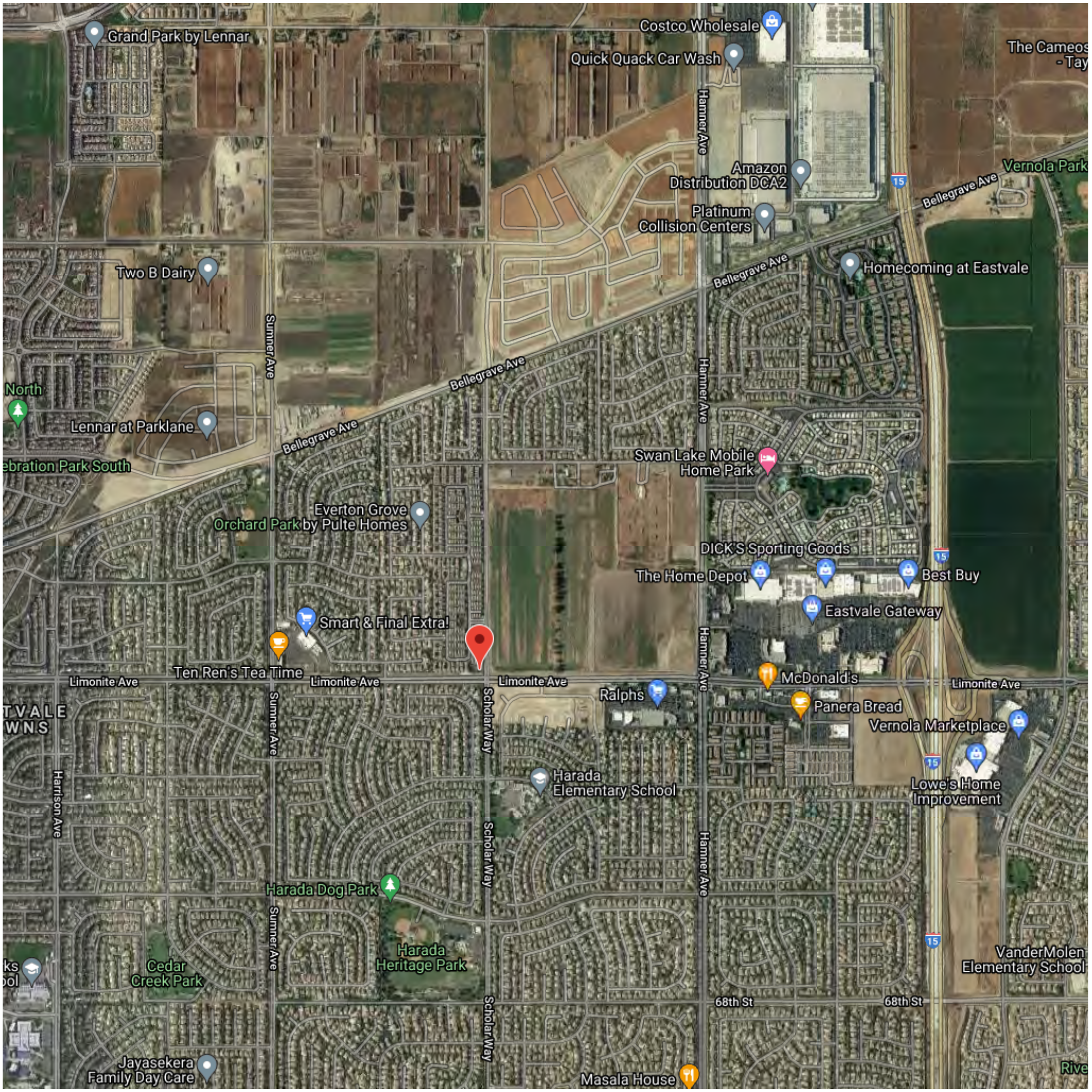
REQUESTOR INFORMATION		
NAME: Gabriela Cyrulik	DATE OF REQUEST: June 16, 2021	
BUSINESS NAME (IF ANY): Hillmann Consulting		
RETURN LEGAL MAILING ADDRESS: 1745 W Orangewood Avenue, 201		
CITY: Orange	STATE: CA	ZIP: 92868
PHONE: 714-392-5920		

The following information is required. **List each street address separately.**

	SITE STREET ADDRESS (NO APNs)	CITY
1.	12740, 12741, 12745 and Limonite Ave	Corona, CA
2.		
3.	.	
4.		
5.		
6.		
7.		

Requests must be made in writing and submitted by mail, email, or in person to the following office:

4065 County Circle Drive, Room 104, Riverside, CA 92503
Phone: (951) 358-5055
Email: DEHRecordsMgmt@rivco.org
Mailing Address: P.O. Box 7909, Riverside, CA 92513-7909



LIST SITES VISIBLE ON MAP

Google
Map data ©2021 Google Imagery ©2021 , County of San Bernardino, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency

SHOW LEGEND Sites Shown on Map: 5 Total Sites 0 Open Sites 5 Closed Sites 0 Sites w/Water Quality Data

U.S. Environmental Protection Agency

MyProperty

Environmental Databases Search

The search of EPA's Facility Registry System did not locate any records for the search criteria provided below:

Search Criteria:

Street Address: 12741 Limonite Avenue
City, State: Corona , CA
Query executed on: 06/23/2021 04:54 PM **EST**

Contact the appropriate state, tribal or local agencies if you seek additional information.

Disclaimer

The MyProperty reports are provided solely for informational purposes. They do not provide legal advice, have legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits in regard to any person. EPA maintains the application to enhance public access to environmental information. This service has continual data updates, and we will correct errors brought to our attention, as appropriate.

U.S. Environmental Protection Agency

MyProperty

Environmental Databases Search

The search of EPA's Facility Registry System did not locate any records for the search criteria provided below:

Search Criteria:

Street Address: 12740 58TH STREET
City, State: Corona , CA
Query executed on: 06/23/2021 04:51 PM **EST**

Contact the appropriate state, tribal or local agencies if you seek additional information.

Disclaimer

The MyProperty reports are provided solely for informational purposes. They do not provide legal advice, have legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits in regard to any person. EPA maintains the application to enhance public access to environmental information. This service has continual data updates, and we will correct errors brought to our attention, as appropriate.

Detailed Facility Report

Facility Summary

LEAL RANCHES

12740 58TH STREET, CORONA, CA 92880

FRS (Facility Registry Service) ID: 110064614298
EPA Region: 09
Latitude: 33.982624
Longitude: -117.559313
Locational Data Source: FRS
Industry: Dairy Farms
Indian Country: N

Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs with NC (Noncompliance) (of 12)	Qtrs with Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
CWA	5	03/03/2021	**No Violation Identified**	0	0	--	--	--	--	--

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): Minor, Permit Effective (CAC209348)
Resource Conservation and Recovery Act (RCRA): No Information
Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information
Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Known Data Problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110064614298					N	33.982624	-117.559313
ICIS-NPDES	CWA	CAC209348	Minor: General Permit Covered Facility	Effective		03/15/2024	N	33.9804	-117.56452

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110064614298	LEAL RANCHES	12740 58TH STREET, CORONA, CA 92880	
ICIS-NPDES	CWA	CAC209348	LEAL RANCHES	12740 58TH, CORONA, CA 92880	

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-NPDES	CAC209348	0241	Dairy Farms
NPDES	CAC209348	0241	Dairy Farms

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
No data records returned			

Facility Industrial Effluent Guidelines

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description
No data records returned		

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
San Manuel Reservation	San Manuel Band of Mission Indians, California	100000256	22.15
San Manuel Reservation	San Manuel Band of Mission Indians, California	100000256	22.06

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	CAC209348	ICIS-NPDES	Inspection/Evaluation	CAFO - Evaluation	State	03/03/2021	
CWA	CAC209348	ICIS-NPDES	Inspection/Evaluation	CAFO - Evaluation	State	01/15/2021	

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	CAC209348	ICIS-NPDES	Inspection/Evaluation	CAFO - Evaluation	State	08/27/2019	
CWA	CAC209348	ICIS-NPDES	Inspection/Evaluation	CAFO - Evaluation	State	01/28/2019	
CWA	CAC209348	ICIS-NPDES	Inspection/Evaluation	CAFO - Evaluation	State	01/09/2018	

Entries in italics are not counted in EPA compliance monitoring strategies or annual results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	CAC209348	No	03/31/2021	0	06/11/2021

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13+
	CWA (Source ID: CAC209348)	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20	10/01-12/31/20	01/01-03/31/21	04/01-06/11/21
	Facility-Level Status	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**Undetermined**
	Quarterly Noncompliance Report History													

Informal Enforcement Actions (5 Years)

Statute	System	Source ID	Type of Action	Lead Agency	Date
No data records returned					

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions (5 Years)

Statute	System	Law/Section	Source ID	Action Type	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty Assessed	State/Local Penalty Assessed	Penalty Amount Collected	SEP Cost	Comp Action Cost
No data records returned															

Environmental Conditions

Watershed(s)

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
180702030705	Lower Cucamonga Creek		No	No		Yes

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Aquatic Life	Fish Consumption Use	Recreation Use	Other Use

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Aquatic Life	Fish Consumption Use	Recreation Use	Other Use
CA	2018	CAW8012100019991014103600	Prado Basin Management Zone	Impaired - 303(d) Listed	PH/ACIDITY/CAUSTIC CONDITIONS		Not Supporting		Insufficient Information	

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
Ozone	Yes	1-Hour Ozone (1979); 8-Hour Ozone (1997); 8-Hour Ozone (2008); 8-Hour Ozone (2015)	No	
Lead	No		No	
Particulate Matter	Yes	PM-2.5 (1997); PM-2.5 (2006); PM-2.5 (2012)	Yes	PM-10 (1987)
Carbon Monoxide	No		Yes	Carbon Monoxide (1971)
Sulfur Dioxide	No		No	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Transfers
No data records returned								

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Community

EJSCREEN EJ Indexes

Eleven primary environmental justice (EJ) indexes of EJSCREEN, EPA's screening tool for EJ concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. The index values below are for the Census block group in which the facility is located. Note that use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJSCREEN provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJSCREEN home page.

Census Block Group EJ Indexes (percentile)	
Particulate Matter (PM 2.5)	99
Ozone	99.2
NATA Diesel PM	98.6
NATA Air Toxics Cancer Risk	97.9

Number of EJ Indexes Above 80th Percentile
9

View EJSCREEN Report

Census Block Group EJ Indexes (percentile)	
NATA Respiratory Hazard Index (HI)	98.3
Traffic Proximity	76.4
Lead Paint Indicator	62.8
Superfund Proximity	93
Risk Management Plan (RMP) Proximity	82.4
Hazardous Waste Proximity	88.3
Wastewater Discharge Proximity	82.1

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2006-2010 American Community Survey 5-Year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary.

General Statistics	
Total Persons (U.S. Census)	74,835
Population Density	2,678/sq.mi.
Percent Minority	73%
Households in Area	19,641
Housing Units in Area	20,732
Total Persons (ACS (American Community Survey))	--
Households on Public Assistance	289
Persons With Low Income	--
Percent With Low Income	--

Geography	
Radius of Selected Area	3 mi.
Center Latitude	33.982624
Center Longitude	-117.559313
Land Area	99%
Water Area	1%

Income Breakdown - Households (%)	
Less than $15,000	701 (3.74%)
$15,000 - $25,000	646 (3.44%)
$25,000 - $50,000	2,869 (15.29%)
$50,000 - $75,000	3,201 (17.06%)
Greater than $75,000	11,347 (60.47%)

Age Breakdown - Persons (%)	
Children 5 years and younger	6,387 (9%)
Minors 17 years and younger	23,506 (31%)
Adults 18 years and older	51,329 (69%)
Seniors 65 years and older	4,149 (6%)

Race Breakdown - Persons (%)	
White	36,810 (49%)
African-American	6,030 (8%)
Hispanic-Origin	34,522 (46%)
Asian/Pacific Islander	12,474 (17%)
American Indian	591 (1%)
Other/Multiracial	18,930 (25%)

Education Level (Persons 25 & older) - Persons (%)	
Less than 9th Grade	3,457 (8.39%)
9th through 12th Grade	3,533 (8.57%)
High School Diploma	9,874 (23.96%)
Some College/2-year	13,484 (32.73%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	10,855 (26.35%)

HILLMANN
CONSULTING

June 15, 2021

State of California
Department of Toxic Substances Control
Region 4 – Cypress Regional Office
5796 Corporate Avenue
Cypress, CA 90630-4732
Phone (714) 484-5337
Fax (714) 484-5318
PubReqAct@dtsc.ca.gov

RE: DTSC Files:

12740, 12741, 12745 and Limonite Ave
Corona, CA 92880

Dear Sir/Madam:

Hillmann Consulting, LLC is conducting an environmental investigation of the above referenced property. Under the Freedom of Information Act, we are requesting any information your office has regarding this property. If any records are located, we would like to obtain copies or schedule a file review. If no records are available, please contact me to confirm. Thank you.

Sincerely,

Gabriela Cyrulik
Environmental Technician
Hillmann Consulting, LLC
gcyrulik@hillmanngroup.com

Jared Blumenfeld
Secretary for
Environmental Protection

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

June 18, 2021

Gabriela Cyrulik
Hillmann Consulting, LLC
gcyrulik@hillmanngroup.com

Public Records Request Number: 1-061621-10
Location(s): 12740, 12741, 12745 Limonite Ave, Corona, CA 92880

Dear Requestor:

On June 16, 2021 the Department of Toxic Substances Control (DTSC) received your email of the same date requesting records under the Public Records Act. After a thorough review of our files, no site records were found pertaining to the sites/facilities referenced above.

A large number of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSCs data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You'll find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

If you have any questions or would like further information regarding your request, please contact me at 916-255-4159 or via email at PubReqAct@dtsc.ca.gov.

Sincerely,
Choua Her
Choua Her
Regional Records Coordinator

County of Riverside
DEPARTMENT OF ENVIRONMENTAL HEALTH
www.rivcoeh.org

REQUEST FOR RECORDS

To help expedite your request, mark the program for which you are requesting records (Call 951-358-5172 if you are uncertain):

☒ Hazardous Materials / Underground Storage Tanks
☒ Land Use / Water Resources / Body Art / Medical Waste / Solid Waste
☐ Food facility / Public Pools and Water Features / Retail Tobacco

- Requests will be responded to within ten (10) business days per California Government Code, sections 6253 and 6256.
- Pursuant to California Government Code section 6254 (f), records of pending investigations and informants' names, addresses, and telephone numbers will not be released.
- **This form is for acquisition of any existing records. Any consultation in reference to these records may be subject to a consultation fee (pursuant to Riverside County Ordinance 640).**
- For access to electronic records available online, visit the public information section at www.rivcoeh.org for more details.

NAME OF REQUESTING PARTY: Gabriela Cyrulik	DATE OF REQUEST: June 15, 2021	
BUSINESS NAME (IF ANY): Hillmann Consulting	TELEPHONE NUMBER: ( ) (714) 392-5920	
RETURN LEGAL MAILING ADDRESS: 1745 W. Orangewood Avenue, 201	EMAIL ADDRESS: gcyrulik@hillmanngroup.com	
CITY: Orange	STATE: CA	ZIP: 92868

The following information is required. **List each street address separately.**

INFORMATION REQUESTED: environmental records	PERIOD OF TIME TO BE RESEARCHED (If applicable)	
	FROM: 1920	TO: 2021
SITE STREET ADDRESS (1): 12740, 12741, 12745 and Limonite Ave	CITY: Corona	
SITE STREET ADDRESS (2): Undeveloped land: SE corner Bryant Street and Oak Glen Road	CITY: Yucaipa, CA	
SITE STREET ADDRESS (3):	CITY:	
SITE STREET ADDRESS (4):	CITY:	
SITE STREET ADDRESS (5):	CITY:	
SITE STREET ADDRESS (6):	CITY:	
APN (**For Land Use and Water Resources ONLY**):		

Email this completed form to:

Land Use/Water Resources (WEST): landuse@rivco.org
Land Use/Water Resources (DESERT): landusedesert@rivco.org
Hazardous Materials: DEHRecordsMgmt@rivco.org
All other programs: dehwebmaster@rivco.org

To mail this form, go to http://rivcoeh.org/Contactus for the address of the DEH office closest to the requested location(s).

Duplication costs for records researched and duplicated must be paid upon receipt of records.

FOR OFFICE USE ONLY

COST OF REPRODUCTION: $_____	EACH ADDITIONAL PAGE: $_____	TOTAL: $_____
REVIEWED BY	TITLE	
RECORDS RECEIVED BY	DATE 6/15/21	

*** IF RECORD REQUEST IS MADE USING ALTERNATE METHOD AND NOT THIS FORM, ATTACH A COPY OF REQUEST TO THIS FORM.**

For our office locations call us at (888) 722-4234 or visit our website at www.rivcoeh.org

APPENDIX G

PROJECT PERSONNEL QUALIFICATIONS

Gabriela Cyrulik

Environmental Technician
gcyrulik@hillmannconsulting.com

EDUCATION:

B.S. Geography and Minor in Environmental Science, Montclair State University, Montclair, NJ

CERTIFICATIONS:

OSHA 10-hr Construction Safety & Health

CA DPH Lead Sampling Technician

Certified in Fire & Smoke Restoration

YEARS OF EXPERIENCE:

With Hillmann: 2 years

Total: 2 years

PROFESSIONAL EXPERIENCE:

Ms. Cyrulik is an Environmental Technician for our Southern California Office. Ms. Cyrulik has supervised work practices and controls in accordance with job specifications, current EPA, OSHA, and state regulations for asbestos abatement projects in schools, as well as commercial, industrial, public, and multi-family residential buildings.

As an Environmental Technician, Ms. Cyrulik performs quality assurance air sampling for asbestos, lead, and mold abatement projects. She is also responsible for performing air and surface hazard materials testing, and potable and non-potable water sampling. She regularly performs Indoor Air Quality Assessments as well for several high-profile clients.

Additionally, Ms. Cyrulik is skilled at performing Phase I environmental site assessments and transaction screens to meet environmental due diligence requirements under CERCLA.

Representative Experience Includes:

Tishman Speyer Properties, nationwide: Hillmann has been providing the complete environmental program for Tishman Speyer's properties since 1987. Our services include: phase I environmental site assessments, asbestos surveys, air monitoring, bid administration, O&M programs, industrial hygiene, and indoor air quality programs. Ms. Cyrulik functions as an Industrial Hygienist on this contract, which is ongoing, and performs Indoor Air Quality Assessments.

Brookfield Properties, various locations: Since 1987, Hillmann has performed industrial hygiene, microbial, indoor air quality, asbestos surveys, project design investigations, project management, bulk sampling and analysis, and geotechnical services in numerous buildings in the New York and Los Angeles metropolitan areas. Ms. Cyrulik is an Industrial Hygienist on this contract.

HILLMANN
CONSULTING

J. Ryan Terwilliger

Operational Manager, West Coast

EDUCATION:

B.S. Environmental Science, University of Southern California, Los Angeles, CA

CERTIFICATION:

Cal-OSHA Certified Asbestos Consultant
CDPH Accredited Lead Inspector/Assessor/ Project Monitor

CA Certified Site Surveillance Technician

OSHA 40 - Hr HAZWOPER

YEARS OF EXPERIENCE:

With Hillmann: 4 years

Total: 8 years

PROFESSIONAL EXPERIENCE:

Mr. Terwilliger is responsible for business operations, fiscal management and field staff management for Hillmann's California Office. He also performs asbestos surveys and investigations to identify asbestos and lead materials associated with occupational hazards. He supervises work practices and controls in accordance with job specifications, current EPA, OSHA and State Regulations for Asbestos remediation projects in commercial, industrial and multi-family residential buildings. Mr. Terwilliger performs IAQ, mold and moisture investigations in commercial, industrial and residential facilities nationwide. He also performs awareness training for asbestos, lead and microbial agents. Mr. Terwilliger provides litigation support consultation.

Representative Experience Includes:

Tishman Speyer Properties, Various locations: Hillmann has provided the complete environmental program for Tishman Speyer's properties since 1987. Our services include environmental health and safety, industrial hygiene, phase I environmental site assessments, asbestos surveys, air monitoring, bid administration, O&M programs and indoor air quality programs on various commercial, industrial and multi-family residential properties. Mr. Terwilliger is an Environmental Scientist on this contract, conducting on-site environmental services including phase I site assessments and NPDES water quality testing.

Westfield – Environmental Program, Various locations: Since 2000, Hillmann has been providing an environmental program encompassing environmental health and safety, Phase I environmental site assessments, asbestos and lead surveys, air monitoring, bid administration and O&M programs, industrial hygiene and indoor air quality programs, and hazardous materials assessments on their mall properties throughout the county. Mr. Terwilliger is an Environmental Scientist on this contract performing industrial hygiene services that include indoor air quality monitoring, Phase I environmental site assessments, asbestos and lead surveys.

Brookfield Office Properties, Various sites, CA: Hillmann has been providing hazardous materials surveys, development abatement specifications, and managing the oversight activities during the abatement at various Brookfield owned sites throughout California. Mr. Terwilliger functions as a Project Manager for this contract.

California Department of Transportation, Central Valley and Northern CA: Hillmann has been performing asbestos and Lead-based Paint Surveys for the California Department of Transportation. Performed comprehensive asbestos containing materials and lead-based paint surveys of residential and commercial buildings that were slated for demolition and generated report of findings in order to aid the Department of Transportation (DOT) in facilitating the road improvement programs and building renovations throughout the

Central Valley area. Also during the abatement of asbestos from DOT owned buildings, provided contractor oversight and air monitoring services for regulatory compliance.

Verizon, Various Sites, CA. Hillmann conducted hazardous materials surveys, development abatement specifications, and project monitoring during abatement at various Verizon owned sites throughout California. Mr. Terwilliger functioned as the Project Manager.

Public Storage, Los Angeles, CA: Hillman preformed comprehensive asbestos, lead-based paint and universal waste materials survey of commercial and industrial buildings throughout Southern California. Hazardous materials surveys were conducted prior to renovation for the storage units. Mr. Terwilliger developed abatement specifications and managed the abatement activities during the renovations of the buildings. He functioned as the Project Manager on this contract.

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CONSULTING

LIMITED PHASE II SUBSURFACE INVESTIGATION REPORT



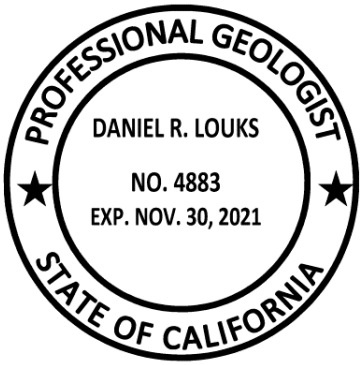
LEAL RANCH, EASTVALE, CALIFORNIA

Prepared For:

The New Home Company
15231 Laguna Canyon Road, Suite 250
Irvine, California 92618

Hillmann Project Number C3-8510

July 28, 2021
Revised March 23, 2022



Written By:
Hillmann Consulting, LLC

Dan Louks
Professional Geologist 4883

Your Property. Our Priority.
1745 W. Orangewood Avenue, Suite 201, Orange, CA 92868
Telephone (714) 634-9500 Fax: (714) 634-9507 Toll free: (800) 232-4326
www.HillmannConsulting.com

HILLMANN
CONSULTING

July 28, 2021

Mr. Matt Gibson
The New Home Company
15231 Laguna Canyon Road, Suite 250
Irvine, California 92618

RE: Limited Phase II Subsurface Investigation Report
Leal Ranch
Eastvale, California
Hillmann Project Number: C3-8510

Dear Mr. Gibson:

Hillmann Consulting, LLC, is pleased to provide this Limited Phase II Subsurface Investigation Report prepared for the above referenced property.

This report is for the exclusive use of the entities named on the front cover, its affiliates, designates and assignees, rating agencies, prospective bond holders and bond holders, and no other party shall have any right to rely on any service provided by Hillmann Consulting, LLC, without prior written consent.

We appreciate the opportunity to provide environmental due diligence services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact the Project Manager at 714-634-9500.

Very Truly Yours,
Hillmann Consulting, LLC

Brandon Clements
Partner; Western Regional Director

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1.0 INTRODUCTION / BACKGROUND

Hillmann Consulting, LLC (Hillmann) conducted a Limited Phase II Subsurface Investigation at Leal Ranch, Eastvale, California. The Property encompasses six contiguous parcels addressed as 12741 and 12745 Limonite Avenue and 12740 58th Street in Eastvale, California and occupies 153.3 acres. The Property is bounded by Limonite Avenue to the south, 58th Street to the north, Scholar Way to the west and Hamner Avenue to the east. The Property is located in an area being developed with new homes and is being considered for redevelopment from its most recent use as agricultural land and a dairy farm to residential. The site location and its vicinity is indicated on **Figure 1**. The Property is currently developed with five residential structures in the northern portion of the Property, and with various dairy barns or out structures. The southern portion of the Property that was formerly orchard-bearing has no structures. The layout of the site is depicted on **Figure 2**.

In June 2021, Hillmann conducted a Phase I Environmental Site Assessment at the site. Records indicate the Property was utilized as orchard growing land dating to the 1930s. The northern portion of the site was utilized for dairy operations from the 1970s until 2019. Large portions of the north portion of the Property were used for dairy ranching and several areas are laden with deposits of animal waste. In addition, the north-central portion of the site includes a maintenance area where repair of farm equipment and vehicles was conducted. This area has multiple areas with small surficial spills and storage of hazardous materials. Records also indicate that an underground storage tank (UST) was used at the site and was removed from the ground in the late 1980s, No closure records for the former UST were available. The large zones with animal waste were identified as a potential environmental concern due to possible methane off-gassing, especially given the proposed residential use. In addition, the maintenance area and UST areas were identified as potential environmental concerns that justified preliminary subsurface investigation.. Results of the Phase I investigation are presented in Hillmann's *"Phase I Environmental Site Assessment Report"* dated June 25, 2021.

In July 2021, Hillmann completed a Limited Phase II Subsurface Investigation at the Property that included soil and soil gas sampling. The objective was to provide a preliminary indication of the amount of animal waste that would need to be removed, determining if there was a significant subsurface methane issue in the waste deposit areas, investigate potential subsurface contamination in the former agricultural areas from historic applications of pesticides, determine whether the historic UST had been removed, and defining potential contamination concerns in the maintenance and UST areas. The current investigation is an independent assessment of the site that was constrained by time and cost factors as part of a self-directed effort. The investigation included installation of 15 soil borings and soil gas sampling probes in targeted locations, soil sampling for pesticides which included the collection of ninety-six (96) individual samples, which were then composited into twenty-four (24) composite samples, and analyzed for Organochlorine Pesticides (OCPs) and Title 22 Metals from ninety-six (96) quadrants throughout the Property, and a GPR investigation in the reported former UST area. This investigation was not intended to meet the more stringent requirements of a regulatory driven assessment.

2.0 GEOLOGY/HYDROGEOLOGY

Based on the drilling logs, the sediments beneath the site consist primarily of silty sand and sandy silt with occasional layers of silty clay and sand from near surface to at least 14 feet below grade, the maximum depth of exploration. The animal waste zones typically have 1-2 feet of material on the surface before native sediment was encountered. However, local areas have piles of the waste and the thickness of those occasional piles can reach 4-5 feet. Groundwater was not encountered during drilling. Descriptions of the sediments encountered are presented in the drilling logs (**Appendix C**).

Based on records available on the GeoTracker website, groundwater is present at about 72 feet below grade at a site located 2 miles east of the Property (76 Station 5204, 6190 Etiwanda Avenue, Mira Loma, CA-Global ID-T0606581722).

3.0 SITE INVESTIGATION

On July 12-19, 2021, Hillmann installed fifteen (15) soil borings (B1-B15) across the northern portion of the site to total depths ranging from 5 to 14 feet below grade. The borings were installed in targeted locations including in the surficial animal waste zones, in the former UST area and in targeted areas of the maintenance area. The borings were installed using hand auger tools. The locations of the borings are indicated on **Figure 2**.

During drilling, a California Professional Geologist described the soil using the Unified Soil Classification System. Soil samples were obtained at select depths in some borings and were preserved for analysis in stainless steel rings, sealed with Teflon tape and plastic end caps. Select samples were analyzed for carbon chain hydrocarbons corresponding to gasoline, diesel fuel, and oil weights (C4-C12, C13-C22, and C23-C40 ranges, respectively) by EPA Method 8015M for Volatile Organic Compounds (VOCs) by EPA Method 8260B, and for heavy metals by EPA Method 6010B. The soil samples were analyzed by A&R Laboratories of Ontario, California.

Each boring was completed as a soil gas sampling probe (SG1-SG15) with sampling tips installed at maximum depth (5-14 feet below grade). The soil gas sampling probes consist of plastic micro-porous vapor implants that are approximately 2 inches long with a 0.5-inch outside diameter, connected to 0.25-inch outside diameter Nylaflow tubing that extended above the surface. The annulus around each vapor implant was backfilled with approximately 1 foot of screen-washed #3 sand. Six inches of dry bentonite was placed immediately above the sand pack, followed by one-foot of bentonite that was hydrated during placement. The bentonite was further sealed with more hydrated bentonite to grade to provide a secure borehole seal. The probes were finished with gas-tight fittings at the surface pending vapor purging and sampling.

The soil gas sampling probes were allowed to equilibrate for at least 48 hours before collecting vapor samples. Prior to vapor sampling, shut-in and leak tests were conducted on the probes. The probe head was attached to the sampling train assembly of Nylaflow tubing, valves, and fittings and connected to a purge pump. The pump was used to evacuate the sealed system using an applied vacuum of 100 inches of water column (in. WC). The vacuum on each probe was monitored for 90 seconds with the sampling train system sealed. After the shut-in test was

validated, the sampling train was leak tested. Liquid isopropyl alcohol was applied around all connections in the sampling train to evaluate whether the system was sealed from ambient air leaks. A detection of 10 times the reporting limit of this compound might suggest that ambient air leakage had occurred.

The purpose of purging is to remove stagnant air from the vapor sampling train to ensure representative samples are obtained. The probes were purged using an adjustable vacuum pump set at 200 mL/minute. During purging, the soil gas was monitored for VOC, oxygen, carbon dioxide, and methane content using a Mini-Rae 2000 multi gas detector to ensure that non-atmospheric formation air was being sampled (**Appendix D**).

Probes SG1-SG5 were installed in targeted areas in the maintenance and former UST areas. These probes were sampled for VOC content. Probes SG6-SG15 were intended to provide data on possible subsurface methane issues and were screened for methane content in the field. The methane monitoring probes were intended to be screened using a Micro-Tip FID instrument calibrated for methane; however, the device malfunctioned in the field. Instead each probe was screened using the methane function on the Mini-Rae 2000 multi-gas detector. Results indicated most probes (12 of 15 total) had no detectable methane content (<1% LEL), however, probe SG11 had greater than 100% LEL (approximately 50,000 ppmV). To provide confirmation of the maximum result, a sample was obtained from SG11 for laboratory analysis of methane content.

After purging three soil gas volumes through the system, vapor samples were collected from the VOC probes (SG1-SG5), and from methane probe SG11 on July 21, 2021. During sampling, the purge pump was operated at 200 mL/minute, and the vacuum was monitored to ensure it was below 100 in. WC. Vacuum applied below this level helps ensure chemical partitioning from pore water to soil gas and the stress on the air seals are both minimized. The samples were containerized in Tedlar bags which were delivered to the laboratory for analysis. Fresh tubing was used on each sampling train between holes. Soil gas samples SG1-SG3 were analyzed for VOC using EPA Method 8260B. Soil gas samples SG4 and SG5, obtained from the UST area, and were analyzed for VOC using the more sensitive TO-15 analysis and for gasoline range hydrocarbons by EPA Method 8015. The soil gas sample from SG11 was analyzed for methane only by EPA Method 8015M by A&R Laboratories of Ontario, California.

On July 16 and 19, 2021 Hillmann collected ninety-six (96) shallow soil samples from agricultural fields on the Property, which were composited into twenty-four (24) samples representative of a sampling area/quadrant. The samples were collected using a hand auger tool or soil sampling spatula, and were completed from 0.5 to 1.5 feet below grade, according to the June 2008 Revision of the California Department of Toxic Substance Control (DTSC) guidelines "Interim Guidance for Sampling Agricultural Soils". Soil samples collected were preserved for analysis in laboratory jars, sealed with Teflon tape and plastic end caps, wrapped in aluminum foil and stored on ice. A total of twenty-four (24) composited soil samples were submitted for laboratory analysis for organo-chlorine pesticides (OCP) by EPA Method 8081A and Title 22 Metals by EPA Method 6010B. A&R Laboratories of Ontario, California analyzed the samples. The soil sample locations are indicated on **Figure 1A.**

Finally, on July 16, a limited Ground Penetrating Radar (GPR) investigation was conducted in the area reported to Hillmann as being the location of the former UST.

3.1 Laboratory Results

Results from soil sampling indicated none of the samples had detectable concentrations of Volatile Organic Compounds (VOCs) or petroleum hydrocarbons, or heavy metal concentrations that exceed residential screening levels. These results are summarized in **Table 1 and Table 1A**. The laboratory reports from soil sampling are included in **Appendix B**.

Results from soil gas sampling indicated samples SG4 and SG5 had low concentrations of petroleum–related VOC including benzene, toluene, ethylbenzene, xylenes, and trimethylbenzene, and the common solvent tetrachloroethene (PCE). The detected concentrations were compared to the Regional Screening Levels (RSLs) for soil gas which are based on human health risk factors for residential and commercial settings and are commonly used as screening tools. The screening criteria uses defined indoor air concentrations based on human health risk factors that are modified using attenuation factors provided by the Environmental Protection Agency (EPA) (0.03) and California Department of Toxic Substance Control (DTSC) (0.002). DTSC policy on which attenuation factor to use is currently under review, but our understanding is that the current accepted screening levels for residential applications for the most environmentally sensitive of the detected compounds (benzene and PCE) are 0.0485 ug/L and 0.23 ug/L, respectively. The more stringent screening levels (if applied) would be 0.003 ug/L and 0.015 ug/L, respectively. Results indicated none of the detected concentrations approaches the current residential screening levels. However, the benzene detection in sample SG5 (0.0043 ug/L) slightly exceeds the proposed screening level of 0.003 ug/L. The laboratory-measured methane concentration in sample SG11 was 45,800 ppmV and exceeds the minimum methane concentration that typically requires construction mitigation measures (1,000 ppmV). These results are summarized in **Table 2**. The laboratory report from soil gas sampling is included in **Appendix B**.

Results of Organochlorine Pesticide (OCP) analysis indicated low levels of dichloro-diphenyl-dichloroethylene (4, 4'-DDE) detected in samples B-2, 6, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 21, 23, 24 as well as low levels of dichloro-diphenyl-trichloroethane (4, 4'-DDT) detected in samples B-11. Results of heavy metal analysis indicated the samples had low background levels of barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc.

The detected compounds were compared to Regional Screening Levels (RSLs) developed by EPA which are based on human health toxicity factors for residential and commercial settings. Results of the OCP analysis low levels of 4, 4'-DDE and 4, 4'-DDT which did not exceed the applicable RSLs for residential applications. These results are summarized in **Table 3**. The results from heavy metal analysis indicate the samples had low, background levels of metals, which did not exceed the applicable RSLs for residential applications. These results are summarized in **Table 4**. The laboratory report is included as **Appendix B**.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The site occupies approximately 153.3-acres, approximately 80 acres of which is former agricultural land that is being considered for a residential development. Records indicate the site is currently and historically utilized as agricultural land, which could pose possible environmental impacts if pesticides were used. Based on these factors Hillmann recommended that a soil sampling investigation that included sampling of near surface native soil for pesticides, and Title 22 Metals. Hillmann collected ninety-six (96) individual samples, which were then composited into twenty-four (24) composite samples, and analyzed for OCPs and Title 22 Metals. Results of the OCP analysis low levels of 4,4'-DDE and 4,4'-DDT which did not exceed the applicable RSLs for residential applications. The results from heavy metal analysis indicate the samples had low, background levels of metals, which did not exceed the applicable RSLs for residential applications.

The northern portion of the site maintained the dairy farm and areas of potential environmental concern including a former UST site, a vehicle maintenance area, and areas covered by animal waste. These concerns justified preliminary subsurface investigation. In July 2021, Hillmann conducted soil and soil gas sampling in targeted areas of the site. Results from soil sampling in the UST and maintenance areas indicated no detectable concentrations of petroleum hydrocarbons or VOC, and no heavy metal concentrations exceeding residential screening levels. The results from soil gas sampling in these areas (SG1-SG5) indicated no VOC concentrations exceeding current residential screening levels. One sample (SG5-14) had benzene concentrations that slightly exceed proposed residential screening levels (if they were to be adopted), but given the depth of the sample (14 feet) and consideration for attenuation provided by new construction, these very low concentrations likely do not pose a significant environmental or human health concern for the proposed residential use.

The results from methane testing in animal waste areas indicate most samples had insignificant concentrations of subsurface methane. Field screening indicated just three samples (of 15) had detectable concentrations of methane. The sample with the highest concentrations of methane (gauged in the field) was laboratory analyzed and had 45,800 ppmV methane which exceeds the typical screening level for determining if mitigation measures are required for new structures. However, it is important to note that the methane distribution is not wide spread and that the areas investigated are still covered with animal waste. This material will have to be removed and disposed prior to grading and construction. A follow-up methane survey should be performed when this is completed, possibly targeting sample SG11 as one of the primary future sampling sites. To provide a preliminary indication on the extent of animal waste, Hillmann recorded the depth of manure at each suspect location. The waste layer extended to 1-2 feet below grade in most areas investigated within the target zones. **Figure 3** shows the rough distribution of waste that would need to be removed and disposed to a depth of 1-2 feet below current surface grade. Based on this rough approximation, a minimum of about 60,000 cubic yards of waste would need to be removed and disposed.

A GPR investigation of the area reported to Hillmann as being the location of the former UST did not indicate any evidence of a UST still present. A copy of the GPR report is located in **Appendix E**.

5.0 LIMITATIONS

This Subsurface Investigation was performed in accordance with generally and currently accepted engineering practices and principles; however, the procedures and methodologies used in this investigation are not intended to meet all specific regulatory guidelines as this work was completed as a self-directed effort. Although the data in this report is indicative of subsurface conditions in areas investigated, no further conclusions regarding the absence or presence of subsurface contamination in other areas of the site should be construed or inferred other than those expressly stated in this report. The conclusions made are based on information obtained from field observations, independent laboratory analytical results, and from current and relevant Federal, State, regional, and local agencies.

TABLE 1
Summary of Soil Sampling Results (mg/Kg)

Sample ID	Heavy Metals Above Screening Levels	VOC	TPHg C4-C12	TPHd C13-C22	TPH-Oil C23-C40
Sampled July 12, 2021					
HB1-2	--	--	ND<0.20	ND<10	ND<20
HB2-2	None	--	ND<0.20	ND<10	ND<20
HB3-2	None	--	ND<0.20	ND<10	ND<20
HB4-13	--	ND	ND<0.20	ND<10	ND<20
Sampled July 16, 2021					
HB5-5	--	ND	ND<0.20	--	--
HB5-10	--	ND	ND<0.20	--	--
HB5-14	--	ND	ND<0.20	--	--
Residential RSL	***--***	***--***	***82***	***82***	***82***
Commercial RSL	***--***	***--***	***420***	***420***	***420***

Notes: ND - Not Detected. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC in residential and commercial settings. The RSL levels for total petroleum hydrocarbons are divided into six non-descript categories that depend on the relative speciation of aromatic and aliphatic hydrocarbons in the source contaminant. The most conservative screening level for petroleum hydrocarbons used. Please refer to lab report for complete results.

TABLE 1A
Summary of Heavy Metal Results (mg/Kg)

Sample ID	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Vanadium	Zinc
HB2-2	ND<1.0	67.4	ND<0.5	18.4	5.64	9.15	2.48	9.14	48.5	28.9
HB3-2	1.45	88.0	ND<0.5	18.1	5.50	9.08	2.84	9.26	50.9	31.0
Residential RSL	***0.11***	***15,000***	***5.2****	***36,000***	***23***	***3,100***	***80****	***490****	***390****	***23,000***
Industrial RSL	***0.36***	***220,000***	***7.3****	***170,000***	***350***	***47,000***	***320****	***3,100****	***1,000****	***350,000***
DTSC Bkgrnd	***12***	***--***	***--***	***--***	***--***	***--***	***--***	***--***	***--***	***--***

Notes: ND - Not Detected. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC in residential and commercial settings. DTSC Background Concentration is based on statistical study of sites throughout southern California. This concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California. - Values modified by DTSC HERO Note 3. Please refer to lab report for complete results.*

TABLE 2
Summary of Soil Gas Sampling Results (ug/L)

Sample ID	Benzene	Toluene	Ethylbenzene	Xylenes	124 TMB	Styrene	PCE	Other VOC	TPHg	Methane (ppmV)
Sampled July 21, 2021										
SG1-5	ND<0.024	ND<0.05	ND<0.05	ND<0.10	ND<0.05	ND<0.05	ND<0.05	ND	--	--
SG2-5	ND<0.024	ND<0.05	ND<0.05	ND<0.10	ND<0.05	ND<0.05	ND<0.05	ND	--	--
SG3-5	ND<0.024	ND<0.05	ND<0.05	ND<0.10	ND<0.05	ND<0.05	ND<0.05	ND	--	--
SG4-13	0.0027	0.015	0.0069	0.0249	0.0049	0.0042	0.030	ND	ND<5	--
SG5-14	0.0043	0.060	0.010	0.036	0.0030	ND<0.005	0.014	ND	ND<5	--
SG11-5	--	--	--	--	--	--	--	--	--	45,800
Residential RSL AF=0.03	***0.003****	***10.33****	***0.037***	***3.33***	***0.243***	***31.33****	***0.015****	--	--	--
Residential RSL AF=0.001	***0.0485****	***155****	***0.55***	***50***	***3.65***	***470***	***0.23****	--	--	--

*Notes: ND - Not Detected. EPA Regional Screening Levels (RSLs) are human health risk based screening levels used by EPA and DTSC to determine Health Risk in residential and commercial settings. *-Values modified for California by DTSC HERO Note 3. Screening levels for soil gas calculated using indoor air values and attenuation factor provided by EPA (0.03) and DTSC (0.001). Please refer to lab report for complete results.*

TABLE 3
Summary of Pesticide Soil Sampling Results (mg/Kg)

Sample ID	4,4 DDD	4,4 DDE	4,4 DDT	Dieldrin	Other OCP
B-2-0.5'-1.5'	ND (<0.0020)	0.018	ND (<0.0020)	ND (<0.0020)	ND
B-3-0.5'-1.5'	ND (<0.0020)	0.0032	ND (<0.0020)	ND (<0.0020)	ND
B-5-0.5'-1.5'	ND (<0.0020)	0.0063	ND (<0.0020)	ND (<0.0020)	ND
B-6-0.5'-1.5'	ND (<0.0020)	0.0058	ND (<0.0020)	ND (<0.0020)	ND
B-9-0.5'-1.5'	ND (<0.0020)	0.0035	ND (<0.0020)	ND (<0.0020)	ND
B-10-0.5'-1.5'	ND (<0.0020)	0.0023	ND (<0.0020)	ND (<0.0020)	ND
B-11-0.5'-1.5'	ND (<0.0020)	0.0097	0.0041	ND (<0.0020)	ND
B-12-0.5'-1.5'	ND (<0.0020)	0.0040	ND (<0.0020)	ND (<0.0020)	ND
B-13-0.5'-1.5'	ND (<0.0020)	0.0044	ND (<0.0020)	ND (<0.0020)	ND
B-15-0.5'-1.5'	ND (<0.0020)	0.068	ND (<0.0020)	ND (<0.0020)	ND
B-16-0.5'-1.5'	ND (<0.0020)	0.057	ND (<0.0020)	ND (<0.0020)	ND
B-17-0.5'-1.5'	ND (<0.0020)	0.013	ND (<0.0020)	ND (<0.0020)	ND
B-18-0.5'-1.5'	ND (<0.0020)	0.019	ND (<0.0020)	ND (<0.0020)	ND
B-19-0.5'-1.5'	ND (<0.0020)	0.021	ND (<0.0020)	ND (<0.0020)	ND
B-21-0.5'-1.5'	ND (<0.0020)	0.011	ND (<0.0020)	ND (<0.0020)	ND
B-23-0.5'-1.5'	ND (<0.0020)	0.011	ND (<0.0020)	ND (<0.0020)	ND
B-24-0.5'-1.5'	ND (<0.0020)	0.017	ND (<0.0020)	ND (<0.0020)	ND
Residential RSL	***2.3***	***2.0***	***1.9***	***0.034***	***Var.***
Commercial RSL	***9.6***	***9.3***	***8.5***	***0.14***	***Var.***

Notes: Refer to Table 2 for heavy metal results summary. OCP - Organo-Chlorine Pesticides. ND - Not Detected NM – Not Measured. EPA Regional Screening Levels (RSLs) are human health risk-based screening levels used by EPA and DTSC in residential and commercial settings. Please refer to lab report for complete results.

TABLE 4
Summary of Heavy Metal Results (mg/Kg)

Sample ID	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc
B-1-0.5'-1.5'	ND (<1.00)	90.9	16.2	4.48	13.3	13.7	ND (<0.500)	7.74	45.5	44.8
B-2-0.5'-1.5'	ND (<1.00)	94.2	17.2	5.04	14.3	18.7	ND (<0.500)	8.81	48.3	44.1
B-3-0.5'-1.5'	ND (<1.00)	79.3	16.2	4.54	12.9	15.8	ND (<0.500)	7.79	46.0	40.2
B-4-0.5'-1.5'	ND (<1.00)	86.6	16.1	4.69	13.3	16.9	ND (<0.500)	7.79	46.3	41.3
B-5-0.5'-1.5'	1.66	108	20.3	6.02	15.6	11.8	ND (<0.500)	11.3	59.5	41.5
B-6-0.5'-1.5'	ND (<1.00)	106	16.2	4.76	17.8	14.0	ND (<0.500)	8.08	47.5	57.4
B-7-0.5'-1.5'	ND (<1.00)	105	20.4	6.03	15.8	7.33	ND (<0.500)	10.9	59.6	41.6
B-8-0.5'-1.5'	1.97	100	18.1	5.12	16.1	10.1	ND (<0.500)	9.34	52.7	45.4
B-9-0.5'-1.5'	ND (<1.00)	73.6	16.1	4.62	14.2	15.4	ND (<0.500)	8.25	46.2	43.3
B-10-0.5'-1.5'	ND (<1.00)	107	17.5	5.26	18.0	18.7	ND (<0.500)	8.85	48.3	52.2
B-11-0.5'-1.5'	1.07	91.4	17.0	4.97	14.6	14.0	ND (<0.500)	8.52	49.7	41.0
B-12-0.5'-1.5'	ND (<1.00)	119	17.8	4.89	22.7	15.3	ND (<0.500)	8.57	47.3	75.8
B-13-0.5'-1.5'	ND (<1.00)	85.3	9.69	2.80	15.8	8.26	0.677	5.35	31.4	67.1
B-14-0.5'-1.5'	ND (<1.00)	107	17.1	4.84	17.0	11.8	ND (<0.500)	9.09	45.6	66.8
B-15-0.5'-1.5'	ND (<1.00)	76.2	11.8	3.65	11.8	11.0	ND (<0.500)	6.43	35.6	48.2
B-16-0.5'-1.5'	ND (<1.00)	68.8	13.2	4.06	10.2	11.7	ND (<0.500)	7.04	37.0	40.8
B-17-0.5'-1.5'	ND (<1.00)	81.5	14.6	4.16	17.3	11.5	ND (<0.500)	8.00	39.7	71.4
B-18-0.5'-1.5'	ND (<1.00)	76.5	13.8	3.96	16.6	10.9	ND (<0.500)	7.52	37.5	68.3
B-19-0.5'-1.5'	ND (<1.00)	87.4	14.0	4.36	15.1	8.59	ND (<0.500)	7.40	38.3	52.6
B-20-0.5'-1.5'	ND (<1.00)	111	17.8	5.09	17.9	12.4	ND (<0.500)	9.48	47.2	68.2
B-21-0.5'-1.5'	ND (<1.00)	98.2	14.7	4.58	14.9	7.99	ND (<0.500)	7.82	41.0	51.7
B-22-0.5'-1.5'	ND (<1.00)	112	16.9	4.95	20.2	12.1	ND (<0.500)	9.33	46.7	70.7

Sample ID	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc
B-23-0.5'-1.5'	ND (<1.00)	95.2	14.6	4.56	14.7	8.21	ND (<0.500)	7.74	40.5	51.5
B-24-0.5'-1.5'	ND (<1.00)	79.1	14.4	4.24	17.5	12.7	ND (<0.500)	8.20	39.1	70.9
Residential RSL	***0.11***	***15,000***	***36,000***	***23***	***3,100***	***80***	***390***	***490****	***390****	***23,000***
Industrial RSL	***0.36***	***220,000***	***170,000***	***350***	***47,000***	***320***	***5,800***	***3,100****	***1,000****	***350,000***
DTSC Background	***12****									

Notes: ND - Not Detected. EPA Regional Screening Levels (RSLs) are human health risk-based screening levels used by EPA and DTSC in residential and commercial settings. DTSC Background Concentration is based on statistical study of sites throughout southern California. This concentration may be used as a screening level for anthropogenic and naturally occurring levels of arsenic in soil in southern California.* - Values modified by DTSC HHRA Note 3. Please refer to lab report for complete results.

SOIL GAS MONITORING DATA FORM

PROJECT: Dairy Farm

LOCATION: Leal Ranch, Eastvale, California

DATE: July 21, 2021

	VAPOR PROBE INFO							
PROBE ID	**SG1**	**SG2**	**SG3**	**SG4**	**SG5**			
PROBE DEPTH (ft)	5	5	5	13	14			
	EXTRACTION DATA							
Applied Vacuum (in. WC)	<5	<5	<5	<5	<5			
FLOW (L/min)	0.2	0.2	0.2	0.2	0.2			
Pore Volumes (borehole - sand pack)	3	3	3	3	3			
	MONITORING DATA							
OXYGEN (%)	17.9	19.5	19.0	18.8	17.8			
CARBON DIOXIDE (%)	3.6	1.65	2.88	2.83	4.68			
VOC by PID (ppm)	0.0	0.0	0.0	0.0	0.0			
Methane (% LEL)	0.0	0.0	0.0	0.0	0.0			

	VAPOR PROBE INFO							
PROBE ID								
PROBE DEPTH (ft)								
	EXTRACTION DATA							
Applied Vacuum (in. WC)								
FLOW (L/min)								
Pore Volumes (borehole - sand pack)								
	MONITORING DATA							
OXYGEN (%)								
CARBON DIOXIDE (%)								
VOC by PID (ppm)								

REMARKS:

SAMPLED BY: DL

SOIL GAS MONITORING DATA FORM

PROJECT: Dairy Farm

LOCATION: Leal Ranch, Eastvale, California

DATE: July 21, 2021

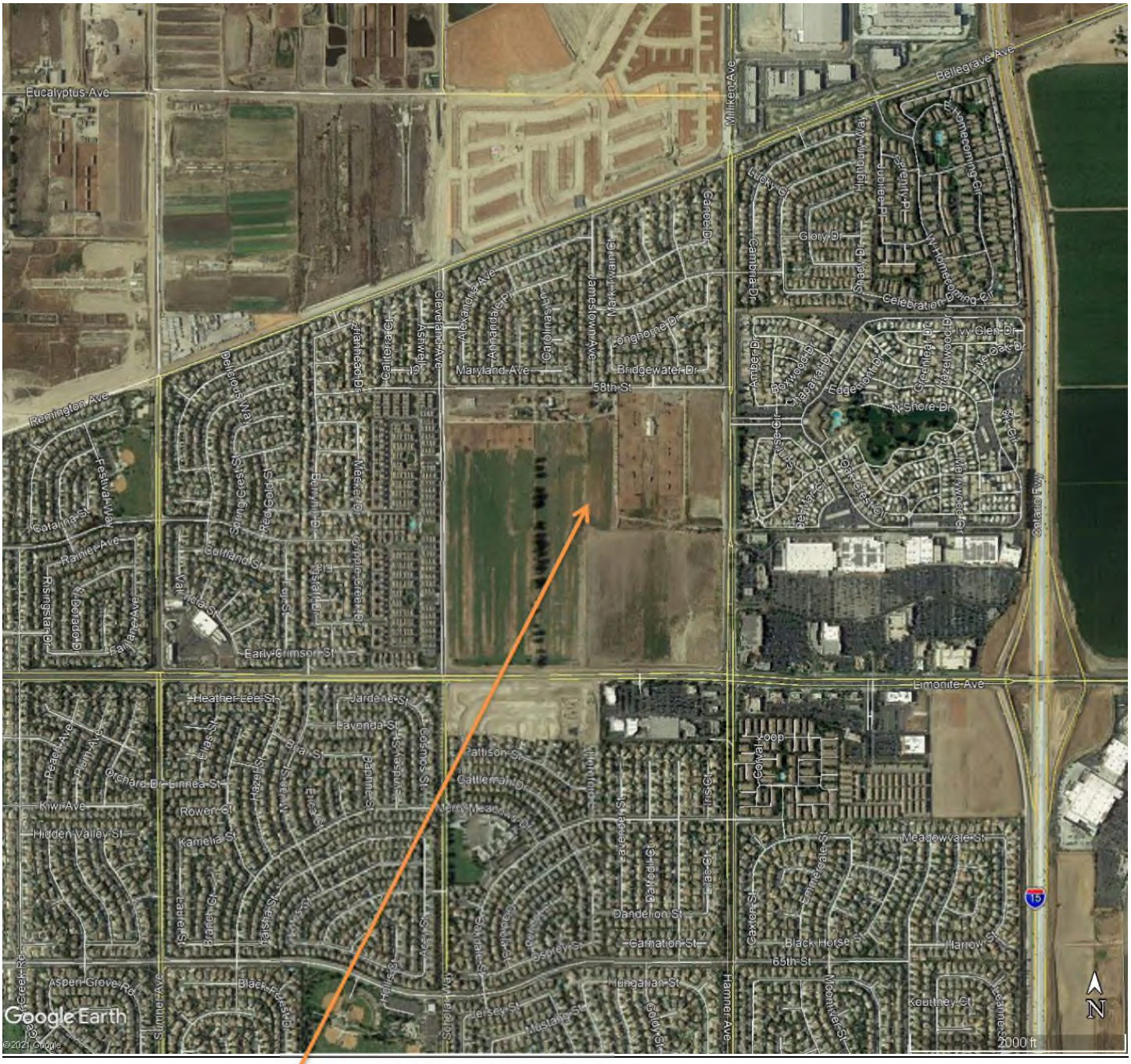
	VAPOR PROBE INFO							
PROBE ID	**SG6**	**SG7**	**SG8**	**SG9**	**SG10**	**SG11**	**SG12**	**SG13**
PROBE DEPTH (ft)	5	5	10	5	5	5	10	5
	EXTRACTION DATA							
Static Pressure (in. WC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FLOW (L/min)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pore Volumes (borehole - sand pack)	3	3	3	3	3	3	3	3
	MONITORING DATA							
OXYGEN (%)	20.1	6.8	3.7	9.2	20.2	3.0	4.3	11.5
CARBON DIOXIDE (%)	0.78	>5	>5	>5	1.21	>5	>5	>5
VOC by PID (ppm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methane (%LEL)	0.0	0.0	0.0	0.0	0.0	>100	2.7	0.0

	VAPOR PROBE INFO							
PROBE ID	**SG14**	**SG15**						
PROBE DEPTH (ft)	5	5						
	EXTRACTION DATA							
Static Pressure (in. WC)	0.0	0.0						
FLOW (L/min)	0.2	0.2						
Pore Volumes (borehole - sand pack)	3	3						
	MONITORING DATA							
OXYGEN (%)	4.1	20.1						
CARBON DIOXIDE (%)	>5	0.89						
VOC by PID (ppm)	0.0	0.0						
Methane (%LEL)	39	0.0			--			

REMARKS:

SAMPLED BY: DL

FIGURES

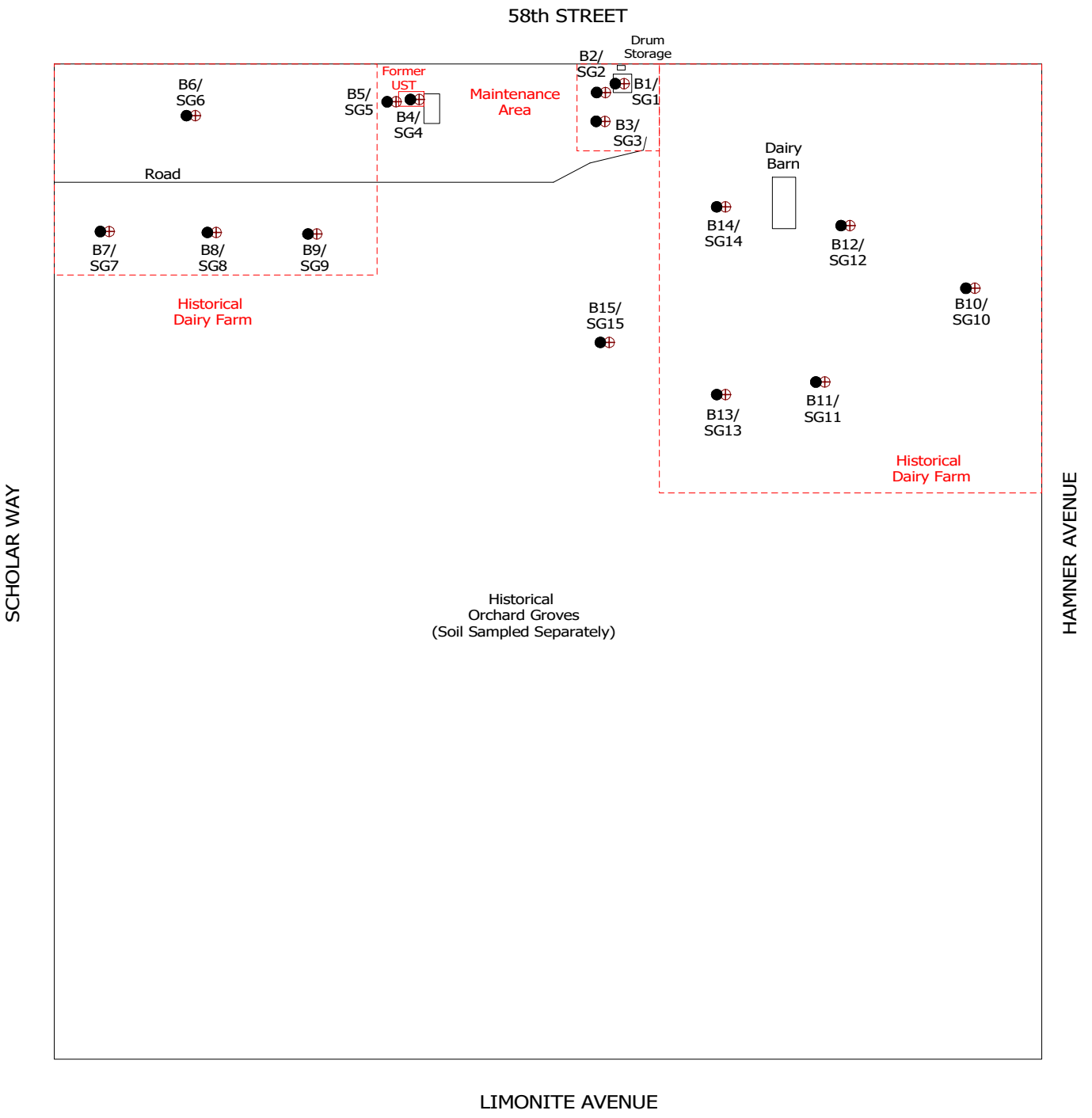


SITE

FIGURE 1

SITE VICINITY MAP
LEAL RANCH
12741-12745 Limonite Avenue
and 12740 58th Street
Eastvale, California

HILLMANN
CONSULTING



LEGEND

- Soil Borings
- Soil Gas Probes

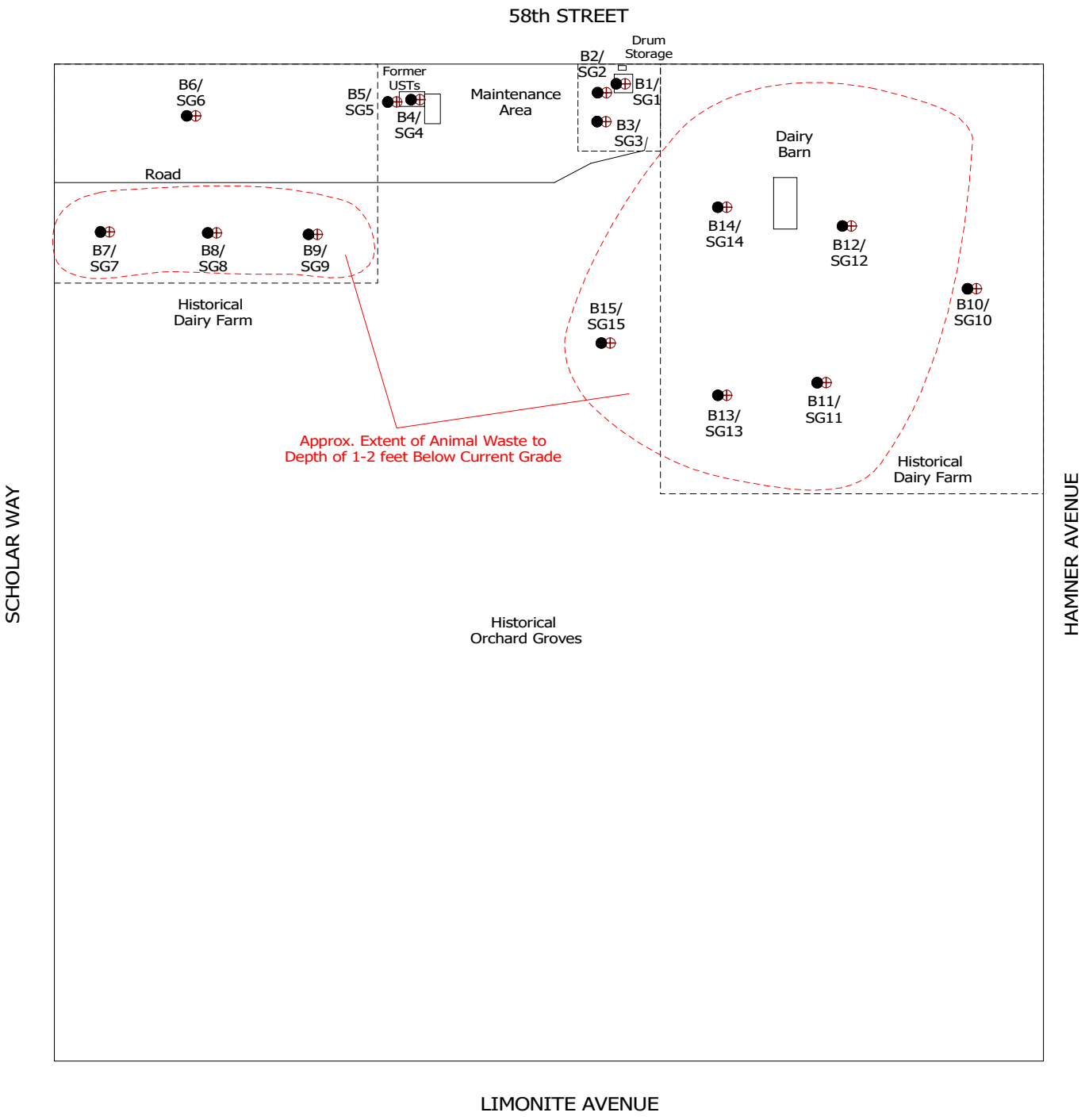
FIGURE 2
GENERAL SITE PLAN
LEAL RANCH
12741-12745 Limonite Avenue
and 12740 58th Street
Eastvale, California

HILLMANN CONSULTING

N

APPROXIMATE SCALE IN FEET

0 400 800



LEGEND

- Soil Borings
- Soil Gas Probes

FIGURE 3
DISTRIBUTION OF ANIMAL WASTE
LEAL RANCH
12741-12745 Limonite Avenue
and 12740 58th Street
Eastvale, California

HILLMANN CONSULTING

N

APPROXIMATE SCALE IN FEET

0 400 800

APPENDIX A
Site Photos



SG1



SG2



SG4



SG6



SG7



SG8



SG10



SG11



SG12



SG13



SG14



SG15

APPENDIX B
Laboratory Reports

A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

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CASE NARRATIVE

Authorized Signature Name / Title (print)	Ken Zheng, President
Signature / Date	Ken Zheng Ken Zheng, President 07/21/2021 9:46:30
Laboratory Job No. (Certificate of Analysis No.)	2107-00086
Project Name / No.	FORMER DAIRY
Dates Sampled (from/to)	07/12/21 To 07/12/21
Dates Received (from/to)	07/12/21 To 07/12/21
Dates Reported (from/to)	07/21/21 To 7/21/2021
Chains of Custody Received	Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Inorganic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

Positive Results (Organic Compounds)

None

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CERTIFICATE OF ANALYSIS

2107-00086

HILLMANN CONSULTING
DAN LOUKS
1745 W.ORANGEWOOD AVE
ORANGE, CA

Date Reported	07/21/21
Date Received	07/12/21
Invoice No.	92375
Cust #	G073
Permit Number	
Customer P.O.	

Project: FORMER DAIRY

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 001 **HB1-2**					Date & Time Sampled:		07/12/21 @	12:20
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		07/14/21	SR
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	07/14/21	SR
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		07/19/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	07/19/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	07/19/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	50		%REC	EPA 8015M		50-150	07/19/21	JEN
Sample: 002 **HB2-2**					Date & Time Sampled:		07/12/21 @	13:00
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		07/14/21	SR
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	07/14/21	SR
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		07/19/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	07/19/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	07/19/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	50		%REC	EPA 8015M		50-150	07/19/21	JEN
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		07/13/21	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Barium	**67.4**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Chromium	**18.4**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Cobalt	**5.64**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Copper	**9.15**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Lead	**2.48**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB

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ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

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CERTIFICATE OF ANALYSIS

2107-00086

HILLMANN CONSULTING
DAN LOUKS
1745 W.ORANGEWOOD AVE
ORANGE, CA

Project: FORMER DAIRY

Date Reported	07/21/21
Date Received	07/12/21
Invoice No.	92375
Cust #	G073
Permit Number	
Customer P.O.	

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 002 **HB2-2**					Date & Time Sampled:		07/12/21 @	13:00
Sample Matrix: **Soil**								
.....continued								
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Nickel	**9.14**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Vanadium	**48.5**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Zinc	**28.9**		mg/Kg	EPA 6010B	1.0	5.00	07/13/21	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		07/13/21	KZ
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	07/13/21	KZ
Sample: 003 **HB3-2**					Date & Time Sampled:		07/12/21 @	13:50
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		07/14/21	SR
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	07/14/21	SR
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		07/19/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	07/19/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	07/19/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	60		%REC	EPA 8015M		50-150	07/19/21	JEN
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		07/13/21	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Arsenic	**1.45**		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Barium	**88.0**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Chromium	**18.1**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Cobalt	**5.50**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB

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ORANGE, CA

Project: FORMER DAIRY

Date Reported	07/21/21
Date Received	07/12/21
Invoice No.	92375
Cust #	G073
Permit Number	
Customer P.O.	

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 003 **HB3-2**					Date & Time Sampled:		07/12/21 @	13:50
Sample Matrix: **Soil**								
.....continued								
Copper	**9.08**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Lead	**2.84**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Nickel	**9.26**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	07/13/21	TLB
Vanadium	**50.9**		mg/Kg	EPA 6010B	1.0	0.500	07/13/21	TLB
Zinc	**31.0**		mg/Kg	EPA 6010B	1.0	5.00	07/13/21	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		07/13/21	KZ
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	07/13/21	KZ
Sample: 004 **HB4-13**					Date & Time Sampled:		07/12/21 @	16:00
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		07/14/21	SR
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	07/14/21	SR
[Extractable Hydrocarbons]								
Extraction	Complete			EPA 3550B	1.0		07/19/21	JEN
C13-C22	<10		mg/Kg	EPA 8015M	1.0	10	07/19/21	JEN
C23-C40	<20		mg/Kg	EPA 8015M	1.0	20	07/19/21	JEN
[Surrogate]								
o-Terphenyl (OTP)	50		%REC	EPA 8015M		50-150	07/19/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		07/14/21	SR
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	07/14/21	SR
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	07/14/21	SR
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR

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ONTARIO, CA 91761
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Invoice No.	92375
Cust #	G073
Permit Number	
Customer P.O.	

Project: FORMER DAIRY

Sample: 004 **HB4-13** Date & Time Sampled: 07/12/21 @ 16:00
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	07/14/21	SR
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/14/21	SR
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/14/21	SR
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/14/21	SR
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	07/14/21	SR
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR

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1650 S. GROVE AVE., SUITE C
ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#'s	2789
	2790
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CERTIFICATE OF ANALYSIS

2107-00086

HILLMANN CONSULTING
DAN LOUKS
1745 W.ORANGEWOOD AVE
ORANGE, CA

Date Reported	07/21/21
Date Received	07/12/21
Invoice No.	92375
Cust #	G073
Permit Number	
Customer P.O.	

Project: FORMER DAIRY

Sample: 004 **HB4-13** Date & Time Sampled: 07/12/21 @ 16:00
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/14/21	SR
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/14/21	SR
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR

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CERTIFICATE OF ANALYSIS

2107-00086

HILLMANN CONSULTING
DAN LOUKS
1745 W.ORANGEWOOD AVE
ORANGE, CA

Date Reported	07/21/21
Date Received	07/12/21
Invoice No.	92375
Cust #	G073
Permit Number	
Customer P.O.	

Project: FORMER DAIRY

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 004 **HB4-13**					Date & Time Sampled:		07/12/21 @	16:00
Sample Matrix: **Soil**								
.....continued								
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/14/21	SR
[VOC Surrogates]								
Dibromofluoromethane	115		%REC	EPA 8260B		70-130	07/14/21	SR
Toluene-D8	116		%REC	EPA 8260B		70-130	07/14/21	SR
Bromofluorobenzene	117		%REC	EPA 8260B		70-130	07/14/21	SR

Respectfully Submitted: Ken Zheng

Ken Zheng - Lab Director

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.
B1 = BOD dilution water is over specifications . The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution.
E = Estimated value; Value exceeds calibration level of instrument.
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference.
J = Analyte concentration detected between RL and MDL.
Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.
S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit, Adjusted by DF
MDL = Method Detection Limit, Adjusted by DF
Qual = Qualifier
Tech = Technician

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

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USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research

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QUALITY CONTROL DATA REPORT

HILLMANN CONSULTING
PACIFIC PALISADES, CA 90272

2107-00086

Date Reported	**07/21/2021**
Date Received	**07/12/2021**
Date Sampled	**07/12/2021**
Invoice No.	**92375**
Customer #	**G073**
Customer P.O.	

Project: FORMER DAIRY

Method # EPA 6010B
QC Reference # 97304 **Date Analyzed:** 7/13/2021 **Technician:** TLB
Samples 002 003

Results

	LCS %REC	LCS %DUP	LCS %RPD	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
Antimony	101	100	0.6	85	86	1.1
Arsenic	100	101	0.5	79	80	0.8
Barium	97	99	1.6	92	96	0.7
Beryllium	98	100	1.7	94	95	0.8
Cadmium	100	99	0.5	74	75	0.9
Chromium	100	101	1.6	85	85	0.1
Cobalt	100	100	0.0	72	73	0.7
Copper	99	99	0.2	86	84	0.6
Lead	99	99	0.2	67	68	0.7
Molybdenum	100	100	0.3	82	83	0.7
Nickel	100	99	0.7	71	73	0.9
Selenium	99	99	0.8	69	69	0.1
Silver	98	97	0.2	85	85	0.4
Thallium	101	98	3.1	86	84	0.4
Vanadium	99	99	0.4	85	84	0.3
Zinc	100	99	0.3	74	76	0.7

Control Ranges

LCS %REC	LCS %RPD	SPIKE %RPD
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20
75 - 125	0 - 20	0 - 20

Method # EPA 7471A
QC Reference # 97316 **Date Analyzed:** 7/13/2021 **Technician:** KZ
Samples 002 003

Results

	LCS %REC	LCS %DUP	LCS %RPD	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
Mercury	100	100	0	94	97	3

Control Ranges

LCS %REC	LCS %RPD	SPIKE %RPD
75 - 125	0 - 25	0 - 25

Method # EPA 8015M
QC Reference # 97368 **Date Analyzed:** 7/19/2021 **Technician:** JEN
Samples 001 002 003 004

Results

	LCS %REC	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
C13-C22	100	110	107	3

Control Ranges

LCS %REC	SPIKE %RPD
70 - 130	0 - 25

Method # EPA 8260B
QC Reference # 97344 **Date Analyzed:** 7/14/2021 **Technician:** SR
Samples 004

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QUALITY CONTROL DATA REPORT

2107-00086

HILLMANN CONSULTING

Date Reported 07/21/2021
Date Received 07/12/2021
Date Sampled 07/12/2021

Project: FORMER DAIRY

Method # EPA 8260B
QC Reference # 97344 **Date Analyzed:** 7/14/2021 **Technician:** SR
Samples 004

Results	LCS %REC	Control Ranges LCS %REC
1,1-Dichloroethene	70	50 - 150
Benzene	118	50 - 150
Chlorobenzene	130	50 - 150
Toluene	124	50 - 150
Trichloroethene	122	50 - 150

Method # LUFT GC/MS
QC Reference # 97345 **Date Analyzed:** 7/14/2021 **Technician:** SR
Samples 001 002 003 004

Results	LCS %REC	LCS %DUP	LCS %RPD	Control Ranges LCS %REC	LCS %RPD
C4-C12	93	93	0	70 - 130	0 - 25

No method blank results were above reporting limit

Respectfully Submitted: Ken Zheng

Ken Zheng - President

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

1435

ARL

A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: 21 07-0086

Page 1 of 1

Client Name	HILLMANN CONSULTING
E-mail	Dan@gsaengineering.net
Address	1745 W. ORANGEWOOD AVE., STE 107, ANA
Report Attention	DAN LOWE
Phone # / Fax: #	(714) 226-3916
Sampled By	
Project No./ Name	FORMER DAIRY
Project Site	12741 LIMONITE AVE., EASTVALE

☒ Chilled ☒ Intact ☐ Seal

Turn Around Time Requested: ☐ Rush 8 12 24 48 Hours ☒ Normal

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	Remarks
1	HB1-2	7/12/21	12:20	SOIL	ICE	SS							X	•		☒ FOR PCB
2	HB2-2	↓	13:00	↓	↓	↓							☒	X		ON HOLD
3	HB3-2		13:50										☒	X		TPH o:j if
	HB4-5		14:45										[illegible]			TPH o 7750 mg/kg
	HB4-10		15:30										↓			
4	HB4-13		16:00				X						X			

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	Hillmann	7/12/21	17:00	[signature]	A+R	7/12/21	1700
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste; SL=Sludge; SS=Soil/Sediment; AR=Air; PP=Pure Product

Preservative Code: IC=Ice; HC=HCl; HN=HNO_3; SH=NaOH; ST=$Na_2S_2O_3$; HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag; G=Glass Container; ST= Steel Tube; B= Brass Tube; P=Plastic Bottle; V=VOA Vial; E= EnCore

ARL

Sample Acceptance Checklist

CLIENT: Hillmann Consulting WORK ORDER NUMBER: 2107-86

Temperature:(Criteria:0.0°C-6.0°C)

Sample Temp.(w/CF) °C(w/CF) 5.0°c

☐ Sample(s) outside temprature criteria: PM contacted by :

☐ Sample(s) outside temprature criteria, but received on ice/chilled on same day of sampling.

☐ Sample(s) received at ambient temprature; placed on ice for transport by courier.

Ambient Temprature ☐ Air ☐ Filter

CUSTODY SEAL:

Cooler	☐	Present and Intact	☐	Present and Not Intact	X	Not Present
Sample(s)	☐	Present and Intact	☐	Present and Not Intact	X	Not Present

Sample Condition:	Yes	No	N/A
Was a COC received	X		
Were sample IDs present?	X		
Were sampling dates & times present?	X		
Was a relingquished signature present?	X		
Were the tests required clearly indicated?	X		
Were all samples sealed in plastic bags?			X
Did all bottle labels agree with COC? (ID, dates and times)	X		
Were correct containers used for the tests required?	X		
Was a sufficient amount of samples sent for tests indicated?	X		
Was there headspace in VOA vials?			X
Were the containers labeled with correct preservatives?			X

Explanations/Comments:

Notification:

For discrepancies, how was the Project Manager notified? Verbal

Verbal: PM Initials: _____ Data/Time: _____

Email: Send to: _____ Data/Time: _____

Project Manager's response:

Completed By: [signature] Date: 7/12/21

A R Laboratories
1650 S. Grove Ave., Suite C, Ontario, CA 91761
PH: 951-779-0310 Fax: 951-779-0344
Email: office@arlaboratories.com

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CASE NARRATIVE

Authorized Signature Name / Title (print)	Ken Zheng, President
Signature / Date	Ken Zheng, President 07/21/2021 9:47:07
Laboratory Job No. (Certificate of Analysis No.)	2107-00144
Project Name / No.	FARM LAND
Dates Sampled (from/to)	07/16/21 To 07/16/21
Dates Received (from/to)	07/16/21 To 07/16/21
Dates Reported (from/to)	07/21/21 To 7/21/2021
Chains of Custody Received	Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

Positive Results (Organic Compounds)

None

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CERTIFICATE OF ANALYSIS

2107-00144

GSA ENGINEERING
DAN LOUKS
16950 AVENIDA DE SANTA YNEZ
PACIFIC PALISADES, CA 90272

Date Reported	07/21/21
Date Received	07/16/21
Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 001 **B5-5**					Date & Time Sampled:		07/16/21 @	12:00
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		07/19/21	JEN
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	07/19/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		07/19/21	JEN
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	07/19/21	JEN
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	07/19/21	JEN
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	07/19/21	JEN
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/19/21	JEN
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/19/21	JEN
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN

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ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
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CERTIFICATE OF ANALYSIS

2107-00144

GSA ENGINEERING
DAN LOUKS
16950 AVENIDA DE SANTA YNEZ
PACIFIC PALISADES, CA 90272

Date Reported	07/21/21
Date Received	07/16/21
Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Sample: 001 **B5-5** Date & Time Sampled: 07/16/21 @ 12:00
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	07/19/21	JEN
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN

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PACIFIC PALISADES, CA 90272

Date Reported	07/21/21
Date Received	07/16/21
Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 001 **B5-5**					Date & Time Sampled:		07/16/21 @	12:00
Sample Matrix: **Soil**								
.....continued								
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
[VOC Surrogates]								
Dibromofluoromethane	106		%REC	EPA 8260B		70-130	07/19/21	JEN
Toluene-D8	114		%REC	EPA 8260B		70-130	07/19/21	JEN
Bromofluorobenzene	112		%REC	EPA 8260B		70-130	07/19/21	JEN
Sample: 002 **B5-10**					Date & Time Sampled:		07/16/21 @	12:40
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		07/19/21	JEN
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	07/19/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		07/19/21	JEN
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	07/19/21	JEN
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	07/19/21	JEN
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN

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Date Reported	07/21/21
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Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Sample: 002 **B5-10** Date & Time Sampled: 07/16/21 @ 12:40
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	07/19/21	JEN
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/19/21	JEN
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/19/21	JEN
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	07/19/21	JEN
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN

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Date Reported	07/21/21
Date Received	07/16/21
Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Sample: 002 **B5-10** Date & Time Sampled: 07/16/21 @ 12:40
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN

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Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 002 **B5-10**					Date & Time Sampled:		07/16/21 @	12:40
Sample Matrix: **Soil**								
.....continued								
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
[VOC Surrogates]								
Dibromofluoromethane	120		%REC	EPA 8260B		70-130	07/19/21	JEN
Toluene-D8	114		%REC	EPA 8260B		70-130	07/19/21	JEN
Bromofluorobenzene	114		%REC	EPA 8260B		70-130	07/19/21	JEN
Sample: 003 **B5-14**					Date & Time Sampled:		07/16/21 @	13:30
Sample Matrix: **Soil**								
[TPH Gasoline (C4-C12)]								
Closed System P&T TPHg Soil	Complete			EPA 5035	1.0		07/19/21	JEN
C4-C12	<0.20		mg/Kg	LUFT GC/MS	1.0	0.20	07/19/21	JEN
[VOCs by GCMS]								
Closed System P&T VOC Soil	Complete			EPA 5035	1.0		07/19/21	JEN
Acetone	<0.10		mg/Kg	EPA 8260B	1.0	0.10	07/19/21	JEN
t-Amyl Methyl Ether (TAME)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Benzene	<0.0040		mg/Kg	EPA 8260B	1.0	0.0040	07/19/21	JEN
Bromobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromodichloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromoform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Bromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
t-Butanol (TBA)	<0.0625		mg/Kg	EPA 8260B	1.0	0.0625	07/19/21	JEN
2-Butanone (MEK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
n-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
sec-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
tert-Butylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Carbon Disulfide	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/19/21	JEN
Carbon Tetrachloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Chloroform	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN

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ONTARIO, CA 91761
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LA City#	10261
ELAP#'s	2789
	2790
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CERTIFICATE OF ANALYSIS

2107-00144

GSA ENGINEERING
DAN LOUKS
16950 AVENIDA DE SANTA YNEZ
PACIFIC PALISADES, CA 90272

Date Reported	07/21/21
Date Received	07/16/21
Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Sample: 003 **B5-14** Date & Time Sampled: 07/16/21 @ 13:30
Sample Matrix: **Soil**
.....continued

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Chloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Chlorotoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Dibromochloromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dibromoethane (EDB)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dibromo-3-Chloropropane	<0.010		mg/Kg	EPA 8260B	1.0	0.010	07/19/21	JEN
Dibromomethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,4-Dichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Dichlorodifluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
cis-1,2-Dichloroethene	<0.0020		mg/Kg	EPA 8260B	1.0	0.0020	07/19/21	JEN
trans-1,2-Dichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2,2-Dichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
cis-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
trans-1,3-Dichloropropene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Diisopropyl Ether (DiPE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Ethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Hexachlorobutadiene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
2-Hexanone	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN
Isopropylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Isopropyltoluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Methylene Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
4-Methyl-2-Pentanone (MIBK)	<0.0313		mg/Kg	EPA 8260B	1.0	0.0313	07/19/21	JEN

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CERTIFICATE OF ANALYSIS

2107-00144

GSA ENGINEERING
DAN LOUKS
16950 AVENIDA DE SANTA YNEZ
PACIFIC PALISADES, CA 90272

Date Reported	07/21/21
Date Received	07/16/21
Invoice No.	92383
Cust #	G073
Permit Number	
Customer P.O.	

Project: FARM LAND

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 003 **B5-14**					Date & Time Sampled:		07/16/21 @	13:30
Sample Matrix: **Soil**								
.....continued								
Methyl-t-butyl Ether (MtBE)	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Naphthalene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
n-Propylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Styrene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,1,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,2,2-Tetrachloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Tetrachloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Toluene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,3-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,4-Trichlorobenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,1-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,1,2-Trichloroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichloroethene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,3-Trichloropropane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichlorofluoromethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Trichlorotrifluoroethane	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,2,4-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
1,3,5-Trimethylbenzene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
Vinyl Chloride	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
m,p-Xylenes	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
o-Xylene	<0.0050		mg/Kg	EPA 8260B	1.0	0.0050	07/19/21	JEN
[VOC Surrogates]								
Dibromofluoromethane	118		%REC	EPA 8260B		70-130	07/19/21	JEN
Toluene-D8	116		%REC	EPA 8260B		70-130	07/19/21	JEN
Bromofluorobenzene	113		%REC	EPA 8260B		70-130	07/19/21	JEN

Respectfully Submitted: Ken Zheng

Ken Zheng - Lab Director

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951-779-0310 FAX 951-779-0344
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QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.
B1 = BOD dilution water is over specifications . The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution.
E = Estimated value; Value exceeds calibration level of instrument.
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference.
J = Analyte concentration detected between RL and MDL.
Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.
S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit, Adjusted by DF
MDL = Method Detection Limit, Adjusted by DF
Qual = Qualifier
Tech = Technician

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

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QUALITY CONTROL DATA REPORT

GSA ENGINEERING
PACIFIC PALISADES, CA 90272

2107-00144

Date Reported	**07/21/2021**
Date Received	**07/16/2021**
Date Sampled	**07/16/2021**
Invoice No.	**92383**
Customer #	**G073**
Customer P.O.	

Project: FARM LAND

Method # EPA 8260B
QC Reference # 97450 **Date Analyzed:** 7/19/2021 **Technician:** JEN
Samples 001 002 003

Results	LCS %REC	Control Ranges LCS %REC
1,1-Dichloroethene	53	50 - 150
Benzene	94	50 - 150
Chlorobenzene	107	50 - 150
Toluene	101	50 - 150
Trichloroethene	104	50 - 150

Method # LUFT GC/MS
QC Reference # 97451 **Date Analyzed:** 7/19/2021 **Technician:** JEN
Samples 001 002 003

Results	LCS %REC	Control Ranges LCS %REC
C4-C12	95	70 - 130

No method blank results were above reporting limit

Respectfully Submitted: Ken Zheng

Ken Zheng - President

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A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: 2017-144

Page 1 of 1

1448

Client Name	HILLMAN CONSULTING
E-mail	Dan@gsaengineering.net
Address	1745 ORANGEWOOD AVE #110 ORANGE
Report Attention	DAN L
Phone # / Fax: #	714 206-3916
Sampled By	NM
Project No./ Name	FARMLAND
Project Site	12741 LIMONITE AVE EASTVALE

☒ Chilled ☒ Intact ☐ Seal

Turn Around Time Requested: ☐ Rush 8 12 24 48 Hours ☒ Normal

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	Remarks
1	B5-5	7-16-21	12:00	Soil	ICE	1	X		X							
2	B5-10	↓	12:40	↓	↓	1	X		X							
3	B5-14	↓	13:30	↓	↓	1	X		X							

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Nell Mullen		7-16-21	17:10			7/16	17:10
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste; SL=Sludge; SS=Soil/Sediment; AR=Air; PP=Pure Product

Preservative Code: IC=Ice; HC=HCl; HN=HNO_3; SH=NaOH; ST=$Na_2S_2O_3$; HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag; G=Glass Container; ST= Steel Tube; B= Brass Tube; P=Plastic Bottle; V=VOA Vial; E= EnCore

ARL

Sample Acceptance Checklist

CLIENT: Hillmann Consulting WORK ORDER NUMBER: 2107-144

Temperature:(Criteria:0.0°C-6.0°C)

Sample Temp.(w/CF) °C(w/CF) 3.1°c

☐ Sample(s) outside temprature criteria: PM contacted by :

☐ Sample(s) outside temprature criteria, but received on ice/chilled on same day of sampling.

☐ Sample(s) received at ambient temprature; placed on ice for transport by courier.

Ambient Temprature ☐ Air ☐ Filter

CUSTODY SEAL:

Cooler	☐	Present and Intact	☐	Present and Not Intact	☒	Not Present
Sample(s)	☐	Present and Intact	☐	Present and Not Intact	☒	Not Present

Sample Condition:	Yes	No	N/A
Was a COC received	X		
Were sample IDs present?	X		
Were sampling dates & times present?	X		
Was a relingquished signature present?	X		
Were the tests required clearly indicated?	X		
Were all samples sealed in plastic bags?			X
Did all bottle labels agree with COC? (ID, dates and times)	X		
Were correct containers used for the tests required?	X		
Was a sufficient amount of samples sent for tests indicated?	X		
Was there headspace in VOA vials?			X
Were the containers labeled with correct preservatives?			X

Explanations/Comments:

Notification:

For discrepancies, how was the Project Manager notified? Verbal

Verbal: PM Initials: _____ Data/Time: _____

Email: Send to: _____ Data/Time: _____

Project Manager's response:

Completed By: [signature] Date: 7/16/21

A R Laboratories
1650 S. Grove Ave., Suite C, Ontario, CA 91761
PH: 951-779-0310 Fax: 951-779-0344
Email: office@arlaboratories.com

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1650 S. GROVE AVE., SUITE C
ONTARIO, CA 91761
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CASE NARRATIVE

Authorized Signature Name / Title (print)	Ken Zheng, President
Signature / Date	Ken Zheng, President 07/23/2021 10:21:54
Laboratory Job No. (Certificate of Analysis No.)	2107-00175
Project Name / No.	FARMLAND / 12741 LIMONITE, EASTVALE
Dates Sampled (from/to)	07/21/21 To 07/21/21
Dates Received (from/to)	07/21/21 To 07/21/21
Dates Reported (from/to)	07/23/21 To 7/23/2021
Chains of Custody Received	Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

Positive Results (Organic Compounds)

Sample	Analyte	Result	Qual	Units	RL	Sample	Analyte	Result	Qual	Units	RL
SG4-13	1,2,4-Trimethylbenzene	**0.0049**		µg/L	0.0010	SG4-13	Benzene	**0.0027**		µg/L	0.0010
SG4-13	Ethylbenzene	**0.0069**		µg/L	0.0010	SG4-13	Styrene	**0.0042**		µg/L	0.0010
SG4-13	Tetrachloroethene	**0.030**		µg/L	0.0010	SG4-13	Toluene	**0.015**		µg/L	0.0010
SG4-13	m,p-Xylenes	**0.016**		µg/L	0.0010	SG4-13	o-Xylene	**0.0089**		µg/L	0.0010
SG5-14	1,2,4-Trimethylbenzene	**0.0030**		µg/L	0.0010	SG5-14	Benzene	**0.0043**		µg/L	0.0010
SG5-14	Ethylbenzene	**0.010**		µg/L	0.0010	SG5-14	Tetrachloroethene	**0.014**		µg/L	0.0010
SG5-14	Toluene	**0.060**		µg/L	0.0010	SG5-14	m,p-Xylenes	**0.024**		µg/L	0.0010
SG5-14	o-Xylene	**0.012**		µg/L	0.0010	SG11-5	Methane	**45800**		ppmv	15

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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Sample: 001 **SG1-5** Date & Time Sampled: 07/21/21 @ 13:00
Sample Matrix: **Soil Vapor**

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
[VOCs by GCMS]										
Acetone	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Benzene	<0.024		µg/L	EPA 8260B	1.0	0.0240	0.10	07/21/21	4:00	JEN
Bromobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromochloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromoform	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromomethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1.0	0.0250	0.050	07/21/21	4:00	JEN
Chlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloroform	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dibromoethane (EDB)	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
1,2-Dibromo-3-Chloropropane	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
Dibromomethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN

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1650 S. GROVE AVE., SUITE C
ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

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LA City#	10261
ELAP#'s	2789
	2790
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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Sample: 001 **SG1-5** Date & Time Sampled: 07/21/21 @ 13:00
Sample Matrix: **Soil Vapor**
.....continued

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Ethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2-Hexanone	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Methylene Chloride	<0.05		µg/L	EPA 8260B	1.0	0.0500	0.1	07/21/21	4:00	JEN
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Naphthalene	<0.032		µg/L	EPA 8260B	1.0	0.0320	0.050	07/21/21	4:00	JEN
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Styrene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,2,2-Tetrachloroethane	<0.05		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Toluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Trichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN

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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 001 **SG1-5** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	13:00
.....continued										
1,2,3-Trichloropropane	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Trichlorotrifluoroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Vinyl Chloride	<0.008		µg/L	EPA 8260B	1.0	0.0080	0.050	07/21/21	4:00	JEN
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1.0	0.1000	0.20	07/21/21	4:00	JEN
o-Xylene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
[VOC Surrogates]										
Dibromofluoromethane	124		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Toluene-D8	113		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Bromofluorobenzene	112		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Sample: 002 **SG2-5** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	13:10
[VOCs by GCMS]										
Acetone	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Benzene	<0.024		µg/L	EPA 8260B	1.0	0.0240	0.10	07/21/21	4:00	JEN
Bromobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromochloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromoform	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromomethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN

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ONTARIO, CA 91761
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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Sample: 002 **SG2-5** Date & Time Sampled: 07/21/21 @ 13:10
Sample Matrix: **Soil Vapor**
.....continued

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1.0	0.0250	0.050	07/21/21	4:00	JEN
Chlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloroform	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dibromoethane (EDB)	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
1,2-Dibromo-3-Chloropropane	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
Dibromomethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Ethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN

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2107-00175

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BRANDON CLEMENTS
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STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Sample: 002 **SG2-5** Date & Time Sampled: 07/21/21 @ 13:10
Sample Matrix: **Soil Vapor**
.....continued

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
2-Hexanone	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Methylene Chloride	<0.05		µg/L	EPA 8260B	1.0	0.0500	0.1	07/21/21	4:00	JEN
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Naphthalene	<0.032		µg/L	EPA 8260B	1.0	0.0320	0.050	07/21/21	4:00	JEN
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Styrene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,2,2-Tetrachloroethane	<0.05		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Toluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Trichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,3-Trichloropropane	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Trichlorotrifluoroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Vinyl Chloride	<0.008		µg/L	EPA 8260B	1.0	0.0080	0.050	07/21/21	4:00	JEN
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1.0	0.1000	0.20	07/21/21	4:00	JEN
o-Xylene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
[VOC Surrogates]										
Dibromofluoromethane	121		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Toluene-D8	112		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN

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ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 002 **SG2-5** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	13:10
.....continued										
Bromofluorobenzene	115		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Sample: 003 **SG3-5** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	13:20
[VOCs by GCMS]										
Acetone	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Benzene	<0.024		µg/L	EPA 8260B	1.0	0.0240	0.10	07/21/21	4:00	JEN
Bromobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromochloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromoform	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Bromomethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1.0	0.0250	0.050	07/21/21	4:00	JEN
Chlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloroform	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Chloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dibromoethane (EDB)	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
1,2-Dibromo-3-Chloropropane	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
Dibromomethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN

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Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Sample: 003 **SG3-5** Date & Time Sampled: 07/21/21 @ 13:20
Sample Matrix: **Soil Vapor**
.....continued

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Ethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
2-Hexanone	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Methylene Chloride	<0.05		µg/L	EPA 8260B	1.0	0.0500	0.1	07/21/21	4:00	JEN
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Naphthalene	<0.032		µg/L	EPA 8260B	1.0	0.0320	0.050	07/21/21	4:00	JEN
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Styrene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,2,2-Tetrachloroethane	<0.05		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Toluene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN

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BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 003 **SG3-5**						Date & Time Sampled:		07/21/21	@	13:20
Sample Matrix: **Soil Vapor**										
.....continued										
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Trichloroethene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,3-Trichloropropane	<0.020		µg/L	EPA 8260B	1.0	0.0200	0.10	07/21/21	4:00	JEN
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Trichlorotrifluoroethane	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
Vinyl Chloride	<0.008		µg/L	EPA 8260B	1.0	0.0080	0.050	07/21/21	4:00	JEN
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1.0	0.1000	0.20	07/21/21	4:00	JEN
o-Xylene	<0.050		µg/L	EPA 8260B	1.0	0.0500	0.10	07/21/21	4:00	JEN
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<0.50		µg/L	EPA 8260B	1.0	0.5000	1.0	07/21/21	4:00	JEN
[VOC Surrogates]										
Dibromofluoromethane	124		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Toluene-D8	113		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Bromofluorobenzene	115		%REC	EPA 8260B			70-130	07/21/21	4:00	JEN
Sample: 004 **SG4-13**						Date & Time Sampled:		07/21/21	@	13:45
Sample Matrix: **Soil Vapor**										
[TPH Gasoline by GCMS]										
C4-C12	<5		µg/L	LUFT GCMS	1.0	5.0000	10	07/21/21	7:00	KZ
[TOXIC ORGANICS IN AIR]										
1,1,1-Trichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1,2,2-Tetrachloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Trichlorotrifluoroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1,2-Trichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1-Dichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1-Dichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ

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Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Sample: 004 **SG4-13** Date & Time Sampled: 07/21/21 @ 13:45
Sample Matrix: **Soil Vapor**
.....continued

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
1,2,4-Trichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2,4-Trimethylbenzene	**0.0049**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dibromoethane (EDB)	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dichloropropane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Dichlorotetrafluoroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,3,5-Trimethylbenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,3-Butadiene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,3-Dichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,4-Dichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,4-Dioxane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
2-Butanone (MEK)	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
2-Hexanone	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
Isopropanol (IPA)	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
4-Ethyltoluene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
Acetone	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
Benzene	**0.0027**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Benzyl chloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromodichloromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromoform	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromomethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Carbon Disulfide	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Carbon Tetrachloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chloroform	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chloromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
cis-1,2-Dichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
cis-1,3-Dichloropropene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ

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Date Reported	07/23/21
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Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 004 **SG4-13** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	13:45
.....continued										
Cyclohexane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Dibromochloromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Dichlorodifluoromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Ethyl acetate	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Ethylbenzene	**0.0069**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Heptane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Hexachlorobutadiene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Hexane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
m,p-Xylenes	**0.016**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Methyl-t-butyl Ether (MtBE)	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Methylene Chloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
o-Xylene	**0.0089**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Propylene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Styrene	**0.0042**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Tetrachloroethene	**0.030**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Tetrahydrofuran	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Toluene	**0.015**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
trans-1,2-Dichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
trans-1,3-Dichloropropene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Trichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Trichlorofluoromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Vinyl acetate	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Vinyl Chloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromofluorobenzene	104		%REC	EPA TO-15			70-130	07/21/21	7:00	KZ
Toluene-D8	110		%REC	EPA TO-15			70-130	07/21/21	7:00	KZ
Dibromofluoromethane	130		%REC	EPA TO-15			70-130	07/21/21	7:00	KZ
Sample: 005 **SG5-14** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	14:00
[TPH Gasoline by GCMS]										
C4-C12	<5		µg/L	LUFT GCMS	1.0	5.0000	10	07/21/21	7:00	KZ

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ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported 07/23/21
Date Received 07/21/21
Invoice No. 92403
Cust # G073
Permit Number
Customer P.O.

Sample: 005 **SG5-14** Date & Time Sampled: 07/21/21 @ 14:00
Sample Matrix: **Soil Vapor**
.....continued

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
[TOXIC ORGANICS IN AIR]										
1,1,1-Trichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1,2,2-Tetrachloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Trichlorotrifluoroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1,2-Trichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1-Dichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,1-Dichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2,4-Trichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2,4-Trimethylbenzene	**0.0030**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dibromoethane (EDB)	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dichloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,2-Dichloropropane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Dichlorotetrafluoroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,3,5-Trimethylbenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,3-Butadiene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,3-Dichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,4-Dichlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
1,4-Dioxane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
2-Butanone (MEK)	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
2-Hexanone	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
Isopropanol (IPA)	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
4-Ethyltoluene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
Acetone	<0.0050		µg/L	EPA TO-15	0.2	0.0050	0.010	07/21/21	7:00	KZ
Benzene	**0.0043**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Benzyl chloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromodichloromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromoform	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromomethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Carbon Disulfide	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ

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ONTARIO, CA 91761
951-779-0310 FAX 951-779-0344
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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Sample: 005 **SG5-14** Date & Time Sampled: 07/21/21 @ 14:00
Sample Matrix: **Soil Vapor**
.....continued

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Carbon Tetrachloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chlorobenzene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chloroethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chloroform	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Chloromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
cis-1,2-Dichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
cis-1,3-Dichloropropene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Cyclohexane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Dibromochloromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Dichlorodifluoromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Ethyl acetate	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Ethylbenzene	**0.010**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Heptane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Hexachlorobutadiene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Hexane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
m,p-Xylenes	**0.024**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Methyl-t-butyl Ether (MtBE)	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Methylene Chloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
o-Xylene	**0.012**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Propylene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Styrene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Tetrachloroethene	**0.014**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Tetrahydrofuran	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Toluene	**0.060**		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
trans-1,2-Dichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
trans-1,3-Dichloropropene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Trichloroethene	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Trichlorofluoromethane	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Vinyl acetate	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Vinyl Chloride	<0.0005		µg/L	EPA TO-15	0.2	0.0005	0.0010	07/21/21	7:00	KZ
Bromofluorobenzene	103		%REC	EPA TO-15			70-130	07/21/21	7:00	KZ

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CERTIFICATE OF ANALYSIS

2107-00175

HILLMANN CONSULTING
BRANDON CLEMENTS
1745 W. ORANGEWOOD AVE
STE#110
ORANGE, CA 92868

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Date Reported	07/23/21
Date Received	07/21/21
Invoice No.	92403
Cust #	G073
Permit Number	
Customer P.O.	

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 005 **SG5-14** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	14:00
.....continued										
Toluene-D8	112		%REC	EPA TO-15			70-130	07/21/21	7:00	KZ
Dibromofluoromethane	130		%REC	EPA TO-15			70-130	07/21/21	7:00	KZ
Sample: 006 **SG11-5** Sample Matrix: **Soil Vapor**						Date & Time Sampled:		07/21/21	@	15:30
Methane	**45800**		ppmv	EPA 8015M	1.0	10.0000	15	07/21/21	9:04	KZ

Respectfully Submitted: Ken Zheng

Ken Zheng - President

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.
B1 = BOD dilution water is over specifications . The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution.
E = Estimated value; Value exceeds calibration level of instrument.
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference.
J = Analyte concentration detected between RL and MDL.
Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.
S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit, Adjusted by DF
MDL = Method Detection Limit, Adjusted by DF
Qual = Qualifier
Tech = Technician

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

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QUALITY CONTROL DATA REPORT

HILLMANN CONSULTING
ORANGE, CA 92868

2107-00175

Date Reported	**07/23/2021**
Date Received	**07/21/2021**
Date Sampled	**07/21/2021**
Invoice No.	**92403**
Customer #	**G073**
Customer P.O.	

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Method # EPA 8015M
QC Reference # 97480 **Date Analyzed:** 7/21/2021 **Technician:** KZ
Samples 006

Results	LCS %REC	LCS %DUP	LCS %RPD	Control Ranges LCS %REC	Control Ranges LCS %RPD
Methane	90	75	16	70 - 130	0 - 25

Method # EPA 8260B
QC Reference # 97486 **Date Analyzed:** 7/21/2021 **Technician:** JEN
Samples 001 002 003

Results	LCS %REC	Control Ranges LCS %REC
1,1-Dichloroethene	70	70 - 130
Benzene	117	70 - 130
Chlorobenzene	130	70 - 130
Toluene	128	70 - 130
Trichloroethene	126	70 - 130

Method # EPA TO-15
QC Reference # 97487 **Date Analyzed:** 7/21/2021 **Technician:** KZ
Samples 004 005

Results	LCS %REC	Control Ranges LCS %REC
1,1-Dichloroethene	70	70 - 130
Benzene	79	70 - 130
Chlorobenzene	130	70 - 130
Toluene	90	70 - 130
Trichloroethene	121	70 - 130

Method # LUFT GCMS
QC Reference # 97489 **Date Analyzed:** 7/21/2021 **Technician:** KZ
Samples 004 005

Results	LCS %REC	Control Ranges LCS %REC
C4-C12	90	70 - 130

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ONTAIRO, CA 91761
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QUALITY CONTROL DATA REPORT

HILLMANN CONSULTING

2107-00175

Date Reported 07/23/2021
Date Received 07/21/2021
Date Sampled 07/21/2021

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Method blank results

Ref	Test Name	Result	Qualif	Units	MDL
97480	Methane	<10		ppmv	10
97486	Acetone	<0.50		µg/L	0.50
	t-Amyl Methyl Ether (TAME)	<0.050		µg/L	0.050
	Benzene	<0.024		µg/L	0.024
	Bromobenzene	<0.050		µg/L	0.050
	Bromochloromethane	<0.050		µg/L	0.050
	Bromodichloromethane	<0.050		µg/L	0.050
	Bromoform	<0.050		µg/L	0.050
	Bromomethane	<0.050		µg/L	0.050
	t-Butanol (TBA)	<0.50		µg/L	0.50
	2-Butanone (MEK)	<0.50		µg/L	0.50
	n-Butylbenzene	<0.050		µg/L	0.050
	sec-Butylbenzene	<0.050		µg/L	0.050
	tert-Butylbenzene	<0.050		µg/L	0.050
	Carbon Disulfide	<0.50		µg/L	0.50
	Carbon Tetrachloride	<0.025		µg/L	0.025
	Chlorobenzene	<0.050		µg/L	0.050
	Chloroethane	<0.050		µg/L	0.050
	Chloroform	<0.050		µg/L	0.050
	Chloromethane	<0.050		µg/L	0.050
	2-Chlorotoluene	<0.050		µg/L	0.050
	4-Chlorotoluene	<0.050		µg/L	0.050
	Dibromochloromethane	<0.050		µg/L	0.050
	1,2-Dibromoethane (EDB)	<0.020		µg/L	0.020
	1,2-Dibromo-3-Chloropropane	<0.020		µg/L	0.020
	Dibromomethane	<0.050		µg/L	0.050
	1,2-Dichlorobenzene	<0.050		µg/L	0.050
	1,3-Dichlorobenzene	<0.050		µg/L	0.050
	1,4-Dichlorobenzene	<0.050		µg/L	0.050
	Dichlorodifluoromethane	<0.050		µg/L	0.050
	1,1-Dichloroethane	<0.050		µg/L	0.050
	1,2-Dichloroethane	<0.050		µg/L	0.050
	1,1-Dichloroethene	<0.050		µg/L	0.050
	cis-1,2-Dichloroethene	<0.050		µg/L	0.050
	trans-1,2-Dichloroethene	<0.050		µg/L	0.050
	1,2-Dichloropropane	<0.050		µg/L	0.050
	1,3-Dichloropropane	<0.050		µg/L	0.050
	2,2-Dichloropropane	<0.050		µg/L	0.050
	1,1-Dichloropropene	<0.050		µg/L	0.050
	cis-1,3-Dichloropropene	<0.050		µg/L	0.050
	trans-1,3-Dichloropropene	<0.050		µg/L	0.050
	Diisopropyl Ether (DiPE)	<0.050		µg/L	0.050
	Ethylbenzene	<0.050		µg/L	0.050
	Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	0.050
	Hexachlorobutadiene	<0.050		µg/L	0.050
	2-Hexanone	<0.50		µg/L	0.50
	Isopropylbenzene	<0.050		µg/L	0.050
	4-Isopropyltoluene	<0.050		µg/L	0.050
	Methylene Chloride	<0.05		µg/L	0.05
	4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	0.50
	Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	0.050
	Naphthalene	<0.032		µg/L	0.032
	n-Propylbenzene	<0.050		µg/L	0.050
	Styrene	<0.050		µg/L	0.050
	1,1,1,2-Tetrachloroethane	<0.050		µg/L	0.050
	1,1,2,2-Tetrachloroethane	<0.05		µg/L	0.05
	Tetrachloroethene	<0.050		µg/L	0.050
	Toluene	<0.050		µg/L	0.050
	1,2,3-Trichlorobenzene	<0.050		µg/L	0.050
	1,2,4-Trichlorobenzene	<0.050		µg/L	0.050
	1,1,1-Trichloroethane	<0.050		µg/L	0.050
	1,1,2-Trichloroethane	<0.050		µg/L	0.050
	Trichloroethene	<0.050		µg/L	0.050
	1,2,3-Trichloropropane	<0.020		µg/L	0.020
	Trichlorofluoromethane	<0.050		µg/L	0.050
	Trichlorotrifluoroethane	<0.050		µg/L	0.050
	1,2,4-Trimethylbenzene	<0.050		µg/L	0.050
	1,3,5-Trimethylbenzene	<0.050		µg/L	0.050
	Vinyl Chloride	<0.008		µg/L	0.008
	m,p-Xylenes	<0.10		µg/L	0.10
	o-Xylene	<0.050		µg/L	0.050
	Isopropanol (IPA)	<0.50		µg/L	0.50
97487	1,1-Dichloroethene	<0.0005		µg/L	0.0005
	Benzene	<0.0005		µg/L	0.0005
	Chlorobenzene	<0.0005		µg/L	0.0005
	Toluene	<0.0005		µg/L	0.0005
	Trichloroethene	<0.0005		µg/L	0.0005
	Bromofluorobenzene			%REC	
97489	C4-C12	<5		µg/L	5

A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
ONTAIRO, CA 91761
951-779-0310 FAX 951-779-0344
www.arlaboratories.com office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#'s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

QUALITY CONTROL DATA REPORT

2107-00175

HILLMANN CONSULTING

Date Reported	**07/23/2021**
Date Received	**07/21/2021**
Date Sampled	**07/21/2021**

Project: FARMLAND / 12741 LIMONITE, EASTVALE

Respectfully Submitted: Ken Zheng

Ken Zheng - President

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

1467

A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: 2107-175

Page 1 of 1

RUSH

Client Name	HILLMAN CONSULTING
E-mail	DAN@GSAENGINEERING.NET
Address	1745 ORANGEWOOD AVE #110 ORANGE
Report Attention	BRANDON C
Phone # / Fax: #	714 206 3916
Sampled By	NM DL
Project No./ Name	FARMLAND
Project Site	12741 LIMONITE EAST VALE

☐ Chilled ☒ Intact ☐ Seal

Turn Around Time Requested: ☒ Rush 8 12 24 48 Hours ☐ Normal — 6 HOUR RUSH THANKS

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	TPH (GRO) (6hr)	Methane (4hr)					Remarks
1	SG1-5	7.21.21	13:00	VAPOR		1	X															
2	SG2-5	"	13:10	"		1	X															
3	SG3-5	"	13:20	"		1	X															
4	SG4-13	"	13:45	"		1	~~X~~		X							X						POSSIBLE UST
5	SG5-14	"	14:00	"		1	~~X~~		X							X						POSSIBLE UST
6	SG11-5	"	15:30	"		1											X					* RUN
																		48 HR TAT				0.05 µg/L
																						Detection Limit

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]		7.21.21	15:45	[signature]	A&R	7.21.21	1545
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water; GW=Ground Water; WW=Waste Water; SD=Solid Waste; SL=Sludge; SS=Soil/Sediment; AR=Air; PP=Pure Product

Preservative Code: IC=Ice; HC=HCl; HN=HNO_3; SH=NaOH; ST=$Na_2S_2O_3$; HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag; G=Glass Container; ST= Steel Tube; B= Brass Tube; P=Plastic Bottle; V=VOA Vial; E= EnCore

APPENDIX C
Drilling Logs

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB1

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 12, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-2			<1	HB1-2		SM	Silty SAND; brown, very fine to fine grained, loose, no odor.
2-4						ML	Clayey SILT; gray-brown, low plasticity, dry, no odor.
5						SM	Silty SAND; brown, very fine to medium grained, some gravel, loose, no odor.
							Install Probe SG1 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB2

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 12, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-2			<1	HB2-2		ML	Sandy SILT; brown, very fine to fine sand, loose, no odor.
2-4						ML	Clayey SILT; gray-brown, low plasticity, dry, no odor.
5						SM	Silty SAND; brown, very fine to medium grained, 10% fine gravel, no odor.
							Install Probe SG2 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB3

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 12, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-2			<1	HB3-2		SM	Silty SAND; brown, very fine to fine grained, loose, no odor.
2-4						ML	Clayey SILT; gray-brown, low plasticity, dry, no odor.
5						SW	SAND; light brown, very fine to coarse grained, poorly sorted, some silt, dry, no odor.
							Install Probe SG3 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB4

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 12, 2021
TOTAL DEPTH OF HOLE 13 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
5			<1	HB4-5		SM	Silty SAND; greenish gray, very fine to fine grained, dry, no odor.
10			<1	HB4-10		ML	Clayey Sandy SILT; greenish-gray, low plasticity, damp, no odor.
13			<1	HB4-13		SM	Silty SAND; greenish-gray, very fine to coarse grained, some clay, 20% fine gravel, no odor. Refusal at 13 feet. Install Probe SG4 at 13 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB5

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 16, 2021
TOTAL DEPTH OF HOLE 14 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
2						ML	Sandy SILT; light brown, very fine sand, loose, no odor.
5			<1	HB5-5		SM	Silty SAND; light gray, very fine to medium grained, dry, no odor.
10			<1	HB5-10		SW	SAND; light brown, very fine to coarse grained, poorly sorted, 10% fine gravel, no odor.
14			<1	HB5-14		SM	Silty SAND; light brown, very fine to coarse grained, 20% fine gravel, no odor. Refusal at 14 feet. Install Probe SG5 at 14 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB6

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 16, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0							No Surficial Animal Waste
0-5			<1			ML	Sandy Clayey SILT; brown, low plasticity, dry. Install Probe SG6 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB7

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 16, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-1							Surficial Animal Waste 0-1 feet
1-5			<1			SM	Silty SAND; greenish gray, very fine to fine grained, some gravel, dry. Install Probe SG7 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB8

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 16, 2021
TOTAL DEPTH OF HOLE 10 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-1							Surficial Animal Waste 0-1 feet
1-5			<1			SM	Silty SAND; greenish gray, very fine to fine grained, some gravel, dry.
5-10			<1			ML	Sandy SILT; gray, very fine sand, low plasticity, dry. Install Probe SG8 at 10 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB9

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 16, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-1							Surficial Animal Waste 0-1 feet
1-5			<1			ML	Sandy SILT; gray, very fine sand, low plasticity, dry. Install Probe SG9 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB10

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 19, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0							No Surficial Animal Waste
0-2						SM	Silty SAND; brown, very fine to fine grained, 10% fine gravel, dry.
2-5			<1			ML	Clayey SILT; gray, low plasticity, dense, dry, no odor.
							Install Probe SG10 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB11

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 19, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-1.5							Surficial Animal Waste 0-1.5 feet
2						SM	Silty SAND; greenish gray, very fine grained, loose.
2-4						SW	Gravelly SAND; greenish gray, very fine to coarse grained, 10% fine gravel, dry.
5			<1			ML	Clayey SILT; gray, low plasticity, dense, dry, no odor.
							Install Probe SG11 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB12

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 19, 2021
TOTAL DEPTH OF HOLE 10 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-1.5							Surficial Animal Waste 0-1.5 feet
2						ML	Clayey SILT; dark greenish gray, low plasticity, soft, slightly moist.
2-10			<1			SM	Silty SAND; greenish gray, very fine sand, some clay, damp, no odor.
							Install Probe SG12 at 10 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB13

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 19, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-1							Surficial Animal Waste 0-1 feet
1-5						ML	Clayey SILT; greenish gray, low plasticity, hard, dense, no odor.
							Install Probe SG13 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB14

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 19, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-2							Surficial Animal Waste 0-2 feet
2-4						ML	Clayey SILT; greenish gray, low plasticity, hard, dense, no odor.
1-5						SW	SAND; greenish gray, very fine to fine grained, poorly sorted, 10% fine gravel, dry, no odor.
							Install Probe SG14 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

HILLMANN CONSULTING

DRILL/LITHOLOGIC LOG

BORING/WELL NUMBER HB15

PROJECT Leal Ranch
OWNER
LOCATION Limonite Avenue-58th St, Eastvale, CA
PROJECT NUMBER
DATE DRILLED July 19, 2021
TOTAL DEPTH OF HOLE 5 Feet
SURFACE ELEVATION
DEPTH TO WATER
SCREEN: DIA. **LENGTH** **SLOT SIZE**
CASING: DIA. **LENGTH** **TYPE**
DRILLING COMPANY Hillmann
DRILL METHOD Hand Auger
DRILLER Neil/Dan
LOG BY Dan Louks

DEPTH (FEET)	WELL CONST		PID (PPM)	SAMPLES		SOIL CLASS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	PIPE	FILL		NUMBER	BLOW	(USCS)	
0-1							Surficial Animal Waste 0-1 feet
1-5						ML	Sandy SILT; brown, low plasticity, very fine sand, dry. Install Probe SG15 at 5 feet. Install sand pack. Seal with bentonite and neat cement to surface.

APPENDIX D
Soil Gas Monitoring Data

SOIL GAS MONITORING DATA FORM

PROJECT: Dairy Farm

LOCATION: Leal Ranch, Eastvale, California

DATE: July 21, 2021

	VAPOR PROBE INFO							
PROBE ID	**SG1**	**SG2**	**SG3**	**SG4**	**SG5**			
PROBE DEPTH (ft)	5	5	5	13	14			
	EXTRACTION DATA							
Applied Vacuum (in. WC)	<5	<5	<5	<5	<5			
FLOW (L/min)	0.2	0.2	0.2	0.2	0.2			
Pore Volumes (borehole - sand pack)	3	3	3	3	3			
	MONITORING DATA							
OXYGEN (%)	17.9	19.5	19.0	18.8	17.8			
CARBON DIOXIDE (%)	3.6	1.65	2.88	2.83	4.68			
VOC by PID (ppm)	0.0	0.0	0.0	0.0	0.0			
Methane (% LEL)	0.0	0.0	0.0	0.0	0.0			

	VAPOR PROBE INFO							
PROBE ID								
PROBE DEPTH (ft)								
	EXTRACTION DATA							
Applied Vacuum (in. WC)								
FLOW (L/min)								
Pore Volumes (borehole - sand pack)								
	MONITORING DATA							
OXYGEN (%)								
CARBON DIOXIDE (%)								
VOC by PID (ppm)								

REMARKS:

SAMPLED BY: DL

SOIL GAS MONITORING DATA FORM

PROJECT: Dairy Farm

LOCATION: Leal Ranch, Eastvale, California

DATE: July 21, 2021

	VAPOR PROBE INFO							
PROBE ID	**SG6**	**SG7**	**SG8**	**SG9**	**SG10**	**SG11**	**SG12**	**SG13**
PROBE DEPTH (ft)	5	5	10	5	5	5	10	5
	EXTRACTION DATA							
Static Pressure (in. WC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FLOW (L/min)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pore Volumes (borehole - sand pack)	3	3	3	3	3	3	3	3
	MONITORING DATA							
OXYGEN (%)	20.1	6.8	3.7	9.2	20.2	3.0	4.3	11.5
CARBON DIOXIDE (%)	0.78	>5	>5	>5	1.21	>5	>5	>5
VOC by PID (ppm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methane (%LEL)	0.0	0.0	0.0	0.0	0.0	>100	2.7	0.0

	VAPOR PROBE INFO							
PROBE ID	**SG14**	**SG15**						
PROBE DEPTH (ft)	5	5						
	EXTRACTION DATA							
Static Pressure (in. WC)	0.0	0.0						
FLOW (L/min)	0.2	0.2						
Pore Volumes (borehole - sand pack)	3	3						
	MONITORING DATA							
OXYGEN (%)	4.1	20.1						
CARBON DIOXIDE (%)	>5	0.89						
VOC by PID (ppm)	0.0	0.0						
Methane (%LEL)	39	0.0			--			

REMARKS:

SAMPLED BY: DL

Appendix G

PRELIMINARY HYDROLOGY

ANALYSIS

FOR

LEAL RANCH
(TENTATIVE MAP NO. 38290)

NORTHWEST OF LIMONITE AVENUE AND HAMNER AVENUE

CITY OF EASTVALE, CA

November 29, 2021

Prepared for:

New Home Company

15231 Laguna Canyon Road, Suite 250

Irvine, CA 92618

(949) 382-7800

Prepared by:

Hunsaker & Associate Irvine, Inc.

3 Hughes

Irvine, CA 92618

(949)583-1010

PRELIMINARY HYDROLOGY ANALYSIS

For

LEAL RANCH

(TENTATIVE MAP NO. 38290)

NORTHWEST OF LIMONITE AVENUE AND HAMNER AVENUE

CITY OF EASTVALE, CA

Prepared Date: 11/29/2021



PREPARED UNDER THE SUPERVISION OF:

11/29/2021

Jianhua "Gary" Guan, R.C.E. 64519, Exp. 06/30/23 Date:

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- **B. STUDY PURPOSE**
- **C. METHODOLOGY**
- **D. DISCUSSION**
  - **Existing Condition**
  - **Proposed Condition**
  - **Hydrology Calculation Results**
- **E. UNIT HYDROGRAPH AND BASIN ROUTING**
- **F. CONCLUSION**
- **G. HYDROLOGIC DATA**

2 PROPOSED CONDITION HYDROLOGY CALCULATIONS

3 PROPOSED CONDITION HYDROLOGY MAP

4 UNIT HYDROGRAPH AND BASIN ROUTING CALCULATIONS

5 REFERENCES

- **AS-BUILT STORM DRAIN IMPROVEMENT PLANS ALONG LIMONITE AVENUE (MDP LINE "D-5", RCFCD DWG NO. 2-0-323)**
- **AS-BUILT STORM DRAIN IMPROVEMENT PLANS ALONG SCHOLAR WAY AND 58TH STREET (MDP LINE "D-3", RCFCD DWG NO. 2-0-308)**
- **AS-BUILT STORM DRAIN IMPROVEMENT PLANS ALONG HAMNER AVENUE (MDP LINE "E", RCFCD DWG NO. 2-0-310)**

SECTION 1
INTRODUCTION

A. PROJECT LOCATION

The project site for the proposed New Home Company development (Leal Ranch - Tentative Tract 38290) is currently a vacant and undeveloped land in the City of Eastvale, Riverside County. The site has a total area of approximately 159.2 acres. It is bounded to the north by 58th Street and existing residential homes beyond; to the east by Hamner Avenue and existing residential homes and a commercial shopping center (Eastvale Gateway); to the south by Limonite Avenue and existing residential homes and a commercial shopping center beyond; and to the west by Scholar Way and existing residential homes beyond; See Vicinity Map for details.

B. STUDY PURPOSE

The purpose of this study is to provide a hydrology analysis for the flow rates produced from the proposed site and assure the proposed flow rates would not exceed the existing storm drain design flow rates in the surrounding streets.

It also serves as the basis for analyzing and designing proposed and required storm drain drainage facilities. The study also demonstrates the proposed detention basin to reduce the increased storm runoffs due to the project development to the existing storm drain design flows. In addition, water quality treatment measures are proposed to ensure the developed flows to be treated prior to releasing to downstream watercourses.

C. METHODOLOGY

This hydrology study was prepared in accordance with the Riverside County Flood Control and Water Conservation District (RCFC&WCD) criteria and Hydrology Manual (Manual) dated April 1978. All pertinent information is included in this report.

The hydrologic calculations were prepared using the CivilD Rational Method computer program. The results of the hydrologic calculations were used to design the required storm drain facilities.

D. DISCUSSION

Existing Condition:

Current development in the project site is comprised of one of the city's last operating dairies, the Leal family home, and a horse farm.

The project site is part of the Eastvale Master Drainage Plan (MPD) improvements. There are existing storm drain systems in the surrounding streets – Limonite Avenue, Scholar Way, Hamner Avenue and 58th Street. The as-built storm drain plans can be

found in Reference Section 5. The storm drains in the surrounding streets discharge into Cleveland Avenue Detention Basin per Eastvale Master Drainage Plan.

The project site sheet flows from north to south and to the existing storm drains along Limonite Avenue. The project site is part of Limonite Avenue storm drain (Line D-5) per Eastvale Master Drainage Plan. There are existing storm drain stubs provided for the future developments

Proposed Condition:

The New Home Company is proposing to develop the project into 14 Planning Areas (Lots 1-14) and 19 lettered lots (A-S) to accommodate a mixed use development consisting of multi-family residential, general retail (shopping center), general offices, medical offices, hotels, civic center, parks and supporting infrastructure improvements.

Storm drain systems are provided to convey the project site runoffs to the existing storm drain systems. Majority of the project site flows will join the existing storm drain systems along Limonite Avenue, following the Eastvale Master Drainage Plan. There are catch basins provided for the street improvements along 58th Street, Hamner Avenue, Limonite Avenue and Scholar Way. The catch basin laterals will be proposed to join the existing storm drains along the streets.

In addition to on-site drainage improvements, the proposed project will provide 2 water quality basins and one combined water quality/detention Basin for water quality treatments and mitigation of flow increases due to the project developments.

Hydrology Calculation Results:

There are three Drainage Areas in the proposed condition hydrology study, only the 100-year storm hydrology analysis were performed.

Drainage Area “A” consists half street improvements along Hamner Avenue and the storm drain laterals are provided to join the existing 66” RCP per Eastvale Master Drainage Plan Line “E”. It is anticipated that the proposed catch basins and laterals would follow the Eastvale MPD and would not have adverse impacts to the existing storm drain systems.

Drainage Area “B” consists majority of the project developments and the proposed storm drains are proposed to join the existing storm drains along Limonite Avenue (MDP Line “D-5”). The total 100-year storm peak flow rate is about 316.4 cfs with 149.1 acres of tributary areas. The design flow rate per the as-built plans is about 160 cfs. The project flows are more than the design flows for the existing storm drain systems.

Drainage Area “C” consists half street improvements along 58th Street and Scholar Way and the storm drain laterals are provided to join the existing 60” RCP and 72” RCP per

Eastvale Master Drainage Plan Line "D-3". It is anticipated that the proposed catch basins and laterals would follow the Eastvale MPD and would not have adverse impacts to the existing storm drain systems.

E. UNIT HYDROGRAPH AND BASIN ROUTING ANALYSIS

Per the 100-year hydrology analysis, the proposed peak flow rates are above the existing storm drain design flow rates for Limonite Storm drain. The proposed 100-year flow rate is about 316.4 cfs and the design flow rate is about 160 cfs.

Detention Basin

The underground Detention Basin with the sizes of approximately 360-ft long, 120-ft wide and 6-ft deep was provided at the southwest corner of the project site to reduce the peak flow rates to the existing storm drain design flows. The water quality basin is proposed at the south of the proposed underground detention basin for water quality basin. Please note the proposed detention basin and water quality basin locations and sizes are preliminary and subject to change during the final design.

Unit hydrograph and basin routing analysis were performed for the 100-year storm. The detailed unit hydrograph and basin routing calculations including stage-storage-outflow information can be found in the Section 4 and the basin routing summary can be found in Table 1. As shown from Table 1, the proposed detention facilities can mitigate the flow increases and reduce the flows to 252.1 cfs (inflow to the basin) to 82.0 cfs (outflow from the basin) with a flow reduction of 170.1 cfs. The total 100-year peak flow rate for Limonite Avenue storm drain is about 151.9 cfs with the proposed detention basin; refer to Table 2 for detailed explanations.

Table 1 Basin Routing Summary for Tentative Map No. 38290
in City of Eastvale

Storm	Inflow	outflow	flow reduction
	(cfs)	(cfs)	(cfs)
100-year	252.1	82.0	170.1

Note: the inflow used in the basin routing analysis was from Node 71

Table 2 100-year Flow Summary for Limonite Avenue Storm Drain after the flow mitigation provided by detention basin

in City of Eastvale

Node	Flow without Mitigation	Flow reduction per Table 1	Flow after Mitigation	Ex. Storm Drain Design Flow Rate	Flow after Mitigation less than the ex. SD Design Flow?
	(cfs)	(cfs)	(cfs)	(cfs)	yes
75	322.0	170.1	151.9	160.0	

As shown from Table 2, the proposed flows (151.9 cfs) is less than the existing storm drain design flow rate (160 cfs) with the proposed basin and would have no adverse impacts to the existing downstream storm drain systems.

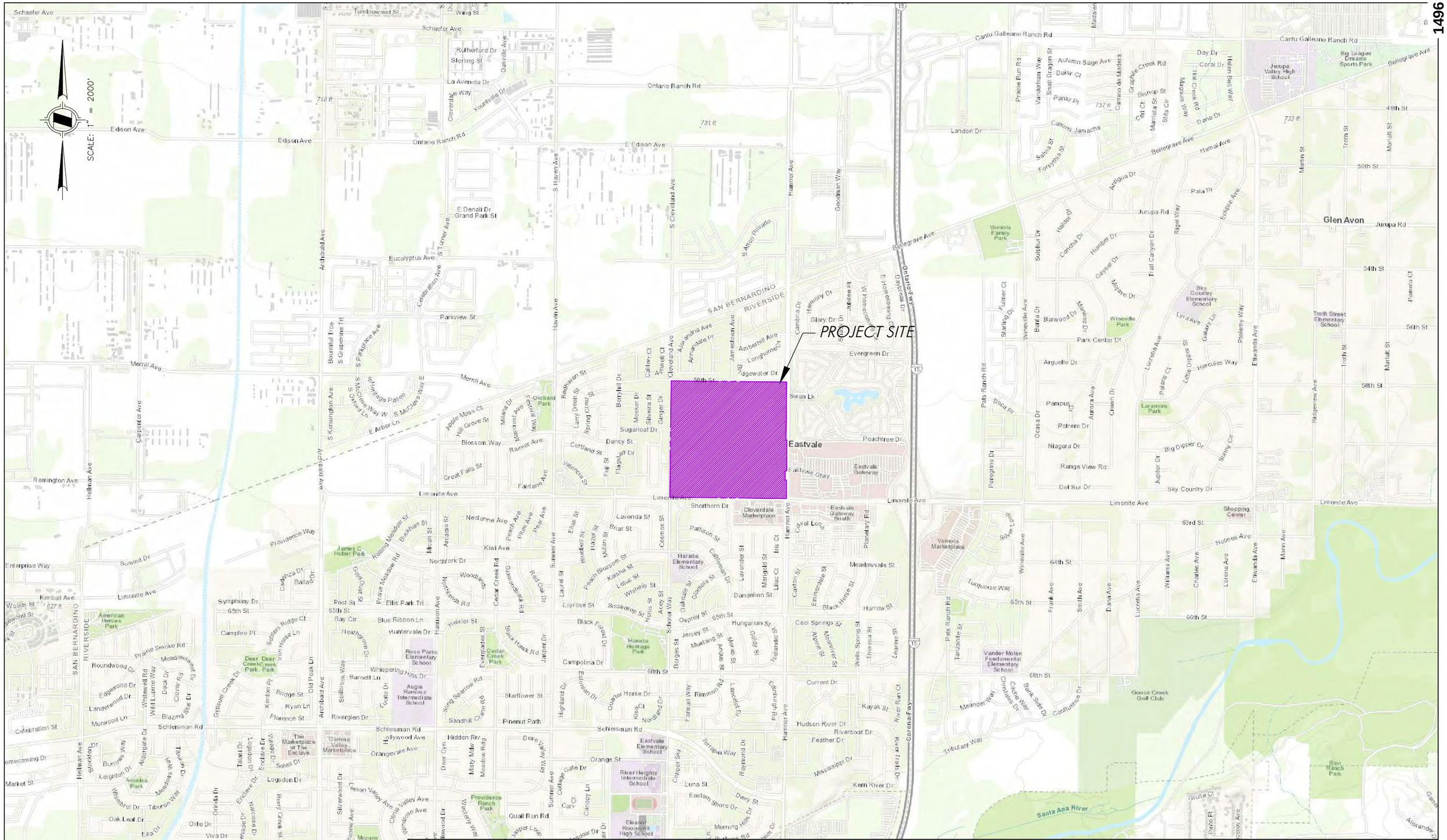
Water Quality:

A complete Water Quality Report is present under a separate cover.

F. CONCLUSION

The New Home Company is proposing to develop the project into 14 Planning Areas (Lots 1-14) and 19 lettered lots (A-S) to accommodate a mixed use development consisting of multi-family residential, general retail (shopping center), general offices, medical offices, hotels, civic center, parks and supporting infrastructure improvements. The proposed project would result in the storm runoff volume and peak flow rate increases due to the project developments at certain discharge points. The project proposes the water quality and detention basins to provide water quality treatments and flow increase mitigations. The flow rates after accounting for the proposed basins are below the design flow rates along Limonite Avenue. Catch basins and laterals are provided for the half street improvements along Scholar Way, 58th Street and Hamner Avenue.

As a result of the project development, it is our opinion that the project would follow Eastvale Master Drainage Plan and would have no adverse impacts to the downstream drainage systems.



DRAWN BY: TIH DATE: 10/18/2021 W.O.: 2749-44	PREPARED BY: HUNSAKER & ASSOCIATES IRVINE, INC. PLANNING ▪ ENGINEERING ▪ SURVEYING Three Hughes, Irvine, CA 92618 ▪ PH: (949) 583-1010 ▪ FX: (949) 583-0759	PREPARED FOR: THE NEW HOME COMPANY 15231 LAGUNA CANYON ROAD, SUITE 250 IRVINE, CA 92618 (949) 382–7800	"LEAL RANCH" - TTM 38290 NORTHWEST OF LIMONITE AVENUE & HAMNER AVENUE CITY OF EASTVALE, CALIFORNIA	VICINITY MAP

DATE: Oct. 23, 2021 02:29:50 PM FILE: F:\0736\Planning\SY_WQ\WQMP\EXHIBITS\PWQMP_VIC LEAL RANCH.dwg

G. HYDROLOGIC DATA

LEAL RANCH
RAINFALL = 0.50

2 YEAR, 1 HOUR

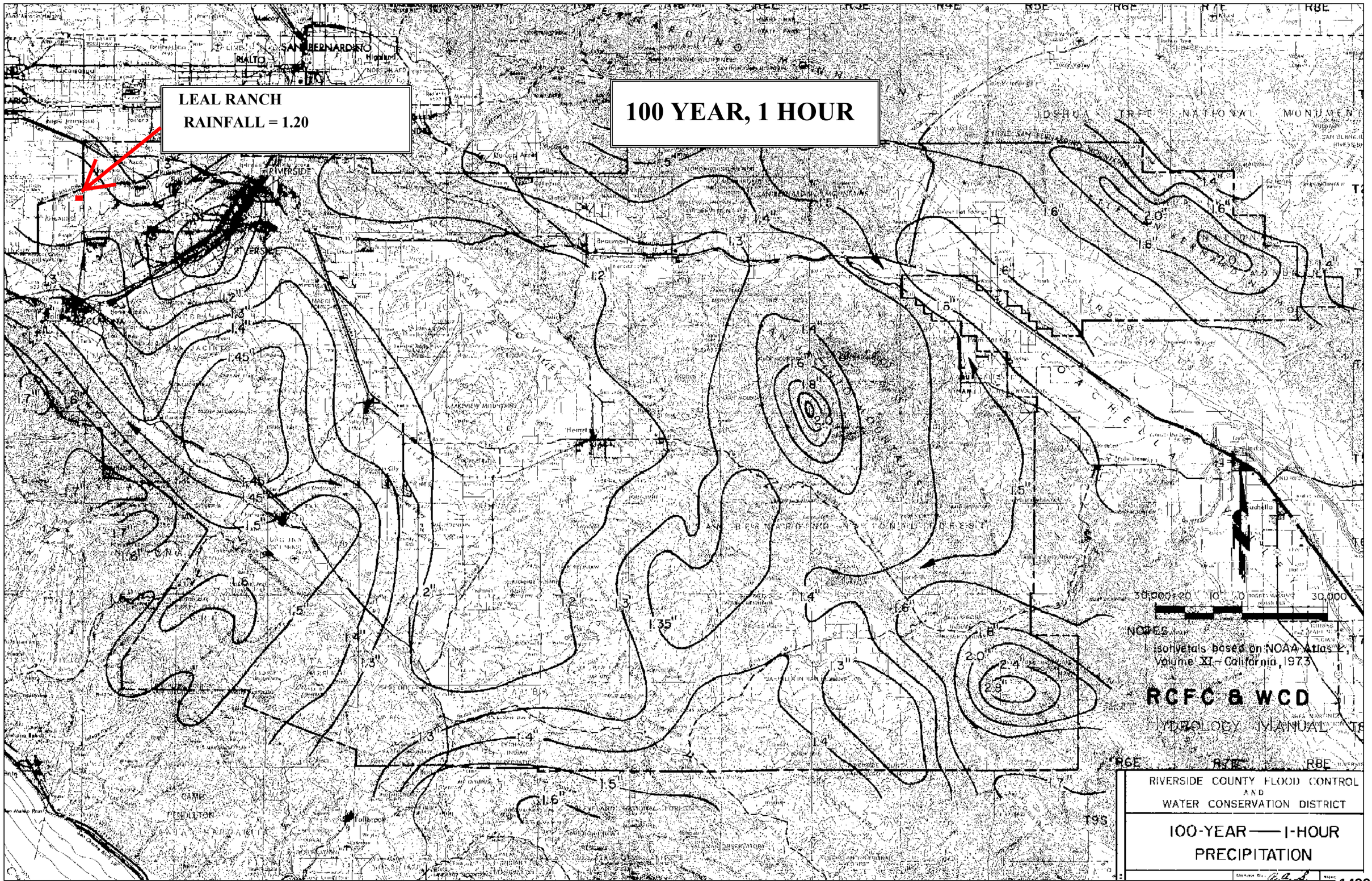
NOTES
1. Isohyetals based on NOAA Atlas 2, Volume XI – California, 1973

RCFC & WCD
HYDROLOGY MANUAL

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

2-YEAR — 1-HOUR PRECIPITATION

PLATE D-4.3


LEAL RANCH
RAINFALL = 1.20
100 YEAR, 1 HOUR
SAN BERNARDINO
RIALTO
RIVERSIDE
JOSHUA TREE NATIONAL MONUMENT
SAN JACINTO VALLEY
SAN BERNARDINO NATIONAL FOREST
CAMP PENDLETON
NOTES
Isohyetals based on NOAA Atlas 2, Volume XI - California, 1973
RCFC & WCD
HYDROLOGY MANUAL
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
100-YEAR — 1-HOUR PRECIPITATION

LEAL RANCH
RAINFALL = 0.55

SLOPE INTENSITY CURVE

NOTES
1. Slope of Intensity - Duration Curve based on District analysis of automatic recording rain gage records.

RCFC & WCD
HYDROLOGY MANUAL

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

SLOPE OF INTENSITY DURATION CURVE

1500

1501

LEGEND

—— SOILS GROUP BOUNDARY

A SOILS GROUP DESIGNATION

RCFC&WCD

HYDROLOGY MANUAL

N

0 FEET 5000

HYDROLOGIC SOILS GROUP MAP FOR CORONA–NORTH

PLATE C–1.14

SECTION 2

PROPOSED CONDITION HYDROLOGY CALCULATIONS

```
            Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2014 Version 9.0
       Rational Hydrology Study        Date: 11/24/21  File:lealp.out
------------------------------------------------------------------------
TENTATIVE MAP NO. 38290 - LEAL Developments
CITY OF Eastvale
PROPOSED CONDITION
100-YEAR STORM
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------


Program License Serial Number 6406

------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.200(In/Hr)
Slope of intensity duration curve = 0.5500




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        1.000 to Point/Station        2.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   550.000(Ft.)
Top (of initial area) elevation =   684.000(Ft.)
Bottom (of initial area) elevation =   680.500(Ft.)
Difference in elevation =     3.500(Ft.)
Slope =    0.00636  s(percent)=       0.64
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.293 min.
Rainfall intensity =      3.164(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      2.442(CFS)
Total initial stream area =        0.900(Ac.)
Pervious area fraction = 0.100
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        2.000 to Point/Station        3.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =   680.500(Ft.)
End of street segment elevation =   677.000(Ft.)
Length of street segment  =   510.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  48.000(Ft.)
Distance from crown to crossfall grade break  =  38.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.020
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  39.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =      3.832(CFS)
Depth of flow =   0.384(Ft.), Average velocity =   2.153(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  12.859(Ft.)
Flow velocity =   2.15(Ft/s)
Travel time =    3.95 min.     TC =   14.24  min.
 Adding area flow to street
COMMERCIAL subarea type
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Rainfall intensity =      2.647(In/Hr) for a   100.0 year storm
Subarea runoff =      2.711(CFS) for      1.200(Ac.)
Total runoff =      5.153(CFS)   Total area =       2.100(Ac.)
Street flow at end of street =      5.153(CFS)
Half street flow at end of street =      5.153(CFS)
Depth of flow =   0.417(Ft.), Average velocity =   2.310(Ft/s)
Flow width (from curb towards crown)=  14.503(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        4.000 to Point/Station        5.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =   677.000(Ft.)
Bottom (of initial area) elevation =   668.500(Ft.)
Difference in elevation =     8.500(Ft.)
Slope =    0.00850  s(percent)=       0.85
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.338 min.
Rainfall intensity =      2.864(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.855
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
```

```
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      5.144(CFS)
Total initial stream area =        2.100(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        6.000 to Point/Station        7.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   600.000(Ft.)
Top (of initial area) elevation =   670.000(Ft.)
Bottom (of initial area) elevation =   667.000(Ft.)
Difference in elevation =     3.000(Ft.)
Slope =    0.00500  s(percent)=       0.50
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.184 min.
Rainfall intensity =      3.023(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.856
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      3.366(CFS)
Total initial stream area =        1.300(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       10.000 to Point/Station       11.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   630.000(Ft.)
Top (of initial area) elevation =   674.000(Ft.)
Bottom (of initial area) elevation =   668.000(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00952  s(percent)=       0.95
TC = k(0.323)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.794 min.
Rainfall intensity =      3.083(In/Hr) for a   100.0 year storm
APARTMENT subarea type
Runoff Coefficient = 0.814
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Initial subarea runoff =     16.055(CFS)
Total initial stream area =        6.400(Ac.)
Pervious area fraction = 0.200


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       11.000 to Point/Station       12.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   668.000(Ft.)
Downstream point/station elevation =   667.500(Ft.)
```

```
Pipe length  =    65.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    16.055(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    16.055(CFS)
Normal flow depth in pipe =   16.38(In.)
Flow top width inside pipe =   22.34(In.)
Critical Depth =   17.34(In.)
Pipe flow velocity =      7.03(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =    10.95 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       12.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.95 min.
Rainfall intensity =      3.059(In/Hr) for a   100.0 year storm
Subarea runoff =      2.096(CFS) for      0.800(Ac.)
Total runoff =     18.151(CFS)   Total area =       7.200(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       12.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.95 min.
Rainfall intensity =      3.059(In/Hr) for a   100.0 year storm
Subarea runoff =      2.096(CFS) for      0.800(Ac.)
Total runoff =     20.248(CFS)   Total area =       8.000(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       12.000 to Point/Station       13.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   667.500(Ft.)
Downstream point/station elevation =   664.000(Ft.)
Pipe length  =   480.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    20.248(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    20.248(CFS)
Normal flow depth in pipe =   20.91(In.)
Flow top width inside pipe =   16.08(In.)
Critical Depth =   19.37(In.)
Pipe flow velocity =      6.97(Ft/s)
Travel time through pipe =    1.15 min.
```

```
Time of concentration (TC) =    12.10 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       13.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.514
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  38.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Time of concentration =    12.10 min.
Rainfall intensity =      2.895(In/Hr) for a   100.0 year storm
Subarea runoff =      2.976(CFS) for      2.000(Ac.)
Total runoff =     23.224(CFS)   Total area =      10.000(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       13.000 to Point/Station       14.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   664.000(Ft.)
Downstream point/station elevation =   661.300(Ft.)
Pipe length  =   440.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.224(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    23.224(CFS)
Normal flow depth in pipe =   21.14(In.)
Flow top width inside pipe =   22.26(In.)
Critical Depth =   20.23(In.)
Pipe flow velocity =      6.95(Ft/s)
Travel time through pipe =    1.06 min.
Time of concentration (TC) =    13.15 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       14.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.15 min.
Rainfall intensity =      2.765(In/Hr) for a   100.0 year storm
Subarea runoff =     23.155(CFS) for      9.800(Ac.)
Total runoff =     46.378(CFS)   Total area =      19.800(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       14.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
```

```
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.15 min.
Rainfall intensity =      2.765(In/Hr) for a   100.0 year storm
Subarea runoff =      8.270(CFS) for      3.500(Ac.)
Total runoff =     54.648(CFS)   Total area =      23.300(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       14.000 to Point/Station       15.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   661.300(Ft.)
Downstream point/station elevation =   661.100(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    54.648(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =    54.648(CFS)
Normal flow depth in pipe =   29.63(In.)
Flow top width inside pipe =   27.49(In.)
Critical Depth =   28.80(In.)
Pipe flow velocity =      8.78(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    13.21 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       15.000 to Point/Station       15.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.21 min.
Rainfall intensity =      2.759(In/Hr) for a   100.0 year storm
Subarea runoff =      1.178(CFS) for      0.500(Ac.)
Total runoff =     55.827(CFS)   Total area =      23.800(Ac.)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Process from Point/Station       15.000 to Point/Station       15.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.21 min.
Rainfall intensity =      2.759(In/Hr) for a   100.0 year storm
Subarea runoff =      1.414(CFS) for      0.600(Ac.)
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Total runoff =     57.241(CFS)   Total area =      24.400(Ac.)


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Process from Point/Station       15.000 to Point/Station       16.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   661.100(Ft.)
Downstream point/station elevation =   660.800(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    57.241(CFS)
Nearest computed pipe diameter  =     36.00(In.)
Calculated individual pipe flow  =    57.241(CFS)
Normal flow depth in pipe =   27.38(In.)
Flow top width inside pipe =   30.73(In.)
Critical Depth =   29.39(In.)
Pipe flow velocity =      9.92(Ft/s)
Travel time through pipe =    0.06 min.
Time of concentration (TC) =    13.27 min.


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Process from Point/Station       16.000 to Point/Station       16.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.27 min.
Rainfall intensity =      2.752(In/Hr) for a   100.0 year storm
Subarea runoff =      0.940(CFS) for      0.400(Ac.)
Total runoff =     58.181(CFS)   Total area =      24.800(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       16.000 to Point/Station       16.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.27 min.
Rainfall intensity =      2.752(In/Hr) for a   100.0 year storm
Subarea runoff =      3.997(CFS) for      1.700(Ac.)
Total runoff =     62.178(CFS)   Total area =      26.500(Ac.)


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Process from Point/Station       16.000 to Point/Station       17.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   660.800(Ft.)
Downstream point/station elevation =   660.500(Ft.)
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Pipe length  =    75.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    62.178(CFS)
Nearest computed pipe diameter  =     42.00(In.)
Calculated individual pipe flow  =    62.178(CFS)
Normal flow depth in pipe =   33.56(In.)
Flow top width inside pipe =   33.66(In.)
Critical Depth =   29.63(In.)
Pipe flow velocity =      7.54(Ft/s)
Travel time through pipe =    0.17 min.
Time of concentration (TC) =    13.43 min.


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Process from Point/Station       17.000 to Point/Station       17.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.43 min.
Rainfall intensity =      2.733(In/Hr) for a   100.0 year storm
Subarea runoff =      3.969(CFS) for      1.700(Ac.)
Total runoff =     66.147(CFS)   Total area =      28.200(Ac.)


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Process from Point/Station       17.000 to Point/Station       18.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   660.500(Ft.)
Downstream point/station elevation =   659.400(Ft.)
Pipe length  =   980.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    66.147(CFS)
Nearest computed pipe diameter  =     54.00(In.)
Calculated individual pipe flow  =    66.147(CFS)
Normal flow depth in pipe =   44.44(In.)
Flow top width inside pipe =   41.23(In.)
Critical Depth =   28.39(In.)
Pipe flow velocity =      4.72(Ft/s)
Travel time through pipe =    3.46 min.
Time of concentration (TC) =    16.89 min.


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Process from Point/Station       18.000 to Point/Station       18.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.851
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    16.89 min.
Rainfall intensity =      2.410(In/Hr) for a   100.0 year storm
Subarea runoff =      3.898(CFS) for      1.900(Ac.)
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Total runoff =     70.045(CFS)   Total area =      30.100(Ac.)


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Process from Point/Station       18.000 to Point/Station       18.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.851
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    16.89 min.
Rainfall intensity =      2.410(In/Hr) for a   100.0 year storm
Subarea runoff =      4.308(CFS) for      2.100(Ac.)
Total runoff =     74.353(CFS)   Total area =      32.200(Ac.)


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Process from Point/Station       18.000 to Point/Station       75.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   659.400(Ft.)
Downstream point/station elevation =   659.000(Ft.)
Pipe length  =   270.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    74.353(CFS)
Nearest computed pipe diameter  =     54.00(In.)
Calculated individual pipe flow  =    74.353(CFS)
Normal flow depth in pipe =   43.41(In.)
Flow top width inside pipe =   42.89(In.)
Critical Depth =   30.21(In.)
Pipe flow velocity =      5.42(Ft/s)
Travel time through pipe =    0.83 min.
Time of concentration (TC) =    17.72 min.


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Process from Point/Station       75.000 to Point/Station       75.000
**** CONFLUENCE OF MAIN STREAMS ****
_____________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     32.200(Ac.)
Runoff from this stream =     74.353(CFS)
Time of concentration =   17.72 min.
Rainfall intensity =     2.347(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station       20.000 to Point/Station       21.000
**** INITIAL AREA EVALUATION ****
_____________________________________________________________________________
Initial area flow distance =   820.000(Ft.)
Top (of initial area) elevation =   678.500(Ft.)
Bottom (of initial area) elevation =   673.000(Ft.)
Difference in elevation =     5.500(Ft.)
Slope =    0.00671  s(percent)=       0.67
TC = k(0.323)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.865 min.
```

```
Rainfall intensity =      2.799(In/Hr) for a   100.0 year storm
APARTMENT subarea type
Runoff Coefficient = 0.809
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Initial subarea runoff =     14.046(CFS)
Total initial stream area =        6.200(Ac.)
Pervious area fraction = 0.200


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Process from Point/Station       21.000 to Point/Station       22.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   673.000(Ft.)
Downstream point/station elevation =   670.300(Ft.)
Pipe length  =    75.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    14.046(CFS)
Nearest computed pipe diameter  =     18.00(In.)
Calculated individual pipe flow  =    14.046(CFS)
Normal flow depth in pipe =   11.14(In.)
Flow top width inside pipe =   17.48(In.)
Critical Depth =   16.58(In.)
Pipe flow velocity =     12.22(Ft/s)
Travel time through pipe =    0.10 min.
Time of concentration (TC) =    12.97 min.


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Process from Point/Station       22.000 to Point/Station       22.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.809
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    12.97 min.
Rainfall intensity =      2.787(In/Hr) for a   100.0 year storm
Subarea runoff =      9.923(CFS) for      4.400(Ac.)
Total runoff =     23.969(CFS)   Total area =      10.600(Ac.)


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Process from Point/Station       22.000 to Point/Station       23.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   670.300(Ft.)
Downstream point/station elevation =   668.300(Ft.)
Pipe length  =   140.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.969(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    23.969(CFS)
Normal flow depth in pipe =   17.58(In.)
Flow top width inside pipe =   21.25(In.)
Critical Depth =   20.81(In.)
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Pipe flow velocity =      9.72(Ft/s)
Travel time through pipe =    0.24 min.
Time of concentration (TC) =    13.21 min.


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Process from Point/Station       23.000 to Point/Station       23.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.21 min.
Rainfall intensity =      2.759(In/Hr) for a   100.0 year storm
Subarea runoff =      0.943(CFS) for      0.400(Ac.)
Total runoff =     24.912(CFS)   Total area =      11.000(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       23.000 to Point/Station       23.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.21 min.
Rainfall intensity =      2.759(In/Hr) for a   100.0 year storm
Subarea runoff =      0.943(CFS) for      0.400(Ac.)
Total runoff =     25.855(CFS)   Total area =      11.400(Ac.)


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Process from Point/Station       23.000 to Point/Station       24.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   668.300(Ft.)
Downstream point/station elevation =   666.300(Ft.)
Pipe length  =   395.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    25.855(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    25.855(CFS)
Normal flow depth in pipe =   21.96(In.)
Flow top width inside pipe =   26.57(In.)
Critical Depth =   20.79(In.)
Pipe flow velocity =      6.71(Ft/s)
Travel time through pipe =    0.98 min.
Time of concentration (TC) =    14.19 min.


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Process from Point/Station       24.000 to Point/Station       24.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
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```
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.19 min.
Rainfall intensity =      2.652(In/Hr) for a   100.0 year storm
Subarea runoff =      0.679(CFS) for      0.300(Ac.)
Total runoff =     26.534(CFS)   Total area =      11.700(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       24.000 to Point/Station       24.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.19 min.
Rainfall intensity =      2.652(In/Hr) for a   100.0 year storm
Subarea runoff =      0.679(CFS) for      0.300(Ac.)
Total runoff =     27.213(CFS)   Total area =      12.000(Ac.)


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Process from Point/Station       24.000 to Point/Station       38.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   666.300(Ft.)
Downstream point/station elevation =   666.000(Ft.)
Pipe length  =    60.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    27.213(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    27.213(CFS)
Normal flow depth in pipe =   23.06(In.)
Flow top width inside pipe =   25.30(In.)
Critical Depth =   21.35(In.)
Pipe flow velocity =      6.72(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =    14.34 min.


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Process from Point/Station       38.000 to Point/Station       38.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.34 min.
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Rainfall intensity =      2.637(In/Hr) for a   100.0 year storm
Subarea runoff =      0.900(CFS) for      0.400(Ac.)
Total runoff =     28.113(CFS)   Total area =      12.400(Ac.)


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Process from Point/Station       38.000 to Point/Station       38.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.34 min.
Rainfall intensity =      2.637(In/Hr) for a   100.0 year storm
Subarea runoff =      0.900(CFS) for      0.400(Ac.)
Total runoff =     29.013(CFS)   Total area =      12.800(Ac.)


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Process from Point/Station       38.000 to Point/Station       38.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =     12.800(Ac.)
Runoff from this stream =     29.013(CFS)
Time of concentration =   14.34 min.
Rainfall intensity =     2.637(In/Hr)


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Process from Point/Station       30.000 to Point/Station       31.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   635.000(Ft.)
Top (of initial area) elevation =   676.000(Ft.)
Bottom (of initial area) elevation =   669.500(Ft.)
Difference in elevation =     6.500(Ft.)
Slope =    0.01024  s(percent)=       1.02
TC = k(0.323)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.673 min.
Rainfall intensity =      3.102(In/Hr) for a   100.0 year storm
APARTMENT subarea type
Runoff Coefficient = 0.814
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Initial subarea runoff =     14.140(CFS)
Total initial stream area =        5.600(Ac.)
Pervious area fraction = 0.200


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Process from Point/Station       31.000 to Point/Station       32.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
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Upstream point/station elevation =   669.500(Ft.)
Downstream point/station elevation =   668.500(Ft.)
Pipe length  =    70.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    14.140(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    14.140(CFS)
Normal flow depth in pipe =   13.52(In.)
Flow top width inside pipe =   20.11(In.)
Critical Depth =   16.75(In.)
Pipe flow velocity =      8.63(Ft/s)
Travel time through pipe =    0.14 min.
Time of concentration (TC) =    10.81 min.


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Process from Point/Station       32.000 to Point/Station       32.000
**** SUBAREA FLOW ADDITION ****
_______________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.814
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    10.81 min.
Rainfall intensity =      3.080(In/Hr) for a   100.0 year storm
Subarea runoff =     11.280(CFS) for      4.500(Ac.)
Total runoff =     25.420(CFS)   Total area =      10.100(Ac.)


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Process from Point/Station       32.000 to Point/Station       33.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_______________________________________________________________________________
Upstream point/station elevation =   668.500(Ft.)
Downstream point/station elevation =   668.200(Ft.)
Pipe length  =    50.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    25.420(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    25.420(CFS)
Normal flow depth in pipe =   24.00(In.)
Flow top width inside pipe =   16.97(In.)
Critical Depth =   21.14(In.)
Pipe flow velocity =      6.81(Ft/s)
Travel time through pipe =    0.12 min.
Time of concentration (TC) =    10.93 min.


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Process from Point/Station       33.000 to Point/Station       33.000
**** SUBAREA FLOW ADDITION ****
_______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.93 min.
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Rainfall intensity =      3.061(In/Hr) for a   100.0 year storm
Subarea runoff =      1.049(CFS) for      0.400(Ac.)
Total runoff =     26.469(CFS)   Total area =      10.500(Ac.)


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Process from Point/Station       33.000 to Point/Station       33.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.93 min.
Rainfall intensity =      3.061(In/Hr) for a   100.0 year storm
Subarea runoff =      1.049(CFS) for      0.400(Ac.)
Total runoff =     27.519(CFS)   Total area =      10.900(Ac.)


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Process from Point/Station       33.000 to Point/Station       34.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   668.200(Ft.)
Downstream point/station elevation =   666.900(Ft.)
Pipe length  =   300.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    27.519(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    27.519(CFS)
Normal flow depth in pipe =   25.13(In.)
Flow top width inside pipe =   22.13(In.)
Critical Depth =   21.45(In.)
Pipe flow velocity =      6.26(Ft/s)
Travel time through pipe =    0.80 min.
Time of concentration (TC) =    11.73 min.


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Process from Point/Station       34.000 to Point/Station       34.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.812
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    11.73 min.
Rainfall intensity =      2.945(In/Hr) for a   100.0 year storm
Subarea runoff =     11.475(CFS) for      4.800(Ac.)
Total runoff =     38.993(CFS)   Total area =      15.700(Ac.)


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Process from Point/Station       34.000 to Point/Station       34.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
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APARTMENT subarea type
Runoff Coefficient = 0.812
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    11.73 min.
Rainfall intensity =      2.945(In/Hr) for a   100.0 year storm
Subarea runoff =     10.518(CFS) for      4.400(Ac.)
Total runoff =     49.511(CFS)   Total area =      20.100(Ac.)


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Process from Point/Station       34.000 to Point/Station       35.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   666.900(Ft.)
Downstream point/station elevation =   666.500(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    49.511(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =    49.511(CFS)
Normal flow depth in pipe =   23.93(In.)
Flow top width inside pipe =   29.47(In.)
Critical Depth =   27.82(In.)
Pipe flow velocity =     10.73(Ft/s)
Travel time through pipe =    0.05 min.
Time of concentration (TC) =    11.78 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       35.000 to Point/Station       35.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.856
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    11.78 min.
Rainfall intensity =      2.937(In/Hr) for a   100.0 year storm
Subarea runoff =      1.006(CFS) for      0.400(Ac.)
Total runoff =     50.517(CFS)   Total area =      20.500(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       35.000 to Point/Station       35.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.856
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    11.78 min.
```

```
Rainfall intensity =      2.937(In/Hr) for a   100.0 year storm
Subarea runoff =      0.754(CFS) for      0.300(Ac.)
Total runoff =     51.271(CFS)   Total area =      20.800(Ac.)


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Process from Point/Station       35.000 to Point/Station       38.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   666.500(Ft.)
Downstream point/station elevation =   666.000(Ft.)
Pipe length  =    60.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    51.271(CFS)
Nearest computed pipe diameter  =     33.00(In.)
Calculated individual pipe flow  =    51.271(CFS)
Normal flow depth in pipe =   29.44(In.)
Flow top width inside pipe =   20.48(In.)
Critical Depth =   28.23(In.)
Pipe flow velocity =      9.16(Ft/s)
Travel time through pipe =    0.11 min.
Time of concentration (TC) =    11.89 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       38.000 to Point/Station       38.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =     20.800(Ac.)
Runoff from this stream =     51.271(CFS)
Time of concentration =   11.89 min.
Rainfall intensity =     2.923(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       29.013     14.34                2.637
2       51.271     11.89                2.923
Largest stream flow has longer or shorter time of concentration
Qp =     51.271 + sum of
         Qa          Tb/Ta
         29.013 *    0.829 =     24.066
Qp =     75.337

Total of 2 streams to confluence:
Flow rates before confluence point:
      29.013      51.271
Area of streams before confluence:
       12.800       20.800
Results of confluence:
Total flow rate =     75.337(CFS)
Time of concentration =    11.892 min.
Effective stream area after confluence =     33.600(Ac.)


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Process from Point/Station       38.000 to Point/Station       39.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   666.000(Ft.)
Downstream point/station elevation =   664.000(Ft.)
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```
Pipe length  =   370.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    75.337(CFS)
Nearest computed pipe diameter  =     42.00(In.)
Calculated individual pipe flow  =    75.337(CFS)
Normal flow depth in pipe =   35.16(In.)
Flow top width inside pipe =   31.02(In.)
Critical Depth =   32.58(In.)
Pipe flow velocity =      8.76(Ft/s)
Travel time through pipe =    0.70 min.
Time of concentration (TC) =    12.60 min.


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Process from Point/Station       39.000 to Point/Station       39.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.810
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    12.60 min.
Rainfall intensity =      2.832(In/Hr) for a   100.0 year storm
Subarea runoff =     20.642(CFS) for      9.000(Ac.)
Total runoff =     95.979(CFS)   Total area =      42.600(Ac.)


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Process from Point/Station       39.000 to Point/Station       39.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.810
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    12.60 min.
Rainfall intensity =      2.832(In/Hr) for a   100.0 year storm
Subarea runoff =      8.945(CFS) for      3.900(Ac.)
Total runoff =    104.923(CFS)   Total area =      46.500(Ac.)


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Process from Point/Station       39.000 to Point/Station       40.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   664.000(Ft.)
Downstream point/station elevation =   663.500(Ft.)
Pipe length  =   180.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   104.923(CFS)
Nearest computed pipe diameter  =     54.00(In.)
Calculated individual pipe flow  =   104.923(CFS)
Normal flow depth in pipe =   44.91(In.)
Flow top width inside pipe =   40.42(In.)
Critical Depth =   36.15(In.)
Pipe flow velocity =      7.42(Ft/s)
Travel time through pipe =    0.40 min.
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Time of concentration (TC) =    13.00 min.


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Process from Point/Station       40.000 to Point/Station       40.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.855
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.00 min.
Rainfall intensity =      2.783(In/Hr) for a   100.0 year storm
Subarea runoff =      1.189(CFS) for      0.500(Ac.)
Total runoff =    106.112(CFS)   Total area =      47.000(Ac.)


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Process from Point/Station       40.000 to Point/Station       40.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.855
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.00 min.
Rainfall intensity =      2.783(In/Hr) for a   100.0 year storm
Subarea runoff =      1.189(CFS) for      0.500(Ac.)
Total runoff =    107.302(CFS)   Total area =      47.500(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       40.000 to Point/Station       41.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   663.500(Ft.)
Downstream point/station elevation =   662.000(Ft.)
Pipe length  =   340.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   107.302(CFS)
Nearest computed pipe diameter  =     51.00(In.)
Calculated individual pipe flow  =   107.302(CFS)
Normal flow depth in pipe =   39.94(In.)
Flow top width inside pipe =   42.04(In.)
Critical Depth =   37.09(In.)
Pipe flow velocity =      9.00(Ft/s)
Travel time through pipe =    0.63 min.
Time of concentration (TC) =    13.63 min.


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Process from Point/Station       41.000 to Point/Station       41.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
CONDOMINIUM subarea type
Runoff Coefficient = 0.739
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Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.350; Impervious fraction =  0.650
Time of concentration =    13.63 min.
Rainfall intensity =      2.711(In/Hr) for a   100.0 year storm
Subarea runoff =     10.821(CFS) for      5.400(Ac.)
Total runoff =    118.122(CFS)   Total area =      52.900(Ac.)


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Process from Point/Station       41.000 to Point/Station       42.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   662.000(Ft.)
Downstream point/station elevation =   660.900(Ft.)
Pipe length  =   200.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   118.122(CFS)
Nearest computed pipe diameter  =     51.00(In.)
Calculated individual pipe flow  =   118.122(CFS)
Normal flow depth in pipe =   39.42(In.)
Flow top width inside pipe =   42.73(In.)
Critical Depth =   38.93(In.)
Pipe flow velocity =     10.04(Ft/s)
Travel time through pipe =    0.33 min.
Time of concentration (TC) =    13.96 min.


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Process from Point/Station       42.000 to Point/Station       42.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.96 min.
Rainfall intensity =      2.676(In/Hr) for a   100.0 year storm
Subarea runoff =      1.142(CFS) for      0.500(Ac.)
Total runoff =    119.264(CFS)   Total area =      53.400(Ac.)


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Process from Point/Station       42.000 to Point/Station       42.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.854
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    13.96 min.
Rainfall intensity =      2.676(In/Hr) for a   100.0 year storm
Subarea runoff =      1.142(CFS) for      0.500(Ac.)
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Total runoff =    120.406(CFS)   Total area =      53.900(Ac.)


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Process from Point/Station       42.000 to Point/Station       43.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   660.900(Ft.)
Downstream point/station elevation =   660.500(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   120.406(CFS)
Nearest computed pipe diameter  =     45.00(In.)
Calculated individual pipe flow  =   120.406(CFS)
Normal flow depth in pipe =   34.41(In.)
Flow top width inside pipe =   38.18(In.)
Critical Depth =   39.62(In.)
Pipe flow velocity =     13.30(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    14.01 min.


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Process from Point/Station       43.000 to Point/Station       43.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.807
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    14.01 min.
Rainfall intensity =      2.671(In/Hr) for a   100.0 year storm
Subarea runoff =     47.444(CFS) for     22.000(Ac.)
Total runoff =    167.850(CFS)   Total area =      75.900(Ac.)


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Process from Point/Station       43.000 to Point/Station       43.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
UNDEVELOPED (good cover) subarea
Runoff Coefficient = 0.496
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  38.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Time of concentration =    14.01 min.
Rainfall intensity =      2.671(In/Hr) for a   100.0 year storm
Subarea runoff =      4.637(CFS) for      3.500(Ac.)
Total runoff =    172.487(CFS)   Total area =      79.400(Ac.)


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Process from Point/Station       43.000 to Point/Station       44.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   660.500(Ft.)
Downstream point/station elevation =   660.000(Ft.)
```

```
Pipe length  =   260.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   172.487(CFS)
Nearest computed pipe diameter  =     69.00(In.)
Calculated individual pipe flow  =   172.487(CFS)
Normal flow depth in pipe =   59.44(In.)
Flow top width inside pipe =   47.68(In.)
Critical Depth =   43.50(In.)
Pipe flow velocity =      7.25(Ft/s)
Travel time through pipe =    0.60 min.
Time of concentration (TC) =    14.60 min.


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Process from Point/Station       44.000 to Point/Station       44.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.60 min.
Rainfall intensity =      2.610(In/Hr) for a   100.0 year storm
Subarea runoff =      0.668(CFS) for      0.300(Ac.)
Total runoff =    173.155(CFS)   Total area =      79.700(Ac.)


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Process from Point/Station       44.000 to Point/Station       44.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.60 min.
Rainfall intensity =      2.610(In/Hr) for a   100.0 year storm
Subarea runoff =      0.668(CFS) for      0.300(Ac.)
Total runoff =    173.824(CFS)   Total area =      80.000(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       44.000 to Point/Station       45.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   660.000(Ft.)
Downstream point/station elevation =   659.800(Ft.)
Pipe length  =    45.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   173.824(CFS)
Nearest computed pipe diameter  =     60.00(In.)
Calculated individual pipe flow  =   173.824(CFS)
Normal flow depth in pipe =   49.22(In.)
Flow top width inside pipe =   46.07(In.)
Critical Depth =   45.33(In.)
Pipe flow velocity =     10.08(Ft/s)
Travel time through pipe =    0.07 min.
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Time of concentration (TC) =    14.68 min.


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Process from Point/Station       45.000 to Point/Station       45.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.806
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    14.68 min.
Rainfall intensity =      2.603(In/Hr) for a   100.0 year storm
Subarea runoff =      5.247(CFS) for      2.500(Ac.)
Total runoff =    179.070(CFS)   Total area =      82.500(Ac.)


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Process from Point/Station       45.000 to Point/Station       46.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   659.800(Ft.)
Downstream point/station elevation =   659.300(Ft.)
Pipe length  =   130.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   179.070(CFS)
Nearest computed pipe diameter  =     63.00(In.)
Calculated individual pipe flow  =   179.070(CFS)
Normal flow depth in pipe =   50.16(In.)
Flow top width inside pipe =   50.76(In.)
Critical Depth =   45.48(In.)
Pipe flow velocity =      9.68(Ft/s)
Travel time through pipe =    0.22 min.
Time of concentration (TC) =    14.90 min.


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Process from Point/Station       46.000 to Point/Station       46.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.90 min.
Rainfall intensity =      2.582(In/Hr) for a   100.0 year storm
Subarea runoff =      0.220(CFS) for      0.100(Ac.)
Total runoff =    179.290(CFS)   Total area =      82.600(Ac.)


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Process from Point/Station       46.000 to Point/Station       46.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.853
```

```
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    14.90 min.
Rainfall intensity =      2.582(In/Hr) for a   100.0 year storm
Subarea runoff =      0.220(CFS) for      0.100(Ac.)
Total runoff =    179.511(CFS)   Total area =      82.700(Ac.)


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Process from Point/Station       46.000 to Point/Station       61.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   659.300(Ft.)
Downstream point/station elevation =   659.000(Ft.)
Pipe length  =    95.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   179.511(CFS)
Nearest computed pipe diameter  =     66.00(In.)
Calculated individual pipe flow  =   179.511(CFS)
Normal flow depth in pipe =   51.38(In.)
Flow top width inside pipe =   54.82(In.)
Critical Depth =   45.01(In.)
Pipe flow velocity =      9.04(Ft/s)
Travel time through pipe =    0.18 min.
Time of concentration (TC) =    15.08 min.


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Process from Point/Station       61.000 to Point/Station       61.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =     82.700(Ac.)
Runoff from this stream =    179.511(CFS)
Time of concentration =   15.08 min.
Rainfall intensity =     2.565(In/Hr)


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Process from Point/Station       50.000 to Point/Station       51.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   560.000(Ft.)
Top (of initial area) elevation =   669.000(Ft.)
Bottom (of initial area) elevation =   663.500(Ft.)
Difference in elevation =     5.500(Ft.)
Slope =    0.00982  s(percent)=       0.98
TC = k(0.323)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.234 min.
Rainfall intensity =      3.174(In/Hr) for a   100.0 year storm
APARTMENT subarea type
Runoff Coefficient = 0.815
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Initial subarea runoff =     12.161(CFS)
Total initial stream area =        4.700(Ac.)
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Pervious area fraction = 0.200


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Process from Point/Station       51.000 to Point/Station       52.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   663.500(Ft.)
Downstream point/station elevation =   662.000(Ft.)
Pipe length  =   195.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    12.161(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    12.161(CFS)
Normal flow depth in pipe =   15.21(In.)
Flow top width inside pipe =   18.77(In.)
Critical Depth =   15.60(In.)
Pipe flow velocity =      6.51(Ft/s)
Travel time through pipe =    0.50 min.
Time of concentration (TC) =    10.73 min.


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Process from Point/Station       52.000 to Point/Station       52.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.73 min.
Rainfall intensity =      3.092(In/Hr) for a   100.0 year storm
Subarea runoff =      1.060(CFS) for      0.400(Ac.)
Total runoff =     13.221(CFS)   Total area =       5.100(Ac.)


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Process from Point/Station       52.000 to Point/Station       52.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
MOBILE HOME PARK subarea type
Runoff Coefficient = 0.792
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.250; Impervious fraction =  0.750
Time of concentration =    10.73 min.
Rainfall intensity =      3.092(In/Hr) for a   100.0 year storm
Subarea runoff =      0.980(CFS) for      0.400(Ac.)
Total runoff =     14.201(CFS)   Total area =       5.500(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       52.000 to Point/Station       53.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   662.000(Ft.)
Downstream point/station elevation =   660.400(Ft.)
```

```
Pipe length  =   375.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    14.201(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    14.201(CFS)
Normal flow depth in pipe =   18.89(In.)
Flow top width inside pipe =   19.65(In.)
Critical Depth =   16.29(In.)
Pipe flow velocity =      5.36(Ft/s)
Travel time through pipe =    1.17 min.
Time of concentration (TC) =    11.90 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       53.000 to Point/Station       53.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.811
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    11.90 min.
Rainfall intensity =      2.922(In/Hr) for a   100.0 year storm
Subarea runoff =      7.349(CFS) for      3.100(Ac.)
Total runoff =     21.549(CFS)   Total area =       8.600(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       53.000 to Point/Station       53.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.811
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    11.90 min.
Rainfall intensity =      2.922(In/Hr) for a   100.0 year storm
Subarea runoff =     12.327(CFS) for      5.200(Ac.)
Total runoff =     33.876(CFS)   Total area =      13.800(Ac.)


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Process from Point/Station       53.000 to Point/Station       54.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
_____________________________________________________________________________
Upstream point/station elevation =   660.400(Ft.)
Downstream point/station elevation =   660.000(Ft.)
Pipe length  =    45.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    33.876(CFS)
Nearest computed pipe diameter  =     30.00(In.)
Calculated individual pipe flow  =    33.876(CFS)
Normal flow depth in pipe =   21.75(In.)
Flow top width inside pipe =   26.79(In.)
Critical Depth =   23.74(In.)
Pipe flow velocity =      8.88(Ft/s)
Travel time through pipe =    0.08 min.
```

```
Time of concentration (TC) =    11.98 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       54.000 to Point/Station       54.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.856
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    11.98 min.
Rainfall intensity =      2.910(In/Hr) for a   100.0 year storm
Subarea runoff =      0.996(CFS) for      0.400(Ac.)
Total runoff =     34.872(CFS)   Total area =      14.200(Ac.)


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Process from Point/Station       54.000 to Point/Station       54.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.856
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    11.98 min.
Rainfall intensity =      2.910(In/Hr) for a   100.0 year storm
Subarea runoff =      0.996(CFS) for      0.400(Ac.)
Total runoff =     35.868(CFS)   Total area =      14.600(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       54.000 to Point/Station       61.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   660.000(Ft.)
Downstream point/station elevation =   659.000(Ft.)
Pipe length  =    70.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    35.868(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    35.868(CFS)
Normal flow depth in pipe =   21.42(In.)
Flow top width inside pipe =   21.86(In.)
Critical Depth =   24.32(In.)
Pipe flow velocity =     10.61(Ft/s)
Travel time through pipe =    0.11 min.
Time of concentration (TC) =    12.09 min.


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Process from Point/Station       61.000 to Point/Station       61.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =     14.600(Ac.)
```

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Runoff from this stream =     35.868(CFS)
Time of concentration =   12.09 min.
Rainfall intensity =     2.896(In/Hr)


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Process from Point/Station       56.000 to Point/Station       57.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   585.000(Ft.)
Top (of initial area) elevation =   667.500(Ft.)
Bottom (of initial area) elevation =   661.500(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.01026  s(percent)=       1.03
TC = k(0.323)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.324 min.
Rainfall intensity =      3.159(In/Hr) for a   100.0 year storm
APARTMENT subarea type
Runoff Coefficient = 0.815
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Initial subarea runoff =      9.267(CFS)
Total initial stream area =        3.600(Ac.)
Pervious area fraction = 0.200


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       57.000 to Point/Station       58.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   661.500(Ft.)
Downstream point/station elevation =   661.000(Ft.)
Pipe length  =    75.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =     9.267(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =     9.267(CFS)
Normal flow depth in pipe =   13.15(In.)
Flow top width inside pipe =   20.32(In.)
Critical Depth =   13.58(In.)
Pipe flow velocity =      5.85(Ft/s)
Travel time through pipe =    0.21 min.
Time of concentration (TC) =    10.54 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       58.000 to Point/Station       58.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.814
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    10.54 min.
Rainfall intensity =      3.124(In/Hr) for a   100.0 year storm
Subarea runoff =      7.886(CFS) for      3.100(Ac.)
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Total runoff =     17.153(CFS)   Total area =       6.700(Ac.)


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Process from Point/Station       58.000 to Point/Station       59.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   661.000(Ft.)
Downstream point/station elevation =   660.300(Ft.)
Pipe length  =   115.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    17.153(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    17.153(CFS)
Normal flow depth in pipe =   19.08(In.)
Flow top width inside pipe =   19.38(In.)
Critical Depth =   17.91(In.)
Pipe flow velocity =      6.40(Ft/s)
Travel time through pipe =    0.30 min.
Time of concentration (TC) =    10.84 min.


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Process from Point/Station       59.000 to Point/Station       59.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
APARTMENT subarea type
Runoff Coefficient = 0.814
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    10.84 min.
Rainfall intensity =      3.076(In/Hr) for a   100.0 year storm
Subarea runoff =      3.754(CFS) for      1.500(Ac.)
Total runoff =     20.907(CFS)   Total area =       8.200(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       59.000 to Point/Station       60.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   660.300(Ft.)
Downstream point/station elevation =   660.000(Ft.)
Pipe length  =    35.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    20.907(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    20.907(CFS)
Normal flow depth in pipe =   19.64(In.)
Flow top width inside pipe =   18.51(In.)
Critical Depth =   19.67(In.)
Pipe flow velocity =      7.60(Ft/s)
Travel time through pipe =    0.08 min.
Time of concentration (TC) =    10.91 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       60.000 to Point/Station       60.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
```

```
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.91 min.
Rainfall intensity =      3.064(In/Hr) for a   100.0 year storm
Subarea runoff =      1.312(CFS) for      0.500(Ac.)
Total runoff =     22.219(CFS)   Total area =       8.700(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       60.000 to Point/Station       60.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.91 min.
Rainfall intensity =      3.064(In/Hr) for a   100.0 year storm
Subarea runoff =      1.312(CFS) for      0.500(Ac.)
Total runoff =     23.532(CFS)   Total area =       9.200(Ac.)


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Process from Point/Station       60.000 to Point/Station       61.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   660.000(Ft.)
Downstream point/station elevation =   659.000(Ft.)
Pipe length  =    80.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.532(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    23.532(CFS)
Normal flow depth in pipe =   18.33(In.)
Flow top width inside pipe =   20.39(In.)
Critical Depth =   20.66(In.)
Pipe flow velocity =      9.15(Ft/s)
Travel time through pipe =    0.15 min.
Time of concentration (TC) =    11.06 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       61.000 to Point/Station       61.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 2 in normal stream number 3
Stream flow area =      9.200(Ac.)
Runoff from this stream =     23.532(CFS)
Time of concentration =   11.06 min.
Rainfall intensity =     3.042(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)
```

```
1      179.511     15.08                 2.565
2       35.868     12.09                 2.896
3       23.532     11.06                 3.042
Largest stream flow has longer time of concentration
Qp =    179.511 + sum of
         Qb         Ia/Ib
         35.868 *    0.886 =     31.772
         Qb         Ia/Ib
         23.532 *    0.843 =     19.845
Qp =    231.128

Total of 3 streams to confluence:
Flow rates before confluence point:
     179.511      35.868      23.532
Area of streams before confluence:
       82.700       14.600        9.200
Results of confluence:
Total flow rate =    231.128(CFS)
Time of concentration =    15.077 min.
Effective stream area after confluence =    106.500(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       61.000 to Point/Station       62.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   659.000(Ft.)
Downstream point/station elevation =   658.800(Ft.)
Pipe length  =    30.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   231.128(CFS)
Nearest computed pipe diameter  =     63.00(In.)
Calculated individual pipe flow  =   231.128(CFS)
Normal flow depth in pipe =   49.22(In.)
Flow top width inside pipe =   52.09(In.)
Critical Depth =   51.38(In.)
Pipe flow velocity =     12.74(Ft/s)
Travel time through pipe =    0.04 min.
Time of concentration (TC) =    15.12 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       62.000 to Point/Station       62.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    15.12 min.
Rainfall intensity =      2.561(In/Hr) for a   100.0 year storm
Subarea runoff =      0.437(CFS) for      0.200(Ac.)
Total runoff =    231.565(CFS)   Total area =     106.700(Ac.)


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Process from Point/Station       62.000 to Point/Station       62.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
```

```
Runoff Coefficient = 0.853
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    15.12 min.
Rainfall intensity =      2.561(In/Hr) for a   100.0 year storm
Subarea runoff =      0.437(CFS) for      0.200(Ac.)
Total runoff =    232.002(CFS)   Total area =     106.900(Ac.)


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Process from Point/Station       62.000 to Point/Station       71.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   658.800(Ft.)
Downstream point/station elevation =   657.500(Ft.)
Pipe length  =   350.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   232.002(CFS)
Nearest computed pipe diameter  =     69.00(In.)
Calculated individual pipe flow  =   232.002(CFS)
Normal flow depth in pipe =   57.00(In.)
Flow top width inside pipe =   52.31(In.)
Critical Depth =   50.62(In.)
Pipe flow velocity =     10.11(Ft/s)
Travel time through pipe =    0.58 min.
Time of concentration (TC) =    15.69 min.


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Process from Point/Station       71.000 to Point/Station       71.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 2 in normal stream number 1
Stream flow area =    106.900(Ac.)
Runoff from this stream =    232.002(CFS)
Time of concentration =   15.69 min.
Rainfall intensity =     2.509(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       65.000 to Point/Station       66.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   650.000(Ft.)
Top (of initial area) elevation =   666.500(Ft.)
Bottom (of initial area) elevation =   660.000(Ft.)
Difference in elevation =     6.500(Ft.)
Slope =    0.01000  s(percent)=       1.00
TC = k(0.323)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.824 min.
Rainfall intensity =      3.078(In/Hr) for a   100.0 year storm
APARTMENT subarea type
Runoff Coefficient = 0.814
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Initial subarea runoff =     10.519(CFS)
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Total initial stream area =        4.200(Ac.)
Pervious area fraction = 0.200


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Process from Point/Station       66.000 to Point/Station       67.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   660.000(Ft.)
Downstream point/station elevation =   659.500(Ft.)
Pipe length  =    55.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    10.519(CFS)
Nearest computed pipe diameter  =     21.00(In.)
Calculated individual pipe flow  =    10.519(CFS)
Normal flow depth in pipe =   12.90(In.)
Flow top width inside pipe =   20.44(In.)
Critical Depth =   14.50(In.)
Pipe flow velocity =      6.79(Ft/s)
Travel time through pipe =    0.14 min.
Time of concentration (TC) =    10.96 min.


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Process from Point/Station       67.000 to Point/Station       67.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.96 min.
Rainfall intensity =      3.057(In/Hr) for a   100.0 year storm
Subarea runoff =      0.524(CFS) for      0.200(Ac.)
Total runoff =     11.043(CFS)   Total area =       4.400(Ac.)


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Process from Point/Station       67.000 to Point/Station       67.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    10.96 min.
Rainfall intensity =      3.057(In/Hr) for a   100.0 year storm
Subarea runoff =      0.524(CFS) for      0.200(Ac.)
Total runoff =     11.567(CFS)   Total area =       4.600(Ac.)


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Process from Point/Station       67.000 to Point/Station       67.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
APARTMENT subarea type
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Runoff Coefficient = 0.813
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.200; Impervious fraction =  0.800
Time of concentration =    10.96 min.
Rainfall intensity =      3.057(In/Hr) for a   100.0 year storm
Subarea runoff =     10.693(CFS) for      4.300(Ac.)
Total runoff =     22.260(CFS)   Total area =       8.900(Ac.)


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Process from Point/Station       67.000 to Point/Station       70.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   659.500(Ft.)
Downstream point/station elevation =   658.000(Ft.)
Pipe length  =   235.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    22.260(CFS)
Nearest computed pipe diameter  =     27.00(In.)
Calculated individual pipe flow  =    22.260(CFS)
Normal flow depth in pipe =   20.02(In.)
Flow top width inside pipe =   23.65(In.)
Critical Depth =   19.81(In.)
Pipe flow velocity =      7.04(Ft/s)
Travel time through pipe =    0.56 min.
Time of concentration (TC) =    11.51 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       70.000 to Point/Station       70.000
**** SUBAREA FLOW ADDITION ****
________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.856
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    11.51 min.
Rainfall intensity =      2.975(In/Hr) for a   100.0 year storm
Subarea runoff =      1.528(CFS) for      0.600(Ac.)
Total runoff =     23.788(CFS)   Total area =       9.500(Ac.)


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Process from Point/Station       70.000 to Point/Station       71.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
________________________________________________________________________
Upstream point/station elevation =   658.000(Ft.)
Downstream point/station elevation =   657.500(Ft.)
Pipe length  =    40.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =    23.788(CFS)
Nearest computed pipe diameter  =     24.00(In.)
Calculated individual pipe flow  =    23.788(CFS)
Normal flow depth in pipe =   18.52(In.)
Flow top width inside pipe =   20.15(In.)
Critical Depth =   20.76(In.)
Pipe flow velocity =      9.15(Ft/s)
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```
Travel time through pipe =    0.07 min.
Time of concentration (TC) =    11.59 min.


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Process from Point/Station       71.000 to Point/Station       71.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =      9.500(Ac.)
Runoff from this stream =     23.788(CFS)
Time of concentration =   11.59 min.
Rainfall intensity =     2.965(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1      232.002     15.69                2.509
2       23.788     11.59                2.965
Largest stream flow has longer time of concentration
Qp =    232.002 + sum of
         Qb         Ia/Ib
         23.788 *    0.846 =     20.133
Qp =    252.135

Total of 2 streams to confluence:
Flow rates before confluence point:
     232.002      23.788
Area of streams before confluence:
      106.900        9.500
Results of confluence:
Total flow rate =    252.135(CFS)
Time of concentration =    15.693 min.
Effective stream area after confluence =    116.400(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       71.000 to Point/Station       72.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   657.500(Ft.)
Downstream point/station elevation =   657.000(Ft.)
Pipe length  =   275.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   252.135(CFS)
Nearest computed pipe diameter  =     81.00(In.)
Calculated individual pipe flow  =   252.135(CFS)
Normal flow depth in pipe =   67.88(In.)
Flow top width inside pipe =   59.69(In.)
Critical Depth =   50.50(In.)
Pipe flow velocity =      7.87(Ft/s)
Travel time through pipe =    0.58 min.
Time of concentration (TC) =    16.28 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       72.000 to Point/Station       72.000
**** SUBAREA FLOW ADDITION ****
______________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.852
Decimal fraction soil group A = 1.000
```

```
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    16.28 min.
Rainfall intensity =      2.459(In/Hr) for a   100.0 year storm
Subarea runoff =      1.047(CFS) for      0.500(Ac.)
Total runoff =    253.182(CFS)   Total area =     116.900(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       72.000 to Point/Station       75.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
______________________________________________________________________________
Upstream point/station elevation =   657.000(Ft.)
Downstream point/station elevation =   656.500(Ft.)
Pipe length  =    90.00(Ft.)   Manning's N = 0.013
No. of pipes = 1  Required pipe flow  =   253.182(CFS)
Nearest computed pipe diameter  =     66.00(In.)
Calculated individual pipe flow  =   253.182(CFS)
Normal flow depth in pipe =   54.75(In.)
Flow top width inside pipe =   49.64(In.)
Critical Depth =   53.21(In.)
Pipe flow velocity =     12.01(Ft/s)
Travel time through pipe =    0.12 min.
Time of concentration (TC) =    16.40 min.


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       75.000 to Point/Station       75.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =    116.900(Ac.)
Runoff from this stream =    253.182(CFS)
Time of concentration =   16.40 min.
Rainfall intensity =     2.449(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       74.353     17.72           2.347
2      253.182     16.40           2.449
Largest stream flow has longer or shorter time of concentration
Qp =    253.182 + sum of
         Qa          Tb/Ta
         74.353 *    0.925 =     68.809
Qp =    321.991

Total of 2 main streams to confluence:
Flow rates before confluence point:
      74.353     253.182
Area of streams before confluence:
       32.200      116.900


Results of confluence:
Total flow rate =    321.991(CFS)
Time of concentration =    16.400 min.
```

```
Effective stream area after confluence  =    149.100(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station        1.000 to Point/Station       80.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   640.000(Ft.)
Top (of initial area) elevation =   684.000(Ft.)
Bottom (of initial area) elevation =   678.000(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00937  s(percent)=       0.94
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.120 min.
Rainfall intensity =      3.194(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.858
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.917(CFS)
Total initial stream area =        0.700(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       81.000 to Point/Station       82.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   655.000(Ft.)
Top (of initial area) elevation =   679.000(Ft.)
Bottom (of initial area) elevation =   676.500(Ft.)
Difference in elevation =     2.500(Ft.)
Slope =    0.00382  s(percent)=       0.38
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.226 min.
Rainfall intensity =      2.878(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.855
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.970(CFS)
Total initial stream area =        0.800(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       81.000 to Point/Station       83.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   310.000(Ft.)
Top (of initial area) elevation =   679.000(Ft.)
Bottom (of initial area) elevation =   677.500(Ft.)
Difference in elevation =     1.500(Ft.)
Slope =    0.00484  s(percent)=       0.48
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
```

```
Initial area time of concentration =    8.644 min.
Rainfall intensity =      3.483(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.860
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.797(CFS)
Total initial stream area =        0.600(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       84.000 to Point/Station       85.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------
Initial area flow distance =   300.000(Ft.)
Top (of initial area) elevation =   678.500(Ft.)
Bottom (of initial area) elevation =   676.000(Ft.)
Difference in elevation =     2.500(Ft.)
Slope =    0.00833  s(percent)=       0.83
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.653 min.
Rainfall intensity =      3.725(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.861
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.604(CFS)
Total initial stream area =        0.500(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       86.000 to Point/Station       87.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------
Initial area flow distance =   590.000(Ft.)
Top (of initial area) elevation =   680.500(Ft.)
Bottom (of initial area) elevation =   673.500(Ft.)
Difference in elevation =     7.000(Ft.)
Slope =    0.01186  s(percent)=       1.19
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.346 min.
Rainfall intensity =      3.337(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.859
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      6.303(CFS)
Total initial stream area =        2.200(Ac.)
Pervious area fraction = 0.100
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       88.000 to Point/Station       89.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =   674.500(Ft.)
Bottom (of initial area) elevation =   663.500(Ft.)
Difference in elevation =    11.000(Ft.)
Slope =    0.01100  s(percent)=       1.10
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.718 min.
Rainfall intensity =      2.946(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.856
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      5.800(CFS)
Total initial stream area =        2.300(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       89.000 to Point/Station       90.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   700.000(Ft.)
Top (of initial area) elevation =   663.500(Ft.)
Bottom (of initial area) elevation =   658.500(Ft.)
Difference in elevation =     5.000(Ft.)
Slope =    0.00714  s(percent)=       0.71
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.076 min.
Rainfall intensity =      3.039(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.857
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      3.384(CFS)
Total initial stream area =        1.300(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       91.000 to Point/Station       92.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------------
Initial area flow distance =   400.000(Ft.)
Top (of initial area) elevation =   660.500(Ft.)
Bottom (of initial area) elevation =   659.100(Ft.)
Difference in elevation =     1.400(Ft.)
Slope =    0.00350  s(percent)=       0.35
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   10.212 min.
```

```
Rainfall intensity =      3.178(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.858
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  32.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      2.725(CFS)
Total initial stream area =        1.000(Ac.)
Pervious area fraction = 0.100
End of computations, total study area =          164.00 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.202
Area averaged RI index number =  32.2
```

SECTION 3
PROPOSED CONDITION HYDROLOGY

MAP

LEGEND

- MAJOR DRAINAGE BOUNDARY
- MINOR DRAINAGE BOUNDARY
- 100 — NODE NUMBER
- A / 1.0 — AREA DESIGNATION / AREA ACREAGE (IN ACRES)
- Q100=8.0cfs, t=13.0 — PEAK FLOW RATE / TIME OF CONCENTRATION
- TQ100=10.0cfs, t=15.2 — PEAK CONFLUENCE FLOW RATE / TIME OF CONCENTRATION
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- A — SOIL GROUP

1" = 100'

100 50 0 100 300

PREPARED BY:

HUNSAKER & ASSOCIATES
I R V I N E , I N C .
PLANNING ▪ ENGINEERING ▪ SURVEYING
Three Hughes • Irvine, CA 92618 • PH: (949) 583-1010 • FX: (949) 583-0759

PREPARED FOR:

NEW HOME COMPANY
15231 LAGUNA CANYON RD., SUITE 250
IRVINE, CA 92618
PH: (949) 382-7800

NOTE:
THE DETENTION BASIN AND WATER QUALITY BASIN SIZES AND LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE

HYDROLOGY MAP
TENTATIVE MAP NO. 38290
LEAL RANCH
PROPOSED CONDITION
CITY OF EASTVALE

SECTION 4
UNIT HYDROGRAPH AND BASIN ROUTING CALCULATIONS

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2014, Version 9.0
              Study date  11/24/21 File: lealp1100.out


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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 6406

----------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



----------------------------------------------------------------------
TENTATIVE MAP NO. 38290 - LEAL Developments
CITY OF Eastvale
PROPOSED CONDITION
100-YEAR STORM
----------------------------------------------------------------------
Drainage Area =     116.40(Ac.)  =      0.182 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =     116.40(Ac.)  =      0.182
Sq. Mi.
Length along longest watercourse =    3525.00(Ft.)
Length along longest watercourse measured to centroid =    1700.00(Ft.)
Length along longest watercourse =      0.668 Mi.
Length along longest watercourse measured to centroid =      0.322 Mi.
Difference in elevation =      21.00(Ft.)
Slope along watercourse =     31.4553 Ft./Mi.
Average Manning's 'N' = 0.021
Lag time =    0.147 Hr.
Lag time =     8.79 Min.
25% of lag time =     2.20 Min.
40% of lag time =     3.52 Min.
Unit time =     5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      116.40          0.50                58.20

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
      116.40          1.20               139.68

STORM EVENT (YEAR) =  100.00
Area Averaged 2-Year Rainfall =    0.500(In)
Area Averaged 100-Year Rainfall =    1.200(In)
```

```
Point rain (area averaged) =    1.200(In)
Areal adjustment factor =   99.89 %
Adjusted average point rain =    1.199(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
   116.400           32.20          0.780
 Total Area Entered =    116.40(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
32.2  32.2      0.740     0.780        0.221       1.000      0.221
                                                  Sum (F) =   0.221
Area averaged mean soil loss (F) (In/Hr) =  0.221
Minimum soil loss rate ((In/Hr)) =  0.110
(for 24 hour storm duration)
Soil low loss rate (decimal) =   0.276
------------------------------------------------------------------------
Slope of intensity-duration curve for a 1 hour storm =0.5500
------------------------------------------------------------------------

             U n i t  H y d r o g r a p h
                    VALLEY S-Curve
------------------------------------------------------------------------
             Unit Hydrograph Data
------------------------------------------------------------------------
Unit time period   Time % of lag   Distribution   Unit Hydrograph
    (hrs)                          Graph %           (CFS)
------------------------------------------------------------------------
    1   0.083         56.860          7.518             8.819
    2   0.167        113.719         31.667            37.148
    3   0.250        170.579         27.543            32.311
    4   0.333        227.438         10.935            12.828
    5   0.417        284.298          6.287             7.376
    6   0.500        341.157          4.287             5.029
    7   0.583        398.017          3.113             3.652
    8   0.667        454.877          2.195             2.575
    9   0.750        511.736          1.744             2.046
   10   0.833        568.596          1.382             1.621
   11   0.917        625.455          1.052             1.234
   12   1.000        682.315          0.794             0.931
   13   1.083        739.174          0.590             0.692
   14   1.167        796.034          0.569             0.667
   15   1.250        852.893          0.324             0.380
                               Sum = 100.000   Sum=     117.309
------------------------------------------------------------------------

 The following loss rate calculations reflect use of the minimum calculated loss
 rate subtracted from the Storm Rain to produce the maximum Effective Rain value

 Unit Time   Pattern   Storm Rain     Loss rate(In./Hr)     Effective
      (Hr.)  Percent   (In/Hr)         Max   |   Low        (In/Hr)
  1   0.08     3.30      0.475       (  0.221)       0.131        0.344
  2   0.17     4.20      0.604       (  0.221)       0.167        0.437
  3   0.25     4.40      0.633       (  0.221)       0.175        0.458
  4   0.33     4.80      0.690       (  0.221)       0.191        0.500
  5   0.42     5.20      0.748       (  0.221)       0.206        0.542
  6   0.50     6.20      0.892          0.221    (  0.246)       0.671
  7   0.58     6.80      0.978          0.221    (  0.270)       0.758
  8   0.67     8.80      1.266          0.221    (  0.349)       1.045
```

```
 9   0.75    13.90      1.999          0.221    (  0.552)        1.779
10   0.83    31.40      4.517          0.221    (  1.247)        4.296
11   0.92     7.20      1.036          0.221    (  0.286)        0.815
12   1.00     3.80      0.547       (  0.221)       0.151        0.396
           (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    12.0
     Flood volume = Effective rainfall      1.00(In)
      times area     116.4(Ac.)/[(In)/(Ft.)] =       9.7(Ac.Ft)
     Total soil loss =      0.20(In)
     Total soil loss =     1.895(Ac.Ft)
     Total rainfall =      1.20(In)
     Flood volume =      423975.3 Cubic Feet
     Total soil loss =       82528.3 Cubic Feet
     ---------------------------------------------------------------------
      Peak flow rate of this hydrograph =    252.104(CFS)
     ---------------------------------------------------------------------
     +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         1 - H O U R    S T O R M
                    R u n o f f      H y d r o g r a p h
     ---------------------------------------------------------------------
                Hydrograph in   5   Minute intervals ((CFS))

     ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0       75.0     150.0     225.0     300.0
-------------------------------------------------------------------------
  0+ 5       0.0209      3.03  Q         |         |         |         |
  0+10       0.1354     16.63  V Q       |         |         |         |
  0+15       0.3518     31.41  |V  Q     |         |         |         |
  0+20       0.6272     39.99  | V  Q    |         |         |         |
  0+25       0.9462     46.32  |  V  Q   |         |         |         |
  0+30       1.3116     53.05  |    V Q  |         |         |         |
  0+35       1.7413     62.40  |      VQ |         |         |         |
  0+40       2.2545     74.51  |        Q|         |         |         |
  0+45       2.9272     97.67  |         | VQ      |         |         |
  0+50       4.0269    159.68  |         |     V   |Q        |         |
  0+55       5.7631    252.10  |         |         |  V      |  Q      |
  1+ 0       7.2336    213.51  |         |         |       QV|         |
  1+ 5       8.0753    122.21  |         |     Q   |         |  V      |
  1+10       8.5815     73.51  |        Q|         |         |    V    |
  1+15       8.9012     46.42  |      Q  |         |         |     V   |
  1+20       9.1273     32.82  |    Q    |         |         |      V  |
  1+25       9.2913     23.82  |  Q      |         |         |       V |
  1+30       9.4169     18.24  | Q       |         |         |       V |
  1+35       9.5134     14.01  |Q        |         |         |        V|
  1+40       9.5862     10.58  |Q        |         |         |        V|
  1+45       9.6404      7.87  |Q        |         |         |        V|
  1+50       9.6804      5.81  Q         |         |         |        V|
  1+55       9.7113      4.48  Q         |         |         |        V|
  2+ 0       9.7281      2.45  Q         |         |         |        V|
  2+ 5       9.7321      0.57  Q         |         |         |        V|
  2+10       9.7331      0.15  Q         |         |         |        V|
-------------------------------------------------------------------------
```

UNDERGROUND DETENTION BASIN
Total Stage-Storage-Outflow Summary

Elevation	Depth	Volume		Discharge
		(ft^3)	(ac-ft)	(cfs)
642.00	0	0	0	0
643.00	1.00	43,200	0.99	6.86
644.00	2.00	86,400	1.98	19.77
645.00	3.00	129,600	2.98	36.19
646.00	4.00	172,800	3.97	55.37
647.00	5.00	216,000	4.96	70.83
648.00	6.00	259,200	5.95	82.74

Note: Refer to Basin Volume Calculations for Volumes and
Refer to the outflow vs. depth calcualtions for discharges

Provided underground Detention Basin
Designer: Gary Guan
Project: Leal Ranch
Location: Eastvale, Riverside County
Date: 11/24/2021

Elevation	$Depth_{incremental}$	$Depth_{cumulative}$	Area	$Area_{average}$	$Volume_{incremental}$		$Volume_{cumulative}$	
(ft)	(ft)	(ft)	(ft^2)	(ft^2)	(ft^3)	(ac-ft)	(ft^3)	(ac-ft)
642.00			43200				0	0
	1.00			43200	43200	0.992		
643.00		1.00	43200				43200	0.99
	1.00			43200	43200	0.992		
644.00		2.00	43200				86400	1.98
	1.00			43200	43200	0.992		
645.00		3.00	43200				129600	2.98
	1.00			43200	43200	0.992		
646.00		4.00	43200				172800	3.97
	1.00			43200	43200	0.992		
647.00		5.00	43200				216000	4.96
	1.00			43200	43200	0.992		
648.00		6.00	43200				259200	5.95

WATER QUALITY/DETENTION BASIN

OUTFLOW VS DEPTH CALCULATIONS

			HOLES	HOLES	HOLES	HOLES	HOLES	HOLES	HOLES	TOP OF RISER		
		No. of Holes →	5	5	3	3	3	3	3	1	←	No. of Weir
			HOLE C	HOLE C	HOLE C	HOLE C	HOLE C	HOLE C	HOLE C	TOP OF RISER C		
		Discharge Coefficient →	0.6	0.6	0.6	0.6	0.6	0.6	0.6	2.8	←	Weir Coefficient
			HOLE FL	HOLE FL	HOLE FL	HOLE FL	HOLE FL	HOLE FL	HOLE FL	DIST TO TOP OF RISER		
Distance of Holes from Basin Bottom (in) →			0	12	18	24	30	36	42	72	←	Distance of Top of Riser Pipe from Basin Bottom (in)
			HOLE R	HOLE R	HOLE R	HOLE R	HOLE R	HOLE R	HOLE R	RISER LENGTH (FT)		
		Hole Radius (in) →	4.00	4.00	4.00	4.00	4	4	4	15.708	←	Riser Pipe Perimeter (ft) =PAI*D, 60" Riser Pipe
			CEN EL	CEN EL	CEN EL	CEN EL	CEN EL	CEN EL	CEN EL	TOP OF RISER ELEV		
		Hole Centerline Elev →	642.3333	643.3333	643.8333	644.3333	644.8333	645.3333	645.8333	648.0	←	Top of Weir Elevation (ft)
ELEV	DEPTH	OUTFLOW								AREA		
642.00	0	0								0	←	(sq-ft)
643.00	1	6.86	6.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
644.00	2	19.77	10.85	6.86	2.06	0.00	0.00	0.00	0.00	0.00		
645.00	3	36.19	13.72	10.85	5.45	4.12	2.06	0.00	0.00	0.00		
646.00	4	55.37	16.09	13.72	7.42	6.51	5.45	4.12	2.06	0.00		
647.00	5	70.83	18.15	16.09	8.97	8.23	7.42	6.51	5.45	0.00		
648.00	6	82.74	20.00	18.15	10.29	9.66	8.97	8.23	7.42	0.00		

↑ [Σ FLOWS (HOLES+RISER)] (OUTFLOW THROUGH HOLES) ↑ (FLOW OVER TOP OF RISER PIPE)

Note:

1. Orifice outflow is based on:
   $Q=CA(2gH)^{0.5}$
   where:
   C = Coefficient, 0.6 used here
   A = Orifice Area
   H = Headwater

2. Top of riser overflow is based on:
   $Q=CLH^{1.5}$
   where:
   C = Coefficient, 2.8 used here based on sharp crested weir
   L = Weir Length
   H = Headwater

```
                  FLOOD HYDROGRAPH ROUTING PROGRAM
            Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2014
                        Study date: 11/24/21

------------------------------------------------------------------------


Leal Ranch - Map Number 38290 - City of Eastvale
Detention Basin Routing
100-year storm (underground)

------------------------------------------------------------------------


Program License Serial Number 6406

------------------------------------------------------------------------
******************** HYDROGRAPH INFORMATION **********************

              From study/file name: LEALP1100.rte
****************************HYDROGRAPH DATA****************************
              Number of intervals =    26
              Time interval =    5.0 (Min.)
              Maximum/Peak flow rate =      252.104 (CFS)
              Total volume =       9.733 (Ac.Ft)
       Status of hydrographs being held in storage
                   Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
       Peak (CFS)      0.000     0.000     0.000     0.000     0.000
       Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
************************************************************************



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station       70.000 to Point/Station       70.000
**** RETARDING BASIN ROUTING ****
________________________________________________________________________

User entry of depth-outflow-storage data
------------------------------------------------------------------------
Total number of inflow hydrograph intervals = 26
Hydrograph time unit =  5.000 (Min.)
Initial depth in storage basin =   0.00(Ft.)
------------------------------------------------------------------------
------------------------------------------------------------------------
Initial basin depth =   0.00 (Ft.)
Initial basin storage =      0.00 (Ac.Ft)
Initial basin outflow =   0.00 (CFS)
------------------------------------------------------------------------
------------------------------------------------------------------------
Depth vs. Storage and Depth vs. Discharge data:
 Basin Depth  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
     (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
------------------------------------------------------------------------
   0.000      0.000      0.000      0.000        0.000
   1.000      0.990      6.860      0.966        1.014
   2.000      1.980     19.770      1.912        2.048
   3.000      2.980     36.190      2.855        3.105
   4.000      3.970     55.370      3.779        4.161
   5.000      4.960     70.830      4.716        5.204
   6.000      5.950     82.740      5.665        6.235
```

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0 63.0 126.05 189.08 252.10	Depth (Ft.)
0.083	3.03	0.07	0.010	O	0.01
0.167	16.63	0.53	0.076	O I	0.08
0.250	31.41	1.62	0.234	O I	0.24
0.333	39.99	3.21	0.463	O I	0.47
0.417	46.32	5.07	0.732	O I	0.74
0.500	53.05	7.40	1.031	O I	1.04
0.583	62.40	11.72	1.363	O I	1.38
0.667	74.51	16.60	1.737	O I	1.75
0.750	97.67	23.26	2.192	O I	2.21
0.833	159.68	34.54	2.880	O I	2.90
0.917	252.10	55.64	3.987	O I	4.02
1.000	213.51	73.08	5.147	O I	5.19
1.083	122.21	80.62	5.774	O I	5.82
1.167	73.51	81.99	5.888	IO	5.94
1.250	46.42	80.24	5.742	I O	5.79
1.333	32.82	77.01	5.474	I O	5.52
1.417	23.82	73.14	5.152	I O	5.19
1.500	18.24	68.47	4.809	I O	4.85
1.583	14.01	63.13	4.467	I O	4.50
1.667	10.58	57.94	4.135	I O	4.17
1.750	7.87	52.43	3.818	I O	3.85
1.833	5.81	46.72	3.524	I O	3.55
1.917	4.48	41.52	3.255	I O	3.28
2.000	2.45	36.76	3.009	I O	3.03
2.083	0.57	32.91	2.780	I O	2.80
2.167	0.15	29.42	2.568	I O	2.59
2.250	0.00	26.28	2.377	I O	2.40
2.333	0.00	23.47	2.205	I O	2.23
2.417	0.00	20.96	2.052	I O	2.07
2.500	0.00	18.92	1.915	I O	1.93
2.583	0.00	17.30	1.790	I O	1.81
2.667	0.00	15.81	1.676	I O	1.69
2.750	0.00	14.45	1.572	IO	1.59
2.833	0.00	13.21	1.477	IO	1.49
2.917	0.00	12.07	1.390	IO	1.40
3.000	0.00	11.04	1.310	IO	1.32
3.083	0.00	10.09	1.237	IO	1.25
3.167	0.00	9.22	1.171	IO	1.18
3.250	0.00	8.43	1.110	IO	1.12
3.333	0.00	7.70	1.055	O	1.07
3.417	0.00	7.04	1.004	O	1.01
3.500	0.00	6.63	0.957	O	0.97
3.583	0.00	6.32	0.912	O	0.92
3.667	0.00	6.03	0.870	O	0.88
3.750	0.00	5.75	0.829	O	0.84
3.833	0.00	5.48	0.791	O	0.80
3.917	0.00	5.22	0.754	O	0.76
4.000	0.00	4.98	0.719	O	0.73
4.083	0.00	4.75	0.685	O	0.69
4.167	0.00	4.53	0.653	O	0.66
4.250	0.00	4.31	0.623	O	0.63
4.333	0.00	4.11	0.594	O	0.60
4.417	0.00	3.92	0.566	O	0.57
4.500	0.00	3.74	0.540	O	0.55
4.583	0.00	3.56	0.514	O	0.52

4.667	0.00	3.40	0.490	O	|	|	|	0.50
4.750	0.00	3.24	0.468	O	|	|	|	0.47
4.833	0.00	3.09	0.446	O	|	|	|	0.45
4.917	0.00	2.95	0.425	O	|	|	|	0.43
5.000	0.00	2.81	0.405	O	|	|	|	0.41
5.083	0.00	2.68	0.386	O	|	|	|	0.39
5.167	0.00	2.55	0.368	O	|	|	|	0.37
5.250	0.00	2.43	0.351	O	|	|	|	0.35
5.333	0.00	2.32	0.335	O	|	|	|	0.34
5.417	0.00	2.21	0.319	O	|	|	|	0.32
5.500	0.00	2.11	0.304	O	|	|	|	0.31
5.583	0.00	2.01	0.290	O	|	|	|	0.29
5.667	0.00	1.92	0.277	O	|	|	|	0.28
5.750	0.00	1.83	0.264	O	|	|	|	0.27
5.833	0.00	1.74	0.251	O	|	|	|	0.25
5.917	0.00	1.66	0.240	O	|	|	|	0.24
6.000	0.00	1.58	0.229	O	|	|	|	0.23
6.083	0.00	1.51	0.218	O	|	|	|	0.22
6.167	0.00	1.44	0.208	O	|	|	|	0.21
6.250	0.00	1.37	0.198	O	|	|	|	0.20
6.333	0.00	1.31	0.189	O	|	|	|	0.19
6.417	0.00	1.25	0.180	O	|	|	|	0.18
6.500	0.00	1.19	0.172	O	|	|	|	0.17
6.583	0.00	1.13	0.164	O	|	|	|	0.17
6.667	0.00	1.08	0.156	O	|	|	|	0.16
6.750	0.00	1.03	0.149	O	|	|	|	0.15
6.833	0.00	0.98	0.142	O	|	|	|	0.14
6.917	0.00	0.94	0.135	O	|	|	|	0.14
7.000	0.00	0.89	0.129	O	|	|	|	0.13
7.083	0.00	0.85	0.123	O	|	|	|	0.12
7.167	0.00	0.81	0.117	O	|	|	|	0.12
7.250	0.00	0.77	0.112	O	|	|	|	0.11
7.333	0.00	0.74	0.106	O	|	|	|	0.11
7.417	0.00	0.70	0.102	O	|	|	|	0.10
7.500	0.00	0.67	0.097	O	|	|	|	0.10
7.583	0.00	0.64	0.092	O	|	|	|	0.09
7.667	0.00	0.61	0.088	O	|	|	|	0.09
7.750	0.00	0.58	0.084	O	|	|	|	0.08
7.833	0.00	0.55	0.080	O	|	|	|	0.08
7.917	0.00	0.53	0.076	O	|	|	|	0.08
8.000	0.00	0.50	0.073	O	|	|	|	0.07
8.083	0.00	0.48	0.069	O	|	|	|	0.07
8.167	0.00	0.46	0.066	O	|	|	|	0.07
8.250	0.00	0.44	0.063	O	|	|	|	0.06
8.333	0.00	0.42	0.060	O	|	|	|	0.06
8.417	0.00	0.40	0.057	O	|	|	|	0.06
8.500	0.00	0.38	0.055	O	|	|	|	0.06
8.583	0.00	0.36	0.052	O	|	|	|	0.05
8.667	0.00	0.34	0.050	O	|	|	|	0.05
8.750	0.00	0.33	0.047	O	|	|	|	0.05
8.833	0.00	0.31	0.045	O	|	|	|	0.05
8.917	0.00	0.30	0.043	O	|	|	|	0.04
9.000	0.00	0.28	0.041	O	|	|	|	0.04
9.083	0.00	0.27	0.039	O	|	|	|	0.04
9.167	0.00	0.26	0.037	O	|	|	|	0.04
9.250	0.00	0.25	0.036	O	|	|	|	0.04
9.333	0.00	0.23	0.034	O	|	|	|	0.03
9.417	0.00	0.22	0.032	O	|	|	|	0.03
9.500	0.00	0.21	0.031	O	|	|	|	0.03
9.583	0.00	0.20	0.029	O	|	|	|	0.03
9.667	0.00	0.19	0.028	O	|	|	|	0.03
9.750	0.00	0.18	0.027	O	|	|	|	0.03
9.833	0.00	0.18	0.025	O	|	|	|	0.03

9.917	0.00	0.17	0.024	O	|	|	|	0.02
10.000	0.00	0.16	0.023	O	|	|	|	0.02
10.083	0.00	0.15	0.022	O	|	|	|	0.02
10.167	0.00	0.15	0.021	O	|	|	|	0.02
10.250	0.00	0.14	0.020	O	|	|	|	0.02
10.333	0.00	0.13	0.019	O	|	|	|	0.02
10.417	0.00	0.13	0.018	O	|	|	|	0.02
10.500	0.00	0.12	0.017	O	|	|	|	0.02
10.583	0.00	0.11	0.017	O	|	|	|	0.02
10.667	0.00	0.11	0.016	O	|	|	|	0.02
10.750	0.00	0.10	0.015	O	|	|	|	0.02
10.833	0.00	0.10	0.014	O	|	|	|	0.01
10.917	0.00	0.09	0.014	O	|	|	|	0.01
11.000	0.00	0.09	0.013	O	|	|	|	0.01
11.083	0.00	0.09	0.012	O	|	|	|	0.01
11.167	0.00	0.08	0.012	O	|	|	|	0.01
11.250	0.00	0.08	0.011	O	|	|	|	0.01
11.333	0.00	0.07	0.011	O	|	|	|	0.01
11.417	0.00	0.07	0.010	O	|	|	|	0.01
11.500	0.00	0.07	0.010	O	|	|	|	0.01
11.583	0.00	0.06	0.009	O	|	|	|	0.01
11.667	0.00	0.06	0.009	O	|	|	|	0.01
11.750	0.00	0.06	0.008	O	|	|	|	0.01
11.833	0.00	0.06	0.008	O	|	|	|	0.01
11.917	0.00	0.05	0.008	O	|	|	|	0.01
12.000	0.00	0.05	0.007	O	|	|	|	0.01
12.083	0.00	0.05	0.007	O	|	|	|	0.01
12.167	0.00	0.05	0.007	O	|	|	|	0.01
12.250	0.00	0.04	0.006	O	|	|	|	0.01
12.333	0.00	0.04	0.006	O	|	|	|	0.01
12.417	0.00	0.04	0.006	O	|	|	|	0.01
12.500	0.00	0.04	0.006	O	|	|	|	0.01
12.583	0.00	0.04	0.005	O	|	|	|	0.01
12.667	0.00	0.03	0.005	O	|	|	|	0.01
12.750	0.00	0.03	0.005	O	|	|	|	0.00
12.833	0.00	0.03	0.005	O	|	|	|	0.00
12.917	0.00	0.03	0.004	O	|	|	|	0.00
13.000	0.00	0.03	0.004	O	|	|	|	0.00
13.083	0.00	0.03	0.004	O	|	|	|	0.00
13.167	0.00	0.03	0.004	O	|	|	|	0.00
13.250	0.00	0.02	0.004	O	|	|	|	0.00
13.333	0.00	0.02	0.003	O	|	|	|	0.00
13.417	0.00	0.02	0.003	O	|	|	|	0.00
13.500	0.00	0.02	0.003	O	|	|	|	0.00
13.583	0.00	0.02	0.003	O	|	|	|	0.00
13.667	0.00	0.02	0.003	O	|	|	|	0.00
13.750	0.00	0.02	0.003	O	|	|	|	0.00
13.833	0.00	0.02	0.003	O	|	|	|	0.00
13.917	0.00	0.02	0.002	O	|	|	|	0.00
14.000	0.00	0.02	0.002	O	|	|	|	0.00
14.083	0.00	0.02	0.002	O	|	|	|	0.00
14.167	0.00	0.01	0.002	O	|	|	|	0.00
14.250	0.00	0.01	0.002	O	|	|	|	0.00
14.333	0.00	0.01	0.002	O	|	|	|	0.00
14.417	0.00	0.01	0.002	O	|	|	|	0.00
14.500	0.00	0.01	0.002	O	|	|	|	0.00
14.583	0.00	0.01	0.002	O	|	|	|	0.00
14.667	0.00	0.01	0.002	O	|	|	|	0.00
14.750	0.00	0.01	0.002	O	|	|	|	0.00
14.833	0.00	0.01	0.001	O	|	|	|	0.00
14.917	0.00	0.01	0.001	O	|	|	|	0.00
15.000	0.00	0.01	0.001	O	|	|	|	0.00
15.083	0.00	0.01	0.001	O	|	|	|	0.00

```
15.167    0.00    0.01      0.001  O       |       |       |       |     0.00
15.250    0.00    0.01      0.001  O       |       |       |       |     0.00
15.333    0.00    0.01      0.001  O       |       |       |       |     0.00
15.417    0.00    0.01      0.001  O       |       |       |       |     0.00
15.500    0.00    0.01      0.001  O       |       |       |       |     0.00
15.583    0.00    0.01      0.001  O       |       |       |       |     0.00

      ****************************HYDROGRAPH DATA****************************
                  Number of intervals =   187
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =       81.994 (CFS)
                  Total volume =       9.732 (Ac.Ft)
            Status of hydrographs being held in storage
                        Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
            Peak (CFS)      0.000     0.000     0.000     0.000     0.000
            Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
      ************************************************************************

      ------------------------------------------------------------------------
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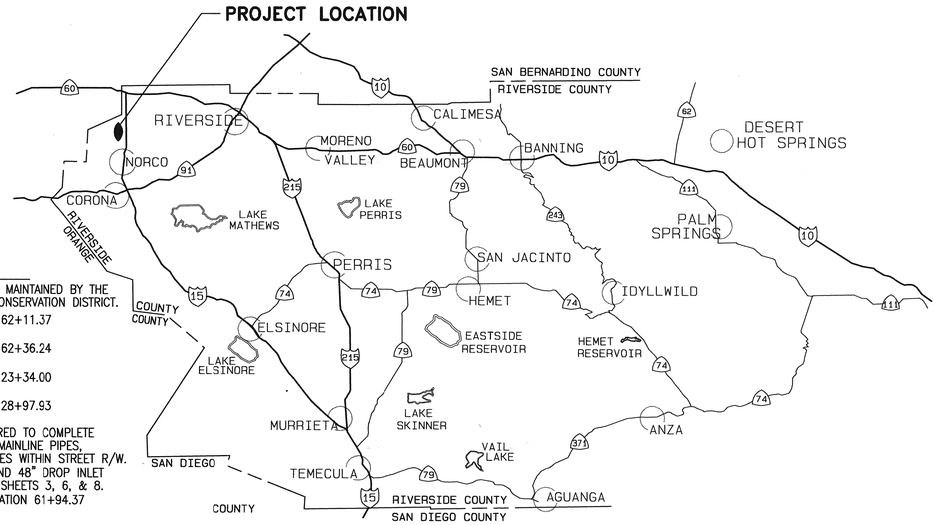
SECTION 5
REFERENCES

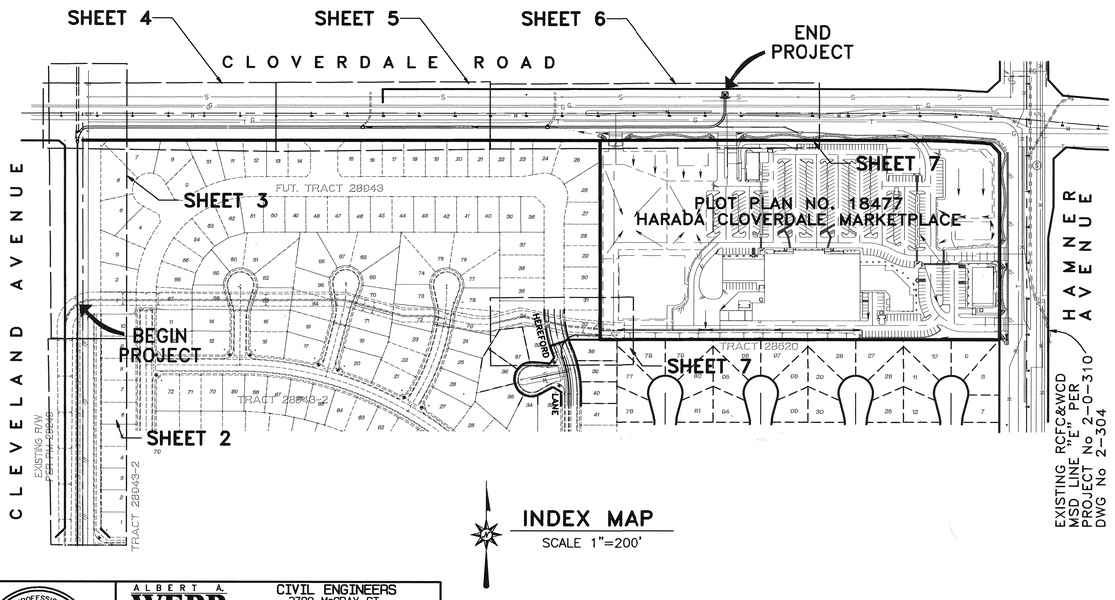
- **AS-BUILT STORM DRAIN IMPROVEMENT PLANS ALONG LIMONITE AVENUE (MDP LINE "D-5", RCFCD DWG NO. 2-0-323)**

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT



VICINITY MAP

N.T.S.



INDEX MAP

SCALE 1"=200'

MAINTENANCE NOTES

THE FOLLOWING ITEMS ARE TO BE INSPECTED AND MAINTAINED BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT.

1. 78" RCP FROM STATION 62+03.37 TO STATION 62+11.37 AS SHOWN ON SHEET 3.
2. 72" RCP FROM STATION 62+30.24 TO STATION 62+36.24 AS SHOWN ON SHEET 3.
3. 60" RCP FROM STATION 10+06.67 TO STATION 23+34.00 AS SHOWN ON SHEETS 4 & 5.
4. 54" RCP FROM STATION 23+37.93 TO STATION 28+97.93 AS SHOWN ON SHEETS 5 & 6.
5. ALL MANHOLES AND OTHER STRUCTURES REQUIRED TO COMPLETE THE CONSTRUCTION OF THE ABOVE MENTIOND MAINLINE PIPES, EXCLUDING CATCH BASINS AND COLLECTOR PIPES WITHIN STREET R/W.
6. 72" BUBBLER FACILITY AT STATION 61+99.37 AND 48" DROP INLET FACILITY AT STATION 28+97.93 AS SHOWN ON SHEETS 3, 6, & 8.
7. 24" HDPE/PVC FROM STATION 49+93.05 TO STATION 61+94.37 AS SHOWN ON SHEETS 2 & 3.

GENERAL NOTES

1. THE CONTRACTOR SHALL CONSTRUCT THE FLOOD CONTROL IMPROVEMENTS SHOWN ON THE DRAWINGS IN CONFORMANCE WITH THE REQUIREMENTS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT'S MEMORANDUM OF UNDERSTANDING STANDARD SPECIFICATIONS, DATED SEPTEMBER 1984, AND DESIGN MANUAL STANDARD DRAWINGS, RECENT EDITION DATED MAY 1971.
2. THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY AGENCIES REGARDING TEMPORARY SUPPORT AND SHORING REQUIREMENTS FOR THE VARIOUS UTILITIES SHOWN IN THE PLAN.
3. CONSTRUCTION INSPECTION WILL BE PERFORMED BY RIVERSIDE COUNTY FLOOD CONTROL. CONTACT DALE ANDERSON AT (909) 955-1288. THE DISTRICT MUST BE NOTIFIED TWENTY DAYS PRIOR TO CONSTRUCTION.
4. ALL STATIONING REFERS TO THE CENTERLINE OF CONSTRUCTION UNLESS OTHERWISE NOTED.
5. STATIONING FOR LATERALS AND CONNECTOR PIPE REFER TO THE CENTERLINE-CENTERLINE INTERSECTION STATION.
6. FORTY-EIGHT HOURS BEFORE EXCAVATION, CALL UNDERGROUND SERVICE ALERT (800) 227-2600.
7. ALL ELEVATIONS SHOWN ARE IN FEET AND DECIMALS THEREOF BASED ON U.S.C. & G.S. DATUM.
8. ALL CROSS SECTIONS ARE TAKEN LOOKING DOWNSTREAM.
9. ELEVATIONS AND LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE UNLESS OTHERWISE NOTED. ALL UTILITIES ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
10. OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES TO BE ABANDONED SHALL BE SEALED WITH 6 INCHES OF CLASS "B" CONCRETE.
11. PIPE CONNECTED TO THE MAINLINE PIPE SHALL CONFORM TO JUNCTION STRUCTURE NO. 4 (JS 229) UNLESS OTHERWISE NOTED.
12. "V" IS THE DEPTH OF INLET AND CATCH BASINS MEASURED FROM THE TOP OF CURB TO INVERT OF CONNECTOR PIPE.
13. ALL CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS AND OTHER EXISTING IMPROVEMENTS TO BE RECONSTRUCTED IN KIND AND AT THE SAME ELEVATION AND LOCATION AS THE EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED.
14. HYDRAULIC GRADE LINES SHOWN IN PROFILES ARE FOR 100 YEAR FREQUENCY FLOWS, UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR SHALL COMPLY WITH THE STATE AND LOCAL SAFETY CODES DURING THE PROGRESS OF WORK.
16. THE DEVELOPER SHALL MAINTAIN ADJACENT STREETS IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE COUNTY OF RIVERSIDE'S OR DISTRICT'S INSPECTOR. THE ADJACENT STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE DEVELOPER SHALL BE RESPONSIBLE FOR ANY CLEAN-UP ON ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION. METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS.

GENERAL NOTES CONT.

17. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, R.C.F.C.D., COUNTY ROAD DEPARTMENT, AND THE DEVELOPER'S ENGINEER HARLMESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNERS, OR THE DEVELOPER'S ENGINEER.
18. ADJUST ALL STORM DRAIN AND SEWER MANHOLES, AND WATER VALVES TO GRADE.
19. ALL PIPE LENGTHS ARE HORIZONTAL PROJECTIONS (NOT TRUE LENGTHS OF PIPE) AND ARE THE BASIS OF THE ESTIMATES OF QUANTITIES. THE CONTRACTOR SHALL DETERMINE THE TRUE QUANTITY OF PIPE REQUIRED FOR THIS PROJECT PRIOR TO PLACING THE ORDER.
20. ELEVATIONS SHOWN ARE TO THE INVERT OF PIPE, EXCEPT WHERE OTHERWISE NOTED.
21. AT THE DISCRETION OF THE ENGINEER, THE CONTRACTOR MAY BE REQUIRED TO VERIFY BY POTHOLING THE LOCATION OF POTENTIALLY AFFECTED UTILITIES.
22. CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATED MATERIAL AT MANDATORY DISPOSAL SITE. MUST BE NOTIFIED ONE WEEK PRIOR TO CONSTRUCTION.
23. ALL BACKFILL AND BEDDING AROUND STRUCTURES AND PIPES SHALL BE COMPACTED TO NOT LESS THAN 90 PERCENT RELATIVE COMPACTION EXCEPT WHERE SUCH MATERIAL IS PLACED UNDER EXISTING PAVED ROADWAYS, THE TOP 3 FEET, MEASURED FROM THE FINISHED PAVING, SHALL BE COMPACTED TO 95 PERCENT RELATIVE COMPACTION.
24. PIPE BEDDING SHALL CONFORM TO RCFC&WCD STD. DWG. NO. M815 EXCEPT FOR COVER <2 FEET. FOR COVER <2 FEET, CONCRETE SLURRY (2000 PSI - 2 SACK) SHALL BE USED. THE ENTIRE TRENCH SHALL BE SLURRY EXTENDING 4 INCHES MINIMUM AND 12 INCHES MAXIMUM ABOVE THE TOP OF THE PIPE.
25. APPROVAL OF THESE PLANS BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT DOES NOT RELIEVE THE DEVELOPER'S ENGINEER OF RESPONSIBILITY FOR THE ENGINEERING DESIGN. IF FIELD CHANGES ARE REQUIRED, IT WILL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO MAKE THE NECESSARY CORRECTIONS.
26. THE CONTRACTOR OR DEVELOPER SHALL SECURE ALL REQUIRED ENCROACHMENT AND/OR STATE AND FEDERAL REGULATORY PERMITS PRIOR TO THE COMMENCEMENT OF ANY WORK.
27. STANDARD DRAWINGS CALLED FOR ON THE PLANS AND PROFILES SHALL CONFORM TO DISTRICT STANDARD DRAWINGS UNLESS NOTED OTHERWISE.
28. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL SHOULD BE PROVIDED TO PREVENT PONDING WATER AND DRAINAGE TO ADJACENT PROPERTIES.

AS BUILT
APPROVED BY:
DATE 7-6-06

CONSTRUCTION NOTES

(1)	CONSTRUCT 72" CMP BUBBLER PER DETAIL ON SHEET 8	1 EA
(2)	INSTALL 24" HDPE OR PVC.	1,184 LF
(3)	CONSTRUCT MANHOLE #4 PER RCFC & WCD STD. DWG. NO. MH 254,	3 EA
(4)	INSTALL 60" RCP (D-LOAD PER PLANS)	1,310 LF
(5)	INSTALL 54" RCP (D-LOAD PER PLANS)	545 LF
(6)	CONSTRUCT JUNCTION STRUCTURE #2 PER RCFC&WCD STD. DWG. JS 227.	1 EA
(7)	CONSTRUCT DROP INLET PER DETAIL ON SHEET 8	1 EA
(8)	CONSTRUCT METAL GUARD RAIL PER CALTRANS STD. PLAN NO. A77A	30 LF
(9)	CONSTRUCT MANHOLE #2 PER RCFC&WCD STD. DWG. MH252.	4 EA
(10)	CONSTRUCT CONCRETE COLLAR PER RCFC&WCD STD. DWG. M821.	3 EA
(11)	INSTALL 24" RCP (D-LOAD PER PLANS)	230 LF
(12)	INSTALL 30" RCP (D-LOAD PER PLANS)	91 LF
(13)	CONSTRUCT MANHOLE #1 PER RCFC & WCD STD. No. MH251	1 EA
(14)	CONSTRUCT CONCRETE BULKHEAD PER RCFC & WCD STD. No. M816	3 EA
(15)	INSTALL HDPE TEE FITTINGS WITH 6" CLEANOUT CAP	2 EA
(16)	INSTALL 22'x22' RIP-RAP WITH 1/4 TON, 30" THICKNESS ROCK (TYP)	1 EA

QUANTITIES

R.C.F.C. & W.C.D. STD. DRAWINGS

JS 227	JUNCTION STRUCTURE No. 2
MH 252	MANHOLE NO. 2
M 815	BEDDING AND PAY LINES
MH 251	MANHOLE NO. 1
MH 254	MANHOLE NO. 4
M 816	BULKHEAD

CALTRANS STD. DRAWINGS

D93C	DEBRIS RACK CAGE
A77A	METAL GUARD RAIL

SHEET INDEX

TITLE SHEET		1
TEMP LINE D-3	STA 50+50.03 TO STA 56+50.00	2
TEMP LINE D-3	STA 56+50.00 TO STA 62+34.69	3
LINE D-5	STA 10+00.00 TO STA 16+00.00	4
LINE D-5	STA 16+00.00 TO STA 23+00.00	5
LINE D-5	STA 23+00.00 TO STA 28+89.88	6
LINE D-5-1	STA 10+00.00 TO STA 12+37.23	7
LINE A	STA 1+00.00 TO STA 2+14.00	
DETAILS		8

PP 18477 - IP 040028
CLOVERDALE MARKETPLACE

GHY

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH (909) 686-1070
FAX (909) 788-1256
PREPARED BY: [signature]
DATE: 6/25/04
R.C.E. NO. C44762
EXP. DATE: 3-31-06
REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRAND NO. C44762 EXP. 3-31-06 CIVIL STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY: [signature] 7/19/04
DEPUTY DIRECTOR OF TRANSPORTATION
DATE: 7-6-04
REGISTERED PROFESSIONAL ENGINEER (SIGNED) A. OTHMAN NO. 33950 EXP. 6-30-06 CIVIL STATE OF CALIFORNIA

Don't Dig...Until You Call U.S.A. Toll Free
1-800-227-2600
for the location of buried utility lines.
Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
M.L. 36-34 1988
AT THE CORNER OF HAMNER AVE. & BELLEGRAVE AVE. 60 FEET E OF HAMNER AVE., 36 FEET NW OF BELLEGRAVE AVE, A BRASS DISK ON TOP OF SW CORNER OF 4'x7' CONC. GAS CO. VAULT MARKED ML 36-34
ELEV=694.35'

REF.	DESCRIPTION	APPR.	DATE
	P8/235729 REVISIONS		
2	AS-BUILT		
1	REVISED "D" LOADS SENT 8-31-04	SEM	9/21/04

DESIGNED BY: WL
DRAWN BY: WL
DATE DRAWN: 6/25/2004
CHECKED BY: [signature]

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: [signature]
PLANNING ENGINEER
DATE: 8-3-2004
APPROVED BY: [signature]
CHIEF ENGINEER
DATE: 8/3/04

EASTVALE MDP LINE D-5 & D-3 (TEMPORARY)
TITLE SHEET

PROJECT NO. 2-0-0323 & 2-0-0308
DRAWING NO. 2-350
SHEET NO. 1 OF 8

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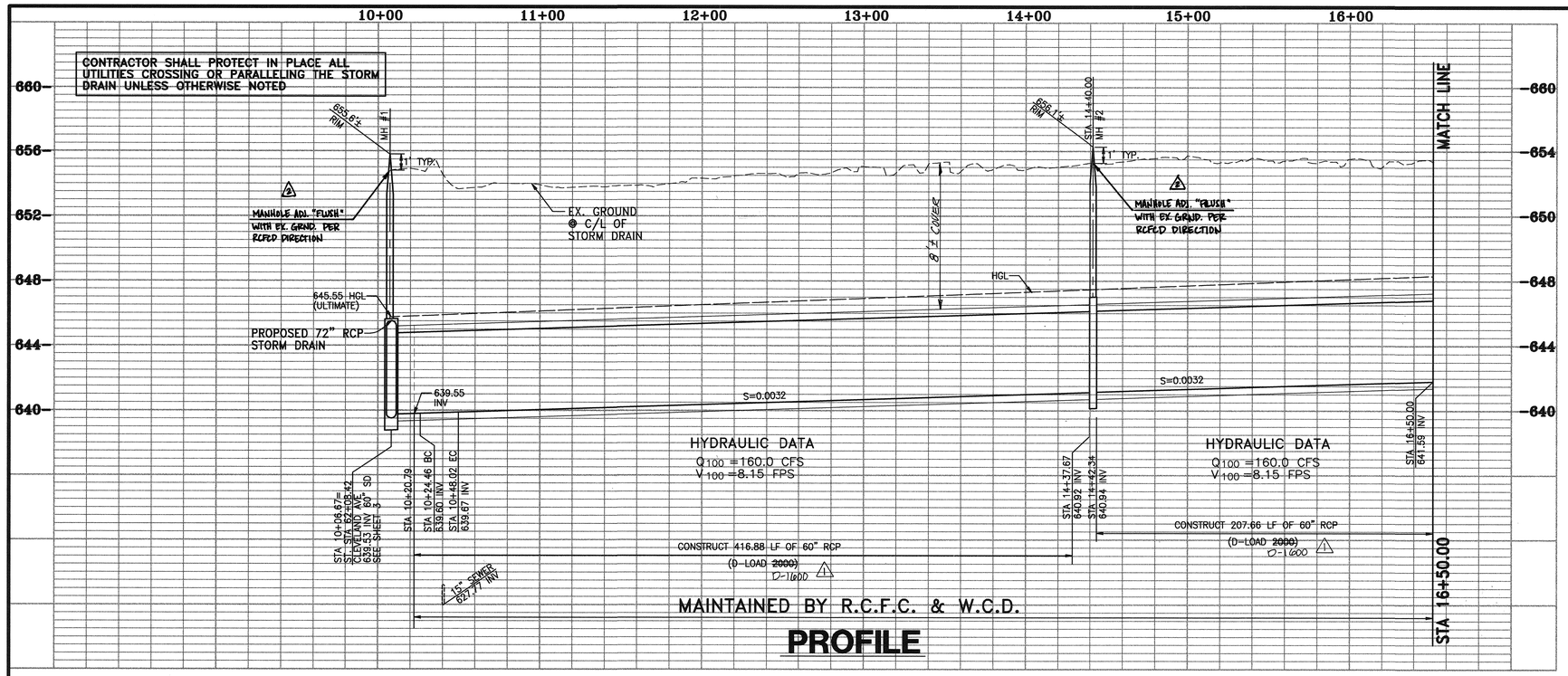
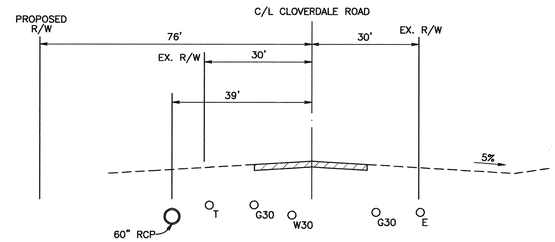
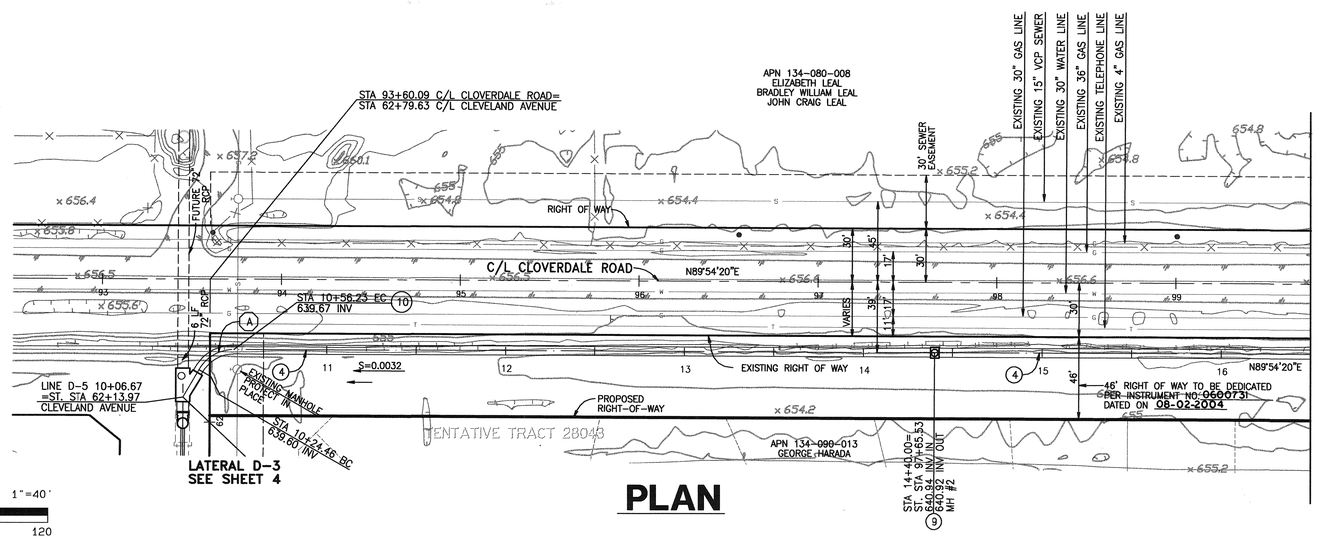
1559





SECTION AT STA 16+00.00
CLOVERDALE ROAD
GRAPHIC SCALE 1"=20'
0 20 40 60

CURVE DATA				
	DELTA	RADIUS	LENGTH	TANGENT
(A)	60°00'00"	22.56'	23.56'	12.99'



PLAN

GRAPHIC SCALE 1"=40'
0 40 80 120

CONSTRUCTION NOTES

(4) INSTALL 60" RCP (D-LOAD PER PLANS)

(9) CONSTRUCT MANHOLE #2 PER RCFC & WCD STD. DWG. NO. MH252.

AS BUILT
APPROVED BY:
DATE 7-6-06

PP 18477 – IP 040028
CLOVERDALE MARKETPLACE

GMY

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1560

REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRANDT NO. C44762 EXP. 3-31-06 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH. (909) 686-1070
FAX (909) 788-1256

PREPARED BY: Scott R. Hildebrandt
DATE: 6/25/04
R.C.E. NO. C44762
EXP. DATE: 3-31-06

Don't Dig...Until You Call U.S.A. Toll Free
1-800-227-2600
for the location of buried utility lines.
Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
B.M. NO. M-13-65
IN THE INTER. OF LINDENBERGER RD. AND SIMPSON RD, A 1-INCH IRON PIPE AND TAG MARKED COUNTY SURVEYOR IN A CAP WELL MONUMENT
ELEV. 1444.021

REF.	DESCRIPTION	APPR.	DATE
	P8/235729 REVISIONS		
(3)	AS-BUILT		
(1)	REVISED "D" LOADS SRH 8-3-04	SEM	8/31/04

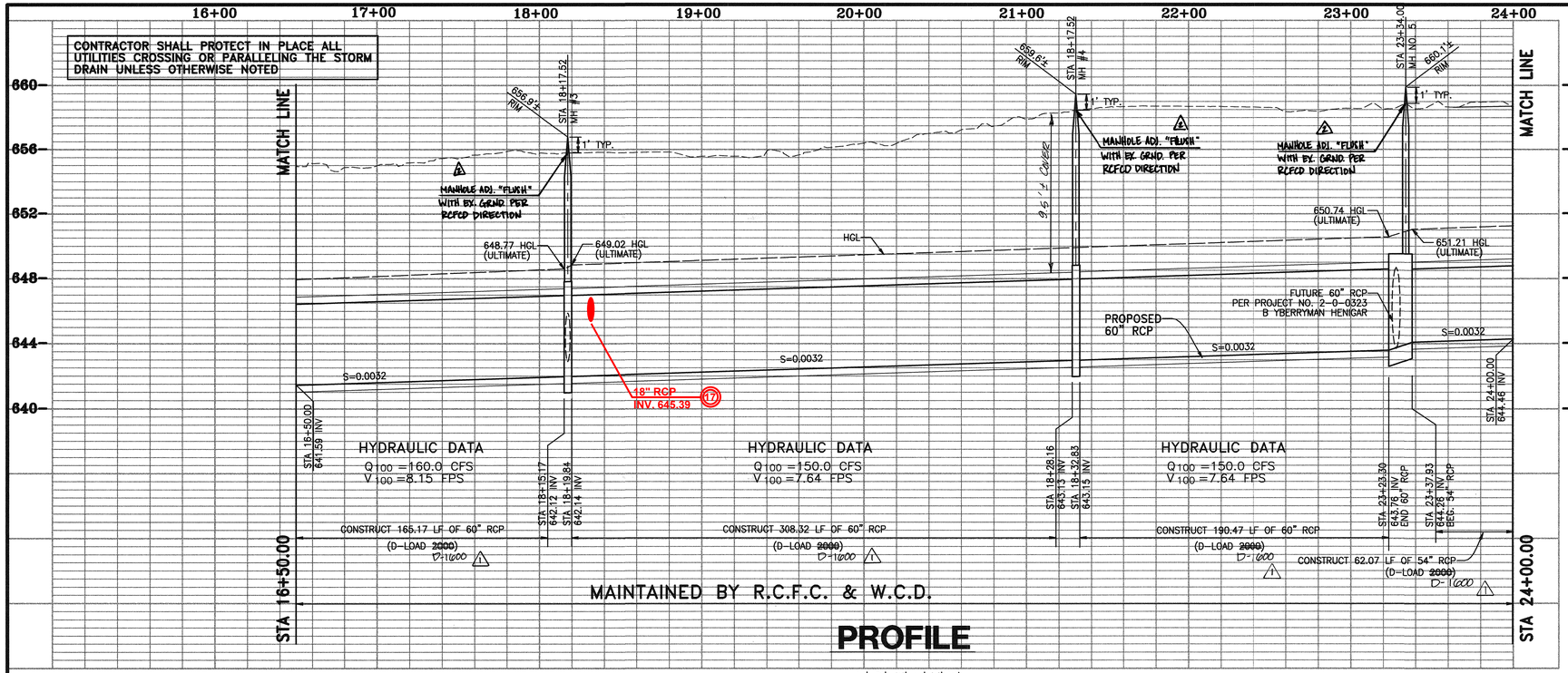
DESIGNED BY: WL
DRAWN BY: WL
DATE DRAWN: 6/25/2004
CHECKED BY: RB

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: David Kendall
DATE: 8/3/04
APPROVED BY: Stuart E McKibbin
DATE: 8-3-2004

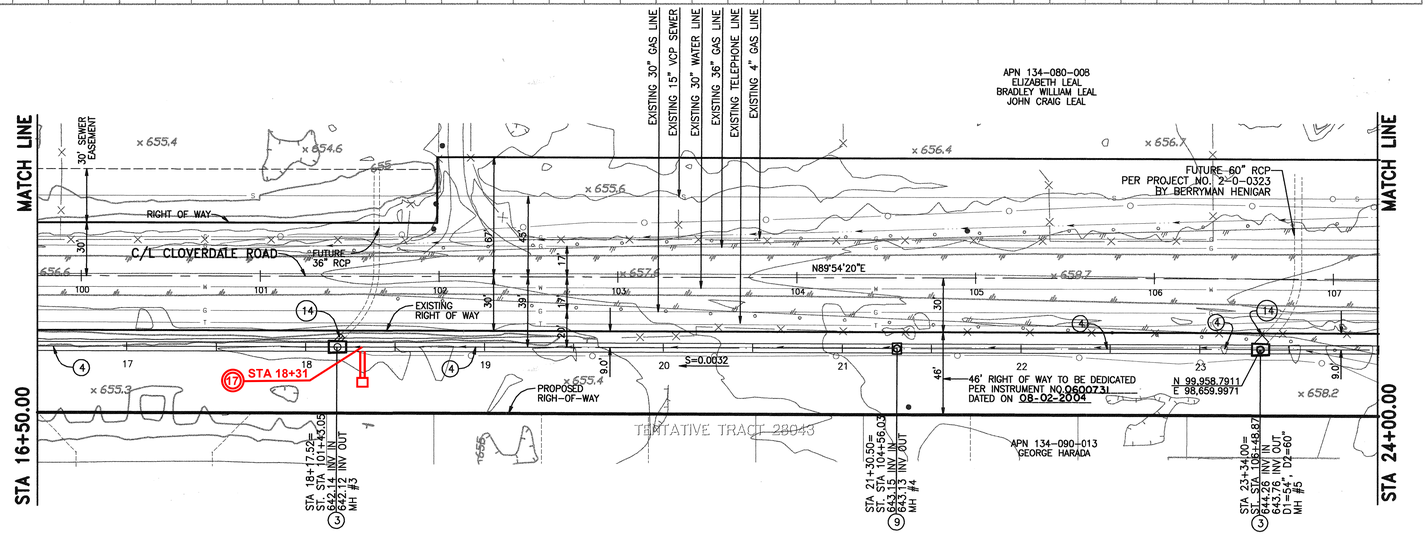
EASTVALE MDP LINE D-5
STA 10+00.00 TO STA 16+00.00

PROJECT NO. 2-0-0323
DRAWING NO. 2-350
SHEET NO. 4 OF 8

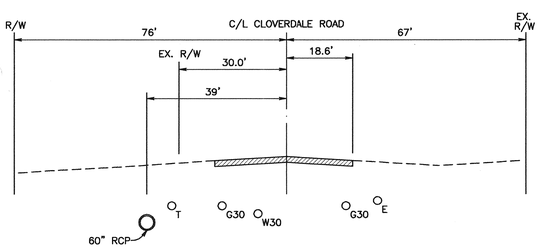
CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED



PROFILE



PLAN



SECTION AT STA 20+00.00
CLOVERDALE ROAD
GRAPHIC SCALE 1"=20'
0 20 40 60

MH NO. 4	
M.L. STA.	18+17.52 LAT. D-5
LATERAL	FUTURE 36" RCP
A	30'±
B	36"
D1	60"
D2	60"
C	9.59'
L	10.00'
ELEV."S"	643.07
ELEV."R"	643.14

MH NO. 4	
M.L. STA.	23+34.00 LAT. D-5
LATERAL	FUTURE 60" RCP
A	30'±
B	60"
D1	54"
D2	60"
C	8.42'
L	10.00'
ELEV."S"	643.87
ELEV."R"	643.93

CONSTRUCTION NOTES

(3) CONSTRUCT MANHOLE #4 PER RCFC & WCD STD. DWG. NO. MH 254,
(4) INSTALL 60" RCP (D-LOAD PER PLANS)
(9) CONSTRUCT MANHOLE #2 PER RCFC & WCD STD. DWG. NO. MH252.
(14) CONSTRUCT CONCRETE BULKHEAD PER RCFC & WCD STD. No. M816
(17) EP 3675, 11/16/2018, 18" RCP CONNECTION W/ JS NO. 4 PER STD JS229

AS BUILT
APPROVED BY: [signature]
DATE 7-6-05

GRAPHIC SCALE 1"=40'
0 40 80 120

PP 18477 – IP 040028
CLOVERDALE MARKETPLACE

GHY

REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRANDT NO. C44762 EXP. 3-31-06 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX (909) 788-1256
PREPARED BY: [signature]
DATE: 6-28-04
R.C.E. NO. C44762
EXP. DATE: 3-31-06

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
BURIED CABLE
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
B.M. NO. M-13-65
IN THE INTER. OF LINDENBERGER RD. AND SIMPSON RD, A 1-INCH IRON PIPE AND TAG MARKED COUNTY SURVEYOR IN A CAP WELL MONUMENT
ELEV. 1444.021

P8/235729 REVISIONS

REF.	DESCRIPTION	APPR.	DATE
2	AS-BUILT	SET	8/31/04
1	REVISED "D" LOADS [signature] 8-31-04		

DESIGNED BY: WL
DRAWN BY: WL
DATE DRAWN: 6/25/2004
CHECKED BY: RB

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: [signature]
DATE: 8/3/04
APPROVED BY: Stuart E. McKibbin
DATE: 8-3-2004

EASTVALE MDP LINE D-5
STA 16+00.00 TO STA 23+00.00

PROJECT NO. 2-0-0323
DRAWING NO. 2-350
SHEET NO. 5 OF 8

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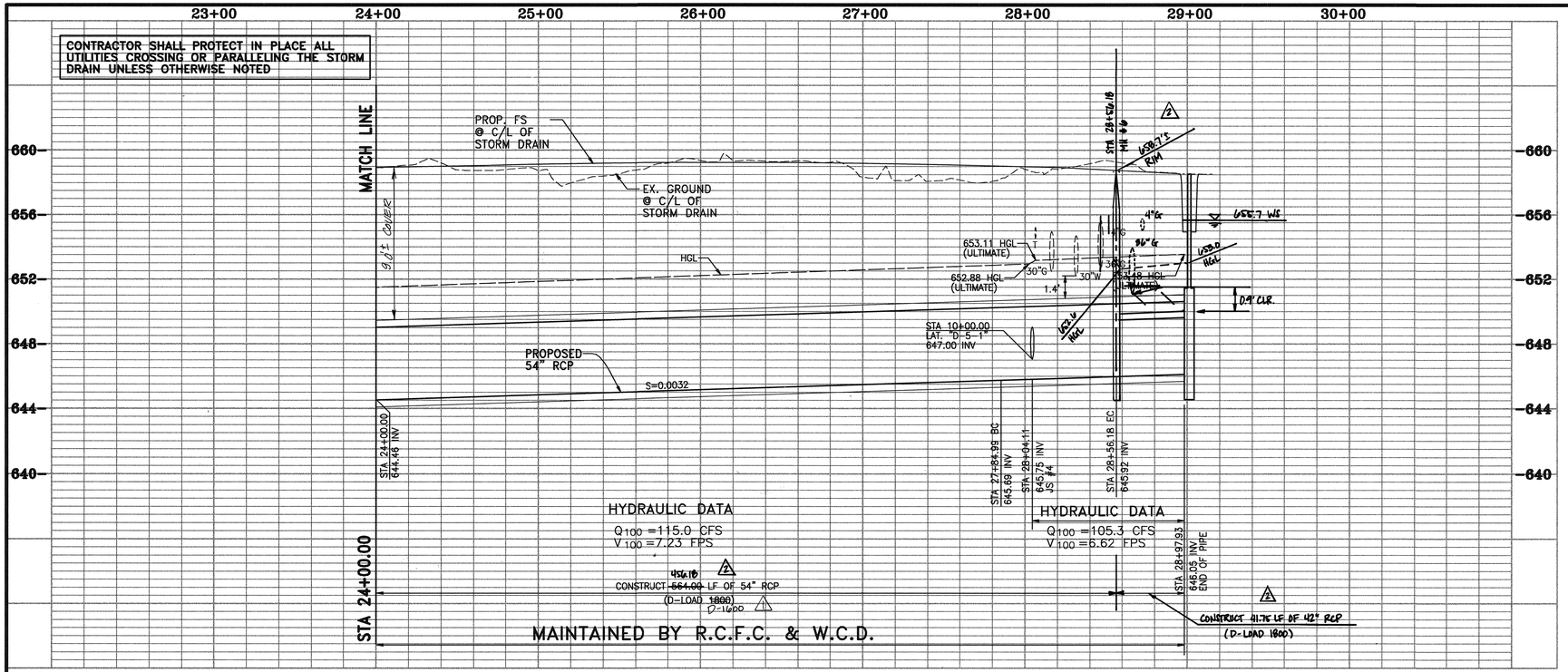
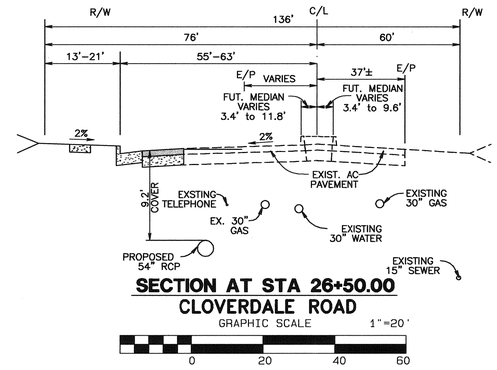
15691

CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED





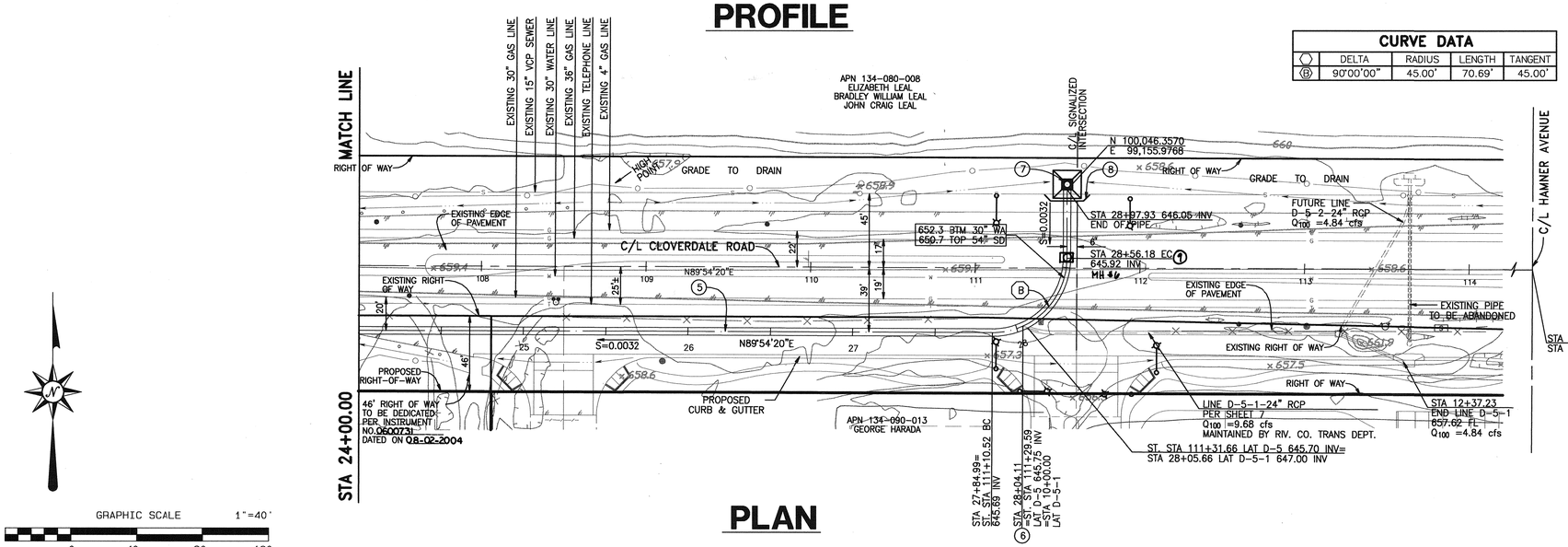
SECTION AT STA 26+50.00
CLOVERDALE ROAD

GRAPHIC SCALE 1"=20'

J.S. NO. 4	
M.L. STA.	28+04.11 LAT. D-5
LATERAL	LAT. D-5-1
A	30"±
B	24"
D	54"
C	6.9'
E	5.8'
F	2.01'
G	1.89'
L	6.8'
ELEV."S"	647.00
ELEV."R"	647.10

PROFILE

CURVE DATA				
	DELTA	RADIUS	LENGTH	TANGENT
(B)	90°00'00"	45.00'	70.69'	45.00'



CONSTRUCTION NOTES

4. INSTALL 60" RCP (D-LOAD PER PLANS)
5. INSTALL 54" RCP (D-LOAD PER PLANS)
6. CONSTRUCT JUNCTION STRUCTURE #2 PER RCFC & WCD STD. DWG. NO. JS 227.
7. CONSTRUCT DROP INLET PER DETAIL ON SHEET 8
8. CONSTRUCT METAL GUARD RAIL PER CALTRANS STD. PLAN NO. A77A
9. CONSTRUCT MANHOLE #2 PER RCFC & WCD STD. DWG. NO. MH252.
14. CONSTRUCT CONCRETE BULKHEAD PER RCFC & WCD STD. No. M816

AS BUILT
APPROVED BY: [signature]
DATE 7-6-06

PLAN

GRAPHIC SCALE 1"=40'
0 40 80 120

PP 18477 – IP 040028
CLOVERDALE MARKETPLACE

GMY

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1562

REGISTERED PROFESSIONAL ENGINEER SCOTT R. HILDEBRANDT NO. C44762 EXP. 3-31-06 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256
PREPARED BY: [signature]
DATE: 6-25-04
R.C.E. NO. C44762
EXP. DATE: 3-31-06

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
B.M. NO. M-13-65
IN THE INTER. OF LINDENBERGER RD. AND SIMPSON RD, A 1-INCH IRON PIPE AND TAG MARKED COUNTY SURVEYOR IN A CAP WELL MONUMENT
ELEV. 1444.021

P8/235729 REVISIONS

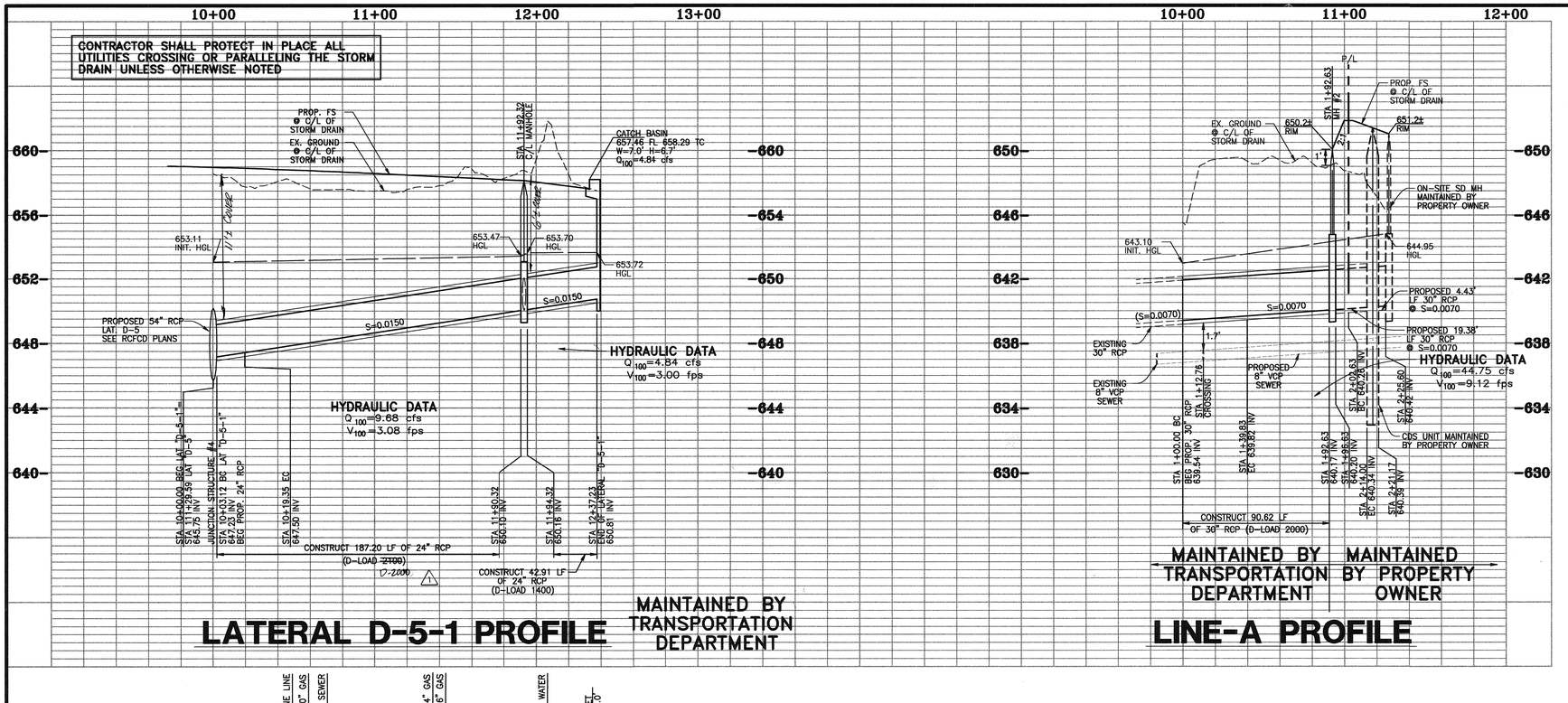
REF.	DESCRIPTION	APPR.	DATE
A	AS-BUILT	GET	6/30/06
	REVISED "D" LOADS SRH 8-31-04		

DESIGNED BY: WL
DRAWN BY: WL
DATE DRAWN: 6/25/2004
CHECKED BY: RB

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: [signature] DATE: 8/3/04
APPROVED BY: [signature] DATE: 8-3-2004

EASTVALE MDP LINE D-5
STA 23+00.00 to STA 28+89.88

PROJECT NO. 2-0-0323
DRAWING NO. 2-350
SHEET NO. 6 OF 8



CURVE DATA				
	DELTA	RADIUS	LENGTH	TENGENT
Ⓒ	20°39'34"	45.00'	16.23'	8.20'
Ⓓ	50°43'00"	45.00'	39.83'	21.33'
Ⓔ	14°28'39"	45.00'	11.37'	5.72'

CONSTRUCTION NOTES

(9) CONSTRUCT MANHOLE #2 PER RCFC & WCD STD. No. MH252
(10) CONSTRUCT CONCRETE COLLAR PER RCFC & WCD STD. No. MH821
(11) INSTALL 24" RCP (D-LOAD PER PLANS)
(12) INSTALL 30" RCP (D-LOAD PER PLANS)
(13) CONSTRUCT MANHOLE #1 PER RCFC & WCD STD. No. MH251

AS BUILT
APPROVED BY:
DATE 7-6-06

PP 18477 – IP 040028
CLOVERDALE MARKETPLACE

GH4

REGISTERED PROFESSIONAL ENGINEER SCOTT R. MILLERSMITH NO. C44762 EXP. 3-31-06 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256
PREPARED BY:
R.C.E. NO. C44762
DATE 6-25-04 EXP. DATE: 3-31-06

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
B.M. NO. M-13-65
IN THE INTER. OF LINDENBERGER RD. AND SIMPSON RD, A 1-INCH IRON PIPE AND TAG MARKED COUNTY SURVEYOR IN A CAP WELL MONUMENT
ELEV. 1444.021

P8/235729 REVISIONS

REF.	DESCRIPTION	APPR.	DATE
1	REVISED "0" LOADS	SRH	8/31/04
2		SRH	8/31/04

DESIGNED BY: WL
DRAWN BY: WL
DATE DRAWN: 6/25/2004
CHECKED BY: RB

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: DATE: 8/3/04
APPROVED BY: DATE: 8-3-2004

EASTVALE MDP LINE D-5
LATERAL D-5-1 STA 10+00.00 TO STA 12+37.23
LINE A STA 1+00.00 TO STA 2+14.00

PROJECT NO. 2-0-0323
DRAWING NO. 2-350
SHEET NO. 7 OF 8

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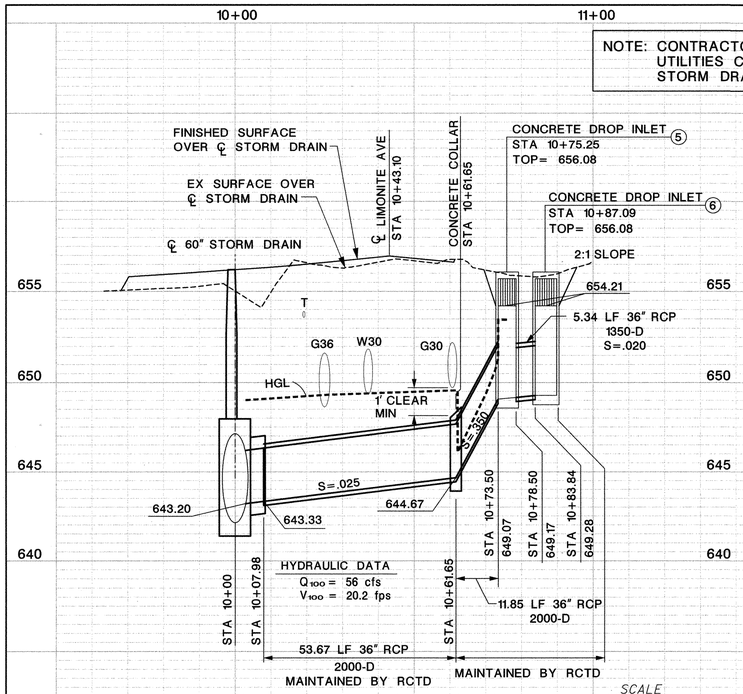
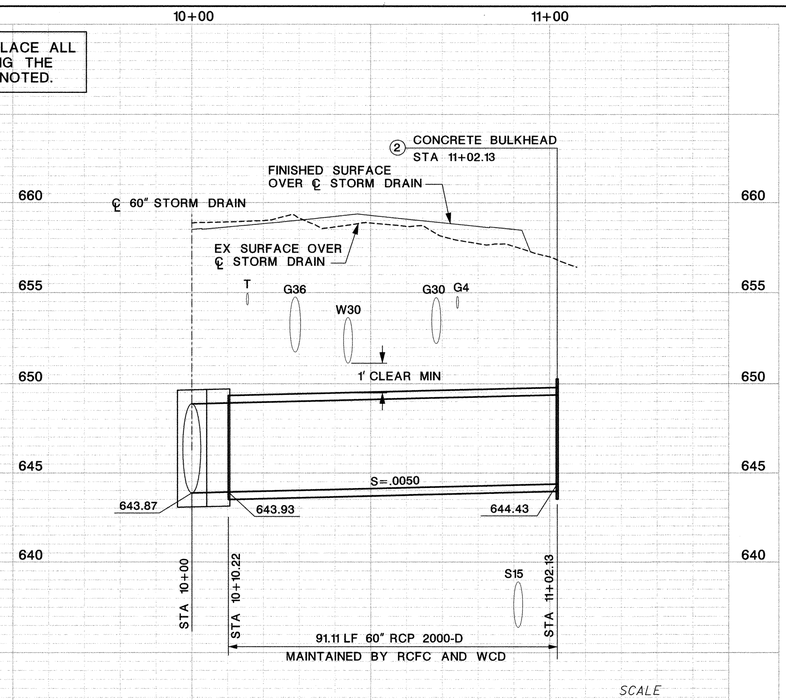
1563

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



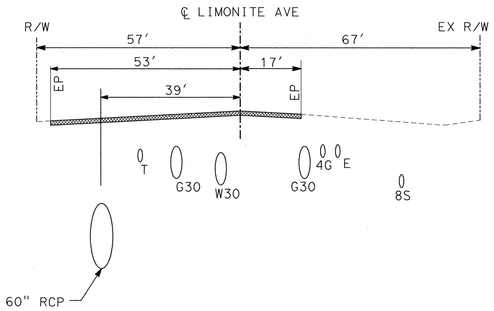
SCALE
HORIZONTAL: 1"=20'
VERTICAL: 1"=4'

CONNECTOR P PROFILE



SCALE
HORIZONTAL: 1"=20'
VERTICAL: 1"=4'

CONNECTOR Q PROFILE



SECTION AT STA 103+00

TYPICAL SECTION FROM STA 99+80 TO STA 107+50

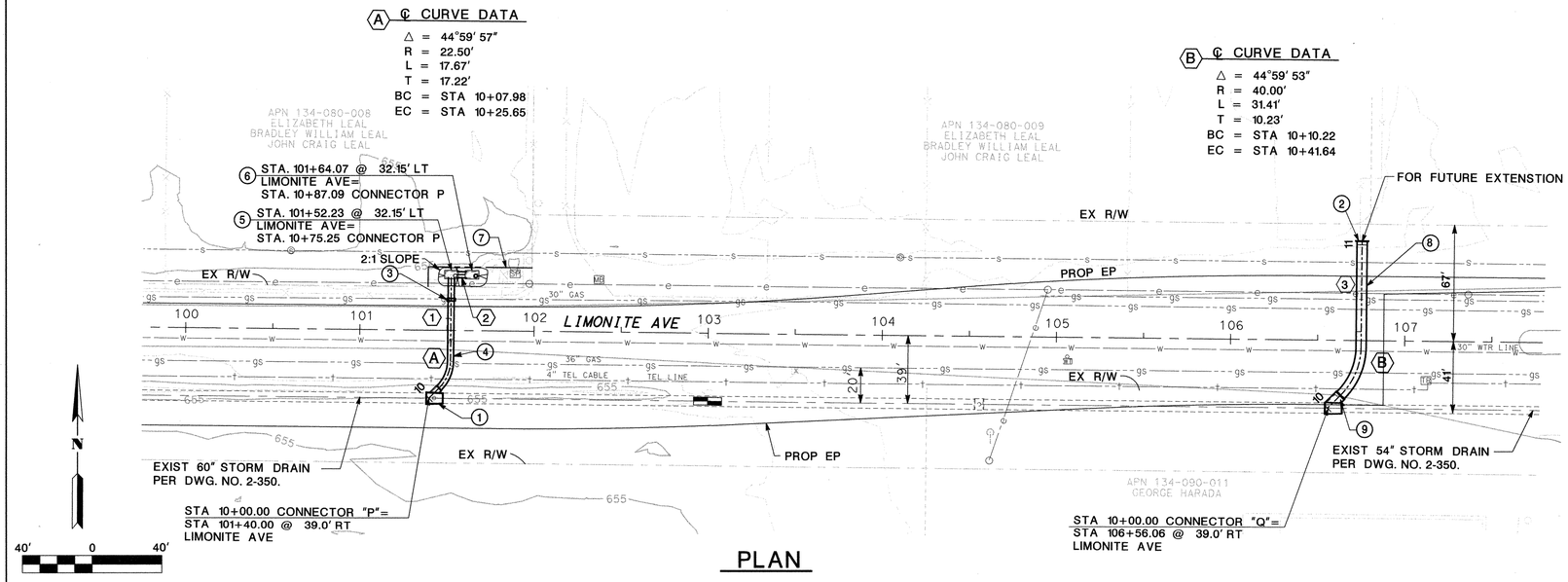
20' 0 20'

INFORMATIONAL NOTE

ALL X-SECTIONS TAKEN LOOKING DOWNSTREAM

Ⓐ ℄ CURVE DATA
- Δ = 44°59' 57"
- R = 22.50'
- L = 17.67'
- T = 17.22'
- BC = STA 10+07.98
- EC = STA 10+25.65

Ⓑ ℄ CURVE DATA
- Δ = 44°59' 53"
- R = 40.00'
- L = 31.41'
- T = 10.23'
- BC = STA 10+10.22
- EC = STA 10+41.64



PLAN

STORM DRAIN DATA TABLE

NO.	DELTA / BEARING	RADIUS	LENGTH	TANGENT	REMARKS
1	N 00°38'23"E	--	47.85'	--	36" RCP
2	S 89°21'40"E	--	5.34'	--	36" RCP
3	N 00°38'20"E	--	60.49'	--	60" RCP

NOTES

1. REMOVE EXIST MANHOLE. CONSTRUCT MH #4 PER RCFC STD DRAWING MH254. A=45°, B=36", C=8.4', D1=60", D2=60", R=643.20, S=643.33.
2. CONSTRUCT CONCRETE BULKHEAD PER RCFC STD DRAWING M816.
3. CONSTRUCT CONCRETE COLLAR PER RCFC & WCD STD DWG M803.
4. CONSTRUCT 30" RCP CONNECTOR "P".
5. CONSTRUCT CONCRETE DROP INLET PER RCFC & WCD STD DWG CB 110, V=7.01', H=1.5', W=6.5', A=3.5'
6. CONSTRUCT CONCRETE DROP INLET PER RCFC & WCD STD DWG CB 110, V=6.8', H=1.5', W=6.5', A=3.5'
7. DRAINAGE EASEMENT DEDICATED TO RIVERSIDE COUNTY.
8. CONSTRUCT 60" RCP CONNECTOR "Q".
9. REMOVE EXIST MANHOLE. CONSTRUCT MH #4 PER RCFC STD DRAWING MH254. A=45°, B=60", C=10.64', D1=60", D2=54", R=643.87, S=643.93

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:
DEPUTY DIRECTOR OF TRANSPORTATION
DATE: 6/24/05

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

REGISTERED PROFESSIONAL ENGINEER HOANG NGUYEN No. C64747 Exp. 06/30/07 CIVIL STATE OF CALIFORNIA

Berryman & Henigar
11590 W. Bernardo Ct. Suite 100 San Diego, CA 92127
TEL: (858)451-6100 FAX: (858)451-2646

THE BENCHMARK USED FOR THIS SURVEY IS A FOUND AERIAL CONTROL POINT DESIGNATED HVP-3. THE VERTICAL VALUE FOR THIS AERIAL CONTROL POINT WAS PROVIDED BY RCTD AND LAND MANAGEMENT AGENCY IN A SURVEY CONTROL REPORT FOR LIMONITE AVE DATED 1-14-2002, W.O. NO. A3-0320, B10670, F.B. 2207, SURVEY NO. 6269.
ELEV: 654.044

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: DATE: 6/29/05
APPROVED BY: DATE: 6-29-2005

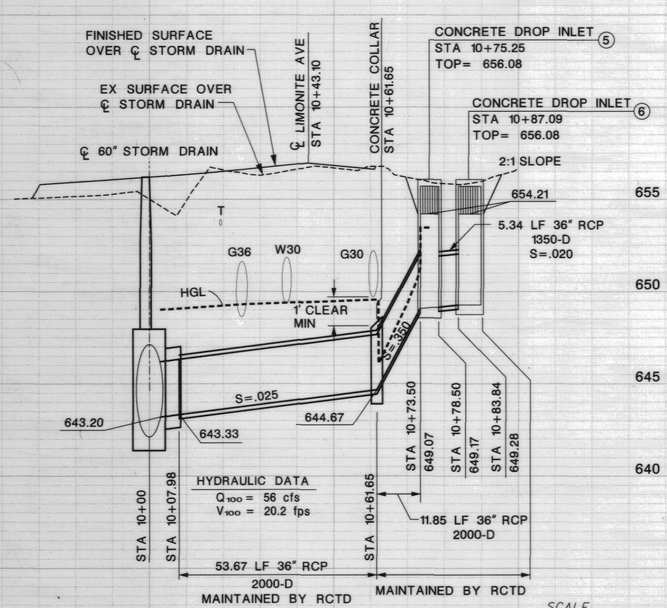
EASTVALE MASTER DRAINAGE PLAN
CONNECTOR P & Q

PROJECT NO. 2-0-0323
DRAWING NO. 2-339
SHEET NO. 9 OF 10

\\SD9P&P.dgn
5/12/2005
hngu@rc

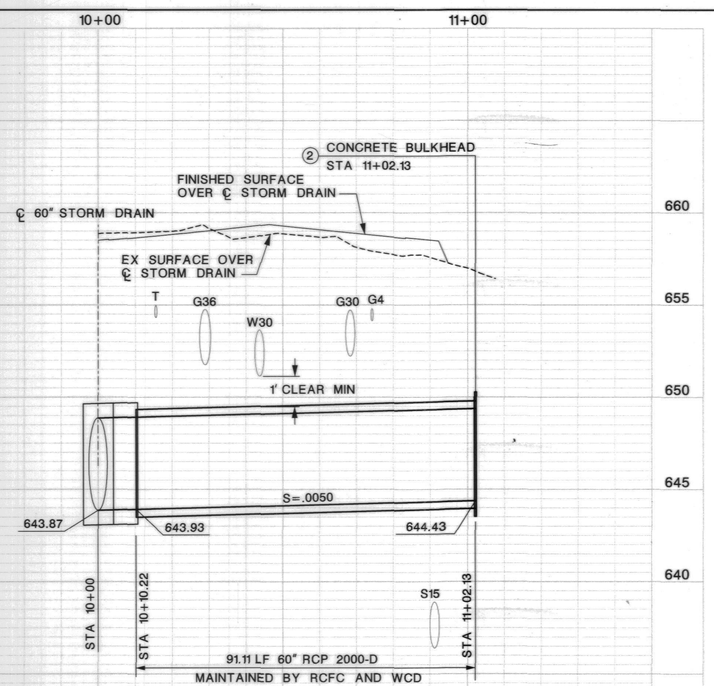
\SD9PLAN&PROFILE

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



CONNECTOR P PROFILE

SCALE
HORIZONTAL: 1"=20'
VERTICAL: 1"=4'



CONNECTOR Q PROFILE

SCALE
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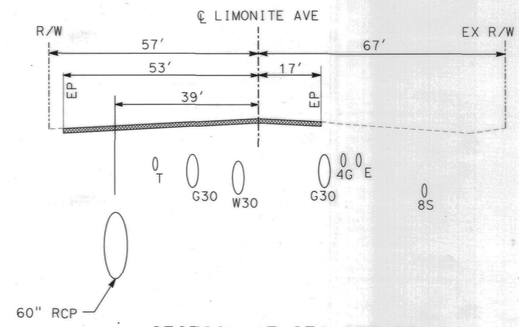
VERTICAL: 1"=4'



SECTION AT STA 103+00

TYPICAL SECTION FROM STA 99+80 TO STA 107+50

20' 0 20'

INFORMATIONAL NOTE

ALL X-SECTIONS TAKEN LOOKING DOWNSTREAM

Ⓐ ℄ CURVE DATA
Δ = 44°59' 57"
R = 22.50'
L = 17.67'
T = 17.22'
BC = STA 10+07.98
EC = STA 10+25.65

Ⓑ ℄ CURVE DATA
Δ = 44°59' 53"
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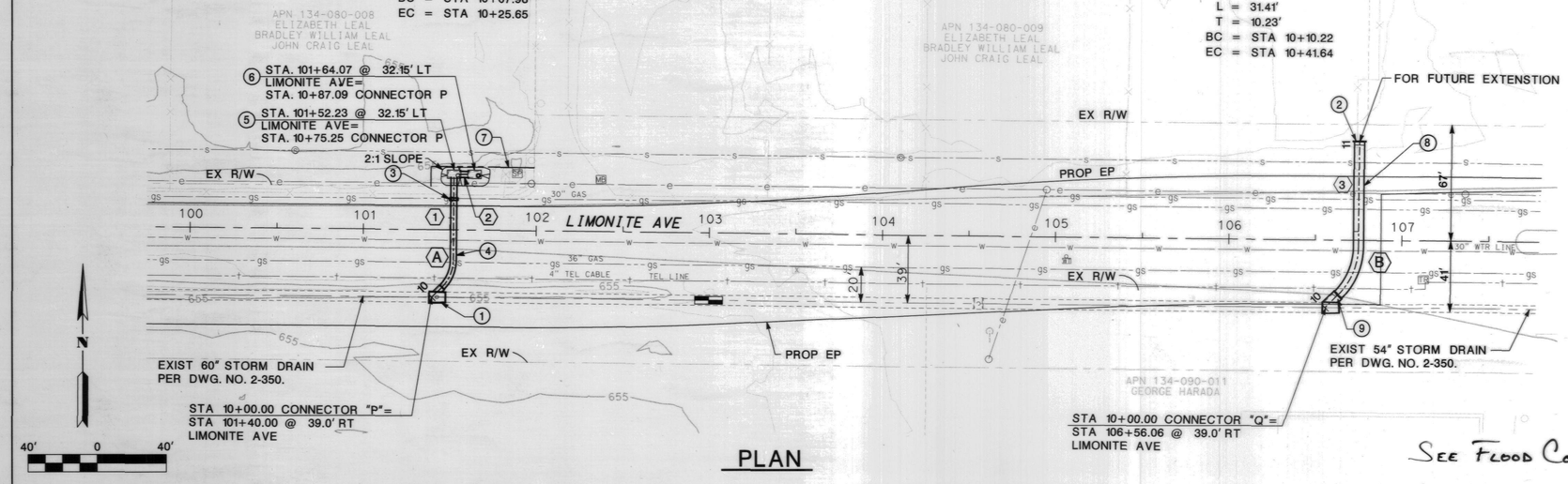

PLAN

STORM DRAIN DATA TABLE

NO.	DELTA / BEARING	RADIUS	LENGTH	TANGENT	REMARKS
1	N 00°38'23"E	--	47.85'	--	36" RCP
2	S 89°21'40"E	--	5.34'	--	36" RCP
3	N 00°38'20"E	--	60.49'	--	60" RCP

NOTES

1. REMOVE EXIST MANHOLE. CONSTRUCT MH #4 PER RCFC STD DRAWING MH254. A=45°, B=36", C=8.4', D1=60", D2=60", R=643.20, S=643.33.
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6. CONSTRUCT CONCRETE DROP INLET PER RCFC & WCD STD DWG CB 110, V=6.8', H=1.5', W=6.5', A=3.5'
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8. CONSTRUCT 60" RCP CONNECTOR "Q".
9. REMOVE EXIST MANHOLE. CONSTRUCT MH #4 PER RCFC STD DRAWING MH254. A=45°, B=60", C=10.64', D1=60", D2=54", R=643.87, S=643.93

See Flood Control As-Builts

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:
DEPUTY DIRECTOR OF TRANSPORTATION
DATE: 6/24/05

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ELEV: 654.044

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY:
DATE: 6/29/05
APPROVED BY:
DATE: 6-29-2005

EASTVALE MASTER DRAINAGE PLAN
CONNECTOR P & Q

PROJECT NO. 2-0-0323
DRAWING NO. 2-339
SHEET NO. 9 OF 10

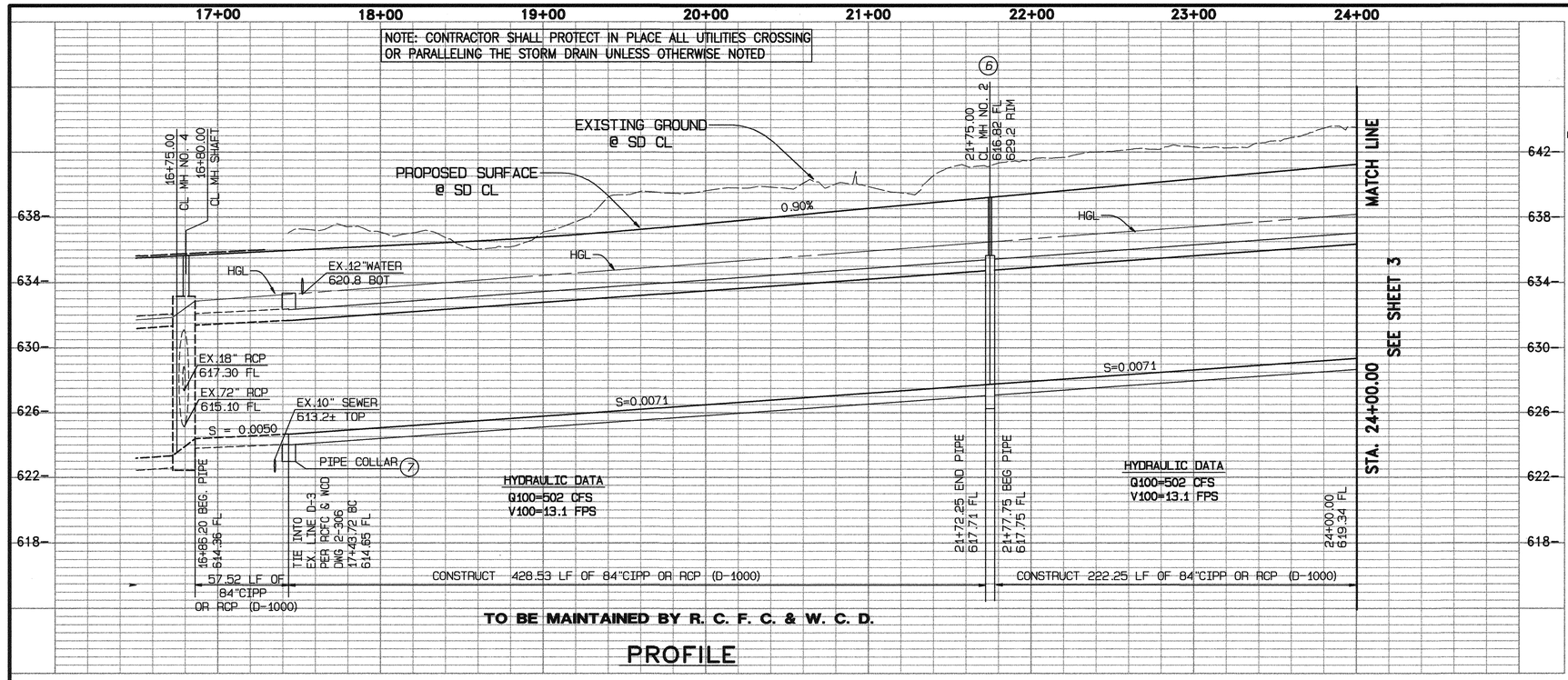
5/12/2005 \\S939\gar\dgn\2-339P&Q.dgn
PLAN&PROFILE

939-D

1565

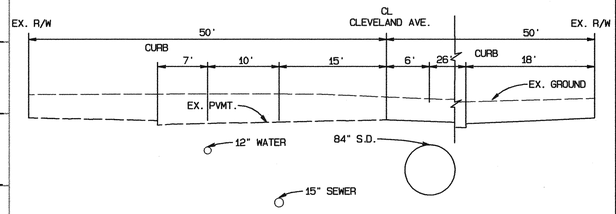
- **AS-BUILT STORM DRAIN IMPROVEMENT PLANS ALONG SCHOLAR WAY AND 58TH STREET (MDP LINE "D-3", RCFCD DWG NO. 2-0-308)**

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED



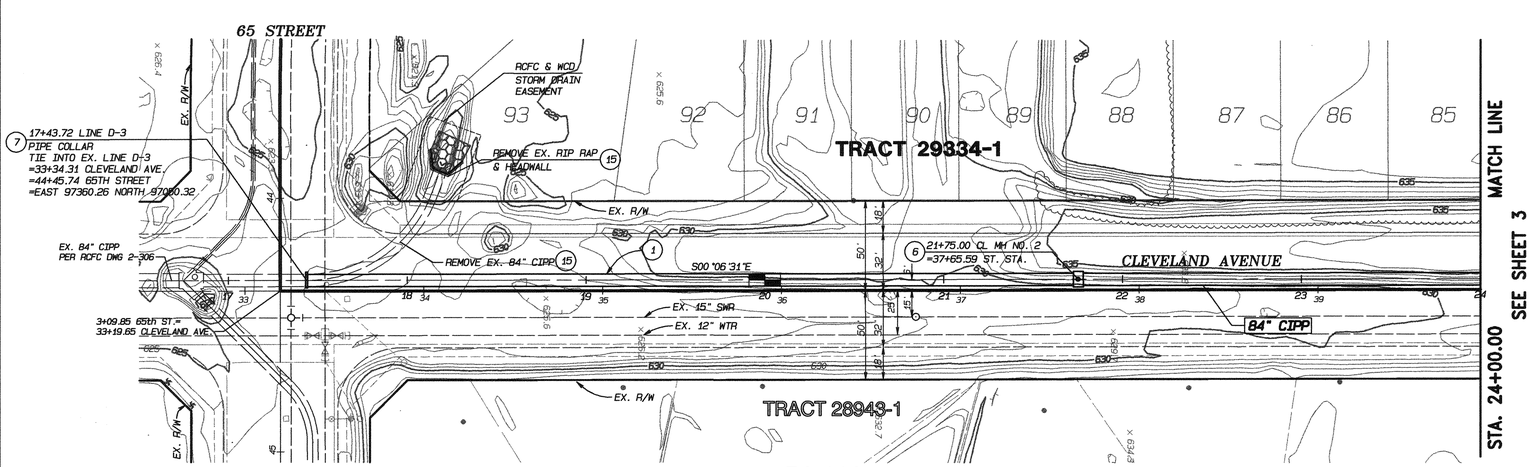
TO BE MAINTAINED BY R. C. F. C. & W. C. D.

PROFILE



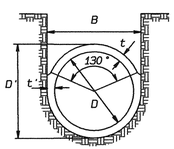
SECTION AT STA. 20+00.00
CLEVELAND AVENUE

GRAPHIC SCALE 1"=10'
0 10 20 30



PLAN

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120



B	WIDTH OF PIPE TRENCH
D	NOMINAL PIPE DIAMETER
D'	OUTER PIPE DIAMETER
t	NOMINAL THICKNESS
t'	SIDEWALL THICKNESS

D	D'	B	t	t'
78"	93"	94"	7.5"	7.5"
84"	100"	101"	8.0"	8.0"

CIPP TRENCH DETAIL
N.T.S.

AS BUILT
APPROVED BY: J. McCraffey
DATE 11-4-05

NOTES

(1) CONSTRUCT 84" CIPP
(6) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(7) CONSTRUCT CONCRETE COLLAR PER RCFC STD M 803
(15) REMOVE PORTION OF EXIST. 84" RCP, HEADWALL, AND RIP RAP

REGISTERED PROFESSIONAL ENGINEER JOHN LIN McCRAFFEY No. C49405 EXP. 9-30-06 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN No. 53950 EXP. 6-30-06 CIVIL STATE OF CALIFORNIA

TRACT NO. 29334-1 IP 040057

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256
PREPARED BY:
DATE: 11-8-04
R.C.E. NO. C49405
EXP. DATE: 9-30-06

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY: 11/15/04 DATE
KHALED A. OTHMAN, P.E.
R.C.E. 53950 EXP. 6-30-06
RECOMMENDED 11/15/04 DATE

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
BURIED CABLE
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
RIVERSIDE COUNTYBENCH MARK M.L. 35-64 DISK IN TOP OF CONC. AT N.E. COR. OF LIMONITE AVE. & HAMMER AVE., 51.0 FT. E OF HAMMER AVE., 45 FT. N. OF LIMONITE AVE., 5FT. N.W.OF A 4"X4" CONC. GAS CO. MARKER POST & 5FT BELOW GROUND. MARKED M.L. 35
ELEVATION: 661.66

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: DATE: 12/15/04
APPROVED BY: DATE: 12-15-2004

EASTVALE
MASTER DRAINAGE PLAN
LINE D-3 (STAGE 5)
STA. 17+43.72 TO STA. 24+00.00

PROJECT NO. 2-0-308
DRAWING NO. 2-363
SHEET NO. 2 OF 9

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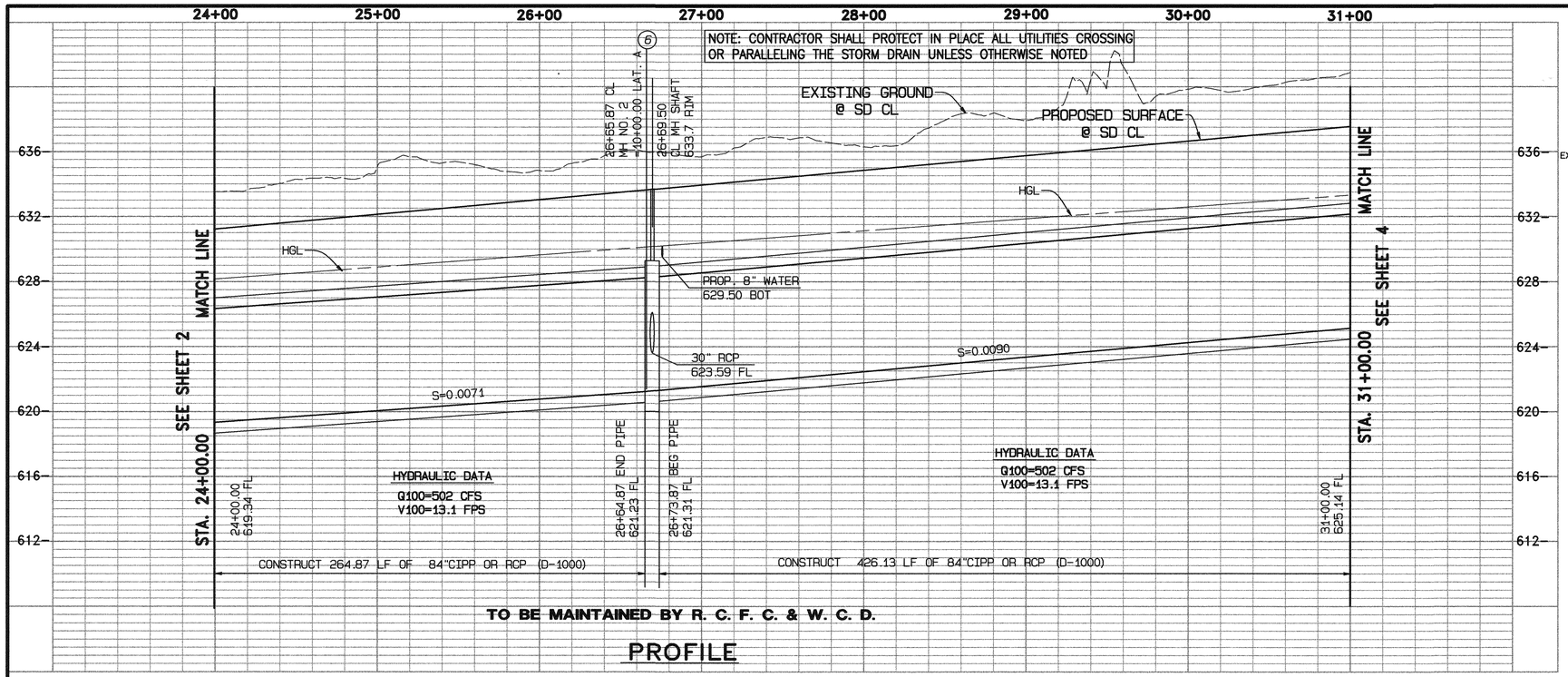
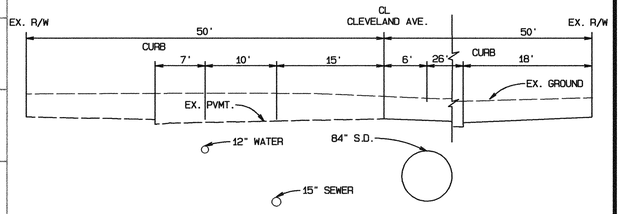


PROFILE

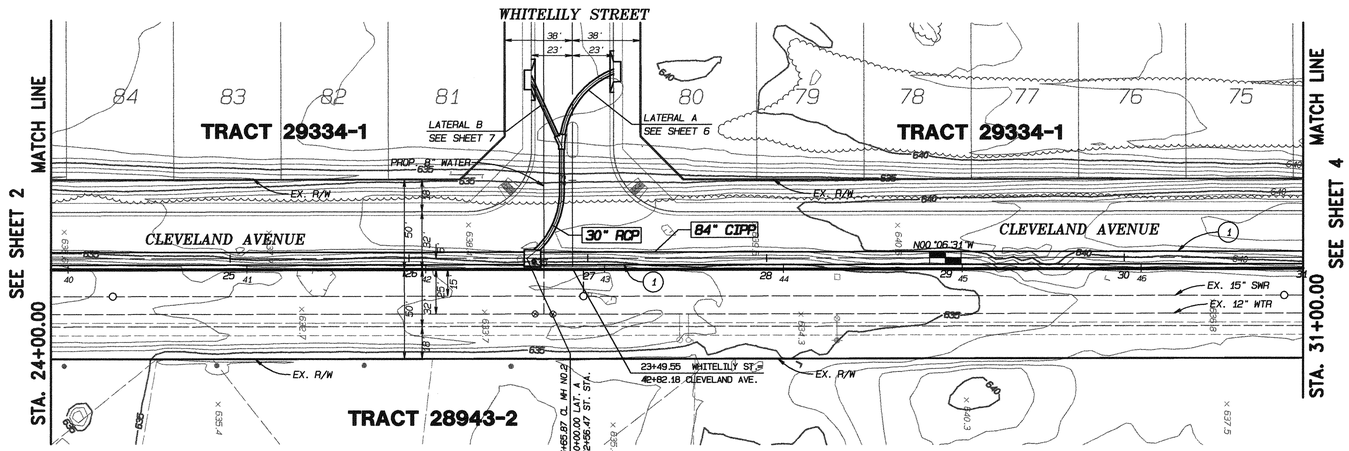


SECTION AT STA. 29+00.00

CLEVELAND AVENUE

GRAPHIC SCALE 1"=10'

0 10 20 30



PLAN

GRAPHIC SCALE 1"=40'

40 20 0 40 80 120

NOTES

1. CONSTRUCT 84" CIPP
6. CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252

AS BUILT

APPROVED BY:

DATE 11-4-05

TRACT NO. 29334-1 IP 040057

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ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS

CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256

PREPARED BY:
R.C.E. NO. C49405
EXP. DATE: 9-30-06
DATE: 11-8-04

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY: 11/15/04 DATE
KHALED A. OTHMAN, P.E.
R.C.E. 33950 EXP. 6-30-06
RECOMMENDED 11/15/04 DATE

REGISTERED PROFESSIONAL ENGINEER JOHN C.W. McCRAY NO. C49405 EXP. 9-30-06 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-06 CIVIL STATE OF CALIFORNIA

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
RIVERSIDE COUNTYBENCH MARK M.L.
35-64 DISK IN TOP OF CONC. AT N.E. COR. OF LIMONITE AVE. & HAMMER AVE., 51.0 FT. E OF HAMMER AVE., 45 FT. N. OF LIMONITE AVE., 5FT. N.W.OF A 4"X4" CONC. GAS CO. MARKER POST & 1FT BELOW GROUND. MARKED M.L. 35
ELEVATION: 661.66

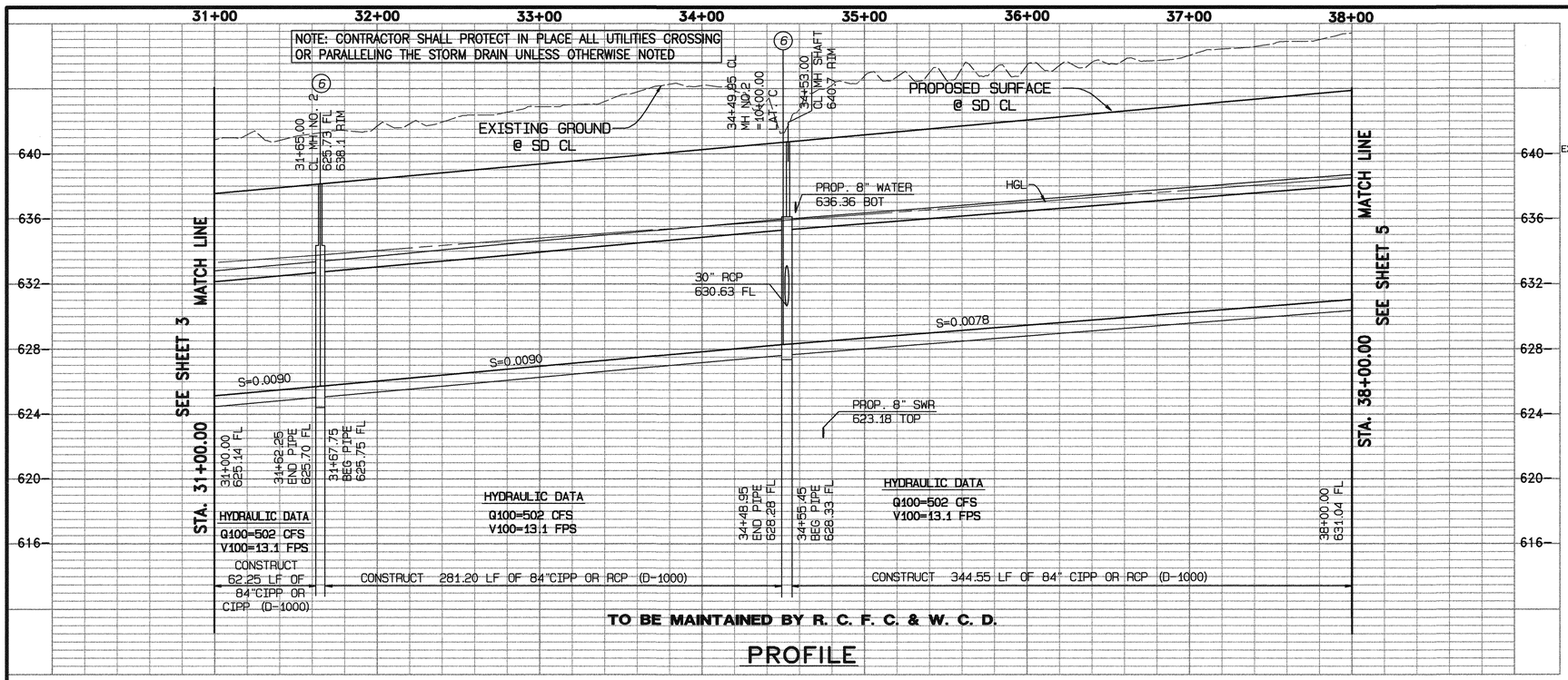
REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: DATE: 12/15/04
APPROVED BY: DATE: 12-15-2004

EASTVALE
MASTER DRAINAGE PLAN
LINE D-3 (STAGE 5)
STA. 24+00.00 TO STA. 31+00.00

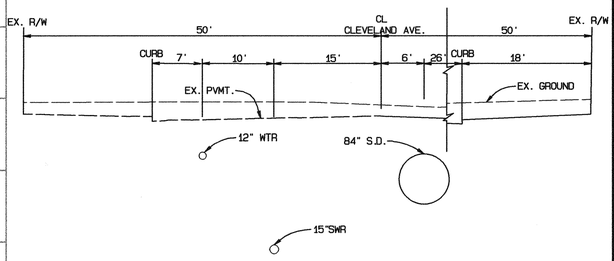
PROJECT NO. 2-0-308
DRAWING NO. 2-363
SHEET NO. 3 OF 9

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED



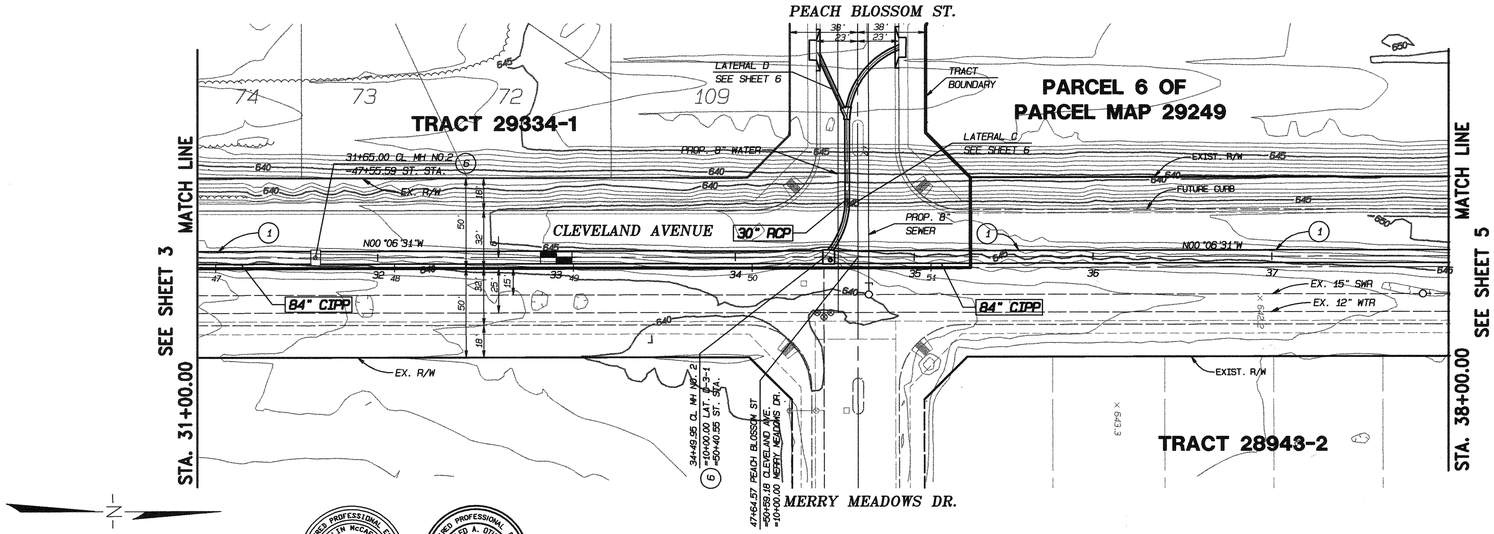
TO BE MAINTAINED BY R. C. F. C. & W. C. D.

PROFILE



SECTION AT STA. 33+00.00
CLEVELAND AVENUE

GRAPHIC SCALE 1"=10'
0 10 20 30



GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

PLAN

NOTES

1. CONSTRUCT 84" CIPP
6. CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252

AS BUILT
APPROVED BY: [signature]
DATE 11-4-05

TRACT NO. 29334-1 IP 040057

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256
PREPARED BY: [signature] R.C.E. NO. C49405
DATE: 11-8-04 EXP. DATE: 9-30-06

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY: [signature] 11/15/04 DATE
KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-06
RECOMMENDED [signature] 11/15/04 DATE

REGISTERED PROFESSIONAL ENGINEER IGOR I.N. McCRAY NO. C49405 EXP. 9-30-06 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-06 CIVIL STATE OF CALIFORNIA

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BENCH MARK:
RIVERSIDE COUNTYBENCH MARK M.L. 35-64 DISK IN TOP OF CONC. AT N.E. COR. OF LIMONITE AVE. & HAMNER AVE., 51.0 FT. E OF HAMNER AVE., 45 FT. N. OF LIMONITE AVE., 5FT. N.W.OF A 4"X4" CONC. GAS CO. MARKER POST & 5FT BELOW GROUND. MARKED M.L. 35
ELEVATION: 661.66

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: [signature] DATE: 12/15/04
APPROVED BY: Stuart E McKibbin DATE: 12-15-2004

EASTVALE MASTER DRAINAGE PLAN LINE D-3 (STAGE 5)
STA. 31+00.00 TO STA. 38+00.00

PROJECT NO. 2-0-308
DRAWING NO. 2-363
SHEET NO. 4 OF 9

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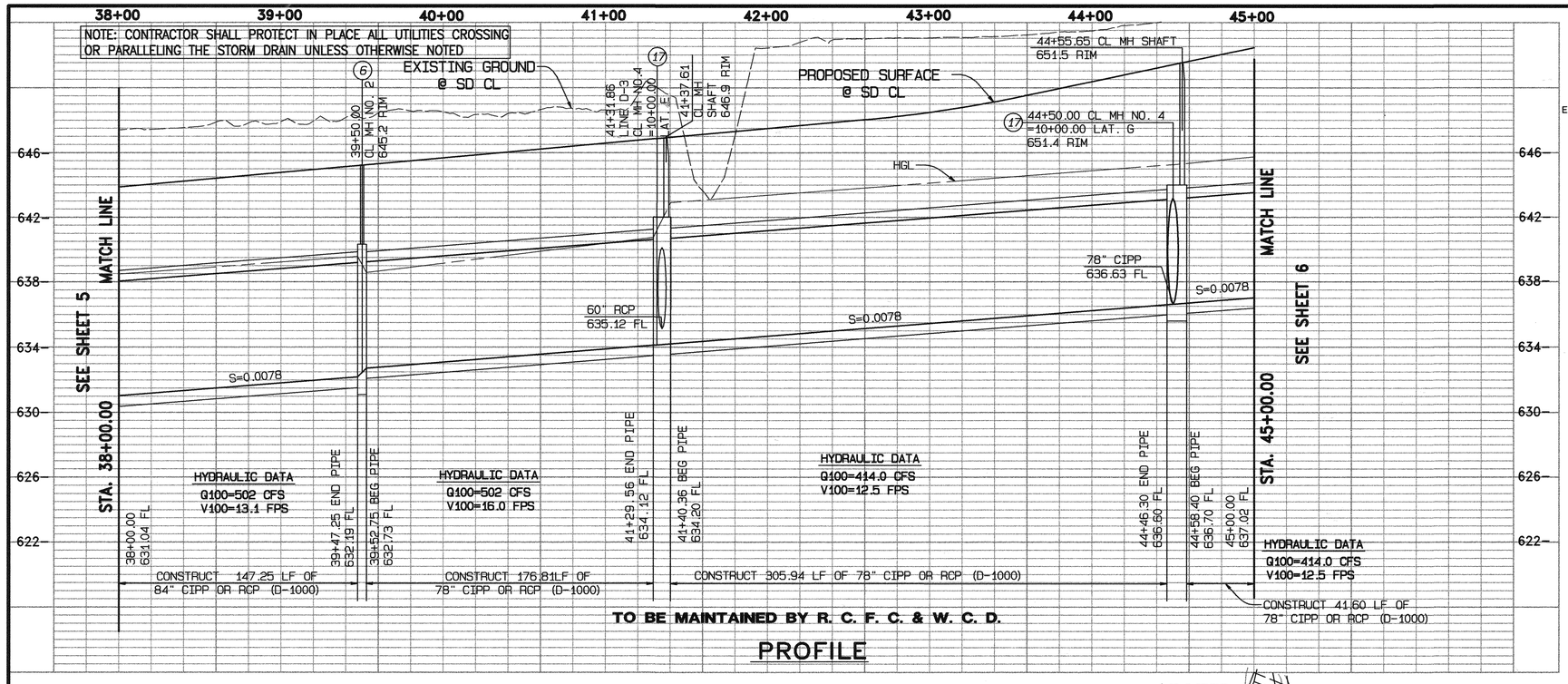
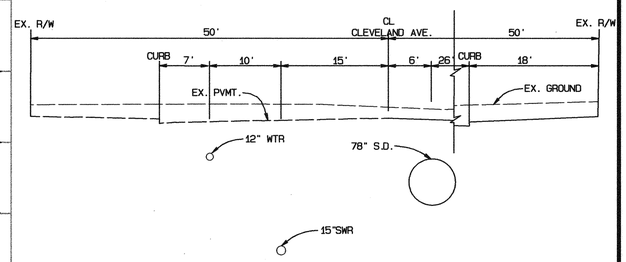
64

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED



TO BE MAINTAINED BY R. C. F. C. & W. C. D.

PROFILE

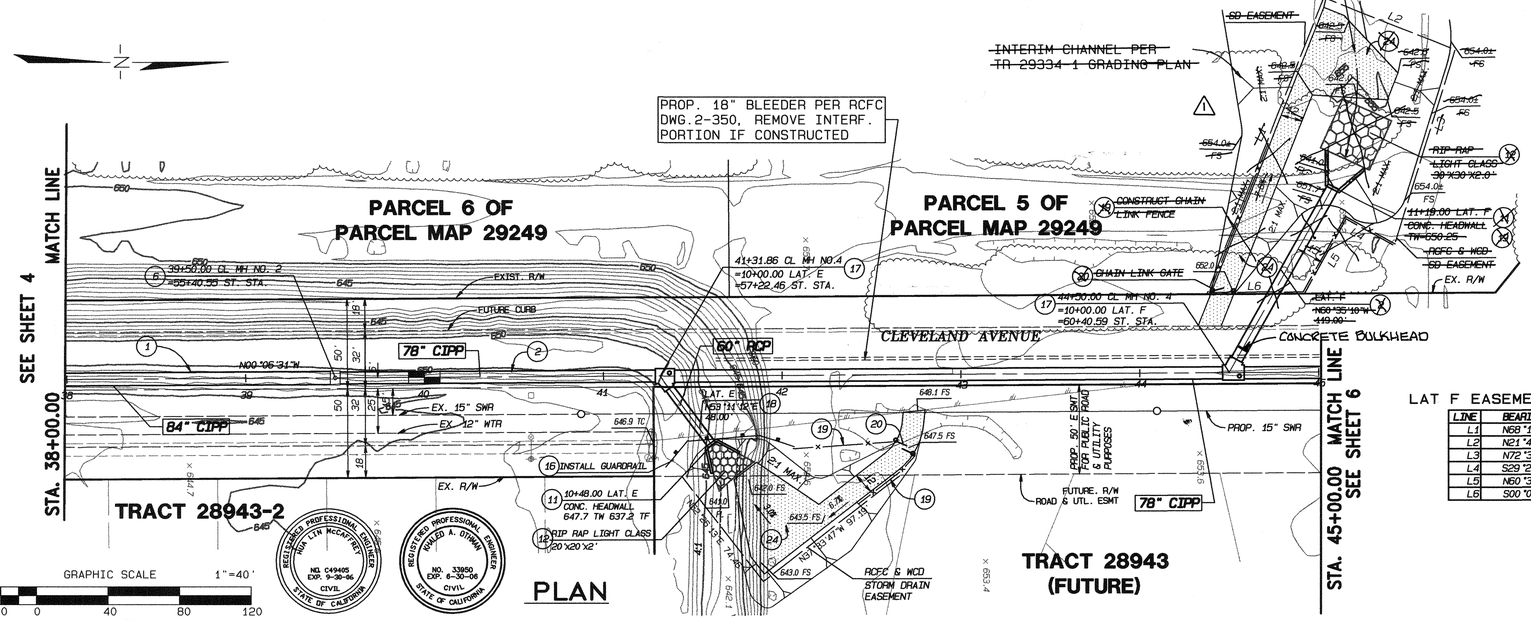


SECTION AT STA. 40+00.00
CLEVELAND AVENUE

GRAPHIC SCALE 1"=10'
0 10 20 30

	MH NO. 4
M.L. STA.	41+36.86 LINE E-3
LATERAL	LAT. E
A	55°±
B	60"
D1	78"
D2	78"
C	8.5'
E	8.0'
L	10.8'
ELEV."S"	635.12
ELEV."R"	635.78

	MH NO. 4
M.L. STA.	44+50.00 LINE E-3
LATERAL	LAT. F
A	60°±
B	78"
D1	78"
D2	78"
C	8.4'
E	8.4'
L	12.1'
ELEV."S"	636.63
ELEV."R"	637.19



GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

PLAN

LAT F EASEMENT DIMENSIONS

LINE	BEARING	DISTANCE
L1	N58°16'09"W	178.11'
L2	N21°47'04"E	79.01'
L3	N72°31'17"W	114.70'
L4	S29°22'27"W	30.87'
L5	N60°35'10"W	47.94'
L6	S00°06'31"E	54.42'

AS BUILT

APPROVED BY: [signature]

DATE 11-4-05

NOTES

1. CONSTRUCT 84" CIPP
2. CONSTRUCT 78" CIPP
6. CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
7. CONSTRUCT CONCRETE COLLAR PER RCFC STD M 803
9. CONSTRUCT J.S. NO.4 PER RCFC STD. JS 229
11. CONSTRUCT TYPE A CONC. HEADWALL PER CALTRANS STD D90
12. CONSTRUCT LIGHT CLASS RIP RAP
16. INSTALL GUARDRAIL PER CALTRANS STD A77A
17. CONSTRUCT MANHOLE NO. 4 PER RCFC STD. MH 254
18. CONSTRUCT 60" RCP (D-1050)
19. CONSTRUCT CHAIN LINK FENCE PER RCFC. STD.M801
20. CONSTRUCT CHAIN LINK FENCE GATE PER RCFC STD. M801
24. CONSTRUCT 3" CLASS II BASE ON ACCESS ROAD

TRACT NO. 29334-1 IP 040057

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256
PREPARED BY: R.C.E. NO. C49405
DATE: 11-8-04 EXP. DATE: 9-30-06

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY: [signature] 11/15/04 DATE
KHALED OTHMAN R.E.
R.C.E. 53950 EXP. 6-30-06
RECOMMENDED [signature] 11/15/04 DATE

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
RIVERSIDE COUNTYBENCH MARK M.L. 35-64 DISK IN TOP OF CONC. AT N.E. COR. OF LIMONITE AVE. & HAMMER AVE., 51.0 FT. E OF HAMMER AVE., 45 FT. N. OF LIMONITE AVE., SFT. N.W.OF A 4"X4" CONC. GAS CO. MARKER POST & 1FT BELOW GROUND. MARKED M.L. 35
ELEVATION: 661.66

REF.	REVISIONS	APPR.	DATE
1	DELETED INTERIM CHANNEL FOR AS BUILT		

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: [signature] DATE: 12/15/04
APPROVED BY: [signature] DATE: 12-15-2004

EASTVALE MASTER DRAINAGE PLAN LINE D-3 (STAGE 5)

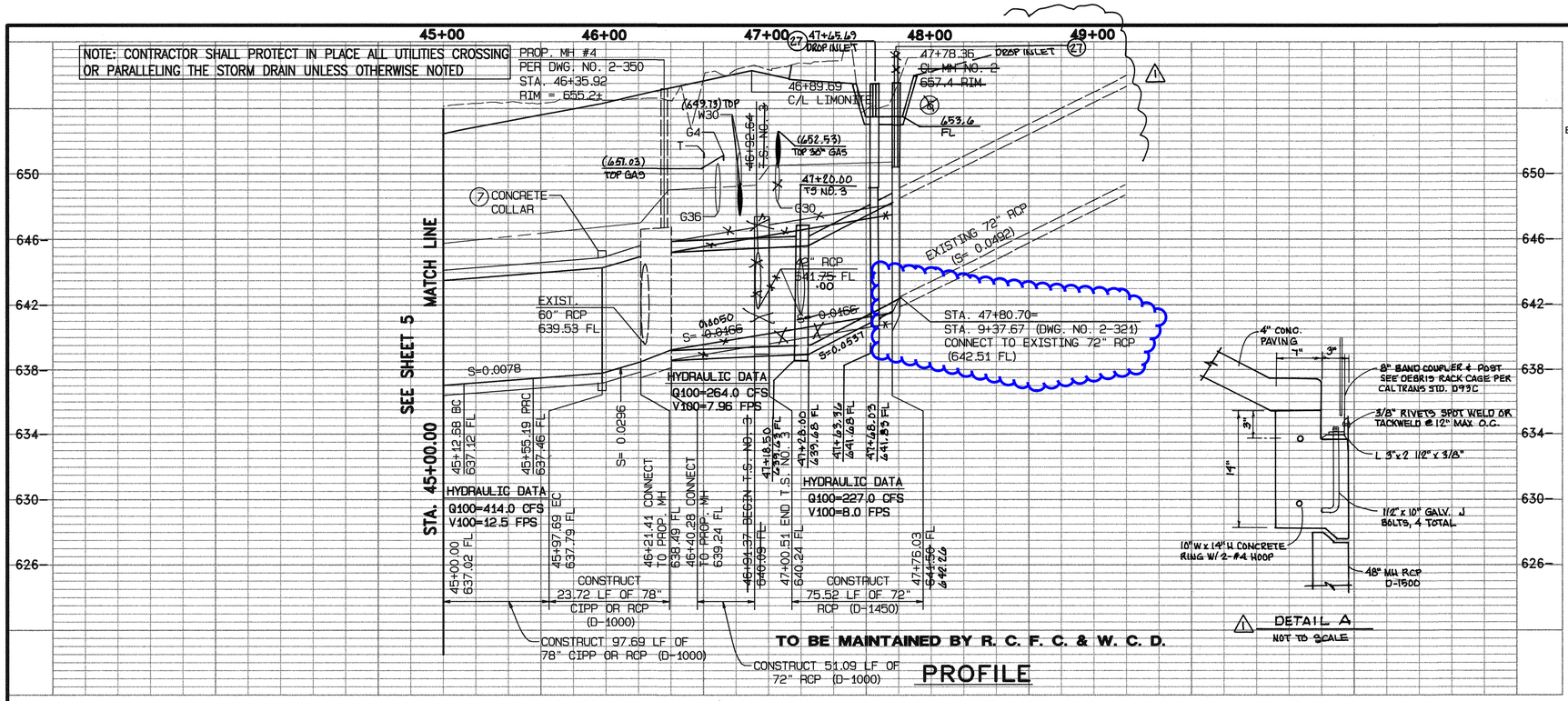
STA. 38+00.00 TO STA. 45+00.00

PROJECT NO. 2-0-308
DRAWING NO. 2-363
SHEET NO. 5 OF 9

G:\2003\03-0054\030054SD.pro 11/5/2004 1:39PM

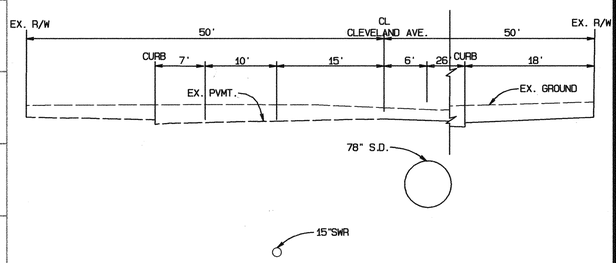
64

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED



PROFILE

⚠1 DETAIL A
NOT TO SCALE



SECTION AT STA. 46+00.00
CLEVELAND AVENUE

GRAPHIC SCALE 1"=10'
0 10 20 30

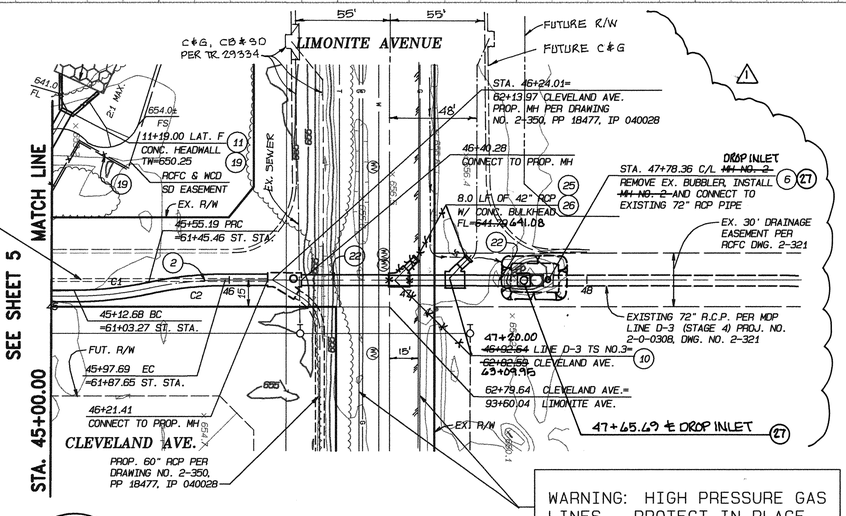
	T.S. NO. 3
M.L. STA.	~~46+24.58~~ LINE D-3 47+20 LINE D-5 ⚠1
LATERAL	
A	45°
B	42"
D1	72"
D2	72"
C	8.92'
ELEV. "S"	~~641.75 00~~
ELEV. "R"	~~641.77 02~~
FL @ BULKHEAD	~~641.79 08~~

AS BUILT
APPROVED BY: [signature]
DATE 11-4-05

MDP LINE D-3 CURVE TABLE

NO.	RADIUS	DELTA	TANGENT	LENGTH
C1	200.00'	12°10'38"	21.33'	42.51'
C2	200.00'	12°10'38"	21.33'	42.51'

PROP. 18" BLEEDER PER RCFC DWG.2-350, REMOVE INTERF. PORTION IF CONSTRUCTED

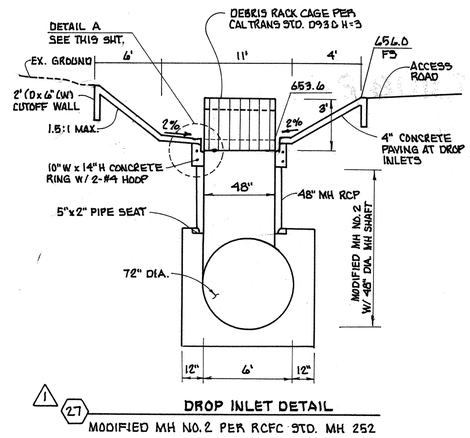


WARNING: HIGH PRESSURE GAS LINES. PROTECT IN PLACE.

PLAN

NOTES

(2) CONSTRUCT 78" CIPP
(6) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(7) CONSTRUCT CONCRETE COLLAR PER RCFC STD M 803
(10) CONSTRUCT T.S. NO.3 PER RCFC STD. TS 303
(11) CONSTRUCT TYPE A HEADWALLS PER CALTRANS STD D90
(12) CONSTRUCT LIGHT CLASS RIP RAP
(19) CONSTRUCT CHAIN LINK FENCE PER RCFC STD. M801
(22) CONSTRUCT 72" RCP (D-1450)
(25) CONSTRUCT 8.0 LF OF 42" RCP (D-1450)
(26) CONSTRUCT CONCRETE BULKHEAD PER RCFC STD M 816
⚠1 (27) CONSTRUCT DROP INLET PER DETAIL THIS SHEET



⚠1 (27) DROP INLET DETAIL
MODIFIED MH NO.2 PER RCFC STD. MH 252

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

REGISTERED PROFESSIONAL ENGINEER JOHN LIN McCRAY NO. C49405 EXP. 9-30-06 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-06 CIVIL STATE OF CALIFORNIA

TRACT NO. 29334-1 IP 040057

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
CIVIL ENGINEERS
3788 McCRAY ST.
RIVERSIDE CA. 92506
PH: (909) 686-1070
FAX: (909) 788-1256
PREPARED BY: [signature]
R.C.E. NO. C49405
EXP. DATE: 9-30-06
DATE: 11-8-04

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY: [signature] DATE 11/15/04
KHALED A. OTHMAN, P.E.
R.C.E. 33950 EXP. 6-30-06
RECOMMENDED [signature] DATE 11/15/04

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK:
RIVERSIDE COUNTYBENCH MARK M.L. 35-64 DISK IN TOP OF CONC. AT N.E. COR. OF LIMONITE AVE. & HAMMER AVE., 51.0 FT. E OF HAMMER AVE., 45 FT. N. OF LIMONITE AVE., 5FT. N.W.OF A 4"X4" CONC. GAS CO. MARKER POST & 5FT BELOW GROUND. MARKED M.L. 35
ELEVATION: 661.66

REF.	DESCRIPTION	APPR.	DATE
⚠1	REVISE TS NO. 3 LOCATION, LINE D-3 PROFILE ADD POTHOLE INFO. ADD 2-DROP INLET AND DETAILS. FOR AS-BUILT.		

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: [signature] DATE: 12/15/04
APPROVED BY: [signature] DATE: 12-15-2004

EASTVALE MASTER DRAINAGE PLAN LINE D-3 (STAGE 5)

STA. 45+00.00 TO STA. 47+75.03

PROJECT NO. 2-0-308
DRAWING NO. 2-363
SHEET NO. 6 OF 9

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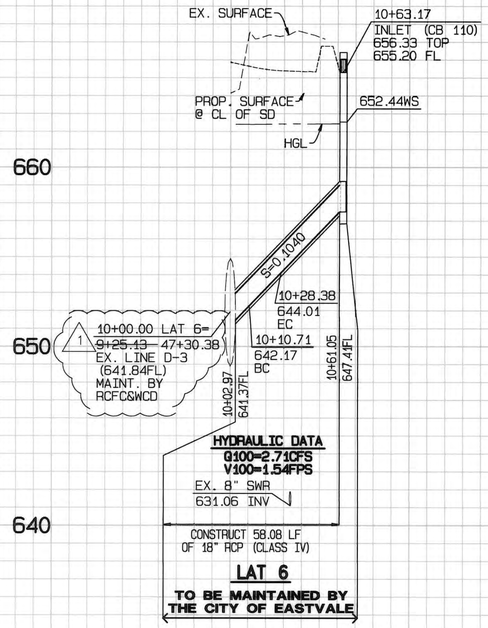
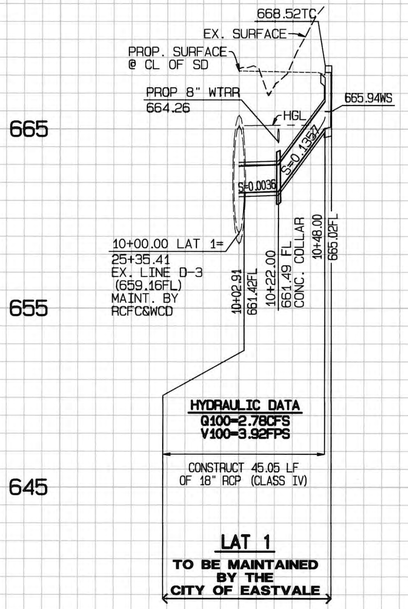
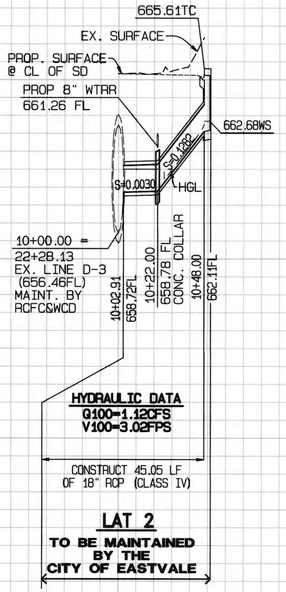
GY

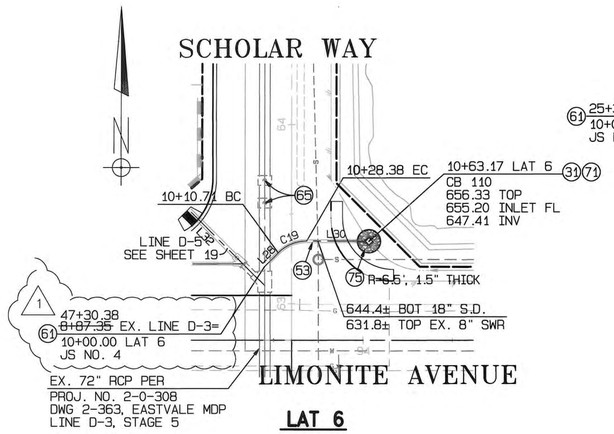


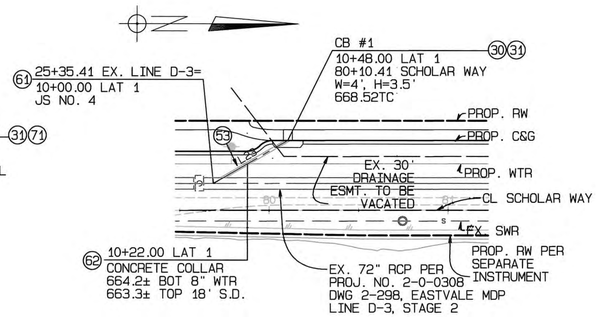


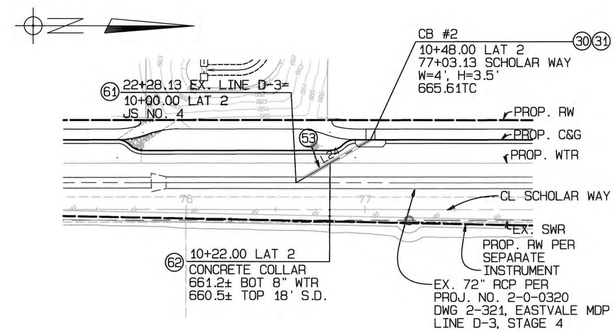


PROFILE SCALES
HORIZ. 1"=40'
VERT. 1"=4'

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.







CONSTRUCTION NOTES

(30) CONSTRUCT 4' CATCH INLET CATCH BASIN PER CITY STD. NO. 300 AND LOCAL DEPRESSION PER CITY STD. NO. 311
(31) INSTALL FOSSIL FILTER PER CONTY STD. 300A, TO BE MAINTAINED BY HOA
(53) CONSTRUCT 18" RCP (CLASS IV)
(61) CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229
(62) CONSTRUCT CONCRETE COLLAR PER RCFC STD. M 803
(65) REMOVE DROP INLET, REPLACE WITH MH CONE (2 TOTAL)
(71) CONSTRUCT CONCRETE DROP INLET PER RCFC STD. CB 110
(75) CONSTRUCT LIGH CLASS RIP-RAP (SIZE PER PLAN WxDxT) W/ MIRAFI 1100N PR APPROVED EQUAL

LINE TABLE

LINE	BEARING	DISTANCE
L23	N30°04'57"W	48.00'
L24	N30°04'57"W	48.00'
L28	N44°55'03"E	10.71'
L30	N89°55'03"E	32.68'

CURVE TABLE

LINE	DELTA	RADIUS	LENGTH	TANGENT
C19	45°00'00"	22.50'	17.67'	9.32'

RCFC&WCD PERMIT # _____

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

G:\2010\10-0040\DWG&PRO\Design\10-0040_S3.prvj 1/27/2014 7:58:49AM

PUBLIC WORKS
DATE SIGNED 1-27-14
ACCEPTED AS TO CONFORMANCE WITH APPLICABLE CITY OF EASTVALE STANDARDS AND PRACTICES.

DIGALERT
DIAL BEFORE YOU DIG
TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 1-800-227-2600
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER COUNTY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR ACCEPTANCE BY THE CITY.

MARK	BY	DATE	REVISIONS	APPR.	DATE
1	SKK	1/27/14	CORRECT STATION CALL OUT FOR EXISTING LINE D-3	Accepted	1/27/14

ENGINEER CITY

SEAL – ENGINEER
REGISTERED PROFESSIONAL ENGINEER SHAWN K. KOMOSSA NO. C81093 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
CIVIL ENGINEERS
3788 McCRAY STREET
RIVERSIDE, CA. 92506
PH: (951) 686-1070
FAX: (951) 788-1256

PREPARED BY: SKKomossa R.C.E. NO. C81093 DATE 1-27-14

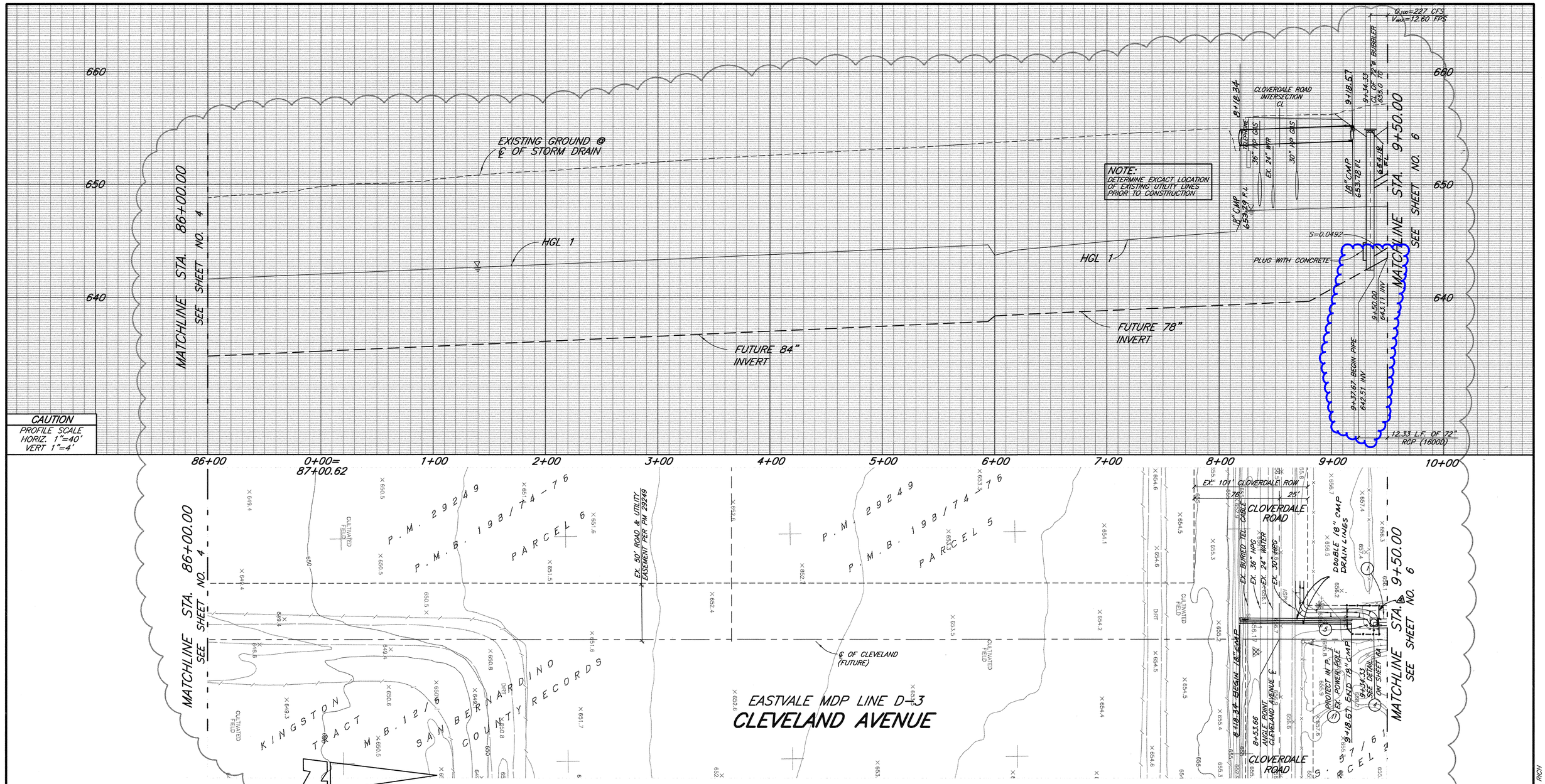
BENCHMARK: SEE SHEET NO.1

SCALE: H: AS SHOWN V: N/A

STORM DRAIN IMPROVEMENT PLANS
TRACT No. 32821-1
SCHEDULE "A"
LAT. 1, LAT. 2 & LAT. 6

SHEET NO. 17 OF 21 SHEETS

FOR: KB HOME
W.O. 10-0040
CITY FILE NO. 10-0124



CAUTION
PROFILE SCALE HORIZ. 1"=40' VERT 1"=4'

STORM DRAIN

1. CONSTRUCT 72" RCP (D LOAD PER PLAN PROFILE)
4. CONSTRUCT 72" CMP RISER PER DETAIL ON SHEET 6A.
5. CONSTRUCT 6" BOLLARD PER DETAIL SHEET 6A.
11. PROTECT IN PLACE (AS NOTED ON PLAN)

△1

Q_{100}=227 CFS
V_{100}=12.60 FPS

REGISTERED PROFESSIONAL ENGINEER THOMAS W. CHADWELL 33755 Exp. 06-30-06 CIVIL STATE OF CALIFORNIA

AS BUILT

APPROVED BY: Thomas W. Chadwell

DATE 10-27-03

NOTE:
HGL1= HYDRAULIC GRADE LINE AT ULTIMATE CONDITIONS PER LINE D-3 MASTER PLAN

DFM

Underground Service Alert	BENCHMARK	SEAL–ENGINEER		SEAL–COUNTY
DIG ALERT Call: TOLL FREE 1–800 227–2600 TWO WORKING DAYS BEFORE YOU DIG	SEE SHEET NO. 1	REGISTERED PROFESSIONAL ENGINEER KENNETH W. CRAWFORD JR. No. 26928 Exp. 3/31/05 CIVIL STATE OF CALIFORNIA	KWC ENGINEERS, INC. CIVIL ENGINEERING, PLANNING AND CONSTRUCTION MANAGEMENT 1289 W. POMONA ROAD, SUITE 104 ● CORONA, CA. 92882-7158 ● 909-734-2130	REGISTERED PROFESSIONAL ENGINEER RANEE A. OTMAN No. 33950 Exp. 06-30-02 CIVIL STATE OF CALIFORNIA

Designed by MVG | Drawn by HP | Checked by LAL

PLANS PREPARED UNDER SUPERVISION OF KENNETH W. CRAWFORD, JR. 2-6-03 DATE | 26928 R.C.E. | 03-31-05 EXP. DATE

P8/232161	REVISIONS		
△	ADD FENCE & 4' GATE		3/16/04
△1	ADD 72" RCP, REMOVE 18" RCP		
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
RECOMMENDED FOR APPROVAL	APPROVED BY:	APPROVED BY:
PLANNING ENGINEER	CHIEF ENGINEER	DATE
DATE 10 Mar 03	DATE 3-10-03	RCE NO. EXP. DATE

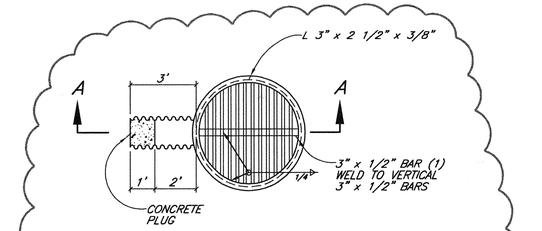
EASTVALE MASTER DRAINAGE PLAN LINE D-3 (STAGE 4)

9+37.67 TO 9+50

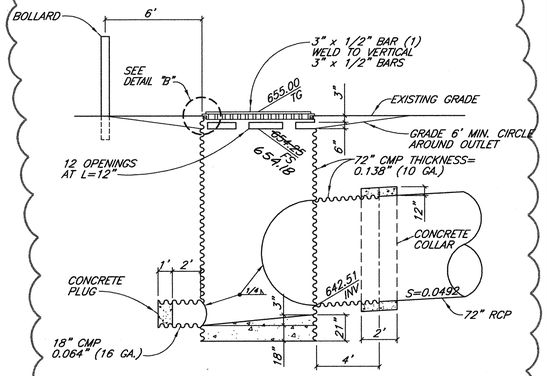
PROJECT NO.	2-0-0308
DRAWING NO.:	2-321
SHEET NO.:	5A OF 7

J:\01\581\2\10 JOB NO. 01-581-2-10 RICH 03-06-03 J:\01\581\CONST\MPP\581SD05A.DWG

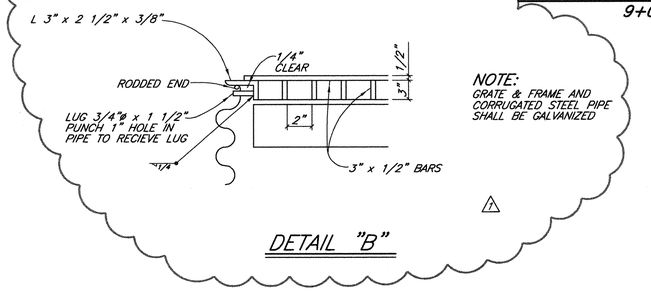
1573



PLAN

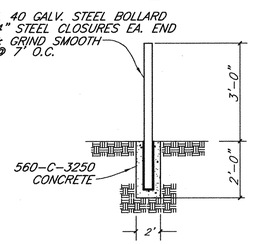


SECTION A–A



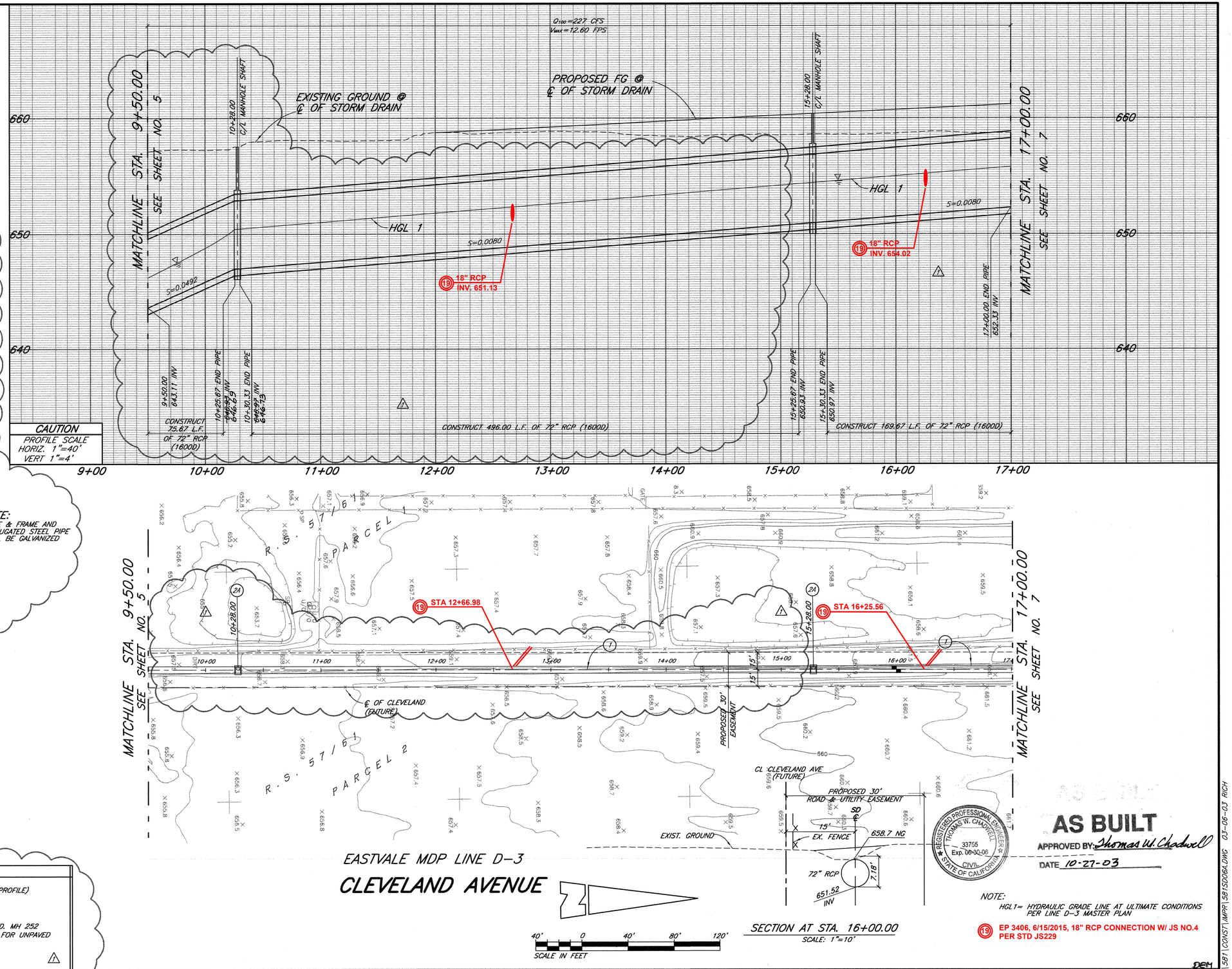
DETAIL "B"

NOTE:
GRATE & FRAME AND CORRUGATED STEEL PIPE SHALL BE GALVANIZED



BOLLARD DETAIL

N.T.S.



CAUTION
PROFILE SCALE
HORIZ. 1"=40'
VERT 1"=4'

EASTVALE MDP LINE D-3

CLEVELAND AVENUE

40' 0 40' 80' 120'
SCALE IN FEET

SECTION AT STA. 16+00.00
SCALE: 1"=10'

NOTE:
HGL1= HYDRAULIC GRADE LINE AT ULTIMATE CONDITIONS PER LINE D-3 MASTER PLAN

19 EP 3406, 6/15/2015, 18" RCP CONNECTION W/ JS NO.4 PER STD JS229

AS BUILT
APPROVED BY: Thomas W. Chadwell
DATE 10-27-03

REGISTERED PROFESSIONAL ENGINEER THOMAS W. CHADWELL 33755 Exp. 06-30-06 CIVIL STATE OF CALIFORNIA

	△	R	L	T	STORM DRAIN
					(1) CONSTRUCT 72" RCP (D LOAD PER PLAN PROFILE)
					(1B) CONSTRUCT 42" RCP (D LOAD PER PLAN)
					(2A) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252 SEE DETAIL "A" ON SHEET NO. 1 FOR MH FOR UNPAVED

Underground Service Alert
Call: TOLL FREE
1–800 227–2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
SEE SHEET NO.

SEAL–ENGINEER
REGISTERED PROFESSIONAL ENGINEER KENNETH W. CRAWFORD, JR. No. 26928 Exp. 3/31/05 CIVIL STATE OF CALIFORNIA

KWC ENGINEERS, INC.
CIVIL ENGINEERING, PLANNING AND CONSTRUCTION MANAGEMENT
1289 W. PomonA ROAD, SUITE 104 ● CORONA, CA. 92882-7198 ● 909-734-2130

Designed by	Drawn by	Checked by
MVG	HP	LAL

PLANS PREPARED UNDER SUPERVISION OF
KENNETH W. CRAWFORD, JR. — 3-6-03 DATE — 26928 R.C.E. — 03-31-05 EXP. DATE

SEAL–COUNTY
REGISTERED PROFESSIONAL ENGINEER MANED A. OTHMAN No. 33950 Exp. 06-30-02 CIVIL STATE OF CALIFORNIA

P8/232161 REVISIONS

REF.	DESCRIPTION	APPR.	DATE
△	ADD 72" RCP, REMOVE 18" RCP		

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
PLANNING ENGINEER
DATE 10 Mar 03
APPROVED BY:
CHIEF ENGINEER
DATE 3-10-03

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE
RCE NO. EXP. DATE

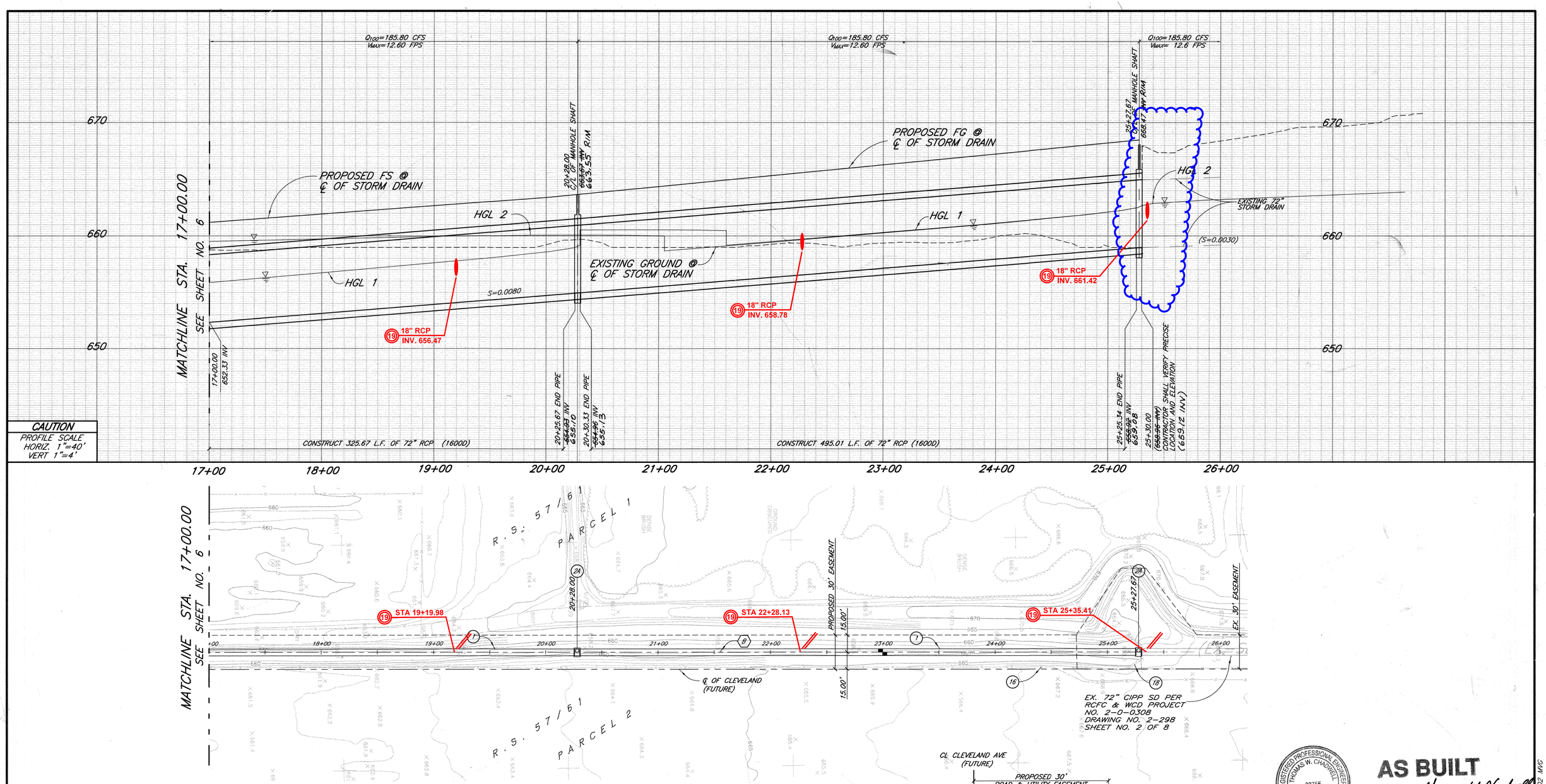
EASTVALE MASTER DRAINAGE PLAN
LINE D-3 (STAGE 4)
AND 18" BLEEDER PIPE
9+50 TO 17+00

PROJECT NO. 2-0-0308
DRAWING NO.: 2-321
SHEET NO.: 6A OF 7

DEM

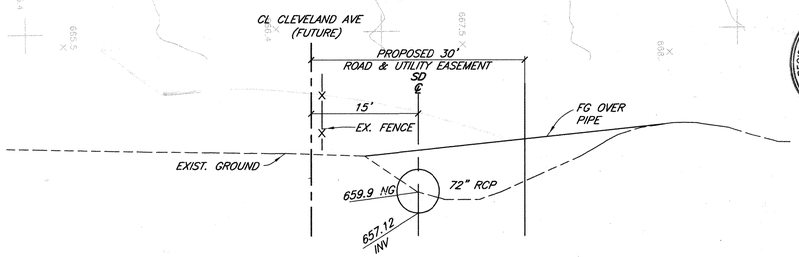
03-06-03 RICH
H:\01_561\CONST\MPR\561S0064.DWG
JN 01 561 2 10

1574



CAUTION
PROFILE SCALE
HORIZ. 1"=40'
VERT 1"=4'

EASTVALE MDP LINE D-3
CLEVELAND AVENUE



SECTION AT STA. 23+00.00
SCALE: 1"=10'

	Δ	R	L	T	STORM DRAIN
B	N00°39'30"E	–	1676.34'	–	(1) CONSTRUCT 72" RCP (D LOAD PER PLAN PROFILE)
					(2A) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252 SEE DETAIL "A" ON SHEET NO. 1 FOR MH FOR UNPAVED AREAS.
					(16) REMOVE INTERFERRING PORTION OF EXISTING FENCE & REPLACE AT PROPERTY LINE
					(18) REMOVE EXISTING HEADWALL AND RIPRAP

NOTE:
HGL1=HYDRAULIC GRADE LINE AT ULTIMATE CONDITIONS PER LINE D-3 MASTER PLAN
HGL2=HYDRAULIC GRADE LINE AT PROJECT CONDITIONS WITH 18" SD SOUTH OF STA. 15+04.13

19 EP 3406, 6/15/2015, 18" RCP CONNECTION W/ JS NO.4 PER STD JS229

REGISTERED PROFESSIONAL ENGINEER THOMAS W. CHADWELL 33755 Exp. 06-30-06 CIVIL STATE OF CALIFORNIA

AS BUILT
APPROVED BY: Thomas W. Chadwell
DATE 10-27-03

40' 0 40' 80' 120'
SCALE IN FEET

DM

Underground Service Alert
DIG ALERT
Call: TOLL FREE
1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
SEE SHEET NO. 1

SEAL—ENGINEER
REGISTERED PROFESSIONAL ENGINEER KENNETH W. CRAWFORD, JR. No. 26928 Exp. 3/31/05 CIVIL STATE OF CALIFORNIA

KWC ENGINEERS, INC.
CIVIL ENGINEERING, PLANNING AND CONSTRUCTION MANAGEMENT
1269 W. POMONA ROAD, SUITE 104 ● CORONA, CA. 92882-7158 ● 909-734-2130

Designed by MVG | Drawn by HP | Checked by LAL

PLANS PREPARED UNDER SUPERVISION OF
KENNETH W. CRAWFORD, JR. — DATE 11-1-02 — R.C.E. 26928 — EXP. DATE 03-31-05

SEAL—COUNTY
REGISTERED PROFESSIONAL ENGINEER RALEO A. ORMAN No. 33950 Exp. 06-30-04 CIVIL STATE OF CALIFORNIA

P8/232161 REVISIONS

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
PLANNING ENGINEER — DATE 11/12/02
APPROVED BY:
CHIEF ENGINEER — DATE 11/13/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY: DATE 11/14/02
RCE NO. _____ EXP. DATE _____

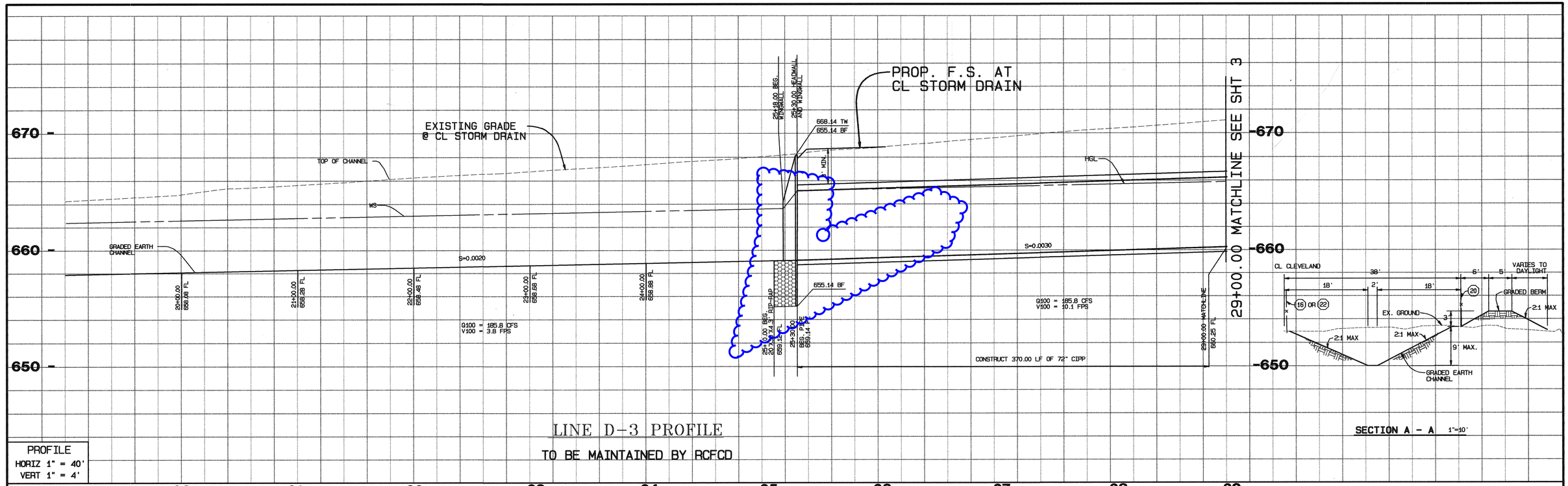
EASTVALE MASTER DRAINAGE PLAN LINE D-3 (STAGE 4)

17+00.00 TO 25+30.00

PROJECT NO. 2-0-0308
DRAWING NO.: 2-321
SHEET NO.: 7 OF 7

J.N. 01.581.2.10 H:\01581\ALT_SD\ALT_IMPR\581SD07A.DWG 10-01-02 MVG

1575

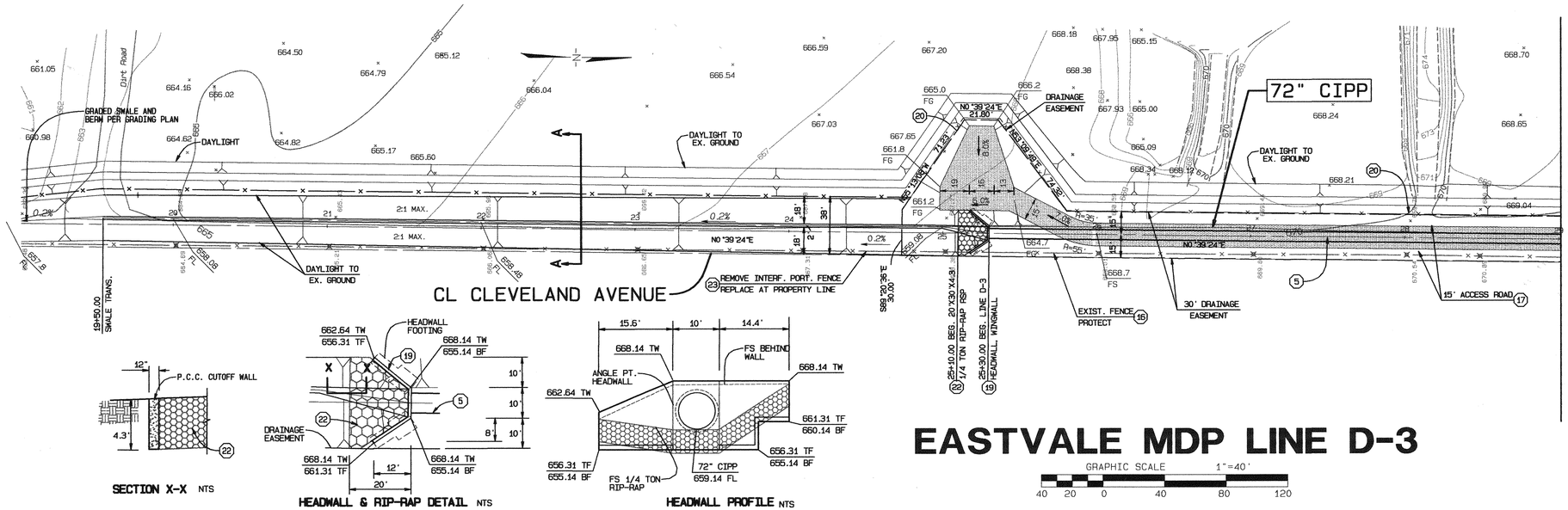


LINE D-3 PROFILE

TO BE MAINTAINED BY RCFCD

SECTION A - A 1"=10'

PROFILE
HORIZ 1" = 40'
VERT 1" = 4'



SECTION AT STA 26+00.00

SECTION X-X NTS

HEADWALL & RIP-RAP DETAIL NTS

HEADWALL PROFILE NTS

CONSTRUCTION NOTES

(5) CONSTRUCT 72" CIPP
(5) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(16) PROTECT EXISTING FENCE IN PLACE
(17) PLACE CRUSHED SLAG (2" MIN. THICKNESS) ON 15' ACCESS ROAD
(19) CONSTRUCT TYPE A HEADWALL & WINGWALL PER CALTRANS STD. D-90
(20) INSTALL 6' CHAIN-LINK FENCE PER RCFC STD. M 801
(22) CONSTRUCT 1/4 TON GROUTED RIP-RAP PER DETAIL THIS SHEET
(23) REMOVE INTERF. PORTION OF EX. FENCE & REPLACE IT AT PROPERTY LINE

EASTVALE MDP LINE D-3

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

GRAPHIC SCALE 1"=10'
0 10 20 30

DM

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
A BRASS DISK IN CONCRETE MONUMENT LOCATED 15 FT. SOUTH OF 4 FT. HIGH SOLID FIVE-BAR DAIRY FENCE IN CORRAL, AT S/W CORNER EUCALYPTUS & CLEVELAND AVES., 37 FT. SOUTH OF EUCALYPTUS, 44 FT. WEST OF CLEVELAND.
ELEV. = 699.8640

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FASHAHI NO. C39530 EXP. 12-31-01 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256
APPROVED BY: Mohd Fashahi DATE: 12/21/00
R.C.E. NO. C39530 EXP. DATE 12-31-01
DESIGNED BY: L.M.
CHECKED BY: MF

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
Michael D Rawson
PLANNING ENGINEER
DATE : 2/26/01
APPROVED BY:
CHIEF ENGINEER
DATE : 2/26/01

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 1/10/01
RCE NO. 33950 EXP. DATE 6/30/01

EASTVALE MASTER DRAINAGE PLAN
LINE D-3 (STAGE 2)
TRACT 28933-1 IP 990097
STA 21+61.00 TO 29+00.00
FOR: FORECAST HOMES
W.O. 98-370

PROJECT NO. 2-0-0308
DRAWING NO. 2-298
SHEET NO. 2 OF 8

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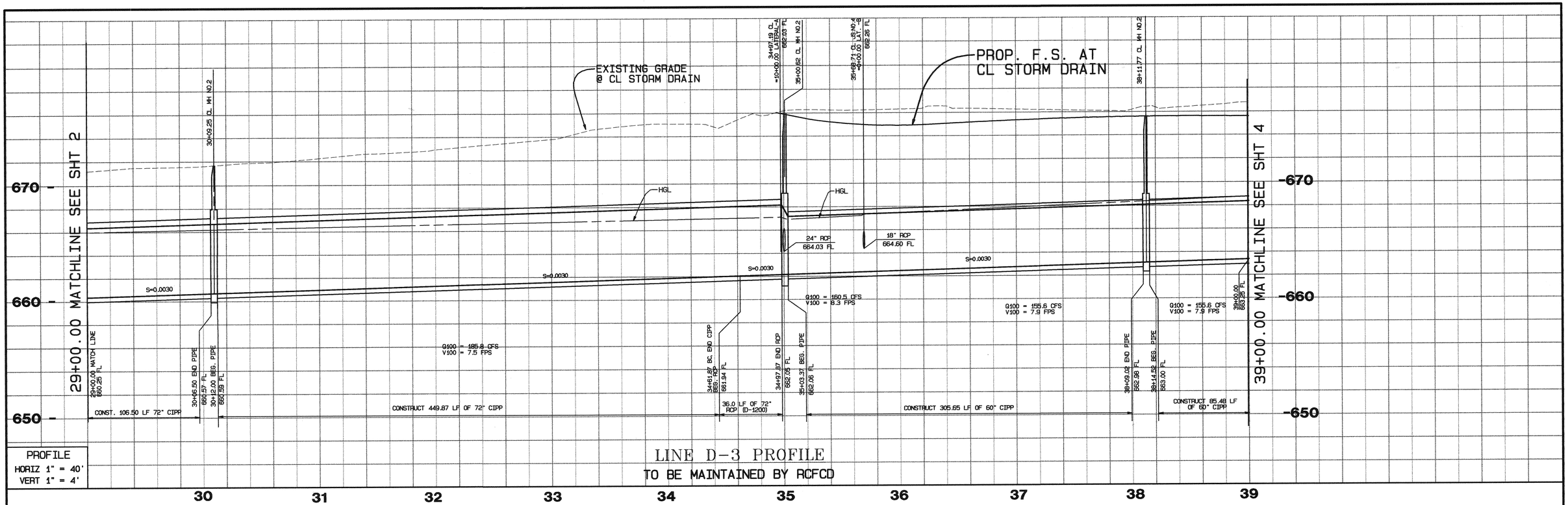
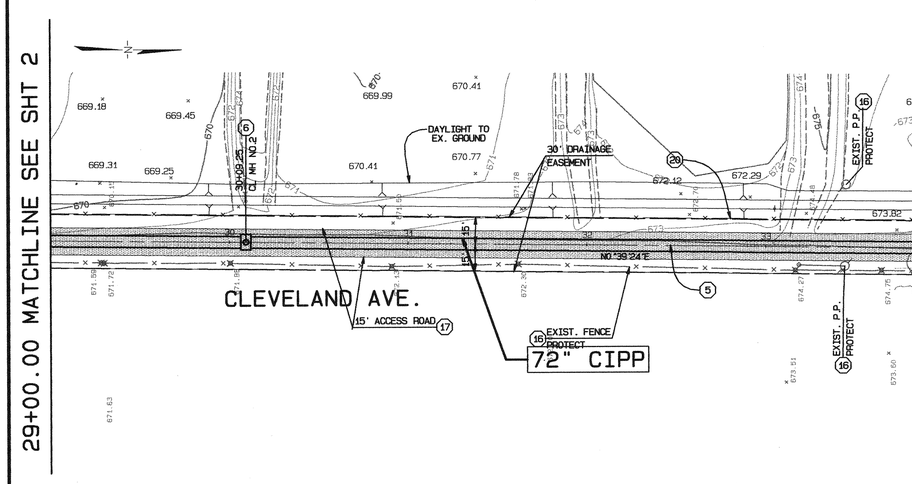
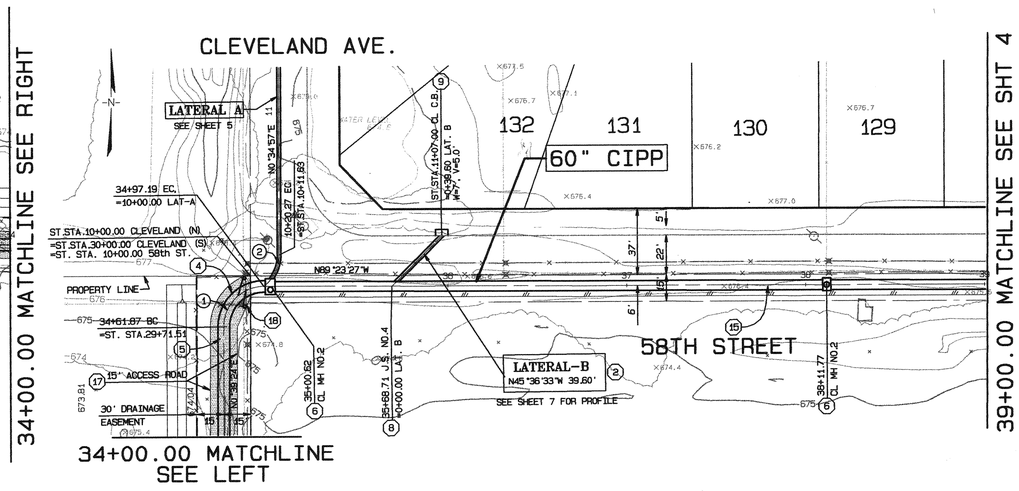


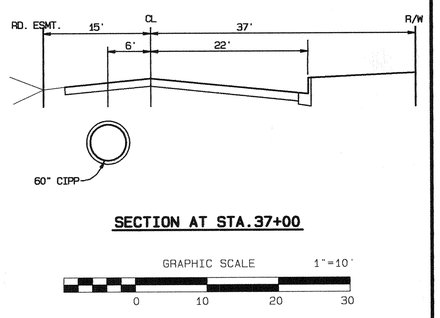
PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

LINE D-3 PROFILE
TO BE MAINTAINED BY RCFCD





34+00.00 MATCHLINE SEE LEFT



SECTION AT STA.37+00

GRAPHIC SCALE 1"=10'
0 10 20 30

CONSTRUCTION NOTES

2. CONSTRUCT 18" RCP CLASS IV
4. CONSTRUCT 72" RCP D-1200
5. CONSTRUCT 72" CIPP
6. CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
8. CONSTRUCT JUNCTION STRUCTURE NO.4 PER RCFC STD. JS 229
9. CONSTRUCT CATCH BASIN NO.1 PER RCFC STD.CB100 W/ LOCAL DEPRESSION PER RCFC STD. LD201
15. CONSTRUCT 60" CIPP
16. PROTECT EXIST. FENCE IN PLACE
17. CONSTRUCT 15' ACCESS ROAD WITH CRUSHED SLAG (2" MIN. THICK)
18. REMOVE INTERFERING PORTION OF EX. FENCE, INSTALL 14' DOUBLE DRIVE GATE PER RCFC STD. M 801

EASTVALE MDP LINE D-3

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

DM

G:\1998\98-0370\98370gr.pro 12/21/2000

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
A BRASS DISK IN CONCRETE MONUMENT LOCATED 15 FT. SOUTH OF 4 FT. HIGH SOLID FIVE-BAR DAIRY FENCE IN CORRAL. AT S/W CORNER EUCALYPTUS & CLEVELAND AVES., 37 FT. SOUTH OF EUCALYPTUS, 44 FT. WEST OF CLEVELAND.
ELEV. = 699.8640

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMAD FAGHIH NO. C39530 EXP. 12-31-01 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

APPROVED BY: [signature] DATE: 12/21/00
R.C.E. NO. C39530 EXP. DATE 12-31-01
DESIGNED BY: C.M.
CHECKED BY: MF

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

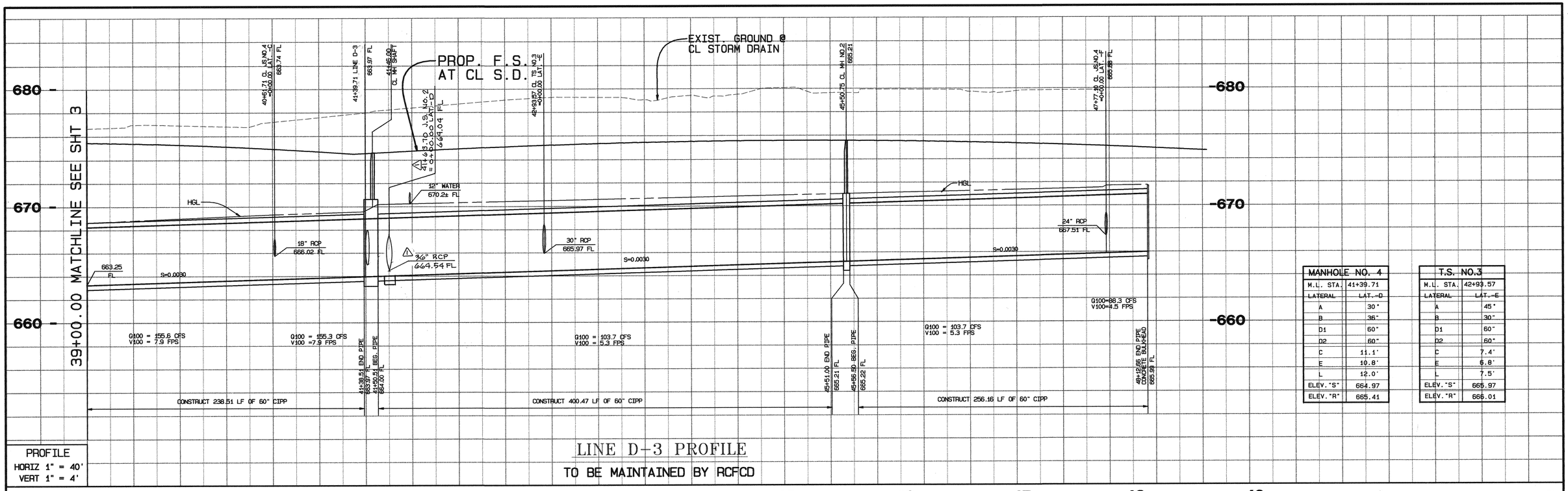
REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL: [signature] PLANNING ENGINEER
DATE: 3/26/01
APPROVED BY: [signature] CHIEF ENGINEER
DATE: 2/28/01

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY: [signature] DATE: 1/10/01
RCE NO. 33950 EXP. DATE 6/30

EASTVALE MASTER DRAINAGE PLAN
LINE D-3 (STAGE 2)
TRACT 28933-1 IP 990097
STA 29+00.00 TO 39+00.00
FOR: FORECAST HOMES W.O. 98-370

PROJECT NO. 2-0-0308
DRAWING NO. 2-298
SHEET NO. 3 OF 8



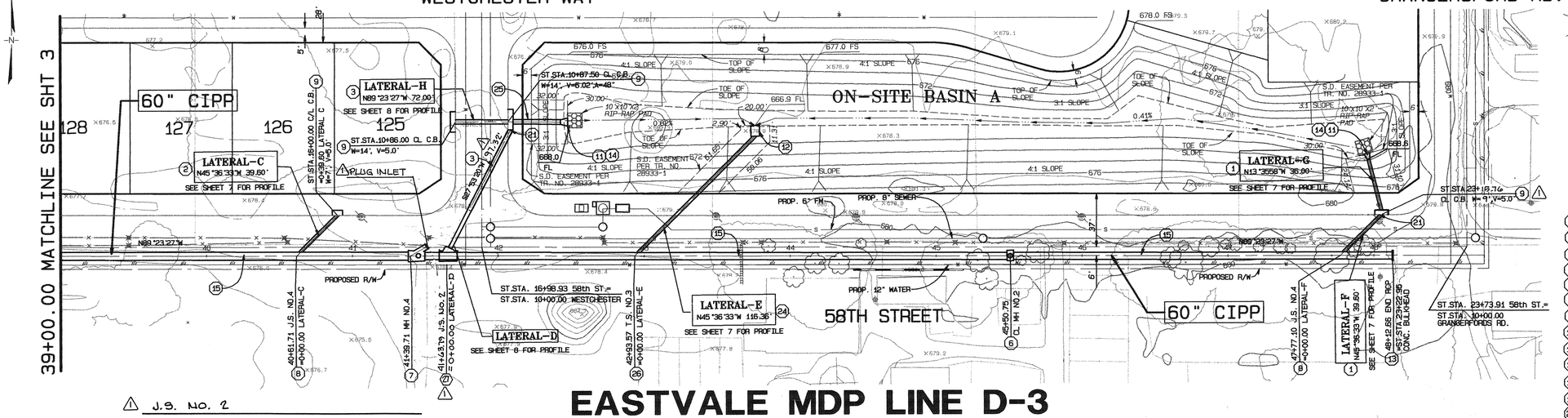
LINE D-3 PROFILE

TO BE MAINTAINED BY RCFCD

PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

MANHOLE NO. 4	
M.L. STA.	41+39.71
LATERAL	LAT.-D
A	30°
B	36"
D1	60"
D2	60"
C	11.1'
E	10.8'
L	12.0'
ELEV. "S"	664.97
ELEV. "R"	665.41

T.S. NO.3	
M.L. STA.	42+93.57
LATERAL	LAT.-E
A	45°
B	30"
D1	60"
D2	60"
C	7.4'
E	6.8'
L	7.5'
ELEV. "S"	665.97
ELEV. "R"	666.01



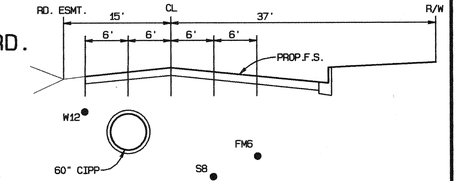
EASTVALE MDP LINE D-3

GRAPHIC SCALE 1"=40'
0 20 40 80 120

⚠ J.S. NO. 2

Δ = 62°43'13", B=36", C=5.2', D= 60", E=3.71, F=2.49', G=1.25', L= 5.0', ELEV. "R" = 664.56, ELEV. "S" = 664.54

⚠ ⑦ CONSTRUCT JUNCTION STRUCTURE NO. 2 PER RCFC STD. JS 227.



SECTION AT STA.46+00

GRAPHIC SCALE 1"=10'
0 10 20 30

CONSTRUCTION NOTES

1. CONSTRUCT 24" RCP CLASS IV
2. CONSTRUCT 18" RCP CLASS IV
3. CONSTRUCT 36" RCP (D-1100)
6. CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
7. CONSTRUCT MANHOLE NO. 4 PER RCFC STD. MH 254
8. CONSTRUCT JUNCTION STRUCTURE NO.4 PER RCFC STD. JS 229
9. CONSTRUCT CATCH BASIN NO.1 PER RCFC STD.CB100 W/ LOCAL DEPRESSION PER RCFC STD. LD201
11. CONSTRUCT METAL FLARED END PER CALTRANS STD. D-94A
12. CONST. DETENTION BASIN OUTLET STRUCTURE PER DETAIL SHT.6
13. CONSTRUCT CONCRETE BULKHEAD PER RCFC STD. M 816
14. CONSTRUCT NO.2 BACKING RSP PER DETAIL SHT. 6
15. CONSTRUCT 60" CIPP
21. INSTALL 1/4" GALVANIZED STEEL BULKHEAD PER DETAIL ON SHT 7
24. CONSTRUCT 30" RCP D-1500
25. CONSTRUCT 42" RCP D-1100
26. CONSTRUCT TRANSITION STRUCTURE NO.3 PER RCFC STD.TS 303

DM

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UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
A BRASS DISK IN CONCRETE MONUMENT LOCATED 15 FT. SOUTH OF 4 FT. HIGH SOLID FIVE-BAR DAIRY FENCE IN CORRAL AT S/W CORNER EUCALYPTUS & CLEVELAND AVES., 37 FT. SOUTH OF EUCALYPTUS, 44 FT.WEST OF CLEVELAND.
ELEV. = 699.8640

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGIH NO. C39530 EXP. 12-31-01 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

APPROVED BY: M. Fagih DATE: 12/21/00
R.C.E. NO. C39530 EXP. DATE 12-31-01
DESIGNED BY: L.M.
CHECKED BY: MF

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER DONALD A. OTTMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REVISIONS			
⚠	REVISE C.B. WIDTH AND	MHP MF	1/16/01
	ADDED J.S. NO. 2		2/12
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
PLANNING ENGINEER
DATE : 2/26/01

APPROVED BY:
CHIEF ENGINEER
DATE : 2/26/01

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 1/19/01
RCE NO. 33950 EXP.DATE 6/30/02

EASTVALE MASTER DRAINAGE PLAN
LINE D-3 (STAGE 2)
TRACT 28933-1 IP 990097
STA 39+00.00 TO 48+12.66
FOR: FORECAST HOMES
W.O. 98-370

PROJECT NO. 2-0-0308
DRAWING NO. 2-298
SHEET NO. 4 OF 8

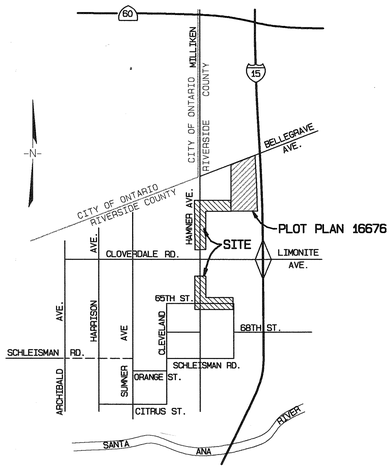
- **AS-BUILT STORM DRAIN IMPROVEMENT PLANS ALONG HAMNER AVENUE (MDP LINE "E", RCFCD DWG NO. 2-0-310)**

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

EASTVALE MASTER DRAINAGE PLAN LINE E

GENERAL NOTES

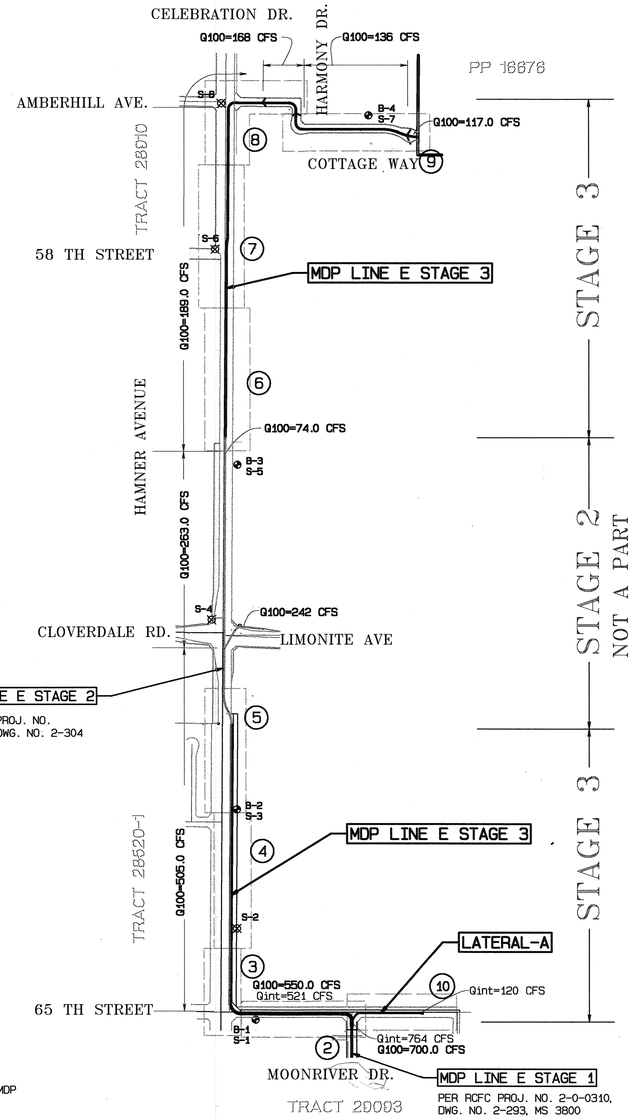
1. ALL STATIONING REFERS TO CENTERLINE OF CONSTRUCTION.
2. ALL CROSS SECTIONS ARE TAKEN LOOKING DOWNSTREAM.
3. TOPOGRAPHY BY DIGITAL PHOTOGRAMMETRIC METHODS. AERIAL PHOTOGRAPHS TAKEN AT AN ALTITUDE NOT TO EXCEED A FLYING HEIGHT TO CONTOUR INTERVAL RATIO OF 1800. PHOTOGRAPHY DATED 10-25-00, BY INLAND AERIAL SURVEYS, INC.
4. THE VERTICAL DATUM IS DERIVED FROM NGVD 29. THE HORIZONTAL DATUM IS DERIVED FROM NAD 83.
5. STANDARD DRAWINGS CALLED FOR ON THE PLAN & PROFILE SHALL CONFORM TO R.C.F.C. & W.C.D. STD. DRAWINGS, CALTRANS OR COUNTY STANDARD PLANS.
6. ELEVATIONS AND LOCATIONS OF UTILITIES WERE OBTAINED FROM AVAILABLE INFORMATION AND ARE SHOWN APPROXIMATELY ON THESE PLANS. 48 HOURS BEFORE EXCAVATION CALL UNDERGROUND SERVICE ALERT AT 1-800-227-2600. ALL UTILITIES SHALL BE PROTECTED IN PLACE EXCEPT AS NOTED ON PLANS AND SPECIFICATIONS.
7. THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY AGENCIES REGARDING TEMPORARY SUPPORT AND SHORING REQUIREMENTS FOR THE VARIOUS UTILITY LINES SHOWN ON THESE PLANS.
8. ALL OPENINGS RESULTING FROM CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES, OR SIMILAR STRUCTURES TO BE ABANDONED, SHALL BE SEALED AT BOTH ENDS WITH 6" MIN. CLASS "B" CONCRETE.
9. STREET RECONSTRUCTION SHALL BE AS SHOWN ON TYPICAL STREET PAVEMENT DETAILS. IF THERE IS NO TYPICAL DETAIL, THE RECONSTRUCTION SHALL BE 0.65' AC OVER 0.60' AB OR IN KIND, WHICHEVER IS GREATER, INCLUDING STRIPING AND MARKING.
10. ALL RECONSTRUCTION, RESURFACING AND PAVEMENT DELINEATION, CURBS, SIDEWALKS AND OTHER IMPROVEMENTS ARE TO BE RECONSTRUCTED IN KIND AT THE SAME LOCATIONS AND ELEVATIONS AS THE EXISTING IMPROVEMENTS, UNLESS OTHERWISE NOTED.
11. ⊕ INDICATES APPROX. SOIL BORING LOCATION PER SOILS REPORT DATED 6/11/2001.
12. FOR COMPLETE RIGHT-OF-WAY AND TEMPORARY CONSTRUCTION EASEMENT REFER TO GRANT OF EASEMENTS & OFFER OF DEDICATIONS RECORDED AS SHOWN ON PLAN
13. ALL TRENCH EDGES SHALL BE SAWCUT NEAT OR AS DIRECTED BY THE ENGINEER.
14. APPROVAL FOR THESE PLANS BY THE RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT DOES NOT RELIEVE THE DEVELOPER'S ENGINEER OF RESPONSIBILITY FOR THE ENGINEERING DESIGN. IF FIELD CHANGES ARE REQUIRED, IT WILL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO MAKE THE NECESSARY CHANGES.
15. ALL WORK WITHIN THE RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT R/W WILL REQUIRE AN ENCROACHMENT PERMIT.
16. ITEMS WITHIN THE TEMPORARY CONSTRUCTION EASEMENT NOT IDENTIFIED ON THE PLANS SHALL BE PROTECTED IN PLACE OR RESTORED TO THE ORIGINAL CONDITIONS
17. CONTRACTOR SHALL INSTALL TEMPORARY CHAIN-LINK FENCE ALONG TEMPORARY CONSTRUCTION EASEMENT, OR RELOCATE EXIST. FENCE TO TEMPORARY CONSTRUCTION EASEMENT. TEMPORARY FENCE SHALL BE REMOVED AFTER CONSTRUCTION COMPLETED



VICINITY MAP NTS

T2S, R7W, SECTION 25





CONSTRUCTION NOTES

1	CONSTRUCT 12'WX7'H RCB PER CALTRANS STD.D-80, MAX. COVER 20'	22	PROTECT EXISTING POWER POLE/ TEL POLE
2	CONSTRUCT 10'WX7'H RCB PER CALTRANS STD.D-80, MAX. COVER 10'	23	REMOVE AND REPLACE EXIST. PAVEMENT, STRIPING AND MARKING. PAVEMENT TO BE
3	CONSTRUCT 84" RCP (D=1750)		RESTORED PER DETAILS AND SECTIONS ON SHEET 14
4	CONSTRUCT 66" RCP (D=1750)	24	RECONSTRUCT DRIVEWAY IN KIND TO MATCH EXIST.& PROVIDE ACCESS DURING CONST.
5	CONSTRUCT 60" RCP (D-1750)	25	REMOVE EXISTING FENCE AND REINSTALL IN KIND TO ITS ORIG. LOCATION
6	CONSTRUCT 48" RCP (D-1500)		AFTER COMPLETION OF CONSTRUCTION
7	CONSTRUCT 24" RCP CLASS IV	25A	RELOCATE EXISTING FENCE TO TCE AND REINSTALL IN KIND TO ITS ORIG.
8	CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252		LOCATION AFTER COMPLETION OF CONSTRUCTION
9	CONSTRUCT MANHOLE NO. 3 PER RCFC STD. MH 253	26	PROTECT IN PLACE
10	CONSTRUCT TRANSITION STRUCTURE NO.1 PER RCFC STD. TS 301	28	PROTECT EXISTING 4" GAS LINE
11	CONSTRUCT TRANSITION STRUCTURE NO.2 PER RCFC STD. TS 302	29	INSTALL 6' TEMP. CHAIN LINK FENCE ALONG TCE PER RCFC STD. M801
12	CONSTRUCT JUNCTION STRUCTURE NO. 1 PER RCFC STD. JS 226	30	EXISTING PACIFIC BELL TEL. RISER TO BE RELOCATED BY TELE. CO.
13	CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229	31	RELOCATE EX. MONITORING VAULT AND FIXTURES FOR DAIRY WASHWATER
14	CONSTRUCT CONCRETE BULKHEAD PER RCFC STD. M 816		PER ORANGE CO. SANITATION DIST. DWG. C4, M1 & M2
15	INSTALL BARRICADE PER RCTD STD. 810	32	REMOVE EX. 6" PVC IRR. LINE & RISER AND REINSTALL IN KIND TO ORIG. LOCATION
16	INSTALL 14' DOUBLE DRIVE GATE PER RCFC STD. M 801		AFTER COMPLETION OF CONSTRUCTION. PROVIDE TEMP. IRR. SYSTEM DURING CONST.
17	INSTALL 6' CHAIN LINK FENCE PER RCFC STD. M801	33	REMOVE AND REPLANT EX. ITAL. CYPRESS TREE W/ AN EXTRA TREE IN KIND @ 6' APART
18	CONSTRUCT DROP INLET 1 PER DETAIL ON SHEET 3	34	CONSTRUCT DECK ACCESS OPENING PER CALTRANS STD. B7-11, DETAIL U43
19	CONSTRUCT DROP INLET 2 PER DETAIL ON SHEET 10		
20	CONSTRUCT 4" CONC. PAVING W/ 2' CUTOFF WALL AT INLET STRUCTURES		
21	CONST. MODIFIED CONCRETE DROP INLET WITH 2" A.C. APRON PER RCFC		
	STD. CB110 & DETAIL ON SHT 11		

LEGEND

- (3) SHEET NUMBERS
- ⊕ B-2 S-3 APPROXIMATE SOIL BORING/ SOUNDING LOCATION
- Q100 100-YEAR FLOW PER EASTVALE MDP
- Qint INTERIM 100-YEAR FLOW FOR EXISTING CONDITION

INDEX MAP

SCALE: 1"=500'

INDEX

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TRAFFIC CONTROL	15 - 17
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ORANGE CO. SANITATION DIST.

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NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATIONS OF ALL UNDERGROUND UTILITIES (UTILITY PIPES, STRUCTURES, ETC.) SHOWN ON THESE PLANS (MAIN LINES ONLY - NO SERVICE LATERALS) WERE ASCERTAINED BY A REVIEW OF RECORDS PROVIDED BY THESE MEMBER AGENCIES AND ARE APPROXIMATE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN.

THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. LOCATIONS OF UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.

CALL UNDERGROUND SERVICE ALERT (U.S.A.) 1-800-227-2600 AT LEAST 2 WORKING DAYS PRIOR TO EXCAVATION.

IP 010027

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGIHI NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET, RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: M. Fagi DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02

APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP.DATE

EASTVALE MDP
LINE E
STAGE 3
TITLE SHEET

PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 1 OF 41

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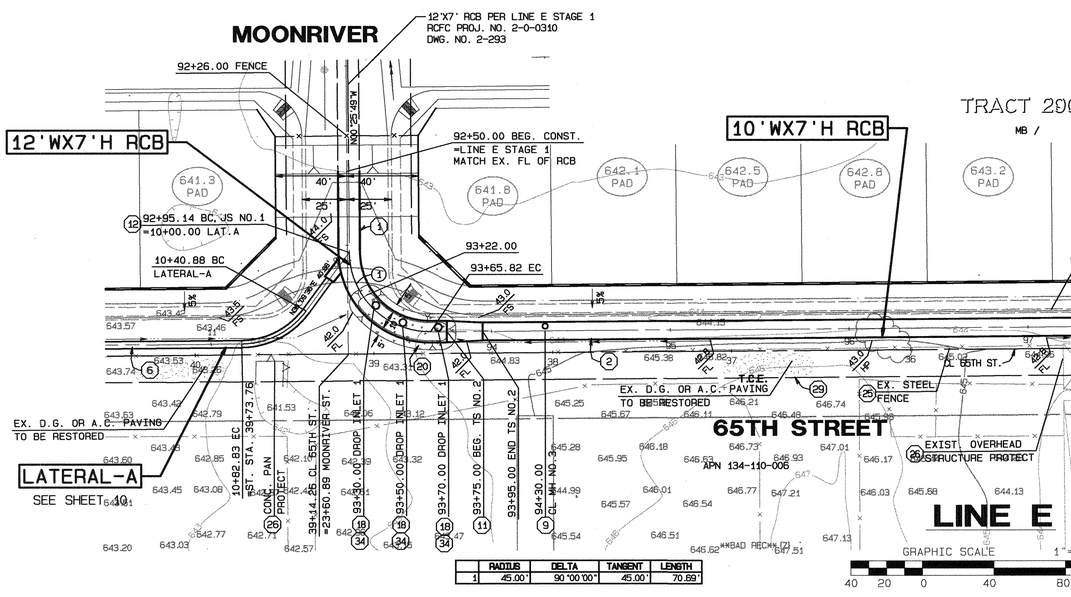
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

J.S. NO.1	
M.L. STA.	93+15.81
LATERAL	LAT.-A
A	36°±
B	48"
C	17.0
EL. "S"	625.94
EL. "R"	626.08

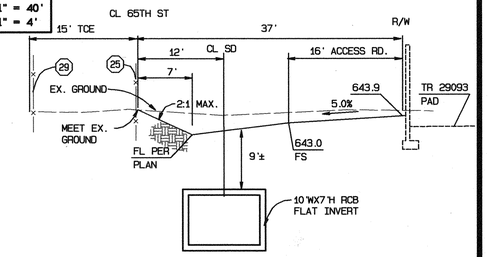
CONSTRUCTION NOTES

1. CONSTRUCT 12'WX7'H RCB PER CALTRANS STD.D-80, MAX. COVER 20' FLAT INVERT
2. CONSTRUCT 10'WX7'H RCB PER CALTRANS STD.D-80, MAX. COVER 10' FLAT INVERT
6. CONSTRUCT 48" RCP D-1500
9. CONSTRUCT MANHOLE NO. 3 PER RCFC STD. MH 253
11. CONSTRUCT TRANSITION STRUCTURE NO.2 PER RCFC STD. TS 302
12. CONSTRUCT JUNCTION STRUCTURE NO. 1 PER RCFC STD. JS 226
18. CONSTRUCT DROP INLET NO.1 PER DETAIL ON SHEET 3
20. CONSTRUCT 4" CONC. PAVING W/ 2' CUTOFF WALL AT INLET STRUC.
25. REMOVE EXISTING FENCE AND REINSTALL IN KIND TO ITS ORIG. LOCATION AFTER COMPLETION OF CONSTRUCTION
26. PROTECT IN PLACE
29. INSTALL 6' TEMP. CHAIN LINK FENCE ALONG TCE PER RCFC STD. M801
34. CONSTRUCT DECK ACCESS OPENING PER CALTRANS STD. B7-11, DETAIL U43

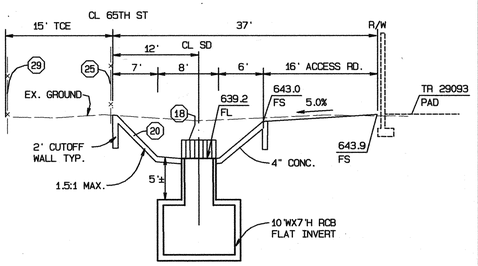
PROFILE
HORIZ 1" = 40'
VERT 1" = 4'



	RADIUS	DELTA	TANGENT	LENGTH
1	45.00'	90°00'00"	45.00'	70.69'



SECTION @ STA.95+00



SECTION @ STA.99+00

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMMER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REG. STERED PROFESSIONAL ENGINEER MOHAMMAD FAGHRI NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: Mohammad Faghri DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02

APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

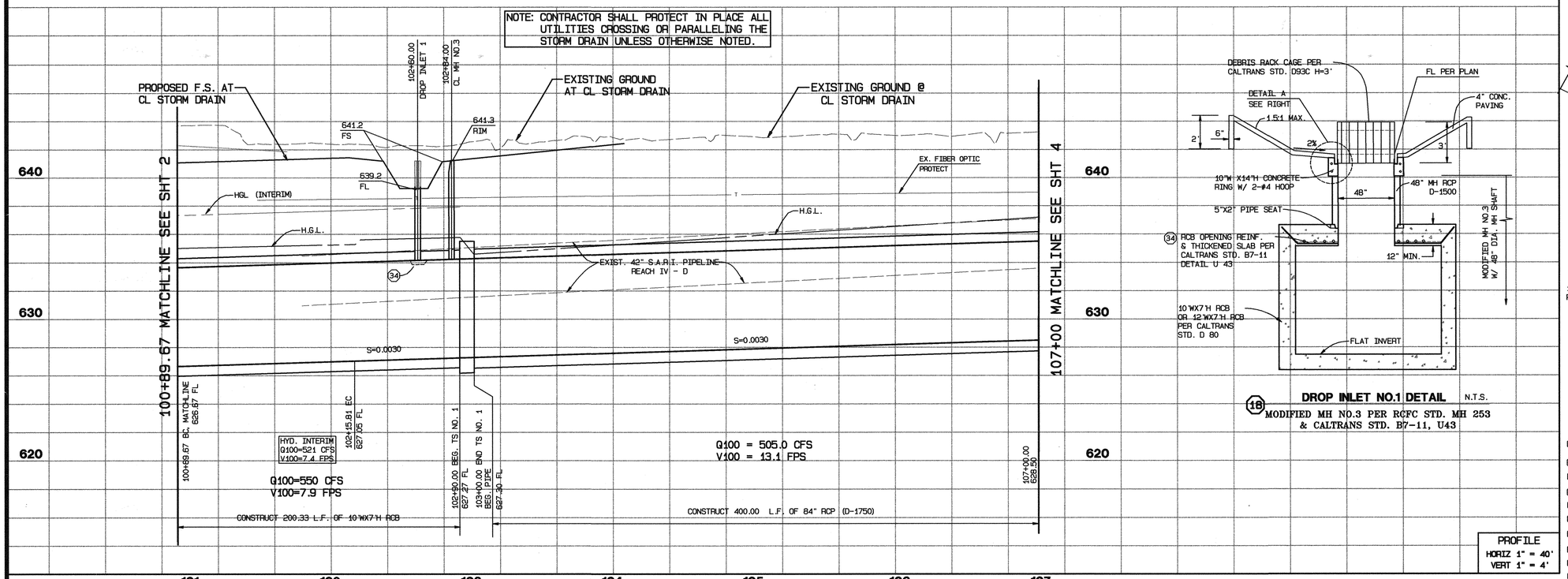
COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 3
PLAN & PROFILE
STA. 92+50.00 TO STA. 100+89.67

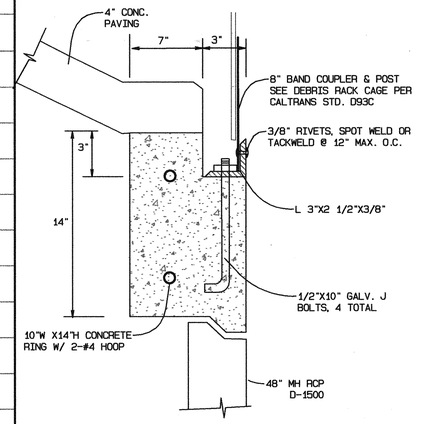
IP 010027
PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 2 OF 41

G:\2000\00-0101\00101SD.prn2/19/2002

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



(18) **DROP INLET NO.1 DETAIL** N.T.S.
MODIFIED MH NO.3 PER RCFC STD. MH 253 & CALTRANS STD. B7-11, U43



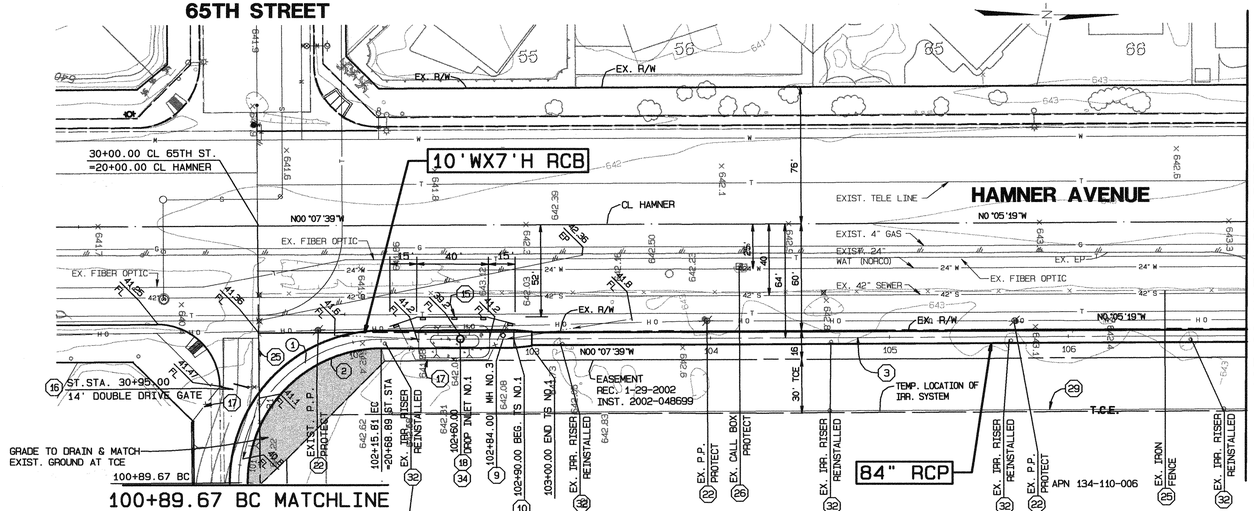
DETAIL A
NOT TO SCALE

CONSTRUCTION NOTES

(2) CONSTRUCT 10'WX7'H RCB PER CALTRANS STD.D-80, MAX. COVER 10' FLAT INVERT
(3) CONSTRUCT 84" RCP (D=1750)
(9) CONSTRUCT MANHOLE NO. 3 PER RCFC STD. MH 253
(10) CONSTRUCT TRANSITION STRUCTURE NO.1 PER RCFC STD. TS 301
(15) INSTALL BARRICADE PER RCTC STD. 810
(16) INSTALL 14' DOUBLE DRIVE GATE PER RCFC STD. M 801
(17) INSTALL 6' CHAIN LINK FENCE PER RCFC STD. M801
(18) CONSTRUCT DROP INLET 1 PER DETAIL ON SHEET 3
(20) CONSTRUCT 4" CONC. PAVING W/ 2' CUTOFF WALL AT INLET STRUC.
(22) PROTECT EXISTING POWER POLE/ TEL POLE
(25) REMOVE EXISTING FENCE AND REINSTALL IN KIND TO ITS ORIG. LOCATION AFTER COMPLETION OF CONSTRUCTION
(26) PROTECT IN PLACE
(29) INSTALL 6' TEMP. CHAIN LINK FENCE ALONG TCE PER RCFC STD. M801
(32) REMOVE EX. 6" PVC IRR. LINE & RISER AND REINSTALL IN KIND TO ORIG. LOCATION UNLESS NOTED OTHERWISE ON PLAN AFTER COMPLETION OF CONSTRUCTION. PROVIDE TEMP. IRR. SYSTEM DURING CONST.
(34) CONSTRUCT DECK ACCESS OPENING PER CALTRANS STD. B7-11, DETAIL U43

PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

101 102 103 104 105 106 107

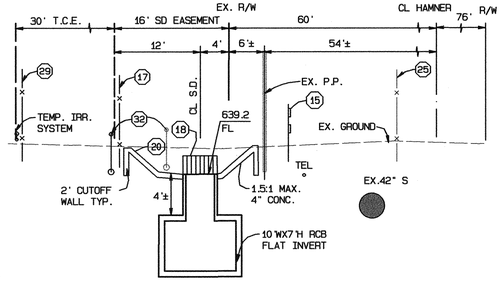


NOTE TO CONTRACTOR:
IRR. LINE TO BE REINSTALLED OR REPLACED ALONG E'LY EDGE OF DROP INLET NO.1

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

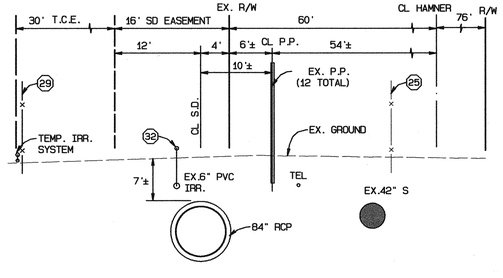
LINE E

	RADIUS	DELTA	TANGENT	LENGTH
1	80.00'	90°20'22"	80.48'	126.14'



SECTION @ STA.102+60
1"=10'

GRAPHIC SCALE 1"=10'
0 10 20 30



SECTION @ STA.105+00
1"=10'

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMMER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGHFOURI NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: Mo Faghfouri DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02

APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP.DATE

EASTVALE MDP
LINE E
STAGE 3
PLAN & PROFILE
STA. 100+89.67 TO STA. 107+00

IP 010027
PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 3 OF 41

G:\2000\00-0101\0010150.pro2/19/2002

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

MATCH LINE 107+00 SEE SHEET 3

MATCH LINE 116+00 SEE SHEET 5

107+98.75 CL MH NO.2 643.5± RIM

113+00.25 CL MH NO.2 648.9± RIM

EXISTING GROUND @ CL STORM DRAIN

EX. FIBER OPTIC PROTECT

6" PVC SWR 647.8± FL

H.G.L.

EXIST. 42" S.A.R.I. PIPELINE REACH IV - D

650 / 640 / 630 / 620

S=0.0030

S=0.0030

S=0.0030

Q100 = 505.0 CFS
V100 = 13.1 FPS

Q100 = 505.0 CFS
V100 = 13.1 FPS

107+00.00 628.50

107+96.00 END PIPE 628.79 FL

108+01.50 BEG. PIPE 628.81 FL

112+97.50 END PIPE 630.30 FL

113+03.00 BEG. PIPE 630.31 FL

116+00.00 631.20 FL

96.00 LF OF 84" RCP (D-1750)

CONSTRUCT 496.00 L.F. OF 84" RCP (D-1750)

CONSTRUCT 297.00 L.F. OF 84" RCP (D-1750)

PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

107 / 108 / 109 / 110 / 111 / 112 / 113 / 114 / 115 / 116

CONSTRUCTION NOTES

(3) CONSTRUCT 84" RCP (D=1750)
(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(22) PROTECT EXISTING POWER POLE/ TEL POLE
(24) RECONSTRUCT CONCRETE DRIVEWAY AND A.C. ROAD IN KIND TO MATCH EXISTING AND PROVIDE ACCESS DURING CONSTRUCTION
(25) REMOVE EXISTING FENCE AND REINSTALL IN KIND TO ITS ORIG. LOCATION AFTER COMPLETION OF CONSTRUCTION (FROM STA. 107+00 TO 114+55)
(25A) RELOCATE EXISTING FENCE AS SHOWN AND REINSTALL IN KIND TO ITS ORIG. LOCATION AFTER COMPLETION OF CONSTRUCTION (FROM STA. 114+55 TO STA. 116+00)
(26) PROTECT IN PLACE
(29) INSTALL 6' TEMP. CHAIN LINK FENCE ALONG TCE PER RCFC STD. M801
(30) EXISTING PACIFIC BELL TEL. RISER TO BE RELOCATED BY TELE. CO.
(31) RELOCATE EX. MONITORING VAULT AND FIXTURES FOR DAIRY WASHWATER @ 90° ROTATION PER ORANGE CO. SANITATION DIST. DWG. C4, M1 & M2
(32) REMOVE EX. 6" PVC IRR. LINE & RISER AND REINSTALL IN KIND TO ORIG. LOCATION AFTER CONSTRUCTION. PROVIDE TEMP. IRR. SYSTEM DURING CONST.
(33) REMOVE AND REPLANT EX. ITAL. CYPRESS TREE W/ AN EXTRA TREE IN KIND @ 6' APART

TRACT 28520

MB /

OAKDALE ST.

HAMNER AVENUE

MATCH LINE 107+00 SEE SHEET 3

MATCH LINE 116+00 SEE SHEET 5

EX. R/W

CL HAMNER

NO°05'19"W

EXIST. TELE LINE

EXIST. 4" GAS

EXIST. 24" WAT (NORCO)

EX. FIBER OPTIC

EX. 42" SEWER

EX. EP

EX. ENTRY WALL PROTECT (26)

EASEMENT REC: 1-29-2002 INST. 2002-048699

TEMP. LOCATION OF IRR. LINE & RISER

APN 134-110-006

APN 134-110-022

LINE E

84" RCP

EX. P.P. PROTECT (22)
EX. PALM TREE PROTECT (26)
107+55 CL CONC. D/W & A/C ROAD (24)
EX. PALM TREE PROTECT (26)
107+98.75 CL MH NO.2 (8)
EX. IRR. RISER REINSTALLED (32)
EX. IRON FENCE (25)
EX. P.P. PROTECT (22)
EX. TEL RISER TO BE RELOCATED (30)
EX. IRR. RISER REINSTALLED (32)
EX. IRR. RISER REINSTALLED (32)
EX. P.P. PROTECT (22)
EX. STEEL FENCE (25)
EX. IRR. RISER REINSTALLED (32)
EX. IRR. RISER REINSTALLED (32)
113+00.25 CL MH NO.2 (8)
EX. P.P. PROTECT (22)
EX. IRR. RISER REINSTALLED (32)
EX. SWR MH PROTECT (26)
4" PVC RISER (31)
EXIST. MONITORING VAULT (DAIRY WASH) (31)
EX. W.V. (31)
EX. P.P. PROTECT (22)
EX. CONC. PAVING (26)
EX. D.G. ROAD RESTORE (26)
HAYSTACK WITH OVERHEAD STRUCT. (26)

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120

30' T.C.E. / 16' EASEMENT / EX. R/W / 60' / CL HAMNER / 76' R/W
12' / 4' / 6'± CL P.P. / 54'±
10'±
EX. P.P. (12 TOTAL)
CL S.D.
TEMP. IRR. SYSTEM
EX. GROUND
8'±
EX.6" PVC IRR.
TEL
EX.42" S
84" RCP

SECTION @ STA. 110+00

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMMER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGIH NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: MF DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02

APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP.DATE

EASTVALE MDP
LINE E
STAGE 3
PLAN & PROFILE
STA. 107+00 TO STA. 116+00

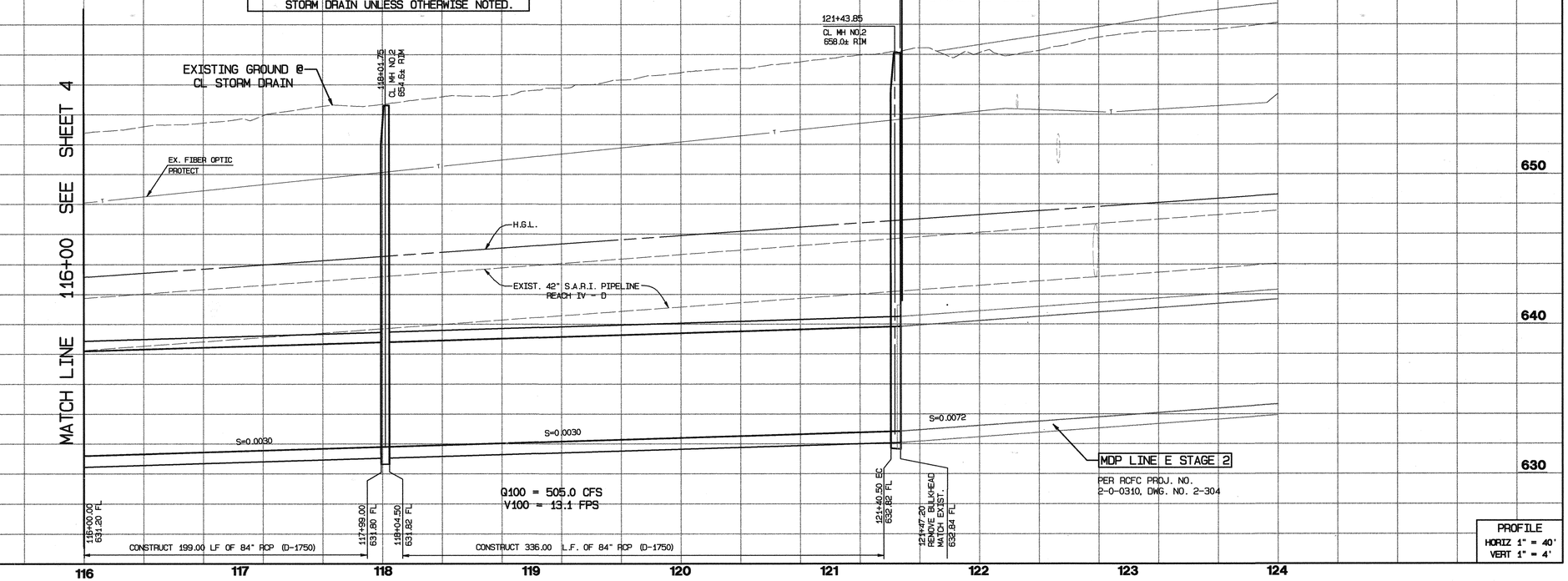
IP 010027
PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 4 OF 41

G:\2000\00-0101\0010150.pro2/19/2002

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

STAGE 3 | STAGE 2

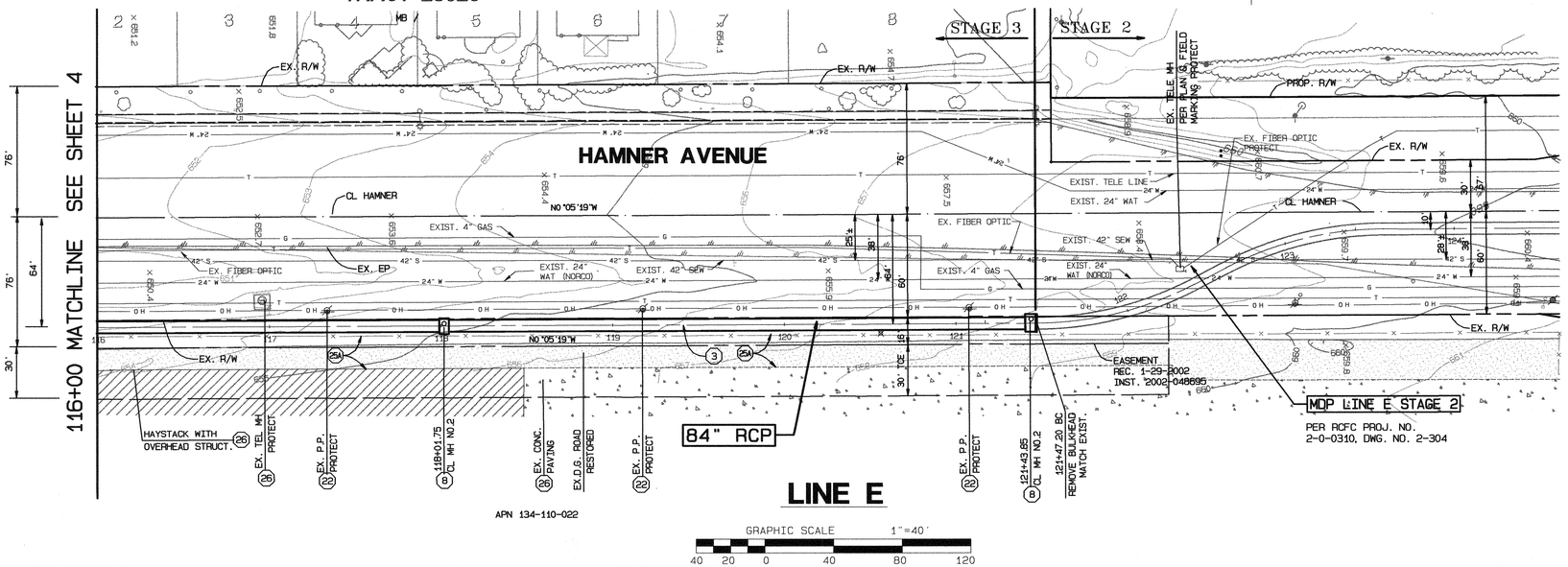
NOT A PART

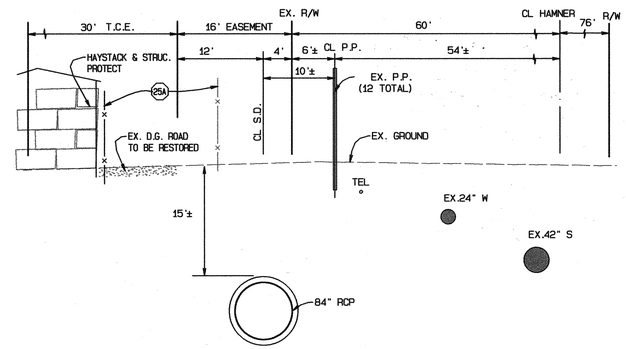


CONSTRUCTION NOTES

(3) CONSTRUCT 84" RCP (D=1750)
(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(22) PROTECT EXISTING POWER POLE/ TEL POLE
(25A) RELOCATE EXISTING FENCE AS SHOWN AND REINSTALL IN KIND TO ITS ORIG. LOCATION AFTER COMPLETION OF CONSTRUCTION
(26) PROTECT IN PLACE

TRACT 28520





SECTION @ STA.118+00

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT; CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHMAD FAGIH NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: MF DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTAIMAT NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE : 2/20/02
APPROVED BY:
CHIEF ENGINEER
DATE : 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP.DATE

EASTVALE MDP
LINE E
STAGE 3
PLAN & PROFILE
STA.116+00 TO STA. 121+47.20

IP 010027

PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 5 OF 41

G:\2000\00-0101\001015D.prn02/19/2002

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

STAGE 2 | STAGE 3

NOT A PART

EXISTING F.S. @ CL STORM DRAIN

145+59.25 CL MH NO.2 675.2± RIM

EX. FIBER OPTIC PROTECT

PROP. 12" W (666.3±) FL

H.G.L.

EXIST. 42" S.A.R.I. PIPELINE REACH IV - D

S=0.0030

S=0.0030

S=0.0030

LINE E STAGE 2
RCFC PROJ. NO. 2-0-0310
DWG. NO. 2-304

141+56.50 REMOVE EX. CONCRETE BULKHEAD (657.07) FL

145+56.50 END PIPE 658.27 FL

145+62.00 BEG. PIPE 658.29 FL

150+58.00 END PIPE 659.77 FL

Q100 = 189.0 CFS
V100 = 8.0 FPS

CONSTRUCT 400.00 L.F. OF 66" RCP (D=1750)

Q100 = 189.0 CFS
V100 = 8.0 FPS

CONSTRUCT 496.00 L.F. OF 66" RCP (D=1750)

MATCH LINE 150+58.00 SEE SHEET 7

PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

680 670 660 650

141 142 143 144 145 146 147 148 149 150

CONSTRUCTION NOTES

(4) CONSTRUCT 66" RCP (D=1750)

(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252

(23) REMOVE AND REPLACE EXIST. PAVEMENT, STRIPING AND MARKING. PAVEMENT TO BE RESTORED PER DETAILS AND SECTIONS ON SHEET 14

(26) PROTECT IN PLACE

PROP. R/W REC. 1-15-2002 INST. 2002-025215

141+56.50 REMOVE BULKHEAD

BEGIN CONST.

EX. WATER MANWAY PROTECT

EX. 30" WATER PROTECT

EX. FIBER OPTIC

EX. R/W

145+59.25 CL MH NO. 2

66" RCP

EX. FIBER OPTIC

CL HAMNER

EX. C & G

EX. 6" F.M.

EX. 12" WATER PROTECT

EXIST. 42" SEW

EX. 24" WAT (NORCO)

EXIST. 4" GAS

EXIST. 15" GAS

EX. R/W

HAMNER AVENUE

EX. SEWER MH PROTECT

SWAN LAKE TRAILER PARK

APN 160-030-005

LINE E STAGE 2
PER RCFC PROJ. NO. 2-0-0310, DWG. NO. 2-304

APN 160-030-012

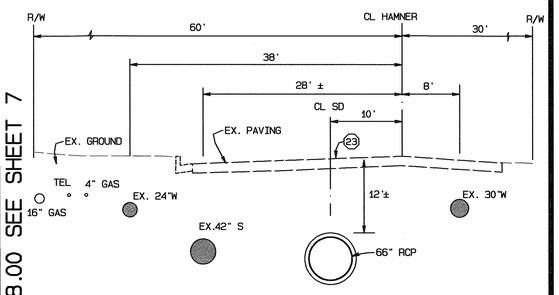
STAGE 2 | STAGE 3

MATCH LINE 150+58.00 SEE SHEET 7

LINE E

GRAPHIC SCALE 1"=40'

40 20 0 40 80 120



SECTION @ STA. 147+00

GRAPHIC SCALE 1"=10'

0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF C\L INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MUHAMMAD FAGHIH NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: [signature] DATE 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER DONALD A. GITHENS NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE : 2/20/02
APPROVED BY:
CHIEF ENGINEER
DATE : 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP. DATE

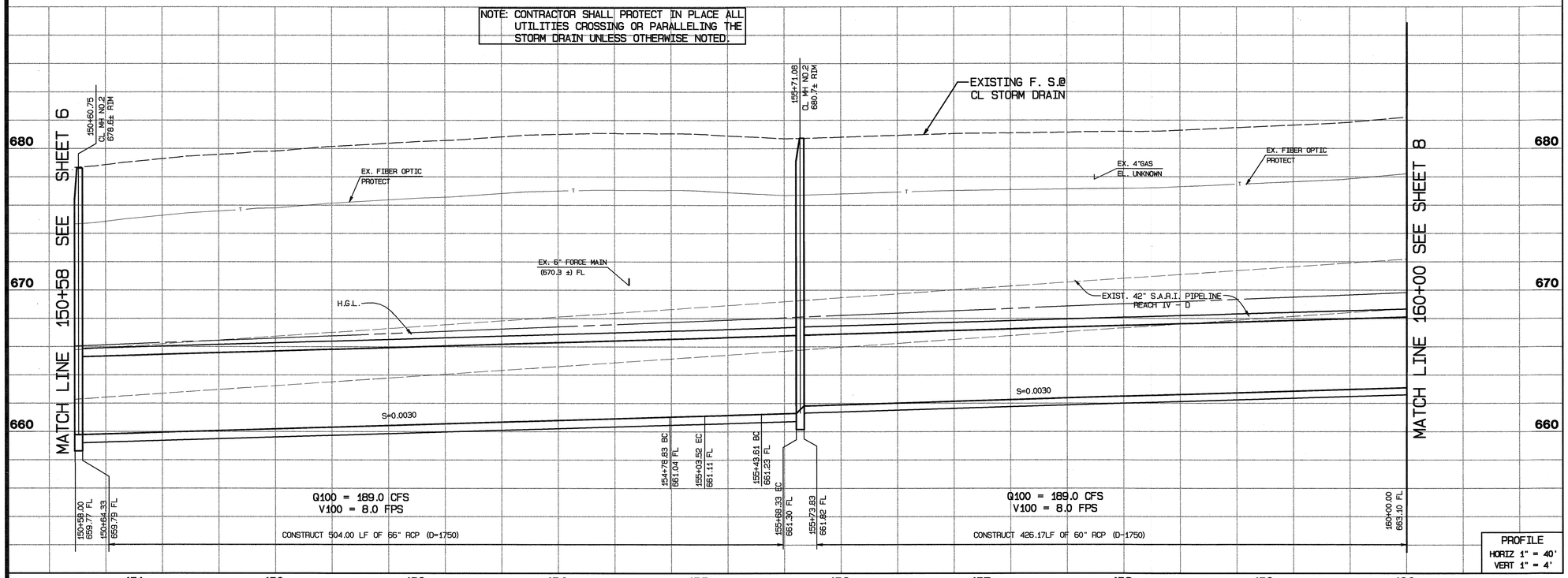
EASTVALE MDP
LINE E
STAGE 3
PLAN & PLOT
STA.141+56.50 TO STA. 150+58.00

IP 010027

PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 6 OF 41

2002/19/2/pd\SI01001010-V\00023

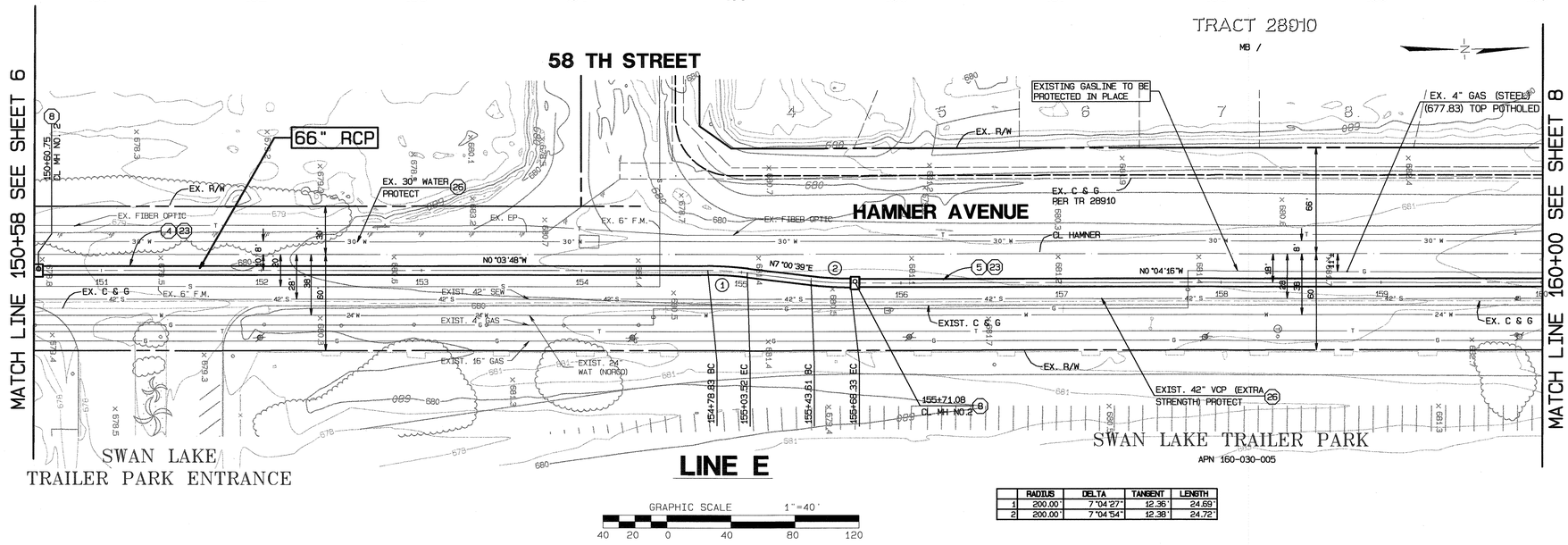
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



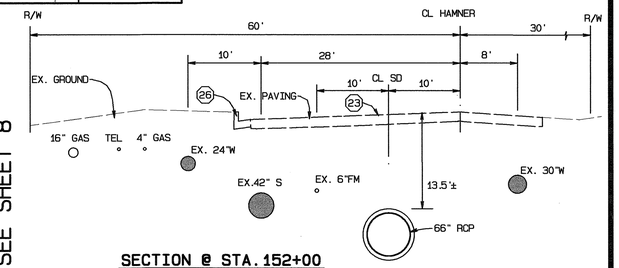
PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

CONSTRUCTION NOTES

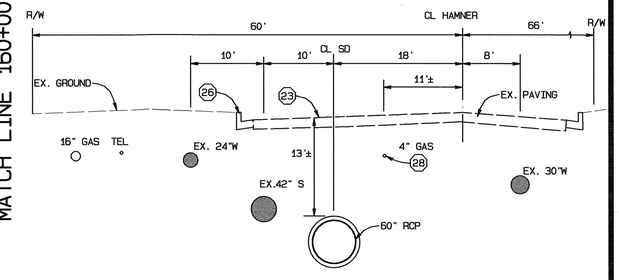
(4) CONSTRUCT 66" RCP (D=1750)
(5) CONSTRUCT 60" RCP (D=1750)
(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(23) REMOVE AND REPLACE EXIST. PAVEMENT, STRIPING AND MARKING. PAVEMENT TO BE RESTORED PER DETAILS AND SECTIONS ON SHEET 14
(26) PROTECT IN PLACE
(28) EXISTING 4" GASLINE PROTECT IN PLACE



	RADIUS	DELTA	TANGENT	LENGTH
1	200.00'	7°04'27"	12.36'	24.69'
2	200.00'	7°04'54"	12.38'	24.72'



SECTION @ STA. 152+00



SECTION @ STA. 159+00

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMAD FAGHIH NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: [signature] DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02
APPROVED BY:
CHIEF ENGINEER
DATE: 2/25/02

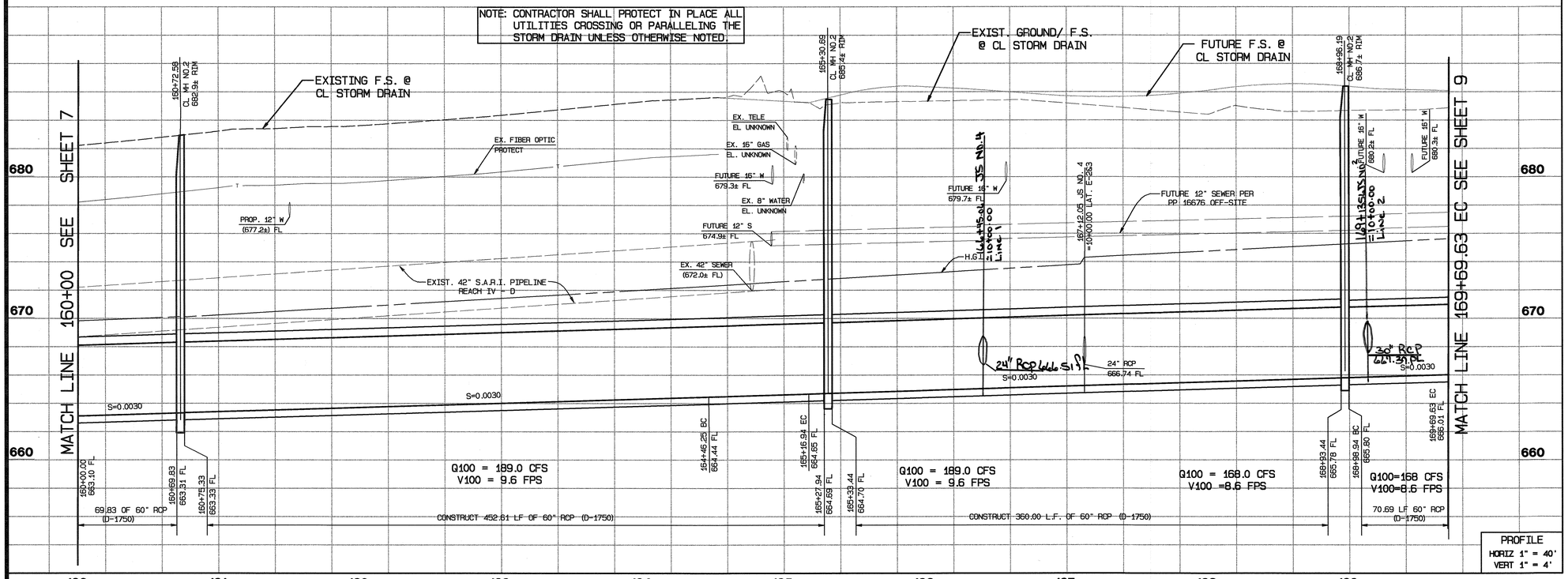
COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY: [signature] DATE: 2/21/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 3
PLAN & PROFILE
STA.150+58 TO STA. 160+00

IP 010027
PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 7 OF 41

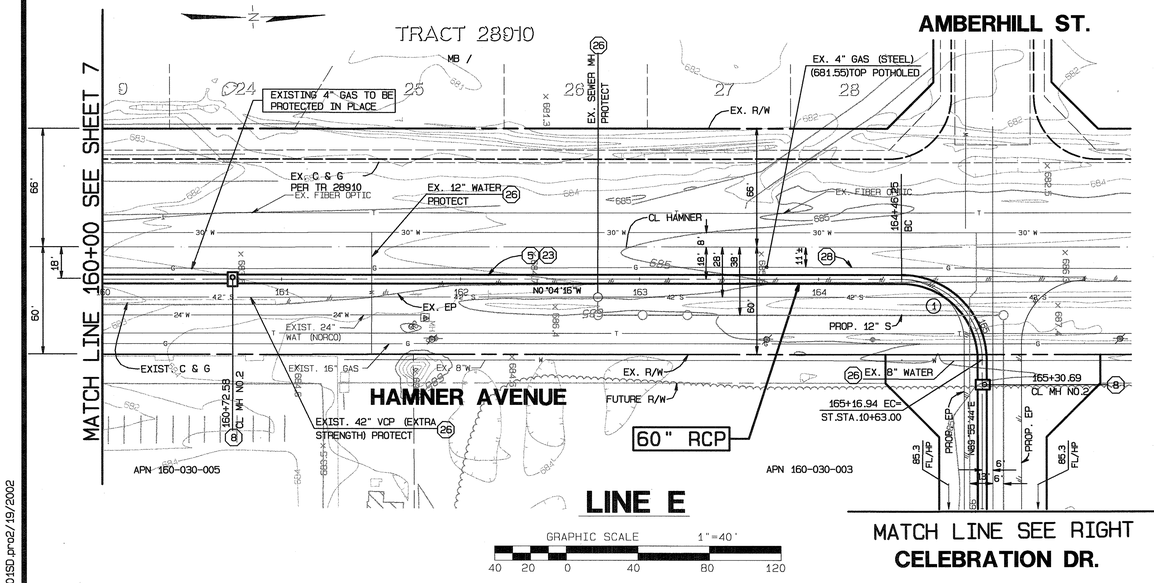
S:\2000\00-0101\0101SD.prn2/19/2002

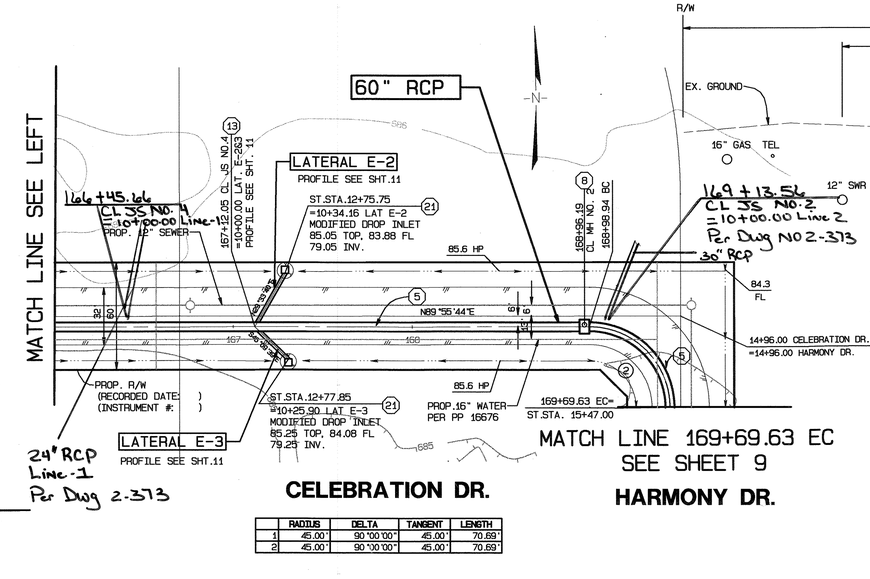
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



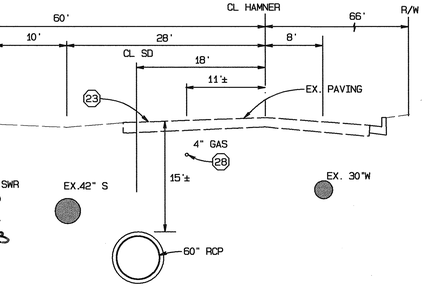
CONSTRUCTION NOTES

(5) CONSTRUCT 60" RCP (D-1750)
(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(13) CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229
(21) CONST. MODIFIED CONCRETE DROP INLET WITH 2" A.C. APRON PER RCFC STD. CB110 & DETAIL ON SHT 11
(23) REMOVE AND REPLACE EXIST. PAVEMENT, STRIPING AND MARKING. PAVEMENT TO BE RESTORED PER DETAILS AND SECTIONS ON SHEET 14
(26) PROTECT IN PLACE
(28) EXISTING 4" GASLINE TO BE PROTECTED IN PLACE





	RADIUS	DELTA	TANGENT	LENGTH
1	45.00'	90°00'00"	45.00'	70.69'
2	45.00'	90°00'00"	45.00'	70.69'



Ep# 20-0324-2956
February 27, 2006
Lennar Homes

G:\2000\00-0101\00101SD.prc2/19/2002

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 1·800 227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF C.L. INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL—ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMAD FASHTAMI NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256
PREPARED BY: Moe + Fogl DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: C.M.
DRAWN BY: C.M.
CHECKED BY:

SEAL—COUNTY
REGISTERED PROFESSIONAL ENGINEER HALED A. GITMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02
APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP.DATE

IP 010027

EASTVALE MDP
LINE E
STAGE 3
PLAN & PROFILE
STA.160+00 TO STA. 169+69.63

PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 8 OF 41

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

EXIST. GROUND/ F.S. @ CL STORM DRAIN

FUTURE F.S. @ CL STORM DRAIN

MATCH LINE 169+69.63 EC SEE SHEET 8

169+95.00 JS NO.4 =10+00.00 LAT. E=462 668.09

171+34.78 CL MH NO.2 668.8± RIM

175+40.28 CL MH NO.2 668.01± RIM

178+68.57 CL MH NO.2 668.4± RIM

177+43.93 36 JS No.4 =10+00.00 Line 4

FUTURE 12" SEWER PER PP 16676 OFF-SITE

H.G.L.

FUTURE 15" W 687.7± FL

24" RCP 668.62 FL

S=0.0030

169+69.63 EC 668.01 FL

170+61.14 BC 666.29 FL

171+32.03 EC 666.50 FL

171+37.53 BEG. PIPE 666.32 FL

S=0.0030

24" RCP 670.69 FL

S=0.0030

28"RCP 669.98 FL

176+95.68 BC 668.19 FL

178+18.98 PRC 668.55 FL

178+71.32 668.72 FL

179+47.28 EC CONC. BULKHEAD 668.95 FL

175+57.53 667.72 FL

175+43.03 667.73 FL

178+65.82 668.70 FL

Q100 = 136.0 CFS
V100 = 6.9 FPS

Q100 = 136.0 CFS
V100 = 6.9 FPS

Q100 = 136.0 CFS
V100 = 6.9 FPS

Q100=117.0 CFS
V100=6.0 FPS

CONSTRUCT 162.40 L.F. OF 60" RCP D-1750

CONSTRUCT 400.00 L.F. OF 60" RCP (D-1750)

CONSTRUCT 322.79 L.F. OF 60" RCP (D-1750)

75.96 L.F. OF 60" RCP (D-1750)

PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

680 / 670 / 660

170 171 172 173 174 175 176 177 178 179

CONSTRUCTION NOTES

(5) CONSTRUCT 60" RCP (D-1750)

(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252

(13) CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229

(14) CONSTRUCT CONCRETE BULKHEAD PER RCFC STD. M816

(21) CONST. MODIFIED CONCRETE DROP INLET WITH 2' A.C. APRON PER RCFC STD. CB110 & DETAIL ON SHT 11

MATCH LINE 169+69.63 EC SEE SHEET 8

HARMONY DR.

LATERAL E-5
PROFILE SEE SHT.12

LATERAL E-4
PROFILE SEE SHT.12

ST.STA. 15+87.57 =10+23.50 LAT E-5 MODIFIED DROP INLET 84.65 TG 83.48 FL

ST.STA. 15+86.21 =10+32.74 LAT E-4 MODIF. DROP INLET 84.25 TG 83.08 FL

169+95.00 JS NO.4 =10+00.00 LAT. E-4 & 5

60" RCP

PROP. 12" SEWER PER PP 16676 OFF-SITE

PROP. R/W (RECORDED DATE:) (INSTRUMENT #:)

177+43.93 CL JS NO.4 =10+00.00 Line 4

EDGE OF PAVEMENT PER IP # 010027

Dwg NO 2-373

EP# 2-0-0324-2956
February 27, 2006
Lennar Homes

COTTAGE WAY

N89°39'41"E

170+61.14 BC

16+77.69 HARMONY DR. =16+77.69 COTTAGE WAY

171+32.03 EC= ST.STA. 17+16.87

171+34.78 CL MH NO.2

PROP. 16" WATER PER PP 16676 OFF-SITE

PROP. R/W (RECORDED DATE:) (INSTRUMENT #:)

APN 160-030-003

175+40.28 CL MH NO.2

176+95.68 BC =ST.STA. 22+80.52

EXISTING LOT LINE

LATERAL E-7
PROFILE SEE SHT.13

ST.STA. 24+71.80 =10+31.39 LAT E-7 MODIF. DROP INLET 84.15 TG 82.98 FL

178+18.98 PRC

178+68.57 CL MH NO.2 =10+00.00 LAT. E6 & 7

ST.STA. 24+69.98 =10+43.96 LAT E-6 MODIFIED DROP INLET 84.35 TG 83.18 FL

LATERAL E-6
PROFILE SEE SHT.13

179+47.28 EC END CONSTRUCTION CONC. BULKHEAD

24"RCP

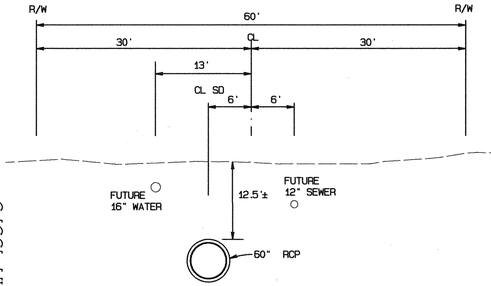
BOUNDARY

PLOT PLAN 16676

	RADIUS	DELTA	TANGENT	LENGTH
1	45.00'	90°16'03"	45.21'	70.90'
2	294.00'	24°01'47"	62.57'	123.30'
3	306.00'	24°01'24"	65.11'	128.30'

LINE E

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120



SECTION @ STA. 175+00

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMMER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGHRI WEBB No. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: mol & Fagl DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTMAN No. 33950 EXP. 6-30-05 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02
APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP. DATE

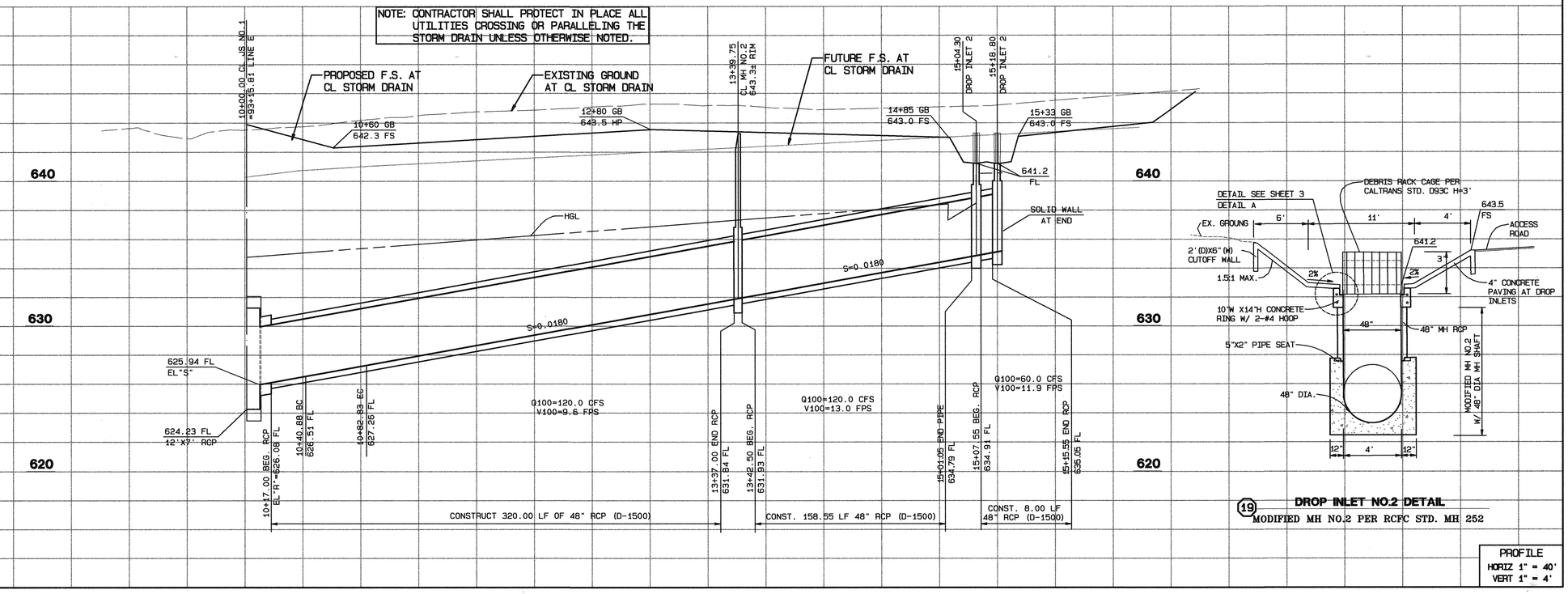
IP 010027

EASTVALE MDP
LINE E
STAGE 3
PLAN & PROFILE
STA.169+69.63 TO STA. 179+47.28

PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 9 OF 41

G:\2000\00-010\00010SD.prn2/19/2002

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



(19) DROP INLET NO.2 DETAIL
MODIFIED MH NO.2 PER RCFC STD. MH 252

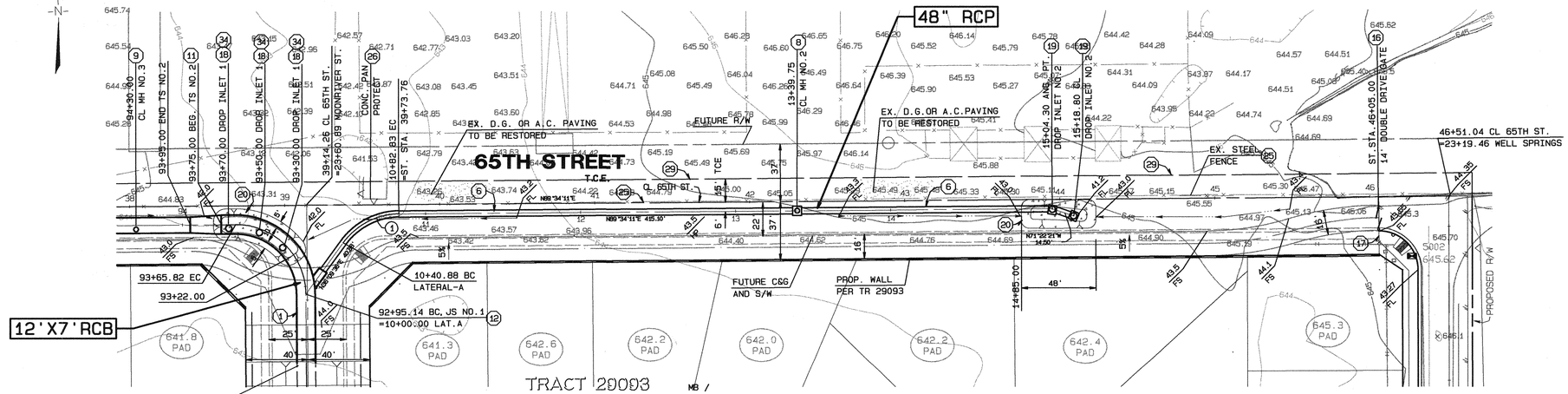
PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

J.S. NO.1	
M.L. STA.	93+15.81
LATERAL	LAT.-A
A	36'±
B	48"
C	17.0
EL."S"	625.94
EL."R"	626.08

CONSTRUCTION NOTES

(1) CONSTRUCT 12'WX7'H RCB PER CALTRANS STD.D-80, MAX. COVER 20' FLAT INVERT
(6) CONSTRUCT 48" RCP D-1500
(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(11) CONSTRUCT TRANSITION STRUCTURE NO.2 PER RCFC STD. TS 302
(12) CONSTRUCT JUNCTION STRUCTURE NO. 1 PER RCFC STD. JS 226
(17) INSTALL 6' CHAIN LINK FENCE PER RCFC STD. M801
(18) CONSTRUCT DROP INLET 1 PER DETAIL ON SHEET 3
(19) CONSTRUCT DROP INLET 2 PER DETAIL ON SHEET 10
(20) CONSTRUCT 4" CONC. PAVING W/2' CUTOFF WALL AT INLET STRUC.
(25) REMOVE & REINSTALL EXIST. FENCE IN KIND
(26) PROTECT IN PLACE
(29) INSTALL 6'TEMP. CHAINLINK FENCE ALONG TCE PER RCFC STD. M801

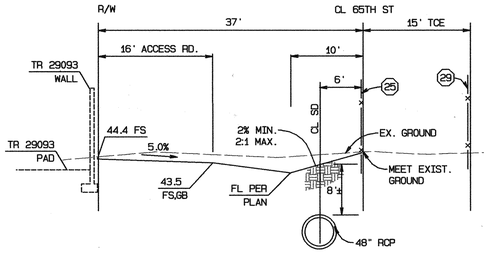
10 11 12 13 14 15 16



	RADIUS	DELTA	TANGENT	LENGTH
1	45.00'	53°24'35"	22.64'	41.95'

MOONRIVER — **LATERAL A** — **WELLS SPRINGS**

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120



SECTION @ STA. 13+00

GRAPHIC SCALE 1"=10'
0 10 20 30

G:\2000\00-0101\0010150.prn02/19/2002

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMMER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL—ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGIH NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: moe Fagih DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL—COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

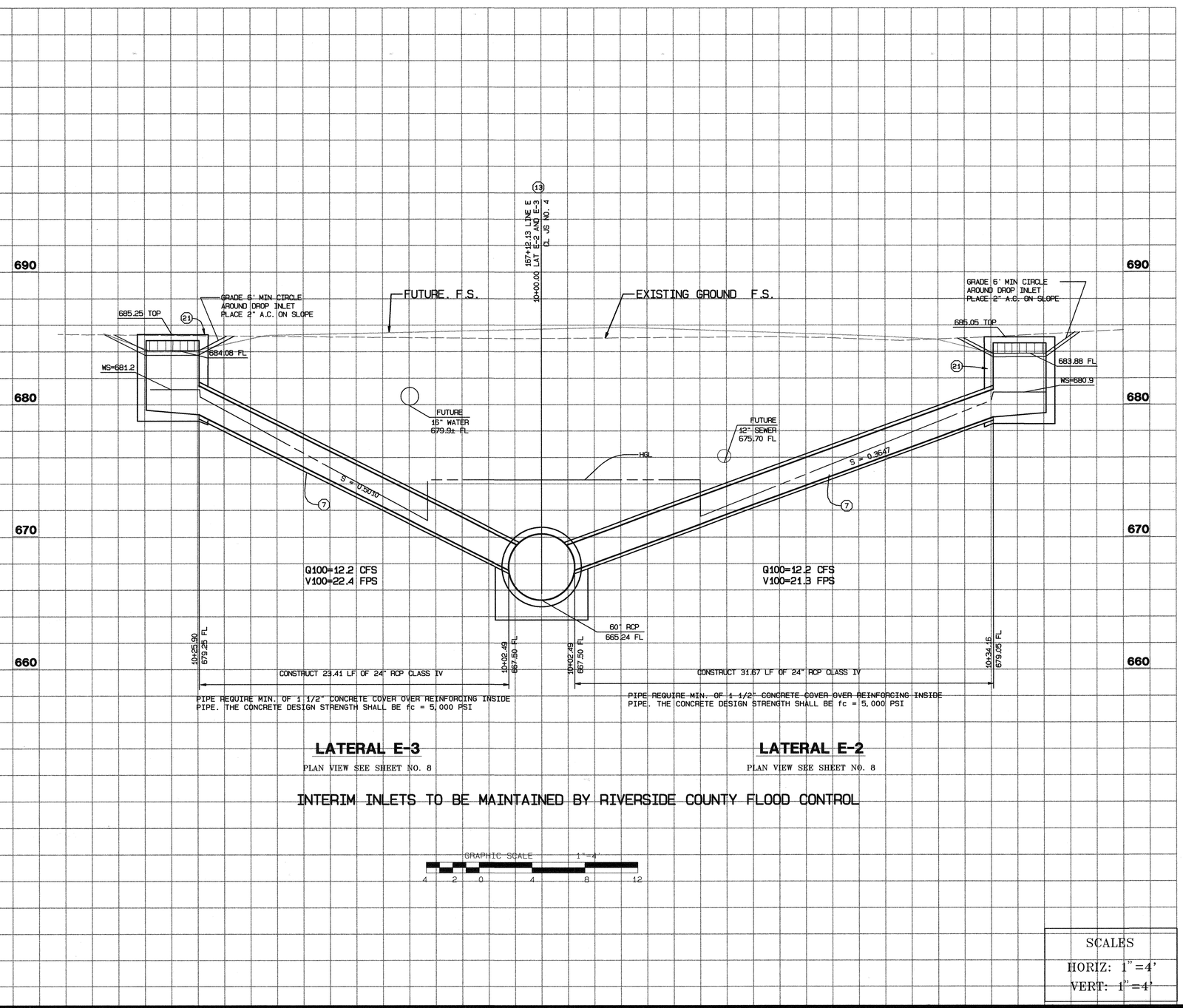
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02

APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP.DATE

EASTVALE MDP
LINE E
STAGE 3
LATERAL A
STA. 10+00 TO STA. 15+18.80

IP 010027
PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 10 OF 41



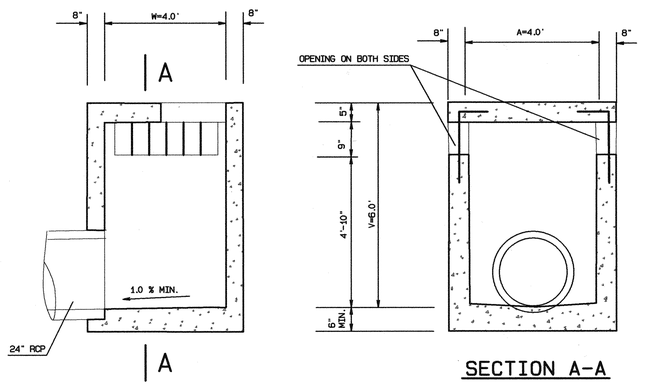
LATERAL E-3

PLAN VIEW SEE SHEET NO. 8

LATERAL E-2

PLAN VIEW SEE SHEET NO. 8

INTERIM INLETS TO BE MAINTAINED BY RIVERSIDE COUNTY FLOOD CONTROL



MODIFIED CONCRETE DROP INLET

N.T.S. (21)

REBAR, MANHOLE & PROTECTION BAR DETAILS PER RCFDC STD. CB 110

CONSTRUCTION NOTES

(7) CONSTRUCT 24" RCP CLASS IV

(13) CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229

(21) CONST. MODIFIED CONCRETE DROP INLET WITH 2" A.C. APRON PER RCFC STD. CB110 & DETAIL ON THIS SHEET

SCALES
HORIZ: 1"=4'
VERT: 1"=4'

G:\2000\00-0101\00101SD.prod2/19/2002

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 1·800 227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGHRI NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET, RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256
PREPARED BY: mo & Fagi DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

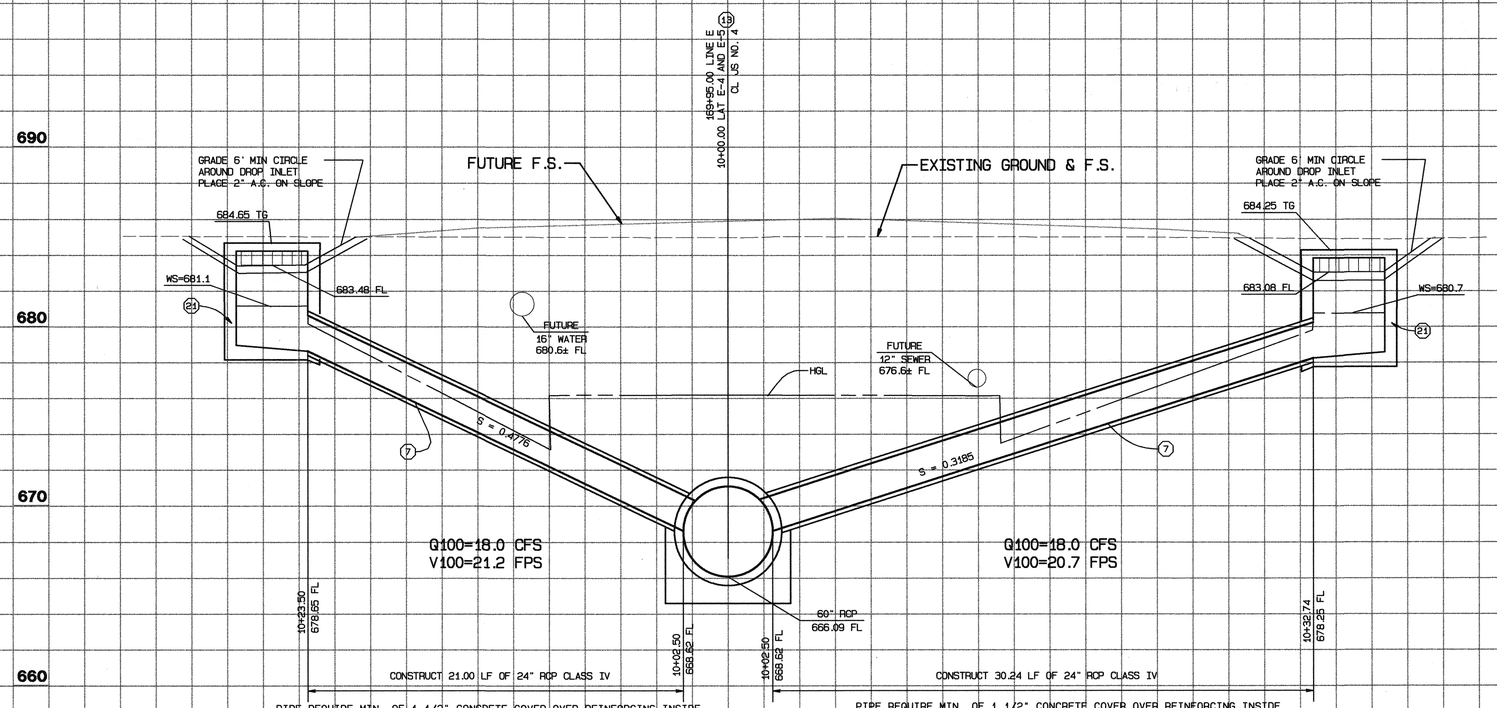
REF.	REVISIONS	APPR.	DATE
1	revise drawing NO	JK	2/6/02

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE: 2/20/02
APPROVED BY:
CHIEF ENGINEER DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY: DATE: 2/24/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 3
CONNECTORS

IP 010027
PROJECT NO. 2-0-0310
DRAWING NO. 2-~~293~~ 307 Δ
SHEET NO. 11 OF 41



LATERAL E-5

PLAN VIEW SEE SHEET NO. 9

LATERAL E-4

PLAN VIEW SEE SHEET NO. 9

INTERIM INLETS TO BE MAINTAINED BY RIVERSIDE COUNTY FLOOD CONTROL

GRAPHIC SCALE 1"=4'

4 2 0 4 8 12

CONSTRUCTION NOTES

(7) CONSTRUCT 24" RCP CLASS IV

(13) CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229

(21) CONST. MODIFIED CONCRETE DROP INLET WITH 2" A.C. APRON PER RCFC STD. CB110 & DETAIL ON SHT 11

SCALES
HORIZ: 1"=4'
VERT: 1"=4'

IP 010027

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUNNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

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PH. (909) 686-1070 FAX (909) 788-1256
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R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	REVISIONS	APPR.	DATE
1	revise drawing no.	SK	2/21/02

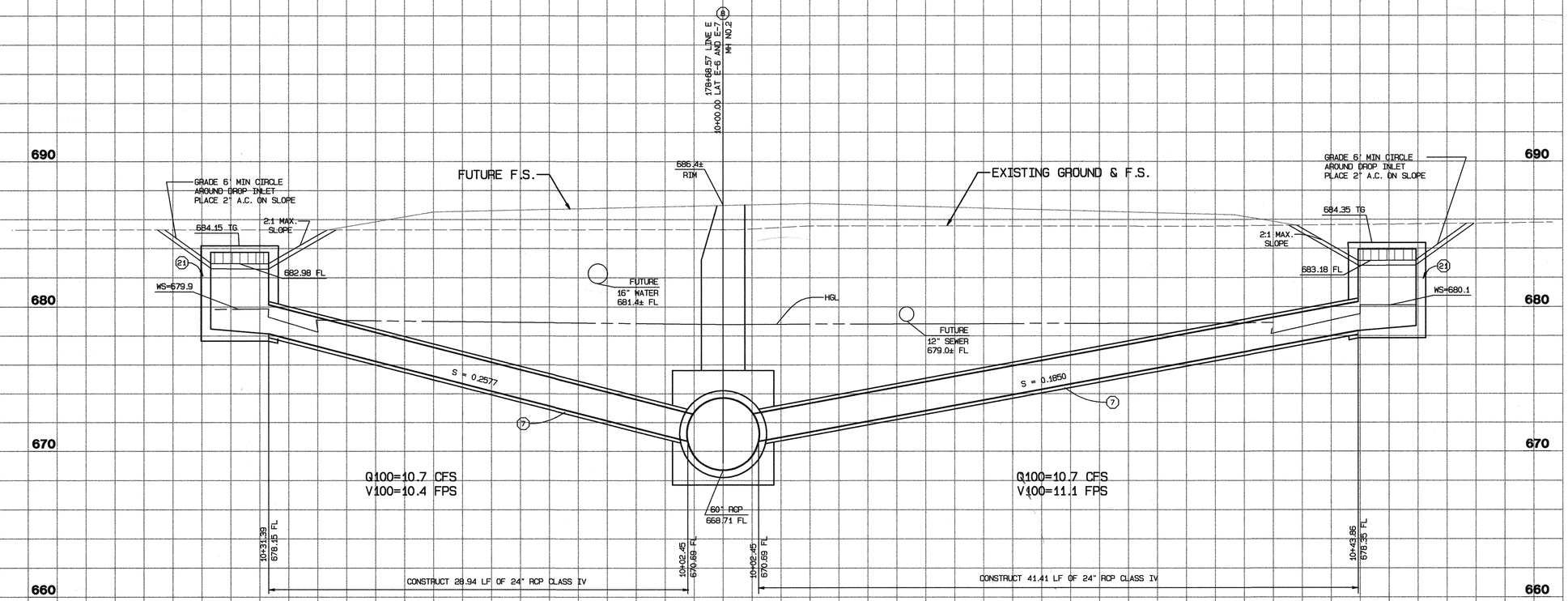
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02
APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 3
CONNECTORS

PROJECT NO. 2-0-0310
DRAWING NO. 2-~~293~~ 307 1
SHEET NO. 12 OF 41

G:\2000\00-0101\001015D.dwg 2/19/2002



LATERAL E-7

PLAN VIEW SEE SHEET NO. 9

LATERAL E-6

PLAN VIEW SEE SHEET NO. 9

INTERIM INLETS TO BE MAINTAINED BY RIVERSIDE COUNTY FLOOD CONTROL

GRAPHIC SCALE 1"=4'

4 2 0 4 8 12

CONSTRUCTION NOTES

(7) CONSTRUCT 24" RCP CLASS IV

(8) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252

(21) CONST. MODIFIED CONCRETE DROP INLET WITH 2" A.C. APRON PER RCFC STD. CB110 & DETAIL ON SHT 11

SCALES
HORIZ: 1"=4'
VERT: 1"=4'

IP 010027

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL—ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGHRI NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET, RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: M Faghri DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL—COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE
1	revise drawing no.	JK	2/21/02

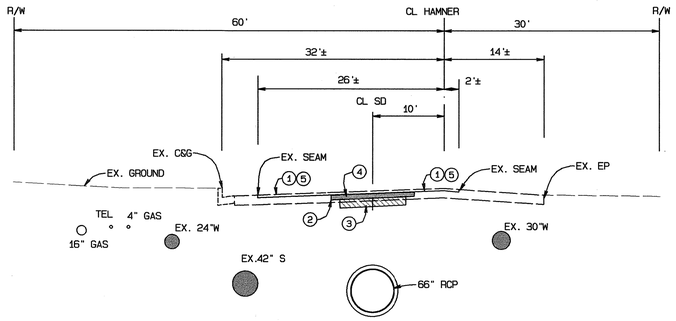
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/20/02
APPROVED BY:
CHIEF ENGINEER
DATE: 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 3
CONNECTORS

PROJECT NO. 2-0-0310
DRAWING NO. 1 2-293 307
SHEET NO. 13 OF 41

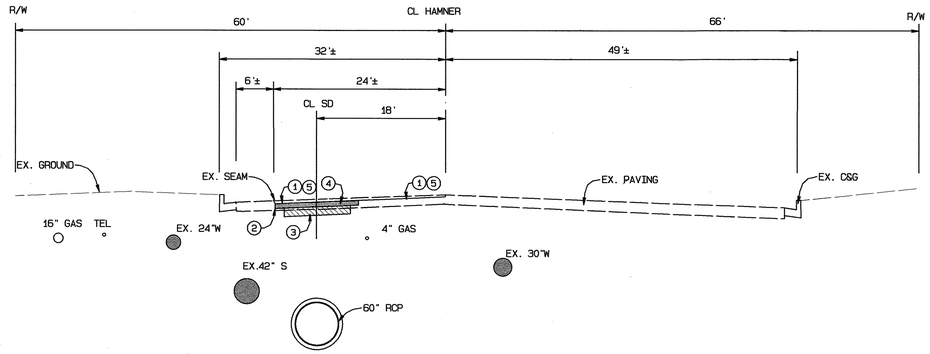
G:\2000\00-0101\00101SD.prc2/19/2002



TYP. SECTION STA.141+56.50 TO STA.150+00.00

GRAPHIC SCALE 1"=10'

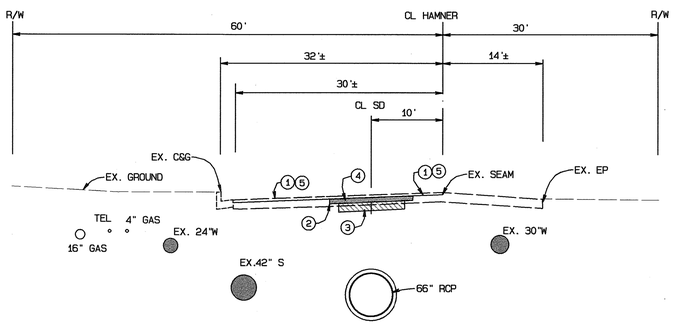
0 10 20 30



TYP. SECTION STA.155+68.33 TO 161+00.00

GRAPHIC SCALE 1"=10'

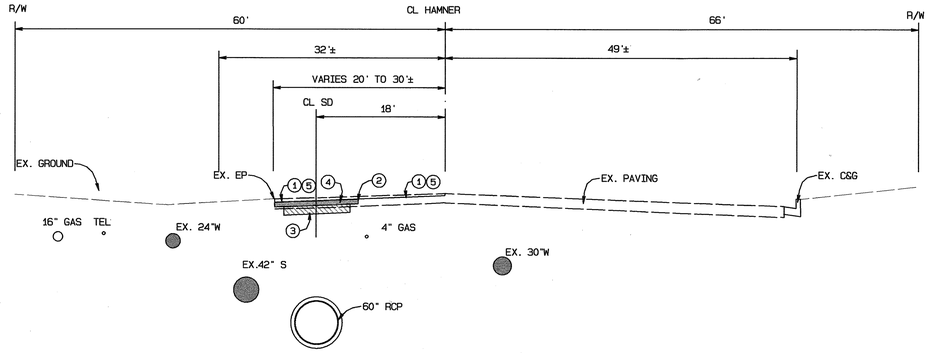
0 10 20 30



TYP. SECTION STA.150+00.00 TO STA.155+68.33

GRAPHIC SCALE 1"=10'

0 10 20 30



TYP. SECTION STA.161+00.00 TO 165+00

GRAPHIC SCALE 1"=10'

0 10 20 30

NOTES

1. HEADER CUT EXISTING A.C. PAVING 0.1' IN DEPTH
2. SAW CUT EXIST. A.C. PAVING PER RCFC STD. M 815
3. CONSTRUCT 0.6' CLASS II AGGREGATE BASE
4. CONSTRUCT 0.55' ASPHALT CONCRETE
5. CONSTRUCT 0.1' ASPHALT CONCRETE OVERLAY

G:\2000\00-010\010027\pcd\010027sd02.dgn 2/19/2002

IP 010027

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800
227·2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMMER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL—ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGIH NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET, RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: Mohammad Fagih DATE 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL—COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33959 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	REVISIONS	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE : 2/20/02

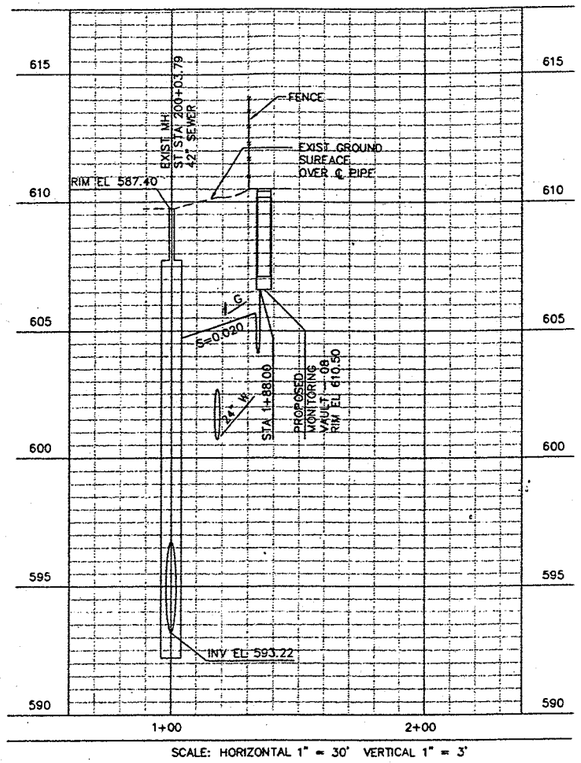
APPROVED BY:
CHIEF ENGINEER
DATE : 2/20/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 2/20/02
RCE NO. EXP.DATE

EASTVALE MDP
LINE E
STAGE 3

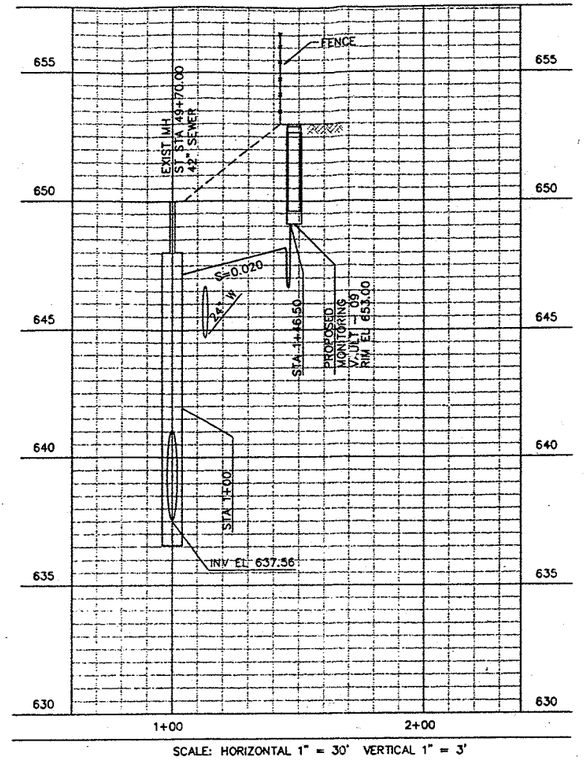
PAVEMENT RESTORATION DETAILS

PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 14 OF 41



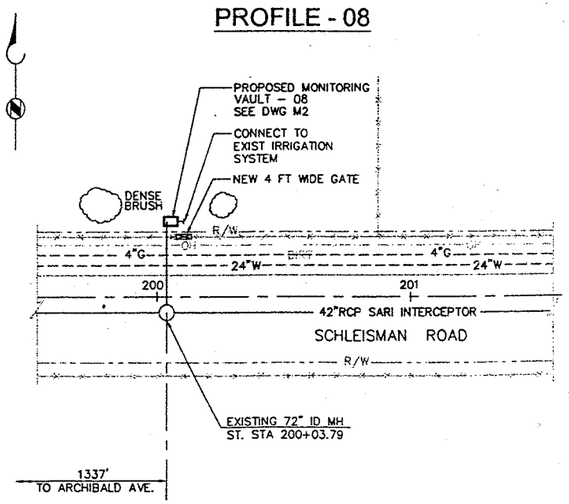
SCALE: HORIZONTAL 1" = 30' VERTICAL 1" = 3'

PROFILE - 08



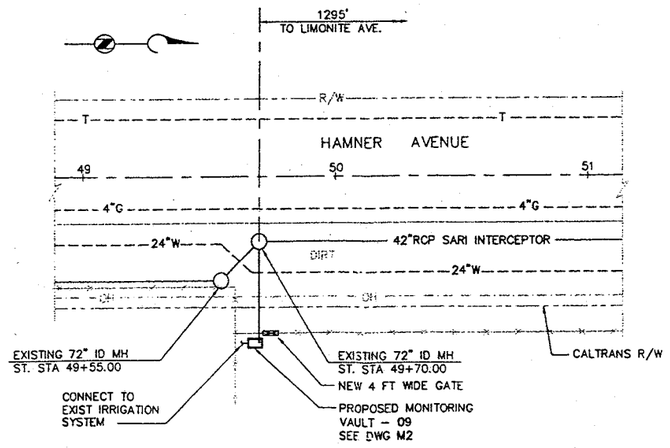
SCALE: HORIZONTAL 1" = 30' VERTICAL 1" = 3'

PROFILE - 09



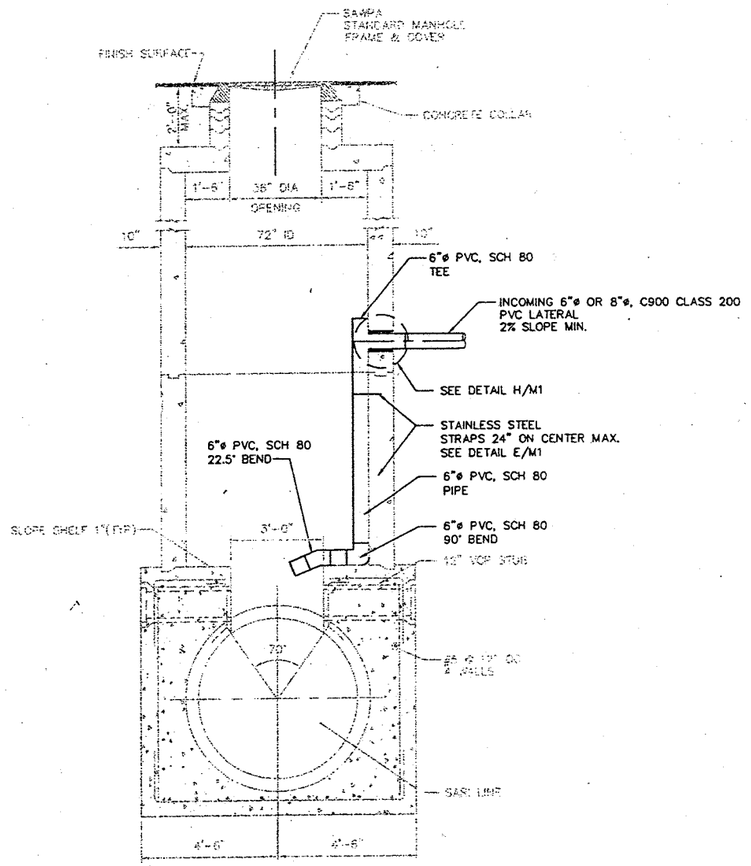
MONITORING VAULT- 08

SCALE: 1"=30'-0"



MONITORING VAULT- 09

SCALE: 1"=30'-0"



SEWER CONNECTION TO EXISTING SEWER MANHOLE

NOT TO SCALE

A TYP

CONSTRUCTION NOTES :

1. ALL MANHOLE PENETRATIONS SHALL BE MADE BY CORE DRILLING.
2. ALL PIPES AND PIPE FITTINGS SHALL BE SOLVENT WELDED.

ONE INCH ON ORIGINAL

PROJECT NO.	2-0-0310
DRAWING NO.	2-307
SHEET NO.	39 OF 41

ORANGE COUNTY SANITATION DISTRICT

DAIRY WASHWATER PILOT PROJECT

PLANS AND PROFILES

REGISTERED PROFESSIONAL ENGINEER GUILLERMO E. CLARK No. 34082 CIVIL STATE OF CALIFORNIA

NO.	DESCRIPTION	APPROVED	DATE

REVISIONS

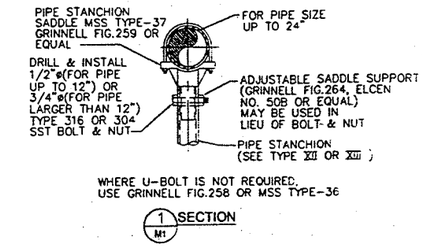
DATE:	SEP. 00
DESIGNED:	MC/DY
DRAWN BY:	CS
CHECKED:	GEG

CGvL ENGINEERS 6 HUGHES • SUITE 100 IRVINE, CALIFORNIA 92XXX (949)454-3600 Fax(949)454-3601

DRAWING NO. C4

SHEET NO. 6 OF 8

09/11/00 at 09:59:38am P:\194-06\DWPP\19406-C4.dwg



NOTE:

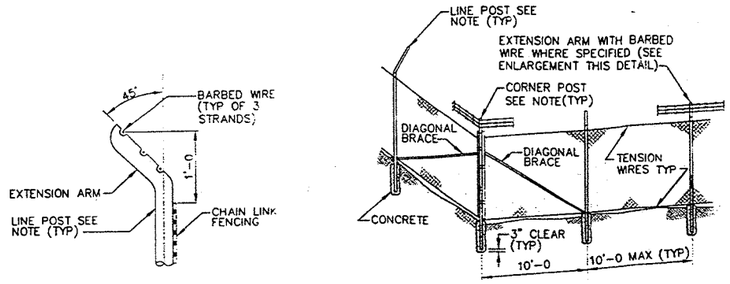
PIPE SUPPORT SHOWN IS FOR GRAVITY LOAD ONLY. FOR SEISMIC ACTIVE AREA PROVIDE SEISMIC BRACING SEISMIC BRACING:

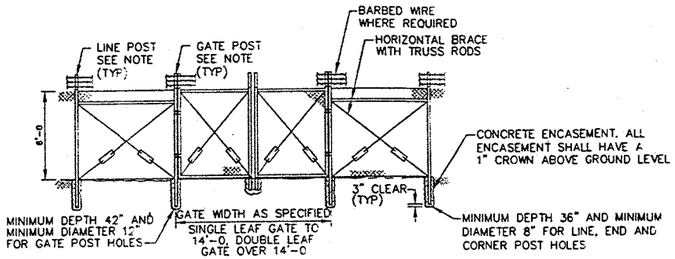
A. TRANSVERSE BRACING SHALL BE PROVIDED AT 20'-0" MAX SPACING. (MIN TWO STRAIGHT RUN GREATER THAN 10'-0")

B. LONGITUDINAL BRACES SHALL BE PROVIDED AT 40'-0" MAX SPACING. (MIN ONE PER EACH END)

PIPE SUPPORT (TYP)

DETAIL A / M1 — NOT TO SCALE



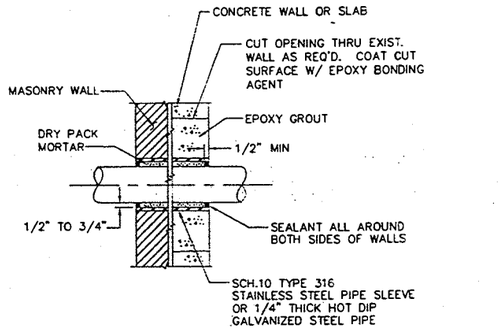


NOTE:

PROVIDE POST CAP WHERE EXTENSION ARM WITH BARBED WIRE IS NOT SPECIFIED.

CHAIN LINK FENCE AND GATE

DETAIL B / VAR — NOT TO SCALE

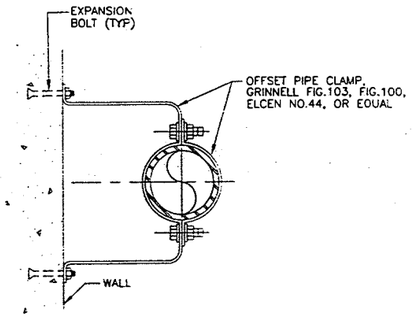


NOTES:

1. SLEEVE MAY BE OMITTED IF HOLE IS CORE DRILLED. CORE DRILLING SHALL BE APPROVED BY THE ENGINEER
2. HOT DIP GALVANIZED SCH 40 STEEL PIPE MAY BE USED FOR SLEEVES 6" DIA AND SMALLER.

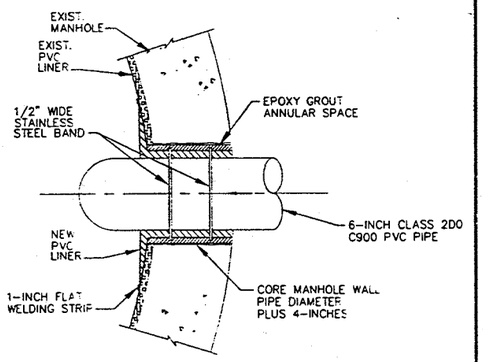
PIPE PENETRATION

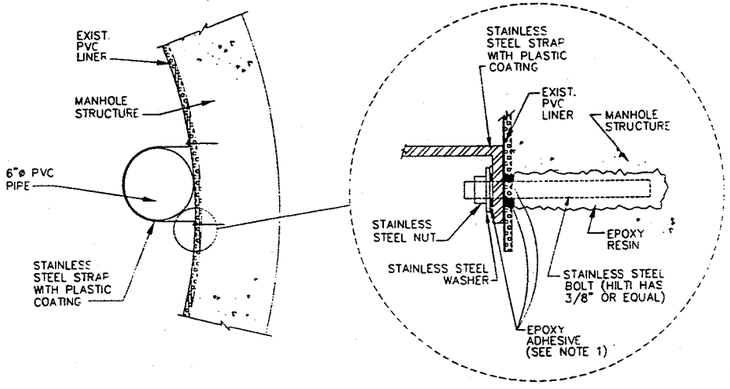
DETAIL C / M2 — NOT TO SCALE



HORIZONTAL PIPE HANGER

DETAIL D / M2 — NOT TO SCALE





PIPE PENETRATION THROUGH PVC LINER

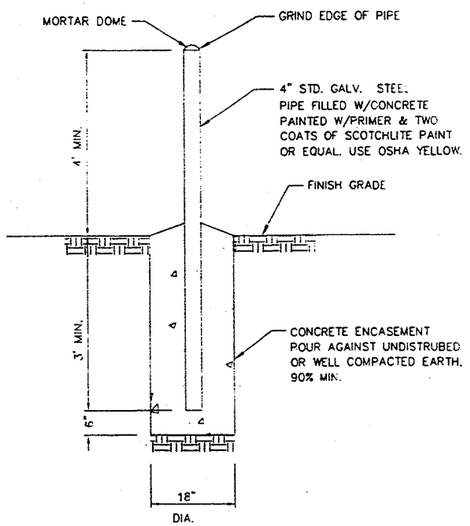
DETAIL H / C4 — NOT TO SCALE

PIPE STRAPPING

DETAIL E / C4 — NOT TO SCALE

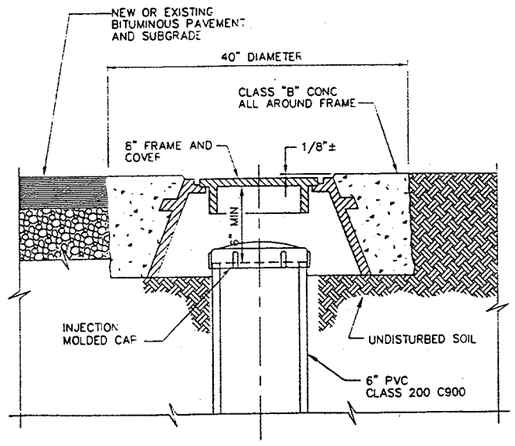
NOTE:

1. EPOXY ADHESIVE SHALL BE APPLIED AROUND THE CEMENTED STAINLESS STEEL BOLT BEFORE AND AFTER INSTALLING THE STAINLESS STEEL STRAP TO ASSURE A GOOD STRUCTURE PROTECTION. SEE EPOXY ADHESIVE ANCHOR SPECIFICATION SECTION 05500.



GUARD POST (TYP)

DETAIL F / M2 — NOT TO SCALE



CLEANOUT

DETAIL G / C3 — NOT TO SCALE

NO.	DESCRIPTION	APPROVED	DATE

REVISIONS

PROJECT NO. 2-0-0310
DRAWING NO. 2-307
SHEET NO. 40 OF 41

ONE INCH ON ORIGINAL

ORANGE COUNTY SANITATION DISTRICT

DAIRY WASHWATER PILOT PROJECT

STANDARD DETAILS

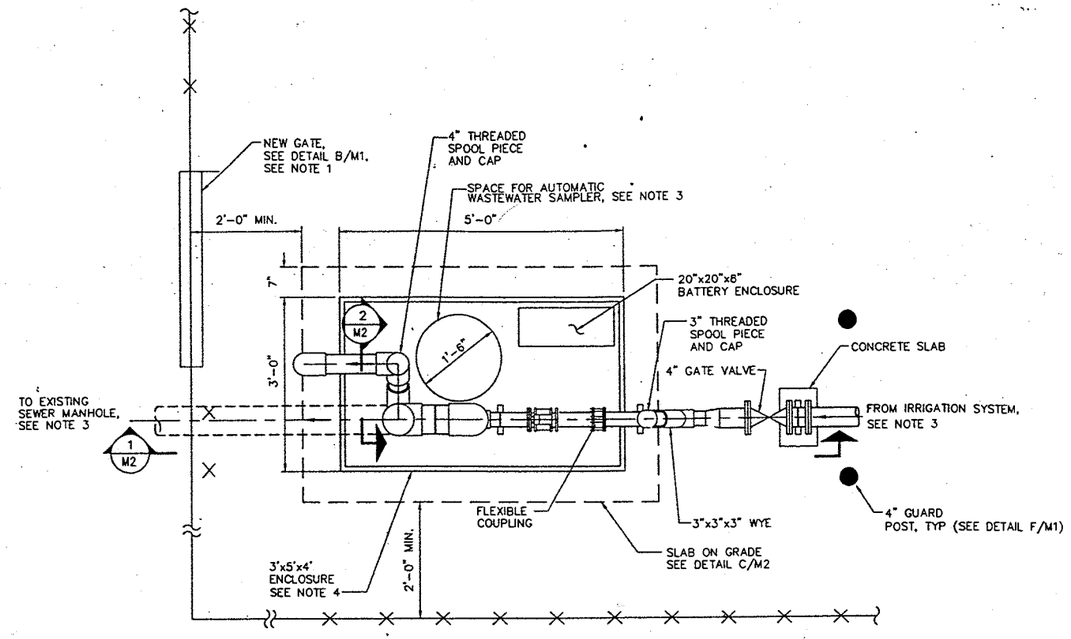
DATE: SEP. 00
DESIGNED: MC/DY
DRAWN BY: CS
CHECKED: GEG

CGVL ENGINEERS — 6 HUGHES • SUITE 100 IRVINE, CALIFORNIA 92XXX (949)454-3600 Fax(949)454-3601

DRAWING NO. M1
SHEET NO. 7 OF 8

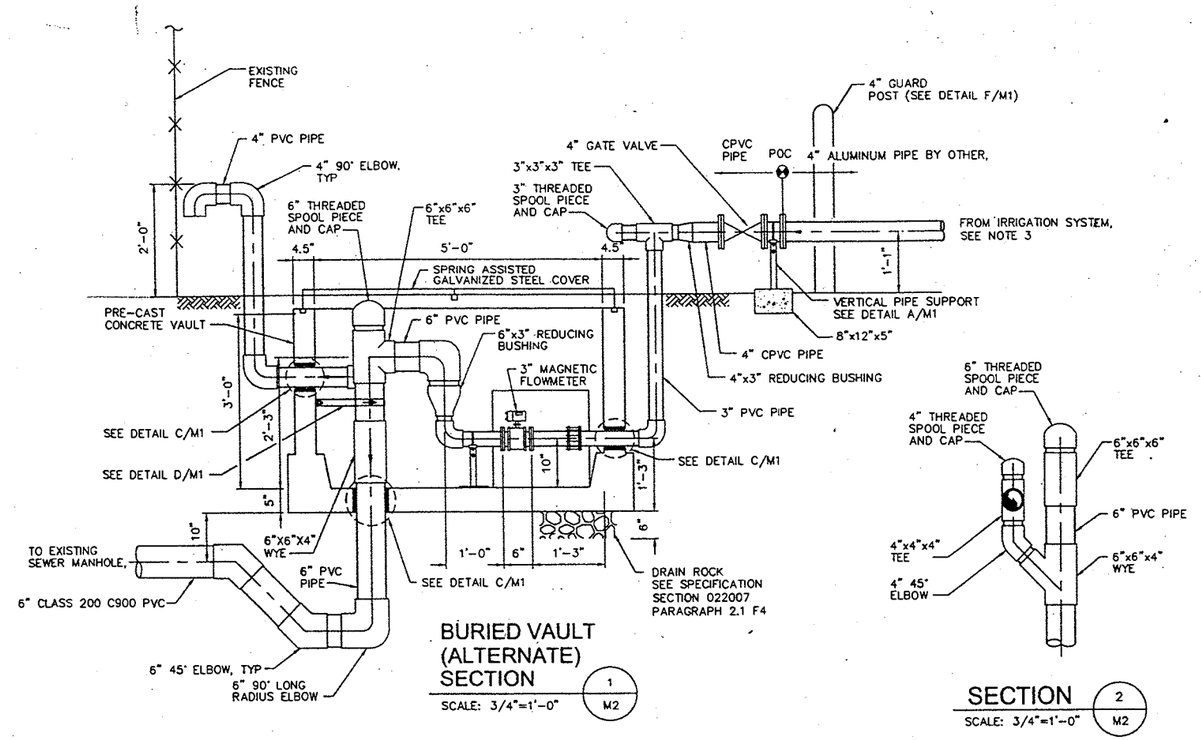
REGISTERED PROFESSIONAL ENGINEER — ARMANDO C. GRIJALVA — No. 43882 — CIVIL — STATE OF CALIFORNIA

09/11/00 at 11:58:29am P:\194-06\DWP\19406-M1.dwg



ABOVE-GROUND VAULT PLAN

SCALE: 3/4"=1'-0"



BURIED VAULT (ALTERNATE) SECTION

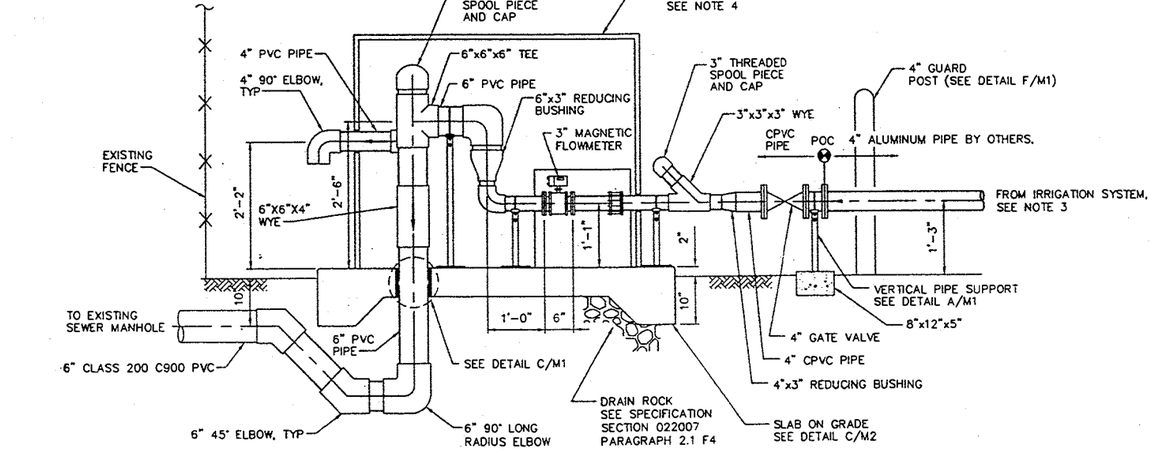
1 / M2

SCALE: 3/4"=1'-0"

SECTION

2 / M2

SCALE: 3/4"=1'-0"

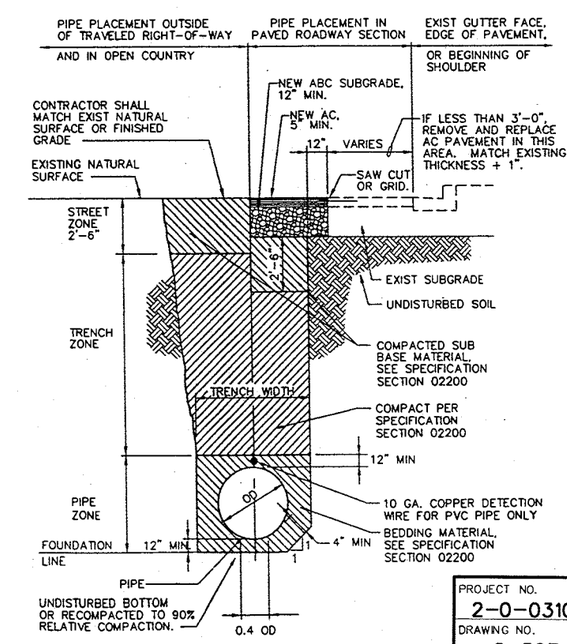


ABOVE-GROUND VAULT SECTION

1 / M2

SCALE: 3/4"=1'-0"

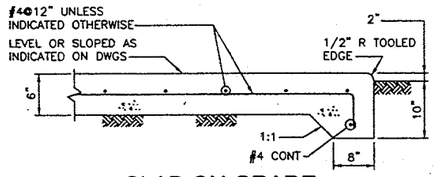
TABLE 1 – MONITORING VAULT INFORMATION SUMMARY									
LOCATION	1	2	3	4	5	6	7	8	9
DAIRY NAME	LOYOLA DAIRY	STUEVE DAIRY	VANDER POEL BROS. DAIRY	LEGEND DAIRY #1	LEGEND DAIRY #2	VAN RYN DAIRY	GOEDHART DAIRY	HARRY MIERSMA DAIRY	KASBERGEN DAIRY
DISTANCE TO MANHOLE, FEET	40	75	30	40	40	85	75	30	35
UNDERGROUND VAULT	YES	YES	YES	YES	NO	NO	NO	YES	YES
GATE REQUIRED	YES	YES	NO	YES	NO	YES	YES	YES	YES
CLEANOUT REQUIRED	NO	NO	NO	NO	NO	YES	YES	NO	NO



PIPE INSTALLATION AND PAVEMENT REPLACEMENT

DETAIL A / M2

NOT TO SCALE



SLAB ON GRADE EQUIPMENT PAD

DETAIL C / M2

NOT TO SCALE

NOTES:

1. MODIFY TO EXISTING FENCE TO ACCOMMODATE 4'-0" WIDE GATE. A GATE SHALL BE PROVIDED WITHIN 20 FT OF VAULT AT THE LOCATIONS LISTED IN TABLE 1.
2. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR PIPES, VALVES, EQUIPMENT AND FLOW METERS.
3. ADEQUATE SPACE SHALL BE PROVIDED TO ACCOMMODATE AUTOMATIC WASTEWATER SAMPLER IN THE VAULT.
4. MATERIAL AND MANUFACTURER TO BE DETERMINED BY OWNER AND APPROVED BY OCSD.

ONE INCH ON ORIGINAL

PROJECT NO. 2-0-0310

DRAWING NO. 2-307

SHEET NO. 41 OF 41

REGISTERED PROFESSIONAL ENGINEER GREGORY E. GEISLER No. 31682 CIVIL STATE OF CALIFORNIA

NO.	DESCRIPTION	APPROVED	DATE
	REVISIONS		

ORANGE COUNTY SANITATION DISTRICT

DAIRY WASHWATER PILOT PROJECT

MONITORING VAULT - PLAN AND SECTION

DATE: SEP, 00
DESIGNED: MC/DY
DRAWN BY: CS
CHECKED: GEG

CGvL ENGINEERS 6 HUGHES • SUITE 100 IRVINE, CALIFORNIA 92XXX (949)454-3600 Fax(949)454-3601

DRAWING NO. M2

SHEET NO. 8 OF 8

09/08/00 at 11:28:48am P:\194-06\DWP\19406-M2.dwg

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
EASTVALE MASTER DRAINAGE PLAN LINE E

GENERAL NOTES

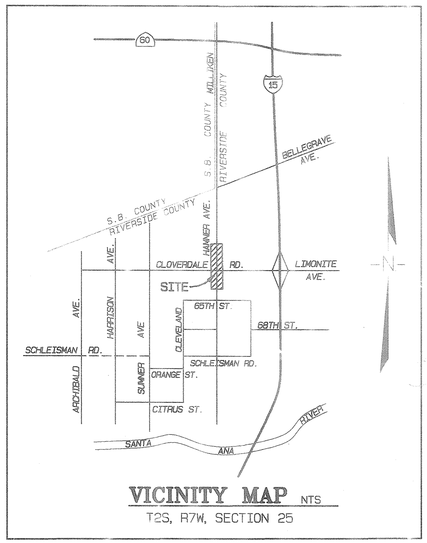
1. ALL STATIONING REFERS TO CENTERLINE OF CONSTRUCTION.
2. ALL CROSS SECTIONS ARE TAKEN LOOKING DOWNSTREAM
3. TOPOGRAPHY BY DIGITAL PHOTOGRAMMETRIC METHODS. AERIAL PHOTOGRAPHS TAKEN AT AN ALTITUDE NO TO EXCEED A FLYING HEIGHT TO CONTOUR INTERVAL RATIO OF 1800. PHOTOGRAPHY DATED 2-13-1999, BY INLAND AERIAL SURVEYS, INC.
4. THE VERTICAL DATUM IS DERIVED FROM NGVD 29. THE HORIZONTAL DATUM IS DERIVED FROM NAD 83.
5. STANDARD DRAWINGS CALLED FOR ON THE PLAN & PROFILE SHALL CONFORM TO R.C.F.C. & W.C.D. STD. DRAWINGS, CALTRANS OR COUNTY STANDARD PLANS.
6. ELEVATIONS AND LOCATIONS OF UTILITIES WERE OBTAINED FROM AVAILABLE INFORMATION AND ARE SHOWN APPROXIMATELY ON THESE PLANS. 48 HOURS BEFORE EXCAVATION CALL UNDERGROUND SERVICE ALERT AT 1-800-227-2600. ALL UTILITIES SHALL BE PROTECTED I
7. THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY AGENCIES REGARDING TEMPORARY SUPPORT AND SHORING REQUIREMENTS FOR THE VARIOUS UTILITY LINES SHOWN ON THESE PLANS.
8. ALL OPENINGS RESULTING FROM CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES, OR SIMILAR STRUCTURES TO BE ABANDONED, SHALL BE SEALED AT BOTH ENDS WITH 6" MIN. CLASS "B" CONCRETE.
9. STREET RECONSTRUCTION SHALL BE AS SHOWN ON TYPICAL STREET PAVEMENT DETAILS. IF THERE IS NO TYPICAL DETAIL, THE RECONSTRUCTION SHALL BE IN KIND.
10. ALL RECONSTRUCTION, RESURFACING AND PAVEMENT DELINEATION, CURBS, SIDEWALKS AND OTHER IMPROVEMENTS ARE TO BE RECONSTRUCTED IN KIND AT THE SAME LOCATIONS AND ELEVATIONS AS THE EXISTING IMPROVEMENTS, UNLESS OTHERWISE NOTED.
11. ⊗ INDICATES APPROX. SOIL BORING LOCATION PER SOILS REPORT BY RMA GROUP DATED 6/11/2001
12. CONSTRUCTION INSPECTION OF STORM DRAIN WILL BE PERFORMED BY RIVERSIDE COUNTY FLOOD CONTROL. CONTACT DALE ANDERSON AT (909) 275-1288. THE DISTRICT MUST BE NOTIFIED TWO WEEKS PRIOR TO CONSTRUCTION. CONSTRUCTION INSPECTION OF ROADWAY RELATED ITEMS WILL BE PERFORMED BY RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT.
13. ALL TRENCH EDGES SHALL BE SAWCUT NEAT OR AS DIRECTED BY THE ENGINEER
14. ALL ROAD WORK SHALL CONFORM TO COUNTY ROAD IMPROVEMENT STANDARDS AND SPECIFICATIONS PER ORDINANCE 461.
15. APPROVAL FOR THESE PLANS BY THE RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT DOES NOT RELIEVE THE DEVELOPER'S ENGINEER OF RESPONSIBILITY FOR THE ENGINEERING DESIGN. IF FIELD CHANGES ARE REQUIRED, IT WILL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO MAKE THE NECESSARY CHANGES.
16. ALL WORK WITHIN THE RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT R/W WILL REQUIRE AN ENCROACHMENT PERMIT.
17. ITEMS WITHIN THE TEMPORARY CONSTRUCTION EASEMENT NOT IDENTIFIED ON THE PLANS SHALL BE PROTECTED IN PLACE OR RESTORED IN KIND
18. STANDARD LOCATION OF STORM DRAIN (RIV. CO. STD 817) IS WAIVED DUE TO EXISTING UTILITY CONFLICTS.
19. THE OPENINGS OF CATCH BASIN AND CONCRETE DROP INLETS SHALL BE SEALED COMPLETELY WITH SAND BAGS OR OTHER METHOD APPROVED BY INSPECTOR UNTIL THE DOWN STREAM PORTION OF THE LINE E STAGE 3 CONSTRUCTED.

NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATIONS OF ALL UNDERGROUND UTILITIES (UTILITY PIPES, STRUCTURES, ETC.) SHOWN ON THESE PLANS (MAIN LINES ONLY – NO SERVICE LATERALS) WERE ASCERTAINED BY A REVIEW OF RECORDS PROVIDED BY THESE MEMBER AGENCIES AND ARE APPROXIMATE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN.

THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. LOCATIONS OF UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.

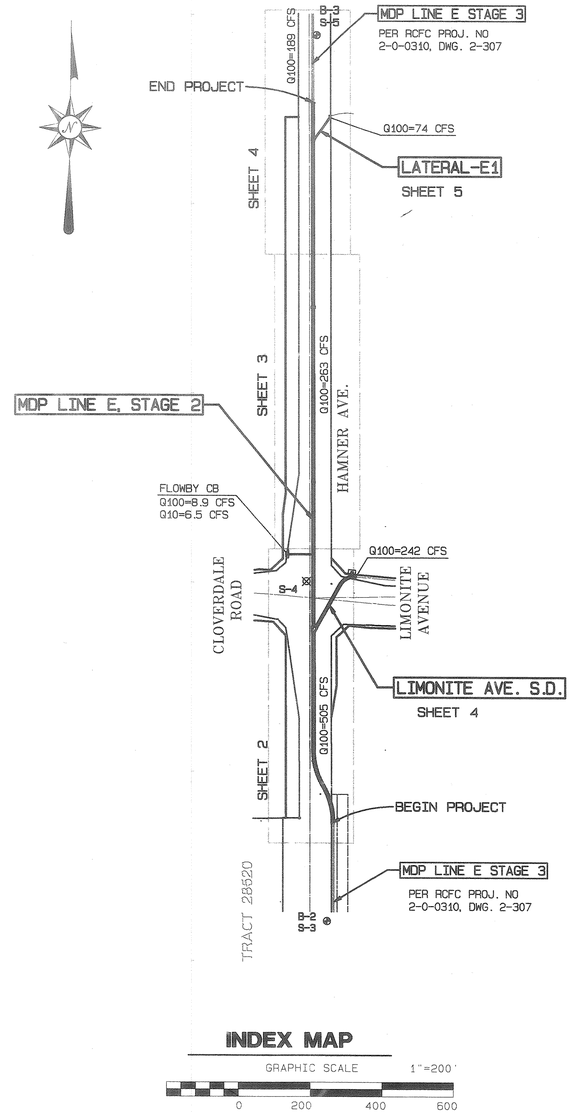
CALL UNDERGROUND SERVICE ALERT (U.S.A.) 1-800-227-2600 AT LEAST 2 WORKING DAYS PRIOR TO EXCAVATION.



VICINITY MAP NTS
T2S, R7W, SECTION 25

CONSTRUCTION NOTES

1	CONSTRUCT 84" RCP (D=1750)
2	CONSTRUCT 66" RCP (D=1750)
3	CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
4	CONSTRUCT MANHOLE NO. 4 PER RCFC STD. MH 254
5	CONSTRUCT CONCRETE BULKHEAD PER RCFC STD. M 816
6	PROTECT IN PLACE
7	CONSTRUCT MODIFIED CONCRETE DROP INLET 1 PER RCFC STD. CB110 AND
	DETAIL ON SHEET 5
8	CONSTRUCT 30" RCP (D=1500)
9	PROTECT EXISTING POWER POLE/ TEL POLE
10	CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229
11	CONSTRUCT 24" RCP CLASS IV
12	CONSTRUCT CATCH BASIN PER RIV.CO. STD. 300 AND GUTTER DEPRESSION
	PER RIV.CO. STD. 311, CASE B
13	CONSTRUCT CONCRETE COLLAR PER RCFC STD. M 803
14	EXIST. FENCE TO BE RELOCATED TO TCE, AND REINSTALLED IN ITS
	ORIG. LOCATION IN KIND AFTER CONPLETION OF CONSTRUCTION
15	CONSTRUCT MODIFIED CONCRETE DROP INLET 2 WITH 2" A.C. APRON PER RCFC
	STD. CB 110 AND DETAIL ON SHEET 5



INDEX MAP
GRAPHIC SCALE 1"=200'
0 200 400 600

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G:\2000\00-0101\0101SD.pre2/20/2002

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PP NO. H331Y

SEAL–ENGINEER: REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FARHAN NO. C39530 EXP. 12-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET, RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256
PREPARED BY: mac-9 Fayl DATE: 2/20/02
R.C.E. NO. C39530 EXP. DATE: 12-31-05
DESIGNED BY: MF
DRAWN BY: L.A.
CHECKED BY:

SEAL–COUNTY: REGISTERED PROFESSIONAL ENGINEER CHARLES A. OTHMAN NO. 33950 EXP. 6-30-02 CIVIL STATE OF CALIFORNIA

REF.	REVISIONS DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE: 2/21/02

APPROVED BY:
CHIEF ENGINEER
DATE: 2/21/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE: 3/01/02
RCE NO. EXP. DATE

EASTVALE MDP LINE E
STAGE 2
TITLE SHEET

MS 3765
IP 990098
PROJECT NO. 2-0-0310
DRAWING NO. 2-304
SHEET NO. 1 OF 33

NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.

STAGE 3 | STAGE 2

NOT A PART

PROPOSED F.S. @ CL STORM DRAIN

EXIST. GROUND @ CL STORM DRAIN

126+90.00 CL MH SHAFT 663.5± RIM

CL LIMONITE

121+47.20 CONC. BULKHEAD BEGIN CONSTRUCTION

EX. FIBER OPTIC PROTECT

EX. TEL. EL. UNKNOWN

EX. 4" GAS EL. UNKNOWN

EX. 24" WAT (650.70 FL)

EX. TEL. (659.2± TOP)

EX. 36" GAS (658.4± TOP)

EX. 2"GAS (655.0± TOP)

EX. 30" GAS (657.0 TOP)

EX. 30" WAT (655.9 TOP)

126+85.00 CL MH NO.4 =10+00.00 LIMONITE SD 636.72

129+00.00 JS NO.4 =10+00.00 LAT. B 644.21 FL

MDP LINE E STAGE 3

PER RCFC PROJ. NO 2-0-0310, DWG. 2-307

H.G.L.

42" SEWER (643.14 FL)

EXIST. 42" S.A.R.I. PIPELINE REACH IV D

24" RCP 646.50 FL

S=0.0294

66" RCP 637.75 FL

S=0.0072

S=0.0072

EP. 2.0-0310.2858
Albert A. Webb Associates
Construct an 18" diameter RCP Storm drain (Line F) Connection to Existing line E
November 29, 2005

121+47.20 BC 632.84 FL

122+42.42 EC, BB 639.69 FL

122+63.19 BC 639.88 FL

123+58.40 EC 634.37 FL

Q100 = 505 CFS
V100 = 13.1 FPS

CONSTRUCT 535.00 L.F. OF 84" RCP (D=1750)

126+83.20 END RCP 636.71 FL

127+00.00 BEG. RCP 638.32 FL

Q100 = 263.0 CFS
V100 = 11.1 FPS

CONSTRUCT 240.00 L.F. OF 66" RCP (D=1750)

129+40.00 645.38 FL

MATCH LINE 129+40 SEE SHEET 3

PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

120 121 122 123 124 125 126 127 128 129 130

660 650 640 630

MH NO.4	
M.L. STA.	126+85.00
LATERAL	LIMONITE SD
A	30°
B	66"
C	15.0'
D1	84"
D2	66"
E	15.0'
L	16.8'
EL."S"	637.75'
EL."R"	637.88'

CONSTRUCTION NOTES

1. CONSTRUCT 84" RCP (D=1750)
2. CONSTRUCT 66" RCP (D=1750)
3. CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
4. CONSTRUCT MANHOLE NO. 4 PER RCFC STD. MH 254
5. CONSTRUCT CONCRETE BULKHEAD PER RCFC STD. M 816
6. PROTECT IN PLACE
9. PROTECT EXISTING POWER POLE/ TEL POLE
10. CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229
11. CONSTRUCT 24" RCP CLASS IV
12. CONSTRUCT CATCH BASIN PER RIV.CO. STD. 300 AND GUTTER DEPRESSION PER RIV.CO. STD. 311, CASE B
14. EXIST. FENCE TO BE RELOCATED TO TCE, REINSTALLED IN ITS ORIG. LOCATION IN KIND AFTER CONPLETION OF CONSTRUCTION
15. CONSTRUCT MODIFIED CONCRETE DROP INLET 2 WITH 2" A.C. APRON PER RCFC STD. CB 110 AND DETAIL ON SHEET 5

TRACT 28520-1

STAGE 3 | STAGE 2

CLOVERDALE ROAD

84" RCP

66" RCP

45+23.23 CL HAMNER STA. BACK
=20+00.00 HAMNER STA. AHEAD
=20+00.00 CLOVERDALE (W)
=20+00.00 LIMONITE (E)

PROP. R/W REC.1-29-2002 INST. #2002-048701

EX. R/W

PROP. AC DIKE

EX. TELE MH PER PLAN & FIELD MARKING PROTECT

EX. FIBER OPTIC PROTECT

EX. 24" WATER PROTECT

EX. B.O.

EX. FIBER OPTIC

EXIST. TELE LINE

EXIST. 24" WAT

EXIST. 42" SEW

EXIST. 24" WAT (INDICD)

EXIST. 4" GAS

EX. FIBER OPTIC

EX. EP

CL HAMNER

PROP. EP

EX. FENCE

EX. CONC. PAVING

EX. P.P. PROTECT

MDP LINE E STAGE 3

PER RCFC PROJ. NO 2-0-0310, DWG. 2-307

121+47.20 BC, BEG. STAGE 2 CONCRETE BULKHEAD

N21°38'38"W 124.75'

STA. 124+02.75

EASEMENT REC. 1-29-2002 INST. 2002-048695

EXIST. D.G. ROAD RESTORED

RELOCATE EX. FENCE TO TCE

122+42.42 EC

122+63.19 BC

123+58.40 EC =ST.STA.42+02.06

HAMNER AVENUE

APN 134-110-022

PROP. R/W REC. 1-29-2002 INST.#2002-048697

EX. SEWER MH PROTECT

PROPOSED STREET AND TRAFFIC SIGNAL IMPROVEMENT PER CO. OF RIV. MS 3765, IP 990098

LIMONITE AVE. STORM DRAIN

PROFILE SEE SHEET 4

LINE E

GRAPHIC SCALE 1"=40'

40 20 0 40 80 120

	RADIUS	DELTA	TANGENT	LENGTH
1	200.00'	27°16'38"	48.53'	95.22'
2	200.00'	27°16'38"	48.53'	95.22'
3	45.00'	65°02'06"	28.69'	51.08'

EX. R/W

EX. F.H.

ST. STA. 21+20.36 =10+73.00 LAT.-B CL CB W=14' V=6' 654.38 TC 653.38 FL Q100/10=8.9/6.5 CFS

20+98.69 BCR 64.28 TC

64.44 TC

N89°56'12"W

EX. FIBER OPTIC

64.40 TC

63.73 TC

11+90 LIMONITE SD =10+00.00 LAT. C JS NO.4

12'X20' SD ESMT

10+10+00 DROP INLET 2 660.82 TG 659.20 FL PROFILE ON SHT.6

12+01.45 EC CONC. BULKHEAD

129+00.00 CL JS NO.4 =10+00.00 LAT. B PROFILE SEE SHT 6

MATCH LINE 129+40 SEE SHEET 3

N00°05'19"W

N85°03'13"W

11+50.37 BC

EX. 30" GAS

EX. 36" GAS

EX. 30" WAT

CONST. CL.

PROP. AC DIKE

SECTION @ STA.124+00

GRAPHIC SCALE 1"=10'

0 10 20 30

R/W 60' 38' 25' 10' 30' R/W

CL HAMMER

CL SD

EX. GROUND

EX. PAVING

TEL 4"G

EX. 24"W

EX. 24"W

EX.42" S

18'±

84" RCP

MS 3765
iP 990098

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
YOU SHOULD CALL TWO DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF 9X X H331Y

SEAL—ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FARHAN NO. C39530 EXP. 12-31-03 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: M&F DATE 2/25/02
DESIGNED BY: M.F.
DRAWN BY: M.F.
CHECKED BY:
R.C.E. NO. C39530 EXP. DATE 12-31-03

SEAL—COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE 2-26-02

APPROVED BY:
CHIEF ENGINEER
DATE 2-26-02

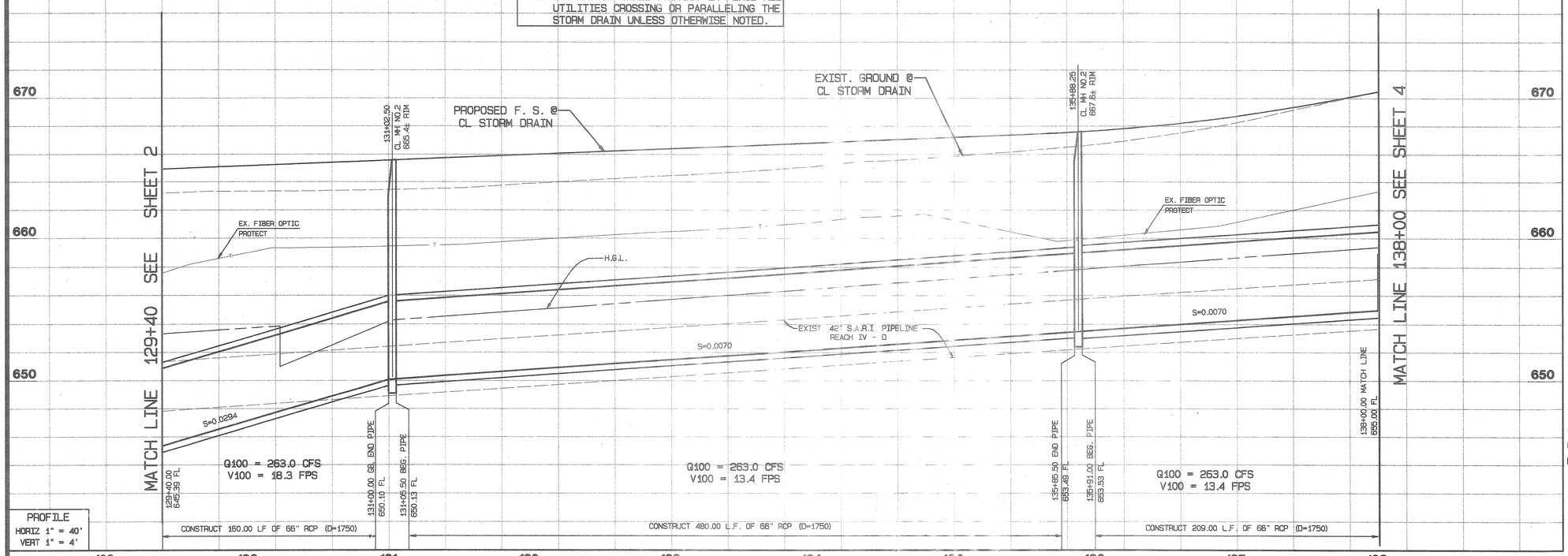
COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE 3/4/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 2
PLAN & PROFILE
STA. 121+47.20 TO STA. 129+40

PROJECT NO. 2-0-0310
DRAWING NO. 2-304
SHEET NO. 2 OF

C:\2000\00-010\100\0150.prod 2/20/2002

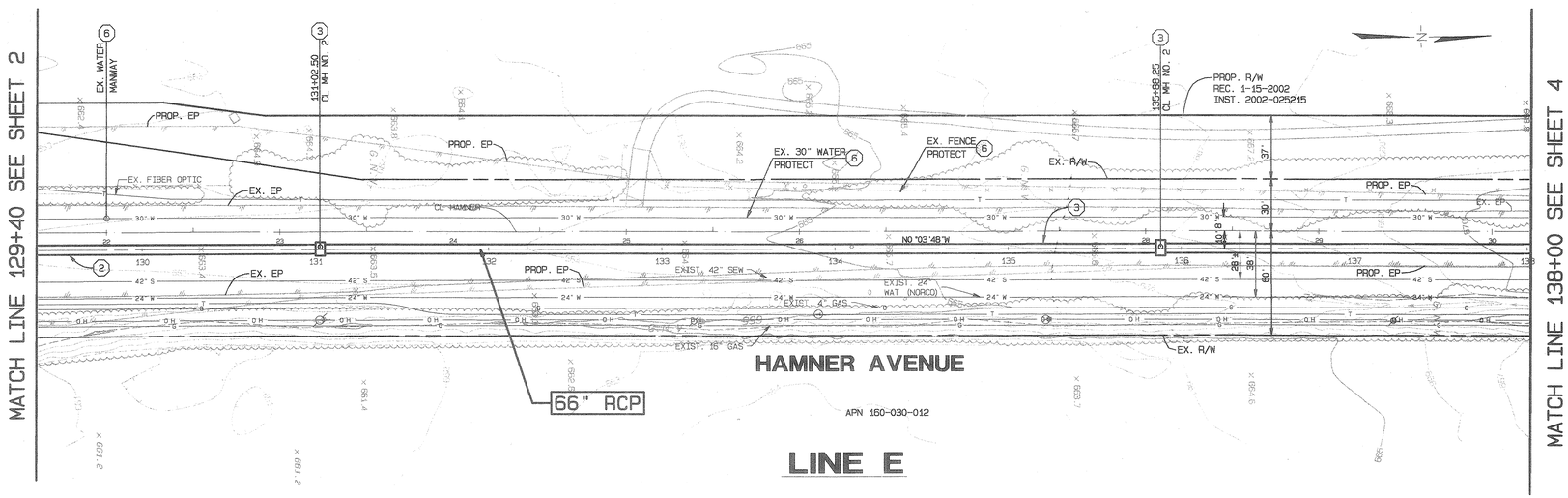
NOTE: CONTRACTOR SHALL PROTECT IN PLACE ALL UTILITIES CROSSING OR PARALLELING THE STORM DRAIN UNLESS OTHERWISE NOTED.



PROFILE
HORIZ 1" = 40'
VERT 1" = 4'

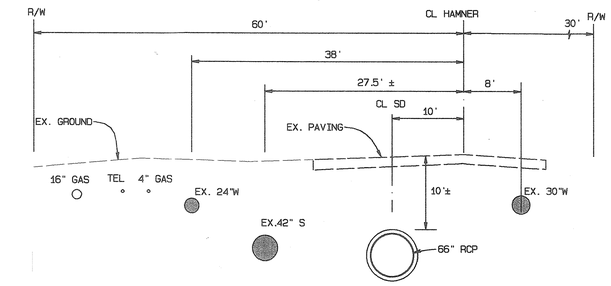
CONSTRUCTION NOTES

(2) CONSTRUCT 66" RCP (D=1750)
(3) CONSTRUCT MANHOLE NO. 2 PER RCFC STD. MH 252
(6) PROTECT IN PLACE



LINE E

GRAPHIC SCALE 1"=40'
40 20 0 40 80 120



SECTION @ STA. 135+00

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF DE. NO. 4331

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAGHIN NO. C39530 EXP. 12-31-05 STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: Mohammad Faghih DATE 2/26/02
R.C.E. NO. C39530 EXP. DATE 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 39530 EXP. 6-30-03 STATE OF CALIFORNIA

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER
DATE 2-26-02
APPROVED BY:
CHIEF ENGINEER
DATE 3/4/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE 3/4/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 2
PLAN & PROFILE
STA. 129+40 TO STA. 138+00

MS 3765
iP 990098
PROJECT NO. 2-0-0310
DRAWING NO. 2-304
SHEET NO. 3 OF 23

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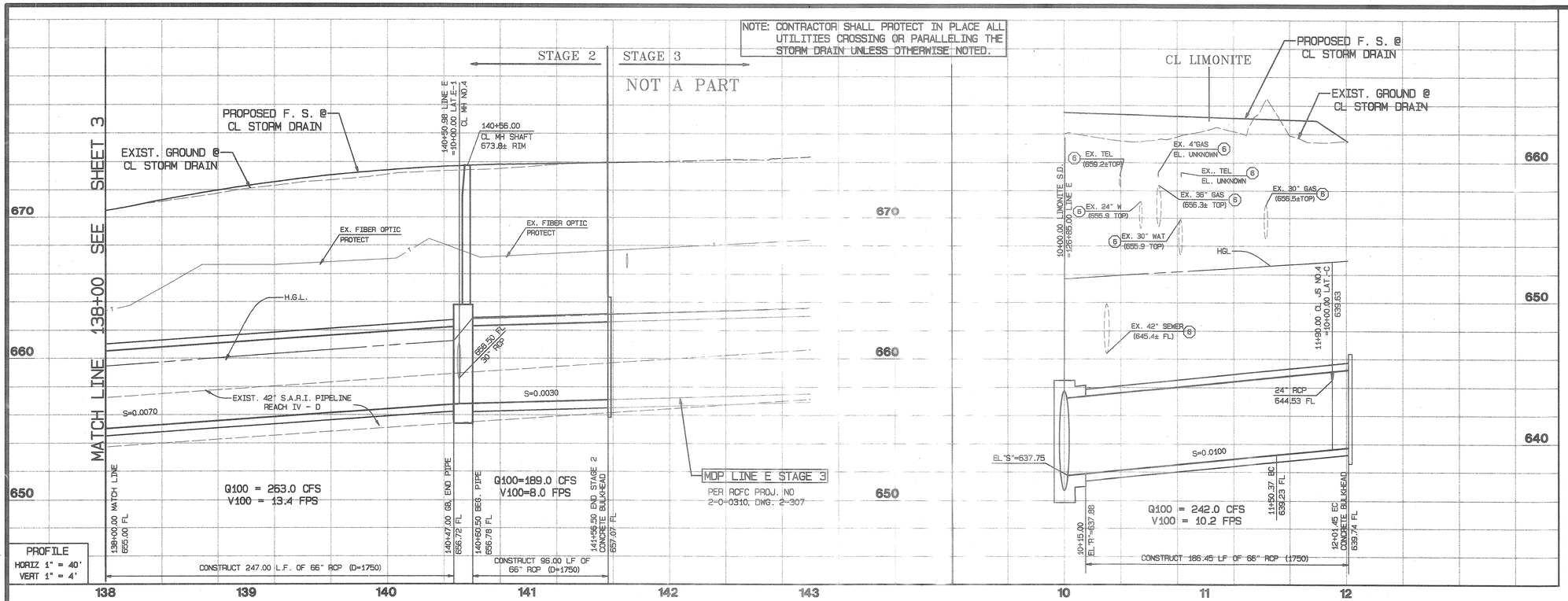


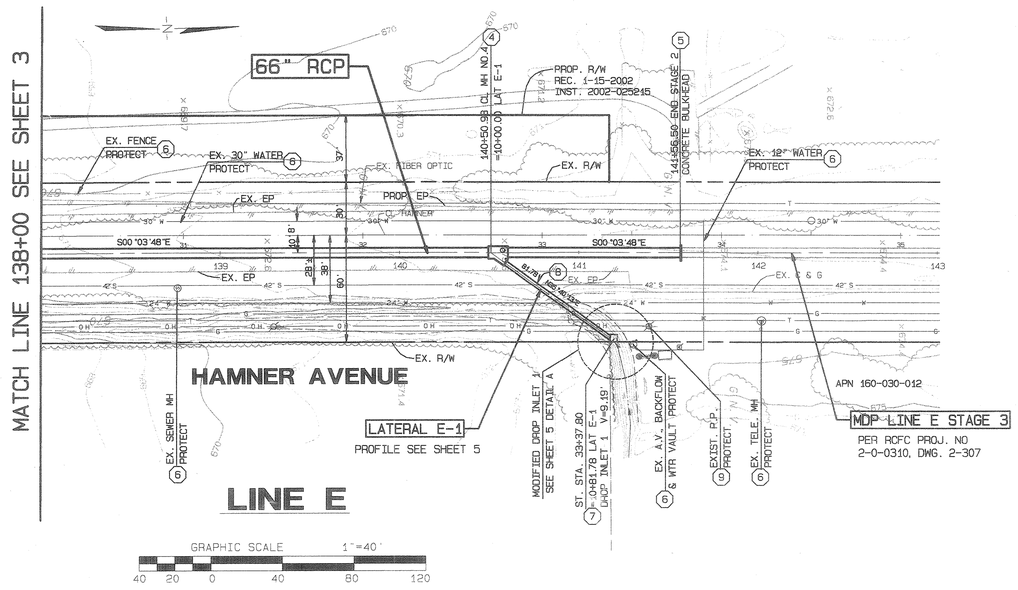
MH NO.4	
M.L. STA.	140+50.98
LATERAL	LATERAL E1
A	35°
B	30"
C	9.8'
D1	66"
D2	66"
E	9.52'
L	13.50'
EL."S"	658.50
EL."R"	659.19

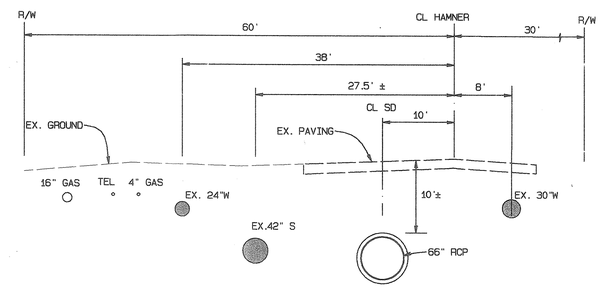
CONSTRUCTION NOTES

(2) CONSTRUCT 66" RCP (D=1750)
(4) CONSTRUCT MANHOLE NO. 4 PER RCFC STD. MH 254
(5) CONSTRUCT CONCRETE BULKHEAD PER RCFC STD. M 816
(6) PROTECT IN PLACE
(7) CONSTRUCT MODIFIED CONCRETE DROP INLET 1 PER RCFC STD. CB110 AND DETAIL ON SHEET 5
(8) CONSTRUCT 30" RCP (D=1500)
(9) PROTECT EXISTING POWER POLE/ TEL POLE

LIMONITE AVE. STORM DRAIN

PLAN VIEW SEE SHEET 2





SECTION @ STA. 140+00

GRAPHIC SCALE 1"=10'
0 10 20 30

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
(48 HOURS) TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER ST. SIDE OF CLOVERDALE IN FRONT OF DR. M. HASSI

SEAL—ENGINEER

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256
PREPARED BY: Mohd Fagih DATE 2/20/02
RCE. NO. C39530 EXP. DATE 12-31-03
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL—COUNTY

REF.	DESCRIPTION	APPR. DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL
DATE 4/4/02

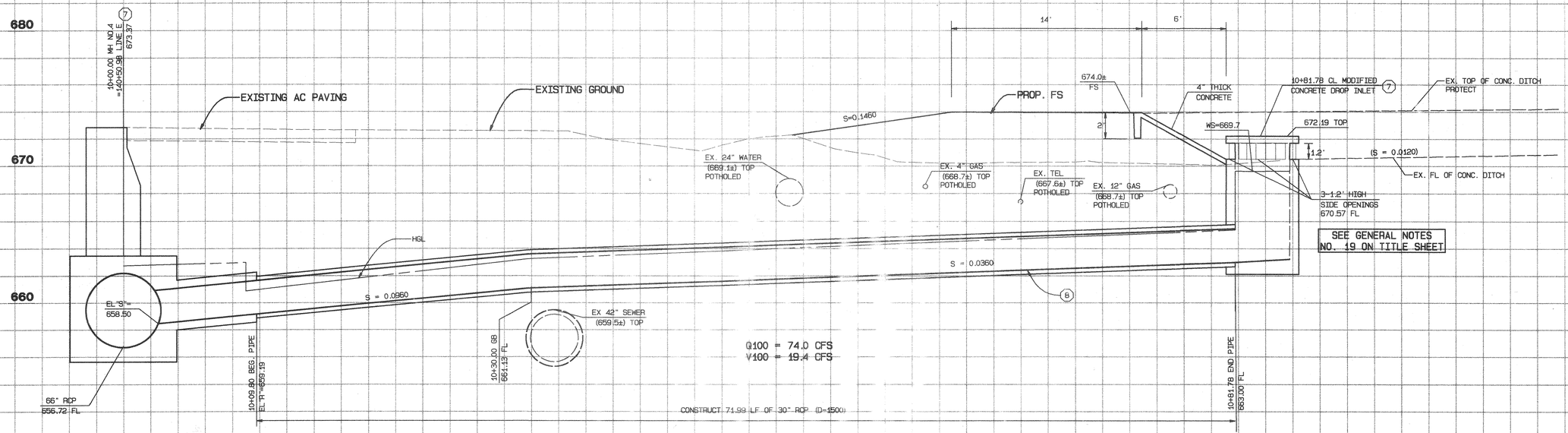
APPROVED BY:
DATE 3/21/02

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY:
DATE 3/21/02
RCE NO. EXP. DATE

EASTVALE MDP
LINE E
STAGE 2
PLAN & PROFILE
STA.138+00 TO STA. 111+56.50

MS 3765
IP 990098
PROJECT NO. 2-0-0310
DRAWING NO. 2-304
SHEET NO 4 OF

J:\00-0101\00\315D.prc2/20/2002

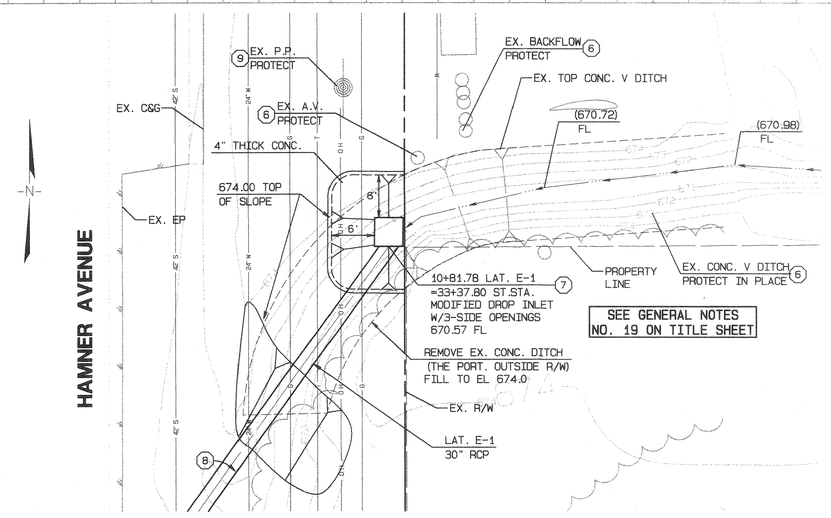


LATERAL E-1

PLAN VIEW SEE SHEET NO. 4

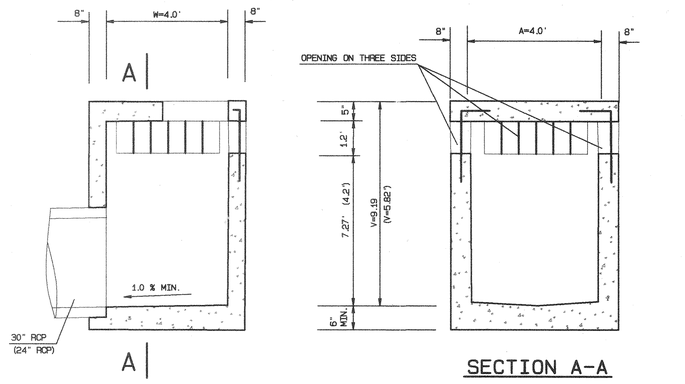
TO BE MAINTAINED BY RIV. CO TRANSPROTATION DEPT.

SCALES
HORIZ: 1"=4'
VERT: 1"=4'



MODIFIED DROP INLET 1 DETAIL A

GRAPHIC SCALE 1"=10'
0 10 20 30



SECTION A-A

MODIFIED CONCRETE DROP INLET 1 & 2

N.T.S. (7) (15)

REBAR, MANHOLE & PROTECTION BAR DETAILS PER RCFDC STD. CB 110

(DIMENSIONS IN PARENTHESIS REPRESENT DROP INLET 2)

CONSTRUCTION NOTES

(4) CONSTRUCT MANHOLE NO. 4 PER RCFC STD. MH 254

(6) PROTECT IN PLACE

(7) CONSTRUCT MODIFIED CONCRETE DROP INLET PER RCFC STD. CB110 & DETAIL THIS SHEET

(8) CONSTRUCT 30" RCP (D=1500)

(9) PROTECT EXISTING POWER POLE/ TEL POLE

(15) CONSTRUCT MODIFIED CONCRETE DROP INLET 2 WITH 2" A.C. APRON PER RCFC STD. CB 110 AND DETAIL ON SHEET 5

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1·800 227 2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF #NO #4351

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FAQHIRI NO. C39530 EXP. 2-31-05 CIVIL STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES ENGINEERING CONSULTANTS
3788 McCRAY STREET, RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256
PREPARED BY: Mo Faqhiri DATE 2/7/02
R.C.E. NO. C39530 EXP. DATE 12-31-05
DESIGNED BY L.M.
DRAWN BY L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 19980 EXP. 6-30-03 CIVIL STATE OF CALIFORNIA

REVISIONS			
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL: PLANNING ENGINEER DATE
APPROVED BY: CHIEF ENGINEER DATE

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY: DATE: 3/4/02
RCE NO. EXP.DATE

EASTVALE MDP
LINE E
STAGE 2
LATERAL E-1

MS 3765
IP 990098

PROJECT NO. 2-0-0310
DRAWING NO. 2-304
SHEET NO. 5 OF 33

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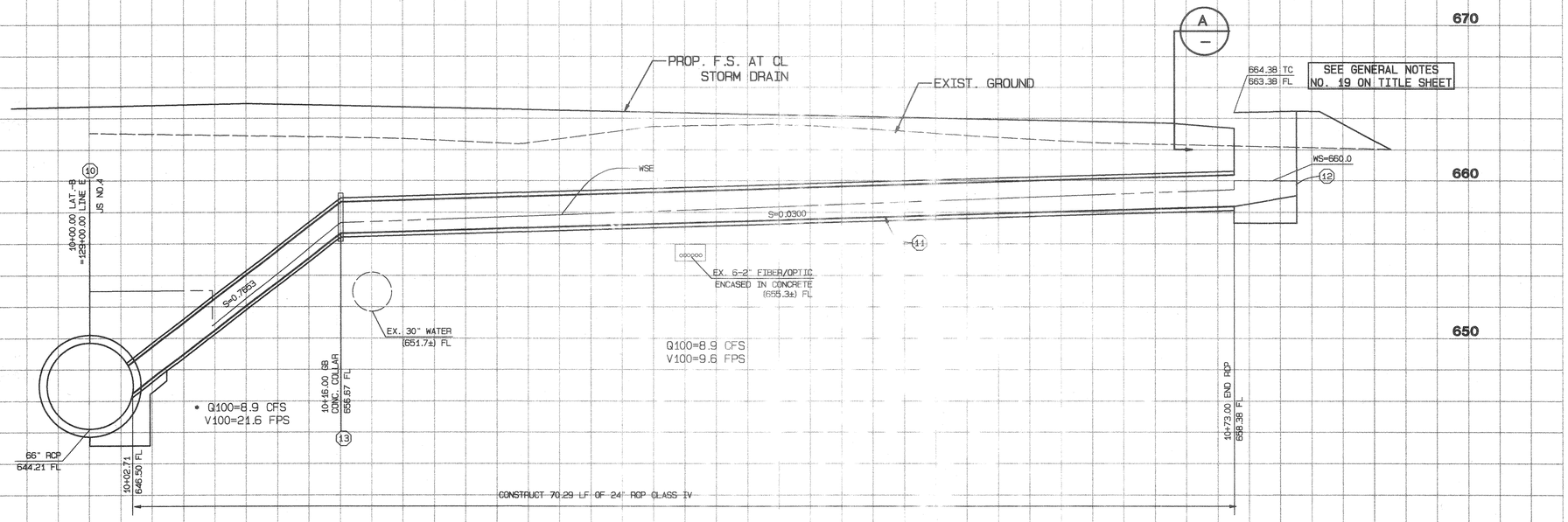


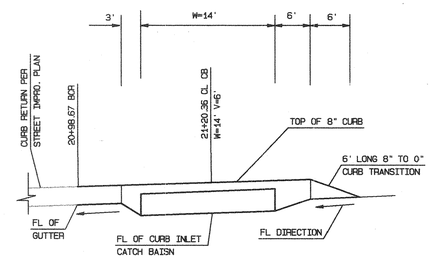
* PIPES NOTED REQUIRE MIN. OF 1 1/2" CONCRETE COVER OVER REINFORCING INSIDE PIPE. THE CONCRETE DESIGN STRENGTH SHALL BE fc=5000 PSI

LATERAL B

PLAN VIEW SEE SHEET NO. 2

TO BE MAINTAINED BY RIV. CO TRANSPROTATION DEPT.

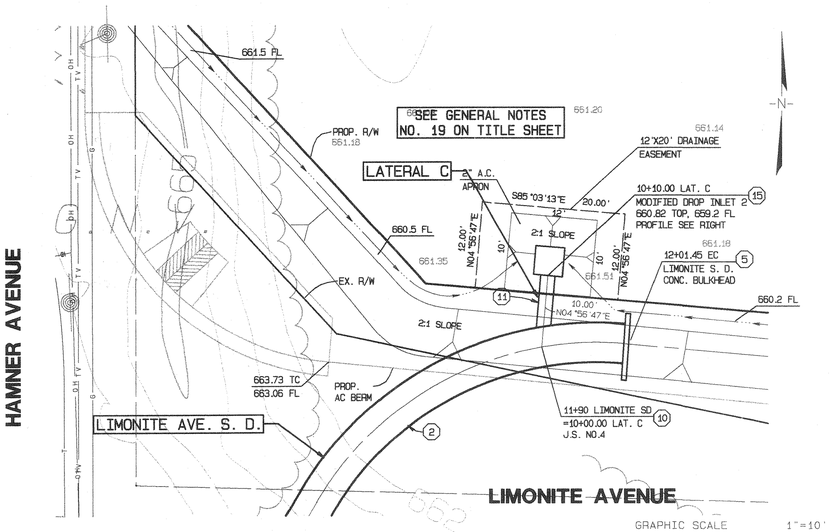
GRAPHIC SCALE 1"=4'



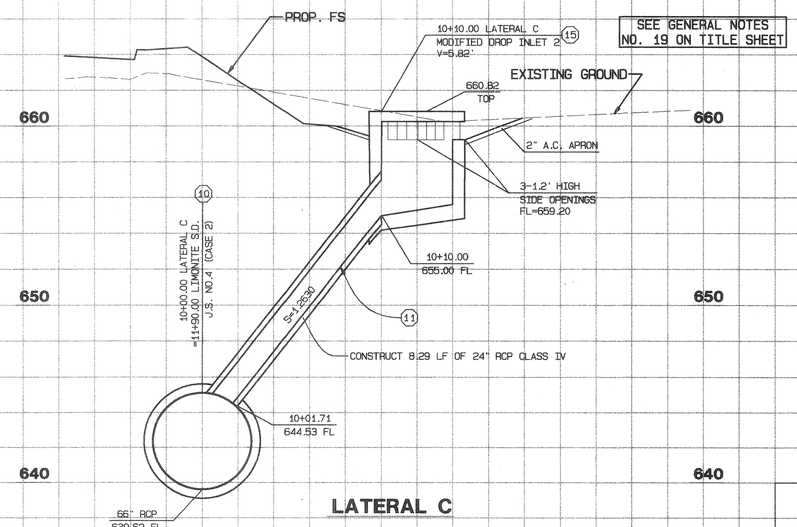
SECTION A-A

N.T.S.

SEE GENERAL NOTES NO.19 ON TITLE SHEET



LATERAL C DROP INLET DETAIL



LATERAL C

PLAN VIEW SEE SHEET NO. 2 AND LEFT

TO BE MAINTAINED BY RIV. CO TRANSPROTATION DEPT.

CONSTRUCTION NOTES

(2) CONSTRUCT 66" RCP (D-1750)

(5) CONSTRUCT CONCRETE BULKHEAD PER RCFC STD. M 816

(10) CONSTRUCT JUNCTION STRUCTURE NO. 4 PER RCFC STD. JS 229

(11) CONSTRUCT 24" RCP CLASS IV

(12) CONSTRUCT CATCH BASIN PER RIV.CO. STD. 300 AND GUTTER DEPRESSION PER RIV.CO. STD. 311, CASE B

(13) CONSTRUCT CONCRETE COLLAR PER RCFC STD. M 803

(15) CONSTRUCT MODIFIED CONCRETE DROP INLET 2 WITH 2" A.C. APRON PER RCFC STD. CB 110 AND DETAIL ON SHEET 5

SCALES
HORIZ: 1"=4'
VERT: 1"=4'

UNDERGROUND SERVICE ALERT
CALL: TOLL FREE
1-800
227-2600
(TWO WORKING DAYS BEFORE YOU DIG)

BENCHMARK
ML-34-88 EL. 661.945'
RE-SET 1988 APPROX. 200'± WEST OF CL INT. CLOVERDALE AND SUMNER S'LY SIDE OF CLOVERDALE IN FRONT OF PH. NO. 331

SEAL-ENGINEER
REGISTERED PROFESSIONAL ENGINEER MOHAMMAD FARHAN NO. C39530 EXP. 12-31-05 STATE OF CALIFORNIA

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET, RIVERSIDE, CA 92506
PH. (909) 686-1070 FAX (909) 788-1256

PREPARED BY: mac F Fazil DATE: 2/7/02
R.C.E. NO.: C39530 EXP. DATE: 12-31-05
DESIGNED BY: L.M.
DRAWN BY: L.M.
CHECKED BY:

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 STATE OF CALIFORNIA

REVISIONS			
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL: PLANNING ENGINEER DATE
APPROVED BY: FIELD ENGINEER DATE

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
APPROVED BY: DATE: 3/4/02
RCE NO. EXP. DATE

EASTVALE MDP LINE E STAGE 2 CONNECTORS

MS 3765
IP 990098

PROJECT NO. 2-0-0310
DRAWING NO. 2-304
SHEET NO. 6 OF 33

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Appendix H

PRELIMINARY WATER QUALITY MANAGEMENT PLAN

"LEAL RANCH"
TENTATIVE TRACT MAP NO. 38290

Project Address:
Northwest of Limonite Avenue and Hamner Avenue
City of Eastvale, CA

Prepared for:

25231 Laguna Canyon Road, Suite 250
Irvine, CA 926183
(949) 382-7800

Prepared by:

Hunsaker & Associates Irvine, Inc.
3 Hughes
Irvine, CA 92618
(949) 583-1010

Preparation Date:
November 29, 2021

W.O. 2749-44C

1605

W.O. 2749-44C

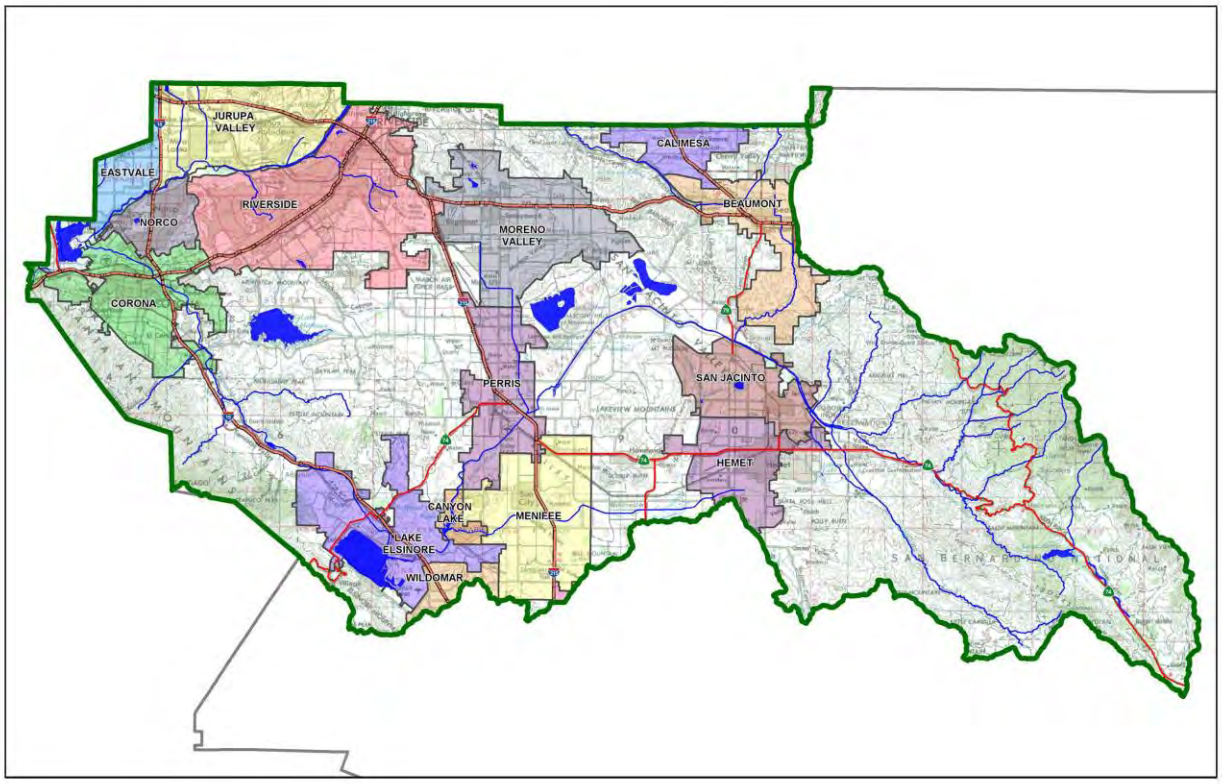
PRELIMINARY WATER QUALITY MANAGEMENT PLAN
"LEAL RANCH" – TENTATIVE TRACT MAP NO. 38290
City of Eastvale, CA

Project Specific Water Quality Management Plan

Project Title: "Leal Ranch" – Tentative Tract Map No. 38290

Public Works No: N/A

Design Review/Case No: TBD



☒ Preliminary
☐ Final

Original Date Prepared: November 29, 2021

Revision Date(s):

Prepared for Compliance with
Regional Board Order No. R8-2010-0033

Contact Information:

Prepared for:
The New Home Company
15231 Laguna Canyon Road, Suite 250
Irvine, CA 92618
(949) 382-7800

Prepared by:
Hunsaker & Associates Irvine, Inc.
3 Hughes,
Irvine, CA 92618
(949) 583-1010

OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for The New Home Company by Hunsaker & Associates Irvine, Inc. for the "Leal Ranch" Project.

This WQMP is intended to comply with the requirements of The City of Eastvale requirements for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under the City of Eastvale Water Quality Ordinance.

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature	Date
Owner's Printed Name	Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0033 and any subsequent amendments thereto."

Preparer's Signature	Date
Preparer's Printed Name	Preparer's Title/Position

Preparer's Licensure:

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Section A: Project and Site Information

The New Home Company proposes the development of "Leal Ranch", Tentative Tract Map No. 38290, located just northwest of the intersection of Limonite Avenue and Hamner Avenue, in the City of Eastvale, California. Specifically, the project site is bound to the north by 58th Street and existing residential homes beyond; to the east by Hamner Avenue and existing residential homes and a commercial shopping center (Eastvale Gateway); to the south by Limonite Avenue and existing residential homes and a commercial shopping center beyond; and to the west by Scholar Way and existing residential homes beyond.

The Project Site consists of approximately 159.2 acres (6,934,278 SF) and will be subdivided into 14 Planning Areas (Lots 1-14) and 19 lettered lots (A-S) to accommodate a mixed use development consisting of multi-family residential, general retail (shopping center), general offices, medical offices, hotels, civic center, parks and supporting infrastructure improvements. Proposed lot summary is as follows:

NUMBERED LOTS			
Lot #	USAGE	S.F.	Acres
1	RESIDENTIAL	315,892.10	7.252
2	MIXED USE	550,731.85	12.643
3	COMMERCIAL CIVIC	426,869.17	9.800
4	MIXED USE	279,624.41	6.419
5	MIXED USE	198,540.25	4.558
6	RESIDENTIAL	244,324.99	5.609
7	RESIDENTIAL	613,599.82	14.086
8	RESIDENTIAL	171,451.45	3.936
9	RESIDENTIAL	191,384.23	4.394
10	MIXED USE	195,395.18	4.486
11	RESIDENTIAL	724,736.51	16.638
12	RESIDENTIAL	754,749.47	17.327
13	RESIDENTIAL	574,268.61	13.183
14	FIRE STATION	53,083.07	1.219
Total		5,294,651.10	121.5485

LETTERED LOTS			
Lot #	USAGE	S.F.	Acres
A	RIGHT OF WAY	139,937.69	3.213
B	RIGHT OF WAY	147,811.51	3.393
C	RIGHT OF WAY	84,478.50	1.939
D	RIGHT OF WAY	38,267.77	0.879
E	ROADWAY	246,244.32	5.653
F	ROADWAY	44,673.74	1.026
G	ROADWAY	113,590.68	2.608
H	ROADWAY	115,905.65	2.661
I	ROADWAY	67,321.01	1.545
J	PARK	89,220.27	2.048
K	PRIVATE REC. FAC.	68,998.58	1.584
L	PARK	153,611.43	3.526
M	TRAIL/LINEAR PARK	44,835.28	1.029
N	TRAIL/LINEAR PARK	31,408.46	0.721
O	TRAIL/LINEAR PARK	32,546.77	0.747
P	TRAIL/LINEAR PARK	84,078.57	1.930
Q	TRAIL/LINEAR PARK	46,663.19	1.071
R	TRAIL/LINEAR PARK	42,155.07	0.968
S	TRAIL/LINEAR PARK	21,801.21	0.500
Total		1,613,549.69	37.0420

Impervious and paved areas for the site include each building structures, streets and parkways, walkways, parking lots and other miscellaneous hardscape areas. Total impervious area is anticipated to consist of approximately 127.36 acres, or 80% of the gross project area.

Pervious areas of the project include open space and designated landscaping areas located in designated park areas, street parkways and parking lots (planters), and private homeowner maintained landscaping areas. Project landscaping and revegetation areas will consist of native and/or drought tolerant plant species. Total pervious area is anticipated to consist of approximately 31.84 acres, or 20% of the gross project area.

Parking is anticipated to be provided via garage parking, driveway parking, open parking lots, parking structures and off-street parking. Total parking shall be consistent with City requirements per each development area's land use.

Normal trash typical of residential and commercial facilities can be anticipated to be produced daily from the project. These include food wastes (wrappers, bottles, etc.) plastics and paper wastes. Such trash is anticipated to be disposed of by residents, staff, and facility users in designated trash storage, to be hauled off for disposal on a weekly basis (minimum) by the contracting waste disposal company.

PROJECT INFORMATION	
Type of Project:	Mixed-Use (Residential, commercial, office, park, hotel, civic center)
Planning Area:	Eastvale Area Plan
Community Name:	"Leal Ranch"
Development Name:	"Leal Ranch"
PROJECT LOCATION	
Latitude & Longitude (DD): 33.978862414978266, -117.56268204581465	
Project Watershed and Sub-Watershed: Santa Ana River Watershed and Lower Cucamonga Creek	
APN(s): 164-030-010, 164-030-025, 164-030-012	
Map Book and Page No.: TBD	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	Commercial, office, medical office, hotel, residential, park
Proposed or Potential SIC Code(s)	TBD
Area of Impervious Project Footprint (SF)	5,547,422 SF
Total Area of proposed Impervious Surfaces within the Project Limits (SF)/or Replacement	5,547,422 SF
Does the project consist of offsite road improvements?	☐ Y ☒ N
Does the project propose to construct unpaved roads?	☐ Y ☒ N
Is the project part of a larger common plan of development (phased project)?	☐ Y ☒ N
EXISTING SITE CHARACTERISTICS	
Total area of Existing Impervious Surfaces within the project limits (SF)	693,428 SF
Is the project located within any MSHCP Criteria Cell?	☐ Y ☒ N
If so, identify the Cell number:	N/A
Are there any natural hydrologic features on the project site?	☐ Y ☒ N
Is a Geotechnical Report attached?	☒ Y ☐ N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	Project resides in A and C areas
What is the Water Quality Design Storm Depth for the project?	0.86"

A.1 Maps and Site Plans

The project's Vicinity Map and Site Plan is provided in Appendix 1 of this WQMP. The maps show the following elements, as required by the WQMP Guidance Document.

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling

A.2 Receiving Waters

The project's receiving waters are as follows:

Table A.1 Identification of Receiving Waters

Receiving Waters	303(d) List Impairments[1]	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Cucamonga Creek (Reach 1) 801.21	Cadmium, Copper, Lead, Zinc	GWR, REC2, LWRM, WILD	No RARE designation
Prado Basin Management Zone Hydrologic Unit 801.21	pH	REC1, REC2, WARM, WILD, RARE	6 miles
Santa Ana River (Reach 3) Hydrologic Unit 801.21	Copper, Lead *(Indicator Bacteria, Nitrate)*	AGR, GWR, REC1, REC2, WARM, WILD, RARE,SPWN	7 miles
Santa Ana River (Reach 2) Hydrologic Unit 801.11	None	REC2, WARM, WILD,	30 miles
Santa Ana River (Reach 1) Hydrologic Unit 801.11	None	REC2, WARM, WILD, RARE	35 miles
Tidal Prism of Santa Ana River and Newport Slough Hydrologic Unit 801.11	None	REC1, REC2, COMM, WILD, RARE, MAR	36.5 miles
Pacific Ocean Offshore Zone Hydrologic Unit 801.11	None	IND, NAV, REC1, REC2, COMM, WILD, RARE, SPWN, MAR	36.5 miles

[1] TMDLs denoted in italics and parenthesis.

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	☐ Y	☒ N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	☐ Y	☒ N
US Army Corps of Engineers, CWA Section 404 Permit	☐ Y	☒ N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	☐ Y	☒ N
Statewide Construction General Permit Coverage	☒ Y	☐ N
Statewide Industrial General Permit Coverage	☐ Y	☒ N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	☐ Y	☒ N
Other *(please list in the space below as required)* City of Eastvale Development and Grading Permits	☒ Y	☐ N

Section B: Optimize Site Utilization (LID Principles)

Site Optimization

Does the project identify and preserve existing drainage patterns? If so, how? If not, why?

Yes. Pre-project site drains southerly to the existing storm rain in Limonite. Proposed condition will preserve flow patterns of project site.

Does the project identify and protect existing vegetation? If so, how? If not, why?

No. Pre-project site does not consist of any natural or native vegetation to be preserved. All vegetation will be removed and replaced with native and/or drought tolerant landscaping.

Does the project identify and preserve natural infiltration capacity? If so, how? If not, why?

Yes. Project will allow incidental infiltration of BMPs in the northern and central project areas, and only in areas where suitable soils are known to be present. Although the project tested favorable infiltration rates at a single location and per County data, is located with HSG Type A soils, per the geotechnical professional's recommendation, infiltration rates at the tested location is not typical of the project site due to the presence of large quantities of silt/compacted silt in project's subsurface soils. Due to unsuitable soils and low tested infiltration rates in the southern portion of the project site, infiltration will not be employed.

Does the project identify and minimize impervious area? If so, how? If not, why?

Yes. Wherever feasible, open space and landscaping areas have been proposed to minimize the amount of directly connected impervious area.

Does the project identify and disperse runoff to adjacent pervious areas? If so, how? If not, why? No. The project will not disperse runoff to adjacent pervious areas at this time. However, runoff dispersion will be considered as project design approaches final.

Section C: Delineate Drainage Management Areas (DMAs)

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s)[1]	Area (Sq. Ft.)	DMA Type
DMA 1 (Sub-Areas A – F)	Mixed Surface Type (landscaping, concrete/asphalt, roof)	5,563,173	Type D
DMA 2	Mixed Surface Type (landscaping, concrete/asphalt)	571,177	Type D
DMA 3	Mixed Surface Type (landscaping, concrete/asphalt)	20,004	Type D
DMA 4	Mixed Surface Type (landscaping, concrete/asphalt)	27,082	Type D
DMA 5	Mixed Surface Type (landscaping, concrete/asphalt)	37,514	Type D
DMA 6	Mixed Surface Type (landscaping, concrete/asphalt)	32,384	Type D
DMA 7	Mixed Surface Type (landscaping, concrete/asphalt)	91,523	Type D
DMA 8	Mixed Surface Type (landscaping, concrete/asphalt)	93,166	Type D
DMA 9	Mixed Surface Type (landscaping, concrete/asphalt)	52,777	Type D
DMA 10	Mixed Surface Type (landscaping, concrete/asphalt)	72,452	Type D
DMA 11	Mixed Surface Type (landscaping, concrete/asphalt)	17,237	Type D
DMA 12	Mixed Surface Type (landscaping, concrete/asphalt)	81,864	Type D
DMA 13	Mixed Surface Type (landscaping, concrete/asphalt)	20,030	Type D
DMA 14	Mixed Surface Type (landscaping, concrete/asphalt)	40,079	Type D
DMA 15	Mixed Surface Type (landscaping, concrete/asphalt)	57,984	Type D

DMA Name or ID	Surface Type(s)[1]	Area (Sq. Ft.)	DMA Type
DMA 16	Mixed Surface Type (landscaping, concrete/asphalt)	95,700	Type D
DMA 17	Mixed Surface Type (landscaping, concrete/asphalt)	97,608	Type D
Total	--	6,971,734	--

[1] *Reference Table 2-1 in the WQMP Guidance Document to populate this column*

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
None			

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				Type 'C' DMAs that are draining to the Self-Retaining Area		
DMA Name/ ID	Post-project surface type	Area (square feet)	Storm Depth (inches)	DMA Name / ID	[C] from Table C.4 =	Required Retention Depth (inches)
		[A]	[B]		[C]	[D]
None						

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Runoff factor	Product	DMA name /ID	Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]		[D]	[C]/[D]
None							

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
DMA 1 (A-F)	Biotreatment BMP 1
DMA 2	Biotreatment/Bioretention BMP 2
DMA 3	Biotreatment/Bioretention BMP 3
DMA 4	Biotreatment/Bioretention BMP 4
DMA 5	Biotreatment/Bioretention BMP 5
DMA 6	Biotreatment/Bioretention BMP 6
DMA 7	Biotreatment/Bioretention BMP 7
DMA 8	Biotreatment/Bioretention BMP 8
DMA 9	Biotreatment/Bioretention BMP 9
DMA 10	Biotreatment/Bioretention BMP 10
DMA 11	Biotreatment/Bioretention BMP 11
DMA 12	Biotreatment/Bioretention BMP 12
DMA 13	Biotreatment/Bioretention BMP 13
DMA 14	Biotreatment/Bioretention BMP 14
DMA 15	Biotreatment/Bioretention BMP 15
DMA 16	Biotreatment/Bioretention BMP 16
DMA 17	Biotreatment/Bioretention BMP 17

Note: More than one drainage management area can drain to a single LID BMP; however, one drainage management area may not drain to more than one BMP.

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for stormwater runoff (Reference Chapter 2.4.4 of the WQMP Guidance Document for further details)? ☐ Y ☒ N

Geotechnical Report

A Geotechnical Report is required by the City of Eastvale to confirm present and past site characteristics that may affect the use of Infiltration BMPs, see Appendix 3.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? ☐ Y ☒ N

Infiltration Feasibility

Table D.1 Infiltration Feasibility

Does the project site…	YES	NO
…have any DMAs with a seasonal high groundwater mark shallower than 10 feet?		X
If Yes, list affected DMAs:		
…have any DMAs located within 100 feet of a water supply well?		X
If Yes, list affected DMAs:		
…have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact?		X
If Yes, list affected DMAs:		
…have measured in-situ infiltration rates of less than 1.6 inches / hour?	X	
If Yes, list affected DMAs:		
…have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface?		X
If Yes, list affected DMAs:		
…geotechnical report identifies other site-specific factors that would preclude effective and safe infiltration?		X
Describe here: *Based on preliminary infiltration testing conducted onsite, infiltration of the site is feasible for norther and central areas of the project site. Southern areas is not feasible.*		

D.2 Harvest and Use Assessment

The following conditions apply*:*

☐ Reclaimed water will be used for the non-potable water demands for the project.

☐ Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verify with the Copermittee).

☒ The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case, Harvest and Use BMPs are still encouraged, but are not required as the Design Capture Volume will be infiltrated or evapotranspired.

Irrigation Use Feasibility

Step 1: *Total Area of Irrigated Landscape*: *N/A*

Type of Landscaping (Conservation Design or Active Turf): *N/A*

Step 2: *Total Area of Impervious Surfaces: N/A*

Step 3: *The project EIATIA factor*: *N/A*

Step 4: *Minimum required irrigated area*:

Step 5:

Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
N/A	*N/A*

Toilet Use Feasibility

Step 1: *Projected Number of Daily Toilet Users: N/A*

Project Type: N/A

Step 2: *Total Area of Impervious Surfaces: N/A*

Step 3: *Enter your TUTIA factor: N/A*

Step 4: *Minimum number of toilet users: N/A*

Step 5:

Minimum required Toilet Users (Step 4)	Projected number of toilet users (Step 1)
N/A	*N/A*

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? There are no other non-potable uses for stormwater runoff of site.

Step 1: *Average Daily Demand: N/A*

Step 2: *Total Area of Impervious Surfaces: N/A*

Step 3: *Enter the factor from Table 2-3: N/A*

Step 4: *Minimum required use: N/A*

Step 5:

Minimum required non-potable use (Step 4)	Projected average daily use (Step 1)
N/A	*N/A*

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

For the project neither of the following applies:

☒ LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4

☐ A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5.

The project proposes to use a combination of Bioretention BMPs (non-infiltration type) and Proprietary Biotreatment BMPs to address project runoff.

D.4 Feasibility Assessment Summaries

Table D.2 LID Prioritization Summary Matrix

DMA* Name/ ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
DMA 1	☐	☐	☐	☒	☐
DMA 2	☐	☐	☒	☒	☐
DMA 3	☐	☐	☒	☒	☐
DMA 4	☐	☐	☒	☒	☐
DMA 5	☐	☐	☒	☒	☐
DMA 6	☐	☐	☒	☒	☐
DMA 7	☐	☐	☒	☒	☐
DMA 8	☐	☐	☒	☒	☐
DMA 9	☐	☐	☒	☒	☐
DMA 10	☐	☐	☒	☒	☐
DMA 11	☐	☐	☒	☒	☐
DMA 12	☐	☐	☒	☒	☐
DMA 13	☐	☐	☒	☒	☐
DMA 14	☐	☐	☒	☒	☐
DMA 15	☐	☐	☒	☒	☐
DMA 16	☐	☐	☒	☒	☐
DMA 17	☐	☐	☒	☒	☐

Runoff from DMA 1 will be conveyed to a proprietary biotreatment BMP facility located in the southwestern portion of the project site (exact location to be determined) for treatment prior to discharging to the existing storm drain system in Limonite Avenue.

DMAs 2 (onsite backbone streets) and 2 through 17 (offsite perimeter street improvements) will be conveyed to parkway bioretention BMPs and/or proprietary biotreatment BMPs prior to discharging to the existing storm drain system along the project's perimeter streets.

Since the project is in the preliminary stage of design (TTM level), the exact locations and actual BMPs to be implemented are tentative and subject to change. Therefore, only feasible BMP alternatives and preliminary locations are provided at this time.

The required Design Capture Volume (V_{BMP}) and Design Flow Rate (Q_{BMP}) for each BMP are provided in the following tables. Although sizing of the proposed BMPs have not been determined at this time, it is anticipated that the project will be able to achieve minimum V_{BMP} and Q_{BMP} requirements for each DMA.

D.5 LID BMP Sizing

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor[1]	*Design Storm Depth (In)*	*Design Capture Volume, Vbmp (cubic feet)*[2]	*Proposed Volume on Plans (cubic feet)*
DMA 1A	2,002,660	Mixed Surface Type	0.8	0.6	1,201,596.0	0.86	86,114.4	*TBD*
DMA 1B	723,208	Mixed Surface Type	0.8	0.6	433,924.8	0.86	31,097.9	
DMA 1C	668,544	Mixed Surface Type	0.8	0.6	401,126.4	0.86	28,747.4	
DMA 1D	1,287,889	Mixed Surface Type	0.8	0.6	772,733.4	0.86	55,379.2	
DMA 1E	558,821	Mixed Surface Type	0.8	0.6	335,292.6	0.86	24,029.3	
DMA 1F	322,031	Mixed Surface Type	0.8	0.6	193,218.6	0.86	13,847.3	
DMA 2	571,177	Mixed Surface Type	0.8	0.6	342,706.2	0.86	24,560.6	
DMA 3	20,004	Mixed Surface Type	0.8	0.6	12,002.4	0.86	860.2	
DMA 4	27,082	Mixed Surface Type	0.8	0.6	16,249.2	0.86	1,164.5	
DMA 5	37,514	Mixed Surface Type	0.8	0.6	22,508.4	0.86	1,613.1	
DMA 6	32,384	Mixed Surface Type	0.8	0.6	19,430.4	0.86	1,392.5	
DMA 7	91,523	Mixed Surface Type	0.8	0.6	54,913.8	0.86	3,935.5	
DMA 8	93,166	Mixed Surface Type	0.8	0.6	55,899.6	0.86	4,006.1	
DMA 9	52,777	Mixed Surface Type	0.8	0.6	31,666.2	0.86	2,269.4	

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor[1]	*Design Storm Depth (In)*	*Design Capture Volume, Vbmp (cubic feet)*[2]	*Proposed Volume on Plans (cubic feet)*
DMA 10	72,452	Mixed Surface Type	0.8	0.6	43,471.2	0.86	3,115.4	*TBD*
DMA 11	17,237	Mixed Surface Type	0.8	0.6	10,342.2	0.86	741.2	
DMA 12	81,864	Mixed Surface Type	0.8	0.6	49,118.4	0.86	3,520.2	
DMA 13	20,030	Mixed Surface Type	0.8	0.6	12,018.0	0.86	861.3	
DMA 14	40,079	Mixed Surface Type	0.8	0.6	24,047.4	0.86	1,723.4	
DMA 15	57,984	Mixed Surface Type	0.8	0.6	34,790.4	0.86	2,493.3	
DMA 16	95,700	Mixed Surface Type	0.8	0.6	57,420.0	0.86	4,115.1	
DMA 17	97,608	Mixed Surface Type	0.8	0.6	58,564.8	0.86	4,197.1	
Total	6,971,734	--			4,183,040.4	0.86	299,784.6	

[1], [2] *Differences between values obtained in this table and County Worksheets due to rounding of values.*

Table D.4.1 Q_{BMP} Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor[1]	*Design Rainfall Intensity (in/hr)*	*Design Flow Rate (cfs)*[2]	*Proposed Flow Rate (cfs)*
DMA 1A	2,002,660	Mixed Surface Type	0.8	0.6	1,201,596.0	0.2	5.52	*TBD*
DMA 1B	723,208	Mixed Surface Type	0.8	0.6	433,924.8	0.2	1.99	
DMA 1C	668,544	Mixed Surface Type	0.8	0.6	401,126.4	0.2	1.84	
DMA 1D	1,287,889	Mixed Surface Type	0.8	0.6	772,733.4	0.2	3.55	
DMA 1E	558,821	Mixed Surface Type	0.8	0.6	335,292.6	0.2	1.54	
DMA 1F	322,031	Mixed Surface Type	0.8	0.6	193,218.6	0.2	0.89	
DMA 2	571,177	Mixed Surface Type	0.8	0.6	342,706.2	0.2	1.57	
DMA 3	20,004	Mixed Surface Type	0.8	0.6	12,002.4	0.2	0.06	
DMA 4	27,082	Mixed Surface Type	0.8	0.6	16,249.2	0.2	0.07	
DMA 5	37,514	Mixed Surface Type	0.8	0.6	22,508.4	0.2	0.10	
DMA 6	32,384	Mixed Surface Type	0.8	0.6	19,430.4	0.2	0.09	
DMA 7	91,523	Mixed Surface Type	0.8	0.6	54,913.8	0.2	0.25	
DMA 8	93,166	Mixed Surface Type	0.8	0.6	55,899.6	0.2	0.26	
DMA 9	52,777	Mixed Surface Type	0.8	0.6	31,666.2	0.2	0.15	
DMA 10	72,452	Mixed Surface Type	0.8	0.6	43,471.2	0.2	0.20	

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor[1]	*Design Rainfall Intensity (in/hr)*	*Design Flow Rate (cfs)* [2]	*Proposed Flow Rate (cfs)*
DMA 11	17,237	Mixed Surface Type	0.8	0.6	10,342.2	0.2	0.05	*TBD*
DMA 12	81,864	Mixed Surface Type	0.8	0.6	49,118.4	0.2	0.23	
DMA 13	20,030	Mixed Surface Type	0.8	0.6	12,018.0	0.2	0.06	
DMA 14	40,079	Mixed Surface Type	0.8	0.6	24,047.4	0.2	0.11	
DMA 15	57,984	Mixed Surface Type	0.8	0.6	34,790.4	0.2	0.16	
DMA 16	95,700	Mixed Surface Type	0.8	0.6	57,420.0	0.2	0.26	
DMA 17	97,608	Mixed Surface Type	0.8	0.6	58,564.8	0.2	0.27	
Total	6,971,734	--			4,183,040.4	0.20	19.21	

[1], [2] *Differences between values obtained in this table and County Worksheets due to rounding of values.*

Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Regional Board). For the project, the following applies:

☒ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- Or -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Regional Board and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

D.6 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

Table D.5 Potential Pollutants by Land Use Type

Priority Development Project Categories and/or Project Features (check those that apply)	General Pollutant Categories							
	Bacterial Indicators	Metals	Nutrients	Pesticides	Toxic Organic Compounds	Sediments	Trash & Debris	Oil & Grease
☒ Detached Residential Development	P	N	P	P	N	P	P	P
☒ Attached Residential Development	P	N	P	P	N	P	P	P[2]
☒ Commercial/Industrial Development	P[3]	P	P[1]	P[1]	P[5]	P[1]	P	P
☐ Automotive Repair Shops	N	P	N	N	P[4, 5]	N	P	P
☐ Restaurants (>5,000 ft^2)	P	N	N	N	N	N	P	P
☐ Hillside Development (>5,000 ft^2)	P	N	P	P	N	P	P	P
☒ Parking Lots (>5,000 ft^2)	P[6]	P	P[1]	P[1]	P[4]	P[1]	P	P
☐ Retail Gasoline Outlets	N	P	N	N	P	N	P	P
Project Priority Pollutant(s) of Concern	☒	☒	☒	☐	☐	☐	☐	☐

P = Potential
N = Not Potential
[1] A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected
[2] A potential Pollutant if the project includes uncovered parking areas; otherwise not expected
[3] A potential Pollutant is land use involving animal waste
[4] Specifically petroleum hydrocarbons
[5] Specifically solvents
[6] Bacterial indicators are routinely detected in pavement runoff

D.7 Stormwater Credits

Projects that cannot implement LID BMPs but implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit.

Table D.6 Water Quality Credits

Qualifying Project Categories	Credit Percentage[2]
Not applicable to project. Project will implement LID BMPs to address runoff.	
Total Credit Percentage[1]	

[1] *Cannot Exceed 50%*
[2] *Obtain corresponding data from Table 3-8 in the WQMP Guidance Document*

D.8 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information. ***This section is not applicable to project. Project will use LID BMPs to address project runoff.***

Table D.7 Treatment Control BMP Sizing

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Area x Runoff Factor		*Enter BMP Name / Identifier Here*		
	[A]		[B]	[C]	[A] x [C]				
						Design Storm Depth (in)	*Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)*	*Total Storm Water Credit % Reduction*	*Proposed Volume or Flow on Plans (cubic feet or cfs)*
	A_T = Σ[A]				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{[G]}$	[F] X (1-[H])	[I]

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document
[E] is obtained from Exhibit A in the WQMP Guidance Document
[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12
[H] is from the Total Credit Percentage as Calculated from Table E.2 above
[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

D.9 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High**: equal to or greater than 80% removal efficiency
- **Medium**: between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

This section is not applicable to project. Project will employ LID BMPs to address runoff.

Table D.8 Treatment Control BMP Selection

Selected Treatment Control BMP Name or ID[1]	Priority Pollutant(s) of Concern to Mitigate[2]	Removal Efficiency Percentage[3]

[1] Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.
[2] Cross Reference Table E.1 above to populate this column.
[3] As documented in a Co-Permittee Approved Study and provided in Appendix 6.

Section E: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The City of Eastvale has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

The project does not qualify.

HCOC EXEMPTION 2: The volume and time of concentration[1] of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the City of Eastvale

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

The project does not qualify.

Table E.1 Hydrologic Conditions of Concern Summary

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference

[1] Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Sensitivity Maps.

Does the project qualify for this HCOC Exemption? ☒ Y ☐ N

Per most recent hydromodification susceptibility data, project is located within a hydromodification exempt area. See Appendix 7.

F.2 HCOC Mitigation

As an alternative to the HCOC Exemption Criteria above, HCOC criteria is considered mitigated if the project meets one of the following conditions, as indicated:

☐ Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.

☐ The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.

☐ Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

☒ None of the above.

Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and "housekeeping", that must be implemented by the site's occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, the following Source Control BMPs are applicable to this project:

Table G.1 Permanent and Operations Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
A. On-site storm drain inlets	Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin Makers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.	Maintain and periodically repaint or replace inlet markings. Provide stormwater pollution prevention information to new site owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
B. Interior floor drains and elevator shaft sump pumps	Any interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	Inspect and maintain drains to prevent blockages and overflow.
C. Interior parking garages	Parking garage floor drains will be plumbed to the sanitary sewer.	Inspect and maintain drains to prevent blockages and overflow.
D1. Need for future indoor and structural pest control	Design building features that discourage entry of pests	Provide Integrated Pest Management information to owners, lessees and operators.

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
D2. Landscape/Outdoor Pesticide Use	Preserve, existing native trees, shrubs, and ground cover to the maximum extent possible. Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Where landscaping areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. Consider using pest-resistant plants, especially to hardscape. To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	Maintain landscaping using minimum or no pesticides. See applicable operation BMPs in "What you show know for…..Landscaping and Gardening" Provide IPM information to new owners, lessees and operators.
E. Pools, spas, ponds, decorative fountains, and other water features.	Ensure pools are plumbed to the sanitary sewer, place notes on plans that connection will be made according to local requirements.	See applicable operational BMPs in "Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain"
F. Food service	Provide description of cleaning area locations and features. Provide description of items to be cleaned in facility and sizing to ensure largest items can be accommodated.	See brochure "The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries". Provide brochure to new site owners, lessees and operators.
G. Refuse areas	Trash enclosure areas shall be paved, covered with a solid canopy-type roof and precluded from rain, run-on and runoff. Drainage from any adjoining roofs and pavements shall be diverted around facility. Perimeter walls shall be installed and dumpster lid provided to prevent offsite transport of trash. Surrounding area shall be kept	Ensure adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
	clean, with all leaks and over-spilled materials clean up as soon as possible. Trash shall be emptied on a weekly basis (at minimum) and as needed.	available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
N. Fire sprinkler test water	Provide a means to drain fire sprinkler test water to the sanitary sewer.	See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www. Cabmphandbooks.com
P. Plazas, sidewalks and parking lots	Sweep regularly	Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Section H: Construction Plan Checklist

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Corresponding Plan Sheet(s)
N/A	Project is currently in the TTM approval process.	

Section I: Operation, Maintenance and Funding

As required by the City of Eastvale, the following Operation, Maintenance and Funding details are provided as summarized:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred.
3. An outline of general maintenance requirements for the Stormwater BMPs selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility..
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance.

See Appendix 9 for a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on site, and an agreement assigning responsibility for maintenance and providing for inspections and certification.

Maintenance Mechanism: Property Owner (The New Home Company) prior to takeover by HOA.

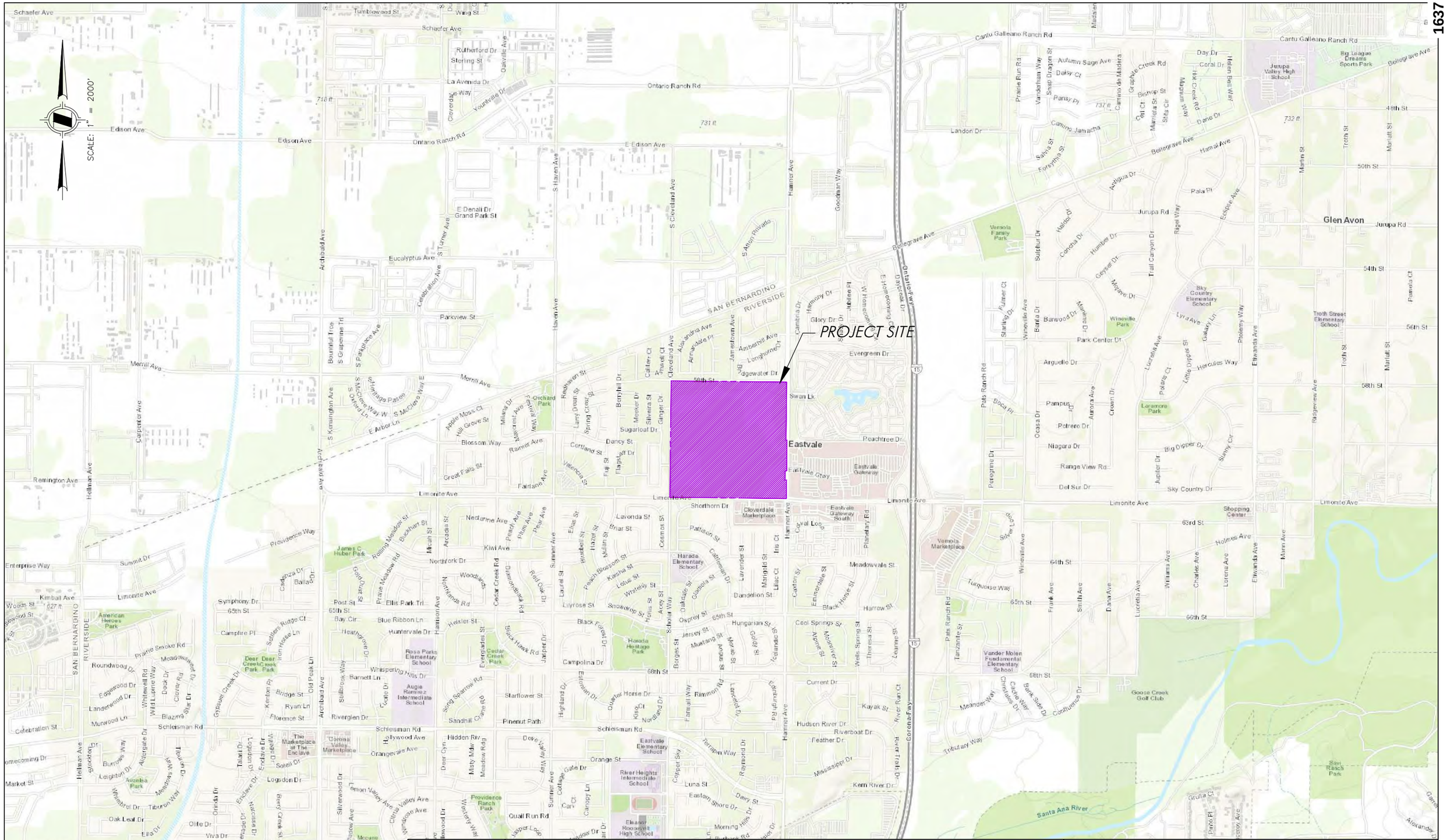
Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

☒ Y ☐ N

Operation and Maintenance Plan and Maintenance Mechanism are included in Appendix 9. Educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP are included in Appendix 10. Maintenance

Appendix 1: Maps and Site Plans

Vicinity Map, WQMP Site Plan and Receiving Waters Exhibit



DRAWN BY: TIH DATE: 10/18/2021 W.O.: 2749-44	PREPARED BY: **HUNSAKER & ASSOCIATES IRVINE, INC.** PLANNING ■ ENGINEERING ■ SURVEYING Three Hughes, Irvine, CA 92618 ■ PH: (949) 583-1010 ■ FX: (949) 583-0759	PREPARED FOR: THE NEW HOME COMPANY *15231 LAGUNA CANYON ROAD, SUITE 250* *IRVINE, CA 92618 (949) 382-7800*	*"LEAL RANCH" - TTM 38290* *NORTHWEST OF LIMONITE AVENUE* *& HAMNER AVENUE* *CITY OF EASTVALE, CALIFORNIA*	*PRELIMINARY WQMP VICINITY MAP*

DATE: Oct. 23, 2021 02:29:50 PM FILE: F:\0736\Planning\SY_WQ\WQMP\EXHIBITS\PWQMP_VIC LEAL RANCH.dwg

DMA3 0.50
DMA4 0.62
DMA5 0.86
DMA6 0.74
DMA7 2.10
DMA8 2.14
DMA9 1.21
DMA10 1.66
DMA11 0.40
DMA12 1.88
DMA13 0.46
DMA14 0.92
DMA15 1.33
DMA16 2.20
DMA17 2.24
DMA2 13.11
DMA1-A 45.98
DMA1-B 16.60
DMA1-C 15.35
DMA1-D 29.57
DMA1-E 12.83
DMA1-F 7.39
NAP
SMITH STREET
SCHOOL VIEW
HAMNER AVENUE
LIMONITE AVENUE

LEGEND

- TRACT LIMITS
- NAP — NOT A PART
- DRAINAGE MANAGEMENT AREA (DMA) LIMITS
- DMA / ACRE — DMA DESIGNATION AND ACRES
- SURFACE FLOW (ONSITE)
- SURFACE FLOW (OFFSITE)
- EXISTING DRAINAGE SYSTEM
- PROPOSED DRAINAGE SYSTEM
- EXISTING CATCH BASIN
- PROJECT CATCH BASIN WITH BMPS SD-13 STORM DRAIN STENCILING
- SUBSURFACE DETENTION VAULT (FLOOD CONTROL)
- PROPRIETARY BIOTREATMENT
- DMA 1 – ONSITE DEVELOPMENT AREA
- DMA 2 – ONSITE BACKBONE STREETS
- DMA 3 – PERIMETER STREET IMPROVEMENT AREAS
- WATER QUALITY DIVERSION STRUCTURE
- DISCHARGE POINT

DMA SUMMARY

DMA	AREA (SF)	SURFACE TYPE	IMP	C-VALUE	DMA*C	D_{B5} (IN)	V_{BMP} (CU-FT)	I_{B5} (IN/HR)	Q_{BMP} (CFS)	BMP ALTERNATIVES
DMA 1A	2,002,660	Mixed Surface Type	0.8	0.6	1,201,596.0	0.86	86,114.4	0.2	5.52	PROPRIETARY BIOTREATMENT
DMA 1B	723,208	Mixed Surface Type	0.8	0.6	433,924.8	0.86	31,097.9	0.2	1.99	
DMA 1C	668,544	Mixed Surface Type	0.8	0.6	401,126.4	0.86	28,747.4	0.2	1.84	
DMA 1D	1,287,889	Mixed Surface Type	0.8	0.6	772,733.4	0.86	55,379.2	0.2	3.55	
DMA 1E	558,821	Mixed Surface Type	0.8	0.6	335,292.6	0.86	24,029.3	0.2	1.54	
DMA 1F	322,031	Mixed Surface Type	0.8	0.6	193,218.6	0.86	13,847.3	0.2	0.89	
DMA 2	571,177	Mixed Surface Type	0.8	0.6	342,706.2	0.86	24,560.6	0.2	1.57	BIORETENTION, PROPRIETARY BIOTREATMENT
DMA 3	20,004	Mixed Surface Type	0.8	0.6	12,002.4	0.86	860.2	0.2	0.06	
DMA 4	27,082	Mixed Surface Type	0.8	0.6	16,249.2	0.86	1,164.5	0.2	0.07	
DMA 5	37,514	Mixed Surface Type	0.8	0.6	22,508.4	0.86	1,613.1	0.2	0.10	
DMA 6	32,384	Mixed Surface Type	0.8	0.6	19,430.4	0.86	1,392.5	0.2	0.09	
DMA 7	91,523	Mixed Surface Type	0.8	0.6	54,913.8	0.86	3,935.5	0.2	0.25	
DMA 8	93,166	Mixed Surface Type	0.8	0.6	55,899.6	0.86	4,006.1	0.2	0.26	
DMA 9	52,777	Mixed Surface Type	0.8	0.6	31,666.2	0.86	2,269.4	0.2	0.15	
DMA 10	72,452	Mixed Surface Type	0.8	0.6	43,471.2	0.86	3,115.4	0.2	0.20	
DMA 11	17,237	Mixed Surface Type	0.8	0.6	10,342.2	0.86	741.2	0.2	0.05	
DMA 12	81,864	Mixed Surface Type	0.8	0.6	49,118.4	0.86	3,520.2	0.2	0.23	
DMA 13	20,030	Mixed Surface Type	0.8	0.6	12,018.0	0.86	861.3	0.2	0.06	
DMA 14	40,079	Mixed Surface Type	0.8	0.6	24,047.4	0.86	1,723.4	0.2	0.11	
DMA 15	57,984	Mixed Surface Type	0.8	0.6	34,790.4	0.86	2,493.3	0.2	0.16	
DMA 16	95,700	Mixed Surface Type	0.8	0.6	57,420.0	0.86	4,115.1	0.2	0.26	
DMA 17	97,608	Mixed Surface Type	0.8	0.6	58,564.8	0.86	4,197.1	0.2	0.27	
TOTAL	6,971,734	--	--	--	4,183,040.4	--	299,784.6	--	19.21	--

N

GRAPHIC SCALE
0 75 150 300
(IN FEET)
1 INCH = 150 FT.

PRELIMINARY
WATER QUALITY MANAGEMENT PLAN (WQMP)

APPLICANT:
NEW HOME COMPANY
15231 LAGUNA CANYON ROAD., SUITE 250
IRVINE, CA 92618
(949) 382-7800

PREPARED BY:
HUNSAKER & ASSOCIATES
I R V I N E , I N C .
PLANNING ■ ENGINEERING ■ SURVEYING
Three Hughes Irvine, CA 92618 PH: (949) 583-1010 FX: (949) 583-0759

"LEAL RANCH" - TENTATIVE TRACT MAP NO. 38290
NORTHWEST OF LIMONITE AVENUE
& HAMNER AVENUE
CITY OF EASTVALE, COUNTY OF RIVERSIDE, CALIFORNIA

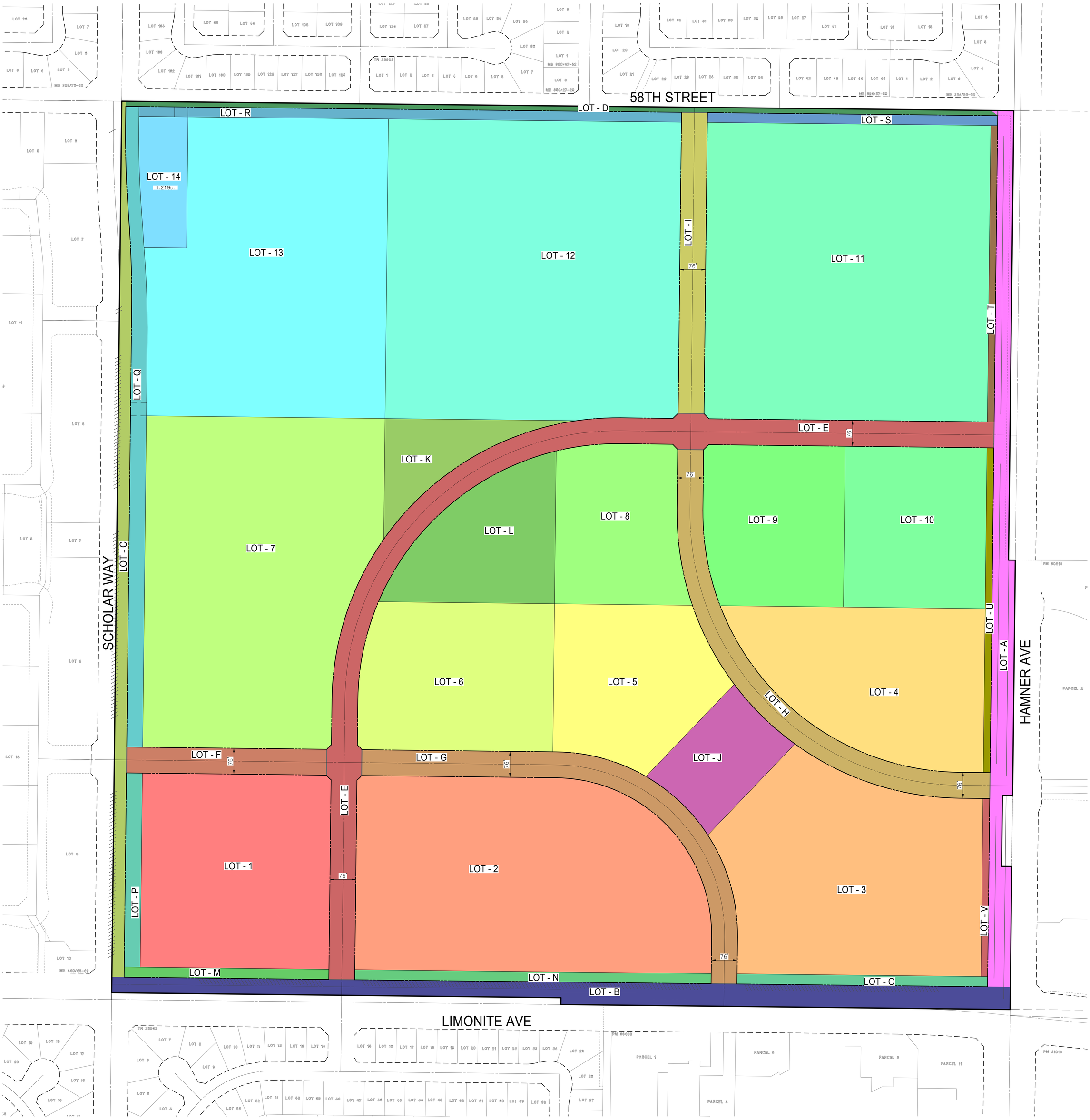
DRAFTED BY:	DATE:	W.O. NO:	SHEET NO:
TIH	11/29/2021	2749-44	1 OF 1

DATE: Nov. 29, 2021 10:22:30 AM FILE: F:\0736\Planning\SY_WQ\WQMP\EXHIBITS\PWQMP_SP LEAL RANCH 11.28.2021.dwg

PLANNING AREAS MAP

LEAL RANCH - A MAP LOTTING EXHIBIT

CITY OF EASTVALE, CA



Numbered Lots		
Lot #	S.F.	Acres
1	315,892.10	7.252
2	550,731.85	12.643
3	42,245.50	0.970
4	280,986.58	6.451
5	203,068.13	4.662
6	244,324.99	5.609
7	613,599.82	14.086
8	171,451.45	3.936
9	191,384.23	4.394
10	196,757.07	4.517
11	724,736.51	16.638
12	754,749.47	17.327
13	574,268.61	13.183
14	53,083.07	1.219
Total	4,917,279.37	112.8852

Lettered Lots		
Lot #	S.F.	Acres
A	139,937.69	3.213
B	147,811.51	3.393
C	84,478.50	1.939
D	38,267.77	0.879
E	246,244.32	5.653
F	44,673.74	1.026
G	113,590.68	2.608
H	115,905.65	2.661
I	67,321.01	1.545
J	89,110.05	2.046
K	68,998.58	1.584
L	153,611.43	3.526
M	18,039.30	0.414
N	31,408.46	0.721
O	22,086.67	0.507
P	26,795.98	0.615
Q	84,078.57	1.930
R	46,663.19	1.071
S	24,737.25	0.568
T	17,417.82	0.400
U	19,077.17	0.438
V	10,461.10	0.240
Total	1,610,716.43	36.9770

N
W HUNSAKER E
S

0 50 100 200
SCALE: 1" = 100'

PREPARED BY

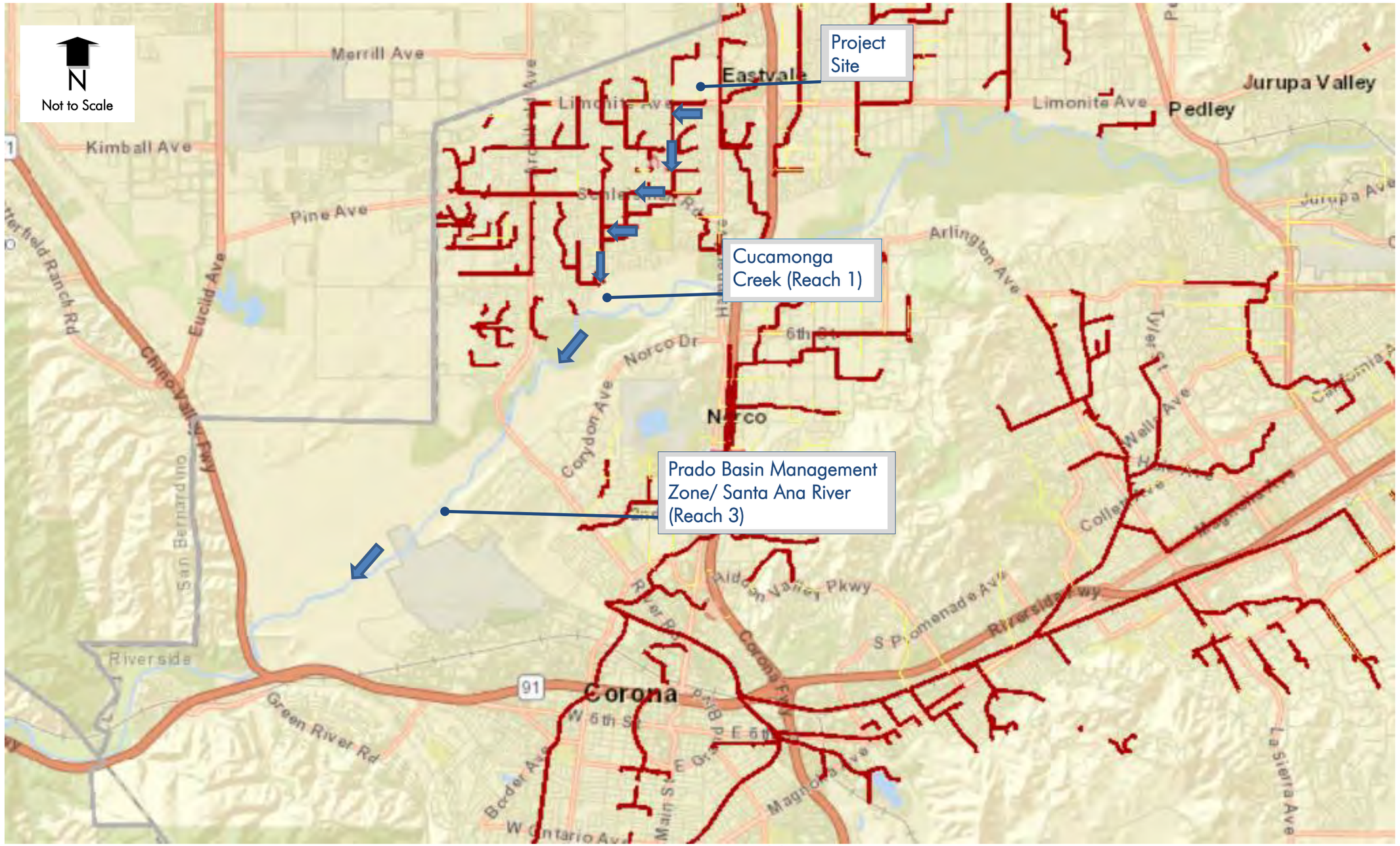
HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING ▪ ENGINEERING ▪ SURVEYING
Three Hughes ▪ Irvine, CA 92618 ▪ PH: (949) 583-1010 ▪ FX: (949) 583-0759

DATE PREPARED: September 15, 2021

W.O. 2749-44X

PLOT DATE: November 2, 2021

DATE: Nov. 02, 2021 10:40:11 AM FILE: H:\00750\Planning\Misc Files\Planning Areas\Leal Ranch-TTM Lot Exhibit.dwg



Receiving Waters Exhibit

Appendix 2: Construction Plans

Grading and Drainage Plans

- Construction Plans shall be submitted with the Final WQMP, at the time of Grading Plan submittal, which will provide detailed design drawings of all LID BMPs for the project and structural source control BMP locations.

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

June 21, 2021 Project No. 21116-01

Mr. A.J. Jarvis
The New Home Company
85 Enterprise, Suite 450
Aliso Viejo, CA 92656

Subject: ***Preliminary Geotechnical Evaluation Including Near Surface Organic Content for the Proposed Approximately 160-Acre "Leal" Property, City of Eastvale, California***

In accordance with your request, LGC Geotechnical, Inc. has performed a geotechnical evaluation including near surface organic content for the proposed approximate 160-acre "Leal" property located southwest of the intersection of Hamner Avenue and 58th Street in the City of Eastvale, California. This report summarizes the results of our background review, subsurface exploration, and geotechnical analyses of the data collected, and presents our findings, conclusions, and preliminary recommendations for the proposed residential project.

If you should have any questions regarding this report, please do not hesitate to contact our office. We appreciate this opportunity to be of service.

Respectfully,

LGC Geotechnical, Inc.

Blake J. Elliott, RCE 70705
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
BLAKE J. ELLIOTT
No. 70705
CIVIL
STATE OF CALIFORNIA

Barry Graham, CEG 2749
Project Geologist

CERTIFIED ENGINEERING GEOLOGIST
BARRY GRAHAM
No. 2749
STATE OF CALIFORNIA

BJE/BPG/amm

Distribution: (1) Addressee (electronic copy, wet signed copies can be provided upon request)

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1.0 INTRODUCTION

1.1 Purpose and Scope of Services

This report presents the results of our geotechnical evaluation including near surface organic content for the proposed approximately 160-acre "Leal" property in the City of Eastvale, California (see Site Location Map, Figure 1). The purpose of our work was to collect subsurface data in order to prepare a geotechnical report providing recommendations for design and construction of the proposed project. Our scope of services included:

- Review of pertinent readily available geotechnical information and geologic maps (Appendix A).
- Subsurface investigation including excavation, sampling, and logging of ten small-diameter hollow stem borings.
- Excavation of 10 exploratory geotechnical trenches throughout the site to aid in estimating the depth of required removals during grading and assist in characterizing the near surface soils.
- Excavation of 25 shallow trenches to assess the organic content of near surface "soils".
- Laboratory testing of representative samples obtained during our subsurface investigation (Appendix C).
- Geotechnical analysis and evaluation of the data obtained, including:
  - Suitability of the site for the proposed development from a geotechnical standpoint;
  - Description of the site geology, and subsurface soil and groundwater conditions;
  - Assessment of the organic content of near surface "soils" including recommendations for offsite organic export and/or mixing;
  - Evaluation of the seismic conditions at the site, including seismic design criteria based on the 2019 California Building Code (CBC); and
  - Recommendations for remedial grading operations and site preparation.
- Preparation of this report presenting our findings, conclusions and recommendations with respect to the proposed site development.

1.2 Existing Site Conditions and Proposed Improvements

The square shaped site is approximately 160 acres in size with minor relief. The site is composed of four adjacent 40-acre parcels, and is bounded to the north by 58th street, the south by Limonite Avenue, the west by Scholar Way, and to the East by Hamner Avenue. The northern portion of the site is a former dairy that has been inactive for several years, while the south has remained as open pasture for decades. A review of historic aerial photographs suggests the site has been used as a dairy or agricultural farm dating back to the earliest available photos in 1938.

As of the date of this report, neither a conceptual plan nor grading plan was available. It is our understanding that the site will most likely consist of residential units, parks and associated street improvements and underground utilities. We expect the proposed residential development will be at-grade with relatively light building loads (column and wall loads assumed to be a maximum of approximately 30 kips and 3 kips per lineal foot, respectively). A preliminary grading plan was not available at this time either.

The recommendations provided herein are based upon the estimated structural loading and expected layout information above. We understand that the project plans are currently being developed at this time; LGC Geotechnical should be provided with updated project plans and any changes to the assumed structural loads when they become available, in order to either confirm or modify the recommendations provided herein.

1.3 Subsurface Evaluation

LGC Geotechnical performed a subsurface geotechnical evaluation of the site consisting of the excavation of 10 hollow-stem auger borings, 2 infiltration borings, 10 exploratory geotechnical trenches with organic testing, and 25 near surface organic trenches.

10 hollow-stem borings (HS-1 through HS-10) were drilled to depths ranging from approximately 25 to 50 feet below existing grade. An LGC Geotechnical representative observed the drilling operations, logged the borings, and collected soil samples for laboratory testing. The borings were excavated using a track-mounted drill rig equipped with 8-inch-diameter hollow-stem augers. Driven soil samples were collected by means of the Standard Penetration Test (SPT) and Modified California Drive (MCD) sampler generally obtained at 2.5 to 5-foot vertical increments. The MCD is a split-barrel sampler with a tapered cutting tip and lined with a series of 1-inch-tall brass rings. The SPT sampler and MCD sampler were driven using a 140-pound automatic hammer falling 30 inches to advance the sampler a total depth of 18 inches. The raw blow counts for each 6-inch increment of penetration were recorded on the boring logs. Bulk samples were also collected and logged at select depths for laboratory testing. At the completion of drilling, the borings were backfilled with the native soil cuttings and tamped. Some settlement of the backfill soils may occur over time.

Ten exploratory geotechnical trenches (TP-1 through TP-10) were excavated utilizing a standard backhoe in order to estimate removal depths and obtain samples for laboratory testing. A staff geologist observed the operation, logged the geotechnical trenches and collected the soil samples. Each exploratory geotechnical trench was also logged and sampled for the organic content of the near surface "soils." The exploratory geotechnical trenches were subsequently backfilled with tamped native soils.

Twenty-five additional shallow trenches (T-1 through T-25) were excavated utilizing a standard backhoe in order to assess the organic content of near surface "soils". Samples were collected at various depths within each trench. In general, based on visual observations, 2 layers of soil were identified including 1) near surface heavily tainted organic "soils" and 2) "clean" (organic free) soils. In some areas there was a "transitional" layer in between these two. The shallow trenches were subsequently backfilled and tamped with native soils. There are 4 areas identified as having thick zones of buried or stockpiled high-organic material. These 4 areas have been outlined on our Geotechnical Map (Figure 2).

LGC Geotechnical, Inc. was asked to avoid the northwest corner of the property during our evaluation as this area is currently occupied by a local farmer. This area was not explored during our evaluation. The boundary for this area is shown on the Geotechnical Map (Figure 2).

The approximate locations of borings and trenches are shown on the Geotechnical Map (Figure

2). Boring and geotechnical trench logs are presented in Appendix B. The Encumbrance Map prepared by Hunsaker & Associates (H&A, 2021) was utilized as a base map for our Geotechnical Map.

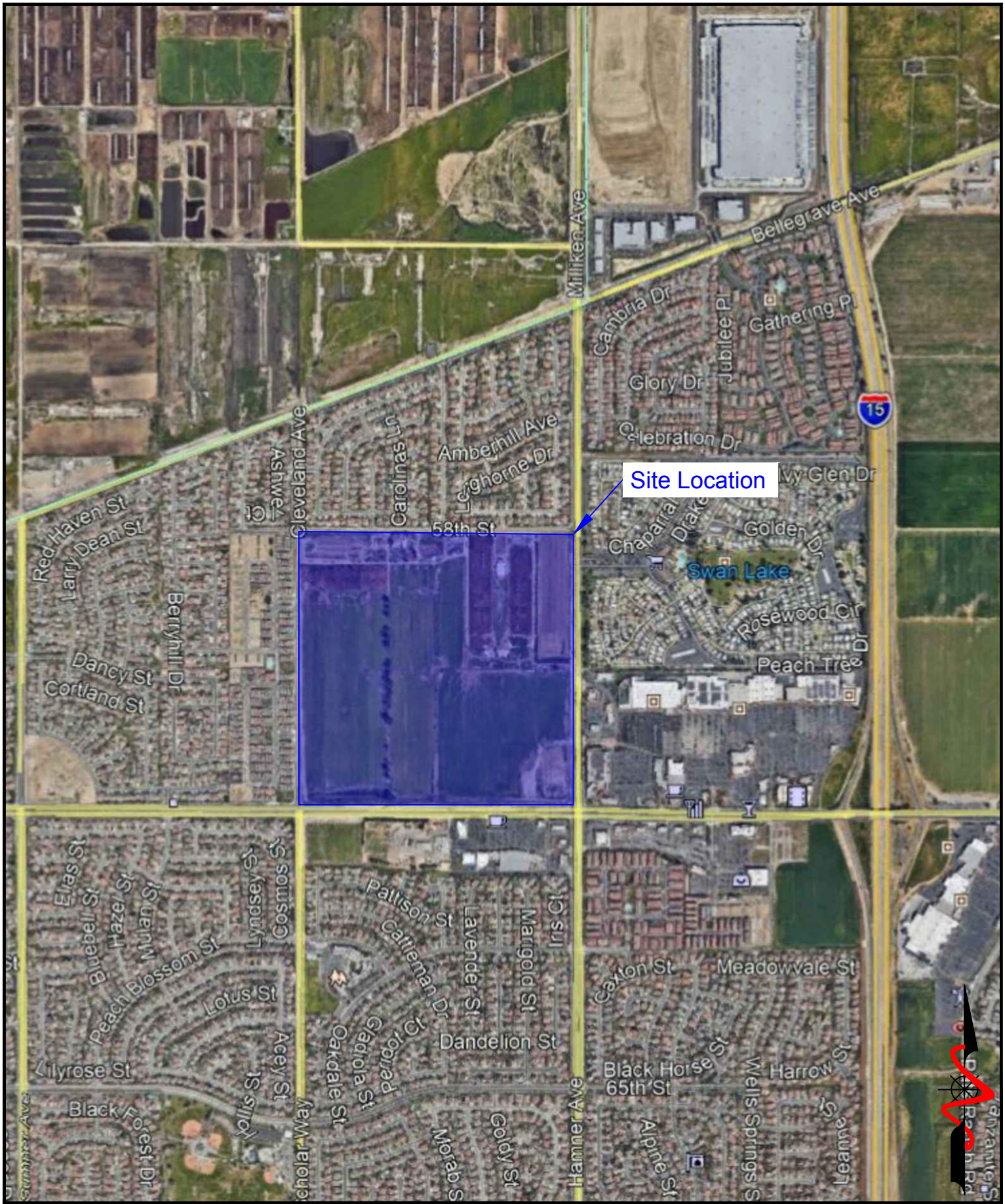
1.4 Laboratory Testing

Laboratory testing was performed on representative soil samples obtained from our subsurface evaluation. Laboratory testing included in-situ moisture and density tests, fines content/sieve analysis, Atterberg Limits (liquid limit and plastic limits), consolidation, collapse/swell potential, expansion index, laboratory compaction and corrosion (sulfate and chloride). Additionally, the near surface organic content trench samples were tested for characterization of the organic content (ASTM 2974).

The following is a summary of the laboratory test results.

- Dry density of the samples collected ranged from approximately 90 pounds per cubic foot (pcf) to 122 pcf, with an average of approximately 109 pcf. Field moisture contents ranged from approximately 1.1 percent to 32.0 percent, with an average of approximately 12 percent.
- One sample tested for fines content indicated a fines content (passing No. 200 sieve) of 83 percent. According to the Unified Soils Classification System (USCS), the tested sample is classified as "fine grained" soil.
- One Atterberg Limit (liquid limit and plastic limit) test was performed. The result indicated a Plasticity Index value of 11.
- One consolidation test was performed. The deformation versus vertical stress plot is provided in Appendix C.
- One swell/collapse test was performed. The plots are provided in Appendix C.
- One Expansion Index (EI) test was performed. The result indicates an EI value of 11, corresponding to "Very Low" expansion potential.
- One laboratory compaction test of a near surface sample indicated maximum dry density of 125.0 pcf with an optimum moisture content of 8.5 percent.
- Corrosion testing indicated soluble sulfate content of 78 parts per million (ppm) and chloride content of 100 ppm.
- The organic content of the samples ranged from approximately 0.1 to 33.2 percent.

A summary of the results is presented in Appendix C. The moisture and dry density test results are presented on the boring logs in Appendix B.



PROJECT NAME	TNHC - Eastvale
PROJECT NO.	21116-01
ENG. / GEOL.	BJE / BPG
SCALE	Not to Scale
DATE	June 2021

LGC Geotechnical, Inc.

FIGURE 1
Site Location Map

1649

2.0 GEOTECHNICAL CONDITIONS

2.1 Regional Geology

The subject site is located south of the San Gabriel Mountains within the broad alluvial plain of the Santa Ana River Basin, within the Peninsular Ranges Geomorphic Province. Specifically, the site is located within the northern portion of the Perris Block, a geologic zone consisting of granitics overlain by sedimentary deposits that are bounded by active faults including the northwest-trending Whittier-Elsinore Fault Zone at the southwest and the northwest-trending San Jacinto Fault Zone at the northeast (USGS, 2002). The roughly rectangular Perris Block is transected by the southwest-trending Santa Ana River that passes approximately 2 miles south of the subject site.

Regional geologic mapping and local topographic expressions do not indicate the presence of large-scale landslides within or adjacent to the project area.

2.2 Site Geology and Generalized Subsurface Conditions

Based on regional mapping (USGS, 2002 & 2003), the subject site is underlain by Holocene- to Pleistocene-age alluvial fan deposits (Qyf), minor amounts of similar age eolian (wind-blown) deposits (Qye), and older early Pleistocene age alluvial channel deposits at depth. For this report however, alluvial and eolian deposits have been undifferentiated as general Quaternary deposits. As indicated in our field explorations, soils generally consisted of medium dense to dense sands and silty sands with thinner layers of stiff to very stiff fine-grained soils (i.e., silts and clays) to the maximum explored depth of approximately 50 feet below existing grade. Descriptions of the subsurface conditions are presented on the boring and geotechnical trench logs located in Appendix B. A brief description of the site geologic units can be found below.

2.3 Groundwater

Groundwater was not encountered in any of our borings. Groundwater levels recorded in the area by California Department of Water Resources are at depths greater than 100 feet below the ground surface (CDWR, 2021).

In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present within the near-surface deposits due to local seepage or during rainy seasons. Groundwater conditions below the site may be variable, depending on numerous factors including seasonal rainfall, local irrigation and groundwater pumping, among others.

2.4 Field Infiltration Testing

Two field percolation tests were performed on Borings I-1 and I-2 to approximate depths of 10 feet below existing grade, respectively. Estimation of infiltration rates was performed in general accordance with guidelines set forth by the Riverside County Flood Control (2011). In general, a 3-inch diameter perforated PVC pipe was placed in each borehole to be tested and

the annulus was backfilled with gravel, including placement of about 2 inches of gravel at the bottom of the borehole. The infiltration wells were pre-soaked prior to testing. Based on the County of Riverside methodology, the calculated (observed) infiltration rates are provided in Table 1 below. These infiltration rates do not include any factor of safety (to be determined by the project Civil Engineer); however, they have been normalized to correct the 3-D flow that occurs within the field test to 1-D flow out of the bottom of the boring only. The locations and depths of the infiltration tests were coordinated with the civil engineer. The approximate infiltration test locations are shown on the Geotechnical Map (Figure 2) and the infiltration test data is included in Appendix D and summarized below.

TABLE 1

Summary of Infiltration Testing

Infiltration Test Location	Infiltration Test Depth Below Existing Grade (ft)	Observed Infiltration Rate* (Inch/Hr.)
I-1	10	3.8
I-2	10	0.6

*Normalized to One-Dimensional Flow, does not include any Factor of Safety.

It should be emphasized that infiltration test results are only representative of the location and depth where they are performed. Varying subsurface conditions may exist outside of the test locations which could alter the calculated infiltration rates indicated above. Infiltration tests are performed using relatively clean water free of particulates, silt, etc. Refer to Section 4.8 for subsurface water infiltration recommendations.

2.5 Faulting and Seismic Hazards

Prompted by damaging earthquakes in California, State legislation and policies concerning the classification and land-use criteria associated with faults have been developed. Their purpose was to prevent the construction of urban developments across the trace of active faults, resulting in the Alquist-Priolo Earthquake Fault Zoning Act. Earthquake Fault Zones have been delineated along the traces of active faults within California. Where developments for human occupation are proposed within these zones, the State requires detailed fault evaluations be performed so that engineering geologists can mitigate the hazards associated with active faulting by identifying the location of active faults and allowing for a setback from zones of previous ground rupture.

The subject site is not located within an Alquist-Priolo Earthquake Fault Zone and no faults were identified on the site during our site evaluation. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site.

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region, which may affect the site, include ground lurching, shallow ground rupture, soil liquefaction and dynamic settlement. These secondary effects of seismic shaking

are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault and the onsite geology. Some of the major active nearby faults that could produce these secondary effects include the Chino-Central, Elsinore, Cucamonga and San Andreas Faults, among others (CGS, 2018). A discussion of these secondary effects is provided in the following sections.

2.5.1 Liquefaction and Dynamic Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Studies indicate that loose, saturated, near-surface, cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils, and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Furthermore, dynamic settlement of dry sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

Based on our review of the City of Eastvale General Plan (CE, 2012), the subject site is located in an area of "High" liquefaction susceptibility based only on soil type (sediments being less than 10,000 years old and unconsolidated). Site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet. However, isolated layers may be susceptible to dry sand seismic settlement. Seismically induced dry sand settlements were estimated by the procedures outlined by Pradel (Pradel, 1998) using the PGA_M per the 2019 CBC and a moment magnitude of 6.71 (USGS, 2014). Based on the data obtained from our field evaluation, seismic settlement due to dry sands is estimated to be on the order of about 0.5-inch or less. Differential settlement may be estimated as half of the total settlement over a horizontal span of 40 feet.

2.5.2 Lateral Spreading

Lateral spreading is a type of liquefaction induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

Due to the depth to groundwater, low potential for liquefaction and lack of nearby "free face" conditions, the potential for lateral spreading is considered extremely low.

2.6 Seismic Design Criteria

The site seismic characteristics were evaluated per the guidelines set forth in Chapter 16, Section 1613 of the 2019 California Building Code (CBC) and applicable portions of ASCE 7-16 which has been adopted by the CBC. **Please note that the following seismic parameters are only applicable for code-based acceleration response spectra and are not applicable for where site-specific ground motion procedures are required by ASCE 7-16.** Representative site coordinates of latitude 33.975696 degrees north and longitude -117.566832 degrees west were utilized in our analyses. The maximum considered earthquake (MCE) spectral response accelerations (S_{MS} and S_{M1}) and adjusted design spectral response acceleration parameters (S_{DS} and S_{D1}) for Site Class D are provided in Table 1 on the following page. Since site soils are Site Class D, additional adjustments are required to code acceleration response spectrums as outlined below and provided in ASCE 7-16. The structural designer should contact the geotechnical consultant if structural conditions (e.g., number of stories, seismically isolated structures, etc.) require site-specific ground motions.

A deaggregation of the PGA based on a 2,475-year average return period (MCE) indicates that an earthquake magnitude of 6.71 at a distance of approximately 14.03 km from the site would contribute the most to this ground motion. A deaggregation of the PGA based on a 475-year average return period (Design Earthquake) indicates that an earthquake magnitude of 6.7 at a distance of approximately 17.24 km from the site would contribute the most to this ground motion (USGS, 2014).

Section 1803.5.12 of the 2019 CBC (per Section 11.8.3 of ASCE 7) states that the maximum considered earthquake geometric mean (MCE_G) Peak Ground Acceleration (PGA) should be used for liquefaction potential. The PGA_M for the site is equal to 0.74g (SEAOC, 2021).

TABLE 2

Seismic Design Parameters

Selected Parameters from 2019 CBC, Section 1613 - Earthquake Loads	Seismic Design Values	Notes/Exceptions
Distance to applicable faults classifies the site as a "Near-Fault" site.		Section 11.4.1 of ASCE 7
Site Class	D*	Chapter 20 of ASCE 7
Ss (Risk-Targeted Spectral Acceleration for Short Periods)	1.63g	From SEAOC, 2021
S_1 (Risk-Targeted Spectral Accelerations for 1-Second Periods)	0.586g	From SEAOC, 2021
F_a (per Table 1613.2.3(1))	1.0	For Simplified Design Procedure of Section 12.14 of ASCE 7, F_a shall be taken as 1.4 (Section 12.14.8.1)
F_v (per Table 1613.2.3(2))	1.714	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{MS} for Site Class D [Note: $S_{MS} = F_aS_S$]	1.63g	-
S_{M1} for Site Class D [Note: $S_{M1} = F_vS_1$]	1.004g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
S_{DS} for Site Class D [Note: $S_{DS} = (^2/_3)S_{MS}$]	1.087g	-
S_{D1} for Site Class D [Note: $S_{D1} = (^2/_3)S_{M1}$]	0.669g	Value is only applicable per requirements/exceptions per Section 11.4.8 of ASCE 7
C_{RS} (Mapped Risk Coefficient at 0.2 sec)	0.941	ASCE 7 Chapter 22
C_{R1} (Mapped Risk Coefficient at 1 sec)	0.918	ASCE 7 Chapter 22
*Since site soils are Site Class D and S_1 is greater than or equal to 0.2, the seismic response coefficient Cs is determined by Eq. 12.8-2 for values of $T \leq 1.5T_s$ and taken equal to 1.5 times the value calculated in accordance with either Eq. 12.8-3 for $T_L \geq T > T_s$, or Eq. 12.8-4 for $T > T_L$. Refer to ASCE 7-16.		

2.7 Organic Rich Soils

Approximately 60 bag soil samples were collected to determine their organic content (based on ASTM 2974). The organic content of the samples ranged from approximately 0.1 to 33.2 percent. In general, the organic content is higher near existing grade and decreases with depth. Table 6 (Appendix C) summarizes the measured organic content and also notes where the

organic content was estimated to be greater than 10% based on observation.

For most of the site there is a distinct contact between high organic content (greater than 5%) and low organic content (less than 2%) at the 1-foot depth. This upper 1-foot of soil across the site requires removal and disposal off-site due to high organic content (greater than 5.0 percent). In a few areas, there is a "transition zone" from 1-foot below the ground surface to approximately 2 feet below the ground surface where the organic content is greater than 2%. Below approximately 2 feet on average is generally free of organics.

There are 4 locations noted on our geotechnical map where appreciable amounts of high organic material is known to be stockpiled above the adjacent ground surface or buried below the ground surface. The depths of high organic material within these areas are noted on the Geotechnical Map (Figure 2). The material noted in these areas will need to be disposed of off-site.

Recommendations for off-site disposal and/or mixing to dilute organics to geotechnically acceptable organic levels (less than 2 percent) are provided in the following "Organic Rich Soil Recommendations" Section 4.1.2.

3.0 CONCLUSIONS

Based on the results of our subsurface geotechnical evaluation, it is our opinion that the proposed improvements are feasible from a geotechnical standpoint, provided that the recommendations contained in the following sections are incorporated during site grading and development. A summary of our geotechnical conclusions are as follows:

- The near-surface loose and compressible soils are not suitable for the planned improvements in their present condition (refer to Section 4.1). Organic rich soils (total organic carbon content generally greater than 2 percent) are not suitable for compacted fill soils from a geotechnical perspective.
- From a geotechnical perspective, onsite soils are anticipated to be suitable for use as general compacted fill provided the high organic content soils (soils with organic content greater than 5 percent) are removed from the site and the remaining soils with organic content between 2 and 5 percent are blended and mixed with "clean" soils and screened of construction debris and any oversized material (8 inches in greatest dimension).
- Records indicate groundwater levels recorded in the area are at depths greater than 100 feet below the ground surface.
- The subject study area is not located within a mapped State of California Earthquake Fault Zone, and based upon our review of published geologic mapping, no known active or potentially active faults are known to exist within or in the immediate vicinity of the site. Therefore, the potential for ground rupture as a result of faulting is considered very low.
- The main seismic hazard that may affect the site is ground shaking from one of the active regional faults. The subject site will likely experience strong seismic ground shaking during its design life.
- Site soils are not generally susceptible to liquefaction due to a lack of groundwater in the upper 50 feet. However, isolated layers are susceptible to dry sand seismic settlement. Total dynamic settlement is estimated to be on the order 0.5-inch or less. Differential settlement may be estimated as half of the total settlement over a horizontal span of 40 feet.
- Based on the results of preliminary laboratory testing, site soils are anticipated to have "Very Low" expansion potential. Final design expansion potential must be determined at the completion of grading.
- Based on the corrosion test results, soils are not considered corrosive per the Caltrans criteria (Caltrans, 2015).
- Excavations into the existing site soils should be feasible with heavy construction equipment in good working order. We anticipate that the sandy and silty earth materials generated from the excavations will be generally suitable for re-use as compacted fill, provided they are relatively free of rocks larger than 8 inches in dimension, construction debris, and significant organic material.
- Some portion of the onsite soils have high fines content; therefore, are not suitable for backfill of site retaining walls. Therefore, import of sandy soils meeting project recommendation is required.
- Field testing resulted in observed infiltration rates ranging from 0.6 to 3.8 inches per hour. The observed infiltration rates do not include a factor of safety. Discussion regarding infiltration is provided in Section 4.8.

4.0 RECOMMENDATIONS

The following recommendations are to be considered preliminary and should be confirmed upon completion of grading and earthwork operations. In addition, they should be considered minimal from a geotechnical viewpoint, as there may be more restrictive requirements from the architect, structural engineer, building codes, governing agencies, or the owner.

It should be noted that the following geotechnical recommendations are intended to provide sufficient information to develop the site in general accordance with the 2019 CBC requirements. With regard to the possible occurrence of potentially catastrophic geotechnical hazards such as fault rupture, earthquake-induced landslides, liquefaction, etc. the following geotechnical recommendations should provide adequate protection for the proposed development to the extent required to reduce seismic risk to an "acceptable level." The "acceptable level" of risk is defined by the California Code of Regulations as "that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project" [Section 3721(a)]. Therefore, repair and remedial work of the proposed improvement may be required after a significant seismic event. With regards to the potential for less significant geologic hazards to the proposed development, the recommendations contained herein are intended as a reasonable protection against the potential damaging effects of geotechnical phenomena such as expansive soils, fill settlement, groundwater seepage, etc. It should be understood, however, that our recommendations are intended to maintain the structural integrity of the proposed development and structures given the site geotechnical conditions but cannot preclude the potential for some cosmetic distress or nuisance issues to develop as a result of the site geotechnical conditions.

The geotechnical recommendations contained herein must be confirmed to be suitable or modified based on the actual as-graded conditions.

4.1 Site Earthwork

Rough grading shall include removal of high organic content soils, remedial earthwork grading and placement of engineered compacted fill to design grades. Geotechnical recommendations for precise grading and construction of the proposed new improvements will be provided, as necessary.

We recommend that earthwork onsite be performed in accordance with the following recommendations, future grading plan review report(s), the 2019 CBC/City of Eastvale requirements, and the General Earthwork and Grading Specifications for Rough Grading included in Appendix D. In case of conflict, the following recommendations shall supersede those included in Appendix D. The following recommendations may be revised within future grading plan review reports or based on the actual conditions encountered during site grading.

4.1.1 Site Preparation

Prior to grading, areas to be developed should undergo the stripping and clearing of vegetation, high organic content soil removal/export and clearing of surface obstructions, pavements, foundation and slab elements from the site. Vegetation, debris and excessive organic material from livestock holding areas should be removed and properly disposed of offsite. Recommendations for removal of organic rich soils are provided in the following section. Holes resulting from removals of buried obstructions, which extend below proposed remedial and/or finish grades, should be replaced with suitable compacted fill material.

If cesspools or septic systems are encountered, they should be removed in their entirety. The resulting excavation should be backfilled with properly compacted fill soils. As an alternative, cesspools can be backfilled with lean sand-cement slurry. Any encountered wells should be properly abandoned in accordance with regulatory requirements.

4.1.2 Organic Rich Soil Recommendations

We recommend soils with an organic content greater than 5 percent be removed and exported from the site. For most of the site this is the top 1 foot. Figure 2 outlines areas that contains high organic content with more than 1-foot in thickness. Our recommendations are based on the following assumptions; 1) all soils with "high" organic contents greater than 5 percent shall be removed and disposed of off-site, 2) "transitional" soils (soils with organic content ranging from 2 to 5 percent) shall be adequately mixed or blended with the "clean" soils (soils with organic content less than 2.0 percent), and 3) There will be sufficient "clean" soils to dilute the limited "transitional" soils during the grading operation. From a geotechnical perspective, organic content of compacted fill soils should not exceed 2 percent.

After export of the top 1 foot of material, remedial grading as described in the following section should result in organic content of the fill materials to be approximately 1 percent. To satisfy the City's requirement of documenting the organic content in the fill, samples should be collected during grading and tested for organic content.

We recommend the geotechnical consultant be present during grading to observe the mixing of the onsite soils and perform periodic testing of the compacted fill. Organic materials shall be thoroughly mixed such that no nesting of organic materials occurs. Removal of organic materials is to satisfy geotechnical concerns and does not mitigate the potential for methane gas. Some methane gas should be expected after grading especially in former wastewater areas. Methane potential shall be evaluated by others.

4.1.3 Removal Depths and Limits

In order to provide a relatively uniform bearing condition for the planned improvements, we recommend the site soils be removed and recompacted. We recommend that soils within building pads be removed and recompacted to a minimum depth of 5 feet below

existing grade (not below base of organic removal). The envelope for removal and recompaction should extend laterally a minimum distance of 5 feet beyond the edges of the proposed improvements. In areas of design cut, over-excavation shall extend a minimum of 5 feet below existing grade or a minimum of 3 feet below finished grade, whichever is deeper. In the design cut areas, this depth may be reduced if in-place alluvial materials are tested and found to have an in-situ dry density equal or greater than 90 percent relative compaction (based on American Standard of Testing and Materials [ASTM] Test Method D1557) and exhibit uniform conditions. The Remedial Grading Diagram (Figure 5) provides a simplified example of the building pad remedial recommendations.

As shown on the attached Geotechnical Map (Figure 2), there is one isolated area of the site on the eastern edge of the property where removals will extend a minimum of 15 feet to remove a buried stockpile of manure. A representative from LGC geotechnical should be on site to approve the removal bottom to ensure it is acceptable from a geotechnical standpoint, and free of organic content.

For minor site structures such as free-standing and screen walls, the removals should extend at least 3 feet beneath the existing grade or 2 feet beneath the base of foundations, whichever is deeper. Within pavement and hardscape areas, removals should extend to a depth of at least 2 feet below the existing grade. The over-excavation in any design cut areas of the pavement may be reduced by the depth of the design cut but should not be less than 1-foot below the finished subgrade (i.e., below planned aggregate base/asphalt concrete). In general, the envelope for over-excavation should extend laterally a minimum distance of 2 feet beyond the edges of the proposed improvements mentioned above.

Local conditions may be encountered during excavation that could require additional over-excavation beyond the above-noted minimum in order to obtain an acceptable subgrade. The actual depths and lateral extents of grading will be determined by the geotechnical consultant, based on subsurface conditions encountered during grading. Removal areas and areas to be over-excavated should be accurately staked in the field by the Project Surveyor.

4.1.4 Temporary Excavations

Temporary excavations should be performed in accordance with project plans, specifications, and applicable Occupational Safety and Health Administration (OSHA) requirements. Excavations should be laid back or shored in accordance with OSHA requirements before personnel or equipment are allowed to enter. Based on our field investigation, the majority of site soils are anticipated to be OSHA Type "C" soils (refer to the attached boring logs). Sandy soils are present and should be considered susceptible to caving. Soil conditions should be regularly evaluated during construction to verify conditions are as anticipated. The contractor shall be responsible for providing the "competent person" required by OSHA standards to evaluate soil conditions. Close coordination with the geotechnical consultant should be maintained to facilitate construction while providing safe excavations. Excavation safety is the sole responsibility

of the contractor.

Vehicular traffic, stockpiles, and equipment storage should be set back from the perimeter of excavations a minimum distance equivalent to a 1:1(horizontal to vertical) projection from the bottom of the excavation or 5 feet, whichever is greater. Once an excavation has been initiated, it should be backfilled as soon as practical. Prolonged exposure of temporary excavations may result in some localized instability. Excavations should be planned so that they are not initiated without sufficient time to shore/fill them prior to weekends, holidays, or forecasted rain.

It should be noted that any excavation that extends below a 1:1 (horizontal to vertical) projection of an existing foundation will remove existing support of the structure foundation. If requested, temporary shoring parameters will be provided.

4.1.5 Subgrade Preparation

In general, areas to receive compacted fill should be scarified to a minimum depth of 6 inches, brought to a near-optimum moisture condition (generally within optimum and 2 percent above optimum moisture content), and re-compacted per project requirements. Removal bottoms and areas to receive fill should be observed and accepted by the geotechnical consultant prior to subsequent fill placement.

4.1.6 Material for Fill

From a geotechnical perspective, the onsite soils are generally considered suitable for use as general compacted fill, provided they are screened of organic materials, construction debris and any oversized material (8 inches in greatest dimension). From a geotechnical perspective, soils with an organic content of less than 2 percent are generally considered suitable for re-use as compacted fill.

From a geotechnical viewpoint, import soils for general fill (i.e., non-retaining wall backfill) should consist of clean, granular soils of Very Low expansion potential (expansion index 20 or less based on ASTM D4829). Import for retaining wall backfill should meet the criteria outlined in the paragraph below. Source samples should be provided to the geotechnical consultant for laboratory testing a minimum of three working days prior to any planned importation.

Retaining wall backfill should consist of granular free draining soils (sand equivalent of 30 or greater as determined by ASTM D2419 or CTM 217). Soils should also be screened of organic materials, construction debris, and any material greater than 3 inches in maximum dimension. The onsite soils are not considered suitable for retaining wall backfill due to their fines content (i.e., silt and clay content). Therefore, import of suitable soils meeting the criteria outlined above will be required.

Aggregate base should conform to the requirements of Section 200-2 of the most recent version of the Standard Specifications for Public Works Construction ("Greenbook") for

untreated base materials and/or City of Ontario requirements. It is our understanding that the City of Ontario only allows crushed aggregate base (CAB) and crushed miscellaneous base (CMB) is not allowed.

4.1.7 Placement and Compaction of Fills

Material to be placed as fill should be brought to near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content) and recompacted to at least 90 percent relative compaction (per ASTM D1557). Moisture conditioning of site soils will be required in order to achieve adequate compaction. Drying and/or mixing the very moist soils will be required prior to reusing the materials in compacted fills. Soils are also present that will require additional moisture in order to achieve the required compaction.

The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used. In general, fill should be placed in uniform lifts not exceeding 8 inches in compacted thickness. Each lift should be thoroughly compacted and accepted prior to subsequent lifts. Generally, placement and compaction of fill should be performed in accordance with local grading ordinances and with observation and testing by LGC Geotechnical. Oversized material as previously defined should be removed from site fills.

During backfill of excavations, the fill should be properly benched into firm and competent soils of temporary backcut slopes as it is placed in lifts.

Aggregate base material should be compacted to a minimum of 95 percent relative compaction at or slightly above optimum moisture content per ASTM D1557. Subgrade below aggregate base should be compacted to a minimum of 90 percent relative compaction per ASTM D1557 at near-optimum moisture content (generally within optimum and 2 percent above optimum moisture content).

4.1.8 Trench and Retaining Wall Backfill and Compaction

The onsite soils may generally be suitable as trench backfill, provided the soils are screened of rocks and other material greater than 6 inches in diameter and organic matter. If trenches are shallow or the use of conventional equipment may result in damage to the utilities, sand having a sand equivalent (SE) of 30 or greater (per California Test Method [CTM] 217) may be used to bed and shade the pipes. Sand backfill within the pipe bedding zone may be densified by jetting or flooding and then tamping to ensure adequate compaction. Subsequent trench backfill should be compacted in uniform thin lifts by mechanical means to at least the recommended minimum relative compaction (per ASTM D1557).

Retaining wall backfill should consist of sandy soils as outlined in preceding Section 4.1.6. The contractor should anticipate the importing of soils for the required retaining wall backfill. The limits of select sandy backfill should extend a minimum ½ the height of the

retaining wall or the width of the heel (if applicable), whichever is greater, refer to Figures 3 and 4 (rear of text). Retaining wall backfill soils should be compacted in relatively uniform thin lifts to at least 90 percent relative compaction (per ASTM D1557). Jetting or flooding of retaining wall backfill materials should not be permitted.

A representative from LGC Geotechnical should observe, probe, and test the backfill to verify compliance with the project recommendations.

4.1.9 Shrinkage and Subsidence

Allowance in the earthwork volumes budget should be made for an estimated 0 to 5 percent reduction in volume of near-surface (upper approximate 5 feet) soils. It should be stressed that these values are only estimates and that an actual shrinkage factor would be extremely difficult to predetermine. Subsidence due to earthwork equipment is expected to be up to 0.1 feet. These values are estimates only and exclude losses due to removal of vegetation or debris. The effective change in volume of onsite soils will depend primarily on the type of compaction equipment, method of compaction used onsite by the contractor, and accuracy of the topographic survey.

Due to the combined variability in topographic surveys, inability to precisely model the removals and variability of on-site near-surface conditions, it is our opinion that the site will not balance at the end of grading. If importing/exporting a large volume of soils is not considered feasible or economical, we recommend a balance area be designated onsite that can fluctuate up or down based on the actual volume of soil. We recommend a "balance" area that can accommodate on the order of 5 percent (plus or minus) of the total grading volume be considered.

4.2 Preliminary Foundation Recommendations

Provided that the remedial grading recommendations provided herein are implemented, the site may be considered suitable for the support of the residential structures using a conventional or post-tensioned foundation system. Site soils are anticipated to be "Very Low" expansion potential (EI of 20 or less per ASTM D4829) and special design considerations from a geotechnical perspective is not required, however, this must be verified based on as-graded conditions. Please note that the following foundation recommendations are preliminary and must be confirmed by LGC Geotechnical.

Preliminary foundation recommendations are provided in the following sections. Recommended soil bearing and estimated settlement due to structural loads are provided in Section 4.3.

4.2.1 Provisional Conventional Foundation Design

Due to the very low expansion potential of the onsite soils, the foundation/structural engineer may design a conventional foundation system that is tied together based upon the anticipated dead and live loads (wind, seismic) that will be imparted by the

structure. The recommendations provided in the "Soil Bearing and Lateral Resistance" section may be utilized in the design of a rigid slab-on-grade conventional foundation designed in accordance with Section 1808 of the 2019 C.B.C.

4.2.2 Provisional Post-Tensioned Foundation Design Parameters

The foundation designer may use a modulus of vertical subgrade reaction (k) of 200 pounds per cubic inch (pounds per square inch per inch of deflection). This value is for a 1-foot by 1-foot square loaded area and should be adjusted by the structural designer for the area of the proposed footing using the following formula:

$k = 200 \times [(B+1)/2B]^2$
k = modulus of vertical subgrade reaction, pounds per cubic inch (pci)
B = foundation width (feet)

The moisture content of near surface fill soils should be maintained at the level it was placed up to the time of concrete placement.

4.2.3 Shallow Foundation Maintenance

The geotechnical parameters provided herein assume that if the areas adjacent to the foundation are planted and irrigated, these areas will be designed with proper drainage and adequately maintained so that ponding, which causes significant moisture changes below the foundation, does not occur. Our recommendations do not account for excessive irrigation and/or incorrect landscape design. Plants should only be provided with sufficient irrigation for life and not overwatered to saturate subgrade soils. Sunken planters placed adjacent to the foundation, should either be designed with an efficient drainage system or liners to prevent moisture infiltration below the foundation. Some lifting of the perimeter foundation beam should be expected even with properly constructed planters.

In addition to the factors mentioned above, future owners/property management personnel should be made aware of the potential negative influences of trees and/or other large vegetation. Roots that extend near the vicinity of foundations can cause distress to foundations. Future owners (and the owner's landscape architect) should not plant trees/large shrubs closer to the foundations than a distance equal to half the mature height of the tree or 20 feet, whichever is more conservative unless specifically provided with root barriers to prevent root growth below the building foundation.

It is the owner's responsibility to perform periodic maintenance during hot and dry periods to ensure that adequate watering has been provided to keep soil from separating or pulling back from the foundation. Future owners and property management personnel should be informed and educated regarding the importance of maintaining a constant level of soil-moisture. The owners should be made aware of the potential negative consequences of both excessive watering, as well as allowing potentially expansive soils to become too dry. Expansive soils can undergo shrinkage

during drying, and swelling during the rainy winter season, or when irrigation is resumed. This can result in distress to building structures and hardscape improvements. The builder should provide these recommendations to future owners and property management personnel.

4.2.4 Slab Underlayment Guidelines

The following is for informational purposes only since slab underlayment (e.g., moisture retarder, sand or gravel layers for concrete curing and/or capillary break) is unrelated to the geotechnical performance of the foundation and thereby not the purview of the geotechnical consultant. Post-construction moisture migration should be expected below the foundation. The foundation engineer/architect should determine whether the use of a capillary break (sand or gravel layer), in conjunction with the vapor retarder, is necessary or required by code. Sand layer thickness and location (above and/or below vapor retarder) should also be determined by the foundation engineer/architect.

4.3 Soil Bearing and Lateral Resistance

Provided our earthwork recommendations are implemented, an allowable soil bearing pressure of 2,000 pounds per square foot (psf) may be used for the design of footings having a minimum width of 12 inches and minimum embedment of 15 inches below lowest adjacent ground surface. This value may be increased by 400 psf for each additional foot of embedment and 200 psf for each additional foot of foundation width to a maximum value of 3,000 psf. A mat foundation a minimum of 6 inches below lowest adjacent grade may be designed for an allowable soil bearing pressure of 1,200 psf. These allowable bearing pressures are applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Bearing values indicated are for total dead loads and frequently applied live loads and may be increased by ⅓ for short duration loading (i.e., wind or seismic loads).

Soil settlement is a function of footing dimensions and applied soil bearing pressure. In utilizing the above-mentioned allowable bearing capacity, assumed structural loads, and provided our earthwork recommendations are implemented, foundation settlement due to structural loads is anticipated to be on the order of 1-inch or less and ½-inch over a horizontal span of 40 feet for total and differential settlement, respectively. Differential settlement should be anticipated between nearby columns or walls where a large differential loading condition exists Furthermore, seismic settlement due to dry-sand settlement is anticipated to be 0.5 inches or less. Differential seismic settlement may be taken as half of the seismic settlement (i.e., ¼-inch over a horizontal span of 40 feet).

Resistance to lateral loads can be provided by friction acting at the base of foundations and by passive earth pressure. For concrete/soil frictional resistance, an allowable coefficient of friction of 0.35 may be assumed with dead-load forces. An allowable passive lateral earth pressure of 270 psf per foot of depth (or pcf) to a maximum of 2,700 psf may be used for the sides of footings poured against properly compacted fill. Allowable passive pressure may be increased to 360 pcf (maximum of 3,600 psf) for short duration seismic loading. This passive pressure is applicable for level (ground slope equal to or flatter than 5H:1V) conditions only. Frictional resistance and

passive pressure may be used in combination without reduction. We recommend that the upper foot of passive resistance be neglected if finished grade will not be covered with concrete or asphalt. The provided allowable passive pressures are based on a factor of safety of 1.5 and 1.1 for static and seismic loading conditions, respectively. The structural designer should incorporate appropriate factors of safety and/or load factors in their design.

4.4 Lateral Earth Pressures and Retaining Wall Design Considerations

Lateral earth pressures are provided as equivalent fluid unit weights, in pound per square foot (psf) per foot of depth or pcf. The values for the active condition do not contain an appreciable factor of safety, so the retaining wall designer should apply the applicable factors of safety and/or load factors during design. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of soil over the wall footing.

Lateral earth pressures are presented in Table 2. Table 2 contains values for approved select sandy backfill for both drained and undrained conditions. Typically, retaining walls are designed for a drained condition with select sandy soils used as backfill. Should retaining walls have constraints limiting the ability to install or drain or appropriately outlet a drain, the values for undrained conditions should be used. Approved select sandy soils should have a sand equivalent of 30 or greater as determined by ASTM D2419.

The retaining wall designer should clearly indicate on the retaining wall plans if drains are required.

TABLE 3

Lateral Earth Pressures – Select Sand Backfill

Condition	**Equivalent Fluid Weight (pcf)**	
	Level Backfill	
	Approved Sandy Backfill Material - Drained	**Approved Sandy Backfill Material - Undrained**
Active	35	80

The drained equivalent fluid pressure values assume free-draining conditions and a drainage system will be installed and maintained to prevent the build-up of hydrostatic pressures. A relatively sandy backfill along with a subdrain pipe wrapped in drainage aggregate and filter fabric (e.g., “burrito” subdrain) properly outletted to a suitable discharge point is typically used for conventional retaining walls. Retaining wall structures should be provided with appropriate drainage and appropriately waterproofed. Typical conventional (i.e., backfilled) retaining wall drainage is shown in Figure 3. At similar sites, wall drainage through the face has been a preferred option. For this condition wall drainage is shown in Figure 4. If conditions other than

those assumed above are anticipated, the equivalent fluid pressure values should be provided on an individual-case basis by the geotechnical consultant.

Surcharge loading effects from any adjacent structures should be evaluated by the retaining wall designer. In general, structural loads within a 1:1 (horizontal to vertical) upward projection from the bottom of the proposed retaining wall footing will surcharge the proposed retaining structure. Uniform surcharges may be estimated using the applicable coefficient of lateral earth pressure using a rectangular distribution. A factor of 0.5 and 0.33 may be used for at-rest and active conditions, respectively. The retaining wall designer should contact the geotechnical engineer for any required geotechnical input in estimating any applicable surcharge loads.

If required, the retaining wall designer may use a seismic lateral earth pressure increment of 5 pcf for retaining walls up to a maximum of 10 feet in height with level backfill. This increment should be applied in addition to the applicable static lateral earth pressure using a triangular distribution with the resultant acting at H/3 in relation to the base of the retaining structure (where H is the retained height). For the restrained, at-rest condition, the seismic increment may be added to the applicable active lateral earth pressure (in lieu of the at-rest lateral earth pressure) when analyzing short duration seismic loading. Per Section 1803.5.12 of the 2019 CBC, the seismic lateral earth pressure is applicable to structures assigned to Seismic Design Category D through F for retaining wall structures supporting more than 6 feet of backfill height. This seismic lateral earth pressure is estimated using the procedure outlined by the Structural Engineers Association of California (Lew, et al, 2010). The provided seismic lateral earth pressure is for a level backfill condition and a maximum of 10 feet in height; a sloping backfill condition and greater retaining wall heights are not anticipated. However, if a sloping backfill condition or retaining walls greater than 10 feet in height are proposed, the retaining wall designer should contact the geotechnical engineer for specific seismic lateral earth pressure increments based on the configuration of the planned retaining wall structures.

For soil bearing and lateral resistance (friction coefficient and passive resistance) is provided in Section 4.3 “Soil Bearing and Lateral Resistance”. Earthwork considerations (temporary backcuts, backfill, compaction, etc.) for retaining walls are provided in Section 4.1 “Site Earthwork” and the subsequent earthwork related sub-sections.

4.5 Corrosivity to Concrete and Metal

Although not corrosion engineers (LGC Geotechnical is not a corrosion consultant), several governing agencies in Southern California require the geotechnical consultant to determine the corrosion potential of soils to buried concrete and metal facilities. We therefore present the results of our testing with regard to corrosion for the use of the client and other consultants, as they determine necessary.

Corrosion testing of near-surface bulk samples indicated a soluble sulfate content value of 78 ppm (less than 0.02 percent) and a chloride content of 100 ppm. Based on Caltrans Corrosion Guidelines (2015), soils are considered corrosive if the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater. Based on the test results, soils are not considered corrosive using Caltrans criteria.

Based on our laboratory test results of representative site soil samples, onsite soils should be considered as having a severity categorization of "not applicable" and are designated class "S0" per ACI 318, Table 19.3.1.1, sulfate. As a result, the minimum compressive strength of the concrete shall be 2,500 psi.

Laboratory testing may need to be performed at the completion of grading by the project corrosion engineer to further evaluate the as-graded soil corrosivity characteristics. Accordingly, revision of the corrosion potential may be needed, should future test results differ substantially from the conditions reported herein. The client and/or other members of the development team should consider this during the design and planning phase of the project and formulate an appropriate course of action.

4.6 Preliminary Asphalt Concrete Pavement Sections

For the purposes of these preliminary recommendations, we have selected a preliminary design R-value of 40 and calculated pavement sections for Traffic Indices of 5.5, 6.0 and 6.5. R-value testing of the street subgrade will need to be performed to confirm our preliminary testing results/assumptions once the streets have been graded to finish subgrade elevations and the final Traffic Index is determined by the Civil Engineer. It is our understanding that the City of Ontario requires that local streets have a minimum pavement section consisting of 4 inches of asphalt over 6 inches of crushed aggregate base (CAB).

TABLE 4

Preliminary Pavement Sections

Assumed Traffic Index	5.5	6.0	6.5
R -Value Subgrade	40	40	40
AC Thickness	4.0 inches	4.0 inches	4.0 inches
CAB Thickness	6.0 inches	6.0 inches	6.0 inches

Increasing the thickness of asphalt or adding additional base material will reduce the likelihood of the pavement experiencing distress during its service life. The above recommendations are based on the assumption that proper maintenance and irrigation of the areas adjacent to the roadway will occur through the design life of the pavement. Failure to maintain a proper maintenance and/or irrigation program may jeopardize the integrity of the pavement.

Earthwork recommendations regarding aggregate base and subgrade are provided in the previous Section "Site Earthwork" and the related sub-sections of this report.

4.7 Nonstructural Concrete Flatwork

Nonstructural concrete (such as flatwork, sidewalks, patios, etc.) has a potential for cracking due to changes in soil volume related to soil-moisture fluctuations. To reduce the potential for excessive cracking and lifting, concrete should be designed in accordance with the minimum guidelines outlined in Table 5 below. These guidelines will reduce the potential for irregular cracking and promote cracking along construction joints but will not eliminate all cracking or lifting. Thickening the concrete and/or adding additional reinforcement will further reduce cosmetic distress.

TABLE 5

Preliminary Geotechnical Parameters for Nonstructural Concrete Flatwork Placed on Very Low to Low Expansion Potential Subgrade

	Homeowner Sidewalks	**Private Drives**	**Patios/Entryways**	**City Sidewalk Curb and Gutters**
Minimum Thickness (in.)	4 (nominal)	4 (full)	4 (full)	City/Agency Standard
Presoaking	Wet down prior to placing	Wet down prior to placing	Wet down prior to placing	City/Agency Standard
Reinforcement	—	No. 3 at 24 inches on centers	No. 3 at 24 inches on centers	City/Agency Standard
Thickened Edge (in.)	—	8 x 8	—	City/Agency Standard
Crack Control Joints	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	Saw cut or deep open tool joint to a minimum of $^1/_3$ the concrete thickness	City/Agency Standard
Maximum Joint Spacing	5 feet	10 feet or quarter cut whichever is closer	6 feet	City/Agency Standard
Aggregate Base Thickness (in.)	—	—	—	City/Agency Standard

To reduce the potential for driveways to separate from the garage slab, the builder may elect to install dowels to tie these two elements together. Similarly, future homeowners should

consider the use of dowels to connect flatwork to the foundation.

4.8 Subsurface Water Infiltration

Recent regulatory changes have occurred that mandate storm water be infiltrated below grade rather than collected in a conventional storm drain system. Typically, a combination of methods are implemented to reduce surface water runoff and increase infiltration including; permeable pavements/pavers for roadways and walkways, directing surface water runoff to grass-lined swales, retention areas, and/or drywells, etc. It should be noted that collecting and concentrating surface water for the purpose of intentionally infiltrating below grade, conflicts with the geotechnical engineering objective of directing surface water away from slopes, structures and other improvements. The geotechnical stability and integrity of a site is reliant upon appropriately handling surface water. In general, we do not recommend that surface water be intentionally infiltrated into the subsurface soils.

Considering the results of the infiltration testing, if required, stormwater may be infiltrated into the subsurface soils at the depths tested below existing grade, using the values presented in Table 1 and the appropriate County of Riverside Flood Control (2011) safety factors. The Civil Engineer should determine the appropriate safety factor applicable to the proposed infiltration system. Results of field infiltration testing are provided in Appendix D.

The following should be considered for design of any required infiltration system:

- Water discharge from any infiltration systems should not occur within the zone of influence of foundation footings (column and load bearing wall locations). For preliminary purposes we recommend a minimum setback of 15 feet from the structural improvements, or the County recommended minimum setback, whichever is more conservative.
- An adequate setback distance between any infiltration facility and adjacent private property should be maintained.
- It may be prudent to provide an overflow system directly connected to the storm drain system in order to prevent failure of the infiltration system, either as a result of lower than anticipated infiltration and/or very high flow volumes. It should be noted that if pretreatment of runoff to remove debris, soil particles, etc., cannot be performed, design infiltration rates may need to be further reduced. Over time, siltation and plugging may reduce the infiltration rate and subsequent effectiveness of the infiltration system.
- Any designed infiltration system will require routine periodic maintenance.
- As with any systems that are designed to concentrate the surface flow and direct the water into the subsurface soils, some type of nuisance water and/or other water-related issues should be expected.

LGC Geotechnical should be provided with details for any planned required infiltration system early in the design process for geotechnical input.

4.9 Control of Surface Water and Drainage Control

From a geotechnical perspective, we recommend that compacted finished grade soils adjacent to proposed structures be sloped away from the proposed structures and towards an approved drainage device or unobstructed swale. Drainage swales, wherever feasible, should not be constructed within 5 feet of buildings. Where lot and building geometry necessitates that drainage swales be routed closer than 5 feet to structural foundations, we recommend the use of area drains together with drainage swales. Drainage swales used in conjunction with area drains should be designed by the project civil engineer so that a properly constructed and maintained system will prevent ponding within 5 feet of the foundation. Code compliance of grades is not the purview of the geotechnical consultant.

Planters with open bottoms adjacent to buildings should be avoided. Planters should not be designed adjacent to buildings unless provisions for drainage, such as catch basins, liners, and/or area drains, are made. Overwatering must be avoided.

4.10 Supplemental Field Explorations

It should be noted that a portion in the northwestern corner of the site was not accessible at the time of our field evaluation (see Figure 2). This area was not explored and did not receive testing for near surface organic rich soils. We recommend performing a future evaluation addressing the organic content of the area prior to the export of high organic "soils" from the site.

4.11 Geotechnical Plan Review

Project plans (grading, foundation, etc.) should be reviewed by this office prior to construction to verify that our geotechnical recommendations have been incorporated. Additional or modified geotechnical recommendations may be required based on the proposed layout.

4.12 Geotechnical Observation and Testing

The recommendations provided in this report are based on limited subsurface observations and geotechnical analysis. The interpolated subsurface conditions should be checked in the field during construction by a representative of LGC Geotechnical. Geotechnical observation and testing is required per Section 1705 of the 2019 California Building Code (CBC).

Geotechnical observation and/or testing should be performed by LGC Geotechnical at the following stages:

- During grading (removal bottoms, fill placement, etc.);
- During retaining wall backfill and compaction;
- During utility trench backfill and compaction;

- After presoaking building pad and other concrete-flatwork subgrades, and prior to placement of aggregate base or concrete;
- Preparation of pavement subgrade and placement of aggregate base;
- After building and wall footing excavation and prior to placement of steel reinforcement and/or concrete; and
- When any unusual soil conditions are encountered during any construction operation subsequent to issuance of this report.

5.0 LIMITATIONS

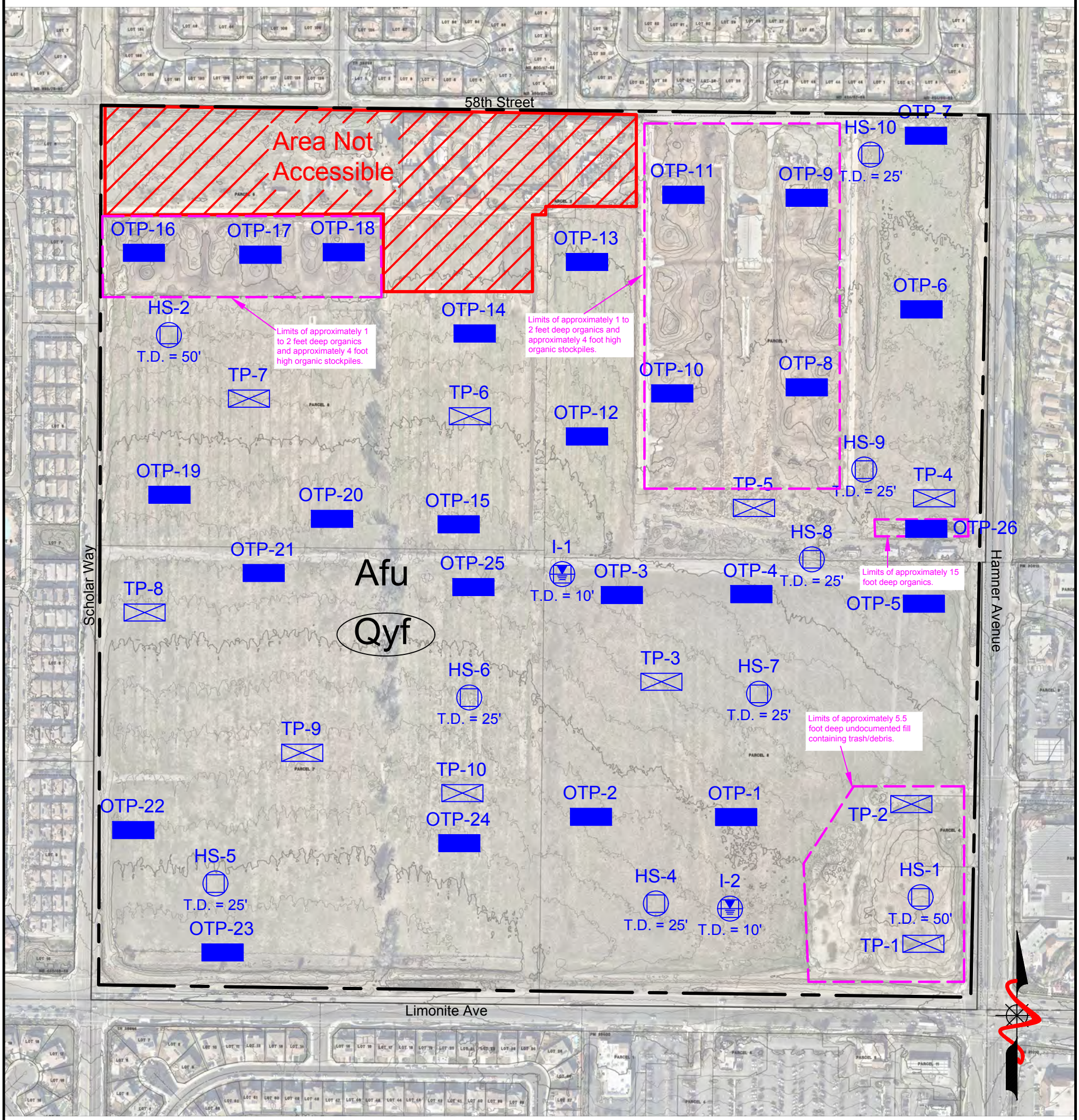
Our services were performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable soils engineers and geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

This report is based on data obtained from limited observations of the site, which have been extrapolated to characterize the site. While the scope of services performed is considered suitable to adequately characterize the site geotechnical conditions relative to the proposed development, no practical evaluation can completely eliminate uncertainty regarding the anticipated geotechnical conditions in connection with a subject site. Variations may exist and conditions not observed or described in this report may be encountered during grading and construction.

This report is issued with the understanding that it is the responsibility of the owner, or of his/her representative, to ensure that the information and recommendations contained herein are brought to the attention of the other consultants (at a minimum the civil engineer, structural engineer, landscape architect) and incorporated into their plans. The contractor should properly implement the recommendations during construction and notify the owner if they consider any of the recommendations presented herein to be unsafe, or unsuitable.

The findings of this report are valid as of the present date. However, changes in the conditions of a site can and do occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. The findings, conclusions, and recommendations presented in this report can be relied upon only if LGC Geotechnical has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site. This report is intended exclusively for use by the client, any use of or reliance on this report by a third party shall be at such party's sole risk.

In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and modification.



Legend

SCALE: 1"=300'

300' 0 300' 600'

Afu	Artificial Fill - Undocumented
Qyf	Quaternary Alluvial Fan/Eolian Deposits - Undifferentiated (Circled Where Buried)
----	Approximate Limits of This Report
OTP-26	Approximate Location of Organic Test Pit
TP-10	Approximate Location of Geotechnical Test Pit
HS-10 T.D. = 25'	Approximate Location of Hollow Stem Auger Boring by LGC Geotechnical, Inc, with Total Depth in Feet
I-2 T.D. = 10'	Approximate Location of Hollow Stem Auger Infiltration Boring by LGC Geotechnical, Inc, with Total Depth in Feet

LGC Geotechnical, Inc.

LGC Geotechnical, Inc.
131 Calle Iglesia, Ste. 200
San Clemente, CA 92672
TEL (949) 369-6141 FAX (949) 369-6142

FIGURE 2
Geotechnical Map

PROJECT NAME	TNHC - Eastvale
PROJECT NO.	21116-01
ENG. / GEOL.	BJE / BPG
SCALE	1" = 300'
DATE	June 2021

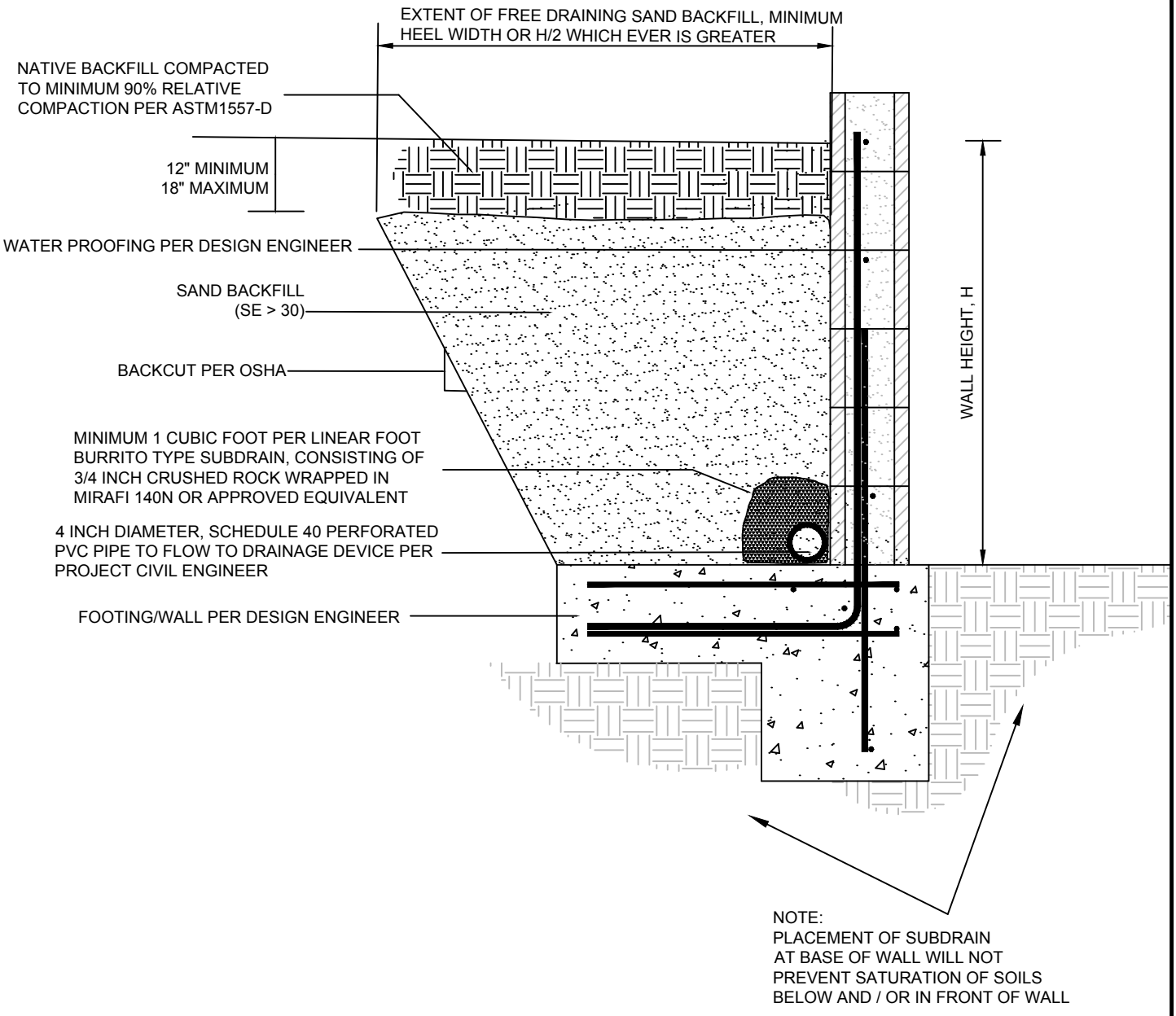


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FIGURE 3
Retaining Wall Backfill Detail Option 1

PROJECT NAME	The New Home Company - Eastvale
PROJECT NO.	21116-01
ENG./GEO.	BJE/BPG
SCALE	Not to Scale
DATE	June 2021

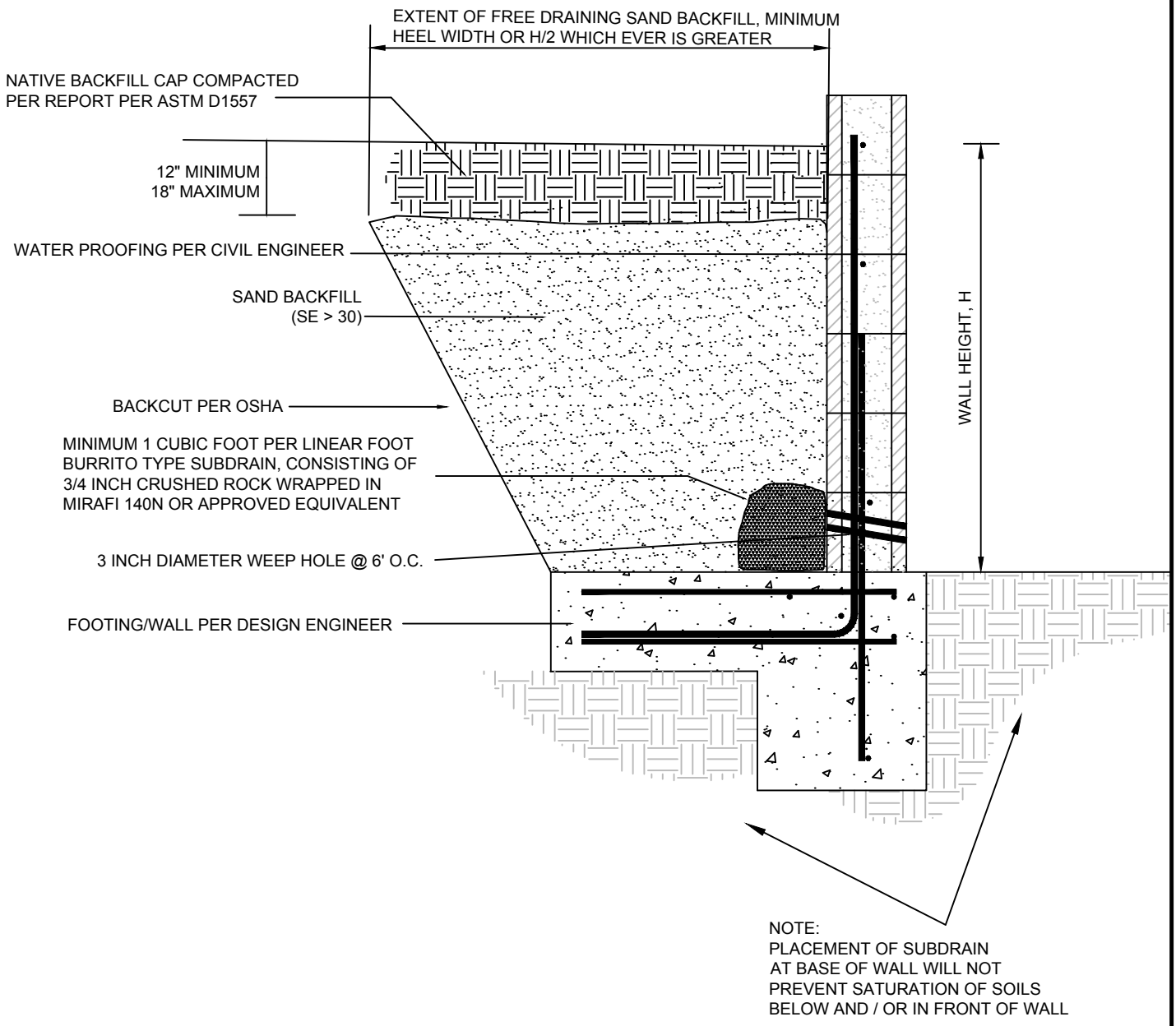

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FIGURE 4
Retaining Wall Backfill Detail Option 2

PROJECT NAME	The New Home Company - Eastvale
PROJECT NO.	21116-01
ENG./GEO.	BJE/BPG
SCALE	Not to Scale
DATE	June 2021

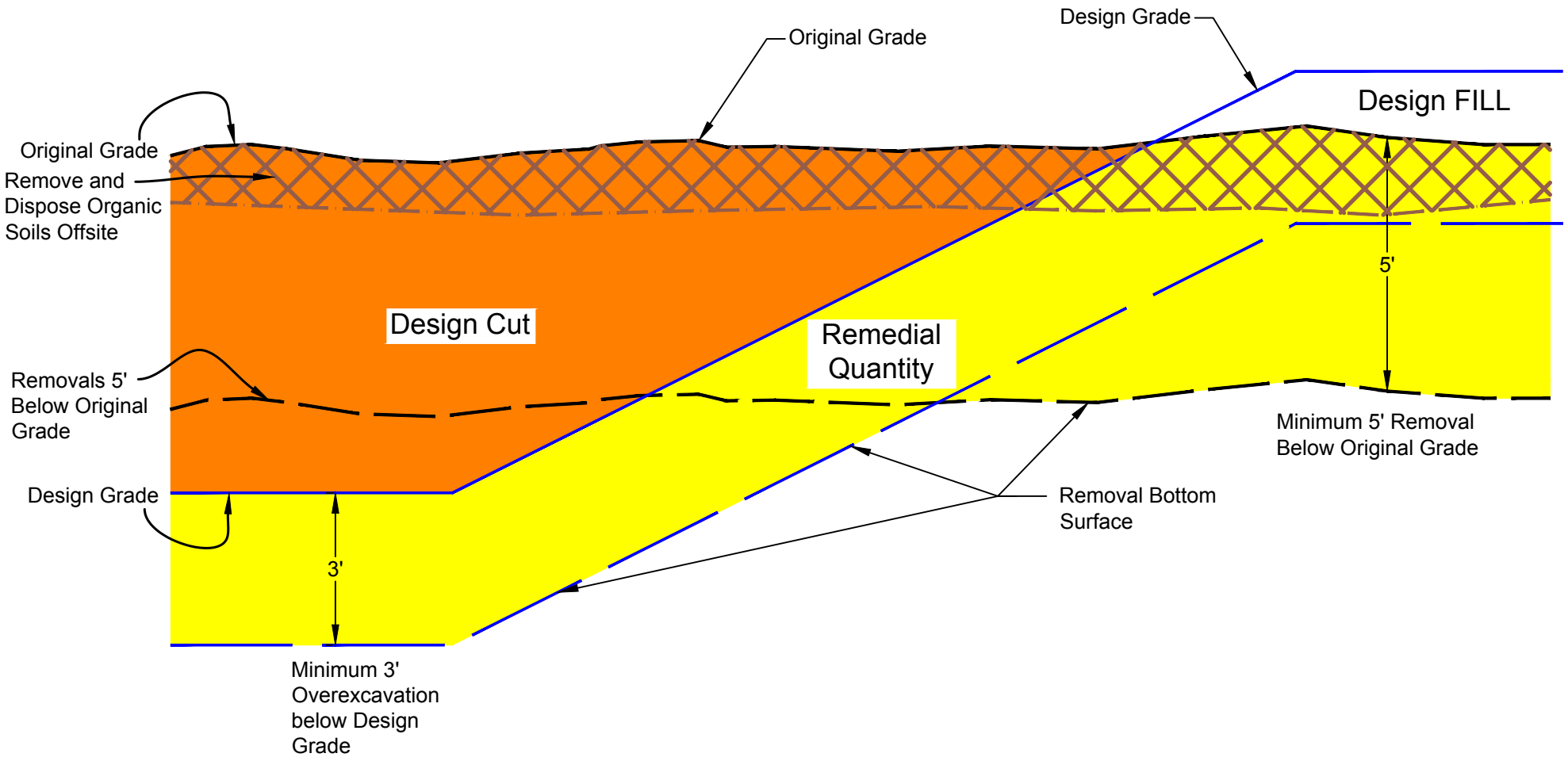

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FIGURE 5
Remedial Grading Diagram

PROJECT NAME	The New Home Company - Eastvale
PROJECT NO.	21116-01
ENG. / GEOL.	BJE/BPG
SCALE	NTS
DATE	June 2021

Appendix A
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APPENDIX A

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Appendix B
Boring, CPT & Geotechnical Trench Logs

Geotechnical Boring Log Borehole HS-1

Date: 5/21/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~671' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
670	0							**@ 0 to 7.5' - <u>Undocumented Artificial Fill (Afu)</u>**	
			R-1	18 20 28	116.7	4.2	SM	@2.5' Silty SAND: light brown, slightly moist, dense	
665	5	B-1	SPT-1	4 6 9		2.9	SP	@5' SAND: gray to brown, slightly moist, medium dense **@ 7.5' to 40' - <u>Quaternary Young Alluvial Fan deposits (Qyf)</u>**	
			R-2	4 9 12				@7.5' Silty SAND: brown, slightly moist, medium dense	
660	10		SPT-2	2 7 9		10.7	SM	@10' Silty SAND: olive brown, slightly moist, medium dense	
655	15		R-3	7 18 22	110.6	13.3		@15' Silty SAND: orangish olive brown, slightly moist, medium dense	
650	20		SPT-3	6 9 9		21.3	CL	@20' CLAY with sand: light brown, moist, medium dense	
645	25		R-4	8 15 22	115.0	17.4	SM	@25' Silty SAND w/ Clay: brown, moist, medium dense	
	30								

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THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-1

Date: 5/21/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~671' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
640	30		SPT-4	3 5 7		23.5	CL	@30' Sandy Lean CLAY: brown, moist, medium dense	
635	35		R-5	8 10 15	103.3	23.2	CL	@35' Sandy Lean CLAY: light brown, moist, very stiff	
								@ 40' to T.D. - <u>Quaternary Very Old Alluvial Channel deposits (Qvoa)</u>	
630	40		SPT-5	10 18 20		9.2	SC	@40' Clayey SAND: orange brown, moist, dense	
625	45		R-6	15 19 27	120.2	15.3	SM/ML	@45' Silty SAND/Sandy SILT: reddish brown, moist, dense	
620	50		SPT-6	16 19 25		9.1	SM	@50' Silty SAND: orangish brown, moist, very dense	
615	55							Total Depth = 51.5' Groundwater Not Encountered Backfilled with Cuttings on 5/21/2021	
	60								

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EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Geotechnical Boring Log Borehole HS-2

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~673' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 2

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							**@0' to 5' <u>Artificial Undocumented Fill</u>**	
670			R-1	9 11 18	104.1	5.4	SM	@2.5' Silty SAND with Gravel: light gray, slightly moist, medium dense	
								@5' to T.D. <u>Quaternary Young Alluvial Fan Deposits</u>	
	5	B-1	SPT-1	6 9 13		11.7	SM/ML	@5' Sandy SILT: light gray, slightly moist, very stiff	
665			R-2	12 15 21	118.8	14.1	SM	@7.5' Silty SAND: grayish light brown, slightly moist, medium dense	
	10		SPT-2	9 9 15		13.6		@10' Silty SAND: grayish light brown, moist, medium dense	
660									
	15		R-3	9 12 19	122.1	8.5		@15' Silty SAND: brown, moist, medium dense	
655									
	20		SPT-3	10 12 15		3.7	SP	@20' SAND with Gravel: grayish light brown, moist, dense, poorly graded	
650									
	25		R-4	12 15 19	99.7	14.9	SP/SM	@25' Silty CLAY transition to Silty SAND to Sandy SILT: olive gray to orangish brown, moist, verty stiff to medium dense	
645									
	30								

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▽	GROUNDWATER TABLE

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AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-2

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~673' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 2 of 2

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	30		SPT-4	9 9 12		20.2	SC	@30' Clayey SAND: orangish light brown, moist, medium dense	
640									
	35		R-5	9 12 20	111.7	16.9	SM	@35' Silty SAND to Sandy SILT: brown, moist, medium dense to very stiff	
635									
	40		SPT-5	12 15 21		19.6	CL	@40' Sandy Lean CLAY: brown, moist, dense	
630									
	45		R-6	27 25 50/4"	118.5	6.0	SP	@45' SAND: brown, moist, very dense, poorly graded	
625									
	50		SPT-6	8 12 15		28.3	CL	@50' CLAY w/ Sand: light brown, moist, hard	
620								Total Depth = 51.5' Groundwater Not Encountered Backfilled with Cuttings on 5/21/2021	
	55								
615									
	60								

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

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TEST TYPES:

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MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Geotechnical Boring Log Borehole HS-3

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~667' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
665	0	B-1	R-1	12 28 34	116.3	5.2	SM	**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D. Quaternary Young Fan Deposits (Qyf)** @2.5' Silty SAND: light gray, slightly moist, dense	
	5		SPT-1	10 12 15		6.8		@5' Silty SAND: light gray, slightly moist, dense	
660			R-2	10 15 19	103.2	3.2	SM	@7.5' Silty SAND: light gray, slightly moist, medium dense	
	10		SPT-2	7 9 11		2.1	SP	@10' SAND: grayish light brown, slightly moist, medium dense	
655									
	15		R-3	13 19 22	105.5	12.6	SC	@15' Clayey SAND: orangish light brown, slightly moist, dense	
650									
	20		SPT-3	8 12 16		22.2	ML	@20' Sandy SILT: light brown, moist, dense	
645									
	25		R-4	9 12 13	105.8	22.7	ML	@25' Sandy SILT: light brown, moist, medium dense	
640								Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/21/2021	
	30								

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AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-4

Date: 5/24/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~663' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By MJG

Elevation (ft)	Depth (ft)	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0						**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D. Quaternary Young Fan Deposits (Qyf)**	
660		R-1	8 8 13	106.7	1.9	SM	@2.5' Silty SAND: light brown, slightly moist, medium dense	
	5	SPT-1	6 7 9		4.0		@5' Silty SAND: grayish light brown, slightly moist, medium dense	
655		R-2	12 15 21	114.8	7.0	CL	@7.5' Sandy CLAY: grayish light brown, slightly moist, medium dense	
	10	SPT-2	6 9 11		12.3	SM	@10' Silty SAND: light brown, slightly moist, medium dense	
650								
	15	R-3	12 18 20	107.7	8.0	SC	@15' Clayey SAND: light brown, slightly moist, medium dense	
645								
	20	SPT-3	9 10 15		32	CL	@20' CLAY: light brown, moist, medium dense to very stiff	
640								
	25	R-4	12 50/5"	118.9	12.8	CL	@25' Sandy CLAY: brown, moist, hard to very dense	
635							Total Depth = 26' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	
	30							

B-1

LGC Geotechnical, Inc.

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED. THE DESCRIPTIONS PROVIDED ARE QUALITATIVE FIELD DESCRIPTIONS AND ARE NOT BASED ON QUANTITATIVE ENGINEERING ANALYSIS.

SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-5

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~659' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By MJG

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D. Quaternary Young Fan Deposits (Qyf)**	
655			R-1	9 14 17	108.3	2.9	SM	@2.5' Silty SAND: grayish light brown, slightly moist, medium dense	
	5	B-1	SPT-1	5 9 9		8.2	SM	@5' Silty SAND: light brown, slightly moist, medium dense	
			R-2	8 12 14	103.0	13.1	SC	@7.5' Clayey SAND: light brown, slightly moist, medium dense	
650	10		SPT-2	4 4 6		25.2	ML	@10' Sandy SILT: olive light brown, moist, medium dense to stiff	
645	15		R-3	27 38 50/4"	113.2	1.5	SP	@15' Poorly Graded SAND: light gray, slightly moist, very dense	
640	20		SPT-3	4 5 6		25.4	ML	@20' Sandy SILT: brown, moist, stiff to medium dense	
635	25		R-4	9 12 18	103.0	18.9	SC	@25' Clayey SAND: brown, moist, very stiff to medium dense	
630	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-6

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~665' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map |

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0							**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D.' Quaternary Young Fan Deposits (Qyf)**	
			R-1	7 9 9	115.3	5.1	ML	@2.5' SILT: light gray, slightly moist, medium dense	
660	5	B-1	SPT-1	5 7 9		6.4	SM	@5' Silty SAND: grayish light brown, slightly moist, medium dense	
			R-2	7 9 12				@7.5' Silty SAND: grayish light brown, slightly moist, medium dense	
655	10		SPT-2	12 18 21		2.3	SP	@10' SAND w/ Gravel: brown, moist, dense, poorly graded	
650	15		R-3	10 12 18	97.9	19.6	ML	@15' SILT: olive light brown, moist, very stiff	
645	20		SPT-3	8 10 10		21.4	ML	@20' Sandy SILT to SILT: olive brown, moist, very stiff	
640	25		R-4	12 15 19	90.5	25.5	ML	@25' Sandy SILT: orangish brown, moist, medium dense	
	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-7

Date: 5/24/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~668' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0						**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D.' Quaternary Young Fan Deposits (Qyf)**	
665		R-1	9 12 12	104.1	3.6	SM	@2.5' Silty SAND: light gray, slightly moist, medium dense	
	5	SPT-1	9 10 10		8.3		@5' Silty SAND: light gray, slightly moist, medium dense	
660		R-2	7 9 12	106.3	7.2	SM	@7.5' Silty SAND: light gray, slightly moist, medium dense	
	10	SPT-2	7 7 9		8.3		@10' Silty SAND to Sandy SILT: light brown, slightly moist, medium dense to very stiff	
655								
	15	R-3	12 18 22	111.4	5.3		@15' Silty SAND: light brown, slightly moist, medium dense	
650								
	20	SPT-3	5 7 9		24.4	CL	@20' Sandy CLAY: light brown, moist, very stiff	
645								
	25	R-4	9 12 18	95.4	27.1	CL	@25' CLAY: light brown, moist, very stiff	
640							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	
	30							

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-8

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~671' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map |

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
670	0							**@0' to 2.5' Undocumented Artificial Fill (Afu)** **@2.5' to T.D.' Quaternary Young Fan Deposits (Qyf)**	
			R-1	4 7 9	110.2	1.9	SM	@2.5' Silty SAND: light gray, slightly moist, medium dense	
665	5		SPT-1	4 4 7		8.6		@5' Silty SAND: light gray, slightly moist, medium dense	
			R-2	9 10 15	103.0	9.6	ML	@7.5' Sandy SILT: light gray, slightly moist, medium dense to very stiff	
660	10		SPT-2	5 7 9		10.6	CL	@10' CLAY: light gray, slightly moist, very stiff	
655	15		R-3	12 19 21	94.8	15.5	MH	@15' SILT: light gray, slightly moist, very stiff	
650	20		SPT-3	15 19 19		3.8	SP	@20' SAND: brownish light gray, slightly moist, dense, poorly graded	
645	25		R-4	14 15 19	115.3	15.2	SC/CL	@25' Clayey SAND transition to Silty SAND w/ Clay: brown, slightly moist, medium dense	
	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-9

Date: 5/24/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~676' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
675	0							**@0' to 5' Undocumented Artificial Fill (Afu)**	
			R-1	6 6 6	112.1	9.8	SM	@2.5' Silty SAND: light brown, slightly moist, loose	
								@5' to T.D.' Quaternary Young Eolian Deposits (Qye)	
670	5	B-1	SPT-1	4 6 9		8.2		@5' Silty SAND: grayish light brown, slightly moist, medium dense	
			R-2	9 13 17	118.1	12.3	SM/ML	@7.5' Silty SAND to Sandy SILT: gray, slightly moist, medium dense to very stiff	
665	10		SPT-2	5 7 9		17.0	ML	@10' Sandy SILT: brownish gray, slightly moist, very stiff	
660	15		R-3	12 18 21	120.4	8.1	SM	@15' SAND: brown, slightly moist, medium dense	
655	20		SPT-3	9 9 13		17.8	CL	@20' Sandy CLAY: orangish brown, moist, medium dense	
650	25		R-4	10 11 15	109.0	8.0	SM	@25' Silty SAND: orangish brown to brown, moist, medium dense to very stiff	
	30							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole HS-10

Date: 5/24/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~682' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
	0						**@0' to 5' Undocumented Artificial Fill (Afu)**	
680		R-1	9 7 9	105.6	8.2	SM	@2.5' Silty SAND: light brown, slightly moist, medium dense	
	5	SPT-1	4 7 7		13.0	SM	**@5' to T.D.' Quaternary Young Eolian Deposits (Qye)** @5' Silty SAND: grayish light brown, slightly moist, medium dense	
675		R-2	12 14 15	113.2	15.1	CL/SC	@7.5' CLAY/Clayey Silty SAND: grayish brown, moist, medium dense	
	10	SPT-2	3 5 5		25.8	ML	@10' Sandy SILT: orangish brown, moist, stiff	
670								
	15	R-3	13 16 21	115.4	6.0	SM	@15' Silty SAND: brown, moist, medium dense	
665								
	20	SPT-3	5 7 8		20.1	CL	@20' Sandy CLAY: brown, moist, medium dense to stiff	
660								
	25	R-4	9 15 21	111.7	8.9	SM	@25' Silty SAND: light brown, moist, very stiff to medium dense	
655							Total Depth = 26.5' Groundwater Not Encountered Backfilled with Cuttings on 5/24/2021	
	30							

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole I-1

Date: 5/21/2021 | **Drilling Company:** Choice Drilling

Project Name: Eastvale | **Type of Rig:** CME 95

Project Number: 21116-01 | **Drop:** 30" | **Hole Diameter:** 8"

Elevation of Top of Hole: ~668' MSL | **Drive Weight:** 140 pounds

Hole Location: See Geotechnical Map |

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
665	0							**@0 to .5' - Undocumented Artificial Fill (Afu)** **@.5 to T.D. - QuaternaryAlluvial Fan Deposits**	
660	5		SPT-1	4 6 7		3.9	SM	@7.5' SAND with Gravel: light gray, slightly moist, medium dense	
655	10							Total Depth = 10' Groundwater Not Encountered 3" Perforated Pipe Surrounded by Gravel Installed on 5/21/2021 and Presoaked on 5/24/2021 Backfilled with Cuttings on 5/25/2021	
650	15								
645	20								
640	25								
	30								

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Geotechnical Boring Log Borehole I-2

Date: 5/21/2021	**Drilling Company:** Choice Drilling
Project Name: Eastvale	**Type of Rig:** CME 95
Project Number: 21116-01	**Drop:** 30" **Hole Diameter:** 8"
Elevation of Top of Hole: ~663' MSL	**Drive Weight:** 140 pounds
Hole Location: See Geotechnical Map	Page 1 of 1

Logged By SHH
Sampled By SHH
Checked By BJE

Elevation (ft)	Depth (ft)	Graphic Log	Sample Number	Blow Count	Dry Density (pcf)	Moisture (%)	USCS Symbol	DESCRIPTION	Type of Test
660	0							**@0 to .5' - Undocumented Artificial Fill (Afu)** **@.5 to T.D. - QuaternaryAlluvial Fan Deposits**	
655	5		SPT-1	4 6 6		9.8	CL	@7.5' CLAY with Sand: light gray, slightly moist, medium dense	
650	10							Total Depth = 10' Groundwater Not Encountered 3" Perforated Pipe Surrounded by Gravel Installed on 5/21/2021 and Presoaked on 5/24/2021 Backfilled with Cuttings on 5/25/2021	
645	15								
640	20								
635	25								
	30								

LGC Geotechnical, Inc.

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SAMPLE TYPES:

B	BULK SAMPLE
R	RING SAMPLE (CA Modified Sampler)
G	GRAB SAMPLE
SPT	STANDARD PENETRATION TEST SAMPLE
▽	GROUNDWATER TABLE

TEST TYPES:

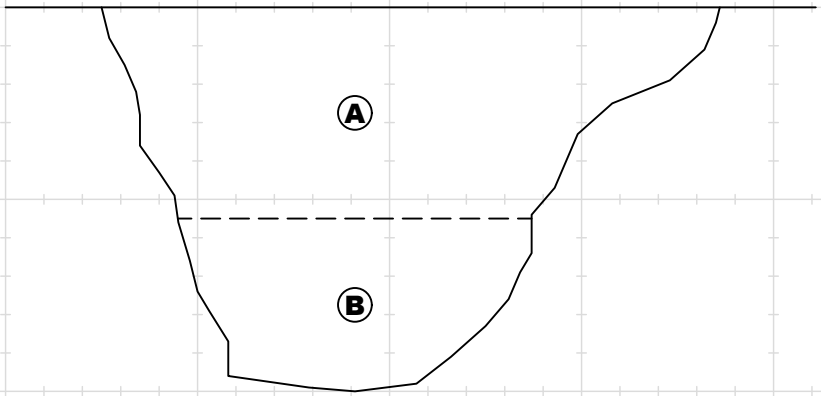
DS	DIRECT SHEAR
MD	MAXIMUM DENSITY
SA	SIEVE ANALYSIS
S&H	SIEVE AND HYDROMETER
EI	EXPANSION INDEX
CN	CONSOLIDATION
CR	CORROSION
AL	ATTERBERG LIMITS
CO	COLLAPSE/SWELL
RV	R-VALUE
-#200	% PASSING # 200 SIEVE

Last Edited: 5/27/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-1
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' to 5.5' - Artifical Fill - Undocumented (Afu) @ 0' - Silty SAND with gravel: gray, dry, loose to medium dense, trash down to 5' to 5.5' (nails, tarps, plastic, etc.)	Afu		G-1		
	B	@ 5.5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf) @ 5.5' - SAND: light brown to gray, slightly moist to moist, loose, fine grained	Qyf		G-2, G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

Last Edited: 6/9/2021

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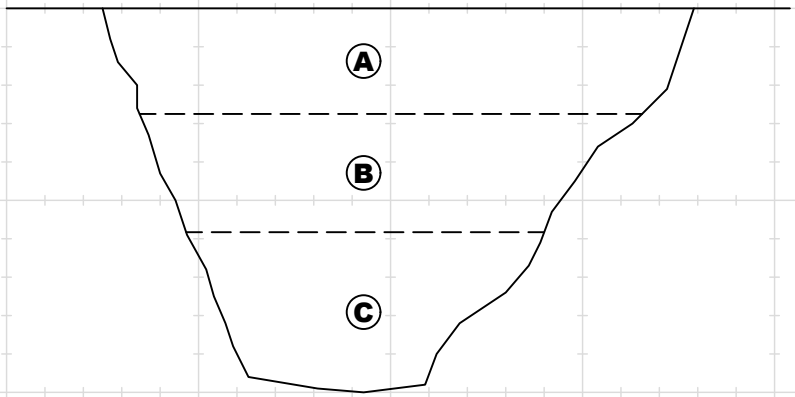
Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-2	LGC Geotechnical, Inc.
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 5.83' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND with gravel: gray, dry, loose in upper 1'-2' then medium dense beyond 2', rootlets, minor trash present, some cobbles (~3" diameter)	Afu	SM	G-1		
	B	@ 2.75' - SAND/SAND with Silt: gray to light brown, dry to slightly moist, medium dense, (~10") metal pipe running north to south through trench at ~3.25' below the surface			G-2, B-1		
		@ 5.83' to T.D. - Quaternary Young Eolian deposits (Qye)					
	C	@ 5.83' - Silty SAND/Sandy SILT: dark gray, moist, fine sand	Qye		G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 668 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

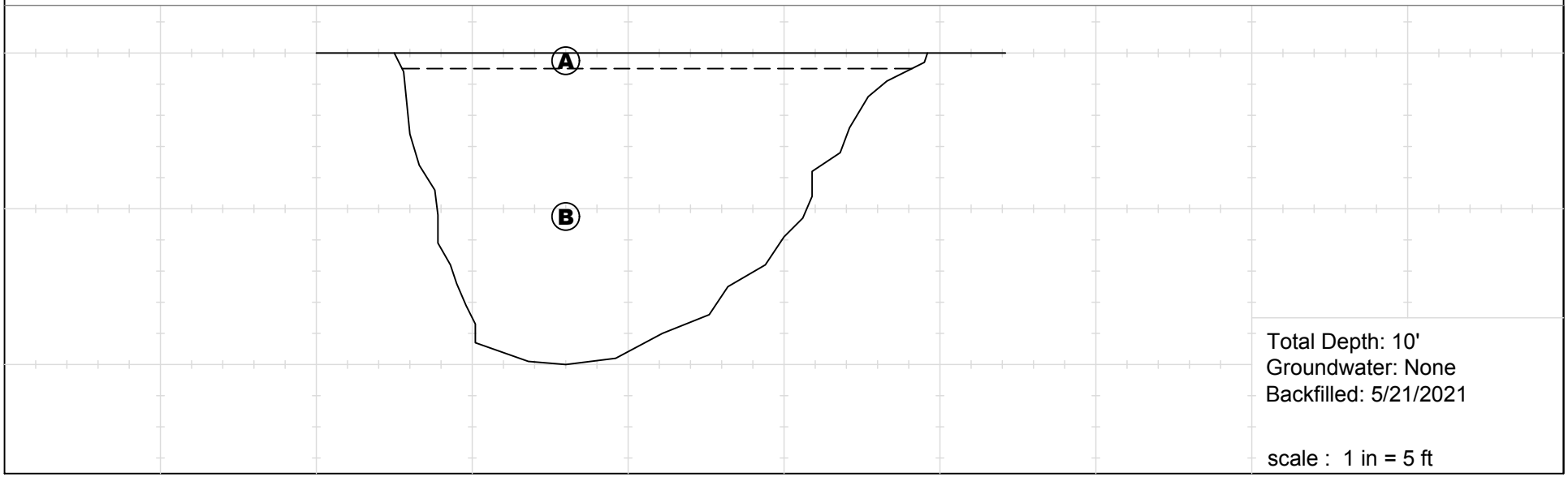
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: TP-3**
Project Number : 21116-01	**Date : 5/21/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' to .5' - Artificial Fill - Undocumented (Afu) @ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM			
	B	@ .5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf) @ 0.5' - Silty SAND to Silt: gray with white mottle, moist, varied density with depth, ~6" layer of softer moist sand at 7' grading into a stiffer silt.	Qyf		G-1, G-2, G-3, B-1		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 667 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



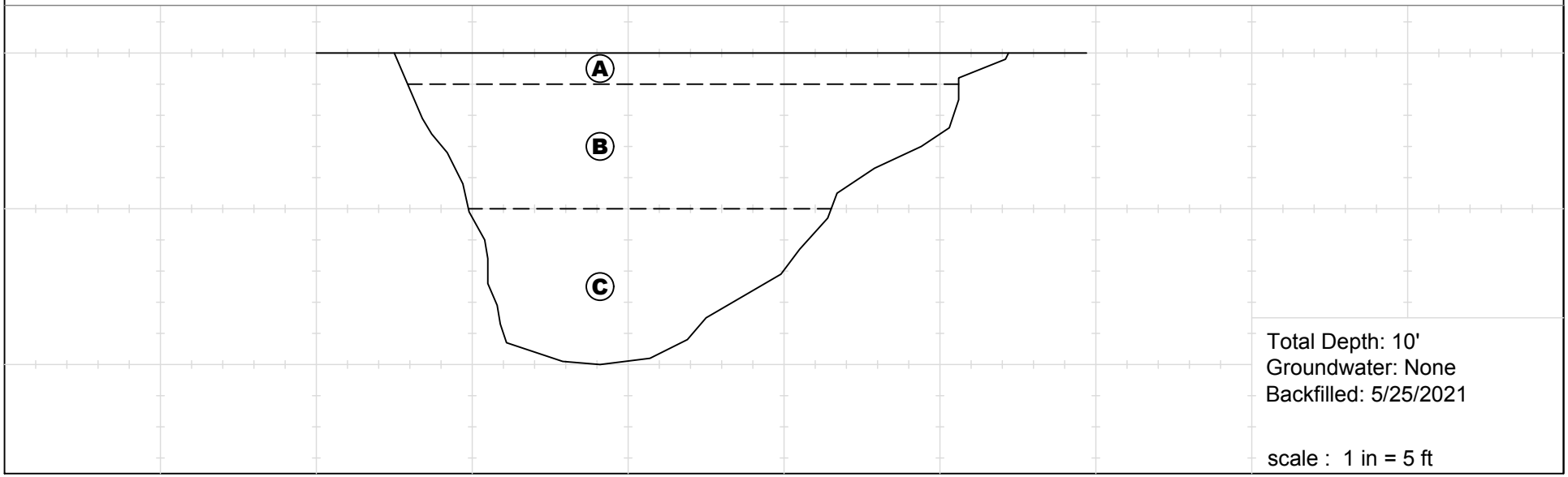
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: TP-4**
Project Number : 21116-01	**Date : 5/25/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 5' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND/ Sandy Silt: gray, slightly moist, loose, roots	Afu	SM			
	B	@ 1' Silty SAND: olive gray, slightly moist to moist, trash (tarp, rope, charcoal)			G-1, G-2		
		@ 5' to T.D. - Quaternary Young Eolian deposits (Qye)					
	C	@ 5' Silty SAND: olive gray to gray, slightly moist, medium dense, some cobbles	Qye		G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 677 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**

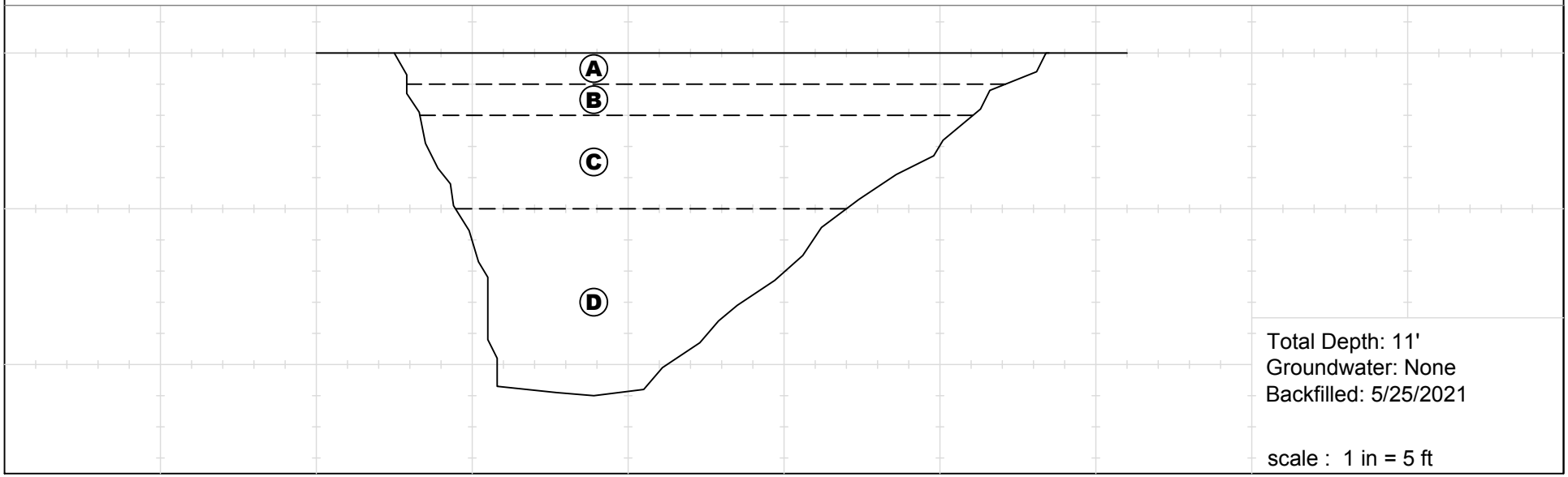


Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-5
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to T.D. - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Pure cow dung down to 6", mixed organics and silt past 6" to 1'. dry and loose overall	Afu		G-1		
	B	@ 1' - Silty SAND with gravel: olive gray, moist to slightly moist, medium dense, gravel, roots, grading into unit "C"		SM	G-2		
		@ 2' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	C	@ 2' - Silty SAND: olive gray, slightly moist, dense, minor gravel present	Qyf		G-3		
	D	@ 5' Silt: gray to olive gray, slightly moist, dense, some oxidation		ML	G-4		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 672 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**

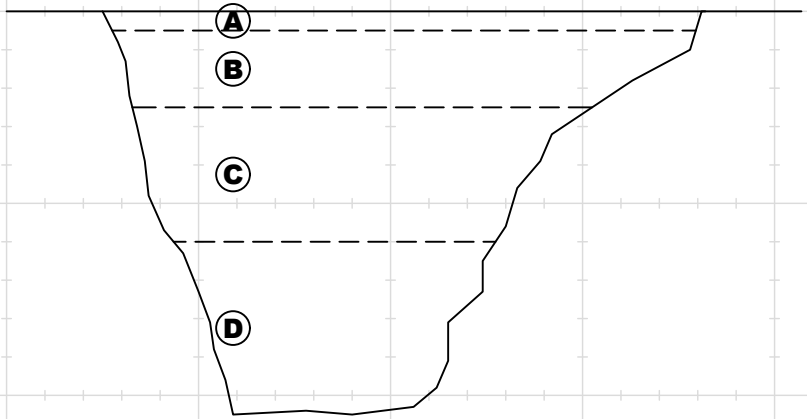


Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-6
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' to 2.5' - Artificial Fill - Undocumented (Afu) @ 0' - Silty SAND: light brown to light gray, dead vegetation, dry, loose	Afu	SM			
	B	@ 0.5' - Silty SAND: light gray, dry, charcoal pieces, medium dense, mixed gravel, disturbed appearance			G-1		
		@ 2.5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)	Qyf		G-2, B-5		
	C	@ 2.5' - Silty SAND: gray, dry to slightly moist (moisture increases with depth), medium dense					
				SP	G-3		
	D	@ 6' - SAND: gray sand transitioning into 6" thick layer of finer sand which is oxidized along the bottom, this grades back into the coarser gray sand, layer is friable, with visible moisture darkening material at 10' and the 6" finer sand layer					

GRAPHICAL REPRESENTATION BELOW: **Elevation : 672 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10.5'
Groundwater: None
Backfilled: 5/25/2021

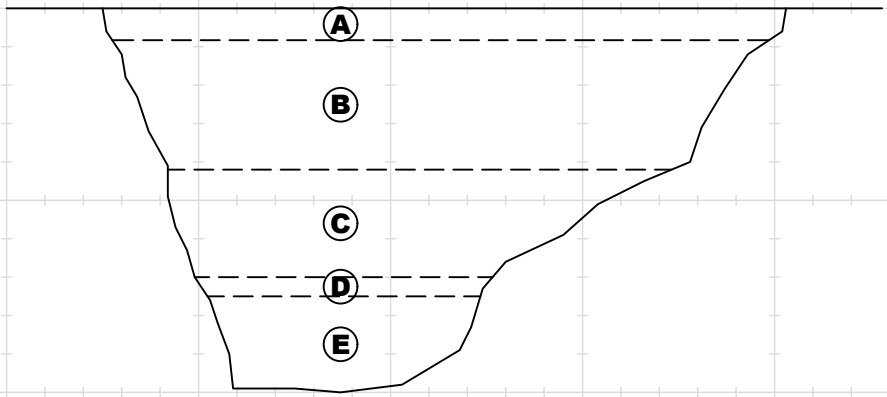
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-7
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 4.2' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND: light brown, gray, dry, loose, dead vegetation and roots	Afu	SM			
	B	@ 0.83' - SILT: white to gray, dry, slightly indurated, porous (~5%), rootlets		ML	G-1, B-1		
		@ 4.2' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)	Qyf		G-2		
	C	@ 4.2' - SILT: olive gray, few pores, roots, dry, medium dense					
	D	@ 7' - 6" thick clay seam - dark gray, slightly moist, low plasticity, medium dense		CL	G-3		
	E	@ 7.5' - Silty SAND: olive gray, slightly moist, less dense than previous layers		SM	G-4		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 671 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

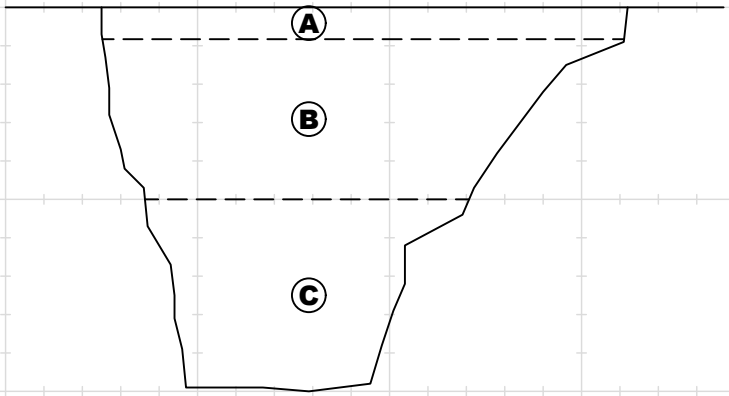
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-8
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 0.83' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND: light gray, dry, dead vegetation, rootlets	Afu				
		@ 0.83' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	B	@ 0.83' - SILT: gray, roots, mildly porous, dry, medium dense, grades into "C"	Qyf	ML	G-1		
	C	@ 5' - SAND: light gray, loose, dry, some caving, coarse grained with tightly packed layers of 3" rocks, rounded to subangular		SP	G-2, G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 666 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

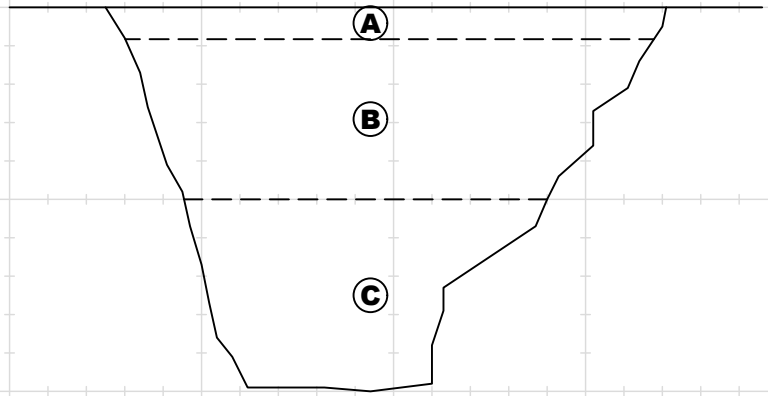
Last Edited: 6/10/2021

1703

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-9	
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 5' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - Silty SAND: light gray, dead vegetation, dry, loose	Afu	SM			
	B	@ 0.83' - SILT: light gray to brown, porous (~5-10%), charcoal pieces, rootlets, 10" concrete pipe filled with mud runs north to south through trench			G-1, G-2		
		@ 5' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	C	@ 5' - SILT: olive gray, slightly moist, dense to medium dense	Qyf	ML	G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 662 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

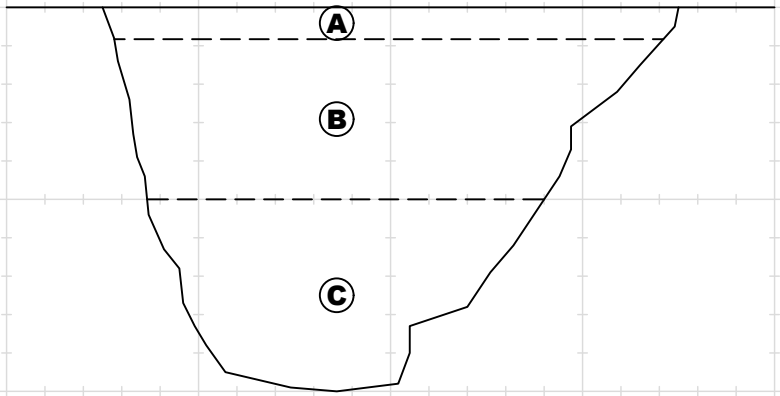
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: TP-10
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' to 0.83' - Artificial Fill - Undocumented (Afu)					
	A	@ 0' - SILT: light gray, dry, cracked, dead vegetation and roots, loose	Afu	ML			
		@ 0.83' to T.D. - Quaternary Young Alluvial Fan deposits (Qyf)					
	B	@ 0.83' - SILT: light gray, dry, slightly porous, minor rootlets, dense to medium dense, some mottled white mineralization & oxidation stains @ contact with "C"	Qyf		G-1, B-1		
	C	@ 5' - SILT - olive gray, light gray, dry to slightly moist, decrease in density from "B" iron oxide.			G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 662 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 10'
Groundwater: None
Backfilled: 5/26/2021

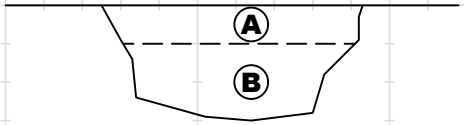
scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-1
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Sandy SILT: dry, gray brown, loose, rootlets, sand is fine grained	Afu	SM	G1		
	B	@ 1' - SILT: white, dry, medium dense to dense, minor rootlets		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 665 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

Last Edited: 6/9/2021

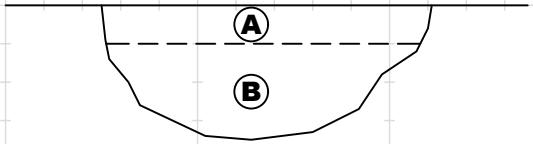
1706

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-2
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM	G-1		
	B	@ 1' - Silt: light gray, medium dense, dry		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 664 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

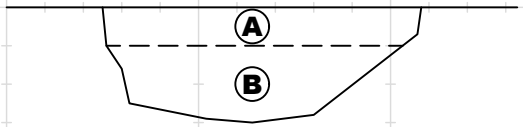
Last Edited: 6/9/2021

1707

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-3
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Silty SAND: light brown, loose, dry @ 1' - SILT: gray, medium dense, white mottle, minor rootlets, dry	Afu	SM ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 669 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

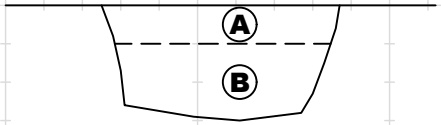
Last Edited: 6/9/2021

1708

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-4	LGC Geotechnical, Inc.
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM	G-1		
	B	@ 1' - SILT: gray, dry, medium dense, slightly porous (<5%)	Qyf	ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

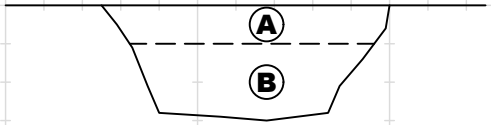
Last Edited: 6/9/2021

1709

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-5	
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: light brown, dry, loose, rootlets	Afu	SM	G-1		
	B	@ 1' - SILT: light gray, slightly moist, medium dense	Qyf	ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 672 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

Last Edited: 6/9/2021

1710

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-6
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

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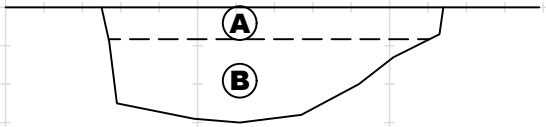
Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silty SAND: brown to gray, dry, loose	Afu	SM	G-1		
	B	@ 0.83' - Silty SAND: light gray brown, dry to slightly moist		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 679 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

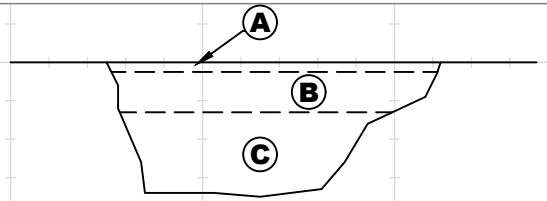
Last Edited: 6/9/2021

1711

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-7	LGC Geotechnical, Inc.
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B C	@ 0' - Asphalt section @ 0.25' - Compacted base @ 1.3' - SILT: moist, gray, dense	Afu	ML	G-1		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 682 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

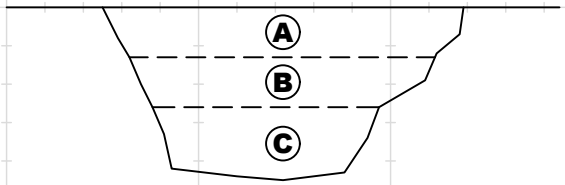
Last Edited: 6/9/2021

1712

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-8	
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Cow Dung					
	B	@ 1.3' - Silty SAND: olive gray, slightly moist, some white mineralization	Afu	SM	G-1, G-2		
	C	@ 2.6' - SAND with gravel: olive gray, slightly moist, medium dense	Qyf	SP	G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 676 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: OTP-9**
Project Number : 21116-01	**Date : 5/21/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

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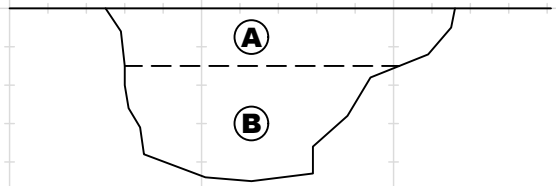
Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1.5' - SILT: olive gray, slightly moist, trace of gravel at bottom of trench	Afu	ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 680 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

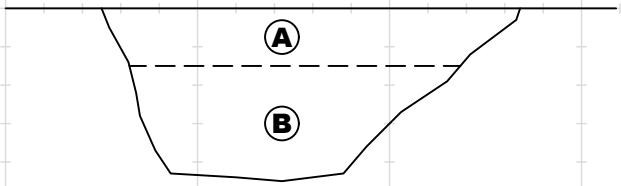
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-10
Project Number : 21116-01	Date : 5/21/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1.5' - Silty SAND: olive brown, dry to slightly moist, slight gravel presence, medium dense to dense	Afu	ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: N 80 E**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/21/2021

scale : 1 in = 5 ft

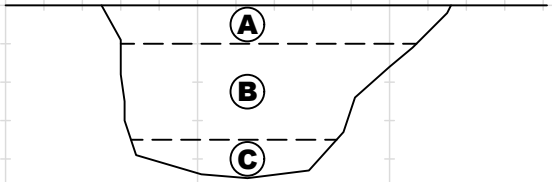
Last Edited: 6/9/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-11
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Cow Dung					
	B	@ 1' - SILT: olive gray, slightly moist, medium dense to dense	Afu	ML	G-1		
	C	@ 3.5' - SAND: gray, loose, slightly moist, gravel	Qyf	SP	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 679 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

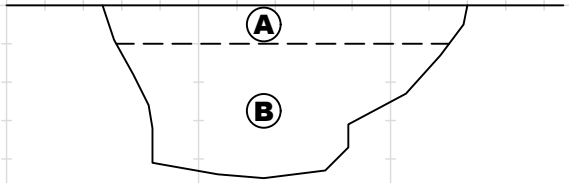
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-12
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Silty SAND: brown, dry, loose, rootlets @ 1' - SILT: dry, medium dense to dense, some gravel, slightly disturbed appearance	Afu	SM ML	G-1 G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4.5'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

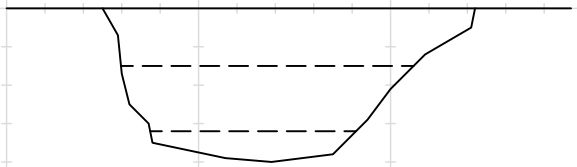
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-13
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
		@ 0' - Silty SAND: light brown, dry, loose, dead vegetation and rootlets		SM	G-1		
		@ 1.5' - Silty SAND: olive gray, dry, medium dense, some minor rootlets			G-2		
		@ 3.2' - SILT: gray, dry, medium dense	Qyf	ML	G-3		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

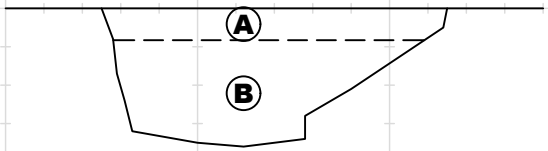
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: OTP-14**
Project Number : 21116-01	**Date : 5/25/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - SILT: light brown, dry, loose, rootlets, dead vegetation	Afu	ML			
	B	@ 0.83' - SILT: olive gray, dry to slightly moist, medium dense, roots to total depth, minor gravel presence			G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 673 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.6'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

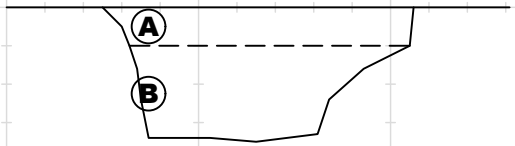
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-15
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Silt: light gray, dry to loose, roots/dead vegetation, grades into "B"	Afu	ML	G-1		
	B	@ 1' - SILT: light gray, dry, medium dense to dense, slightly porous, some random gravel fragments, bottom 10" grades into olive gray silt			G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

Last Edited: 6/10/2021

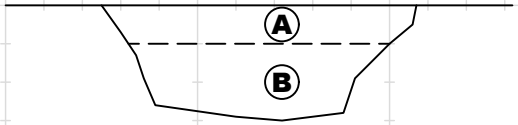
1720

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-16
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - Cow Dung	Afu		G-1		
	B	@ 1' - SILT: olive gray, slightly moist, dense		ML	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/25/2021

scale : 1 in = 5 ft

Last Edited: 6/10/2021

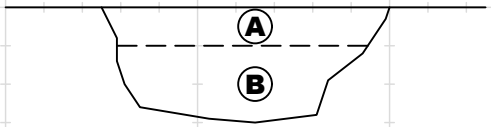
1721

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-17
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1' - SILT: olive gray, slightly moist, trace gravel, slightly porous	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 675 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/25/2021

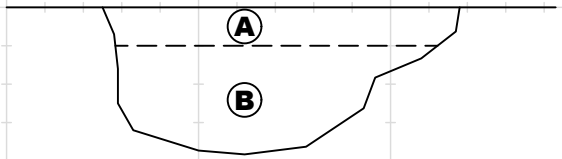
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-18
Project Number : 21116-01	Date : 5/25/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - Cow Dung @ 1' - SILT: olive gray, medium dense, slightly moist, upper 3' is disturbed, lower 10" appears undisturbed and free of debris	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 676 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.83'
Groundwater: None
Backfilled: 5/25/2021

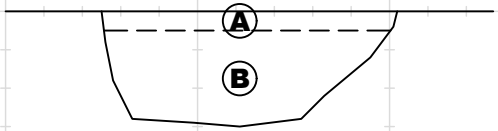
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: OTP-19**	LGC Geotechnical, Inc.
Project Number : 21116-01	**Date : 5/26/2021**	**Engineering Properties:**	
Equipment: Backhoe	**Location: See Geotechnical Map**		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, dry, loose, rootlets @ 0.5' - SILT: light gray, dry, medium dense to dense, slightly porous (5-10%)	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 670 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

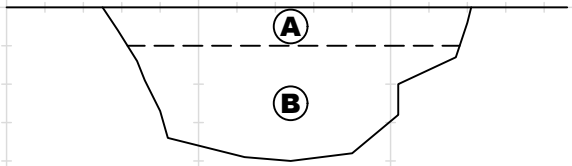
Last Edited: 6/10/2021

1724

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-20	
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' SILT: light gray, dry, loose, rootlets @ 1' SILT: light gray, dry, dense, slightly porous	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 668 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-21
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

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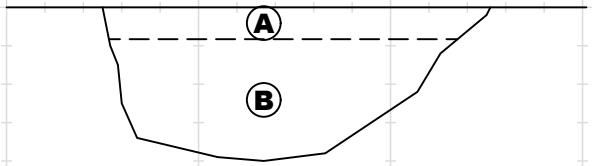
Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - SILT: light brown to gray, dry, loose, dead vegetation	Afu				
	B	@ 0.83' - SILT: gray to light gray, dry, medium dense, slightly porous (~10%) looks disturbed, rootlets		ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 667 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

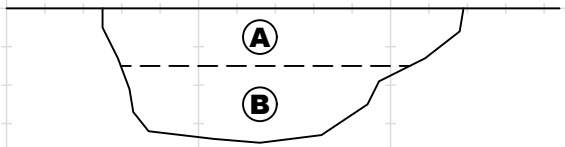
Last Edited: 6/10/2021

1726

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-22	
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A	@ 0' - SILT: light brown to gray, dry, loose, dead vegetation, roots	Afu		G-1		
	B	@ 1.5' - SILT: light gray, slightly moist, porous (5-10%)		SM	G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 661 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3.5'
Groundwater: None
Backfilled: 5/26/2021

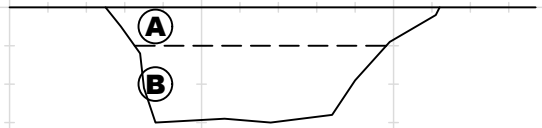
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-23
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, loose, dead grass, dry @ 1'- SILT: light gray, dry, dense, roots, porous (~10%)	Afu	SM	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 659 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

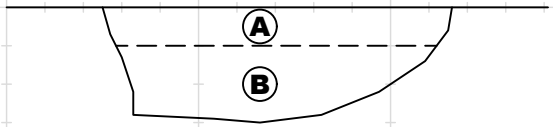
Last Edited: 6/10/2021

1728

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-24	
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:	
Equipment: Backhoe	Location: See Geotechnical Map		

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, dry, loose, cracked, roots @ 1' - SILT: light gray, dry, medium dense looks disturbed, porous (~5-10%), transitions to olive gray silt at 2' which is slightly moist.	Afu	SM	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 660 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

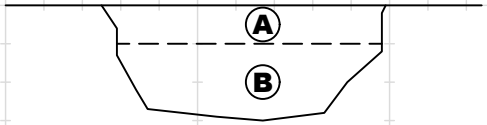
Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	**Logged By: MJG**	**Trench No: OTP-25**
Project Number : 21116-01	**Date : 5/26/2021**	**Engineering Properties:**
Equipment: Backhoe	**Location: See Geotechnical Map**	

LGC Geotechnical, Inc.

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: light gray, dry, cracked, loose @ 1' - SILT: light gray, dry, dense, slightly disturbed from 1'-2', past 2' begins to transition to an undisturbed olive gray silt which persists to the bottom of the trench.	Afu	ML	G-1, G-2		

GRAPHICAL REPRESENTATION BELOW: **Elevation : 666 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 3'
Groundwater: None
Backfilled: 5/26/2021

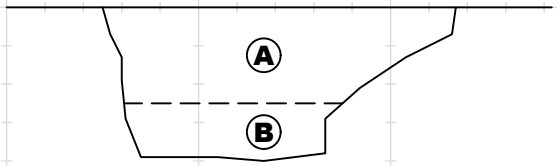
scale : 1 in = 5 ft

Last Edited: 6/10/2021

Project Name: TNHC - Eastvale	Logged By: MJG	Trench No: OTP-26
Project Number : 21116-01	Date : 5/26/2021	Engineering Properties:
Equipment: Backhoe	Location: See Geotechnical Map	

Geologic Attitudes	Unit	SOIL DESCRIPTION:	GEOLOGIC UNIT	USCS	SAMPLE No	MOISTURE (%)	DRY DENSITY (PCF)
	A B	@ 0' - SILT: dry, gray, loose @ 2.5' - Cow Dung, farmer stated there is a stockpile of cow dung 15' deep beyond this point	Afu	ML			

GRAPHICAL REPRESENTATION BELOW: **Elevation : 674 ' MSL** **Surface Slope: 0 deg.** **Trend: E-W**



Total Depth: 4'
Groundwater: None
Backfilled: 5/26/2021

scale : 1 in = 5 ft

Last Edited: 6/10/2021

Appendix C
Laboratory Test Results

APPENDIX C

Laboratory Test Results

The laboratory testing program was directed towards providing quantitative data relating to the relevant engineering properties of the site soils. Samples considered representative of site conditions were tested in general accordance with American Society for Testing and Materials (ASTM) procedure and/or California Test Methods (CTM), where applicable. The following summary is a brief outline of the test type and a table summarizing the test results.

Moisture and Density Determination Tests: Moisture content (ASTM D2216) and dry density determinations (ASTM D2937) were performed on driven samples obtained from the test borings. The results of these tests are presented in the boring logs. Where applicable, only moisture content was determined from undisturbed or disturbed samples.

Grain Size Distribution/Fines Content: Representative samples were dried, weighed, and soaked in water until individual soil particles were separated (per ASTM D421) and then washed on a No. 200 sieve (ASTM D1140). Where applicable, the portion retained on the No. 200 sieve was dried and then sieved on a U.S. Standard brass sieve set in accordance with ASTM D6913 (sieve).

Sample Location	Description	% Passing # 200 Sieve
I-2	Clay with Sand	83

Atterberg Limits: The liquid and plastic limits ("Atterberg Limits") were determined per ASTM D4318 for engineering classification of fine-grained material and presented in the table below. The USCS soil classification indicated in the table below is based on the portion of sample passing the No. 40 sieve and may not necessarily be representative of the entire sample. The plot is provided in this Appendix.

Sample Location	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	USCS Soil Classification
HS-8 @ 7.5 ft	32	21	11	CL

Consolidation: One consolidation test was performed per ASTM D2435. A sample (2.4 inches in diameter and 1-inch in height) was placed in a consolidometer and increasing loads were applied. The sample was allowed to consolidate under "double drainage" and total deformation for each loading step were recorded. The percent consolidation for each load step was recorded as the ratio of the amount of vertical compression to the original sample height. The consolidation pressure curve is provided in this Appendix.

Collapse/Swell Potential: One collapse test was performed per ASTM D4546. A sample (2.4 inches in diameter and 1-inch in height) was placed in a consolidometer and loaded to the approximate in-situ effective stress. The curve is presented in this Appendix.

Maximum Density Tests: The maximum dry density and optimum moisture content of a typical material was determined in accordance with ASTM D1557. The result of this test is presented in the table below:

Sample Location	Sample Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
HS-3 @ 0-5 ft	Brown Silty Sand	125.0	8.5

Expansion Index: The expansion potential of selected representative samples was evaluated by the Expansion Index Test per ASTM D4829.

Sample Location	Expansion Index	Expansion Potential*
HS-2 @ 0-5 ft	11	Very Low

* Per ASTM D4829

Soluble Sulfates: The soluble sulfate content of a select sample was determined by standard geochemical methods (CTM 417). The test result is presented in the table below.

Sample Location	Sulfate Content, ppm
HS-1 @ 0-5 ft	78

Chloride Content: Chloride content was tested per CTM 422. The results are presented below.

Sample Location	Chloride Content, ppm
HS-1 @ 0-5 ft	100

Organic Matter Content of Soils: Organic matter content tests were performed in general accordance with ASTM D 2974 (Test Methods A & C). The results are presented in this Table 6.

TP-1	
Depth (ft)	% Organics
6'-9'	0.3

TP-2	
Depth (ft)	% Organics
4'-5.17'	0.2

TP-5	
Depth (ft)	% Organics
0.5'-1.5'	16.3
1.5'-2'	0.9
3'-5'	0.8

TP-9	
Depth (ft)	% Organics
1'-2'	1.4
3'-4'	0.5
7'-8'	0.4

OTP-1	
Depth (ft)	% Organics
0'-1'	6.5
1'-3'	0.4

OTP-2	
Depth (ft)	% Organics
0'-1'	12.9
1'-3'	0.5

OTP-3	
Depth (ft)	% Organics
0'-1'	7.0
1'-3'	0.7

OTP-4	
Depth (ft)	% Organics
0'-0.5'	15.8
0.5'-3'	0.4

OTP-5	
Depth (ft)	% Organics
0'-1'	8.2
1'-3'	0.7

OTP-6	
Depth (ft)	% Organics
0'-0.83'	8.8
0.83'-3'	0.8

OTP-7	
Depth (ft)	% Organics
3.5'	0.8

OTP-8*	
Depth (ft)	% Organics
0'-1'	>10
1.5'	2.3
2'-2.6'	0.5
3'-4.5'	0.2

OTP-9	
Depth (ft)	% Organics
0'-1'	1.5
1'-3'	0.6

OTP-10*	
Depth (ft)	% Organics
0'-1'	>10
1.5'-2'	1.2
2'-4.5'	0.5

OTP-11*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	0.9
3.5'-4.5'	0.1

OTP-12	
Depth (ft)	% Organics
0'-1'	10.0
1'-3.5'	0.9

OTP-13	
Depth (ft)	% Organics
0'-1'	8.7
1'-3'	0.6
4'	0.5

OTP-14*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	0.6
2'-3'	0.5

OTP-15	
Depth (ft)	% Organics
0'-1'	3.0
1'-3.5'	0.6

OTP-16	
Depth (ft)	% Organics
0'-1'	33.2
1'-3'	1.2

OTP-17*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.2
2'-3'	1.3

OTP-18*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.2
3'-3.5'	0.8

OTP-19	
Depth (ft)	% Organics
1'-2'	1.4
2'-3'	0.9

OTP-20	
Depth (ft)	% Organics
1'-2'	0.9
2'-4'	0.6

OTP-21*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.0
2'-4'	0.5

OTP-22*	
Depth (ft)	% Organics
0'-1'	>10
1'-1.5'	2.8
2'-3'	0.7

OTP-23*	
Depth (ft)	% Organics
0'-1'	>10
1'-2'	1.1
2'-3'	0.8

OTP-24	
Depth (ft)	% Organics
1'-2'	0.8
2'-3'	0.4

OTP-25	
Depth (ft)	% Organics
1'-2'	0.8
2'-3'	0.9

Legend

> 5%	Recommended for Offsite Removal
2 to 5%	Recommended for Mixing/Blending with "Clean" Soils
< 2%	"Clean" Soils

Note: * Indicates Soil Visually Confirmed to Have greater than 10% Organics at 0'-1'

LGC Geotechnical, Inc.

Table 6
Summary of Measured Organic Content vs Depth of Sample

Project Name	TNHC - Eastvale
Project Number	21116-01
ENG./GEOL.	BJE/BPG
Date	Jun-21

Appendix D
Infiltration Test Data

Infiltration Test Data Sheet

LGC Geotechnical, Inc
131 Calle Iglesia Suite 200, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: Eastvale
Project Number: 21116-01
Date: 5/25/2021
Boring Number: I-1

Test hole dimensions (if circular)	
Boring Depth (feet)*:	10
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

*measured at time of test

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

*Pre-Test (Sandy Soil Criteria)**

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Greater Than or Equal to 0.5 feet (yes/no)
1	9:14	9:39	25.0	7.53	9.10	1.57	Yes
2	9:40	10:05	25.0	7.65	9.33	1.68	Yes

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight, and then obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25 inches

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Observed Infiltration Rate(in/hr)
1	10:06	10:16	10.0	7.90	8.45	0.55	3.3
2	10:17	10:27	10.0	7.82	8.33	0.51	2.9
3	10:28	10:38	10.0	8.11	8.67	0.56	3.8
4	10:39	10:49	10.0	8.00	8.53	0.53	3.3
5	10:50	11:00	10.0	7.85	8.47	0.62	3.7
6	11:01	11:11	10.0	7.91	8.52	0.61	3.8

Observed Infiltration Rate (Does Not Include Any Factor of Safety) **3.8**

Sketch:

Notes:

Infiltration Test Data Sheet

LGC Geotechnical, Inc
131 Calle Iglesia Suite 200, San Clemente, CA 92672 tel. (949) 369-6141

Project Name: Eastvale
Project Number: 21116-01
Date: 5/25/2021
Boring Number: I-2

Test hole dimensions (if circular)	
Boring Depth (feet)*:	10
Boring Diameter (inches):	8
Pipe Diameter (inches):	3

*measured at time of test

Test pit dimensions (if rectangular)	
Pit Depth (feet):	
Pit Length (feet):	
Pit Breadth (feet):	

*Pre-Test (Sandy Soil Criteria)**

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval (min)	Initial Depth to Water (feet)	Final Depth to Water (feet)	Total Change in Water Level (feet)	Greater Than or Equal to 0.5 feet (yes/no)
1	7:03	7:28	25.0	7.56	7.82	0.26	No
2	7:29	7:54	25.0	7.63	7.89	0.26	No

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight, and then obtain at least twelve measurements per hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25 inches

Main Test Data

Trial No.	Start Time (24:HR)	Stop Time (24:HR)	Time Interval, Δt (min)	Initial Depth to Water, D_o (feet)	Final Depth to Water, D_f (feet)	Change in Water Level, ΔD (feet)	Observed Infiltration Rate(in/hr)
1	8:50	9:20	30.0	7.60	7.99	0.39	0.7
2	9:21	9:51	30.0	7.63	8.00	0.37	0.6
3	9:52	10:22	30.0	7.59	7.91	0.32	0.5
4	10:23	10:53	30.0	7.61	7.95	0.34	0.6
5	10:54	11:24	30.0	7.65	7.93	0.28	0.5
6	11:25	11:55	30.0	7.60	7.93	0.33	0.5
7	11:56	12:26	30.0	7.64	7.95	0.31	0.5
8	12:27	12:57	30.0	7.65	7.94	0.29	0.5
9	12:58	13:28	30.0	7.61	7.96	0.35	0.6
10	13:29	13:59	30.0	7.58	7.89	0.31	0.5
11	14:00	14:30	30.0	7.58	7.91	0.33	0.5
12	14:31	15:01	30.0	7.62	7.95	0.33	0.6

Observed Infiltration Rate (Does Not Include Any Factor of Safety) **0.6**

Sketch:

Notes:

Appendix E
General Earthwork and Grading Specifications for Rough Grading

General Earthwork and Grading Specifications for Rough Grading

1.0 General

1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ a qualified Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to confirm that the attained level of compaction is being accomplished as specified. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the project plans and specifications. The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of “equipment” of work and the estimated quantities of daily earthwork

contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the
Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate personnel will be available for observation and testing. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified. It is the contractor's sole responsibility to provide proper fill compaction.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed. The contractor is responsible for all hazardous waste relating to his work. The Geotechnical Consultant does not have expertise in this area. If hazardous waste is a concern, then the Client should acquire the services of a qualified environmental assessor.

2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be over-excavated as specified in the following section. Scarification shall continue until soils are broken down and free of oversize material and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Over-excavation

In addition to removals and over-excavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be over-excavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise over-excavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of the geotechnical consultant. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.5 Compaction Testing

Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than
5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 The Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over

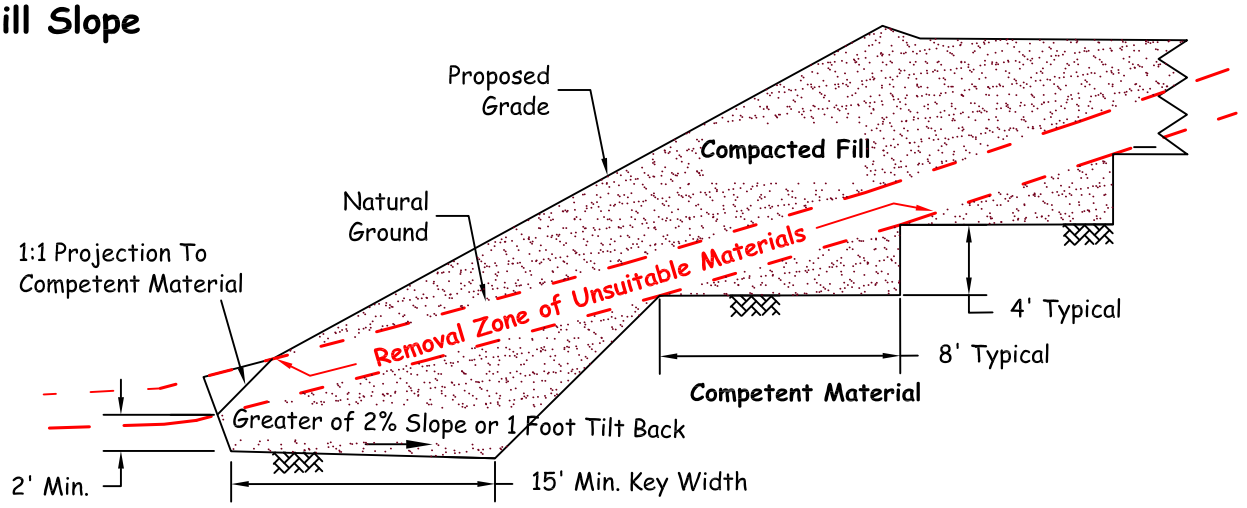
the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

7.3 The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

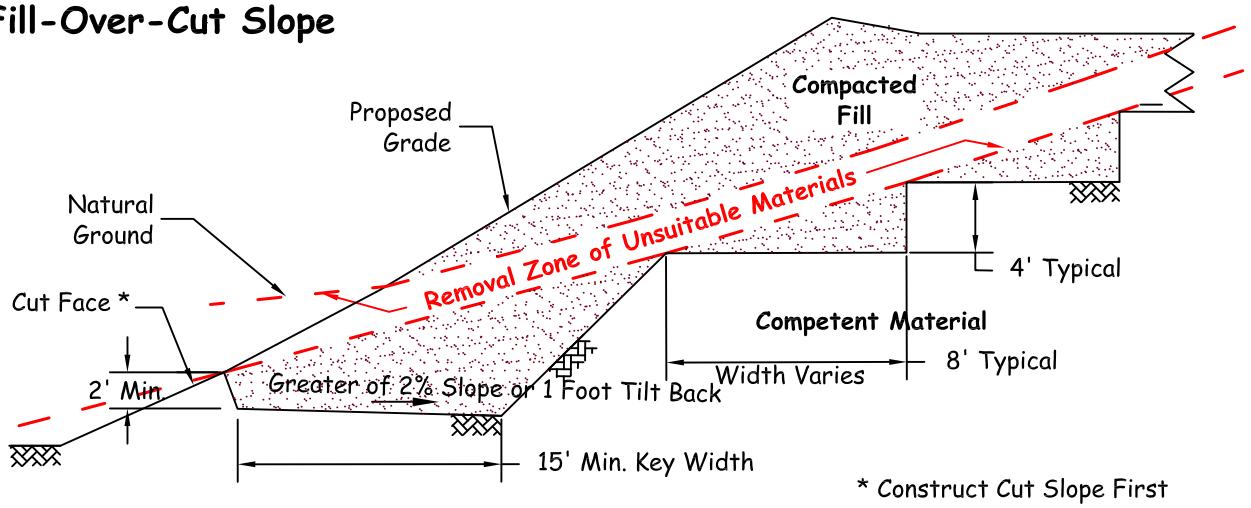
7.4 The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

Fill Slope

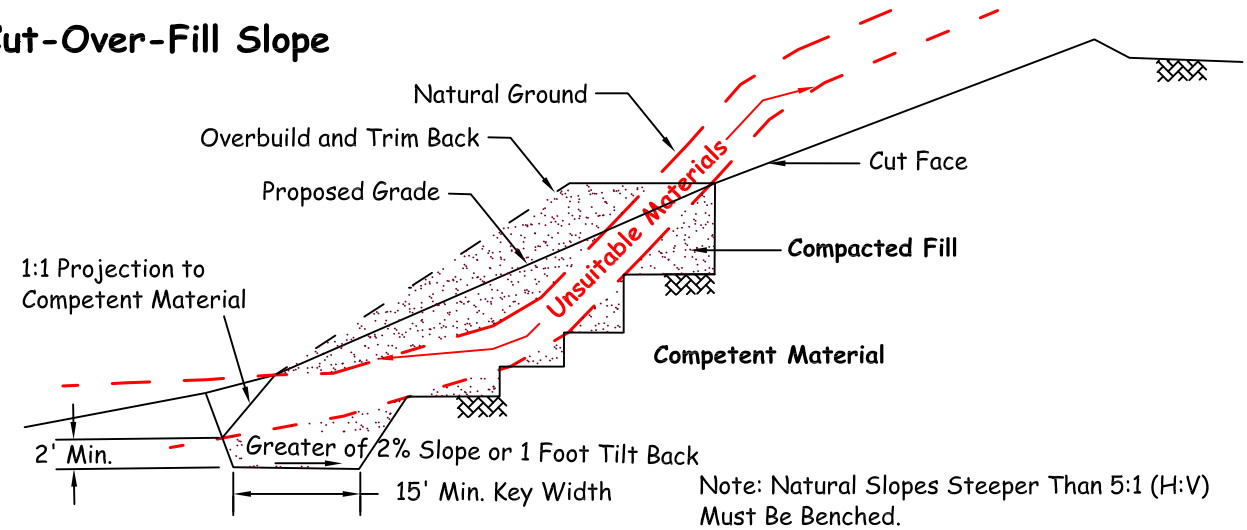


Fill-Over-Cut Slope



* Construct Cut Slope First

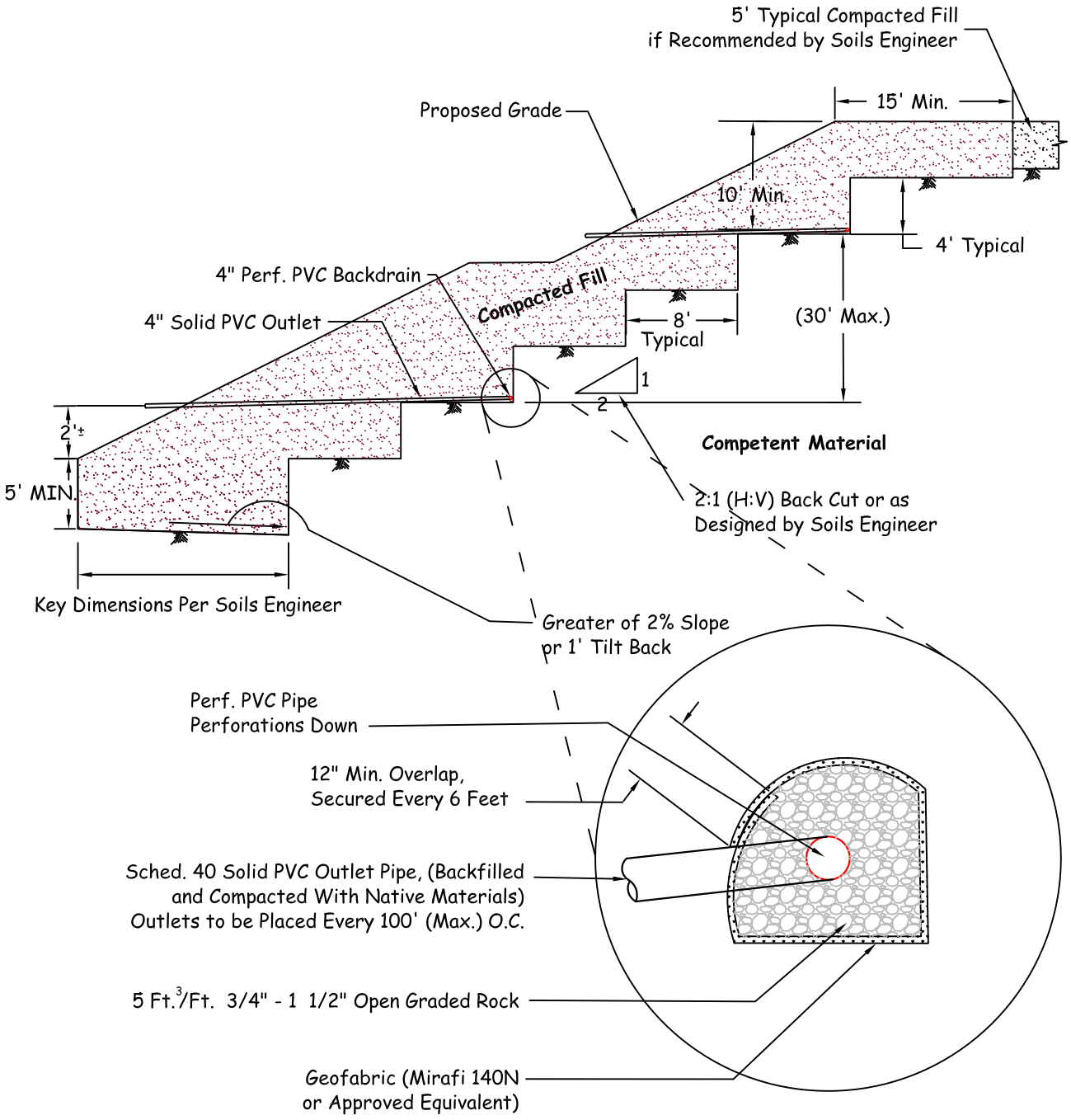
Cut-Over-Fill Slope



Note: Natural Slopes Steeper Than 5:1 (H:V) Must Be Benched.

LGC Geotechnical, Inc.

KEYING AND BENCHING



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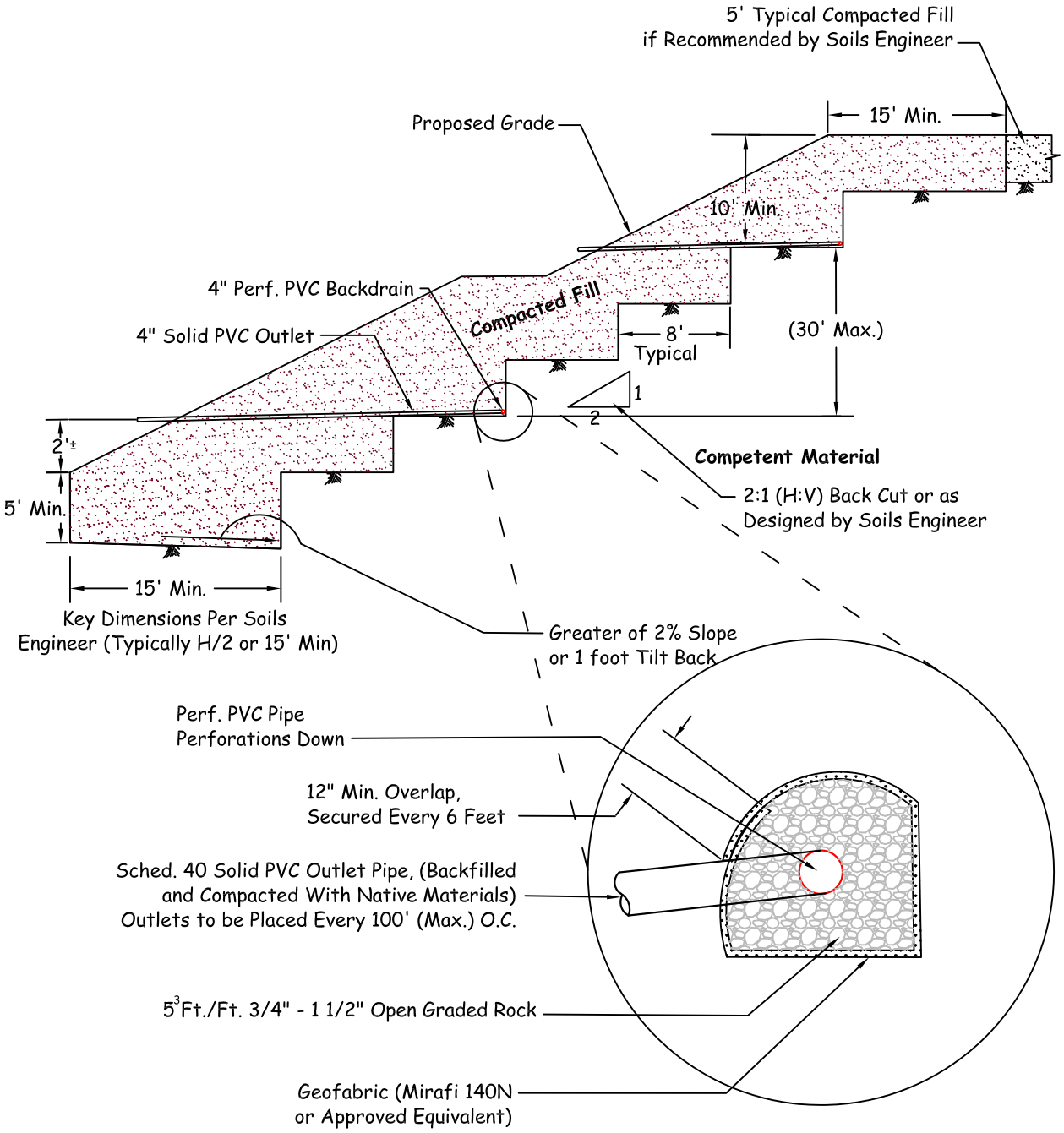
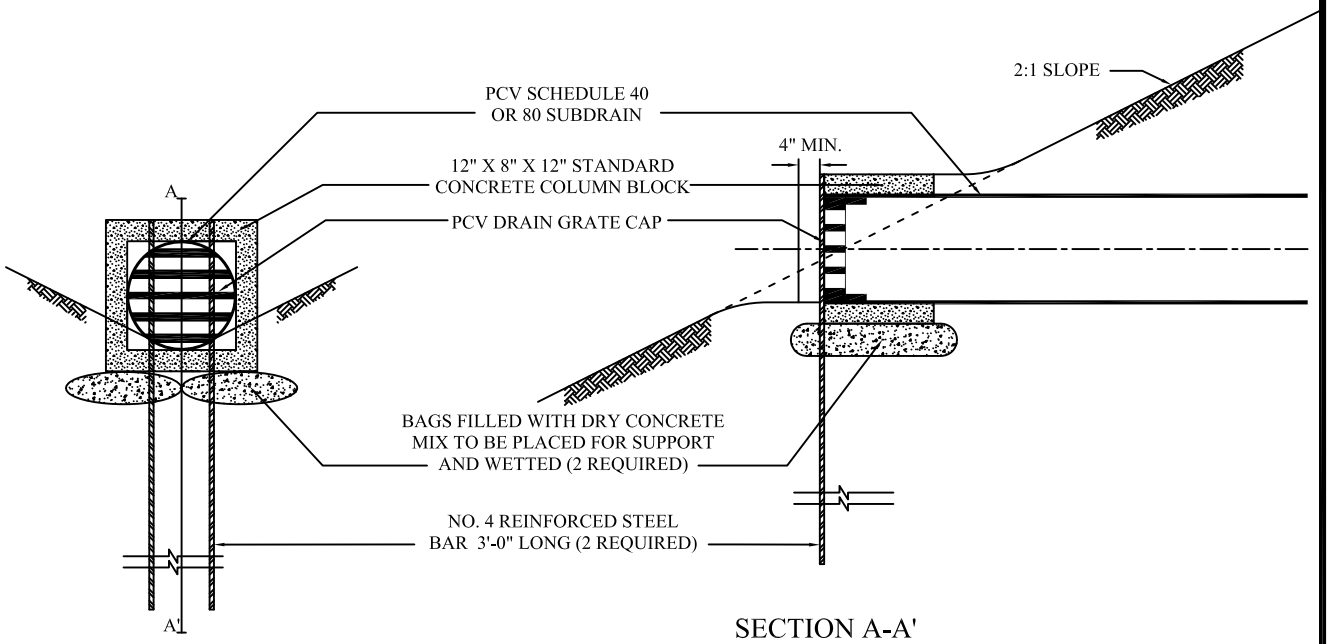
TYPICAL BUTTRESS DETAIL



LGC Geotechnical, Inc.

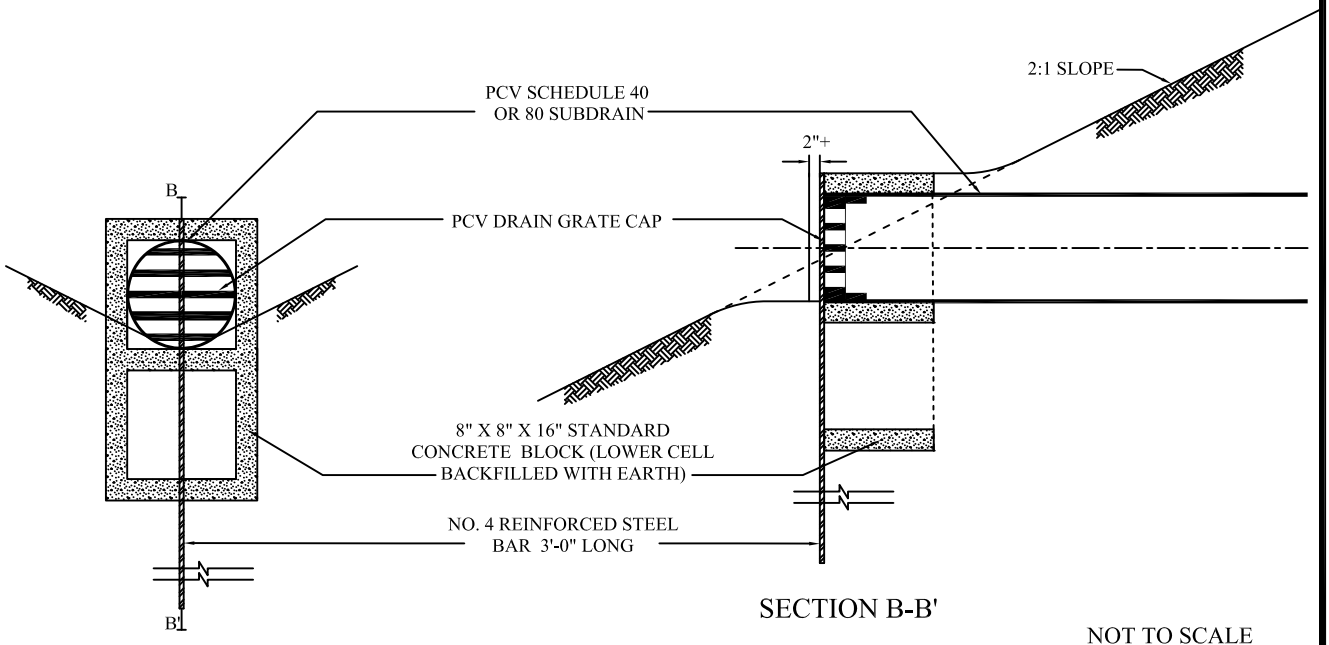
TYPICAL STABILIZATION FILL DETAIL

SUBDRAIN OUTLET MARKER -6" & 8" PIPE



SECTION A-A'

SUBDRAIN OUTLET MARKER -4" PIPE



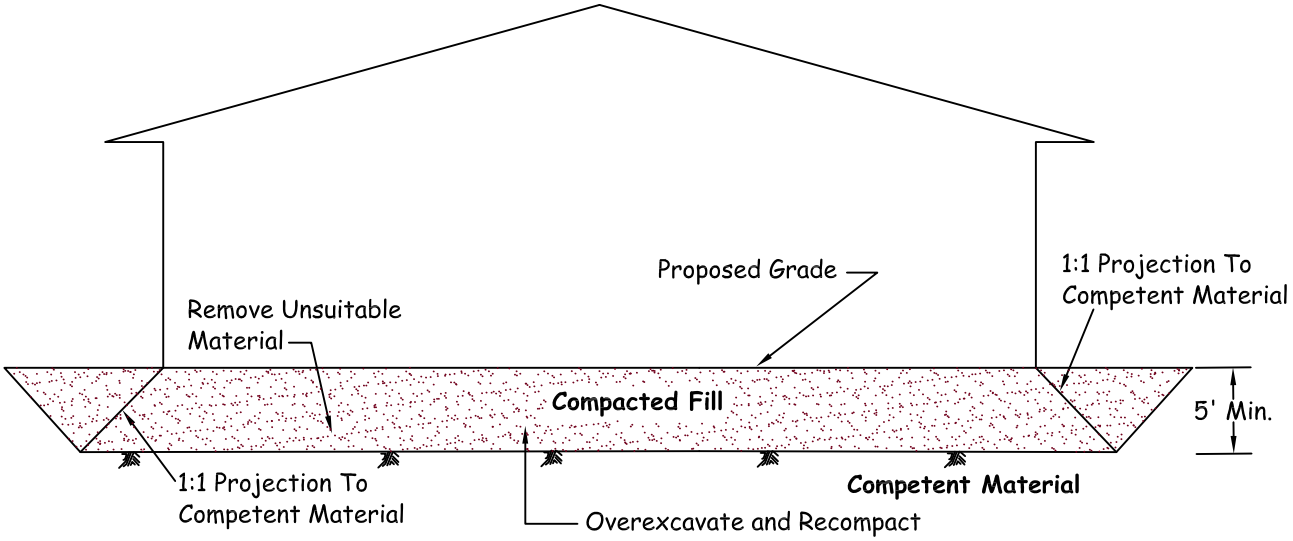
SECTION B-B'

NOT TO SCALE

LGC Geotechnical, Inc.

SUBDRAIN OUTLET MARKER DETAIL

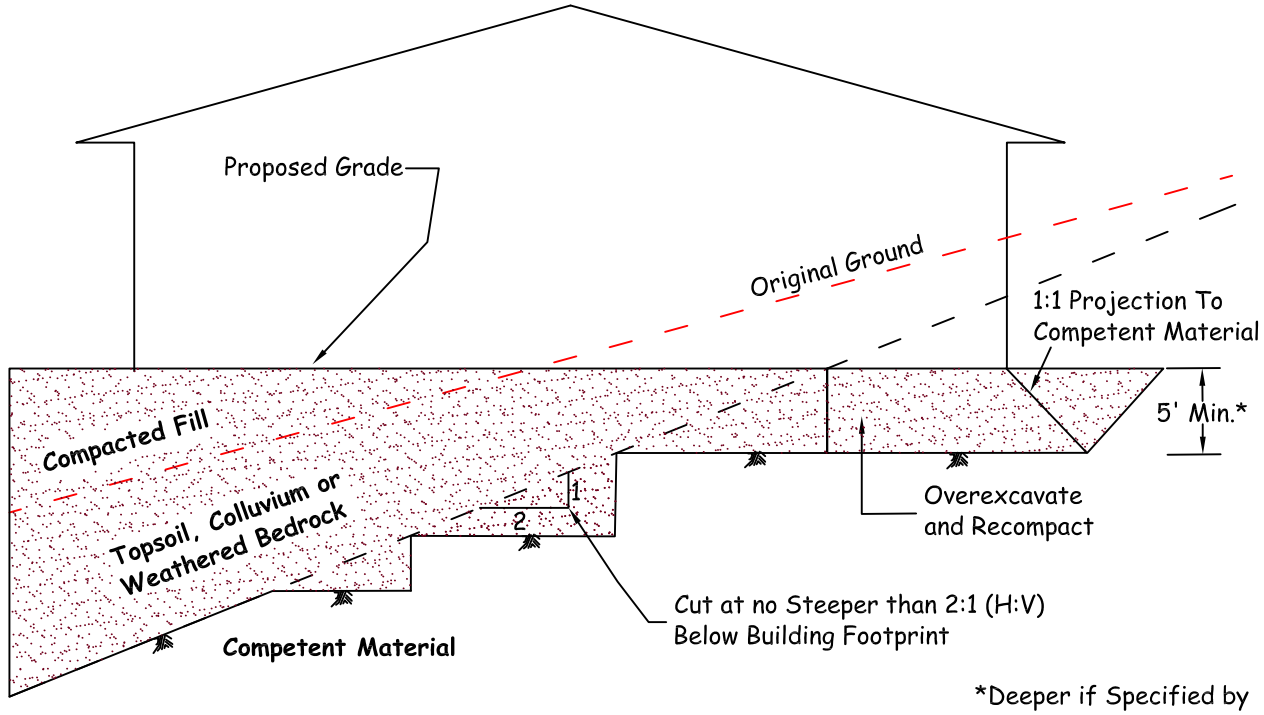
Cut Lot
(Exposing Unsuitable Soils at Design Grade)



Note 1: Removal Bottom Should be Graded With Minimum 2% Fall Towards Street or Other Suitable Area (as Determined by Soils Engineer) to Avoid Ponding Below Building

Note 2: Where Design Cut Lots are Excavated Entirely Into Competent Material, Overexcavation May Still be Required for Hard-Rock Conditions or for Materials With Variable Expansion Characteristics.

Cut/Fill Transition Lot



*Deeper if Specified by Soils Engineer

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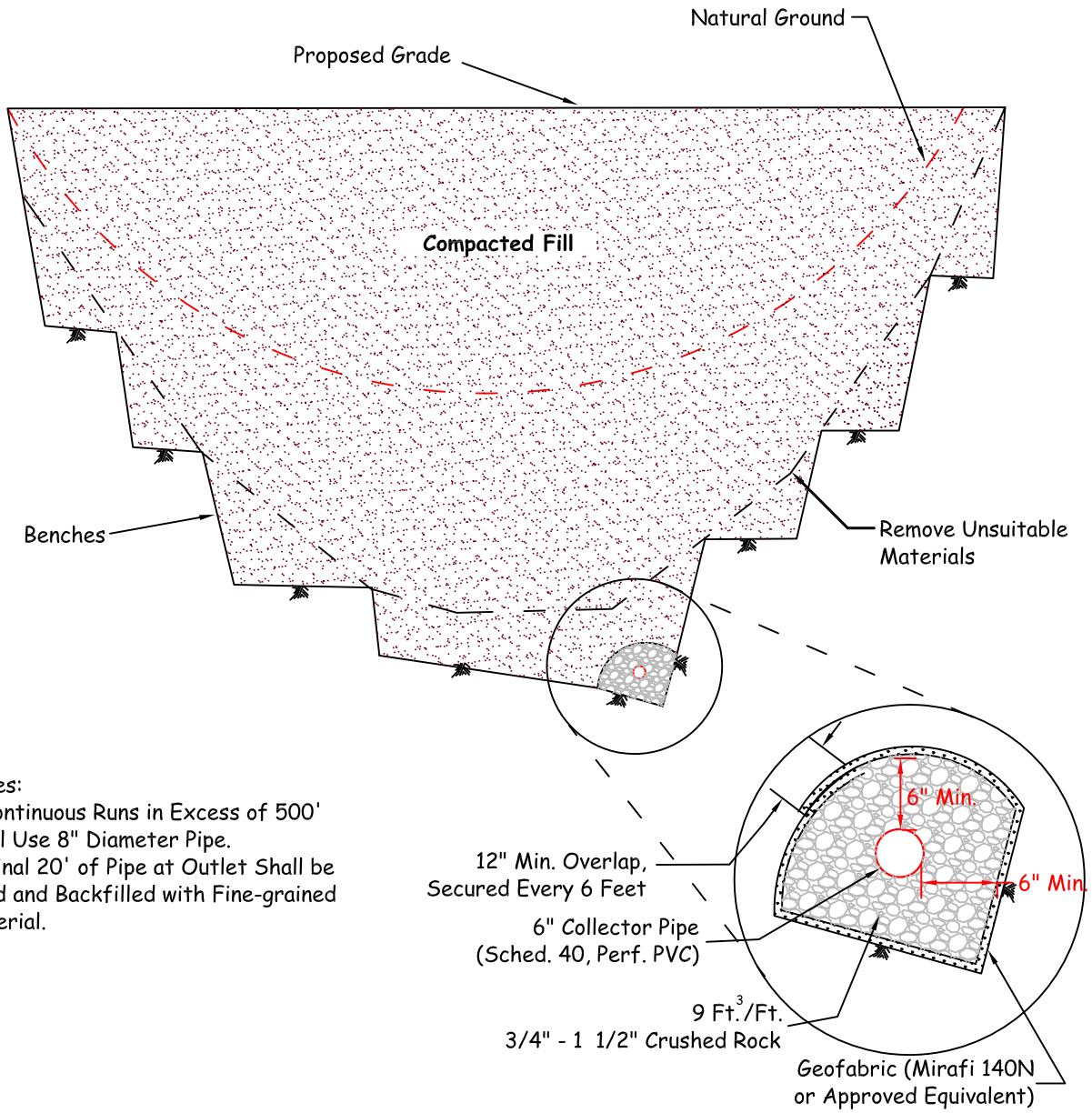
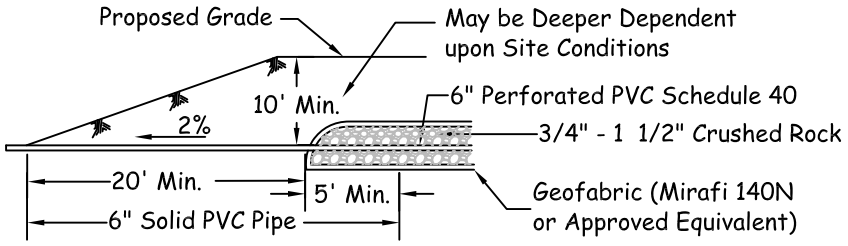
CUT AND TRANSITION LOT OVEREXCAVATION DETAIL



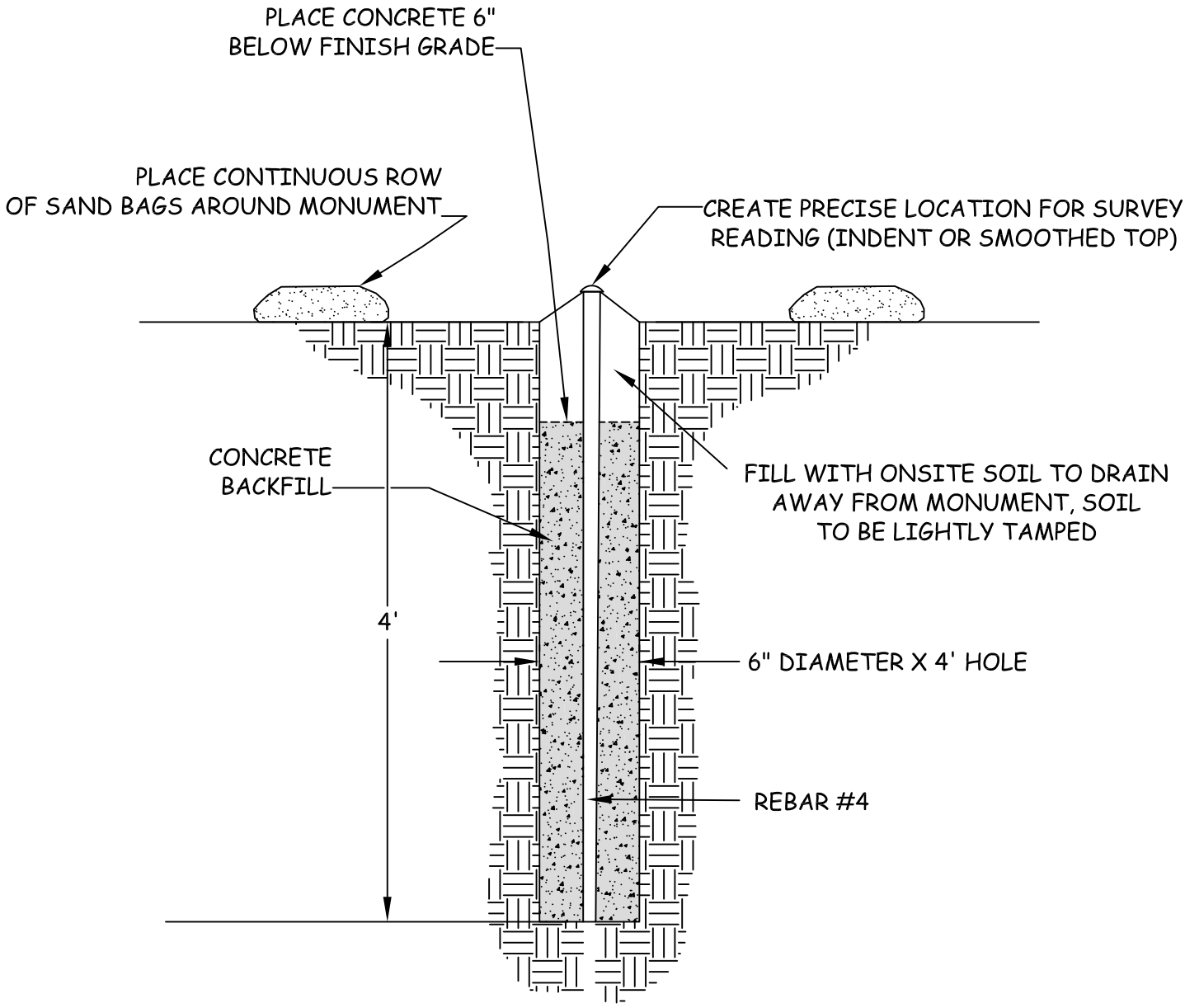
Notes:
1) Continuous Runs in Excess of 500' Shall Use 8" Diameter Pipe.
2) Final 20' of Pipe at Outlet Shall be Solid and Backfilled with Fine-grained Material.

Proposed Outlet Detail



LGC Geotechnical, Inc.

CANYON SUBDRAINS

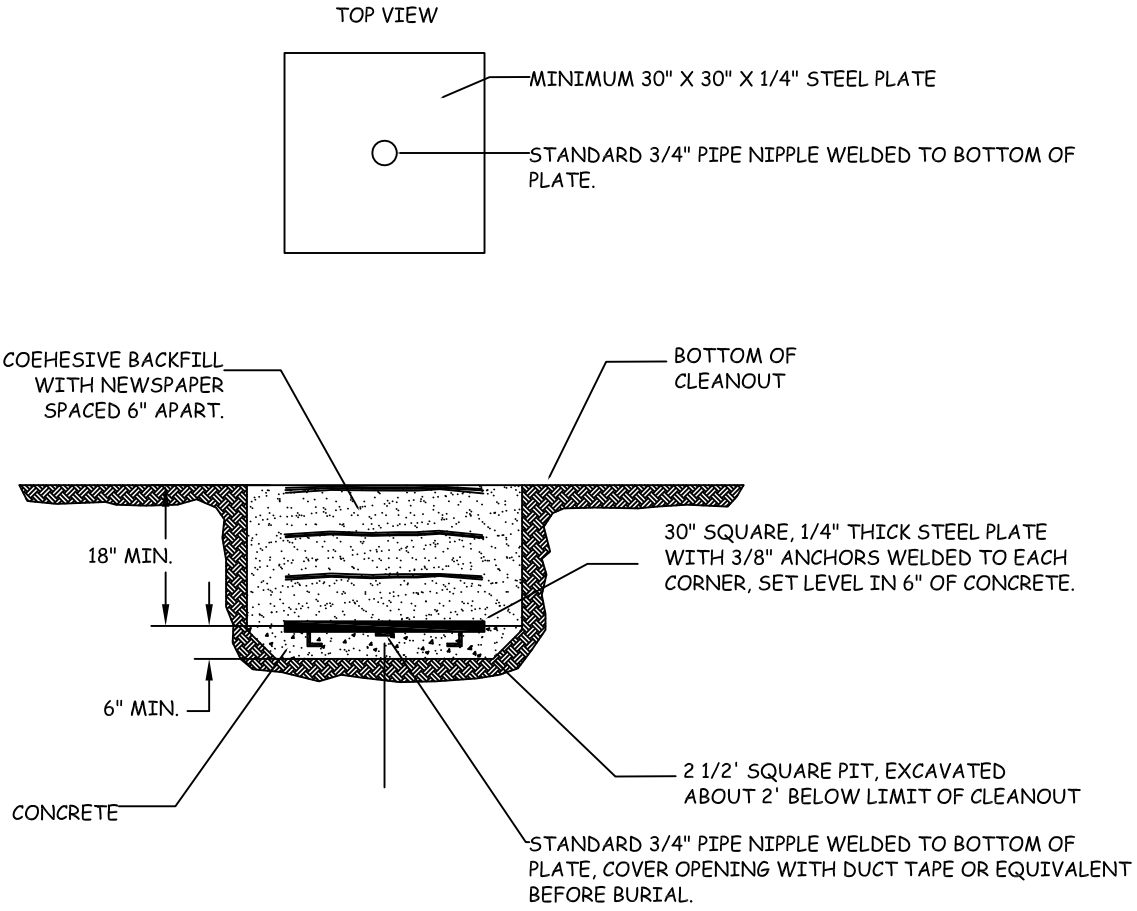


NO CONSTRUCTION EQUIPMENT WITHIN 25 FEET
OF ANY INSTALLED SETTLEMENT MONUMENTS

LGC Geotechnical, Inc.

TYPICAL SURFACE SETTLEMENT MONUMENT

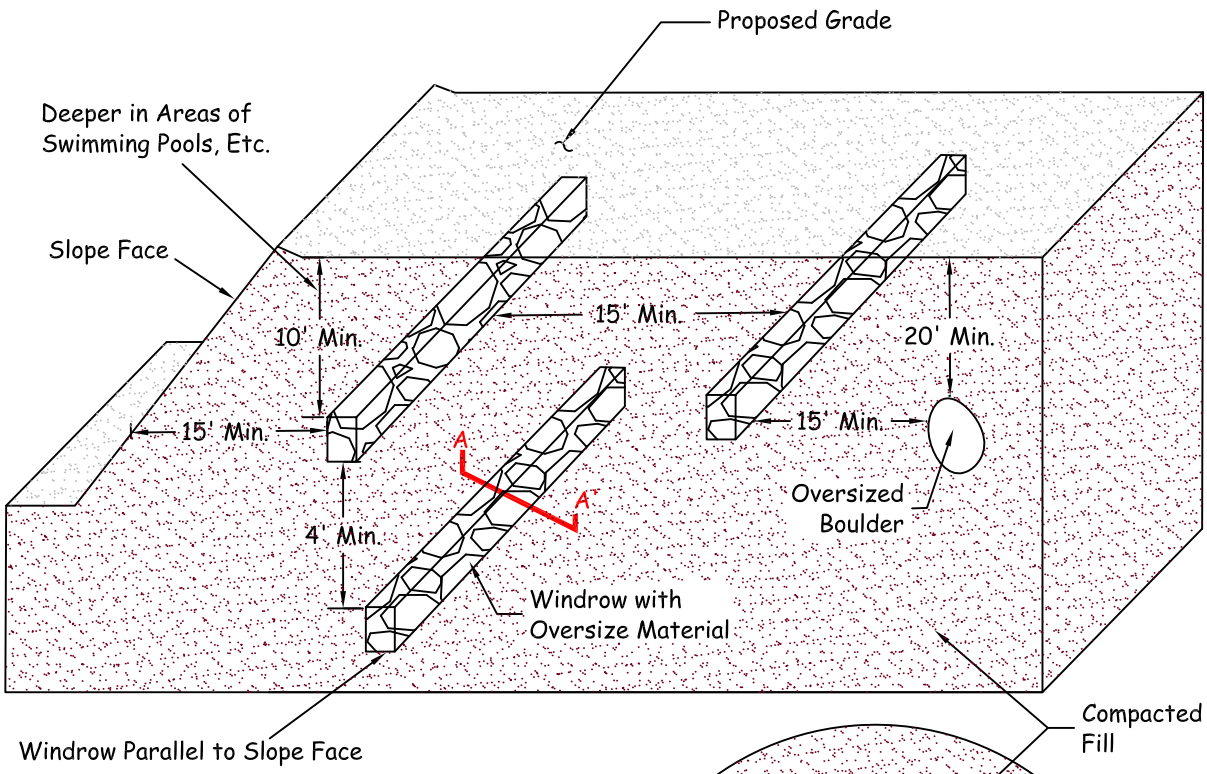
1751

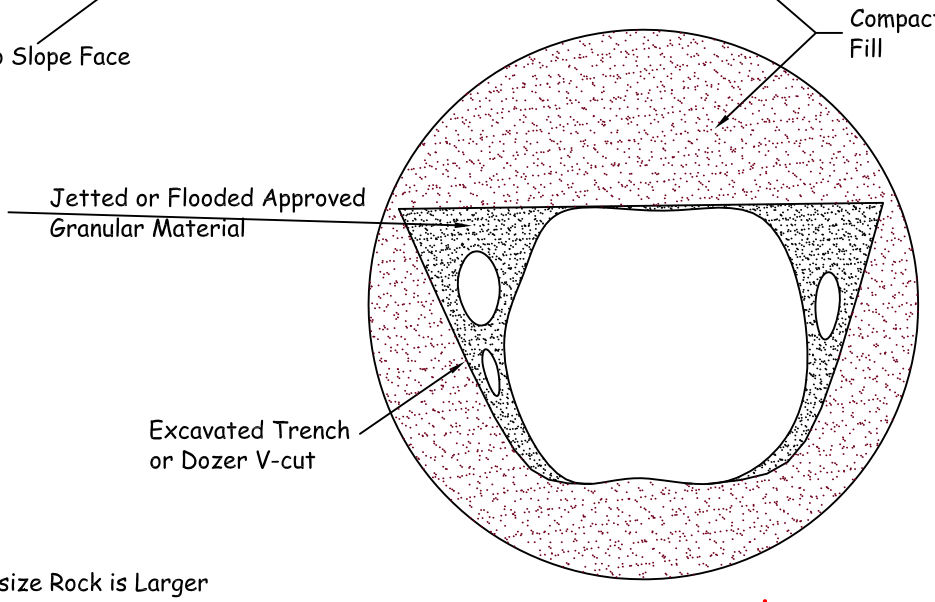


1. SURVEY FOR HORIZONTAL AND VERTICAL LOCATION TO NEAREST .01 INCH PRIOR TO BACKFILL USING KNOW LOCATIONS THAT WILL REMAIN INTACT DURING THE DURATION OF THE MONITORING PROGRAM. KNOW POINTS EXPLICITELY NOT ALLOWED ARE THOSE LOCATED ON FILL OR THAT WILL BE DESTROYED DURING GRADING.
2. IN THE EVENT OF DAMAGE TO SETTLEMENT PLATE DURING GRADING, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE GEOTECHNICAL ENGINEER AND SHALL BE RESPONSIBLE FOR RESTORING THE SETTLEMENT PLATES TO WORKING ORDER.
3. DRILL TO RECOVER AND ATTACH RISER PIPE.

LGC Geotechnical, Inc.

TYPICAL SETTLEMENT PLATE AND RISER





Note: Oversize Rock is Larger
than 8" in Maximum Dimension.

Section A-A'

LGC Geotechnical, Inc.

OVERSIZE ROCK DISPOSAL DETAIL

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use

- On File with City

- N/A. Project is able to meet LID BMP requirements onsite.

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: Hunsaker & Associates Irvine, Inc. | Date: 11/29/2021

Designed by: Tommy Hsu | Case No: TBD

Company Project Number/Name: Leal Ranch

BMP Identification

BMP NAME / ID: DMAS 1 THROUGH 17

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.86 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
1A	*2002660*	*Mixed Surface Types*	*0.8*	*0.60*	*1200186.1*			
1B	*723208*	*Mixed Surface Types*	*0.8*	*0.60*	*433415.7*			
1C	*668544*	*Mixed Surface Types*	*0.8*	*0.60*	*400655.7*			
1D	*1287889*	*Mixed Surface Types*	*0.8*	*0.60*	*771826.7*			
1E	*558821*	*Mixed Surface Types*	*0.8*	*0.60*	*334899.2*			
1F	*322031*	*Mixed Surface Types*	*0.8*	*0.60*	*192991.9*			
2	*571177*	*Mixed Surface Types*	*0.8*	*0.60*	*342304.1*			
3	*20004*	*Mixed Surface Types*	*0.8*	*0.60*	*11988.3*			
4	*27082*	*Mixed Surface Types*	*0.8*	*0.60*	*16230.1*			
5	*37514*	*Mixed Surface Types*	*0.8*	*0.60*	*22482*			
6	*32384*	*Mixed Surface Types*	*0.8*	*0.60*	*19407.6*			
7	*91523*	*Mixed Surface Types*	*0.8*	*0.60*	*54849.4*			
8	*93166*	*Mixed Surface Types*	*0.8*	*0.60*	*55834*			
9	*52777*	*Mixed Surface Types*	*0.8*	*0.60*	*31629*			
10	*72452*	*Mixed Surface Types*	*0.8*	*0.60*	*43420.2*			
11	*17237*	*Mixed Surface Types*	*0.8*	*0.60*	*10330.1*			
12	*81864*	*Mixed Surface Types*	*0.8*	*0.60*	*49060.8*			
13	*20030*	*Mixed Surface Types*	*0.8*	*0.60*	*12003.9*			
14	*40079*	*Mixed Surface Types*	*0.8*	*0.60*	*24019.2*			
15	*57984*	*Mixed Surface Types*	*0.8*	*0.60*	*34749.6*			
16	*95700*	*Mixed Surface Types*	*0.8*	*0.60*	*57352.6*			
17	*97608*	*Mixed Surface Types*	*0.8*	*0.60*	*58496.1*			
	6971734	***Total***			**4178132.3**	**0.86**	***298736.5***	***TBD***

Notes:

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Hunsaker & Associates	Date	11/29/2021
Designed by	Tommy Hsu	Case No	TBD
Company Project Number/Name	Leal Ranch		

BMP Identification

BMP NAME / ID: DMAS 1 THROUGH 17

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity: I = 0.20 in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

	DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Rainfall Intensity (in/hr)*	*Design Flow Rate (cfs)*	*Proposed Flow Rate (cfs)*
DMAs	1A	2002660	Mixed Surface Types	0.8	0.60	1200186.1			
	1B	723208	Mixed Surface Types	0.8	0.599296	433415.7			
	1C	668544	Mixed Surface Types	0.8	0.599296	400655.7			
	1D	1287889	Mixed Surface Types	0.8	0.599296	771826.7			
	1E	558821	Mixed Surface Types	0.8	0.599296	334899.2			
	1F	322031	Mixed Surface Types	0.8	0.599296	192991.9			
	2	571177	Mixed Surface Types	0.8	0.599296	342304.1			
	3	20004	Mixed Surface Types	0.8	0.599296	11988.3			
	4	27082	Mixed Surface Types	0.8	0.599296	16230.1			
	5	37514	Mixed Surface Types	0.8	0.599296	22482			
	6	32384	Mixed Surface Types	0.8	0.599296	19407.6			
	7	91523	Mixed Surface Types	0.8	0.599296	54849.4			
	8	93166	Mixed Surface Types	0.8	0.599296	55834			
	9	52777	Mixed Surface Types	0.8	0.599296	31629			
	10	72452	Mixed Surface Types	0.8	0.599296	43420.2			
	11	17237	Mixed Surface Types	0.8	0.599296	10330.1			
	12	81864	Mixed Surface Types	0.8	0.599296	49060.8			
	13	20030	Mixed Surface Types	0.8	0.599296	12003.9			
	14	40079	Mixed Surface Types	0.8	0.599296	24019.2			
	15	57984	Mixed Surface Types	0.8	0.599296	34749.6			
	16	95700	Mixed Surface Types	0.8	0.599296	57352.6			
	17	97608	Mixed Surface Types	0.8	0.599296	58496.1			
		6971734		***Total***		**4178132.3**	**0.20**	***19.2***	***TBD***

Notes:

3.5 Bioretention Facility

Type of BMP	LID – Bioretention
Treatment Mechanisms	Infiltration, Evapotranspiration, Evaporation, Biofiltration
Maximum Drainage Area	This BMP is intended to be integrated into a project's landscaped area in a distributed manner. Typically, contributing drainage areas to Bioretention Facilities range from less than 1 acre to a maximum of around 10 acres.
Other Names	Rain Garden, Bioretention Cell, Bioretention Basin, Biofiltration Basin, Landscaped Filter Basin, Porous Landscape Detention

Description

Bioretention Facilities are shallow, vegetated basins underlain by an engineered soil media. Healthy plant and biological activity in the root zone maintain and renew the macro-pore space in the soil and maximize plant uptake of pollutants and runoff. This keeps the Best Management Practice (BMP) from becoming clogged and allows more of the soil column to function as both a sponge (retaining water) and a highly effective and self-maintaining biofilter. In most cases, the bottom of a Bioretention Facility is unlined, which also provides an opportunity for infiltration to the extent the underlying onsite soil can accommodate. When the infiltration rate of the underlying soil is exceeded, fully biotreated flows are discharged via underdrains. Bioretention Facilities therefore will inherently achieve the maximum feasible level of infiltration and evapotranspiration and achieve the minimum feasible (but highly biotreated) discharge to the storm drain system.

Siting Considerations

These facilities work best when they are designed in a relatively level area. Unlike other BMPs, Bioretention Facilities can be used in smaller landscaped spaces on the site, such as:

- ✓ Parking islands
- ✓ Medians
- ✓ Site entrances

Landscaped areas on the site (such as may otherwise be required through minimum landscaping ordinances), can often be designed as Bioretention Facilities. This can be accomplished by:

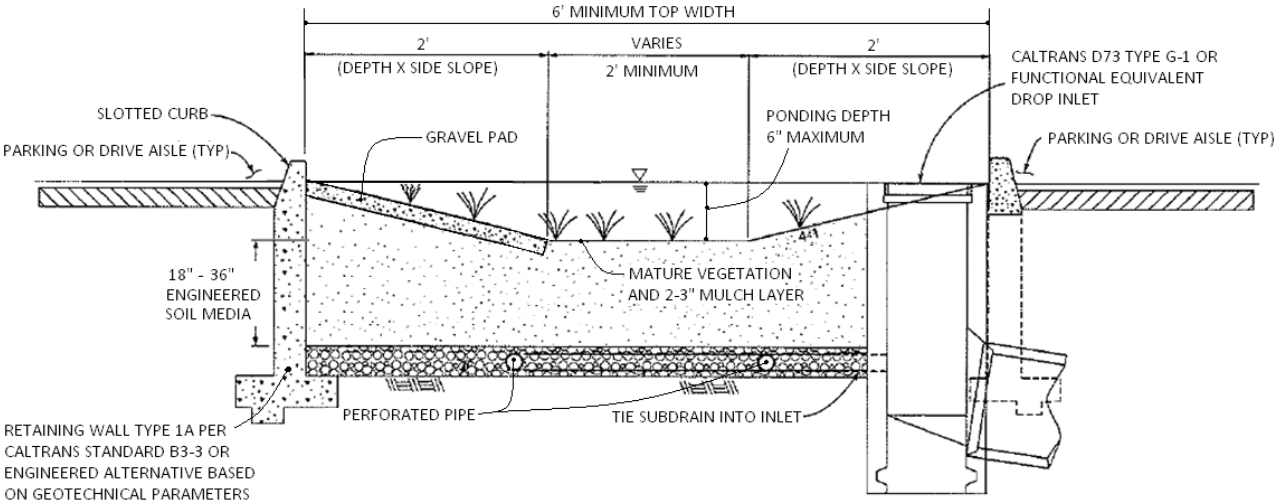
- *Depressing* landscaped areas below adjacent impervious surfaces, rather than elevating those areas
- Grading the site to direct runoff from those impervious surfaces *into* the Bioretention Facility, rather than away from the landscaping
- Sizing and designing the depressed landscaped area as a Bioretention Facility as described in this Fact Sheet

Bioretention Facilities should however not be used downstream of areas where large amounts of sediment can clog the system. Placing a Bioretention Facility at the toe of a steep slope should also be avoided due to the potential for clogging the engineered soil media with erosion from the slope, as well as the potential for damaging the vegetation.

Design and Sizing Criteria

The recommended cross section necessary for a Bioretention Facility includes:

- Vegetated area
- 18' minimum depth of engineered soil media
- 12' minimum gravel layer depth with 6' perforated pipes (added flow control features such as orifice plates may be required to mitigate for HCOC conditions)



While the 18-inch minimum engineered soil media depth can be used in some cases, it is recommended to use 24 inches or a preferred 36 inches to provide an adequate root zone for the chosen plant palate. Such a design also provides for improved removal effectiveness for nutrients. The recommended ponding depth inside of a Bioretention Facility is 6 inches; measured from the flat bottom surface to the top of the water surface as shown in Figure 1.

Because this BMP is filled with an engineered soil media, pore space in the soil and gravel layer is assumed to provide storage volume. However, several considerations must be noted:

- Surcharge storage above the soil surface (6 inches) is important to assure that design flows do not bypass the BMP when runoff exceeds the soil's absorption rate.
- In cases where the Bioretention Facility contains engineered soil media deeper than 36 inches, the pore space within the engineered soil media can only be counted to the 36-inch depth.
- A maximum of 30 percent pore space can be used for the soil media whereas a maximum of 40 percent pore space can be use for the gravel layer.

Figure 1: Standard Layout for a Bioretention Facility

Engineered Soil Media Requirements

The engineered soil media shall be comprised of 85 percent mineral component and 15 percent organic component, by volume, drum mixed prior to placement. The mineral component shall be a Class A sandy loam topsoil that meets the range specified in Table 1 below. The organic component shall be nitrogen stabilized compost[1], such that nitrogen does not leach from the media.

Table 1: Mineral Component Range Requirements

Percent Range	Component
70-80	Sand
15-20	Silt
5-10	Clay

The trip ticket, or certificate of compliance, shall be made available to the inspector to prove the engineered mix meets this specification.

Vegetation Requirements

Vegetative cover is important to minimize erosion and ensure that treatment occurs in the Bioretention Facility. The area should be designed for at least 70 percent mature coverage throughout the Bioretention Facility. To prevent the BMP from being used as walkways, Bioretention Facilities shall be planted with a combination of small trees, densely planted shrubs, and natural grasses. Grasses shall be native or ornamental; preferably ones that do not need to be mowed. The application of fertilizers and pesticides should be minimal. To maintain oxygen levels for the vegetation and promote biodegradation, it is important that vegetation not be completely submerged for any extended period of time. Therefore, a maximum of 6 inches of ponded water shall be used in the design to ensure that plants within the Bioretention Facility remain healthy.

A 2 to 3-inch layer of standard shredded aged hardwood mulch shall be placed as the top layer inside the Bioretention Facility. The 6-inch ponding depth shown in Figure 1 above shall be measured from the top surface of the 2 to 3-inch mulch layer.

Curb Cuts

To allow water to flow into the Bioretention Facility, 1-foot-wide (minimum) curb cuts should be placed approximately every 10 feet around the perimeter of the Bioretention Facility. Figure 2 shows a curb cut in a Bioretention Facility. Curb cut flow lines must be at or above the V_{BMP} water surface level.

[1] For more information on compost, visit the US Composting Council website at: http://compostingcouncil.org/



Figure 2: Curb Cut located in a Bioretention Facility

To reduce erosion, a gravel pad shall be placed at each inlet point to the Bioretention Facility. The gravel should be 1- to 1.5-inch diameter in size. The gravel should overlap the curb cut opening a minimum of 6 inches. The gravel pad inside the Bioretention Facility should be flush with the finished surface at the curb cut and extend to the bottom of the slope.

In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet. See Figure 3.

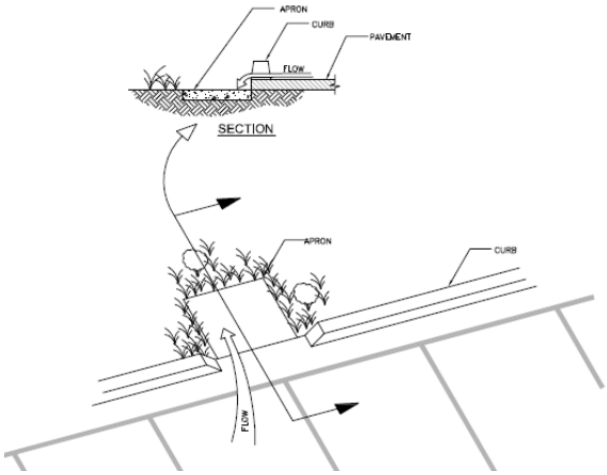


Figure 3: Apron located in a Bioretention Facility

Terracing the Landscaped Filter Basin

It is recommended that Bioretention Facilities be level. In the event the facility site slopes and lacks proper design, water would fill the lowest point of the BMP and then discharge from the basin without being treated. To ensure that the water will be held within the Bioretention Facility on sloped sites, the BMP must be terraced with nonporous check dams to provide the required storage and treatment capacity.

The terraced version of this BMP shall be used on non-flat sites with no more than a 3 percent slope. The surcharge depth cannot exceed 0.5 feet, and side slopes shall not exceed 4:1. Table 2 below shows the spacing of the check dams, and slopes shall be rounded up (i.e., 2.5 percent slope shall use 10' spacing for check dams).

Table 2: Check Dam Spacing

6" Check Dam Spacing	
Slope	**Spacing**
1%	*25'*
2%	*15'*
3%	*10'*

Roof Runoff

Roof downspouts may be directed towards Bioretention Facilities. However, the downspouts must discharge onto a concrete splash block to protect the Bioretention Facility from erosion.

Retaining Walls

It is recommended that Retaining Wall Type 1A, per Caltrans Standard B3-3 or equivalent, be constructed around the entire perimeter of the Bioretention Facility. This practice will protect the sides of the Bioretention Facility from collapsing during construction and maintenance or from high service loads adjacent to the BMP. Where such service loads would not exist adjacent to the BMP, an engineered alternative may be used if signed by a licensed civil engineer.

Side Slope Requirements

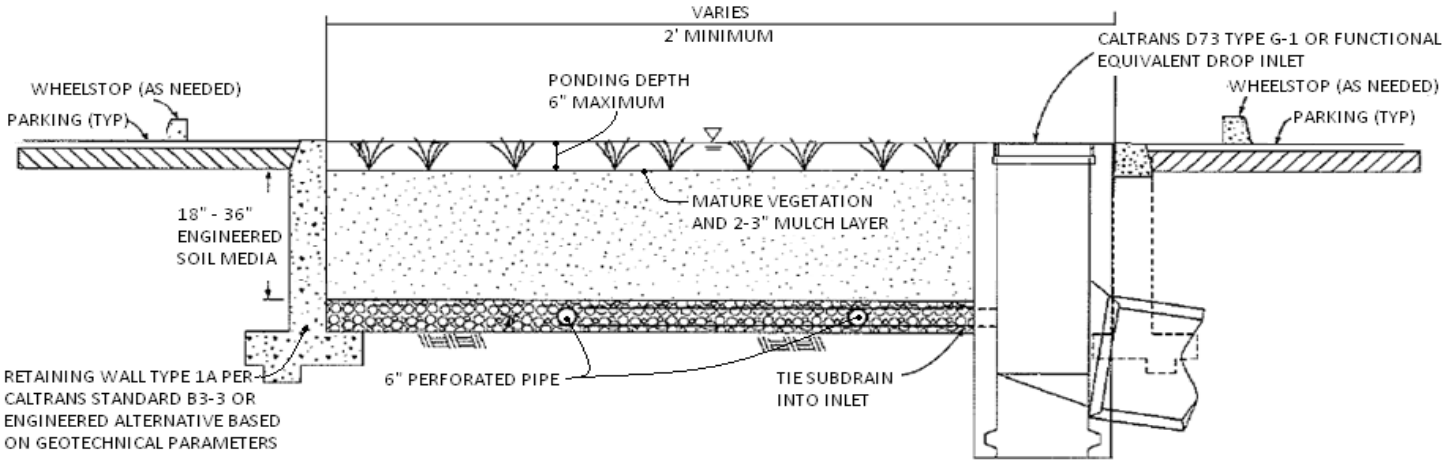
Bioretention Facilities Requiring Side Slopes

The design should assure that the Bioretention Facility does not present a tripping hazard. Bioretention Facilities proposed near pedestrian areas, such as areas parallel to parking spaces or along a walkway, must have a gentle slope to the bottom of the facility. Side slopes inside of a Bioretention Facility shall be 4:1. A typical cross section for the Bioretention Facility is shown in Figure 1.

Bioretention Facilities Not Requiring Side Slopes

Where cars park perpendicular to the Bioretention Facility, side slopes are not required. A 6-inch maximum drop may be used, and the Bioretention Facility must be planted with trees and shrubs to prevent pedestrian access. In this case, a curb is not placed around the Bioretention Facility,

but wheel stops shall be used to prevent vehicles from entering the Bioretention Facility, as shown in Figure 4.



Planter Boxes

Bioretention Facilities can also be placed above ground as planter boxes. Planter boxes must have a minimum width of 2 feet, a maximum surcharge depth of 6 inches, and no side slopes are necessary. Planter boxes must be constructed so as to ensure that the top surface of the engineered soil media will remain level. This option may be constructed of concrete, brick, stone or other stable materials that will not warp or bend. Chemically treated wood or galvanized steel, which has the ability to contaminate stormwater, should not be used. Planter boxes must be lined with an impermeable liner on all sides, including the bottom. Due to the impermeable liner, the inside bottom of the planter box shall be designed and constructed with a cross fall, directing treated flows within the subdrain layer toward the point where subdrain exits the planter box, and subdrains shall be oriented with drain holes oriented down. These provisions will help avoid excessive stagnant water within the gravel underdrain layer. Similar to the in-ground Bioretention Facility versions, this BMP benefits from healthy plants and biological activity in the root zone. Planter boxes should be planted with appropriately selected vegetation.



Figure 5: Planter Box
Source: LA Team Effort

Overflow

An overflow route is needed in the Bioretention Facility design to bypass stored runoff from storm events larger than V_{BMP} or in the event of facility or subdrain clogging. Overflow systems must connect to an acceptable discharge point, such as a downstream conveyance system as shown in Figure 1 and Figure 4. The inlet to the overflow structure shall be elevated inside the Bioretention Facility to be flush with the ponding surface for the design capture volume (V_{BMP}) as shown in Figure 4. This will allow the design capture volume to be fully treated by the Bioretention Facility, and for larger events to safely be conveyed to downstream systems. The overflow inlet shall **not** be located in the entrance of a Bioretention Facility, as shown in Figure 6.

Underdrain Gravel and Pipes

An underdrain gravel layer and pipes shall be provided in accordance with Appendix B – Underdrains.



Figure 6: Incorrect Placement of an Overflow Inlet.

Inspection and Maintenance Schedule

The Bioretention Facility area shall be inspected for erosion, dead vegetation, soggy soils, or standing water. The use of fertilizers and pesticides on the plants inside the Bioretention Facility should be minimized.

Schedule	Activity
Ongoing	• Keep adjacent landscape areas maintained. Remove clippings from landscape maintenance activities. • Remove trash and debris • Replace damaged grass and/or plants • Replace surface mulch layer as needed to maintain a 2-3 inch soil cover.
After storm events	• Inspect areas for ponding
Annually	• Inspect/clean inlets and outlets

Bioretention Facility Design Procedure

1) Enter the area tributary, A_T, to the Bioretention Facility.

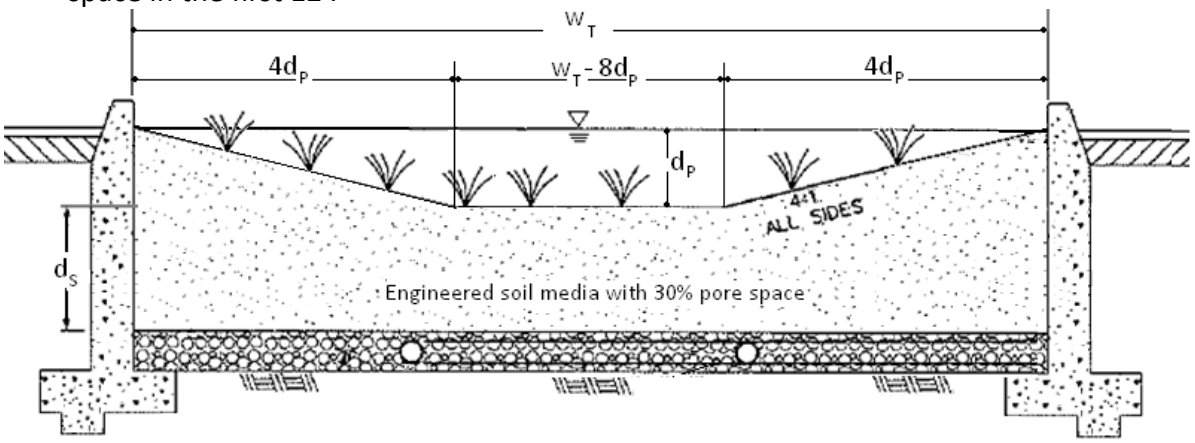
2) Enter the Design Volume, $V_{BMP,}$ determined from Section 2.1 of this Handbook.

3) Select the type of design used. There are two types of Bioretention Facility designs: the standard design used for most project sites that include side slopes, and the modified design used when the BMP is located perpendicular to the parking spaces or with planter boxes that do not use side slopes.

4) Enter the depth of the engineered soil media, d_S. The minimum depth for the engineered soil media can be 18' in limited cases, but it is recommended to use 24' or a preferred 36' to provide an adequate root zone for the chosen plant palette. Engineered soil media deeper than 36' will only get credit for the pore space in the first 36'.

5) Enter the top width of the Bioretention Facility.

6) Calculate the total effective depth, d_E, within the Bioretention Facility. The maximum allowable pore space of the soil media is 30% while the maximum allowable pore space for the gravel layer is 40%. Gravel layer deeper than 12' will only get credit for the pore space in the first 12'.



a. For the design with side slopes the following equation shall be used to determine the total effective depth. Where, d_P is the depth of ponding within the basin.

$$d_E(\text{ft}) = \frac{0.3 \times \left[\left(w_T(\text{ft}) \times d_S(\text{ft})\right) + 4\left(d_P(\text{ft})\right)^2\right] + 0.4 \times 1(\text{ft}) + d_P(\text{ft})\left[4d_P(\text{ft}) + \left(w_T(\text{ft}) - 8d_P(\text{ft})\right)\right]}{w_T(\text{ft})}$$

This above equation can be simplified if the maximum ponding depth of 0.5' is used. The equation below is used on the worksheet to find the minimum area required for the Bioretention Facility:

$$d_E(\text{ft}) = (0.3 \times d_S(\text{ft}) + 0.4 \text{ x } 1(\text{ft})) - \left(\frac{0.7\ (\text{ft}^2)}{w_T(\text{ft})}\right) + 0.5(\text{ft})$$

b. For the design without side slopes the following equation shall be used to determine the total effective depth:

$$d_E(\text{ft}) = d_P(\text{ft}) + [(0.3) \times d_S(\text{ft}) + (0.4) \times 1(\text{ft})]$$

The equation below, using the maximum ponding depth of 0.5', is used on the worksheet to find the minimum area required for the Bioretention Facility:

$$d_E(\text{ft}) = 0.5\ (\text{ft}) + [(0.3) \times d_S(\text{ft}) + (0.4) \times 1(\text{ft})]$$

7) Calculate the minimum surface area, A_M, required for the Bioretention Facility. This does not include the curb surrounding the Bioretention Facility or side slopes.

$$A_M(\text{ft}^2) = \frac{V_{BMP}(\text{ft}^3)}{d_E\ (\text{ft})}$$

8) Enter the proposed surface area. This area shall not be less than the minimum required surface area.

9) Verify that side slopes are no steeper than 4:1 in the standard design, and are not required in the modified design.

10) Provide the diameter, minimum 6 inches, of the perforated underdrain used in the Bioretention Facility. See Appendix B for specific information regarding perforated pipes.

11) Provide the slope of the site around the Bioretention Facility, if used. The maximum slope is 3 percent for a standard design.

12) Provide the check dam spacing, if the site around the Bioretention Facility is sloped.

13) Describe the vegetation used within the Bioretention Facility.

References Used to Develop this Fact Sheet

Anderson, Dale V. "Landscaped Filter Basin Soil Requirements." Riverside, May 2010.

California Department of Transportation. CalTrans Standard Plans. 15 September 2005. May 2010 <http://www.dot.ca.gov/hq/esc/oe/project_plans/HTM/stdpln s-met-new99.htm>.

Camp Dresser and McKee Inc.; Larry Walker Associates. California Stormwater Best Management Practice Handbook for New Development and Redevelopment. California Stormwater Quality Association (CASQA), 2004.

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County of Los Angeles Public Works. Stormwater Best Management Practice Design and Maintenance Manual. Los Angeles, 2009.

Kim, Hunho, Eric A. Seagren and Allen P. Davis. "Engineered Bioretention for Removal of Nitrate from Stormwater Runoff." Water Environment Research 75.4 (2003): 355-366.

LA Team Effort. LA Team Effort: FREE Planter Boxes for Businesses. 2 November 2009. May 2010 <http://lateameffort.blogspot.com/2009/11/free-planter-boxes-for-businesses-est.html>.

Montgomery County Maryland Department of Permitting Services Water Resources Section. Biofiltration (BF). Montgomery County, 2005.

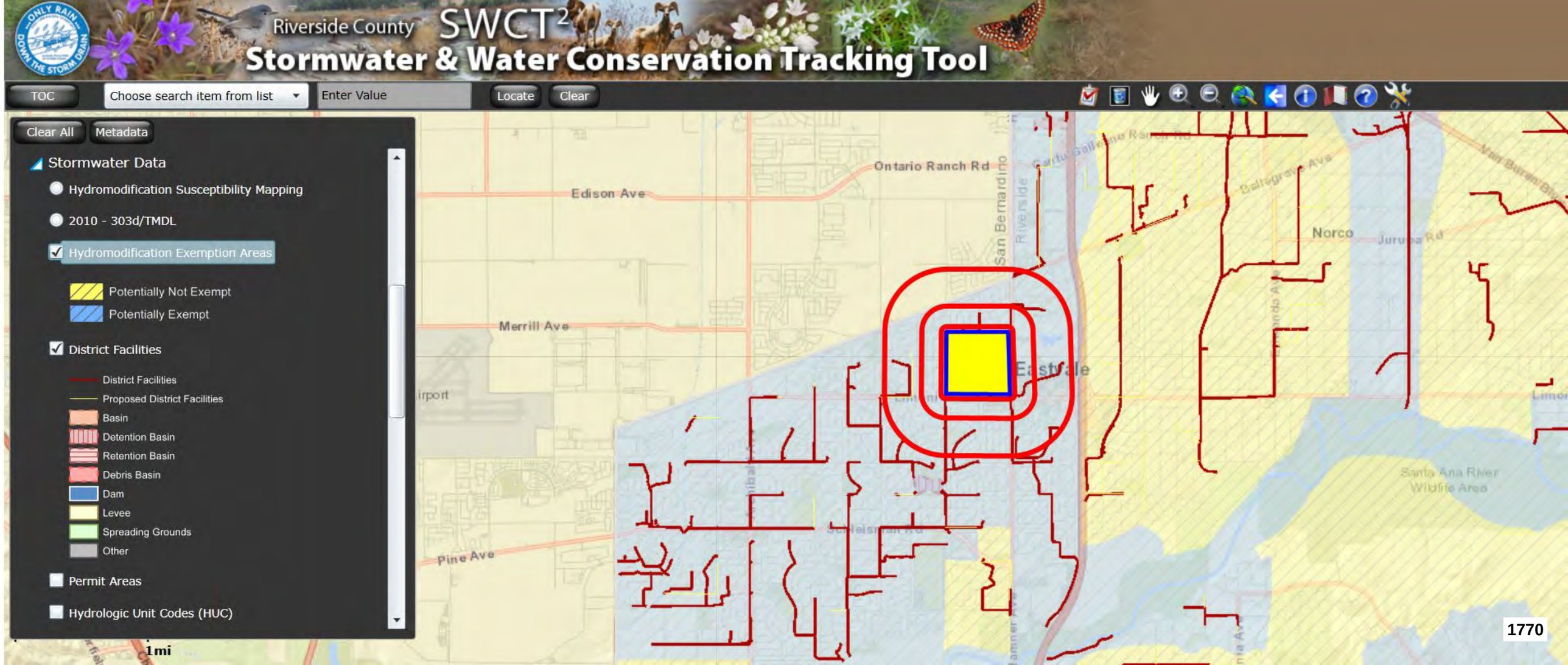
Program, Ventura Countywide Stormwater Quality Management. Technical Guidance Manual for Stormwater Quality Control Measures. Ventura, 2002.

United States Environmental Protection Agency. Storm Water Technology Fact Sheet Bioretention. Washington D.C, 1999.

Urban Drainage and Flood Control District. Urban Storm Drainage Criteria Manual Volume 3 - Best Management Practices. Vol. 3. Denver, 2008. 3 vols.

Urbonas, Ben R. Stormwater Sand Filter Sizing and Design: A Unit Operations Approach. Denver: Urban Drainage and Flood Control District, 2002.

- Project does not have HCOCs for downstream areas.


Riverside County SWCT²
Stormwater & Water Conservation Tracking Tool
TOC
Choose search item from list
Enter Value
Locate
Clear
Clear All
Metadata
Stormwater Data
Hydromodification Susceptibility Mapping
2010 - 303d/TMDL
Hydromodification Exemption Areas
Potentially Not Exempt
Potentially Exempt
District Facilities
District Facilities
Proposed District Facilities
Basin
Detention Basin
Retention Basin
Debris Basin
Dam
Levee
Spreading Grounds
Other
Permit Areas
Hydrologic Unit Codes (HUC)
Ontario Ranch Rd
Edison Ave
Merrill Ave
Pine Ave
San Bernardino
Riverside
Norco
Eastvale
Santa Ana River Wildlife Area
1mi
1770

WQMP Project Report

County of Riverside Stormwater Program

Santa Ana River Watershed Geodatabase

Saturday, October 23, 2021

Note: The information provided in this report and on the Stormwater Geodatabase for the County of Riverside Stormwater Program is intended to provide basic guidance in the preparation of the applicantï¿½s Water Quality Management Plan (WQMP) and should not be relied upon without independent verification.

Project Site Parcel Number(s):	164030014, 164030010, 164030013, 164030012, RW, 164030025, 164030024
Latitude/Longitude:	33.9791, -117.5627
Thomas Brothers Page:	
Project Site Acreage:	145.48
Watershed(s):	SANTA ANA
This Project Site Resides in the following Hydrologic Unit(s) (HUC):	**HUC Name** - HUC Number **Lower Cucamonga Creek** - 180702030705
The HUCs Contribute stormwater to the following 303d listed water bodies and TMDLs which may include drainage from your proposed Project Site:	**WBID Name** - WBID Number **Cucamonga Creek Reach 1 (Valley Reach)** - CAR8012100019990211101136 **Santa Ana River, Reach 3** - CAR8012100019990211140353
These 303d listed Water bodies and TMDLs have the following Pollutants of Concern (POC):	**Bacterial Indicators** - Coliform Bacteria, Pathogens **Metals/Metalloids** - Cadmium, Copper, Lead, Zinc
Is the Site subject to Hydromodification:	No
Limitations on Infiltration:	**Project Site Onsite Soils Group(s)** - A, C **Known Groundwater Contamination Plumes within 1000'** - No **Adjacent Water Supply Wells(s)** - No information available please contact your local water agency for more information. Your local contact agency is JURUPA C.S.D.. Your local wholesaler contact agency is METROPOLITAN WATER DISTRICT.
Environmentally Sensitive Areas within 200'(Fish and Wildlife Habitat/Species):	None
Environmentally Sensitive Areas within 200'(CVMSHCP):	None

Environmentally Sensitive Areas within 200'(WRMSHCP):	Narrow Endemic Plants Survey Req. - NAP,Burrowing Owl Survey Required Area,Narrow Endemic Plants Survey Req. - Area 7
Groundwater elevation from Mean Sea Level:	552
85th Percentile Design Storm Depth (in):	0.858
Groundwater Basin:	Chino-North
MSHCP/CVMSHCP Criteria Cell (s):	No Data
Retention Ordinance Information:	No Data
Studies and Reports Related to Project Site:	IBI Scores - Southern Cal bulletin118_4-sc water_fact_3_7.11 8039-SAR-Hydromodification final UWMP 051011 JCSD Master Water Plan 2005 Comprehensive Bacteria Reduction Plan Eastvale MDP 34th Annual Report Chino Basin Watermaster 2012 Annual Report of Santa Ana River Eastvale ADP Map Eastvale ADP Report

Appendix 8: Source Control

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet (also see instructions in Section G of the WQMP Template):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your WQMP Exhibit.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in your WQMP. Use the format shown in Table G.1on page 23 of this WQMP Template. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs for those shown here.

IF THESE SOURCES WILL BE ON THE PROJECT SITE …	… THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on WQMP Drawings**	**3** **Permanent Controls—List in WQMP Table and Narrative**	**4** **Operational BMPs—Include in WQMP Table and Narrative**
☑ **A.** On-site storm drain inlets	☐ Locations of inlets.	☐ Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.	☐ Maintain and periodically repaint or replace inlet markings. ☐ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ☐ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ☐ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
☑ **B.** Interior floor drains and elevator shaft sump pumps		☐ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	☐ Inspect and maintain drains to prevent blockages and overflow.
☑ **C.** Interior parking garages		☐ State that parking garage floor drains will be plumbed to the sanitary sewer.	☐ Inspect and maintain drains to prevent blockages and overflow.

IF THESE SOURCES WILL BE ON THE PROJECT SITE …	… THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on WQMP Drawings**	3 **Permanent Controls—List in WQMP Table and Narrative**	4 **Operational BMPs—Include in WQMP Table and Narrative**
☑ **D1.** Need for future indoor & structural pest control		❑ Note building design features that discourage entry of pests.	❑ Provide Integrated Pest Management information to owners, lessees, and operators.
☑ **D2.** Landscape/ Outdoor Pesticide Use	❑ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ❑ Show self-retaining landscape areas, if any. ❑ Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.)	State that final landscape plans will accomplish all of the following. ❑ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ❑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. ❑ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ❑ Consider using pest-resistant plants, especially adjacent to hardscape. To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	❑ Maintain landscaping using minimum or no pesticides. ❑ See applicable operational BMPs in **"What you should know for…..Landscape and Gardening"** at http://rcflood.org/stormwater/**Error! Hyperlink reference not valid.** ❑ Provide IPM information to new owners, lessees and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☑ **E.** Pools, spas, ponds, decorative fountains, and other water features.	❑ Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. (Exception: Public pools must be plumbed according to County Department of Environmental Health Guidelines.)	If the Co-Permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	❑ See applicable operational BMPs in "Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain" at http://rcflood.org/stormwater/
☑ **F.** Food service	❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	❑ Describe the location and features of the designated cleaning area. ❑ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	❑ See the brochure, "The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries" at http://rcflood.org/stormwater/ Provide this brochure to new site owners, lessees, and operators.
☑ **G.** Refuse areas	❑ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. ❑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ❑ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	❑ State how site refuse will be handled and provide supporting detail to what is shown on plans. ❑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	❑ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on WQMP Drawings**	3 **Permanent Controls—List in WQMP Table and Narrative**	4 **Operational BMPs—Include in WQMP Table and Narrative**
❑ **H.** Industrial processes.	❑ Show process area.	❑ **If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."**	❑ **See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** See the brochure "Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities" at http://rcflood.org/stormwater/

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of Hazardous Materials Programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank www.cchealth.org/groups/hazmat/	❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on WQMP Drawings**	3 **Permanent Controls—List in WQMP Table and Narrative**	4 **Operational BMPs—Include in WQMP Table and Narrative**
❑ **J.** Vehicle and Equipment Cleaning	❑ Show on drawings as appropriate: **(1) Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses.** **(2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use).** **(3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer.** **(4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.**	❑ **If a car wash area is not provided, describe any measures taken to discourage on-site car washing and explain how these will be enforced.**	**Describe operational measures to implement the following (if applicable):** ❑ **Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system.** Refer to "Outdoor Cleaning Activities and Professional Mobile Service Providers" for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/ ❑**Car dealerships and similar may rinse cars with water only.**

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the Stormwater Control Plan, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. ❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment. Refer to "Automotive Maintenance & Car Care Best Management Practices for Auto Body Shops, Auto Repair Shops, Car Dealerships, Gas Stations and Fleet Service Operations". Brochure can be found at http://rcflood.org/stormwater/ Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ **L.** Fuel Dispensing Areas	❑ Fueling areas[6] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.		❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Fact Sheet SD-30 , "Fueling Areas" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

[6] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
❑ **M.** Loading Docks	❑ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer. ❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. ❑ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.		❑ Move loaded and unloaded items indoors as soon as possible. ❑ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☑ **N.** Fire Sprinkler Test Water		☐ Provide a means to drain fire sprinkler test water to the sanitary sewer.	☐ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
O. Miscellaneous Drain or Wash Water or Other Sources ☐ Boiler drain lines ☐ Condensate drain lines ☐ Rooftop equipment ☐ Drainage sumps ☐ Roofing, gutters, and trim. ☐ Other sources		☐ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ☐ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ☐ Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ☐ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ☐ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. Include controls for other sources as specified by local reviewer.	

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on WQMP Drawings	3 Permanent Controls—List in WQMP Table and Narrative	4 Operational BMPs—Include in WQMP Table and Narrative
☑ **P.** Plazas, sidewalks, and parking lots.			☐ Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanism

- Provided in Final WQMP.

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

- Provided in Final WQMP.

Appendix I

LEAL MASTER PLAN AMENDMENT PROJECT
NOISE IMPACT STUDY
City of Eastvale



LEAL MASTER PLAN AMENDMENT
NOISE IMPACT STUDY
City of EASTVALE, California

Prepared for:

Mr. AJ Jarvis, President
THE NEW HOME COMPANY
15231 Laguna Canyon Rd Suite 250
Irvine, CA 92618

Prepared by:

RK ENGINEERING GROUP, INC.
4000 Westerly Place, Suite 280
Newport Beach, CA 92660

Bryan Estrada, AICP
Darshan Shivaiah, M.S.

April 8, 2022

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1.0 Introduction

1.1 Purpose of Analysis and Study Objectives

The purpose of this report is to evaluate the potential noise impacts from the proposed LEAL Master Plan Amendment (project) and provide recommendations, if necessary, to minimize any project noise impacts. The assessment was conducted within the context of the California Environmental Quality Act (CEQA) and utilizes the noise standards set forth by the applicable Federal, State, and local agencies.

The following is provided in this report:

- A description of the study area and the proposed project
- Information regarding the fundamentals of noise
- Identification of the regulatory setting and applicable noise standards
- Analysis of the existing noise environment
- Analysis of the project's operational noise impact to adjacent receptors
- Analysis of the project's construction noise and vibration impact to adjacent receptors
- Summary of recommended project design features to reduce noise level impacts.

This analysis also reviews changes in noise levels that would occur as a result of the proposed project in comparison to the previously approved project described in the Leal Master Plan Draft Environmental Impact Report, prepared by Michael Baker International, July 2015 (hereinafter referred to as 2015 EIR).

1.2 Site Location

The proposed project site is located near the northwest corner (NWC) of Hamner Avenue and Limonite Avenue, in the City of Eastvale. The project site is bound by 58th Street to the north, Limonite Avenue to the south, Hamner Avenue to the east, and Scholar Avenue to the west. The project site is located approximately 666 feet above sea level and generally slopes from north to south.

The project site location map is provided in Exhibit A.

The project site is currently vacant and zoned for Leal Master Plan in the City of Eastvale Zoning Map. The City of Eastvale General Plan land use map designates the project site as Leal Policy Area.

Several noise sensitive land use areas are present surrounding the project site, including;

- Existing residential uses located to the north, approximately 50 feet from the project site, across 58th Street.

- Existing residential uses located to the south, approximately 120 feet from the project site, across Limonite Avenue.

- Existing residential uses located to the east, approximately 170 feet from the project site, across Hamner Avenue.

- Existing residential uses located to the west, approximately 75 feet from the project site, across Scholar Way.

1.3 Project Description

The project consists of amending the Leal Master Plan to allow for the construction and operation of a total of 2,500 residential dwelling units, a 1.6 acre community recreational center, 12.5 acres of community park, and 28.17 acres of mixed use development (including a new civic center, retail/commercial and residential uses).

The total gross site area is approximately 158.6 acres.

The buildout of the project will also include approximately 22.9 acres of roadway improvement to 58th Street, Limonite Avenue, Hamner Avenue and Scholar Way, along with new internal street improvements.

The site plan used for this analysis, provided by the HUNSAKER & ASSOCIATES, is illustrated in Exhibit B. Table 1 summarizes the land use assumptions used for this analysis.

Table 1
Land Use Summary

Land Use	CalEEMod Use	Quantity	Metric[1]	Acre
Single Family Residential	Single Family Detached	400	DU	47.148
Multifamily Residential	Townhomes/Condos	1,000	DU	35.277
	Apartments	1,100	DU	28.169
Retail	Regional Shopping Center	390.0	TSF	
General Office	General Office	65.0	TSF	
Medical Office	Medical Office Building	65.0	TSF	
Civic Center	Government (Civic Center)	40.0	TSF	11.019
Fire Station		12.2	TSF	
Police		10.0	TSF	
Library	Library	25.0	TSF	
Parking	Parking Structure	2,820.0	Spaces	
Parking	Parking Lot	978.0	Spaces	
Recreational Center	City Park	1.6	Acre	1.584
Park	City Park	12.5	Acre	12.478
On-site / Off-site Street Improvements	Parking Lot	22.9	Acre	22.917
Total				**158.592**

[1] D.U. – Dwelling units; T.S.F. – Thousand Square Feet

This report analyzes short-term noise impacts associated with construction activities and long-term noise impacts associated with the day-to-day operation of the project. The primary sources of long-term noise impacts would increase in vehicular traffic along surrounding roadways, on-site circulation and parking lot noise, HVAC units, and outdoor recreational noise.

1.4 Summary of Analysis Results

Based on the result of this analysis, the project is not expected to result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

The amendment project is expected to generate 27,764 fewer trips compared to the previously approved 2015 EIR. As a result, the project's traffic noise contribution to the surrounding roadways would be less than previously estimated in the 2015 EIR, and the project would not cause a significant increase in the ambient roadway noise levels in the vicinity of the site. The amendment project has reduced the amount of commercial land use in favor of a greater amount of residential use; which is generally considered a more compatible land use with the surrounding community from a noise standpoint.

Several standard construction best practices and project design features have been recommended to help ensure noise levels do not significantly impact the surrounding community.

1.5 Recommended Project Design Features

The following recommended project design features include standard rules and requirements, best practices and recognized design guidelines for reducing noise levels. Design features are assumed to be part of the conditions of the project and integrated into its design. Design features are not typically considered mitigation under CEQA.

Operational Design Features

DF-1 Prior to the issuance of building permits, the project shall demonstrate that building construction will achieve the minimum interior noise standard of 45 dBA CNEL for all residential units located along arterial roadways and/or adjacent to commercial uses, per the California Building Standards Code. The following noise control measures may be required for dwelling units located near adjacent roadways:

- Install sound barriers (masonry walls or walls with earth berms) between residences and noise sources.
- Install double-paned or upgraded STC sound rated windows.
- Provide sound insulating exterior walls and roofing systems.
- Locate and/or design attic vents to minimize sound propagation into each home.

- Provide forced-air ventilation systems.

- Provide the necessary setbacks for dwelling units fronting along major roadways.

DF-2 The project shall comply with California Title 24 building insulation requirements for exterior walls, roofs and common separating assemblies (e.g. floor/ceiling assemblies and demising walls).

DF-3 For proper acoustical performance, all exterior windows, doors, and sliding glass doors should have a positive seal and leaks/cracks must be kept to a minimum.

DF-4 The final building plans shall ensure that HVAC units are not located within an area of the project site that would contribute to a noise level exceedance at any adjacent property line, per the City of Eastvale Municipal Code requirements. To meet the City's noise standards the following measures should be followed:

- All HVAC equipment shall be shielded or enclosed from the line of sight of adjacent residential uses.

- The combined noise level of all units operating simultaneously shall not exceed the City of Eastvale daytime and nighttime exterior standards at the nearest surrounding property lines.

DF-5 Future residents, property management personnel, and commercial tenants will be required to comply with the City of Eastvale Municipal Code Noise Regulations, Chapter 8.52, which specify that no person shall create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness.

To help ensure compliance with the City's Noise Regulations, the following recommendations are provided:

- Deliveries, loading and unloading activities, and trash pick-up hours should be limited to daytime hours only (8 a.m. – 10 p.m.).

- Limit engine idling time for all delivery vehicles and moving trucks to 5 minutes or less.

Construction Design Features

DF-6 Prepare a construction management plan and obtain a construction work permit from the City of Eastvale prior to starting construction. The construction management plan shall ensure all contractors implement construction best management practices to reduce construction noise levels. Examples of best management practices may include the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).

- Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.

- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.

- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.

- Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible.

- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

- Provide notifications and signage in readily visible locations along the perimeter of construction sites that indicate the dates and duration of construction activities, as well as provide a telephone number where neighbors can enquire about the construction process and register complaints to a designated construction noise disturbance coordinator.

- Construction activities shall not take place between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and 6:00 p.m. to 7:00 a.m. during the months of October through May.

DF-7 No impact pile driving or blasting activities shall be permitted on the project site during construction. If impact pile driving or blasting is required, a follow-up noise and vibration impact assessment shall be conducted prior to start of any activity.

2.0 Fundamentals of Noise

This section of the report provides basic information about noise and vibration and presents some of the terms used in the report.

2.1 Sound, Noise, and Acoustics

The sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. The sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

2.2 Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting out at 20 Hz all the way to the high pitch of 20,000 Hz.

2.3 Sound Pressure Levels and Decibels

The *amplitude* of a sound determines its loudness. The loudness of sound increases or decreases, as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square inch meter (N/m2), also called micro-Pascal (μPa). One μPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels and abbreviated as dB.

2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two (2) sounds of equal SPL are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3dB increase.

If two (2) sounds differ by approximately 10 dB the higher sound level is the predominant sound.

2.5 Human Response to Changes in Noise Levels[1]

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, (A-weighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, the A-scale weighing is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in the noise level of 3 dB. A change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway), would result in a barely perceptible change in sound level.

2.6 Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant, while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels. Following are the most commonly used noise descriptors along with brief definitions.

A-Weighted Sound Level

The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level

The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

[1] Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

Community Noise Equivalent Level (CNEL)

The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Decibel (dB)

A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A)

A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ)

The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Habitable Room

Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

L(n)

The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90, and L99, etc.

Noise

Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Percent Noise Levels

See L(n).

Sound Level (Noise Level)

The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

Sound Level Meter

An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL)

The dBA level which, if it lasted for one (1) second, would produce the same A-weighted sound energy as the actual event.

2.7 Sound Propagation[2]

As sound propagates from a source it spreads geometrically. The sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

[2] Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

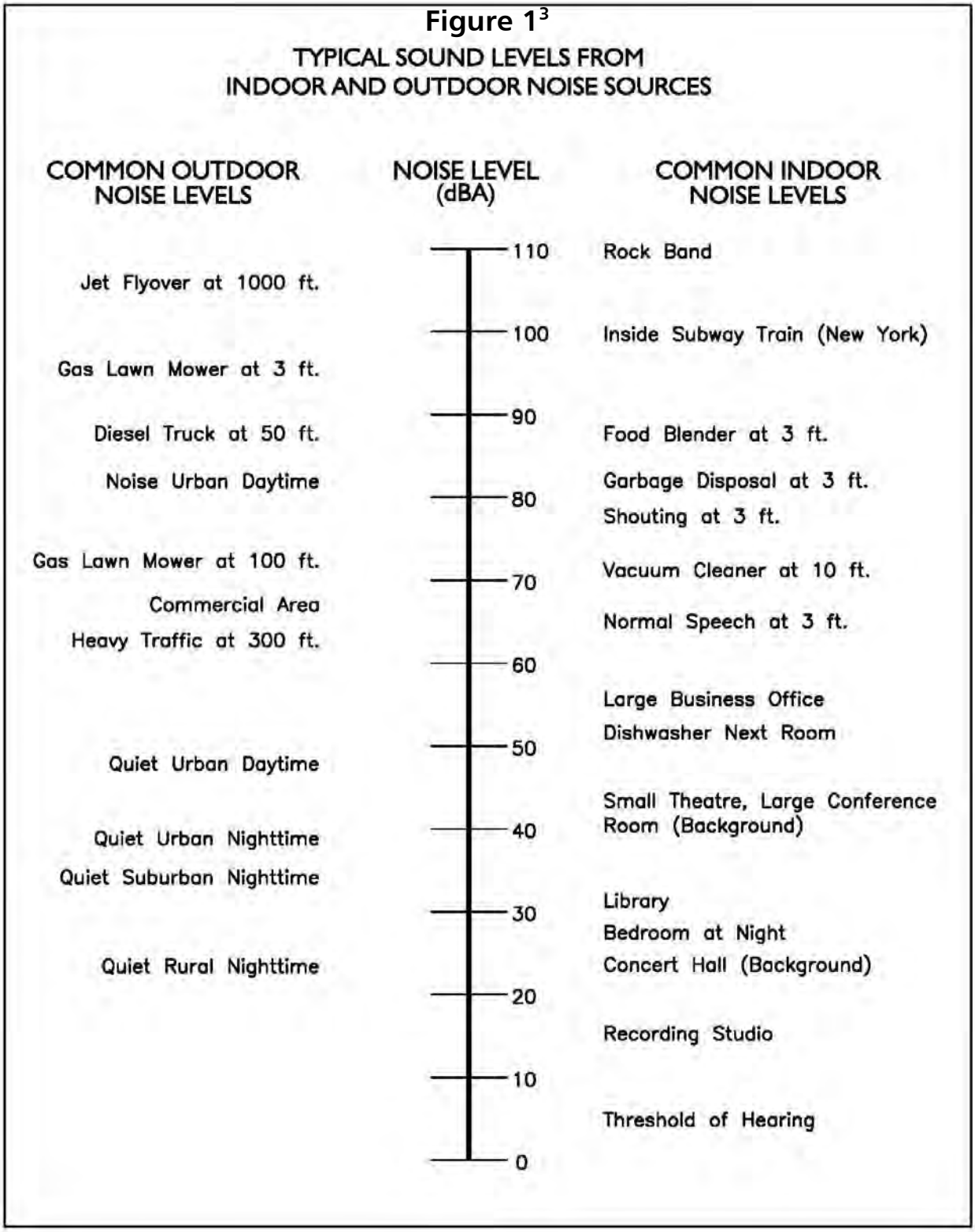
As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use the hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at an additional rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 6.0 dB per doubling of distance for a point source.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet and greater from a noise source. Wind, temperature, air humidity, and turbulence can further impact how far sound can travel.

Figure 1 shows typical sound levels from indoor and outdoor noise sources.

Figure 1[3]

TYPICAL SOUND LEVELS FROM
INDOOR AND OUTDOOR NOISE SOURCES



[3] Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

2.8 Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude.

PPV

Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

RMS

Known as the root mean squared (RMS) can be used to denote vibration amplitude.

VdB

A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

2.9 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts.

2.10 Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wavefront, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wavefront. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wavefront. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

3.0 Regulatory Setting

The proposed project is located in the City of Eastvale and noise regulations are addressed through the various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

3.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three (3) purposes:

- Publicize noise emission standards for interstate commerce
- Assist state and local abatement efforts
- Promote noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was originally tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows: The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies. The Federal Aviation Agency (FAA) is responsible to regulate noise from aircraft and airports. The Federal Highway Administration (FHWA) is responsible to regulate noise from the interstate highway system. The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

The Federal government and the State advocate that local jurisdiction use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being constructed adjacent to a highway or, or alternatively that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the Federal government and the State have preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

3.2 State Regulations

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix." The matrix allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

The State of California has established noise insulation standards as outlined in Title 24 of the Building Standards Code which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold. The State mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

Noise insulation design standards for residences are identified in Section 1206 Sound Transmission of the 2019 California Building Standards Code. The City is required by the State Housing Law to adopt these State codes as minimum performance standards. The City may enact stricter noise standards throughout the city or on a case-by-case basis if deemed necessary. In brief, the Title 24 noise standards require the following for multi-family dwellings:

1. Party wall and floor-ceiling assembly designs must provide a minimum STC of 50, based on lab tests. Field tested assemblies must provide a minimum noise isolation class (NIC) of 45.

2. Floor-ceiling assembly designs must provide for a minimum impact insulation class (IIC) of 50, based on lab tests. Field tested assemblies must provide a minimum FIIC of 45.

3. Entry doors from interior corridors must provide an STC of 26 or more.

4. Penetrations or openings in sound rated assemblies must be treated to maintain required ratings.

5. Interior noise levels due to exterior sources must not exceed a community noise equivalent level (CNEL) or a day-night level (LDN) of 45 dBA, in any habitable room.

Thus, the interior limit is 45 dBA CNEL between dwelling units and from exterior noise sources to interior living spaces.

3.3 City of Eastvale Noise Regulations

The project is required to comply with the noise standards and thresholds established within the City of Eastvale Municipal Code Chapter 8.52 Noise Regulation. The noise standards from the Municipal code and the General Plan are provided in Appendix A.

3.3.1 City of Eastvale Municipal Code Noise Standards

The City of Eastvale Municipal Code Chapter 8.52 Noise Regulation, requires that a project shall not create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness. Noise standards are defined in Table 1 of the Chapter 8.52 Noise Regulation of the Municipal Code and are applicable to the project site and surrounding noise sensitive uses.

Table 2 shows the exterior noise standards from the City of Eastvale Municipal Code Chapter 8.52 Noise Regulation Exterior Noise Standards for the project site and surrounding residential land uses.

Table 2
City of Eastvale Municipal Code
Exterior Noise Level Standards

Land Use	Time Period	Maximum Decibel Level (dBA)
Specific Plan – Residential	7:00 AM – 10:00 PM	55
	10:00 PM – 7:00 AM	45
Specific Plan – Commercial	7:00 AM – 10:00 PM	65
	10:00 PM – 7:00 AM	55
Open Space (Recreational Use)	7:00 AM – 10:00 PM	45
	10:00 PM – 7:00 AM	45

[1] Source: City of Eastvale Municipal Code, Chapter 8.52 – Noise Regulation.

Construction Noise Regulations

Chapter 8.52 Noise Regulations, Section 8.52.020 Exemptions of the City's municipal code exempts the construction noise activities, provided;

- Private construction projects located one-quarter of a mile or more from an inhabited dwelling;
- Private construction projects located within one-quarter of a mile from an inhabited dwelling, provided that construction does not occur between the hours of:

  i. 6:00 p.m. and 6:00 a.m. during the months of June through September;

  ii. 6:00 p.m. and 7:00 a.m. during the months of October through May;

3.3.2 City of Eastvale General Plan Noise Standards

The City of Eastvale General Plan Noise Element addresses noise goals and policies, implementation programs, compatibility guidelines and roadway noise levels. Goals and policies that apply to the proposed project include:

POLICY N-1: Protect noise-sensitive land uses from high levels of noise by restricting noise producing land uses from these areas.

POLICY N-3: Consider the following uses to be sensitive to noise and vibration, and discourage these uses in areas where existing or projected future noise levels would be in excess of 65 CNEL and/or vibration would be more than 0.0787 Peak Particle Velocity (inches/second):

- Schools;
- Hospitals;
- Rest Homes;
- Long Term Care Facilities;
- Mental Care Facilities;
- Residential Uses;
- Libraries;
- Passive Recreation Uses; and
- Places of worship

POLICY N-4: Require noise sensitive land uses proposed in areas where existing or projected future noise levels would be in excess of 65 CNEL to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.

POLICY N-5: Require that exterior noise forecasts use the appropriate Level of Service for the adjacent roadways, or a 20-year projection of traffic volumes (whichever is greater) for future noise forecasts.

4.0 Study Method and Procedures

The following section describes the noise modeling procedures and assumptions used in the noise analysis.

4.1 Traffic Noise Modeling

Traffic noise from vehicular traffic was projected using a version of the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at the predicted noise level through a series of adjustments to the key input parameters. The following outlines the key adjustments made to the computer model for the roadway inputs:

- Roadway classification – (e.g. freeway, major arterial, arterial, secondary, collector, etc),
- Roadway Active Width – (distance between the center of the outer most travel lanes on each side of the roadway)
- Average Daily Traffic (ADT) Volumes, Travel Speeds, Percentages of automobiles, medium trucks, and heavy trucks
- Roadway grade and angle of view
- Site Conditions (e.g. soft vs. hard)
- Percentage of total ADT which flows each hour throughout a 24-hour period

The following outlines key adjustments to the computer model for the project site parameter inputs:

- Vertical and horizontal distances (Sensitive receptor distance from noise source)
- Noise barrier vertical and horizontal distances (Noise barrier distance from sound source and receptor).
- Traffic noise source spectra
- Topography

Table 3 and Table 4 indicates the roadway parameters utilized for this study.

Table 3
Roadway Parameters[1]

Roadway	Segment	Class.	Lanes	Speed Limit	Site
Limonite Avenue	Archibald Avenue to Harrison Avenue	Urban Arterial	6	50	Hard
Limonite Avenue	Harrison Avenue to Scholar Way	Urban Arterial	6	50	Hard
Limonite Avenue	Scholar Way to Hamner Avenue	Urban Arterial	5	45	Hard
Limonite Avenue	Hamner Avenue to I-15 Ramps	Urban Arterial	6	45	Hard
Limonite Avenue	I-15 Ramps to Wineville Avenue	Urban Arterial	6	50	Hard
Hamner Avenue	Citrus Street to Schleisman Road	Urban Arterial	6	50	Hard
Hamner Avenue	Schleisman Road to 68th Street	Urban Arterial	6	45	Hard
Hamner Avenue	68th Street to 58th Street	Urban Arterial	6	45	Hard
Hamner Avenue	Limonite Avenue to 58th Street	Urban Arterial	5	45	Hard
Hamner Avenue	58th Street to Bellgrave Avenue	Urban Arterial	6	45	Hard
Scholar Way	Limonite Avenue to 68th Street	Secondary Collector	2	35	Hard
Scholar Way	Bellgrave Avenue to Limonite Avenue	Secondary Collector	4	35	Hard

[1] Source: LEAL Masterplan Amendment Project, Traffic Impact Study, Eastvale, RK Engineering, November 2021.

Table 4
Roadway Average Daily Traffic (ADT)[1]

Roadway	Segment	Existing ADT	Existing Plus Project ADT	Long Range	Long Range Plus Project
Limonite Avenue	Archibald Avenue to Harrison Avenue	18,497	22,162	44,000	47,665
Limonite Avenue	Harrison Avenue to Scholar Way	26,192	29,857	50,780	54,445
Limonite Avenue	Scholar Way to Hamner Avenue	29,548	47,874	48,960	67,286
Limonite Avenue	Hamner Avenue to I-15 Ramps	44,312	60,805	69,110	85,603
Limonite Avenue	I-15 Ramps to Wineville Avenue	33,855	37,520	65,010	68,675
Hamner Avenue	Citrus Street to Schleisman Road	20,619	24,284	25,400	29,065
Hamner Avenue	Schleisman Road to 68th Street	11,831	15,496	15,030	18,695
Hamner Avenue	68th Street to 58th Street	20,186	22,019	22,730	24,563
Hamner Avenue	Limonite Avenue to 58th Street	15,649	32,142	31,890	48,383
Hamner Avenue	58th Street to Bellgrave Avenue	15,649	32,142	31,890	48,383
Scholar Way	Limonite Avenue to 68th Street	4,912	6,745	6,860	8,693
Scholar Way	Bellgrave Avenue to Limonite Avenue	2,240	4,073	2,810	4,643

[1] LEAL Masterplan Amendment Project, Traffic Impact Study, Eastvale, RK Engineering, November 2021.

Table 5 and Table 6 indicates the vehicle distribution and truck mix utilized for all roadways in this study area.

Table 5
Vehicle Distribution (Truck Mix) for Arterial Roadways[1]

Motor-Vehicle Type	Daytime % (7 AM - 7 PM)	Evening % (7 PM - 10 PM)	Night % (10 PM - 7 AM)	Total % of Traffic Flow
Automobiles	69.5	12.9	9.6	92
Medium Trucks	1.44	0.06	1.5	3
Heavy Trucks	2.4	0.1	2.5	5

[1] Vehicle percentages are based on County of Riverside Department of Environmental Health.

Table 6
Vehicle Distribution (Truck Mix) for Collector Roadways[1]

Motor-Vehicle Type	Daytime % (7 AM - 7 PM)	Evening % (7 PM - 10 PM)	Night % (10 PM - 7 AM)	Total % of Traffic Flow
Automobiles	73.6	13.6	10.22	97.42
Medium Trucks	0.9	0.04	0.9	1.84
Heavy Trucks	0.35	0.04	0.35	0.74

[1] Vehicle percentages are based on County of Riverside Department of Environmental Health.

4.2 Construction Noise Modeling

The construction noise analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model, together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, and baseline parameters for the project site. This study evaluates the potential exterior noise impacts during each phase of construction.

Demolition activities are expected to occur at approximately 50 feet from the nearest existing residential uses to the north. Therefore, noise levels from demolition activities are analyzed at 50 feet. Noise levels from all other construction activities are conservatively estimated from 200 feet, whereas, in reality, the degree of construction noise will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties. Noise levels were projected for equipment operating over an 1-hour period from to the nearest sensitive receptor property line.

- Construction phasing and equipment usage assumptions are referenced from the LEAL Master Plan AQ & GHG and Energy Impact Study, by RK Engineering, November 2021.

4.3 Construction Vibration Modeling

The construction vibration assessment is based on the methodology set-forth within the Caltrans Transportation and Construction Vibration Guidance Manual, April 2020. The vibration impacts from vibratory rollers and compactors, heavy truck loading and bulldozer activity is analyzed. All vibratory activity is analyzed as a continuous and/or frequent event and is required to comply with the applicable guidance thresholds criteria. It is expected

that vibration levels will be highest during paving phase. No impact pile driving is expected as part of this project.

Vibratory impacts were calculated from the site area property line to the closest sensitive receptors and structures using the reference vibration levels, soil conditions and the reference equation *PPV= PPV ref (25/D)^n (in/sec)* (from Caltrans Manual) where:

PPV = reference measurement at 25 feet from vibration source
D = distance from equipment to property line
n= vibration attenuation rate through ground (n=1.1 was utilized for this study)

5.0 Existing Noise Environment

The existing noise environment for the project site and surrounding area has been established based on the modeled existing traffic noise levels by RK.

5.1 Existing Traffic Noise Levels

Table 7 shows the modeled existing traffic noise levels calculated at 100 feet from the centerline of roadway segments surrounding the site. The distances to the 55, 60, 65, and 70 dBA CNEL noise contours are also shown. The noise levels were calculated using traffic volumes from the *LEAL Masterplan Amendment Traffic Impact Study, RK Engineering Group, November 2021.*

The traffic noise levels does not takes into account of the effect of any noise barriers or topography that may reduce traffic noise levels.

The roadway noise calculation worksheets are provided in Appendix B.

Table 7
Existing Traffic Noise Levels

Roadway[1]	Segment	CNEL at 100ft. (dBA)	Distance to Contour (Ft)[2]			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Limonite Avenue	Archibald Ave to Harrison Ave	68.2	66	210	664	2,100
Limonite Avenue	Harrison Avenue to Scholar Way	69.7	94	297	940	2,973
Limonite Avenue	Scholar Way to Hamner Avenue	69.0	80	254	803	2,538
Limonite Avenue	Hamner Avenue to I-15 Ramps	70.8	120	381	1,204	3,806
Limonite Avenue	I-15 Ramps to Wineville Avenue	70.8	122	384	1,215	3,843
Hamner Avenue	Citrus Street to Schleisman Road	68.7	74	234	740	2,341
Hamner Avenue	Schleisman Road to 68th Street	65.1	32	102	321	1,016
Hamner Avenue	68th Street to 58th Street	67.4	55	173	548	1,734
Hamner Avenue	Limonite Avenue to 58th Street	66.3	43	134	425	1,344
Hamner Avenue	58th Street to Bellgrave Avenue	66.3	43	134	425	1,344
Scholar Way	Limonite Avenue to 68th Street	57.8	6	19	60	191
Scholar Way	Bellgrave Ave to Limonite Ave	54.4	3	9	28	87

[1] Noise levels calculated at 100 feet from the centerline of subject roadway.

[2] Refer to Appendix B for projected noise level calculations.

6.0 Operational Noise Impacts

This assessment analyzes the anticipated noise levels generated by the project and impacts caused by changes to the ambient environment. The main sources of noise generated by the project would include vehicular traffic noise along the adjacent roadways. Noise level impacts are compared to the City of Eastvale noise standards.

The project must demonstrate that noise levels generated by the project site would not result in a permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

6.1 Traffic Source Noise

The potential off-site noise impacts caused by the increase in vehicular traffic from the operation of the proposed project on the nearby roadways were calculated for direct and cumulative project conditions.

6.1.1 Existing Conditions

The direct impact of project traffic added to the surrounding roadway network is shown in Table 8 for the existing year conditions. Roadway noise calculation worksheets are provided in Appendix B.

The FHWA Highway Traffic Noise Analysis and Abatement Policy and Guidance indicates that a change in noise level of 3 dBA is considered barely perceptible and a change in noise level of 5 dBA is considered readily perceptible to the human ear. Therefore, for purposes of this analysis, and consistent with common practice in the County of Riverside, an increase of 5 dBA or more above ambient conditions would be considered the threshold of significance for causing a substantial permanent increase in noise.

Table 8
Roadway Noise Impact Analysis (dBA CNEL)[1]
Existing Year Conditions

Roadway[2]	Segment	CNEL at the Nearest Façade			Significant Impact?[3]
		Existing Without Project	Existing with Project	Change as a Result of Project	
Limonite Avenue	Archibald Ave to Harrison Ave	68.2	69.0	0.8	NO
Limonite Avenue	Harrison Avenue to Scholar Way	69.7	70.3	0.6	NO
Limonite Avenue	Scholar Way to Hamner Avenue	69.0	71.3	2.3	NO
Limonite Avenue	Hamner Avenue to I-15 Ramps	70.8	72.2	1.4	NO
Limonite Avenue	I-15 Ramps to Wineville Avenue	70.8	71.3	0.5	NO
Hamner Avenue	Citrus Street to Schleisman Rd	68.7	69.4	0.7	NO
Hamner Avenue	Schleisman Road to 68th Street	65.1	66.2	1.1	NO
Hamner Avenue	68th Street to 58th Street	67.4	67.8	0.4	NO
Hamner Avenue	Limonite Avenue to 58th Street	66.3	69.4	3.1	NO
Hamner Avenue	58th Street to Bellgrave Avenue	66.3	69.4	3.1	NO
Scholar Way	Limonite Avenue to 58th Street	57.8	59.2	1.4	NO
Scholar Way[5]	58th Street to Bellgrave Avenue	54.4	57.0	2.6	NO

[1] Exterior noise levels are calculated at 5 feet above ground level.
[2] Noise levels are calculated approximately 100 feet from the centerline of the subject roadway.
[3] A significant noise impact would occur when project operational activities cause an increase in ambient noise levels of 5 dBA or more and the resulting noise level exceeds 60 dBA CNEL/Ldn.

Table 8 shows that the project would not result in a significant traffic noise level increase for all study area roadway segments.

6.1.2 Long Range Year Conditions

The cumulative impact of project traffic added to the surrounding roadway network with the addition of other potential cumulative development projects and area-wide growth is shown in Table 9 for Long Range Year conditions.

The FHWA Highway Traffic Noise Analysis and Abatement Policy and Guidance indicates that a change in noise level of 3 dBA is considered barely perceptible and a change in noise

level of 5 dBA is considered readily perceptible to the human ear. Therefore, for purposes of this analysis, and consistent with common practice in the County of Riverside, an increase of 5 dBA or more above ambient conditions would be considered the threshold of significance for causing a substantial permanent increase in noise.

Table 9
Roadway Noise Impact Analysis (dBA CNEL)[1]
Long Range Conditions

Roadway[2]	Segment	CNEL at the Nearest Façade			Significant Impact? [3]
		Long Range Without Project	Long Range with Project	Change as a Result of Project	
Limonite Avenue	Archibald Ave to Harrison Ave	72.0	72.3	0.3	NO
Limonite Avenue	Harrison Avenue to Scholar Way	72.6	72.9	0.3	NO
Limonite Avenue	Scholar Way to Hamner Avenue	71.2	72.6	1.4	NO
Limonite Avenue	Hamner Avenue to I-15 Ramps	72.7	73.7	1.0	NO
Limonite Avenue	I-15 Ramps to Wineville Avenue	73.7	73.9	0.2	NO
Hamner Avenue	Citrus Street to Schleisman Rd	69.6	70.2	0.6	NO
Hamner Avenue	Schleisman Road to 68th Street	66.1	67.1	1.0	NO
Hamner Avenue	68th Street to 58th Street	67.9	68.2	0.3	NO
Hamner Avenue	Limonite Avenue to 58th Street	69.4	71.2	1.8	NO
Hamner Avenue	58th Street to Bellgrave Avenue	69.4	71.2	1.8	NO
Scholar Way	Limonite Avenue to 58th Street	59.3	60.3	1.0	NO
Scholar Way[5]	58th Street to Bellgrave Avenue	55.4	57.6	2.2	NO

[1] Exterior noise levels are calculated at 5 feet above ground level.
[2] Noise levels are calculated approximately 100 feet from the centerline of the subject roadway.
[3] A significant noise impact would occur when project operational activities cause an increase in ambient noise levels of 5 dBA or more and the resulting noise level exceeds 60 dBA CNEL/Ldn.

Tables 9 shows that the project would not result in a significant traffic noise level increase for all study area roadway segments. The roadway noise calculation worksheets are provided in Appendix B.

6.2 Stationary Source Noise Impacts

Potential noise increases associated with each of the potential land uses in the proposed project are discussed below. Noise impacts were qualitatively assessed based on the potential land uses within the Master Plan area.

6.2.1 Residential Land Use

The proposed project allows for the future development of various residential land uses including medium- and high-density residential development and mixed-use development. The typical sources of stationary noise from residential land uses would include on-site circulation and parking lot noise, mechanical pool/spa equipment, HVAC units, and outdoor recreational noise.

Noise from residential land uses are typically considered compatible with other adjacent residential uses and would not typically be categorized as loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness. In particular, social activities and vehicular related noise are generally substantially less during the noise sensitive nighttime hours.

Several project design features are provided to help ensure stationary noise from the residential land uses do not adversely affect the surrounding community.

6.2.2 Parks, Trails, and Open Space Land Uses

The proposed project allows for the development of several community features including gathering places, parks, open spaces, and trails.

The main sources of potential stationary noise impacts from the proposed land uses would include noise from children's play areas and playgrounds, outdoor gathering and events, and/or vehicle parking areas.

Parks and open space are typically considered compatible land uses with other adjacent residential uses and would not typically generate loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness. Additionally, the parks will be closed during nighttime hours to help further reduce any potential noise impacts.

6.2.3 Commercial and Civic Land Uses

The proposed project allows for the future development of various nonresidential land uses, including standard and mixed-use retail, commercial office, and civic center uses. The main sources of potential stationary noise impacts from the proposed commercial and civic center use would mainly include on-site circulation and parking lot noise, HVAC units, on-site truck operations, vehicle/equipment backup alarms, decompression of trailer truck brakes, and loading dock operations.

Based on the current Masterplan layout, commercial and civic land uses are generally expected to be located on the southeast corner of the project site, with the exception of the fire station which is proposed to be located at the northwest corner of the site. Fire and emergency services are exempt from the noise standards in the Eastvale Municipal Code; however, several design features will help reduce noise levels as much as possible.

Land uses surrounding the proposed commercial and civic land uses near the southwest portion of the site include, commercial uses to the east and south. The proposed land uses would typically be compatible with other adjacent off-site surrounding land uses. Several project design features and construction practices are provided to help ensure operational noise levels from the commercial and civic center uses do not adversely affect the surrounding community.

6.3 Preliminary Interior Noise Analysis

Traffic noise levels along the adjacent roadways are the primary source of ambient noise impacting the project site. This section of the analysis does not necessarily apply to CEQA, as recent court rulings have indicated that CEQA is primarily concerned with the project's impact of the environment, not the environment's impact on a project.

Future traffic noise levels along the roadway segments surrounding the project site represents the noise levels at 100 feet from the centerline of each roadway segment and do not consider future noise barrier walls along the project property lines. The future roadway noise levels along the surrounding roadways are expected to range from 72.2 dBA CNEL along Limonite Avenue, 70.7 dBA CNEL along Hamner Avenue and 59.9 dBA CNEL along Scholarly Way.

Prior to issuance of building permits, the project proponent should demonstrate to the City building department that the proposed building shell and window assemblies will achieve

exterior to interior noise reduction necessary to meet the State of California and City of Eastvale requirements.

Furthermore, the project shall comply with California Title 24 insulation building requirements for commercial, multi-family dwelling units for common separating assemblies (e.g., floor/ceiling assemblies and demising walls).

6.4 Recommended Operational Design Features

The following recommended project design features include standard rules and requirements, best practices and recognized design guidelines for reducing noise levels. Design features are assumed to be part of the conditions of the project and integrated into its design. Design features are not typically considered mitigation under CEQA.

DF-1 Prior to the issuance of building permits, the project shall demonstrate that building construction will achieve the minimum interior noise standard of 45 dBA CNEL for all residential units located along arterial roadways and/or adjacent to commercial uses, per the California Building Standards Code. The following noise control measures may be required for dwelling units located near adjacent roadways:

- Install sound barriers (masonry walls or walls with earth berms) between residences and noise sources.
- Install double-paned or upgraded STC sound rated windows.
- Provide sound insulating exterior walls and roofing systems.
- Locate and/or design attic vents to minimize sound propagation into each home.
- Provide forced-air ventilation systems.
- Provide the necessary setbacks for dwelling units fronting along major roadways.

DF-2 The project shall comply with California Title 24 building insulation requirements for exterior walls, roofs and common separating assemblies (e.g. floor/ceiling assemblies and demising walls).

DF-3 For proper acoustical performance, all exterior windows, doors, and sliding glass doors should have a positive seal and leaks/cracks must be kept to a minimum.

DF-4 The final building plans shall ensure that HVAC units are not located within an area of the project site that would contribute to a noise level exceedance at any adjacent property line, per the City of Eastvale Municipal Code requirements. To meet the City's noise standards the following measures should be followed:

- All HVAC equipment shall be shielded or enclosed from the line of sight of adjacent residential uses.

- The combined noise level of all units operating simultaneously shall not exceed the City of Eastvale daytime and nighttime exterior standards at the nearest surrounding property lines.

DF-5 Future residents, property management personnel, and commercial tenants will be required to comply with the City of Eastvale Municipal Code Noise Regulations, Chapter 8.52, which specify that no person shall create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness.

To help ensure compliance with the City's Noise Regulations, the following recommendations are provided:

- Deliveries, loading and unloading activities, and trash pick-up hours should be limited to daytime hours only (8 a.m. – 10 p.m.).

- Limit engine idling time for all delivery vehicles and moving trucks to 5 minutes or less.

7.0 Construction Noise and Vibration Impacts

Temporary construction noise and vibration impacts have been assessed from the project site to the surrounding adjacent land uses.

Chapter 8.52 Noise Regulations, Section 8.52.020 – Exemptions, of the City's municipal code exempts the construction noise activities, provided;

- Private construction projects located one-quarter of a mile or more from an inhabited dwelling;
- Private construction projects located within one-quarter of a mile from an inhabited dwelling, provided that construction does not occur between the hours of:
  - i. 6:00 p.m. and 6:00 a.m. during the months of June through September;
  - ii. 6:00 p.m. and 7:00 a.m. during the months of October through May;

Although construction activity may be exempt from the noise standards in the City's Municipal Code, CEQA requires that potential noise impacts still be evaluated for significance. The City of Eastvale CEQA Significance Thresholds Guide does not have established criteria for construction noise impacts. Therefore, for purposes of this analysis, the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2018) criteria is referenced as an informational guide for the construction noise impact analysis[4]. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction.

Construction phasing and equipment usage assumptions are referenced from:

- *LEAL Master Plan Amendment Project AQ & GHG and Energy Impact Study, by RK Engineering Group, November 2021.*

7.1 Typical Construction Noise Levels

Table 10 shows typical construction noise levels compiled by the Environmental Protection Agency (EPA) for common type construction equipment. Typical construction noise levels are used to estimate potential project construction noise levels at the adjacent sensitive receptors.

[4] Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. Section 7. September 2018.

Table 10
Typical Construction Noise Levels[1]

Type	Noise Levels (dBA) at 50 Feet
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86
Impact Equipment	
Pneumatic Wrenches	82 - 87
Jack Hammers, Rock Drills	80 - 99
Pile Drivers (Peak)	95-105
Other	
Vibrators	68 - 82
Saws	71 - 82

[1] Referenced Noise Levels from the Environmental Protection Agency (EPA)

7.2 Construction Noise Impact Analysis

This assessment analyzes potential noise impacts during all expected phases of construction, including; demolition, site preparation, grading, building construction, paving, and architectural coating. Noise levels are calculated based on an average distance of equipment over an 1-hour period to the nearest adjacent property. The project's estimated construction noise levels have been calculated using the Federal Highway Administration Roadway Construction Noise Model Version 1.1.

Demolition activities are expected to occur at approximately 50 feet from the nearest existing residential uses to the north. Therefore, noise levels from demolition activities are analyzed at 50 feet. Noise levels from all other construction activities are conservatively estimated from 200 feet, whereas, in reality, the degree of construction noise will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties.

Tables 11 shows the noise level impacts to the residential property lines to the east and south. Construction noise calculation worksheets are provided in Appendix C.

Table 11
Project Construction Noise Levels

Phase	Equipment	Quantity	Equipment Noise Level (dBA Leq)	Combined Noise Level (dBA Leq)
Demolition[2]	Concrete/Industrial Saw	1	74.8	84.6
	Excavators	3	76.7	
	Rubber Tired Dozers	2	77.7	
Site Preparation[1]	Rubber Tired Dozers	3	65.6	75.6
	Tractors/Loaders/Backhoes	4	68.0	
Grading[1]	Excavators	2	64.7	76.2
	Graders	1	69.0	
	Rubber Tired Dozers	1	65.6	
	Scrapers	2	67.6	
	Tractors/Loaders/Backhoes	2	68.0	
Building Construction[1]	Cranes	1	60.6	74.2
	Forklifts	3	59.0	
	Generator Sets	1	65.6	
	Tractors/Loaders/Backhoes	3	68.0	
	Welders	1	58.0	
Paving[1]	Pavers	1	62.2	67.3
	Paving Equipment	1	61.0	
	Rollers	2	61.0	
Architectural Coating[1]	Air Compressors	1	61.6	61.6
Worst Case Construction Phase Noise Level – Leq (dBA)				84.6
FTA Construction Noise Criteria (General Assessment)				90.0
Noise level exceeds FTA criteria?				**NO**

[1] Construction Noise Levels are analyzed at 200 feet

[2] Demolition noise levels are conservatively analyzed at 50 feet. Noise level does not take into account of existing six (6) foot wall along residential uses to the north.

As shown in Table 11, project construction noise levels are expected to be below the recommended 1-hour general assessment construction noise threshold provided by the FTA for adverse community reaction at the adjacent residential uses.

7.3 Construction Vibration

To determine the vibratory impacts during construction, reference construction equipment vibration levels were utilized and then extrapolated to the façade of the nearest adjacent structures. All structures surrounding the project site are "new residential structures". No historical or fragile buildings are known to be located within the vicinity of the site.

The construction of the proposed project is not expected to require the use of substantial vibration inducing equipment or activities, such as pile drivers or blasting. The main sources of vibration impacts during construction of the project would be the operation of equipment such as bulldozer activity during demolition, loading trucks during grading and excavation, and vibratory rollers during paving.

The construction vibration assessment utilizes the referenced vibration levels and methodology set-forth within the Caltrans Transportation and Construction Vibration Guidance Manual, April 2020. Table 12 shows the referenced vibration levels.

Table 12
Typical Construction Vibration Levels[1]

Equipment	Peak Particle Velocity (PPV) (inches/second) at 25 feet	Approximate Vibration Level (LV) at 25 feet
Piledriver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Piledriver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

[1] Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.

Table 13 shows the project's construction-related vibration analysis at the nearest structures to the project construction area. Construction impacts are assessed from the general closest area on the project site to the nearest adjacent structure.

Table 13
Construction Vibration Impact Analysis

Construction Activity	Distance to Nearest Structure (ft)	Duration	Calculated Vibration Level - PPV (in/sec)	City of Eastvale Vibration Threshold- PPV (in/sec)	Significant Impact
Large Bulldozer	100	Continuous/Frequent	0.019	0.0787	NO
Vibratory Roller	100	Continuous/Frequent	0.046		NO
Loaded Trucks	100	Continuous/Frequent	0.017		NO
Caisson Drilling	100	Continuous/Frequent	0.019		NO

As shown in Table 13, project related construction activity is not expected to cause any potential damage to the nearest structures and is expected to be below the City of Eastvale 0.0787 PPV (in/sec) threshold.

Construction vibration calculation worksheets are shown in Appendix C.

7.4 Construction Design Features

The following recommended mitigation measures are provided to help ensure the project's noise levels do not adversely impact the adjacent noise sensitive land uses:

DF-6 Prepare a construction management plan and obtain a construction work permit from the City of Eastvale prior to starting construction. The construction management plan shall ensure all contractors implement construction best management practices to reduce construction noise levels. Examples of best management practices may include the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).

- Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.

- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.

- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.

- Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible.

- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

- Provide notifications and signage in readily visible locations along the perimeter of construction sites that indicate the dates and duration of construction activities, as well as provide a telephone number where neighbors can enquire about the construction process and register complaints to a designated construction noise disturbance coordinator.

- Construction activities shall not take place between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and 6:00 p.m. to 7:00 a.m. during the months of October through May.

DF-7 No impact pile driving or blasting activities shall be permitted on the project site during construction. If impact pile driving or blasting is required, a follow-up noise and vibration impact assessment shall be conducted prior to start of any activity.

Exhibits

Location Map



Legend:

✳ = Project Site

N

Exhibit B
Site Plan



N

Appendices

Appendix A

City of Eastvale
Noise Standard

CHAPTER 8.52. - NOISE REGULATION

Sec. 8.52.010. - Reserved.

Sec. 8.52.020. - Exemptions.

Sound emanating from the following sources is exempt from the provisions of this chapter:

(1) Facilities owned or operated by or for a governmental agency;

(2) Capital improvement projects of a governmental agency;

(3) The maintenance or repair of public properties;

(4) Public safety personnel in the course of executing their official duties, including, but not limited to, sworn peace officers, emergency personnel and public utility personnel. This exemption includes, without limitation, sound emanating from all equipment used by such personnel, whether stationary or mobile;

(5) Public or private schools and school-sponsored activities;

(6) Agricultural operations on land designated agriculture in the city general plan, or land zoned A-l (light agriculture), A-P (light agriculture with poultry), A-2 (heavy agriculture), A-D (agriculture-dairy) or C/V (citrus/vineyard), provided such operations are carried out in a manner consistent with accepted industry standards. This exemption includes, without limitation, sound emanating from all equipment used during such operations, whether stationary or mobile;

(7) Wind energy conversion systems (WECS), provided such systems comply with the WECS noise provisions of county Ordinance No. 348;

(8) Private construction projects located one-quarter of a mile or more from an inhabited dwelling;

(9) Private construction projects located within one-quarter of a mile from an inhabited dwelling, provided that construction does not occur between the hours of:

a. 6:00 p.m. and 6:00 a.m. during the months of June through September; and

b. 6:00 p.m. and 7:00 a.m. during the months of October through May;

(10) Property maintenance, including, but not limited to, the operation of lawnmowers, leaf blowers, etc., provided such maintenance occurs between the hours of 7:00 a.m. and 8:00 p.m.;

(11) Motor vehicles, other than off-highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems;

(12) Heating and air conditioning equipment;

(13) Safety, warning and alarm devices, including, but not limited to, house and car alarms, and other warning devices that are designed to protect the public health, safety and welfare;

(14) The discharge of firearms consistent with all state laws.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.030. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Audio equipment means a television, stereo, radio, tape player, compact disc player, mp3 player, I-POD or other similar device.

Decibel (dB) means a unit for measuring the relative amplitude of a sound equal approximately to the smallest difference normally detectable by the human ear, the range of which includes approximately 130 decibels on a scale beginning with zero decibels for the faintest detectable sound. Decibels are measured with a sound level meter using different methodologies defined as follows:

(1) The term, "A-weighting (dBA)" means the standard A-weighted frequency response of a sound level meter, which de-emphasizes low and high frequencies of sound in a manner similar to the human ear for moderate sounds.

(2) The term "maximum sound level (Lmax)" means the maximum sound level measured on a sound level meter.

Governmental agency means the United States, the state, the county, any city within the county, any special district within the county or any combination of these agencies.

Land use permit means a discretionary permit issued by the city pursuant to title 120 (planning and zoning) of this Code.

Motor vehicle means a vehicle that is self-propelled.

Motor vehicle sound system means a stereo, radio, tape player, compact disc player, mp3 player, I-POD or other similar device in a motor vehicle.

Noise means any loud, discordant or disagreeable sound.

Occupied property means property upon which is located a residence, business or industrial or manufacturing use.

Off-highway vehicle means a motor vehicle designed to travel over any terrain.

Public or private school means an institution conducting academic instruction at the preschool, elementary school, junior high school, high school or college level.

Public property means property owned by a governmental agency or held open to the public, including, but not limited to, parks, streets, sidewalks, and alleys.

Sensitive receptor means a land use that is identified as sensitive to noise in the noise element of the city general plan, including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries or public libraries.

Sound-amplifying equipment means a loudspeaker, microphone, megaphone or other similar device.

Sound level meter means an instrument meeting the standards of the American National Standards Institute for type 1 or type 2 sound level meters or an instrument that provides equivalent data.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.040. - General sound level standards.

No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in the following table:

TABLE 1. SOUND LEVEL STANDARDS (dB Lmax)

General Plan Foundation Component				Maximum Decibel Level	
Land Use Designation General Plan		Land Use Designation Name	Density	7:00 a.m. — 10:00 p.m.	10:00 p.m.— 7:00 a.m.
Community development					
	EDR	Estate density residential	2 acres	55	45
	VLDR	Very low-density residential	1 acre	55	45
	LDR	Low-density residential	½ acre	55	45
	MDR	Medium-density residential	2—5	55	45

	MHDR	Medium high-density residential	5—8	55	45
	HDR	High-density residential	8—14	55	45
	VHDR	Very high-density residential	14—20	55	45
	H'TDR	Highest density residential	20+	55	45
	CR	Retail commercial		65	55
	CO	Office commercial		65	55
	CT	Tourist commercial		65	55
	CC	Community center		65	55
	LI	Light industrial		75	55
	HI	Heavy industrial		75	75
	BP	Business park		65	45
	PF	Public facility		65	45
	SP	Specific plan-residential		55	45
		Specific plan-commercial		65	55
		Specific plan-light industrial		75	55
		Specific plan-heavy industrial		75	75
Rural community					
	EDR	Estate density residential	2 acres	55	45

	VLDR	Very low-density residential	1 acre	55	45
	LDR	Low-density residential	½ acre	55	45
Rural					
	RR	Rural residential	5 acres	45	45
	RM	Rural mountainous	10 acres	45	45
	RD	Rural desert	10 acres	45	45
Agriculture					
	AG	Agriculture	10 acres	45	45
Open space					
	C	Conservation		45	45
	CH	Conservation habitat		45	45
	REC	Recreation		45	45
	RUR	Rural	20 acres	45	45
	W	Watershed		45	45
	MR	Mineral resources		75	45

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.050. - Sound level measurement methodology.

Sound level measurements may be made anywhere within the boundaries of an occupied property. The actual location of a sound level measurement shall be at the discretion of the enforcement officials identified in section 8.52.080. Sound level measurements shall be made with a sound level meter. Immediately before a measurement is made, the sound level meter shall be calibrated utilizing an acoustical calibrator meeting the standards of the American National Standards Institute. Following a sound level measurement, the calibration of the sound level meter shall be reverified. Sound level meters and calibration equipment shall be certified annually.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.060. - Special sound sources standards.

The general sound level standards set forth in section 8.52.040 apply to sound emanating from all sources, including the special sound sources set forth in this section, and the person creating, or allowing the creation of, the sound is subject to the requirements of that section. The following special sound sources are also subject to the following additional standards, the failure to comply with which constitutes separate violations of this chapter:

(1) *Motor vehicles.*

a. *Off-highway vehicles.*

1. No person shall operate an off-highway vehicle unless it is equipped with a USDA-qualified spark arrester and a constantly operating and properly maintained muffler. A muffler is not considered constantly operating and properly maintained if it is equipped with a cutout, bypass or similar device.
2. No person shall operate an off-highway vehicle unless the noise emitted by the vehicle is not more than 96 dBA if the vehicle was manufactured on or after January 1, 1986, or is not more than 101 dBA if the vehicle was manufactured before January 1, 1986. For purposes of this subsection, emitted noise shall be measured a distance of 20 inches from the vehicle tailpipe using test procedures established by the Society of Automotive Engineers under Standard J-1287.

b. *Sound systems.* No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, between the hours of 10:00 p.m. and 8:00 a.m., such that the sound system is audible to the human ear inside any inhabited dwelling. No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, at any other time such that the sound system is audible to the human ear at a distance greater than 100 feet from the vehicle.

(2) *Power tools and equipment.* No person shall operate any power tools or equipment between the hours of 10:00 p.m. and 8:00 a.m. such that the power tools or equipment are audible to

the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than 100 feet from the power tools or equipment.

(3) *Audio equipment.* No person shall operate any audio equipment, whether portable or not, between the hours of 10:00 p.m. and 8:00 a.m. such that the equipment is audible to the human ear inside an inhabited dwelling other than a dwelling in which the equipment may be located. No person shall operate any audio equipment, whether portable or not, at any other time such that the equipment is audible to the human ear at a distance greater than 100 feet from the equipment.

(4) *Sound-amplifying equipment and live music.* No person shall install, use or operate sound-amplifying equipment, or perform, or allow to be performed, live music unless such activities comply with the following requirements. To the extent that these requirements conflict with any conditions of approval attached to an underlying land use permit, these requirements shall control:

a. Sound-amplifying equipment or live music is prohibited between the hours of 10:00 p.m. and 8:00 a.m.

b. Sound emanating from sound-amplifying equipment or live music at any other time shall not be audible to the human ear at a distance greater than 200 feet from the equipment or music.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.070. - Exceptions.

Exceptions may be requested from the standards set forth in section 8.52.040 or 8.52.060 and may be characterized as construction-related, single-event or continuous event exceptions.

(1) *Application and processing.*

a. *Construction-related exceptions.* An application for a construction-related exception shall be made to and considered by the city on forms provided by the city and shall be accompanied by the appropriate filing fee. No public hearing is required.

b. *Single-event exceptions.* An application for a single-event exception shall be made to and considered by the city on forms provided by the planning department and shall be accompanied by the appropriate filing fee. No public hearing is required.

c. *Continuous-event exceptions.* An application for a continuous-event exception shall be made to the city on forms provided by the planning department and shall be accompanied by the appropriate filing fee. Upon receipt of an application for a

continuous-event exception, the city shall set the matter for public hearing before the planning commission, notice of which shall be given as provided in the Eastvale Municipal Code. Notwithstanding the exceptions set forth in this section, an application for a continuous-event exception that is associated with an application for a land use permit shall be processed concurrently with the land use permit in the same manner that the land use permit is required to be processed.

(2) *Requirements for approval.* The appropriate decision making body or officer shall not approve an exception application unless the applicant demonstrates that the activities described in the application would not be detrimental to the health, safety or general welfare of the community. In determining whether activities are detrimental to the health, safety or general welfare of the community, the appropriate decision-making body or officer shall consider such factors as the proposed duration of the activities and their location in relation to sensitive receptors. If an exception application is approved, reasonable conditions may be imposed to minimize the public detriment, including, but not limited to, restrictions on sound level, sound duration and operating hours.

(3) *Appeals.* The city's decision on an application for a construction-related exception is considered final. The city's decision on an application for a single-event exception is considered final. After making a decision on an application for a continuous-event exception, the appropriate decision-making body or officer shall mail notice of the decision to the applicant. Within ten calendar days after the mailing of such notice, the applicant or an interested person may appeal the decision to the city council. Upon receipt of an appeal and payment of the appropriate appeal fee, the city clerk shall set the matter for hearing not less than five days nor more than 30 days thereafter and shall give written notice of the hearing in the same manner as notice of the hearing was given by the appropriate hearing officer or body. The city council shall render its decision within 30 days after the appeal hearing is closed.

(4) *Effect of a pending continuous-event exception application.* For a period of 180 days from the effective date of the ordinance from which this chapter is derived, no person creating any sound prohibited by this chapter shall be considered in violation of this chapter if the sound is related to a use that is operating pursuant to an approved land use permit, if an application for a continuous-event exception has been filed to sanction the sound and if a decision on the application is pending.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.080. - Enforcement.

The chief of police and planning director shall have the primary responsibility for enforcing this chapter; provided, however, the chief of police and planning director may be assisted by the public health department. Violations shall be prosecuted as described in section 8.52.100, but nothing in this chapter shall prevent the chief of police, planning director or the department of public health from engaging in efforts to obtain voluntary compliance by means of warnings, notices or educational programs.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.090. - Duty to cooperate.

No person shall refuse to cooperate with, or obstruct, the enforcement officials identified in section 8.52.080 when they are engaged in the process of enforcing the provisions of this chapter. This duty to cooperate may require a person to extinguish a sound source so that it can be determined whether sound emanating from the source violates the provisions of this chapter.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

Sec. 8.52.100. - Violations and penalties.

Any person who violates any provision of this chapter once or twice within a 180-day period shall be guilty of an infraction. Any person who violates any provision of this chapter more than twice within a 180-day period shall be guilty of a misdemeanor. Each day a violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such. Penalties shall not exceed the following amounts:

(1) For the first violation within a 180-day period, the minimum mandatory fine shall be $500.00.

(2) For the second violation within a 180-day period, the minimum mandatory fine shall be $750.00.

(3) For any further violations within a 180-day period, the minimum mandatory fine shall be $1,000.00 or imprisonment in the county jail for a period not exceeding six months, or both.

(Ord. No. 2011-04, §§ 1, 2, 1-26-2011)

INTRODUCTION

"Noise" is unwanted sound. Sound can be measured in a variety of ways, but the determination of whether the *sound* is in fact *noise* is subjective. For example children playing may be wonderful sound to some, but not to others. And of course the sounds of playing during the early afternoon may be perceived differently than late in the evening. Laughter at 2 PM is charming; the same laughter at 2 AM can be annoying and disruptive to sleep.



Managing noise is both a quality of life issue and an important means of encouraging commerce. If noise standards are too stringent, businesses may have a difficult time locating in Eastvale, and mitigation from traffic noise or other sources may make it difficult to build new homes. If the noise standards are too lenient, the quality of life in the community may suffer. This chapter of the General Plan attempts to balance these issues and separate sound from noise in the context of the City of Eastvale.

SETTING

Eastvale has a relatively quiet noise environment. The primary sources of noise in the city are transportation-related. Interstate 15 and the other major transportation corridors in the community accommodate local and regional traffic; that creates noise. Sound generated by vehicle traffic along roadways can be expressed in terms of sound levels at a given distance from the roadway. Other noise sources in the City include outdoor speakers and alarms, air-conditioning, heating, generators, sirens, car and home stereos, etc. In the industrial area of Eastvale, outdoor equipment may create noise, although this is expected in an industrial setting and does not affect residential areas.

TERMS AND DEFINITIONS

The science of noise analysis has its own terminology that makes a straightforward discussion difficult. The terms shown in the definition block (*see text* box) are used to measure sound. The various sound levels are then used to develop or establish policy that affects noise generation and attenuation.

Ambient Noise: The normal or existing level of environmental noise at a given location.

CNEL (Community Noise Equivalent Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening (from 7:00 p.m. to 10:00 p.m.) and after the addition of 10 decibels to sound levels in the night (from 10:00 p.m. to 7:00 a.m.).

dBA (A-weighted decibel): The A-weighted decibel scale discriminates upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micropascals.

Leq (Equivalent energy level): The average acoustic energy content of noise during the time it lasts. The City uses a 10- minute Leq measurement.

Ldn (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the night (from 10:00 p.m. to 7:00 a.m.).

NOISE SENSITIVE LAND USES

A series of land uses have been deemed "sensitive" by the State of California. These land uses require an attention to noise to ensure that they can operate as designed. Sensitive uses typically include schools, hospitals, rest homes, long term care facilities, mental care facilities, homes, places of worship, libraries, and passive recreation areas. Activities conducted in proximity to these sensitive uses must consider their sound output, and ensure that they don't create unacceptable noise levels.

Similarly, noise generating uses need to be protected from encroachment by noise sensitive uses. Existing agricultural operations, industrial and commercial activity that generates noise should not be required to curtail their activity because of a newly constructed housing project or other noise-sensitive use.

Most communities handle noise issues by taking care to put compatible uses near each other and avoid placing noisy uses next to homes and other noise-sensitive uses.

The table and maps on the following pages illustrate future noise conditions that will need to be addressed as the City makes land use decisions.

Table N-1 provides information on projected noise levels along major roadways in the City—specifically, what the future noise level could be at a given distance from the centerline of the roadway. This information is useful to residents seeking information on neighborhoods and to planners who want to ensure that noise impacts are properly addressed when new development proposals are reviewed. The noise information is expressed in A-weighted decibels (dBA) and divided into bands or contours ranging from 55 to 70 dBA in 5 dBA increments. The contours are used in ordinances and policy statements.

Noise created by stationary sources (i.e., outdoor mechanical equipment) is difficult to predict, and will need to be addressed on a case-by-case basis.

TABLE N-1: DISTANCE TO NOISE LEVELS BY MAJOR ROADWAY DESIGNATION[1]

Roadway Classification	70 dBA	65 dBA	60 dBA	55 dBA
Urban Arterial – 6 Lanes	141	297	638	1,373
Urban Arterial – 4 Lanes	106	227	487	1,048
Major Highway	91	190	407	879
Secondary Highway	65	135	288	620
Collector Street	27	59	126	272

Source: Appendix I: Noise Element Data, Riverside County General Plan

How Loud Is It?

Sound Levels for Common Noise Sources

Activity	Noise Level in Decibels
Limit of Hearing	0 dB
Normal Breathing	10 dB
Soft Whisper	30 dB
Library	40 dB
Refrigerator	50 dB
Rainfall	50 dB
Washing Machine	50-75 dB
Normal Conversation	60 dB
Hair Dryer	60-95 dB
Alarm Clock	65-80 dB
Power Mower	65-95 dB
Dumpster Pickup (@ 50')	80 dB
Garbage Disposal	80-95 dB
Noisy Restaurant	85 dB
Train Approaching (Engines)	85-90 dB
Tractor	90 dB
Shouting in Ear	110 dB
Loud Rock Concert	120 dB
Jet Engine at Takeoff	150 dB

These are typical noise levels. Distance from the source will reduce the noise level. A 10 dB increase doubles perceived loudness. Continued exposure to noise above 85 dB can cause hearing loss; the maximum exposure to 85 dB noise in the workplace is eight hours. A single exposure to 140 dB noise can cause some hearing loss. Source: National Institute for Occupational Safety and Health.

[1] *Distance is measured from the centerline.*

NOISE MITIGATION STRATEGIES

When an existing or proposed land use emits sound that exceeds the City determined acceptable level, the sound is characterized as noise and subject to regulation. There are a number of methods of reducing noise from both the source and at the sensitive use. When design or regulatory methods are used to reduce noise, the methods attenuate or mitigate the noise. There are both indoor and outdoor standards for this type of mitigation. Policies included in this chapter provide a number of methods for mitigation; however, with changing technology and advances in design, this list is not comprehensive, and new methods should be considered. Note too that the responsibility for mitigation is dependent upon the planned land use and existing uses on and near a site.

Table N-3 provides several categories for noise compatibility that equate to standard development processing. As noted in the table, *completely compatible* uses are typically those that would be allowed by right in the zoning code. Tentatively compatible uses are those that would be conditional uses. The remaining two columns, *normally incompatible* and *completely incompatible,* represent land uses where intensive study or even project denial might occur because of existing or projected noise levels.

NOISE SOURCES

AGRICULTURE

The City has adopted the Riverside County Right-to-Farm Ordinance which conserves, protects, and encourages the development, improvement, and continued viability of agricultural land and industries for the long-term production of food and other agricultural products, and for the economic well-being of the County's residents. The Right-to-Farm Ordinance also attempts to balance the rights of farmers to produce food and other agricultural products with the rights of non-farmers who own, occupy, or use land within or adjacent to agricultural areas. The City continues to support agriculture by limiting the circumstances under which agricultural operations may be deemed a nuisance.

STATIONARY NOISE

A stationary noise source is any entity in a fixed location that emits noise. Stationary noise sources are common in many noise-sensitive areas. Motors, appliances, air conditioners, lawn and garden equipment, power tools, and generators are often found in residential neighborhoods, as well as on or near the properties of schools, hospitals, and parks. These structures are often a permanent fixture and are required for the particular land use. Industrial and manufacturing facilities are also stationary noise producers that may affect adjacent sensitive land uses. The emitted noise from the noise source can be mitigated to acceptable levels either at the source or on the adjacent property through the use of proper planning, setbacks, noise walls, acoustic-rated windows, dense landscaping, or by other noise control measures.

TRANSPORTATION

The most common mobile noise sources in the City are transportation-related. Motor vehicle noise is characterized by the number of vehicles generating engine and tire noise on local roads and freeways, which often creates a higher sustained noise level in proximity to areas sensitive to noise exposure. Rail and aircraft operations, though less frequent, may generate extremely high noise levels that can be disruptive to daily activities in residential areas and noise sensitive uses. Transit associated with bus service in the City is part of the transportation noise consideration.

Airports

Aircraft flyovers are audible in Eastvale, as a result of aircraft approaching and departing from Chino Airport and Ontario International Airport. A substantial portion of the City underlies the general traffic patter envelope of Chino as clearly depicted in the most recently adopted version of the Chino land Use Compatibility Plan, available at www.rclaus.org. However, the noise is transient and not considered a major noise source unless they occur during the late evening and morning hours. According to the 2008 Airport Land Use Compatibility Plan, only about 10% of flights at Chino Airport occur between 7:00 p.m. and 7:00 a.m. Helicopters and heliports are also potential sources of noise, but due to the relatively low frequency and short duration of their operation in most circumstances, these operations do not significantly affect average noise levels within the City.

NOISE ATTENUATION

One of the most effective means of reducing noise in a sensitive area is to construct and design buildings in such a way that the noise is deflected, absorbed or mitigated so as not to affect the occupants. If the building has already been constructed, then landscaping, physical barriers, sound dampening technology and other design techniques can be used to absorb the noise. These building and design techniques should serve two purposes; to mitigate noise to acceptable indoor and outdoor levels, and to enhance the community character rather than detract from its surroundings.

VIBRATION

Another community annoyance related to noise is vibration. Vibration can be described by both its amplitude and frequency, where amplitude is characterized by displacement, velocity, and/or acceleration. Typically, particle velocity (measured in inches or millimeters per second) and/or acceleration (measured in gravities) are used to describe vibration.

Vibration can be felt outdoors, but the perceived intensity of vibration impacts are greater indoors, due to the shaking of the structure. Some of the most common sources of vibration come from trains and/or transit vehicles, construction

equipment, airplanes, and large vehicles. Several land uses are especially sensitive to vibration, and, therefore, have a lower vibration threshold. These uses include, but are not limited to, concert halls, hospitals, libraries, vibration-sensitive research operations, residential areas, schools, and offices.

Table N-2, Human Reaction to Typical Vibration Levels, presents the human reaction to various levels of peak particle velocity. Typical construction vibrations fall in the 10 to 30 Hertz (Hz) range and usually occur around 15 Hz. Traffic vibrations exhibit a similar range of frequencies. However, due to their suspension systems, buses often generate frequencies around 30 Hz at high speeds. It is more uncommon, but possible, to measure traffic frequencies above 30 Hz.

TABLE N-2: HUMAN REACTION TO TYPICAL VIBRATION LEVELS

Peak Particle Velocity (inches/second)	Human Reaction
0.0059-0.0188	Threshold of perception, possibility of intrusion
0.0787	Vibrations readily perceptible
0.0984	Continuous vibration begins to annoy people
0.1968	Vibrations annoying to people in buildings
0.3937-0.5905	Vibrations considered unpleasant when continuously subjected and unacceptable by some walking on bridges.

Source: Caltrans, 1992

ISSUES FOR FUTURE PLANNING

As population and development increase in Eastvale, the noise levels in the community will likely also increase. Methods of addressing the increase in noise can be evaluated before noise levels reach an annoyance level. Noise attenuation will be important for noise sensitive uses located along major roadways or in the vicinity of industrial or heavy commercial activities. The City may also need to address noise during the planning of special events such as street fairs and concerts.

NOISE GOALS AND POLICIES

GOAL N-1: Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Eastvale.

GOAL N-2: Locate noise-tolerant land uses within areas irrevocably committed to land uses that are noise-producing, such as transportation corridors.

GOAL N-3: Ensure that noise sensitive uses do not encroach into areas needed by noise generating uses.

GOAL N-4: Locate noise sources away from existing noise sensitive land uses unless appropriate noise control measures are provided.

POLICIES

Policies are provided below in the following topical areas:

- General Noise Policies (page 10-7)
- Noise Mitigation Strategies (page 10-8)
- Noise Sources (page 10-12)
- Building and Design (page 10-13)
- Building and Design Techniques (page 10-14)

GENERAL NOISE POLICIES

POLICY N-1: **Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas.**

POLICY N-2: **Continue to work with other agencies such as Caltrans and school districts to ensure that newly proposed facilities do not negatively affect existing noise sensitive land uses.**

POLICY N-3: **Consider the following uses to be sensitive to noise and vibration, and discourage these uses in areas where existing or projected future noise levels would be in excess of 65 CNEL and/or vibration would be more than 0.0787 Peak Particle Velocity (inches/second):**

- **Schools;**
- **Hospitals;**
- **Rest Homes;**
- **Long Term Care Facilities;**
- **Mental Care Facilities;**
- **Residential Uses;**
- **Libraries;**
- **Passive Recreation Uses; and**
- **Places of worship**

POLICY N-4: **Require noise sensitive land uses proposed in areas where existing or projected future noise levels would be in excess of 65 CNEL to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.**

POLICY N-5: **Require that exterior noise forecasts use the appropriate Level of Service for the adjacent roadways, or a 20-year projection of traffic volumes (whichever is greater) for future noise forecasts.**

NOISE MITIGATION STRATEGIES

POLICY N-6: **Mitigate exterior noise to the levels shown in Table N-3 to the extent feasible.**

TABLE N-3: NOISE COMPATIBILITY BY LAND USE DESIGNATION[1]

Land Use Designations	Completely Compatible	Tentatively Compatible	Normally Incompatible	Completely Incompatible
All Residential (Single- and Multi-Family)	Less than 60 dBA	60-70 dBA	70-75 dBA	Greater than 75 dBA
All Non-Residential (Commercial, Industrial & Institutional)	Less than 70 dBA	70-75 dBA	Greater than 75 dBA	(2)
Public Parks (Lands on which public parks are located or planned)	Less than 65 dBA	65-70 dBA	70-75 dBA	Greater than 75 dBA

(1) All noise levels shown in this table are designated CNEL.
(2) To be determined as part of the project review process.

POLICY N-7: **Table N-4 provides the City's standards for maximum exterior non-transportation noise levels to which land designated for residential land uses may be exposed for any 30-minute period on any day. Where existing ambient noise levels exceed these standards, the ambient noise level shall be highest allowable noise level as measured in dBA Leq (30 minutes).**

Note to the Reader: Public schools are not regulated by the City; therefore, no noise standards for public schools are included in this Chapter.

ACTION N-7.1: Establish acceptable standards for residential noise sources such as, but not limited to, leaf blowers, mobile vendors, mobile stereos and stationary noise sources such as home appliances, air conditioners, and swimming pool equipment.

ACTION N-7.2: Evaluate noise producers for the possibility of pure-tone producing noises. Mitigate any pure tones that may be emitted from a noise source.

TABLE N-4: EXTERIOR NOISE LEVEL STANDARDS FOR NON-TRANSPORTATION NOISE, MEASURED AS DBA LEQ (30 MINUTES)[2]

Land Use Type	Time Period	Maximum Noise Level (dBA)
Single-Family Homes and Duplexes	10 p.m. to 7 a.m.	50
	7 a.m. to 10 p.m.	60
Multiple Residential 3 or More Units Per Building (Triplex +)	10 p.m. to 7 a.m.	55
	7 a.m. to 10 p.m.	60

POLICY N-8: **The noise levels specified in Policy N-7 shall be lowered by 5 dB for simple tonal noises (such as humming sounds), noises consisting primarily of speech or music, or for recurring impulsive noises (such as pile drivers, punch presses, and similar machinery). Example: the Single Family/Duplex standard from 10 p.m. to 7 a.m. for these types of noises is 45 dBA.**

POLICY N-9: **The City may impose exterior noise standards which are less restrictive than those specified in Table N-4, provided that:**

1) **The noise impact on the residential or other noise-sensitive use is addressed in an environmental analysis and at least one outdoor area meets the standard; and**

2) **A finding is made by the approving body specifying why the exception would not be detrimental to the public health, safety and general welfare; and**

3) **The exception would not adversely affect the character of the surrounding development.**

4) **The exception would not be injurious to adjacent uses, property and improvements; and,**

5) **Alternatives have been considered but none are technologically feasible for the proposal; and,**

[2] *Leq (Equivalent Sound Level) is the average noise level during the time period of the sample.*

6) **Interior noise levels resulting from an external source will be no more than 45dBA CNEL from 7 a.m. to 10 p.m.; and,**

7) **Residents of noise sensitive uses are informed of the proposal during the review stage and prior to approval.**

POLICY N-10: **Table N-5: Maximum Acceptable Interior Noise Levels Created by Exterior Noise Sources provides the City's standards for acceptable indoor noise levels for various types of land uses. These standards should receive special attention when projects are considered in "Tentatively Compatible" or "Normally Incompatible" areas.**

- **Noise created inside a use listed below shall not count toward the acceptable noise levels to be maintained in accordance with this policy.**

TABLE N-5: MAXIMUM ACCEPTABLE INTERIOR NOISE LEVELS CREATED BY EXTERIOR NOISE SOURCES

Land Use Type	Acceptable Noise Level (dBA CNEL)
Residential Living and Sleeping Areas	45 dBA
Residential Living and Sleeping Areas where the dwelling unit is subject to noise from railroad tracks, aircraft overflights, or similar sources which produce clearly identifiable, discrete noise events (such as the passing of a train as opposed to relatively steady or constant noise sources such as roadways)	40 dBA
Private & Semi Private School Classrooms(1)	55 dBA
All Places of Work Other than School Classrooms	Conform with applicable state and federal workplace safety standards

(1) Standards for public schools are set and enforced by the State of California and are not regulated by the City of Eastvale.

POLICY N-11: **Developers of new residential or other noise-sensitive uses which are placed in environments subject to existing or projected noise that exceeds the "completely compatible" guidelines in Table N-3: Noise Compatibility by Land Use Designation shall be responsible for ensuring that acceptable exterior and interior noise levels will be achieved.**

POLICY N-12: **The City's preferences for providing noise mitigation are, in order of preference (#1 is most preferred; #5 is the least):**

1) **Reduce noise at the source.**
2) **If #1 is not practical, designate land uses which are compatible with projected noise levels.**
3) **If #1 or #2 are not practical, use distance from the source to reduce noise to acceptable levels.**
4) **If #1, #2, or #3 are not practical, use buildings, berms, or landscaping or a combination of these to reduce exterior noise to acceptable levels. Use construction techniques (sound-reducing windows, insulation, etc.) to reduce interior noise to acceptable levels.**
5) **The last measure which should be considered is the use of a sound wall to reduce noise to acceptable levels.**

NOISE SOURCES

POLICY N-13: **Protect existing agricultural resources from noise complaints that may result from routine farming practices, through continued support of the Right-to-Farm Ordinance.**

POLICY N-14: **Ensure compatibility between industrial and commercial development and adjacent land uses. To achieve compatibility, industrial and commercial development projects may be required to include noise mitigation measures to avoid or minimize project impacts on adjacent uses.**

POLICY N-15: **Encourage noise-tolerant land uses such as commercial or industrial development, to locate in areas already committed to land uses that are noise-producing.**

POLICY N-16: **Require that parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize potential noise impacts on adjacent noise sensitive land uses.**

POLICY N-17: **If noise levels in Table N-4 exceed, or are projected to be exceeded as a result of the proposed commercial or industrial loading dock or delivery area, require delivery hours be limited when adjacent to noise-sensitive land uses.**

ACTION N-17.1: Enforce all noise sections of the State Motor Vehicle Code.

POLICY N-18: **Natural buffers, setbacks or other noise attenuation shall be established between freeways and urban arterial roadways and adjoining noise-sensitive areas.**

ACTION N-18.1: Employ noise mitigation practices when designing all future streets and highways, and when improvements occur along existing highway segments.

POLICY N-19: **Encourage local and regional public transit providers to ensure that the equipment they operate and purchase is state-of-the-art and does not generate excessive noise impacts on the community.**

POLICY N-20: **Encourage the development and use of alternative transportation modes, including bicycle paths and pedestrian walkways, to minimize vehicular noise in residential and other noise-sensitive areas.**

POLICY N-21: **Actively participate in the development of noise abatement plans for freeways.**

BUILDING AND DESIGN

POLICY N-22: **Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.**

POLICY N-23: **Condition subdivision and other land development approval adjacent to developed/occupied noise-sensitive land uses to require the developer to submit a construction-related noise mitigation plan to the City for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and specify how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:**

a) Temporary noise attenuation fences;

b) Preferential location of equipment;

c) Length of equipment use and idling time; and,

d) Use of current noise suppression technology and equipment.

POLICY N-24: Require that all construction equipment be kept properly tuned and use noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

BUILDING AND DESIGN TECHNIQUES

POLICY N-25: Development should use natural barriers such as berms, setbacks and/or dense vegetation to assist in noise reduction.

POLICY N-26: Continue to develop effective strategies and mitigation measures for the abatement of noise reflecting effective site design approaches and state-of-the-art building technologies.

POLICY N-27: Noise reduction measures shall be included in the design of new development through measures which may include:

- Separation of noise-sensitive buildings from noise-generating sources;
- Use of natural topography and intervening structures to shield noise-sensitive land uses; and
- Adequate sound proofing of noise sources or receptor structures to maintain desired interior noise levels.

POLICY N-28: Require that commercial and residential mixed-use structures minimize the transfer or transmission of noise and vibration from the commercial land use to the residential land use through appropriate building technologies.

Appendix B

Roadway Noise Analysis Results

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Archibald Ave to Harrison Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	18,497	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,850	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.4	66.0	64.7	58.6	67.1	67.7
MEDIUM TRUCKS	61.2	42.0	34.2	43.4	49.5	49.6
HEAVY TRUCKS	67.6	50.6	42.8	52.0	58.2	58.2
NOISE LEVELS (dBA)	71.4	66.1	64.7	59.6	67.7	68.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.4	66.0	64.7	58.6	67.1	67.7
MEDIUM TRUCKS	61.2	42.0	34.2	43.4	49.5	49.6
HEAVY TRUCKS	67.6	50.6	42.8	52.0	58.2	58.2
NOISE LEVELS (dBA)	71.4	66.1	64.7	59.6	67.7	68.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	66	210	664	2100
LDN	58	185	584	1846

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Archibald Ave to Harrison Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	22,162	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,216	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.1	66.8	65.5	59.4	67.9	68.5
MEDIUM TRUCKS	61.9	42.7	35.0	44.2	50.3	50.4
HEAVY TRUCKS	68.4	51.4	43.6	52.8	59.0	59.0
NOISE LEVELS (dBA)	72.2	66.9	65.5	60.4	68.4	69.0

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.1	66.8	65.5	59.4	67.9	68.5
MEDIUM TRUCKS	61.9	42.7	35.0	44.2	50.3	50.4
HEAVY TRUCKS	68.4	51.4	43.6	52.8	59.0	59.0
NOISE LEVELS (dBA)	72.2	66.9	65.5	60.4	68.4	69.0

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	80	252	796	2516
LDN	70	221	700	2212

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Archibald Ave to Harrison Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	44,000	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	4,400	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.1	69.7	68.5	62.4	70.8	71.5
MEDIUM TRUCKS	64.9	45.7	37.9	47.1	53.3	53.3
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	75.2	69.9	68.5	63.4	71.4	72.0

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.1	69.7	68.5	62.4	70.8	71.5
MEDIUM TRUCKS	64.9	45.7	37.9	47.1	53.3	53.3
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	75.2	69.9	68.5	63.4	71.4	72.0

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	158	499	1579	4995
LDN	139	439	1389	4392

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Archibald Ave to Harrison Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	47,665	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	4,767	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.5	70.1	68.8	62.7	71.2	71.8
MEDIUM TRUCKS	65.3	46.1	38.3	47.5	53.6	53.7
HEAVY TRUCKS	71.7	54.7	46.9	56.2	62.3	62.3
NOISE LEVELS (dBA)	75.5	70.2	68.8	63.7	71.8	72.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.5	70.1	68.8	62.7	71.2	71.8
MEDIUM TRUCKS	65.3	46.1	38.3	47.5	53.6	53.7
HEAVY TRUCKS	71.7	54.7	46.9	56.2	62.3	62.3
NOISE LEVELS (dBA)	75.5	70.2	68.8	63.7	71.8	72.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	171	541	1711	5411
LDN	150	476	1504	4758

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Harrison Ave to Scholar Way)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	26,192
SPEED =	50
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	2,619

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.9	67.5	66.2	60.1	68.6	69.2
MEDIUM TRUCKS	62.7	43.5	35.7	44.9	51.0	51.1
HEAVY TRUCKS	69.1	52.1	44.3	53.6	59.7	59.7
NOISE LEVELS (dBA)	72.9	67.6	66.2	61.1	69.2	69.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.9	67.5	66.2	60.1	68.6	69.2
MEDIUM TRUCKS	62.7	43.5	35.7	44.9	51.0	51.1
HEAVY TRUCKS	69.1	52.1	44.3	53.6	59.7	59.7
NOISE LEVELS (dBA)	72.9	67.6	66.2	61.1	69.2	69.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	94	297	940	2973
LDN	83	261	827	2614

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Archibald Ave to Harrison Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	29,857	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,986	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.4	68.1	66.8	60.7	69.1	69.8
MEDIUM TRUCKS	63.2	44.0	36.3	45.5	51.6	51.6
HEAVY TRUCKS	69.7	52.7	44.9	54.1	60.3	60.3
NOISE LEVELS (dBA)	73.5	68.2	66.8	61.7	69.7	70.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.4	68.1	66.8	60.7	69.1	69.8
MEDIUM TRUCKS	63.2	44.0	36.3	45.5	51.6	51.6
HEAVY TRUCKS	69.7	52.7	44.9	54.1	60.3	60.3
NOISE LEVELS (dBA)	73.5	68.2	66.8	61.7	69.7	70.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	107	339	1072	3389
LDN	94	298	942	2980

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT: LEAL Masterplan Amendment
ROADWAY: Limonite Avenue (Archibald Ave to Harrison Ave)
LOCATION: 100 Feet from the Centerline of the Roadway
Condition: Long Range Condition
JOB #: 2610-2021-03
DATE: 30-Nov-21
ENGINEER: D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	50,780
SPEED =	50
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	5,078

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.7	70.4	69.1	63.0	71.5	72.1
MEDIUM TRUCKS	65.5	46.3	38.6	47.8	53.9	54.0
HEAVY TRUCKS	72.0	55.0	47.2	56.4	62.6	62.6
NOISE LEVELS (dBA)	75.8	70.5	69.1	64.0	72.0	72.6

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.7	70.4	69.1	63.0	71.5	72.1
MEDIUM TRUCKS	65.5	46.3	38.6	47.8	53.9	54.0
HEAVY TRUCKS	72.0	55.0	47.2	56.4	62.6	62.6
NOISE LEVELS (dBA)	75.8	70.5	69.1	64.0	72.0	72.6

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	182	576	1823	5764
LDN	160	507	1603	5068

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Archibald Ave to Harrison Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	54,445	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	5,445	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	73.0	70.7	69.4	63.3	71.8	72.4
MEDIUM TRUCKS	65.9	46.6	38.9	48.1	54.2	54.3
HEAVY TRUCKS	72.3	55.3	47.5	56.7	62.9	62.9
NOISE LEVELS (dBA)	76.1	70.8	69.4	64.3	72.4	72.9

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	73.0	70.7	69.4	63.3	71.8	72.4
MEDIUM TRUCKS	65.9	46.6	38.9	48.1	54.2	54.3
HEAVY TRUCKS	72.3	55.3	47.5	56.7	62.9	62.9
NOISE LEVELS (dBA)	76.1	70.8	69.4	64.3	72.4	72.9

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	195	618	1954	6180
LDN	172	543	1718	5434

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Scholar Way to Hamner Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	29,548	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,955	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.1	66.7	65.4	59.4	67.8	68.4
MEDIUM TRUCKS	62.5	43.3	35.5	44.7	50.9	50.9
HEAVY TRUCKS	69.2	52.2	44.4	53.7	59.8	59.8
NOISE LEVELS (dBA)	72.6	66.9	65.4	60.5	68.5	69.0

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.1	66.7	65.4	59.4	67.8	68.4
MEDIUM TRUCKS	62.5	43.3	35.5	44.7	50.9	50.9
HEAVY TRUCKS	69.2	52.2	44.4	53.7	59.8	59.8
NOISE LEVELS (dBA)	72.6	66.9	65.4	60.5	68.5	69.0

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	80	254	803	2538
LDN	71	224	708	2239

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Scholar Way to Hamner Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	47,874	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	4,787	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	68.8	67.5	61.4	69.9	70.5
MEDIUM TRUCKS	64.6	45.4	37.6	46.8	53.0	53.0
HEAVY TRUCKS	71.3	54.3	46.5	55.8	61.9	61.9
NOISE LEVELS (dBA)	74.7	69.0	67.5	62.6	70.6	71.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	68.8	67.5	61.4	69.9	70.5
MEDIUM TRUCKS	64.6	45.4	37.6	46.8	53.0	53.0
HEAVY TRUCKS	71.3	54.3	46.5	55.8	61.9	61.9
NOISE LEVELS (dBA)	74.7	69.0	67.5	62.6	70.6	71.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	130	411	1300	4112
LDN	115	363	1147	3627

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Scholar Way to Hamner Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	48,960	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	4,896	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.3	68.9	67.6	61.5	70.0	70.6
MEDIUM TRUCKS	64.7	45.5	37.7	46.9	53.0	53.1
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	74.8	69.1	67.6	62.7	70.7	71.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.3	68.9	67.6	61.5	70.0	70.6
MEDIUM TRUCKS	64.7	45.5	37.7	46.9	53.0	53.1
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	74.8	69.1	67.6	62.7	70.7	71.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	133	421	1330	4206
LDN	117	371	1173	3710

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Scholar Way to Hamner Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	67,286	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	6,729	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.6	70.3	69.0	62.9	71.4	72.0
MEDIUM TRUCKS	66.1	46.8	39.1	48.3	54.4	54.5
HEAVY TRUCKS	72.8	55.8	48.0	57.2	63.4	63.4
NOISE LEVELS (dBA)	76.2	70.4	69.0	64.1	72.1	72.6

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.6	70.3	69.0	62.9	71.4	72.0
MEDIUM TRUCKS	66.1	46.8	39.1	48.3	54.4	54.5
HEAVY TRUCKS	72.8	55.8	48.0	57.2	63.4	63.4
NOISE LEVELS (dBA)	76.2	70.4	69.0	64.1	72.1	72.6

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	183	578	1828	5780
LDN	161	510	1612	5098

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Hamner Ave to I-15 Ramps)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	44,312	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	4,431	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.8	68.5	67.2	61.1	69.5	70.2
MEDIUM TRUCKS	64.2	45.0	37.3	46.5	52.6	52.6
HEAVY TRUCKS	71.0	54.0	46.2	55.4	61.6	61.6
NOISE LEVELS (dBA)	74.4	68.6	67.2	62.3	70.3	70.8

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.8	68.5	67.2	61.1	69.5	70.2
MEDIUM TRUCKS	64.2	45.0	37.3	46.5	52.6	52.6
HEAVY TRUCKS	71.0	54.0	46.2	55.4	61.6	61.6
NOISE LEVELS (dBA)	74.4	68.6	67.2	62.3	70.3	70.8

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	120	381	1204	3806
LDN	106	336	1062	3357

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Hamner Ave to I-15 Ramps)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	60,805	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	6,081	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.2	69.8	68.5	62.5	70.9	71.5
MEDIUM TRUCKS	65.6	46.4	38.6	47.8	54.0	54.0
HEAVY TRUCKS	72.4	55.4	47.6	56.8	62.9	63.0
NOISE LEVELS (dBA)	75.7	70.0	68.6	63.6	71.6	72.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.2	69.8	68.5	62.5	70.9	71.5
MEDIUM TRUCKS	65.6	46.4	38.6	47.8	54.0	54.0
HEAVY TRUCKS	72.4	55.4	47.6	56.8	62.9	63.0
NOISE LEVELS (dBA)	75.7	70.0	68.6	63.6	71.6	72.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	165	522	1652	5223
LDN	146	461	1457	4607

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Hamner Ave to I-15 Ramps)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	69,110	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	6,911	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.8	70.4	69.1	63.0	71.5	72.1
MEDIUM TRUCKS	66.2	47.0	39.2	48.4	54.5	54.6
HEAVY TRUCKS	72.9	55.9	48.1	57.3	63.5	63.5
NOISE LEVELS (dBA)	76.3	70.6	69.1	64.2	72.2	72.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.8	70.4	69.1	63.0	71.5	72.1
MEDIUM TRUCKS	66.2	47.0	39.2	48.4	54.5	54.6
HEAVY TRUCKS	72.9	55.9	48.1	57.3	63.5	63.5
NOISE LEVELS (dBA)	76.3	70.6	69.1	64.2	72.2	72.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	188	594	1877	5937
LDN	166	524	1656	5236

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (Hamner Ave to I-15 Ramps)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	85,603	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	8,560	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	73.7	71.3	70.0	64.0	72.4	73.0
MEDIUM TRUCKS	67.1	47.9	40.1	49.3	55.5	55.5
HEAVY TRUCKS	73.8	56.8	49.1	58.3	64.4	64.5
NOISE LEVELS (dBA)	77.2	71.5	70.1	65.1	73.1	73.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	73.7	71.3	70.0	64.0	72.4	73.0
MEDIUM TRUCKS	67.1	47.9	40.1	49.3	55.5	55.5
HEAVY TRUCKS	73.8	56.8	49.1	58.3	64.4	64.5
NOISE LEVELS (dBA)	77.2	71.5	70.1	65.1	73.1	73.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	233	735	2325	7353
LDN	205	649	2051	6486

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (I-15 Ramps to Wineville Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	33,855	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	3,386	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.0	68.6	67.3	61.3	69.7	70.3
MEDIUM TRUCKS	63.8	44.6	36.8	46.0	52.2	52.2
HEAVY TRUCKS	70.2	53.2	45.5	54.7	60.8	60.9
NOISE LEVELS (dBA)	74.1	68.7	67.3	62.2	70.3	70.8

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.0	68.6	67.3	61.3	69.7	70.3
MEDIUM TRUCKS	63.8	44.6	36.8	46.0	52.2	52.2
HEAVY TRUCKS	70.2	53.2	45.5	54.7	60.8	60.9
NOISE LEVELS (dBA)	74.1	68.7	67.3	62.2	70.3	70.8

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	122	384	1215	3843
LDN	107	338	1069	3379

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (I-15 Ramps to Wineville Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	37,520	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	3,752	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.4	69.1	67.8	61.7	70.1	70.8
MEDIUM TRUCKS	64.2	45.0	37.2	46.5	52.6	52.6
HEAVY TRUCKS	70.7	53.7	45.9	55.1	61.3	61.3
NOISE LEVELS (dBA)	74.5	69.2	67.8	62.7	70.7	71.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.4	69.1	67.8	61.7	70.1	70.8
MEDIUM TRUCKS	64.2	45.0	37.2	46.5	52.6	52.6
HEAVY TRUCKS	70.7	53.7	45.9	55.1	61.3	61.3
NOISE LEVELS (dBA)	74.5	69.2	67.8	62.7	70.7	71.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	135	426	1347	4259
LDN	118	374	1184	3745

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (I-15 Ramps to Wineville Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	65,010
SPEED =	50
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	6,501

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	73.8	71.4	70.1	64.1	72.5	73.2
MEDIUM TRUCKS	66.6	47.4	39.6	48.8	55.0	55.0
HEAVY TRUCKS	73.1	56.1	48.3	57.5	63.7	63.7
NOISE LEVELS (dBA)	76.9	71.6	70.2	65.1	73.1	73.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	73.8	71.4	70.1	64.1	72.5	73.2
MEDIUM TRUCKS	66.6	47.4	39.6	48.8	55.0	55.0
HEAVY TRUCKS	73.1	56.1	48.3	57.5	63.7	63.7
NOISE LEVELS (dBA)	76.9	71.6	70.2	65.1	73.1	73.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	233	738	2334	7380
LDN	205	649	2052	6489

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Limonite Avenue (I-15 Ramps to Wineville Ave)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	68,675
SPEED =	50
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	6,868

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	74.1	71.7	70.4	64.3	72.8	73.4
MEDIUM TRUCKS	66.9	47.7	39.9	49.1	55.2	55.3
HEAVY TRUCKS	73.3	56.3	48.5	57.7	63.9	63.9
NOISE LEVELS (dBA)	77.1	71.8	70.4	65.3	73.4	73.9

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	74.1	71.7	70.4	64.3	72.8	73.4
MEDIUM TRUCKS	66.9	47.7	39.9	49.1	55.2	55.3
HEAVY TRUCKS	73.3	56.3	48.5	57.7	63.9	63.9
NOISE LEVELS (dBA)	77.1	71.8	70.4	65.3	73.4	73.9

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	247	780	2465	7796
LDN	217	685	2168	6855

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Citrus Street to Schleisman Road)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	20,619
SPEED =	50
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	2,062

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.8	66.5	65.2	59.1	67.5	68.2
MEDIUM TRUCKS	61.6	42.4	34.6	43.9	50.0	50.0
HEAVY TRUCKS	68.1	51.1	43.3	52.5	58.7	58.7
NOISE LEVELS (dBA)	71.9	66.6	65.2	60.1	68.1	68.7

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.8	66.5	65.2	59.1	67.5	68.2
MEDIUM TRUCKS	61.6	42.4	34.6	43.9	50.0	50.0
HEAVY TRUCKS	68.1	51.1	43.3	52.5	58.7	58.7
NOISE LEVELS (dBA)	71.9	66.6	65.2	60.1	68.1	68.7

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	74	234	740	2341
LDN	65	206	651	2058

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Citrus Street to Schleisman Road)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	24,284	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,428	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.5	67.2	65.9	59.8	68.2	68.9
MEDIUM TRUCKS	62.3	43.1	35.4	44.6	50.7	50.8
HEAVY TRUCKS	68.8	51.8	44.0	53.2	59.4	59.4
NOISE LEVELS (dBA)	72.6	67.3	65.9	60.8	68.8	69.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.5	67.2	65.9	59.8	68.2	68.9
MEDIUM TRUCKS	62.3	43.1	35.4	44.6	50.7	50.8
HEAVY TRUCKS	68.8	51.8	44.0	53.2	59.4	59.4
NOISE LEVELS (dBA)	72.6	67.3	65.9	60.8	68.8	69.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	87	276	872	2757
LDN	77	242	766	2424

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Citrus Street to Schleisman Road)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	25,400
SPEED =	50
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	2,540

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.7	67.4	66.1	60.0	68.4	69.1
MEDIUM TRUCKS	62.5	43.3	35.6	44.8	50.9	50.9
HEAVY TRUCKS	69.0	52.0	44.2	53.4	59.6	59.6
NOISE LEVELS (dBA)	72.8	67.5	66.1	61.0	69.0	69.6

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.7	67.4	66.1	60.0	68.4	69.1
MEDIUM TRUCKS	62.5	43.3	35.6	44.8	50.9	50.9
HEAVY TRUCKS	69.0	52.0	44.2	53.4	59.6	59.6
NOISE LEVELS (dBA)	72.8	67.5	66.1	61.0	69.0	69.6

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	91	288	912	2883
LDN	80	254	802	2535

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Citrus Street to Schleisman Road)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	29,065	
SPEED =	50	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,907	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.3	67.9	66.7	60.6	69.0	69.7
MEDIUM TRUCKS	63.1	43.9	36.1	45.3	51.5	51.5
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.2	60.2
NOISE LEVELS (dBA)	73.4	68.1	66.7	61.6	69.6	70.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.3	67.9	66.7	60.6	69.0	69.7
MEDIUM TRUCKS	63.1	43.9	36.1	45.3	51.5	51.5
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.2	60.2
NOISE LEVELS (dBA)	73.4	68.1	66.7	61.6	69.6	70.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	104	330	1043	3299
LDN	92	290	917	2901

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Schleisman Road to 68th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	11,831
SPEED =	45
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	1,183

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	65.1	62.7	61.4	55.4	63.8	64.4
MEDIUM TRUCKS	58.5	39.3	31.5	40.7	46.9	46.9
HEAVY TRUCKS	65.2	48.3	40.5	49.7	55.8	55.9
NOISE LEVELS (dBA)	68.6	62.9	61.5	56.5	64.5	65.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	65.1	62.7	61.4	55.4	63.8	64.4
MEDIUM TRUCKS	58.5	39.3	31.5	40.7	46.9	46.9
HEAVY TRUCKS	65.2	48.3	40.5	49.7	55.8	55.9
NOISE LEVELS (dBA)	68.6	62.9	61.5	56.5	64.5	65.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	32	102	321	1016
LDN	28	90	283	896

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Schleisman Road to 68th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	15,496	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,550	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	63.9	62.6	56.5	65.0	65.6
MEDIUM TRUCKS	59.7	40.5	32.7	41.9	48.1	48.1
HEAVY TRUCKS	66.4	49.4	41.6	50.9	57.0	57.0
NOISE LEVELS (dBA)	69.8	64.1	62.6	57.7	65.7	66.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	63.9	62.6	56.5	65.0	65.6
MEDIUM TRUCKS	59.7	40.5	32.7	41.9	48.1	48.1
HEAVY TRUCKS	66.4	49.4	41.6	50.9	57.0	57.0
NOISE LEVELS (dBA)	69.8	64.1	62.6	57.7	65.7	66.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	42	133	421	1331
LDN	37	117	371	1174

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Schleisman Road to 68th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	15,030
SPEED =	45
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	1,503

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.1	63.8	62.5	56.4	64.8	65.5
MEDIUM TRUCKS	59.5	40.3	32.6	41.8	47.9	48.0
HEAVY TRUCKS	66.3	49.3	41.5	50.7	56.9	56.9
NOISE LEVELS (dBA)	69.7	63.9	62.5	57.6	65.6	66.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.1	63.8	62.5	56.4	64.8	65.5
MEDIUM TRUCKS	59.5	40.3	32.6	41.8	47.9	48.0
HEAVY TRUCKS	66.3	49.3	41.5	50.7	56.9	56.9
NOISE LEVELS (dBA)	69.7	63.9	62.5	57.6	65.6	66.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	41	129	408	1291
LDN	36	114	360	1139

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Schleisman Road to 68th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	18,695	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,870	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.1	64.7	63.4	57.4	65.8	66.4
MEDIUM TRUCKS	60.5	41.3	33.5	42.7	48.9	48.9
HEAVY TRUCKS	67.2	50.2	42.5	51.7	57.8	57.9
NOISE LEVELS (dBA)	70.6	64.9	63.5	58.5	66.5	67.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.1	64.7	63.4	57.4	65.8	66.4
MEDIUM TRUCKS	60.5	41.3	33.5	42.7	48.9	48.9
HEAVY TRUCKS	67.2	50.2	42.5	51.7	57.8	57.9
NOISE LEVELS (dBA)	70.6	64.9	63.5	58.5	66.5	67.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	51	161	508	1606
LDN	45	142	448	1417

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (68th Street to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	20,186	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,019	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.4	65.0	63.8	57.7	66.1	66.8
MEDIUM TRUCKS	60.8	41.6	33.8	43.0	49.2	49.2
HEAVY TRUCKS	67.6	50.6	42.8	52.0	58.2	58.2
NOISE LEVELS (dBA)	70.9	65.2	63.8	58.8	66.8	67.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.4	65.0	63.8	57.7	66.1	66.8
MEDIUM TRUCKS	60.8	41.6	33.8	43.0	49.2	49.2
HEAVY TRUCKS	67.6	50.6	42.8	52.0	58.2	58.2
NOISE LEVELS (dBA)	70.9	65.2	63.8	58.8	66.8	67.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	55	173	548	1734
LDN	48	153	484	1529

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (68th Street to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	22,019	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	2,202	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.8	65.4	64.1	58.1	66.5	67.1
MEDIUM TRUCKS	61.2	42.0	34.2	43.4	49.6	49.6
HEAVY TRUCKS	67.9	51.0	43.2	52.4	58.5	58.6
NOISE LEVELS (dBA)	71.3	65.6	64.2	59.2	67.2	67.8

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.8	65.4	64.1	58.1	66.5	67.1
MEDIUM TRUCKS	61.2	42.0	34.2	43.4	49.6	49.6
HEAVY TRUCKS	67.9	51.0	43.2	52.4	58.5	58.6
NOISE LEVELS (dBA)	71.3	65.6	64.2	59.2	67.2	67.8

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	60	189	598	1891
LDN	53	167	528	1668

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT: LEAL Masterplan Amendment
ROADWAY: Hamner Avenue (68th Street to 58th Street)
LOCATION: 100 Feet from the Centerline of the Roadway
Condition: Long Range Condition
JOB #: 2610-2021-03
DATE: 30-Nov-21
ENGINEER: D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	22,730
SPEED =	45
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	2,273

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.9	65.6	64.3	58.2	66.6	67.3
MEDIUM TRUCKS	61.3	42.1	34.4	43.6	49.7	49.8
HEAVY TRUCKS	68.1	51.1	43.3	52.5	58.7	58.7
NOISE LEVELS (dBA)	71.5	65.7	64.3	59.4	67.4	67.9

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.9	65.6	64.3	58.2	66.6	67.3
MEDIUM TRUCKS	61.3	42.1	34.4	43.6	49.7	49.8
HEAVY TRUCKS	68.1	51.1	43.3	52.5	58.7	58.7
NOISE LEVELS (dBA)	71.5	65.7	64.3	59.4	67.4	67.9

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	62	195	617	1953
LDN	54	172	545	1722

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (68th Street to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	24,563
SPEED =	45
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	2,456

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.3	65.9	64.6	58.5	67.0	67.6
MEDIUM TRUCKS	61.7	42.5	34.7	43.9	50.1	50.1
HEAVY TRUCKS	68.4	51.4	43.6	52.9	59.0	59.0
NOISE LEVELS (dBA)	71.8	66.1	64.6	59.7	67.7	68.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.3	65.9	64.6	58.5	67.0	67.6
MEDIUM TRUCKS	61.7	42.5	34.7	43.9	50.1	50.1
HEAVY TRUCKS	68.4	51.4	43.6	52.9	59.0	59.0
NOISE LEVELS (dBA)	71.8	66.1	64.6	59.7	67.7	68.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	67	211	667	2110
LDN	59	186	589	1861

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Limonite Avenue to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	15,649	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,565	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	63.9	62.6	56.6	65.0	65.7
MEDIUM TRUCKS	59.7	40.5	32.7	41.9	48.1	48.1
HEAVY TRUCKS	66.5	49.5	41.7	50.9	57.0	57.1
NOISE LEVELS (dBA)	69.8	64.1	62.7	57.7	65.7	66.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	63.9	62.6	56.6	65.0	65.7
MEDIUM TRUCKS	59.7	40.5	32.7	41.9	48.1	48.1
HEAVY TRUCKS	66.5	49.5	41.7	50.9	57.0	57.1
NOISE LEVELS (dBA)	69.8	64.1	62.7	57.7	65.7	66.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	43	134	425	1344
LDN	37	119	375	1186

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Limonite Avenue to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	32,142	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	3,214	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.1	65.8	59.7	68.1	68.8
MEDIUM TRUCKS	62.8	43.6	35.9	45.1	51.2	51.3
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.2	60.2
NOISE LEVELS (dBA)	73.0	67.2	65.8	60.9	68.9	69.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.1	65.8	59.7	68.1	68.8
MEDIUM TRUCKS	62.8	43.6	35.9	45.1	51.2	51.3
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.2	60.2
NOISE LEVELS (dBA)	73.0	67.2	65.8	60.9	68.9	69.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	87	276	873	2761
LDN	77	244	770	2435

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Limonite Avenue to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	31,890	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	3,189	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.0	65.7	59.7	68.1	68.7
MEDIUM TRUCKS	62.8	43.6	35.8	45.0	51.2	51.2
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.1	60.2
NOISE LEVELS (dBA)	72.9	67.2	65.8	60.8	68.8	69.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.0	65.7	59.7	68.1	68.7
MEDIUM TRUCKS	62.8	43.6	35.8	45.0	51.2	51.2
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.1	60.2
NOISE LEVELS (dBA)	72.9	67.2	65.8	60.8	68.8	69.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	87	274	866	2739
LDN	76	242	764	2416

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (Limonite Avenue to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	48,383	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	4,838	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	68.8	67.5	61.5	69.9	70.6
MEDIUM TRUCKS	64.6	45.4	37.6	46.8	53.0	53.0
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	74.7	69.0	67.6	62.6	70.6	71.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	68.8	67.5	61.5	69.9	70.6
MEDIUM TRUCKS	64.6	45.4	37.6	46.8	53.0	53.0
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	74.7	69.0	67.6	62.6	70.6	71.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	131	416	1314	4156
LDN	116	367	1159	3666

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (58th Street to Bellgrave Avenue)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	15,649	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	1,565	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	63.9	62.6	56.6	65.0	65.7
MEDIUM TRUCKS	59.7	40.5	32.7	41.9	48.1	48.1
HEAVY TRUCKS	66.5	49.5	41.7	50.9	57.0	57.1
NOISE LEVELS (dBA)	69.8	64.1	62.7	57.7	65.7	66.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	66.3	63.9	62.6	56.6	65.0	65.7
MEDIUM TRUCKS	59.7	40.5	32.7	41.9	48.1	48.1
HEAVY TRUCKS	66.5	49.5	41.7	50.9	57.0	57.1
NOISE LEVELS (dBA)	69.8	64.1	62.7	57.7	65.7	66.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	43	134	425	1344
LDN	37	119	375	1186

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (58th Street to Bellgrave Avenue)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	32,142
SPEED =	45
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	3,214

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.1	65.8	59.7	68.1	68.8
MEDIUM TRUCKS	62.8	43.6	35.9	45.1	51.2	51.3
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.2	60.2
NOISE LEVELS (dBA)	73.0	67.2	65.8	60.9	68.9	69.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.1	65.8	59.7	68.1	68.8
MEDIUM TRUCKS	62.8	43.6	35.9	45.1	51.2	51.3
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.2	60.2
NOISE LEVELS (dBA)	73.0	67.2	65.8	60.9	68.9	69.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	87	276	873	2761
LDN	77	244	770	2435

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Condition	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (58th Street to Bellgrave Avenue)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	31,890
SPEED =	45
PK HR % =	10
NEAR LANE/FAR LANE DIST	72
ROAD ELEVATION =	0.0
GRADE =	0.0 %
PK HR VOL =	3,189

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.0	65.7	59.7	68.1	68.7
MEDIUM TRUCKS	62.8	43.6	35.8	45.0	51.2	51.2
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.1	60.2
NOISE LEVELS (dBA)	72.9	67.2	65.8	60.8	68.8	69.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.0	65.7	59.7	68.1	68.7
MEDIUM TRUCKS	62.8	43.6	35.8	45.0	51.2	51.2
HEAVY TRUCKS	69.6	52.6	44.8	54.0	60.1	60.2
NOISE LEVELS (dBA)	72.9	67.2	65.8	60.8	68.8	69.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	87	274	866	2739
LDN	76	242	764	2416

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Hamner Avenue (58th Street to Bellgrave Avenue)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	48,383	
SPEED =	45	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	72	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	4,838	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	(10 = HARD SITE, 15 = SOFT SITE)
MEDIUM TRUCKS =	10	
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.695	0.129	0.096	0.9200
MEDIUM TRUCKS	0.014	0.001	0.015	0.0300
HEAVY TRUCKS	0.024	0.001	0.025	0.0500

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	93.34	- -
MEDIUM TRUCKS	4.0	93.30	- -
HEAVY TRUCKS	8.0	93.34	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	68.8	67.5	61.5	69.9	70.6
MEDIUM TRUCKS	64.6	45.4	37.6	46.8	53.0	53.0
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	74.7	69.0	67.6	62.6	70.6	71.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	68.8	67.5	61.5	69.9	70.6
MEDIUM TRUCKS	64.6	45.4	37.6	46.8	53.0	53.0
HEAVY TRUCKS	71.4	54.4	46.6	55.8	62.0	62.0
NOISE LEVELS (dBA)	74.7	69.0	67.6	62.6	70.6	71.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	131	416	1314	4156
LDN	116	367	1159	3666

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	4,912	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	491	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	58.2	56.0	54.7	48.7	57.1	57.8
MEDIUM TRUCKS	50.6	29.4	21.9	30.6	36.8	36.8
HEAVY TRUCKS	51.9	26.5	23.1	27.8	34.0	34.1
NOISE LEVELS (dBA)	59.7	56.0	54.7	48.8	57.2	57.8

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	58.2	56.0	54.7	48.7	57.1	57.8
MEDIUM TRUCKS	50.6	29.4	21.9	30.6	36.8	36.8
HEAVY TRUCKS	51.9	26.5	23.1	27.8	34.0	34.1
NOISE LEVELS (dBA)	59.7	56.0	54.7	48.8	57.2	57.8

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	6	19	60	191
LDN	5	17	52	165

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	6,745	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	675	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	59.5	57.4	56.1	50.1	58.5	59.1
MEDIUM TRUCKS	52.0	30.8	23.3	32.0	38.2	38.2
HEAVY TRUCKS	53.3	27.9	24.5	29.2	35.4	35.5
NOISE LEVELS (dBA)	61.0	57.4	56.1	50.2	58.6	59.2

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	59.5	57.4	56.1	50.1	58.5	59.1
MEDIUM TRUCKS	52.0	30.8	23.3	32.0	38.2	38.2
HEAVY TRUCKS	53.3	27.9	24.5	29.2	35.4	35.5
NOISE LEVELS (dBA)	61.0	57.4	56.1	50.2	58.6	59.2

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	8	26	83	262
LDN	7	23	72	227

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Conditions	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	6,860	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	686	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	59.6	57.5	56.2	50.2	58.6	59.2
MEDIUM TRUCKS	52.1	30.8	23.3	32.1	38.3	38.3
HEAVY TRUCKS	53.3	28.0	24.6	29.2	35.4	35.5
NOISE LEVELS (dBA)	61.1	57.5	56.2	50.3	58.6	59.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	59.6	57.5	56.2	50.2	58.6	59.2
MEDIUM TRUCKS	52.1	30.8	23.3	32.1	38.3	38.3
HEAVY TRUCKS	53.3	28.0	24.6	29.2	35.4	35.5
NOISE LEVELS (dBA)	61.1	57.5	56.2	50.3	58.6	59.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	8	27	84	266
LDN	7	23	73	231

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	8,693	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	869	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	60.6	58.5	57.2	51.2	59.6	60.2
MEDIUM TRUCKS	53.1	31.9	24.4	33.1	39.3	39.3
HEAVY TRUCKS	54.4	29.0	25.6	30.3	36.5	36.6
NOISE LEVELS (dBA)	62.1	58.5	57.2	51.3	59.7	60.3

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	60.6	58.5	57.2	51.2	59.6	60.2
MEDIUM TRUCKS	53.1	31.9	24.4	33.1	39.3	39.3
HEAVY TRUCKS	54.4	29.0	25.6	30.3	36.5	36.6
NOISE LEVELS (dBA)	62.1	58.5	57.2	51.3	59.7	60.3

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	11	34	107	338
LDN	9	29	93	293

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Conditions	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	2,240	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	224	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.7	52.6	51.3	45.3	53.7	54.3
MEDIUM TRUCKS	47.2	26.0	18.5	27.2	33.4	33.4
HEAVY TRUCKS	48.5	23.1	19.7	24.4	30.6	30.7
NOISE LEVELS (dBA)	56.2	52.6	51.3	45.4	53.8	54.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	54.7	52.6	51.3	45.3	53.7	54.3
MEDIUM TRUCKS	47.2	26.0	18.5	27.2	33.4	33.4
HEAVY TRUCKS	48.5	23.1	19.7	24.4	30.6	30.7
NOISE LEVELS (dBA)	56.2	52.6	51.3	45.4	53.8	54.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	3	9	28	87
LDN	2	8	24	75

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Existing Plus Project Conditions	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	4,073	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	407	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	57.3	55.2	53.9	47.9	56.3	56.9
MEDIUM TRUCKS	49.8	28.6	21.1	29.8	36.0	36.0
HEAVY TRUCKS	51.1	25.7	22.3	27.0	33.2	33.3
NOISE LEVELS (dBA)	58.8	55.2	53.9	48.0	56.4	57.0

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	57.3	55.2	53.9	47.9	56.3	56.9
MEDIUM TRUCKS	49.8	28.6	21.1	29.8	36.0	36.0
HEAVY TRUCKS	51.1	25.7	22.3	27.0	33.2	33.3
NOISE LEVELS (dBA)	58.8	55.2	53.9	48.0	56.4	57.0

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	5	16	50	158
LDN	4	14	43	137

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Conditions	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	2,810	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	281	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	55.7	53.6	52.3	46.3	54.7	55.3
MEDIUM TRUCKS	48.2	27.0	19.5	28.2	34.4	34.4
HEAVY TRUCKS	49.5	24.1	20.7	25.4	31.6	31.7
NOISE LEVELS (dBA)	57.2	53.6	52.3	46.4	54.8	55.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	55.7	53.6	52.3	46.3	54.7	55.3
MEDIUM TRUCKS	48.2	27.0	19.5	28.2	34.4	34.4
HEAVY TRUCKS	49.5	24.1	20.7	25.4	31.6	31.7
NOISE LEVELS (dBA)	57.2	53.6	52.3	46.4	54.8	55.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	3	11	35	109
LDN	3	9	30	95

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL (CALVENO)

PROJECT:	LEAL Masterplan Amendment	Condition:	Long Range Plus Project	JOB #:	2610-2021-03
ROADWAY:	Scholar Way (Limonite Ave to 58th Street)			DATE:	30-Nov-21
LOCATION:	100 Feet from the Centerline of the Roadway			ENGINEER:	D. Shivaiah

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	4,643	
SPEED =	35	
PK HR % =	10	
NEAR LANE/FAR LANE DIST	36	
ROAD ELEVATION =	0.0	
GRADE =	0.0	%
PK HR VOL =	464	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		100
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER =		0
PAD ELEVATION =		0.0
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	10	
MEDIUM TRUCKS =	10	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	10	

WALL INFORMATION

HTH WALL=	0.0	
AMBIENT=	0.0	
BARRIER =	0	(0 = WALL, 1 = BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVENING	NIGHT	DAILY
AUTOMOBILES	0.736	0.136	0.102	0.9742
MEDIUM TRUCKS	0.009	0.000	0.009	0.0184
HEAVY TRUCKS	0.004	0.000	0.004	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	98.41	- -
MEDIUM TRUCKS	4.0	98.37	- -
HEAVY TRUCKS	8.0	98.41	0.00

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	57.9	55.8	54.5	48.5	56.9	57.5
MEDIUM TRUCKS	50.4	29.1	21.6	30.4	36.6	36.6
HEAVY TRUCKS	51.7	26.3	22.9	27.5	33.7	33.8
NOISE LEVELS (dBA)	59.4	55.8	54.5	48.6	56.9	57.6

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	57.9	55.8	54.5	48.5	56.9	57.5
MEDIUM TRUCKS	50.4	29.1	21.6	30.4	36.6	36.6
HEAVY TRUCKS	51.7	26.3	22.9	27.5	33.7	33.8
NOISE LEVELS (dBA)	59.4	55.8	54.5	48.6	56.9	57.6

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	6	18	57	180
LDN	5	16	49	156

Appendix C

Construction Noise and Vibration
Analysis Results

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2021
Case Description: LEAL Master Plan Amendment Project

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Demolition	Residential	80	80	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	50	0
Excavator	No	40		80.7	50	0
Dozer	No	40		81.7	50	0
Excavator	No	40				
Excavator	No	40				
Dozer	No	40				

		Calculated (dBA)	
Equipment		*Lmax	Leq
Concrete Mixer Truck		78.8	74.8
Excavator		80.7	76.7
Dozer		81.7	77.7
Excavator		80.7	76.7
Excavator		80.7	76.7
Dozer		81.7	77.7
	Total	81.7	84.6

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2021
Case Description: LEAL Master Plan Amendment Project

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Site Preparation	Residential	80	80	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Tractor	No	40				
Tractor	No	40				
Tractor	No	40				
Tractor	No	40				

Calculated (dBA)

Equipment		*Lmax	Leq
Dozer		69.6	65.6
Dozer		69.6	65.6
Dozer		69.6	65.6
Tractor		72	68
Tractor		72	68
Tractor		72	68
Tractor		72	68
	Total	72	75.6

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2021
Case Description: LEAL Master Plan Amendment Project

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Grading	Residential	80	80	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	200	0
Grader	No	40	85		200	0
Dozer	No	40		81.7	200	0
Scraper	No	40				
Tractor	No	40				
Excavator	No	40				
Tractor	No	40				
Scraper	No	40				

Calculated (dBA)

Equipment		*Lmax	Leq
Excavator		68.7	64.7
Grader		73	69
Dozer		69.6	65.6
Scraper		71.5	67.6
Tractor		72	68
Excavator		68.7	64.7
Tractor		72	68
Scraper		71.5	67.6
	Total	73	76.2

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2021
Case Description: LEAL Master Plan Amendment Project

				---- Receptor #1 ----
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Building Construction	Residential	80	80	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	200	0
Pickup Truck	No	40		75	200	0
Generator	No	50		80.6	200	0
Tractor	No	40				
Welder / Torch	No	40				
Pickup Truck	No	40				
Pickup Truck	No	40				
Tractor	No	40				
Tractor	No	40				

		Calculated (dBA)	
Equipment		*Lmax	Leq
Crane		68.5	60.6
Pickup Truck		63	59
Generator		68.6	65.6
Tractor		72	68
Welder / Torch		62	58
Pickup Truck		63	59
Pickup Truck		63	59
Tractor		72	68
Tractor		72	68
	Total	72	74.2

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2021
Case Description: LEAL Master Plan Amendment Project

				---- Receptor #1 ----
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Paving	Residential	80	80	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	200	0
Roller	No	20		80	200	0
Roller	No	20		80	200	0
Roller	No	20				

Calculated (dBA)

Equipment		*Lmax	Leq
Paver		65.2	62.2
Roller		68	61
Roller		68	61
Roller		68	61
	Total	68	67.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/24/2021
Case Description: LEAL Master Plan Amendment Project

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Architectural Coating	Residential	80	80	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	200	0

Results

	Calculated (dBA)	
Equipment	*Lmax	Leq
Compressor (air)	65.6	61.6
Total	65.6	61.6

*Calculated Lmax is the Loudest value.

VIBRATION IMPACTS FROM CONSTRUCTION AND OPERATIONS

PROJECT:	LEAL Master Plan Amendment Project	JOB #:	2610-2021-03
ACTIVITY:	Large Bulldozer	DATE:	24-Nov-21
LOCATION:	At 100 Feet	ENGINEER:	D. Shivaiah

VIBRATION INPUT/OUTPUT DATA

OTHER CONSTRUCTION EQUIPMENT

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.019 in/sec**

Equipment Type =	2	Large Bulldozer
PPV_{ref} =	0.089	Reference PPV at 25 ft.
D =	100.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

EQUIPMENT PPV REFERENCE LEVELS

Type	Equipment	Reference PPV at 25 ft. (in/sec)
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

VIBRATION IMPACTS FROM CONSTRUCTION AND OPERATIONS

PROJECT:	LEAL Master Plan Amendment Project	JOB #:	2610-2021-03
ACTIVITY:	Vibratory Roller	DATE:	24-Nov-21
LOCATION:	At 100 Feet	ENGINEER:	D. Shivaiah

VIBRATION INPUT/OUTPUT DATA

OTHER CONSTRUCTION EQUIPMENT

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.046 in/sec**

Equipment Type =	1	Vibratory Roller
PPV_{ref} =	0.210	Reference PPV at 25 ft.
D =	100.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

EQUIPMENT PPV REFERENCE LEVELS

Type	Equipment	Reference PPV at 25 ft. (in/sec)
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

PROJECT:	LEAL Master Plan Amendment Project	JOB #:	2610-2021-03
ACTIVITY:	Loaded Truck	DATE:	24-Nov-21
LOCATION:	At 100 Feet	ENGINEER:	D. Shivaiah

VIBRATION INPUT/OUTPUT DATA

OTHER CONSTRUCTION EQUIPMENT

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.017 in/sec**

Equipment Type =	4	Loaded Trucks
PPV_{ref} =	0.076	Reference PPV at 25 ft.
D =	100.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

EQUIPMENT PPV REFERENCE LEVELS

Type	Equipment	Reference PPV at 25 ft. (in/sec)
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

VIBRATION IMPACTS FROM CONSTRUCTION AND OPERATIONS

PROJECT:	LEAL Master Plan Amendment Project	JOB #:	2610-2021-03
ACTIVITY:	Caisson Drilling	DATE:	24-Nov-21
LOCATION:	At 100 Feet	ENGINEER:	D. Shivaiah

VIBRATION INPUT/OUTPUT DATA

OTHER CONSTRUCTION EQUIPMENT

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.019 in/sec**

Equipment Type =	3	Caisson Drilling
PPV_{ref} =	0.089	Reference PPV at 25 ft.
D =	100.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

EQUIPMENT PPV REFERENCE LEVELS

Type	Equipment	Reference PPV at 25 ft. (in/sec)
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

Appendix J

LEAL MASTERPLAN AMENDMENT PROJECT
TRAFFIC STUDY
City of Eastvale, California

Prepared for:

THE NEW HOME COMPANY
15231 Laguna Canyon Road, Suite 250
Irvine, CA 92618

Prepared by:

RK ENGINEERING GROUP, INC.
4000 Westerly Place, Suite 280
Newport Beach, CA 92660

Robert Kahn, P.E.
Bryan Estrada, AICP
Darshan Shivaiah M.S.



April 8, 2021

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1.0 Introduction

1.1 Purpose of Report and Study Objectives

The purpose of this traffic impact analysis is to evaluate The Leal Masterplan Amendment Project (hereinafter referred to as "modified project") from a traffic and circulation standpoint.

The *Leal Master Plan Draft Environmental Impact Report (DEIR), Michael Baker International, July 2015*, and the *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015)* have been previously prepared for the original project. Since then, modifications to the development plan have been proposed. RK has been requested to review the modified project and identify whether any new impacts or increase in severity of impacts may occur as a result of the modified project.

This analysis has been prepared to be consistent with the previous 2015 TIA and the 2015 DEIR prepared for the project. A copy of the *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015)* is contained as an attachment to this report.

The modified project is forecast to generate 27,764 fewer daily trips than what was previously estimated in the 2015 TIA and DEIR.[1] This is a substantial reduction in traffic, and as a result, the modified project would not result in additional transportation impacts other than those previously identified in the 2015 DEIR.

To help further demonstrate the reduced impact from the modified project, this report provides a detailed assessment of level of service impacts from the modified project to the local transportation system. In an effort to be consistent with the 2015 TIA and DEIR, and to provide a fair comparison of potential changes to previously identified project impacts, most of the same analysis assumptions and traffic forecasting scenarios from the 2015 TIA are used in this report.

1.2 Site Location

The proposed modified project site is bound by 58th Street to the north, Limonite Avenue to the south, Hamner Avenue to the east, and Scholar Way to the west, in the City of

[1] See Section 4.0 for more details regarding changes to project trip generation.

Eastvale. The project site is currently vacant and undeveloped. The project site location map is shown on Exhibit A. The project site plan is shown in Exhibit B.

1.3 Project Description

The previously approved 2015 TIA evaluated the following land uses for the original project:

- 660 dwelling units of multi-family residential;
- 1,525,000 square feet of retail;
- 460,000 square feet of general office;
- 460,000 square feet of medical office;
- 100,000 square feet of civic center; and
- 450 rooms of hotel.

The modified land use assumptions are summarized below.

- 400 dwelling units of single family detached residential;
- 2,100 dwelling units of multi-family residential;
- 390,000 square feet of commercial and retail;
- 65,000 square feet of general office;
- 65,000 square feet of medical office;
- 40,000 square feet of civic center use;
- 25,000 square feet of library use;
- 10,000 square feet of police station use; and
- 12,200 square feet of fire station use.

Table 1-1 summarizes the land uses evaluated in the previously approved 2015 TIA and the Modified Project land use assumptions.

Table 1-1
Project Land Uses

Land Use	Units	Previously Approved 2015 Project & traffic Study	Modified Project
Single Family Detached Residential	Dwelling Units	0	400
Multi-family Residential	Dwelling Units	660	2,100
Retail	Square Feet	1,525,000	390,000
General Office	Square Feet	460,000	65,000
Medical Office	Square Feet	460,000	65,000
Civic Center	Square Feet	100,000	40,000
Library	Square Feet	0	25,000
Police	Square Feet	0	10,000
Fire Station	Square Feet	0	12,200
Hotel	Rooms	450	0

2.0 Study Area & Analysis Methodology

This section of the report presents the analysis study area and the methodologies used to perform the traffic analyses summarized in this report in accordance with the City of Eastvale requirements. This section also discusses the agency-established applicable performance criteria and thresholds for the study facilities.

Although VMT is now the appropriate metric for determining transportation impacts, General Plan Policy C-10 of the Eastvale General Plan requires that the City maintain a LOS C on all City maintained roadways, and a LOS D in employment and commercial areas. Therefore, a discussion relative to project consistency with Policy C-10 has been included.

2.1 Study Area

The study area included in this analysis has been determined based upon the previously prepared and approved traffic study for the proposed modified project.

Consistent with the previously approved 2015 traffic study for the proposed project, this analysis evaluates the daily capacity and level of service (LOS) at the following eighteen (18) study roadway segments:

1. **Limonite Avenue:** Archibald Avenue to Harrison Avenue;
2. **Limonite Avenue:** Harrison Avenue to Scholar Way;
3. **Limonite Avenue:** Scholar Way to Hamner Avenue;
4. **Limonite Avenue:** Hamner Avenue to I-15 Ramps;
5. **Limonite Avenue:** I-15 Ramps to Wineville Avenue;
6. **Hamner Avenue:** Citrus Street to Schleisman Road;
7. **Hamner Avenue:** Schleisman Road to 68th Street;
8. **Hamner Avenue:** 68th Street to Limonite Avenue;

9. **Hamner Avenue:** Limonite Avenue to 58th Street;

10. **Hamner Avenue:** 58th Street to Bellegrave Avenue;

11. **Scholar Way:** Limonite Avenue to 68th Street;

12. **I-15 Freeway:** South of Limonite Avenue;

13. **I-15 Freeway:** Limonite Avenue to Cantu-Galleano Ranch Road;

14. **I-15 Freeway:** North of SR-60 Freeway;

15. **Scholar Way:** Bellegrave Avenue to Limonite Avenue;

16. **SR-60 Freeway:** West of I-15 Freeway;

17. **SR-60 Freeway:** East of I-15 Freeway; and

18. **Cantu-Galleano Ranch Road:** I-15 Ramps to Hamner Avenue.

Consistent with the previously approved 2015 traffic study for the proposed project, this analysis evaluates traffic conditions for the following study scenarios:

- Existing Conditions;
- Existing Plus Project Conditions;
- Cumulative (Long-Range) No Project Conditions; and
- Cumulative (Long-Range) Plus Project Conditions.

2.2 Volume to Capacity (V/C)) Methodology

The volume to capacity (V/C) ratio methodology is commonly utilized as the appropriate methodology for analyzing level of service (LOS) of roadway segments. This methodology is consistent with the methodology utilized in the previously prepared and approved 2015 traffic study for the proposed project.

To calculate the level of service, the daily volume of traffic using the roadway segment is compared with the daily capacity of the roadway segment; this is referred to as the volume-to-capacity (V/C) ratio. The V/C ratio represents the portion of the total daily capacity of the roadway being utilized by the daily volume of traffic.

Table 2-1 below shows the LOS criteria based on the V/C ratio of the roadway segment.

Table 2-1
Roadway Segment LOS - Volume to Capacity (V/C)

Level of Service (LOS)	Critical V/C Ratio
A	0.00 - 0.60
B	0.61 - 0.70
C	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	>1.00

The daily capacity of the roadway segment is determined based on the roadway classification and the number of travel lanes as shown in Table 2-2.

Table 2-2
Roadway Segment Daily Volume Capacity based on Classification

Roadway Classification	Number of Lanes (Both Directions of Travel)	Daily Capacity for LOS E (V/C = 1.00)
Freeway	10	200,600
Freeway	8	160,500
Freeway	6	117,500
Urban Arterial	6	53,900
Urban Arterial	4	35,900
Secondary Collector	2	13,000

Source: City of Eastvale General Plan

2.3 Study Roadway Segment Performance Criteria

The acceptable LOS (target LOS) for roadway segments in the City of Eastvale is LOS C or better. A roadway segment operating at LOS D, E or F is considered deficient.

3.0 Existing Traffic Volumes & Circulation System

This section provides a discussion of existing study area conditions and traffic volumes.

3.1 Existing Study Roadway Segment Classifications & Daily Capacity

Table 3-1 identifies the existing roadway segment classifications and daily capacity for the study area.

Table 3-1
Study Roadway Segments
Existing Daily Volume Capacity & Classification

#	Study Roadway Segment	Limits	Classification	No. of Lanes	Daily Capacity for LOS E (V/C = 1.00)
1	Limonite Ave	Archibald Ave to Harrison Ave	Urban Arterial	4	35,900
2	Limonite Ave	Harrison Ave to Scholar Way	Urban Arterial	4	35,900
3	Limonite Ave	Scholar Way to Hamner Ave	Urban Arterial	5	44,875
4	Limonite Ave	Hamner Ave to I-15 Ramps	Urban Arterial	6	53,900
5	Limonite Ave	I-15 Ramps to Wineville Ave	Urban Arterial	4	35,900
6	Hamner Ave	Citrus St to Schleisman Rd	Urban Arterial	4	35,900
7	Hamner Ave	Schleisman Rd to 68th St	Urban Arterial	6	53,900
8	Hamner Ave	68th St to Limonite Ave	Urban Arterial	6	53,900
9	Hamner Ave	Limonite Ave to 58th St	Urban Arterial	5	44,875
10	Hamner Ave	58th St to Bellegrave Ave	Urban Arterial	6	53,900
11	Scholar Way	Limonite Ave to 68th St	Secondary Collector	2	13,000
12	I-15 Freeway	South of Limonite Ave	Freeway	6	117,500
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	Freeway	6	117,500
14	I-15 Freeway	North of State Route 60	Freeway	8	160,500
15	Scholar Way	Bellgrave Ave to Limonite Ave	Secondary Collector	4	13,000
16	State Route 60	West of I-15 Freeway	Freeway	10	200,600
17	State Route 60	East of I-15 Freeway	Freeway	8	160,500
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	Urban Arterial	4	35,900

3.2 Existing Traffic Volumes

Existing traffic volumes at the study intersections are based upon the existing traffic volumes utilized in the previously prepared and approved *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015).*

Existing (2021) traffic volumes for the study area are derived by applying an annual growth rate of one percent (1%) per year to the 2015 traffic volumes over a six (6) year period. Existing (2021) traffic volumes within the study area are shown on Exhibit C and summarized in Table 3-2.

Table 3-2
Existing (2021) Traffic Volumes

#	Study Roadway Segment	Limits	Existing Daily Traffic Volume
1	Limonite Ave	Archibald Ave to Harrison Ave	18,497
2	Limonite Ave	Harrison Ave to Scholar Way	26,192
3	Limonite Ave	Scholar Way to Hamner Ave	29,548
4	Limonite Ave	Hamner Ave to I-15 Ramps	44,312
5	Limonite Ave	I-15 Ramps to Wineville Ave	33,855
6	Hamner Ave	Citrus St to Schleisman Rd	20,619
7	Hamner Ave	Schleisman Rd to 68th St	11,831
8	Hamner Ave	68th St to Limonite Ave	20,186
9	Hamner Ave	Limonite Ave to 58th St	15,649
10	Hamner Ave	58th St to Bellegrave Ave	15,649
11	Scholar Way	Limonite Ave to 68th St	4,912
12	I-15 Freeway	South of Limonite Ave	80,622
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	83,345
14	I-15 Freeway	North of State Route 60	115,671
15	Scholar Way	Bellgrave Ave to Limonite Ave	2,240
16	State Route 60	West of I-15 Freeway	69,076
17	State Route 60	East of I-15 Freeway	81,438
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	13,094

4.0 Projected & Future Traffic Volumes

This section of the report provides a discussion on methodologies utilized to derive future traffic volumes for the study area.

4.1 Project Traffic Conditions

Trip generation represents the amount of traffic that is attracted and produced by a development. The trip generation for the project is based upon the specific land uses that have been planned for this development.

Trip generation is typically estimated based on the trip generation rates from the latest *Institute of Transportation Engineers (ITE) Trip Generation Manual*. This publication provides a comprehensive evaluation of trip generation rates for a variety of land uses.

4.1.1 Trip Generation of Previously Approved Project

Table 4-1A shows the ITE (9th Edition, 2012) trip generation rates utilized for the trip generation analysis of the previously approved project and its land uses.

Table 4-1A
ITE 9th Edition (2012) Trip Generation Rates
Utilized in the Previously Approved Traffic Study
from Leal Specific Plan TIA (Fehr & Peers, May 12, 2015)

#	Land Use	ITE Code	Units	AM			PM			Daily
				In	Out	Total	In	Out	Total	
1	Apartment	220	DU	0.10	0.41	0.51	0.40	0.22	0.62	6.65
2	Hotel	310	Rooms	0.31	0.22	0.53	0.31	0.29	0.60	8.17
3	General Office	710	TSF	Ln(T)=0.8 x LN(X) + 1.57			0.25	1.24	1.49	Ln(T)=0.76 x LN(X) + 3.68
4	Medical / Dental Office	720	TSF	1.89	0.50	2.39	1.00	2.57	3.57	36.13
5	Government Office Complex	733	TSF	1.97	0.24	2.21	0.88	1.97	2.85	27.92
6	Shopping Center	820	TSF	Ln(T)=0.61 x LN(X) + 2.24			Ln(T)=0.67 x LN(X) + 3.31			Ln(T)=0.65 x LN(X) + 5.83

Source: 2012 ITE Trip Generation Manual (9th Edition)

DU = Dwelling Units

TSF = Thousand Square Feet

Utilizing the trip generation rates from Table 4-1A, Table 4-1B summarizes the daily and peak hour trip generation for the previously approved project.

Table 4-1B
Trip Generation of Previously Approved Project & Traffic Study from Leal Specific Plan TIA (Fehr & Peers, May 12, 2015)

#	Land Use	ITE Code	Units	Quantity	AM			PM			Daily
					In	Out	Total	In	Out	Total	
1	Apartment	220	DU	660	67	269	336	266	143	409	4,389
2	Hotel	310	Rooms	450	141	98	239	138	132	270	3,677
3	General Office	710	TSF	460.000	571	78	649	117	569	686	4,187
4	Medical / Dental Office	720	TSF	460.000	869	231	1,100	460	1,182	1,642	16,620
5	Government Office Complex	733	TSF	100.000	197	24	221	88	197	285	2,792
6	Shopping Center	820	TSF	1,525.000	510	312	822	1,785	1,933	3,718	39,908
Internal Capture (10%)					*-236*	*-101*	*-337*	*-285*	*-416*	*-701*	*-7,157*
Total Trip Generation					**2,120**	**911**	**3,030**	**2,569**	**3,740**	**6,309**	**64,416**

Source: 2012 ITE Trip Generation Manual (9th Edition); Leal Specific Plan TIA (Fehr & Peers, May 12, 2015).

DU = Dwelling Units

TSF = Thousand Square Feet

As shown in Table 4-1B, assuming a 10 percent internal capture consistent with the previously approved traffic study, based on the ITE trip generation rates, the previously approved project was forecast to generate approximately 64,416 daily trips which include approximately 3,030 AM peak hour trips and approximately 6,309 PM peak hour trips.

4.1.2 Trip Generation of Modified Project

Table 4-2 shows the ITE (10th Edition, 2017) trip generation rates utilized for the trip generation analysis of the modified project and its land uses.

Table 4-2A
ITE 10th Edition (2017) Trip Generation Rates
Utilized for Modified Project

#	Land Use	ITE Code	Units	AM			PM			Daily
				In	Out	Total	In	Out	Total	
1	Single Family Homes	210	DU	0.19	0.56	0.74	0.62	0.37	0.99	9.44
2	Multifamily Housing (Low-Rise)	220	DU	0.11	0.35	0.46	0.35	0.21	0.56	7.32
3	Fire & Rescue Station	575	TSF	0.14	0.34	0.48	0.14	0.34	0.48	4.80
4	Library	590	TSF	0.71	0.29	1.00	3.92	4.24	8.16	72.05
5	General Office	710	TSF	1.00	0.16	1.16	Ln(T)=0.95 x LN(X) + 0.36			Ln(T)=0.97 x LN(X) + 2.5
6	Medical / Dental Office	720	TSF	2.17	0.61	2.78	0.97	2.49	3.46	34.80
7	Government Office Building	730	TSF	2.51	0.84	3.34	0.43	1.28	1.71	22.59
8	Government Office Complex	733	TSF	1.90	0.23	2.13	0.87	1.95	2.82	33.98
9	Shopping Center	820	TSF	0.58	0.36	0.94	Ln(T)=0.74 x LN(X) + 2.89			Ln(T)=0.68 x LN(X) + 5.57

Source: 2017 ITE Trip Generation Manual (10th Edition)

DU = Dwelling Units

TSF = Thousand Square Feet

Utilizing the trip generation rates from Table 4-2A, Table 4-2B summarizes the daily and peak hour trip generation for the modified project.

Table 4-2B
Trip Generation of Modified Project

#	Land Use	ITE Code	Units	Quantity	AM			PM			Daily
					In	Out	Total	In	Out	Total	
1	Single Family Homes	210	DU	400	74	222	296	249	147	396	3,776
2	Multifamily Housing (Low-Rise)	220	DU	2,100	222	744	966	741	435	1,176	15,372
3	Fire & Rescue Station	575	TSF	12.200	2	4	6	2	4	6	60
4	Library	590	TSF	25.000	18	7	25	98	106	204	1,801
5	General Office	710	TSF	65.000	65	11	76	12	64	76	699
6	Medical / Dental Office	720	TSF	65.000	141	40	181	63	162	225	2,262
7	Government Office Building	730	TSF	10.000	25	8	33	4	13	17	226
8	Government Office Complex	733	TSF	40.000	76	9	85	35	78	113	1,359
9	Shopping Center	820	TSF	390.000	227	139	366	714	774	1,488	15,169
Internal Capture (10%)					*-85*	*-118*	*-203*	*-192*	*-178*	*-370*	*-4,072*
Total Trip Generation					**765**	**1,066**	**1,831**	**1,726**	**1,605**	**3,331**	**36,652**

Source: 2017 ITE Trip Generation Manual (10th Edition).

DU = Dwelling Units

TSF = Thousand Square Feet

As shown in Table 4-2B, assuming a 10 percent internal capture consistent with the previously approved traffic study, based on the ITE trip generation rates, the modified project is forecast to generate approximately 36,652 daily trips which include approximately 1,831 AM peak hour trips and approximately 3,331 PM peak hour trips.

4.1.3 Trip Generation Comparison of Previously Approved Project & Modified Project

Table 4-3 shows the trip generation comparison between the previously approved project and the modified project.

Table 4-3
Modified Project Net Trip Generation
Compared to Leal Specific Plan TIA (Fehr & Peers, May 12, 2015)

Land Use	AM			PM			Daily
	In	Out	Total	In	Out	Total	
Modified Project	765	1,066	1,831	1,726	1,605	3,331	36,652
Leal Specific Plan TIA (Fehr & Peers, May 12, 2015)	2,120	911	3,030	2,569	3,740	6,309	64,416
Net Difference	**-1,355**	**155**	**-1,200**	**-842**	**-2,136**	**-2,978**	**-27,764**

As shown in Table 4-3, when compared to the previously approved project, the modified project is forecast to generate approximately 27,764 net fewer daily trips which include approximately 1,200 net fewer AM peak hour trips and approximately 2,978 net fewer PM peak hour trips compared to the original project.

Based upon the preliminary trip generation analysis, the modified project is expected to generate fewer trips than were analyzed in the 2015 TIA and DEIR. Hence, additional traffic impacts are not expected.

4.2 Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of retail, employment, and recreational opportunities, and the proximity to the regional freeway system. The directional orientation of traffic was determined by evaluating existing and land uses and highways within the study area.

The project trip distribution is assumed to be the same as what was evaluated in the previously approved traffic study and the *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015).*

Table 4-4 shows the project trip distribution and traffic assignment on the study roadway segments. Project traffic volumes are also shown in Exhibit D.

Table 4-4
Project Trip Distribution & Trip Assignment on Study Roadway Segments

#	Study Roadway Segment	Limits	Distribution (Percent of Project Total Trips)	Project Total Daily Trip Generation	Project Daily Trip Assignment
1	Limonite Ave	Archibald Ave to Harrison Ave	10%	36,652	3,665
2	Limonite Ave	Harrison Ave to Scholar Way	10%	36,652	3,665
3	Limonite Ave	Scholar Way to Hamner Ave	50%	36,652	18,326
4	Limonite Ave	Hamner Ave to I-15 Ramps	45%	36,652	16,493
5	Limonite Ave	I-15 Ramps to Wineville Ave	10%	36,652	3,665
6	Hamner Ave	Citrus St to Schleisman Rd	10%	36,652	3,665
7	Hamner Ave	Schleisman Rd to 68th St	10%	36,652	3,665
8	Hamner Ave	68th St to Limonite Ave	5%	36,652	1,833
9	Hamner Ave	Limonite Ave to 58th St	45%	36,652	16,493
10	Hamner Ave	58th St to Bellegrave Ave	45%	36,652	16,493
11	Scholar Way	Limonite Ave to 68th St	5%	36,652	1,833
12	I-15 Freeway	South of Limonite Ave	20%	36,652	7,330
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	15%	36,652	5,498
14	I-15 Freeway	North of State Route 60	15%	36,652	5,498
15	Scholar Way	Bellgrave Ave to Limonite Ave	5%	36,652	1,833
16	State Route 60	West of I-15 Freeway	15%	36,652	5,498
17	State Route 60	East of I-15 Freeway	15%	36,652	5,498
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	10%	36,652	3,665

4.3 Existing Plus Project Conditions Traffic Volumes

Existing Plus Project Conditions traffic volumes consist of the summation of the existing traffic volumes and the project traffic volumes.

Existing Plus Project Conditions traffic volumes are shown on Exhibit E and summarized in Table 4-5.

Table 4-5
Existing Plus Project Conditions Traffic Volumes

#	Study Roadway Segment	Limits	Existing Daily Traffic Volume	Project Daily Traffic Volume	Existing Plus Project Conditions Daily Traffic Volume
1	Limonite Ave	Archibald Ave to Harrison Ave	18,497	3,665	**22,162**
2	Limonite Ave	Harrison Ave to Scholar Way	26,192	3,665	**29,857**
3	Limonite Ave	Scholar Way to Hamner Ave	29,548	18,326	**47,874**
4	Limonite Ave	Hamner Ave to I-15 Ramps	44,312	16,493	**60,805**
5	Limonite Ave	I-15 Ramps to Wineville Ave	33,855	3,665	**37,520**
6	Hamner Ave	Citrus St to Schleisman Rd	20,619	3,665	**24,284**
7	Hamner Ave	Schleisman Rd to 68th St	11,831	3,665	**15,496**
8	Hamner Ave	68th St to Limonite Ave	20,186	1,833	**22,019**
9	Hamner Ave	Limonite Ave to 58th St	15,649	16,493	**32,142**
10	Hamner Ave	58th St to Bellegrave Ave	15,649	16,493	**32,142**
11	Scholar Way	Limonite Ave to 68th St	4,912	1,833	**6,745**
12	I-15 Freeway	South of Limonite Ave	80,622	7,330	**87,952**
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	83,345	5,498	**88,843**
14	I-15 Freeway	North of State Route 60	115,671	5,498	**121,169**
15	Scholar Way	Bellgrave Ave to Limonite Ave	2,240	1,833	**4,073**
16	State Route 60	West of I-15 Freeway	69,076	5,498	**74,574**
17	State Route 60	East of I-15 Freeway	81,438	5,498	**86,936**
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	13,094	3,665	**16,759**

4.4 Cumulative (Long-Range) Without Project Conditions Traffic Volumes

Cumulative (Long-Range) Without Project Conditions traffic volumes have been obtained from the previously approved traffic study as contained in the *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015).*

Long-Range Without Project Conditions traffic volumes as shown in Exhibit F and summarized in Table 4-6.

Table 4-6
Cumulative (Long-Range) Without Project Conditions
Traffic Volumes

#	Study Roadway Segment	Limits	Cumulative Without Project Daily Traffic Volume
1	Limonite Ave	Archibald Ave to Harrison Ave	44,000
2	Limonite Ave	Harrison Ave to Scholar Way	50,780
3	Limonite Ave	Scholar Way to Hamner Ave	48,960
4	Limonite Ave	Hamner Ave to I-15 Ramps	69,110
5	Limonite Ave	I-15 Ramps to Wineville Ave	65,010
6	Hamner Ave	Citrus St to Schleisman Rd	25,400
7	Hamner Ave	Schleisman Rd to 68th St	15,030
8	Hamner Ave	68th St to Limonite Ave	22,730
9	Hamner Ave	Limonite Ave to 58th St	31,890
10	Hamner Ave	58th St to Bellegrave Ave	31,890
11	Scholar Way	Limonite Ave to 68th St	6,860
12	I-15 Freeway	South of Limonite Ave	81,750
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	86,170
14	I-15 Freeway	North of State Route 60	127,570
15	Scholar Way	Bellgrave Ave to Limonite Ave	2,810
16	State Route 60	West of I-15 Freeway	78,910
17	State Route 60	East of I-15 Freeway	83,360
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	23,980

Source: Leal Specific Plan TIA (Fehr & Peers, May 12, 2015).

4.5 Cumulative (Long-Range) With Project Conditions Traffic Volumes

Cumulative (Long-Range) With Project Conditions traffic volumes are derived by adding the project-generated traffic to the Cumulative (Long-Range) With Project Conditions traffic volumes.

Long-Range Without Project traffic volumes as shown in Exhibit G and summarized in Table 4-7.

Table 4-7
Cumulative (Long-Range) With Project Conditions Traffic Volumes

#	Study Roadway Segment	Limits	Cumulative Without Project Daily Traffic Volume	Project Daily Traffic Volume	Cumulative With Project Daily Traffic Volume
1	Limonite Ave	Archibald Ave to Harrison Ave	44,000	3,665	**47,665**
2	Limonite Ave	Harrison Ave to Scholar Way	50,780	3,665	**54,445**
3	Limonite Ave	Scholar Way to Hamner Ave	48,960	18,326	**67,286**
4	Limonite Ave	Hamner Ave to I-15 Ramps	69,110	16,493	**85,603**
5	Limonite Ave	I-15 Ramps to Wineville Ave	65,010	3,665	**68,675**
6	Hamner Ave	Citrus St to Schleisman Rd	25,400	3,665	**29,065**
7	Hamner Ave	Schleisman Rd to 68th St	15,030	3,665	**18,695**
8	Hamner Ave	68th St to Limonite Ave	22,730	1,833	**24,563**
9	Hamner Ave	Limonite Ave to 58th St	31,890	16,493	**48,383**
10	Hamner Ave	58th St to Bellegrave Ave	31,890	16,493	**48,383**
11	Scholar Way	Limonite Ave to 68th St	6,860	1,833	**8,693**
12	I-15 Freeway	South of Limonite Ave	81,750	7,330	**89,080**
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	86,170	5,498	**91,668**
14	I-15 Freeway	North of State Route 60	127,570	5,498	**133,068**
15	Scholar Way	Bellgrave Ave to Limonite Ave	2,810	1,833	**4,643**
16	State Route 60	West of I-15 Freeway	78,910	5,498	**84,408**
17	State Route 60	East of I-15 Freeway	83,360	5,498	**88,858**
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	23,980	3,665	**27,645**

5.0 Study Roadway Segment LOS Analysis

This section of the report provides a discussion on the study roadway segment LOS analysis and findings.

5.1 Existing Conditions LOS

Existing Conditions LOS calculations for the study roadway segment are shown in Table 5-1 and are based upon the existing (2021) traffic volumes shown on Exhibit C and Table 3-2, and the existing roadway geometry and classifications shown in Table 3-1.

Table 5-1
Existing Conditions
Study Roadway Segment LOS Analysis Summary

#	Study Roadway Segment	Limits	Classification	No. of Lanes	Daily Capacity for LOS E (V/C = 1.00)	Traffic Volume	V/C Ratio	LOS
1	Limonite Ave	Archibald Ave to Harrison Ave	Urban Arterial	4	35,900	18,497	0.52	A
2	Limonite Ave	Harrison Ave to Scholar Way	Urban Arterial	4	35,900	26,192	0.73	C
3	Limonite Ave	Scholar Way to Hamner Ave	Urban Arterial	5	44,875	29,548	0.66	B
4	Limonite Ave	Hamner Ave to I-15 Ramps	Urban Arterial	6	53,900	44,312	**0.82**	**D**
5	Limonite Ave	I-15 Ramps to Wineville Ave	Urban Arterial	4	35,900	33,855	**0.94**	**E**
6	Hamner Ave	Citrus St to Schleisman Rd	Urban Arterial	4	35,900	20,619	0.57	A
7	Hamner Ave	Schleisman Rd to 68th St	Urban Arterial	6	53,900	11,831	0.22	A
8	Hamner Ave	68th St to Limonite Ave	Urban Arterial	6	53,900	20,186	0.37	A
9	Hamner Ave	Limonite Ave to 58th St	Urban Arterial	5	44,875	15,649	0.35	A
10	Hamner Ave	58th St to Bellgrave Ave	Urban Arterial	6	53,900	15,649	0.29	A
11	Scholar Way	Limonite Ave to 68th St	Secondary Collector	2	13,000	4,912	0.38	A
12	I-15 Freeway	South of Limonite Ave	Freeway	6	117,500	80,622	0.69	B
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	Freeway	6	117,500	83,345	0.71	C
14	I-15 Freeway	North of State Route 60	Freeway	8	160,500	115,671	0.72	C
15	Scholar Way	Bellgrave Ave to Limonite Ave	Secondary Collector	4	13,000	2,240	0.17	A
16	State Route 60	West of I-15 Freeway	Freeway	10	200,600	69,076	0.34	A
17	State Route 60	East of I-15 Freeway	Freeway	8	160,500	81,438	0.51	A
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	Urban Arterial	4	35,900	13,094	0.36	A

Deficient operation shown in **bold**.

As shown in Table 5-1, all study roadway segment are currently operating at an acceptable LOS (LOS C or better) for Existing Conditions with the exception of the following roadway segments which are currently operating at a deficient LOS (LOS D, E, or F):

4. **Limonite Avenue:** Hamner Avenue to I-15 Ramps; and

5. **Limonite Avenue:** I-15 Ramps to Wineville Avenue.

5.2 Existing Plus Project Conditions LOS

Existing Plus Project Conditions LOS calculations for the study roadway segment are shown in Table 5-2 and are based upon the Existing Plus Project traffic volumes shown on Exhibit E and Table 4-5, and the existing roadway geometry and classifications shown in Table 3-1.

Table 5-2
Existing Plus Project Conditions - Study Roadway Segment LOS Analysis Summary

#	Study Roadway Segment	Limits	Classification	No. of Lanes	Daily Capacity for LOS E (V/C = 1.00)	Existing Conditions			Existing Plus Project Conditions		
						Traffic Volume	V/C Ratio	LOS	Traffic Volume	V/C Ratio	LOS
1	Limonite Ave	Archibald Ave to Harrison Ave	Urban Arterial	4	35,900	18,497	0.52	A	22,162	0.62	B
2	Limonite Ave	Harrison Ave to Scholar Way	Urban Arterial	4	35,900	26,192	0.73	C	29,857	**0.83**	**D**
3	Limonite Ave	Scholar Way to Hamner Ave	Urban Arterial	5	44,875	29,548	0.66	B	47,874	**1.07**	**F**
4	Limonite Ave	Hamner Ave to I-15 Ramps	Urban Arterial	6	53,900	44,312	**0.82**	**D**	60,805	**1.13**	**F**
5	Limonite Ave	I-15 Ramps to Wineville Ave	Urban Arterial	4	35,900	33,855	**0.94**	**E**	37,520	**1.05**	**F**
6	Hamner Ave	Citrus St to Schleisman Rd	Urban Arterial	4	35,900	20,619	0.57	A	24,284	0.68	B
7	Hamner Ave	Schleisman Rd to 68th St	Urban Arterial	6	53,900	11,831	0.22	A	15,496	0.29	A
8	Hamner Ave	68th St to Limonite Ave	Urban Arterial	6	53,900	20,186	0.37	A	22,019	0.41	A
9	Hamner Ave	Limonite Ave to 58th St	Urban Arterial	5	44,875	15,649	0.35	A	32,142	0.72	C
10	Hamner Ave	58th St to Bellegrave Ave	Urban Arterial	6	53,900	15,649	0.29	A	32,142	0.60	A
11	Scholar Way	Limonite Ave to 68th St	Secondary Collector	2	13,000	4,912	0.38	A	6,745	0.52	A
12	I-15 Freeway	South of Limonite Ave	Freeway	6	117,500	80,622	0.69	B	87,952	0.75	C
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	Freeway	6	117,500	83,345	0.71	C	88,843	0.76	C
14	I-15 Freeway	North of State Route 60	Freeway	8	160,500	115,671	0.72	C	121,169	0.75	C
15	Scholar Way	Bellgrave Ave to Limonite Ave	Secondary Collector	4	13,000	2,240	0.17	A	4,073	0.31	A
16	State Route 60	West of I-15 Freeway	Freeway	10	200,600	69,076	0.34	A	74,574	0.37	A
17	State Route 60	East of I-15 Freeway	Freeway	8	160,500	81,438	0.51	A	86,936	0.54	A
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	Urban Arterial	4	35,900	13,094	0.36	A	16,759	0.47	A

Deficient operation shown in **bold**.

As shown in Table 5-2, all study roadway segment are forecast to operate at an acceptable LOS (LOS C or better) for Existing Plus Project Conditions with the exception of the following roadway segments which are forecast to operate at a deficient LOS (LOS D, E, or F):

2. **Limonite Avenue:** Harrison Avenue to Scholar Way;

3. **Limonite Avenue:** Scholar Way to Hamner Avenue;

4. **Limonite Avenue:** Hamner Avenue to I-15 Ramps; and

5. **Limonite Avenue:** I-15 Ramps to Wineville Avenue.

5.3 Cumulative (Long-Range) Without Project Conditions LOS

Cumulative (Long-Range) Without Project Conditions LOS calculations for the study roadway segment are shown in Table 5-3 and are based upon the Cumulative (Long-Range) Without Project traffic volumes shown on Exhibit F and Table 4-6, and the geometry and classifications as proposed by the project for Cumulative (Long-Range) conditions.

Table 5-3
Cumulative (Long-range) Without Project Conditions
Study Roadway Segment LOS Analysis Summary

#	Study Roadway Segment	Limits	Classification	No. of Lanes	Daily Capacity for LOS E (V/C = 1.00)	Traffic Volume	V/C Ratio	LOS
1	Limonite Ave	Archibald Ave to Harrison Ave	Urban Arterial	6	53,900	44,000	**0.82**	**D**
2	Limonite Ave	Harrison Ave to Scholar Way	Urban Arterial	6	53,900	50,780	**0.94**	**E**
3	Limonite Ave	Scholar Way to Hamner Ave	Urban Arterial *	5 + 1	45,366	48,960	**1.08**	**F**
4	Limonite Ave	Hamner Ave to I-15 Ramps	Urban Arterial	6	53,900	69,110	**1.28**	**F**
5	Limonite Ave	I-15 Ramps to Wineville Ave	Urban Arterial	6	53,900	65,010	**1.21**	**F**
6	Hamner Ave	Citrus St to Schleisman Rd	Urban Arterial	6	53,900	25,400	0.47	A
7	Hamner Ave	Schleisman Rd to 68th St	Urban Arterial	6	53,900	15,030	0.28	A
8	Hamner Ave	68th St to Limonite Ave	Urban Arterial	6	53,900	22,730	0.42	A
9	Hamner Ave	Limonite Ave to 58th St	Urban Arterial *	5 +1	45,366	31,890	0.70	B
10	Hamner Ave	58th St to Bellegrave Ave	Urban Arterial	6	53,900	31,890	0.59	A
11	Scholar Way	Limonite Ave to 68th St	Secondary Collector	2	13,000	6,860	0.53	A
12	I-15 Freeway	South of Limonite Ave	Freeway	6	117,500	81,750	0.70	B
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	Freeway	6	117,500	86,170	0.73	C
14	I-15 Freeway	North of State Route 60	Freeway	8	160,500	127,570	0.79	C
15	Scholar Way	Bellgrave Ave to Limonite Ave	Secondary Collector	4	13,000	2,810	0.22	A
16	State Route 60	West of I-15 Freeway	Freeway	10	200,600	78,910	0.39	A
17	State Route 60	East of I-15 Freeway	Freeway	8	160,500	83,360	0.52	A
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	Urban Arterial	4	35,900	23,980	0.67	B

Deficient operation shown in **bold**.

* = Consists of five lanes plus one frontage lane. This analysis assumes the segment has a daily capacity equivalent to five full lanes plus a sixth (frontage) lane with 5 percent of the capacity of a single lane.

As shown in Table 5-3, all study roadway segment are forecast to operate at an acceptable LOS (LOS C or better) for Cumulative (Long-Range) Without Project Conditions with the exception of the following roadway segments which are forecast to operate at a deficient LOS (LOS D, E, or F):

1. **Limonite Avenue:** Archibald Avenue to Harrison Avenue;

2. **Limonite Avenue:** Harrison Avenue to Scholar Way;

3. **Limonite Avenue:** Scholar Way to Hamner Avenue;

4. **Limonite Avenue:** Hamner Avenue to I-15 Ramps; and

5. **Limonite Avenue:** I-15 Ramps to Wineville Avenue.

5.4 Cumulative (Long-Range) With Project Conditions LOS Existing Plus Project Conditions LOS

Cumulative (Long-Range) With Project Conditions LOS calculations for the study roadway segment are shown in Table 5-4 and are based upon the Cumulative (Long-Range) With Project traffic volumes shown on Exhibit G and Table 4-7, and the geometry and classifications as proposed by the project for Cumulative (Long-Range) conditions.

Table 5-4
Cumulative (Long-range) With Project Conditions – Study Roadway Segment LOS Analysis Summary

#	Study Roadway Segment	Limits	Classification	No. of Lanes	Daily Capacity for LOS E (V/C = 1.00)	Cumulative (Long-Range) Without Project Conditions			Cumulative (Long-Range) With Project Conditions		
						Traffic Volume	V/C Ratio	LOS	Traffic Volume	V/C Ratio	LOS
1	Limonite Ave	Archibald Ave to Harrison Ave	Urban Arterial	6	53,900	44,000	**0.82**	**D**	47,665	**0.88**	**D**
2	Limonite Ave	Harrison Ave to Scholar Way	Urban Arterial	6	53,900	50,780	**0.94**	**E**	54,445	**1.01**	**F**
3	Limonite Ave	Scholar Way to Hamner Ave	Urban Arterial *	5 + 1	45,366	48,960	**1.08**	**F**	67,286	**1.48**	**F**
4	Limonite Ave	Hamner Ave to I-15 Ramps	Urban Arterial	6	53,900	69,110	**1.28**	**F**	85,603	**1.59**	**F**
5	Limonite Ave	I-15 Ramps to Wineville Ave	Urban Arterial	6	53,900	65,010	**1.21**	**F**	68,675	**1.27**	**F**
6	Hamner Ave	Citrus St to Schleisman Rd	Urban Arterial	6	53,900	25,400	0.47	A	29,065	0.54	A
7	Hamner Ave	Schleisman Rd to 68th St	Urban Arterial	6	53,900	15,030	0.28	A	18,695	0.35	A
8	Hamner Ave	68th St to Limonite Ave	Urban Arterial	6	53,900	22,730	0.42	A	24,563	0.46	A
9	Hamner Ave	Limonite Ave to 58th St	Urban Arterial *	5 + 1	45,366	31,890	0.70	B	48,383	**1.07**	**F**
10	Hamner Ave	58th St to Bellegrave Ave	Urban Arterial	6	53,900	31,890	0.59	A	48,383	**0.90**	**D**
11	Scholar Way	Limonite Ave to 68th St	Secondary Collector	2	13,000	6,860	0.53	A	8,693	0.67	B
12	I-15 Freeway	South of Limonite Ave	Freeway	6	117,500	81,750	0.70	B	89,080	0.76	C
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	Freeway	6	117,500	86,170	0.73	C	91,668	0.78	C
14	I-15 Freeway	North of State Route 60	Freeway	8	160,500	127,570	0.79	C	133,068	**0.83**	**D**
15	Scholar Way	Bellgrave Ave to Limonite Ave	Secondary Collector	4	13,000	2,810	0.22	A	4,643	0.36	A
16	State Route 60	West of I-15 Freeway	Freeway	10	200,600	78,910	0.39	A	84,408	0.42	A
17	State Route 60	East of I-15 Freeway	Freeway	8	160,500	83,360	0.52	A	88,858	0.55	A
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	Urban Arterial	4	35,900	23,980	0.67	B	27,645	0.77	C

Deficient operation shown in **bold**.

* = Consists of five lanes plus one frontage lane. This analysis assumes the segment has a daily capacity equivalent to five full lanes plus a sixth (frontage) lane with 5 percent of the capacity of a single lane.

As shown in Table 5-4, all study roadway segment are forecast to operate at an acceptable LOS (LOS C or better) for Cumulative (Long-Range) With Project Conditions with the exception of the following roadway segments which are forecast to operate at a deficient LOS (LOS D, E, or F):

As shown in Table 5-2, all study roadway segment are forecast to operate at an acceptable LOS (LOS C or better) for Existing Plus Project Conditions with the exception of the following roadway segments which are forecast to operate at a deficient LOS (LOS D, E, or F):

1. **Limonite Avenue:** Archibald Avenue to Harrison Avenue;

2. **Limonite Avenue:** Harrison Avenue to Scholar Way;

3. **Limonite Avenue:** Scholar Way to Hamner Avenue;

4. **Limonite Avenue:** Hamner Avenue to I-15 Ramps;

5. **Limonite Avenue:** I-15 Ramps to Wineville Avenue;

9. **Hamner Avenue:** Limonite Avenue to 58th Street;

10. **Hamner Avenue:** 58th Street to Bellegrave Avenue; and

14. **I-15 Freeway:** North of SR-60 Freeway.

6.0 Previously Approved Project & Modified Project LOS Comparison

A comparison of the level of service operations and deficiencies has been prepared between the previously approved project as document in the *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015* and the Modified project as currently proposed.

Table 6-1 shows the LOS and deficiency comparison for Existing Plus Project Conditions.

Table 6-2 shows the LOS and deficiency comparison for Cumulative (Long-Range) With Project Conditions.

As shown in Table 6-1 and 6-2, the Modified project results in the same or less LOS deficiencies and impacts when compared to the previously approved project for the analysis scenarios evaluated as part of this report.

Table 6-1
Previously Approved Project vs. Modified Project
Existing Plus Project Conditions
Study Roadway Segment LOS Analysis Comparison

#	Study Roadway Segment	Limits	Previously Approved Project *			Modified Project			Difference	
			Traffic Volume	V/C Ratio	LOS	Traffic Volume	V/C Ratio	LOS	Traffic Volume	V/C Ratio
1	Limonite Ave	Archibald Ave to Harrison Ave	23,725	0.66	B	22,162	0.62	B	-1,563	-0.04
2	Limonite Ave	Harrison Ave to Scholar Way	30,974	**0.86**	**D**	29,857	**0.83**	**D**	-1,117	-0.03
3	Limonite Ave	Scholar Way to Hamner Ave	59,336	**1.65**	**F**	47,874	**1.07**	**F**	-11,462	-0.58
4	Limonite Ave	Hamner Ave to I-15 Ramps	70,094	**1.30**	**F**	60,805	**1.13**	**F**	-9,289	-0.17
5	Limonite Ave	I-15 Ramps to Wineville Ave	38,193	**1.06**	**F**	37,520	**1.05**	**F**	-673	-0.01
6	Hamner Ave	Citrus St to Schleisman Rd	25,724	0.72	C	24,284	0.68	B	-1,440	-0.04
7	Hamner Ave	Schleisman Rd to 68th St	17,445	0.32	A	15,496	0.29	A	-1,949	-0.03
8	Hamner Ave	68th St to Limonite Ave	22,166	0.41	A	22,019	0.41	A	-147	0.00
9	Hamner Ave	Limonite Ave to 58th St	43,092	**1.20**	**F**	32,142	0.72	C	-10,950	-0.48
10	Hamner Ave	58th St to Bellegrave Ave	43,092	**1.20**	**F**	32,142	0.60	A	-10,950	-0.60
11	Scholar Way	Limonite Ave to 68th St	7,777	0.60	A	6,745	0.52	A	-1,032	-0.08
12	I-15 Freeway	South of Limonite Ave	88,550	0.75	C	87,952	0.75	C	-598	0.00
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	87,965	0.75	C	88,843	0.76	C	878	0.01
14	I-15 Freeway	North of State Route 60	118,417	0.74	C	121,169	0.75	C	2,752	0.01
15	Scholar Way	Bellgrave Ave to Limonite Ave	5,260	0.40	A	4,073	0.31	A	-1,187	-0.09
16	State Route 60	West of I-15 Freeway	74,523	0.37	A	74,574	0.37	A	51	0.00
17	State Route 60	East of I-15 Freeway	86,168	0.54	A	86,936	0.54	A	768	0.00
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	18,635	0.52	A	16,759	0.47	A	-1,876	-0.05

* Source: *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015)*

Table 6-2
Previously Approved Project vs. Modified Project
Cumulative (Long-Range) With Project Conditions
Study Roadway Segment LOS Analysis Comparison

#	Study Roadway Segment	Limits	Previously Approved Project *			Modified Project			Difference	
			Traffic Volume	V/C Ratio	LOS	Traffic Volume	V/C Ratio	LOS	Traffic Volume	V/C Ratio
1	Limonite Ave	Archibald Ave to Harrison Ave	50,300	**0.93**	**E**	47,665	**0.88**	**D**	-2,635	-0.05
2	Limonite Ave	Harrison Ave to Scholar Way	57,080	**1.06**	**F**	54,445	**1.01**	**F**	-2,635	-0.05
3	Limonite Ave	Scholar Way to Hamner Ave	80,460	**1.49**	**F**	67,286	**1.48**	**F**	-13,174	-0.01
4	Limonite Ave	Hamner Ave to I-15 Ramps	97,460	**1.81**	**F**	85,603	**1.59**	**F**	-11,857	-0.22
5	Limonite Ave	I-15 Ramps to Wineville Ave	71,310	**1.32**	**F**	68,675	**1.27**	**F**	-2,635	-0.05
6	Hamner Ave	Citrus St to Schleisman Rd	31,700	0.59	A	29,065	0.54	A	-2,635	-0.05
7	Hamner Ave	Schleisman Rd to 68th St	21,330	0.40	A	18,695	0.35	A	-2,635	-0.05
8	Hamner Ave	68th St to Limonite Ave	25,880	0.48	A	24,563	0.46	A	-1,317	-0.02
9	Hamner Ave	Limonite Ave to 58th St	60,240	**1.12**	**F**	48,383	**1.07**	**F**	-11,857	-0.05
10	Hamner Ave	58th St to Bellegrave Ave	60,240	**1.12**	**F**	48,383	**0.90**	**D**	-11,857	-0.22
11	Scholar Way	Limonite Ave to 68th St	10,010	0.77	C	8,693	0.67	B	-1,317	-0.10
12	I-15 Freeway	South of Limonite Ave	94,350	0.80	C	89,080	0.76	C	-5,270	-0.04
13	I-15 Freeway	Limonite Ave to Cantu-Galleano Ranch Rd	90,790	0.77	C	91,668	0.78	C	878	0.01
14	I-15 Freeway	North of State Route 60	137,020	**0.85**	**D**	133,068	**0.83**	**D**	-3,952	-0.02
15	Scholar Way	Bellgrave Ave to Limonite Ave	5,960	0.46	A	4,643	0.36	A	-1,317	-0.10
16	State Route 60	West of I-15 Freeway	88,360	0.44	A	84,408	0.42	A	-3,952	-0.02
17	State Route 60	East of I-15 Freeway	92,810	0.58	A	88,858	0.55	A	-3,952	-0.03
18	Cantu-Galleano Ranch Rd	I-15 Ramps to Hamner Ave	30,280	**0.84**	**D**	27,645	0.77	C	-2,635	-0.07

* Source: *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015)*

7.0 Vehicle Miles Traveled (VMT) Evaluation

In response to Senate Bill (SB) 743, the California Natural Resource Agency certified and adopted new CEQA Guidelines in December 2018 which now identify Vehicle Miles Traveled (VMT) as the most appropriate metric to evaluate a project's transportation impact under CEQA (§ 15064.3).

Effective July 1, 2020, the previous CEQA metric of LOS, typically measured in terms of automobile delay, roadway capacity and congestion, generally will no longer constitute a significant environmental impact.

On June 24, 2020, the City of Eastvale adopted Resolution No. 20-44, which establishes VMT impact thresholds for assessing consistency with CEQA Guidelines Section 15064.3, subdivision (b).

Land use projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Utilizing the latest Riverside County Transportation Model (RIVCOM) and the Western Riverside County Council of Governments (WRCOG) Web Screening Tool, it has been determined that the project site is located within a low-VMT generating zone based on residential home-based VMT and home-based work VMT for both base model year (2018) and future model year (2045).

Utilizing the base model data for VMT screening is appropriate. RIVCOM assumes there will be 2,501 households and 2,107 employees in the project's traffic analysis zone (TAZ) under year 2045 conditions. The project would consist of similar land uses and demographics as estimated in the base model and is expected to exhibit similar VMT patterns.

As a result, the proposed Modified project is exempt from further VMT assessment and may be presumed to have a less than significant impact absent substantial evidence to the contrary.

The WRCOG tool output for the proposed project is provided Attachment A.

8.0 Findings & Conclusions

The purpose of this traffic impact analysis is to evaluate The Leal Masterplan Amendment Project (hereinafter referred to as "modified project") from a traffic and circulation standpoint.

The *Leal Master Plan Draft Environmental Impact Report (DEIR), Michael Baker International, July 2015*, and the *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015)* have been previously prepared for the original project. Since then, modifications to the development plan have been proposed. RK has been requested to review the modified project and identify whether any new impacts or increase in severity of impacts may occur as a result of the modified project.

This analysis has been prepared to be consistent with the previous 2015 TIA and the 2015 DEIR prepared for the project. A copy of the *Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015)* is contained as an attachment to this report.

The proposed modified project site is bound by 58th Street to the north, Limonite Avenue to the south, Hamner Avenue to the east, and Scholar Way to the west, in the City of Eastvale. The project site is currently vacant and undeveloped. The project site location map is shown on Exhibit A. The project site plan is shown in Exhibit B.

The previously approved 2015 TIA evaluated the following land uses for the original project:

- 660 dwelling units of multi-family residential;
- 1,525,000 square feet of retail;
- 460,000 square feet of general office;
- 460,000 square feet of medical office;
- 100,000 square feet of civic center; and
- 450 rooms of hotel.

The modified land use assumptions are summarized below.

- 400 dwelling units of single family detached residential;

- 2,100 dwelling units of multi-family residential;
- 390,000 square feet of commercial and retail;
- 65,000 square feet of general office;
- 65,000 square feet of medical office;
- 40,000 square feet of civic center use;
- 25,000 square feet of library use;
- 10,000 square feet of police station use; and
- 12,200 square feet of fire station use.

The Table below summarizes the land uses evaluated in the previously approved 2015 TIA and the Modified Project land use assumptions.

Project Land Uses

Land Use	Units	Previously Approved 2015 Project & traffic Study	Modified Project
Single Family Detached Residential	Dwelling Units	0	400
Multi-family Residential	Dwelling Units	660	2,100
Retail	Square Feet	1,525,000	390,000
General Office	Square Feet	460,000	65,000
Medical Office	Square Feet	460,000	65,000
Civic Center	Square Feet	100,000	40,000
Library	Square Feet	0	25,000
Police	Square Feet	0	10,000
Fire Station	Square Feet	0	12,200
Hotel	Rooms	450	0

Study Area & Analysis Scenarios:

Consistent with the previously approved 2015 traffic study for the proposed project, this analysis evaluates the daily capacity and level of service (LOS) at the following eighteen (18) study roadway segments:

1. **Limonite Avenue:** Archibald Avenue to Harrison Avenue;
2. **Limonite Avenue:** Harrison Avenue to Scholar Way;
3. **Limonite Avenue:** Scholar Way to Hamner Avenue;
4. **Limonite Avenue:** Hamner Avenue to I-15 Ramps;
5. **Limonite Avenue:** I-15 Ramps to Wineville Avenue;
6. **Hamner Avenue:** Citrus Street to Schleisman Road;
7. **Hamner Avenue:** Schleisman Road to 68th Street;
8. **Hamner Avenue:** 68th Street to Limonite Avenue;
9. **Hamner Avenue:** Limonite Avenue to 58th Street;
10. **Hamner Avenue:** 58th Street to Bellegrave Avenue;
11. **Scholar Way:** Limonite Avenue to 68th Street;
12. **I-15 Freeway:** South of Limonite Avenue;
13. **I-15 Freeway:** Limonite Avenue to Cantu-Galleano Ranch Road;
14. **I-15 Freeway:** North of SR-60 Freeway;
15. **Scholar Way:** Bellegrave Avenue to Limonite Avenue;
16. **SR-60 Freeway:** West of I-15 Freeway;

17. **SR-60 Freeway:** East of I-15 Freeway; and

18. **Cantu-Galleano Ranch Road:** I-15 Ramps to Hamner Avenue.

Consistent with the previously approved 2015 traffic study for the proposed project, this analysis evaluates traffic conditions for the following study scenarios:

- Existing Conditions;
- Existing Plus Project Conditions;
- Cumulative (Long-Range) No Project Conditions; and
- Cumulative (Long-Range) Plus Project Conditions.

Project Trip Generation:

The previously approved project was forecast to generate approximately 64,416 daily trips which include approximately 3,030 AM peak hour trips and approximately 6,309 PM peak hour trips.

Based on the ITE trip generation rates, the modified project is forecast to generate approximately 36,652 daily trips which include approximately 1,831 AM peak hour trips and approximately 3,331 PM peak hour trips

When compared to the previously approved project, the modified project is forecast to generate approximately 27,764 net fewer daily trips which include approximately 1,200 net fewer AM peak hour trips and approximately 2,978 net fewer PM peak hour trips compared to the original project.

Based upon the preliminary trip generation analysis, the modified project is expected to generate fewer trips than were analyzed in the 2015 TIA and DEIR. Hence, additional traffic impacts are not expected.

LOS Analysis Findings:

Based on the LOS analysis conducted, the Modified project results in the same or less LOS deficiencies and impacts when compared to the previously approved project for the analysis scenarios evaluated as part of this report.

VMT Analysis Findings:

Utilizing the Western Riverside County Council of Governments (WRCOG) Screening Tool, the modified project site is located within a low-VMT generating zone based on residential home-based VMT and home-based work VMT.

As a result, the proposed Modified project is exempt from further VMT assessment and may be presumed to have a less than significant impact absent substantial evidence to the contrary.

The WRCOG tool output for the proposed project is provided Attachment A.

Exhibits

Exhibit A

Location Map

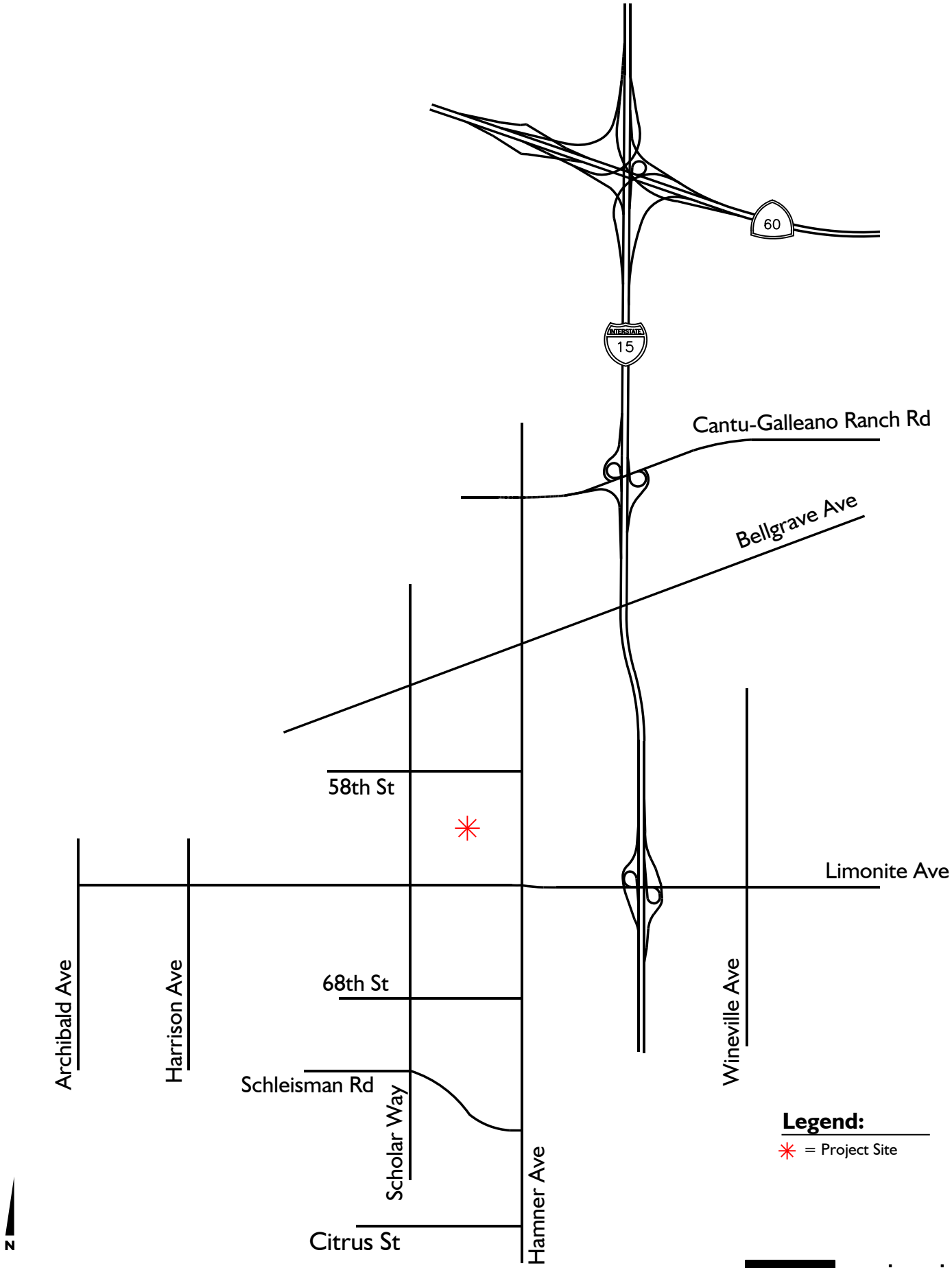


Exhibit B
Site Plan



N

Exhibit C

Existing Traffic Volumes

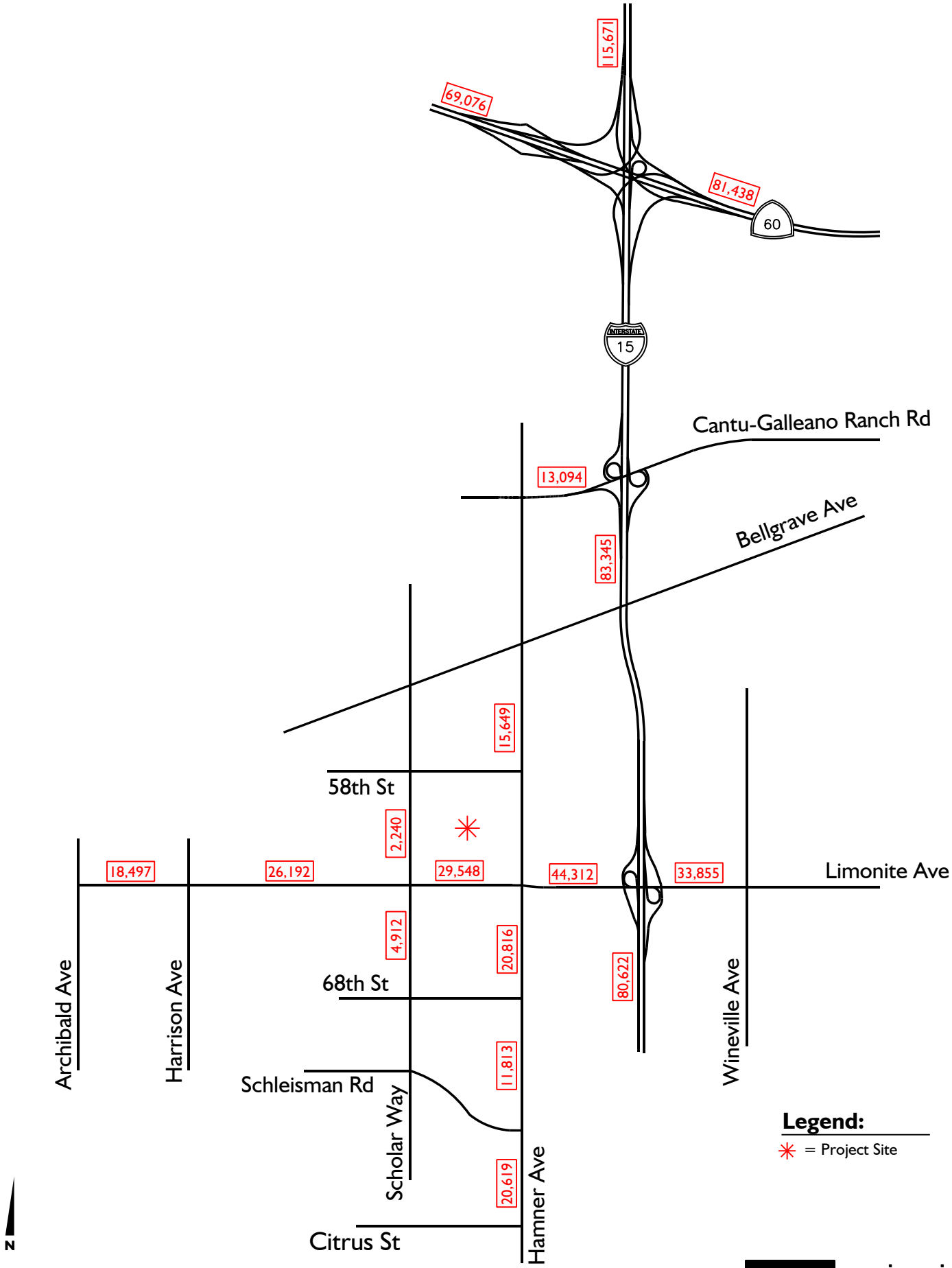


Exhibit D

Project Traffic Volumes

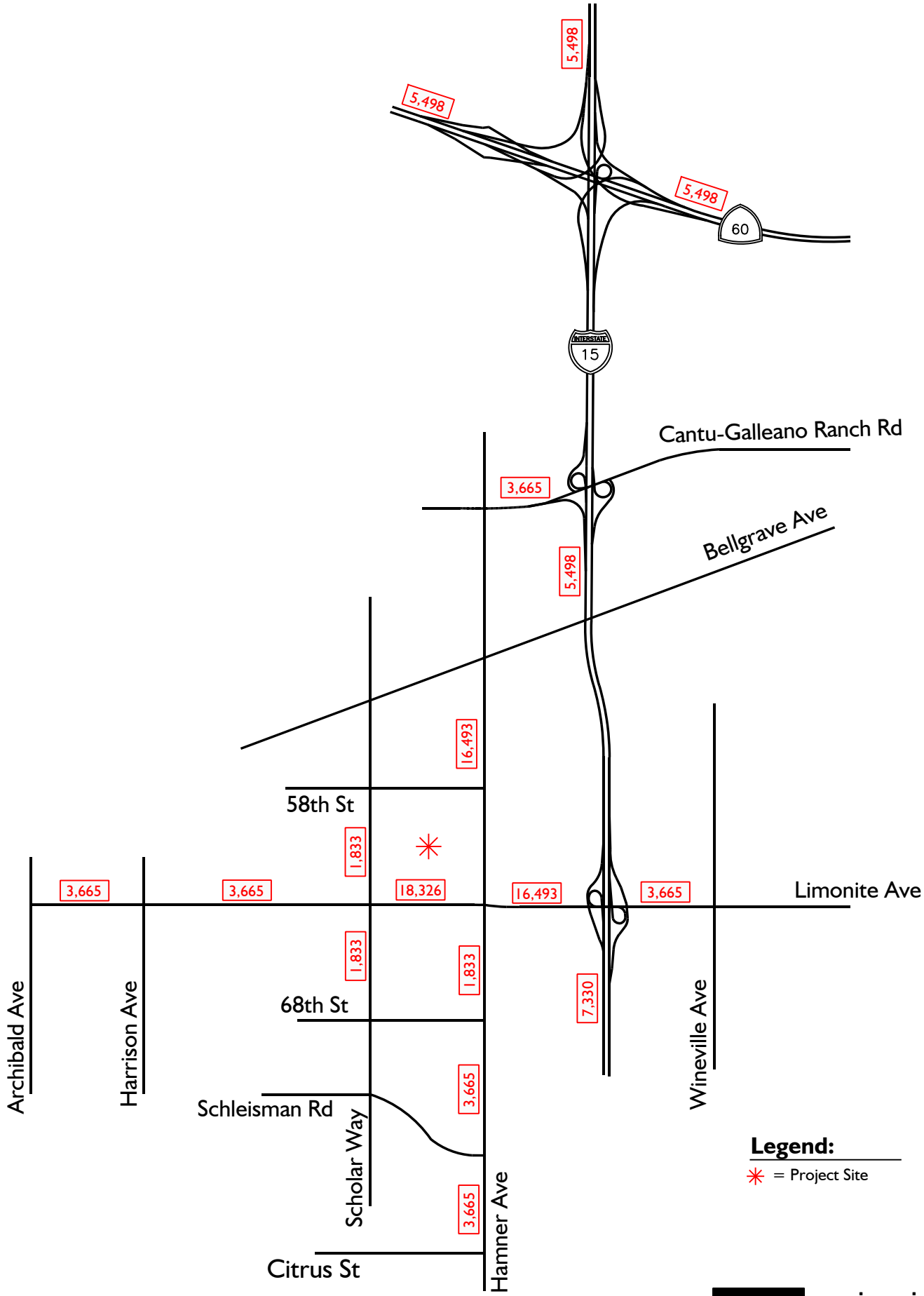


Exhibit E

Existing Plus Project Traffic Volumes

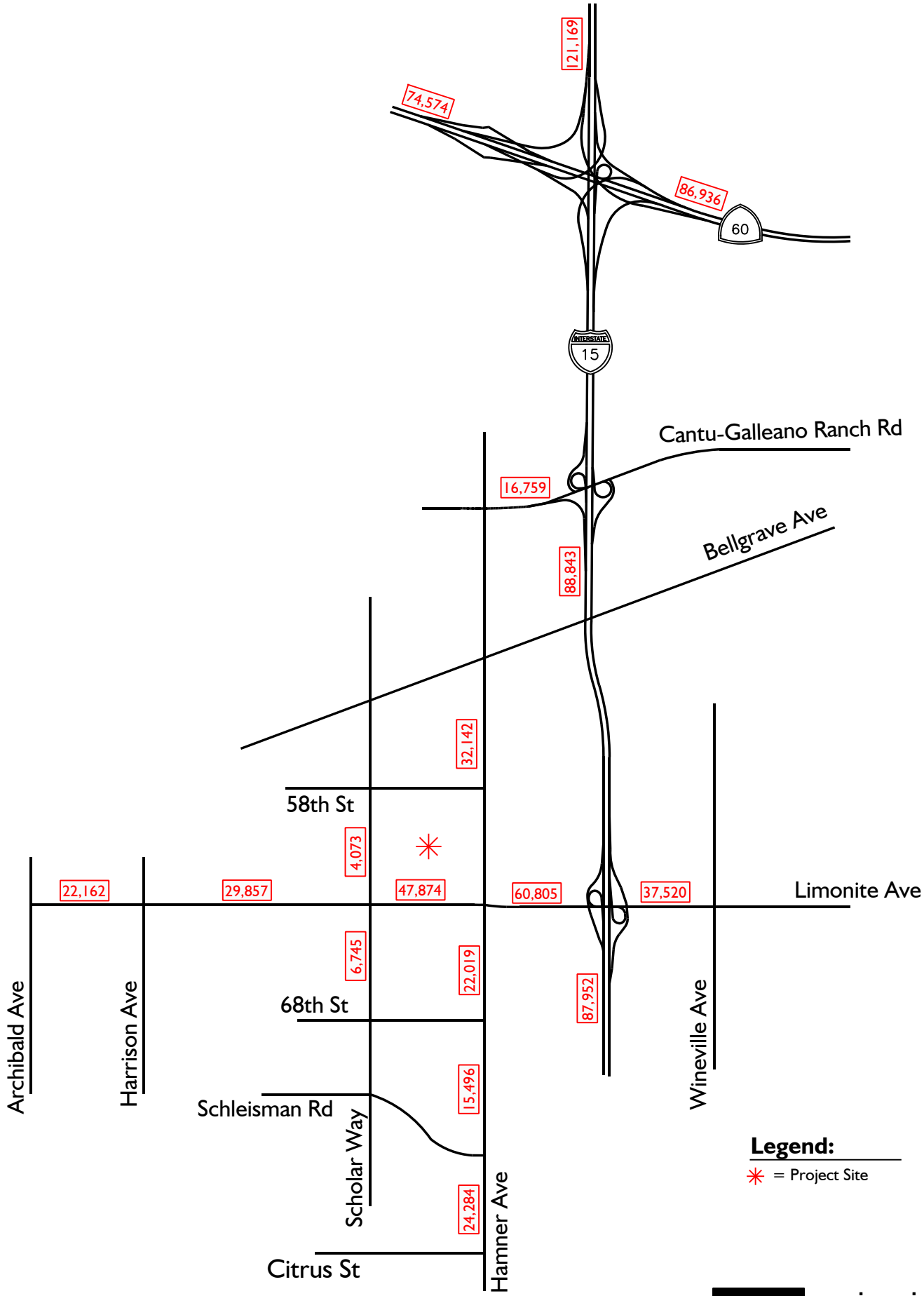


Exhibit F

Horizon Year Without Project Traffic Volumes

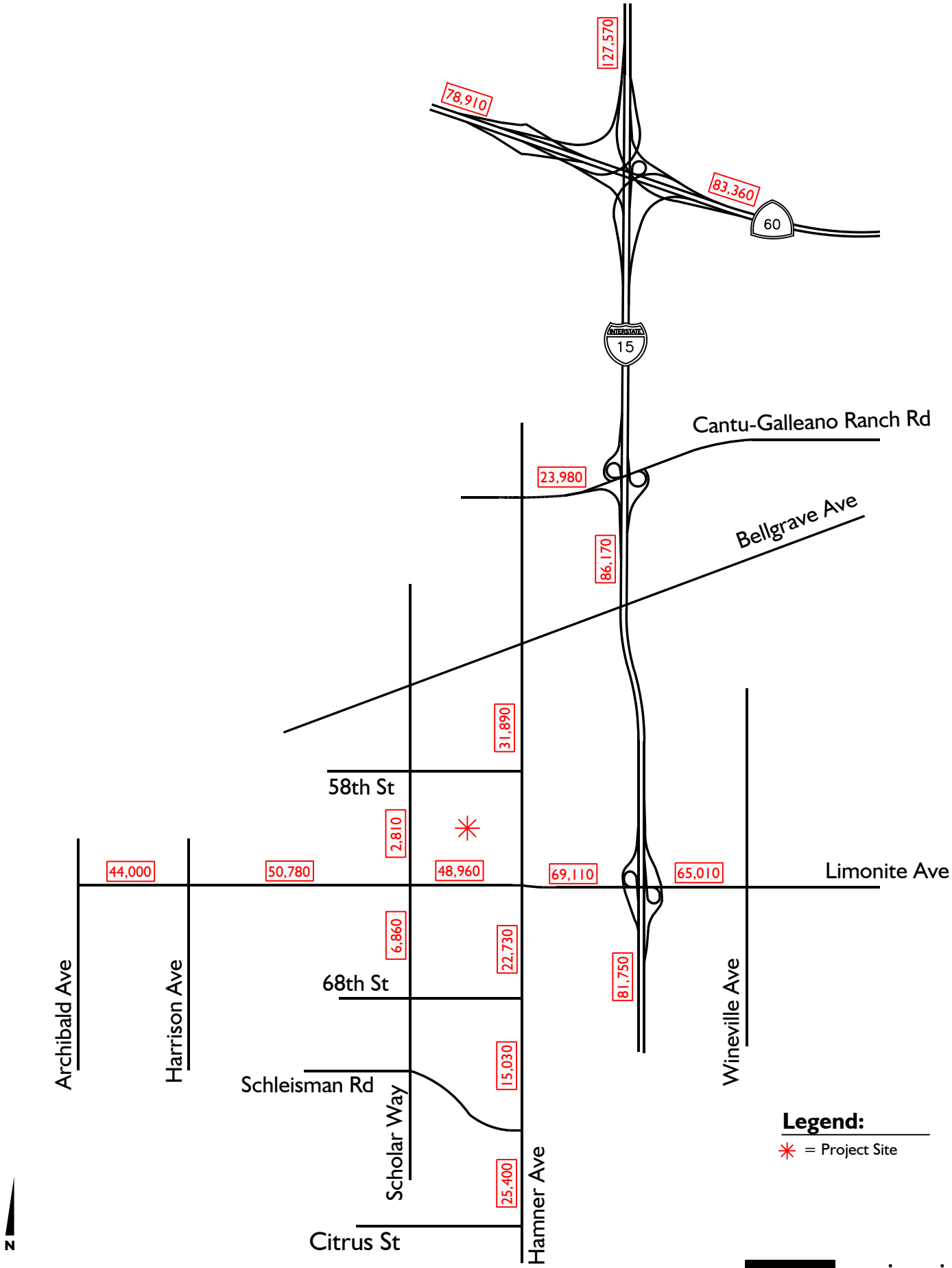
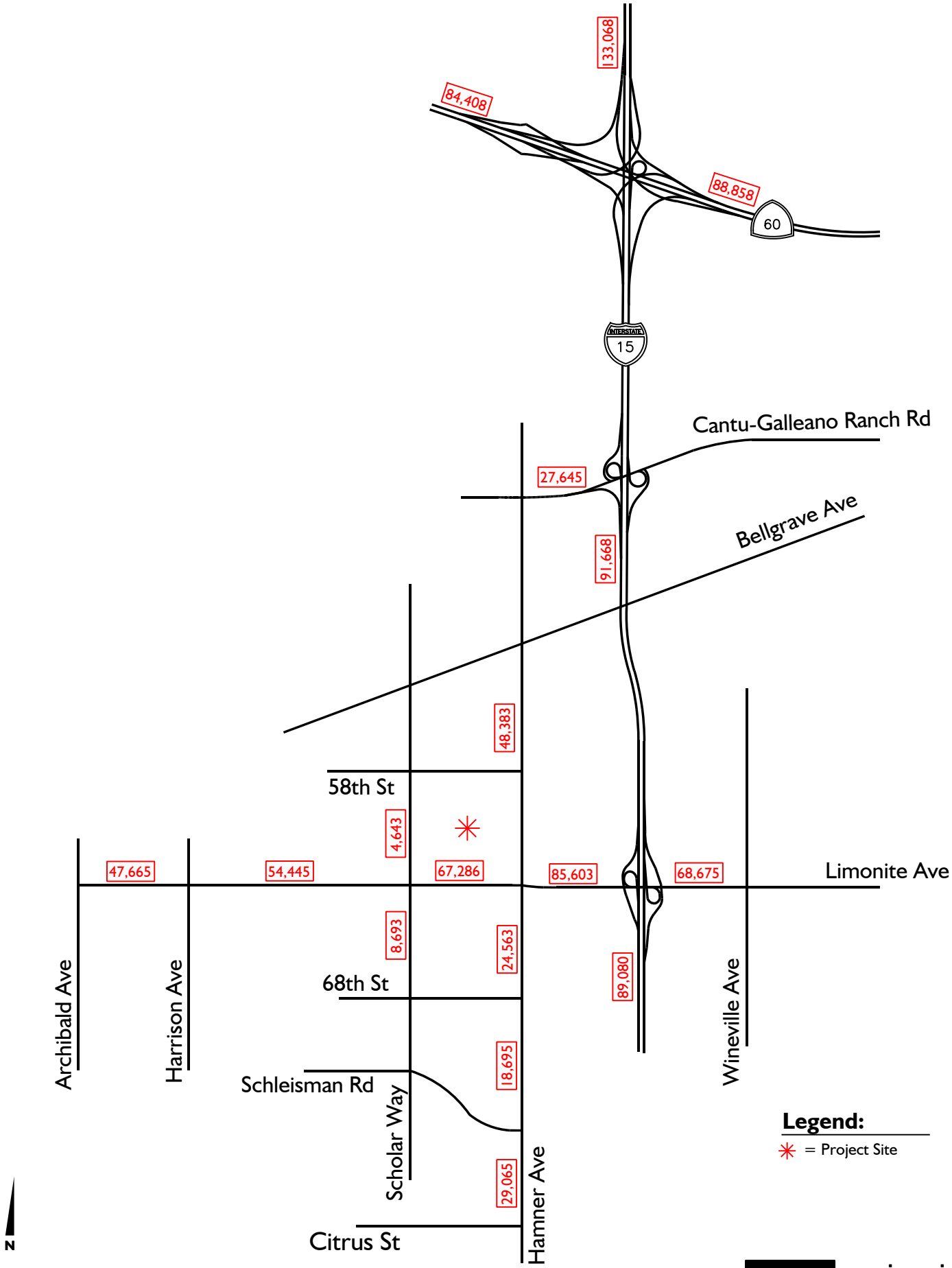


Exhibit G

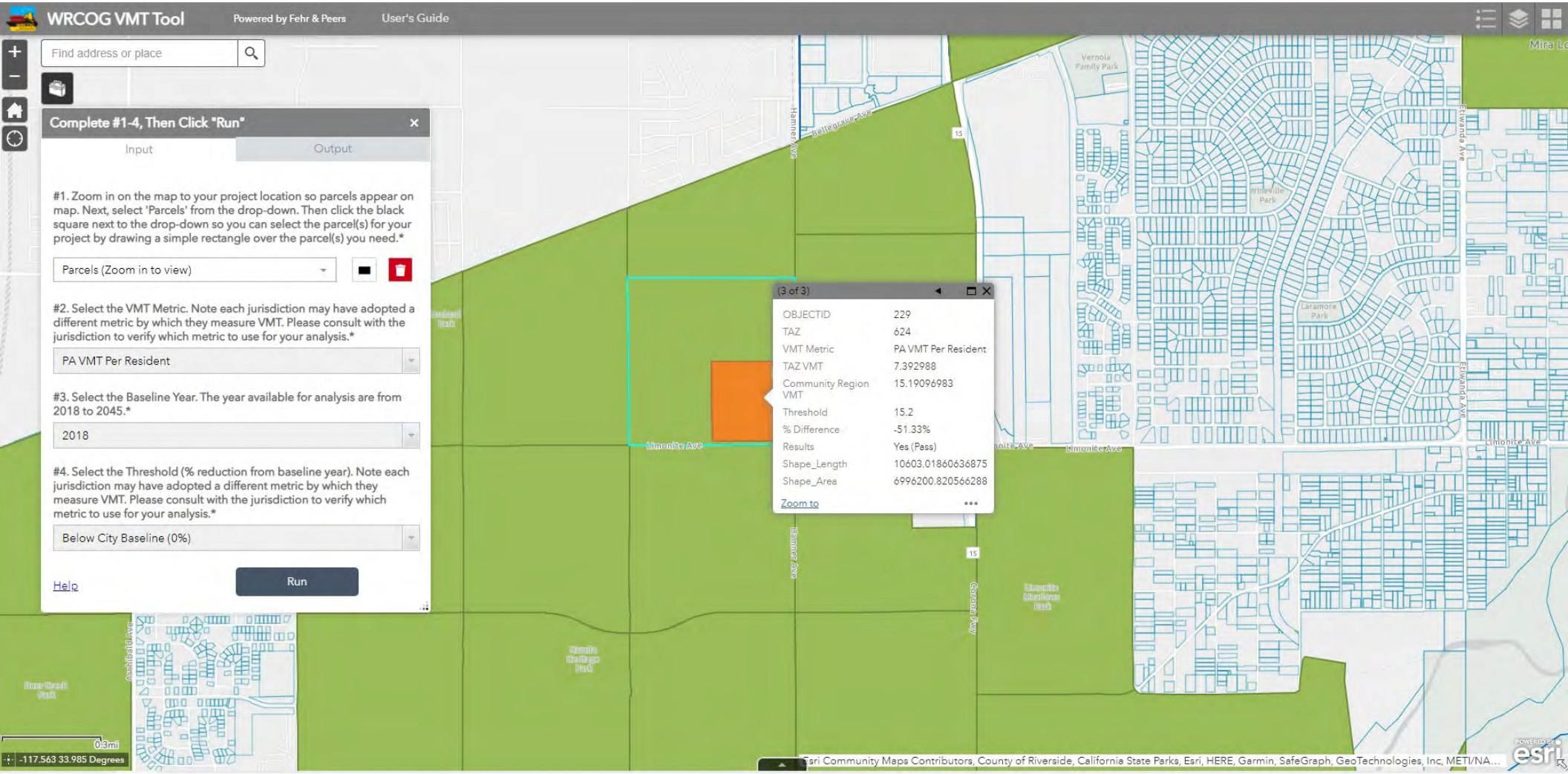
Horizon Year With Project Traffic Volumes

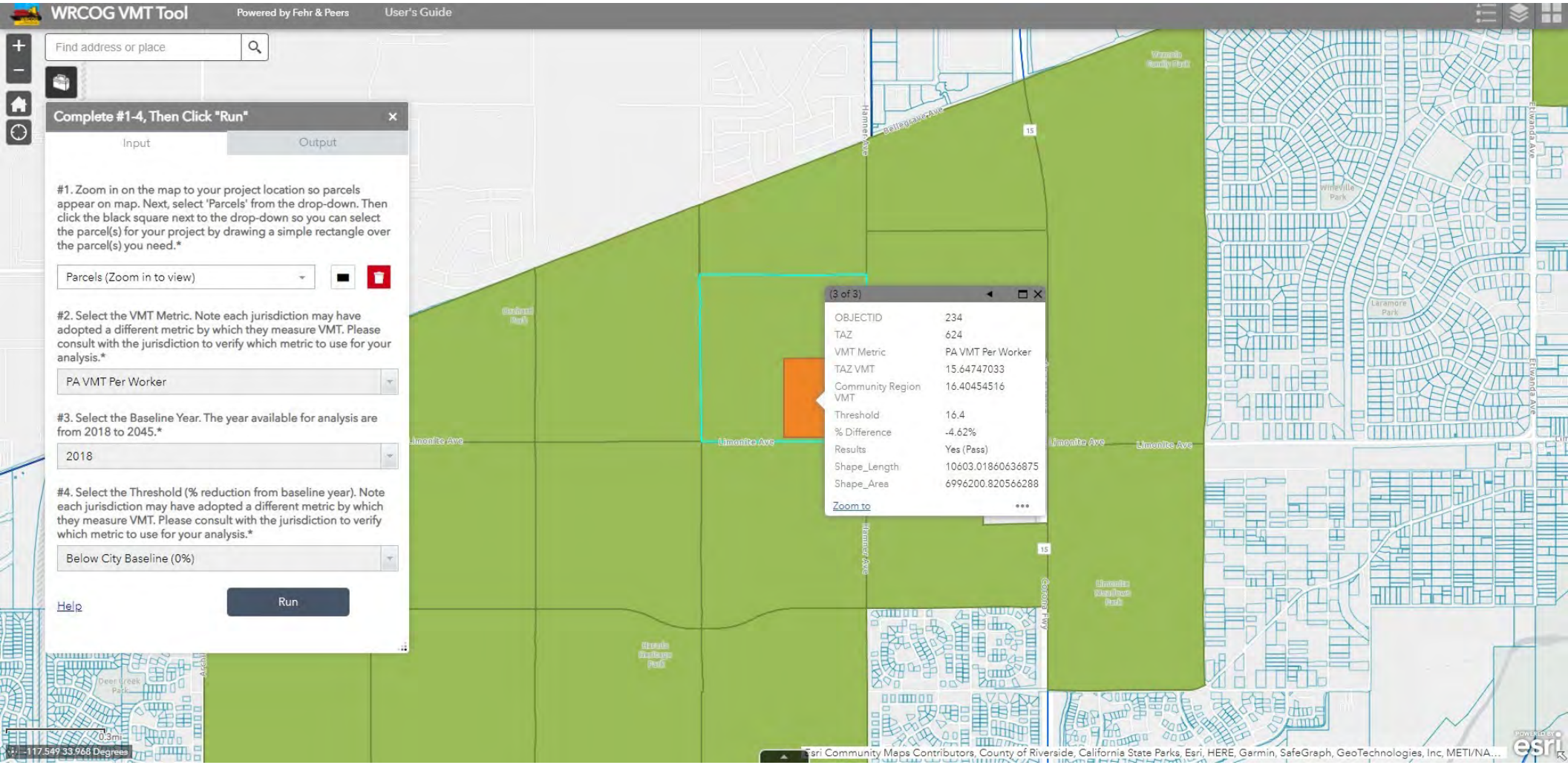


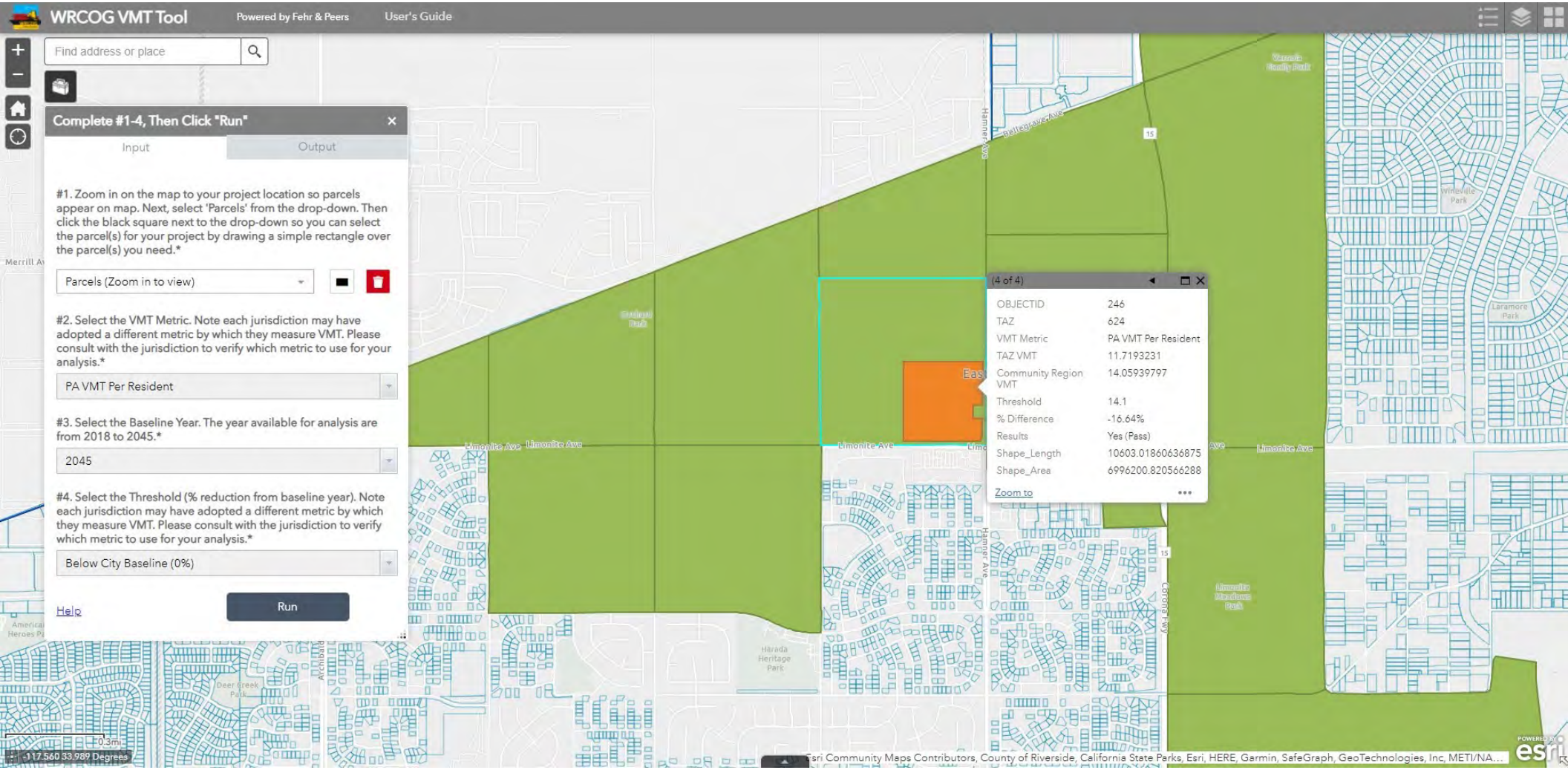
Attachments

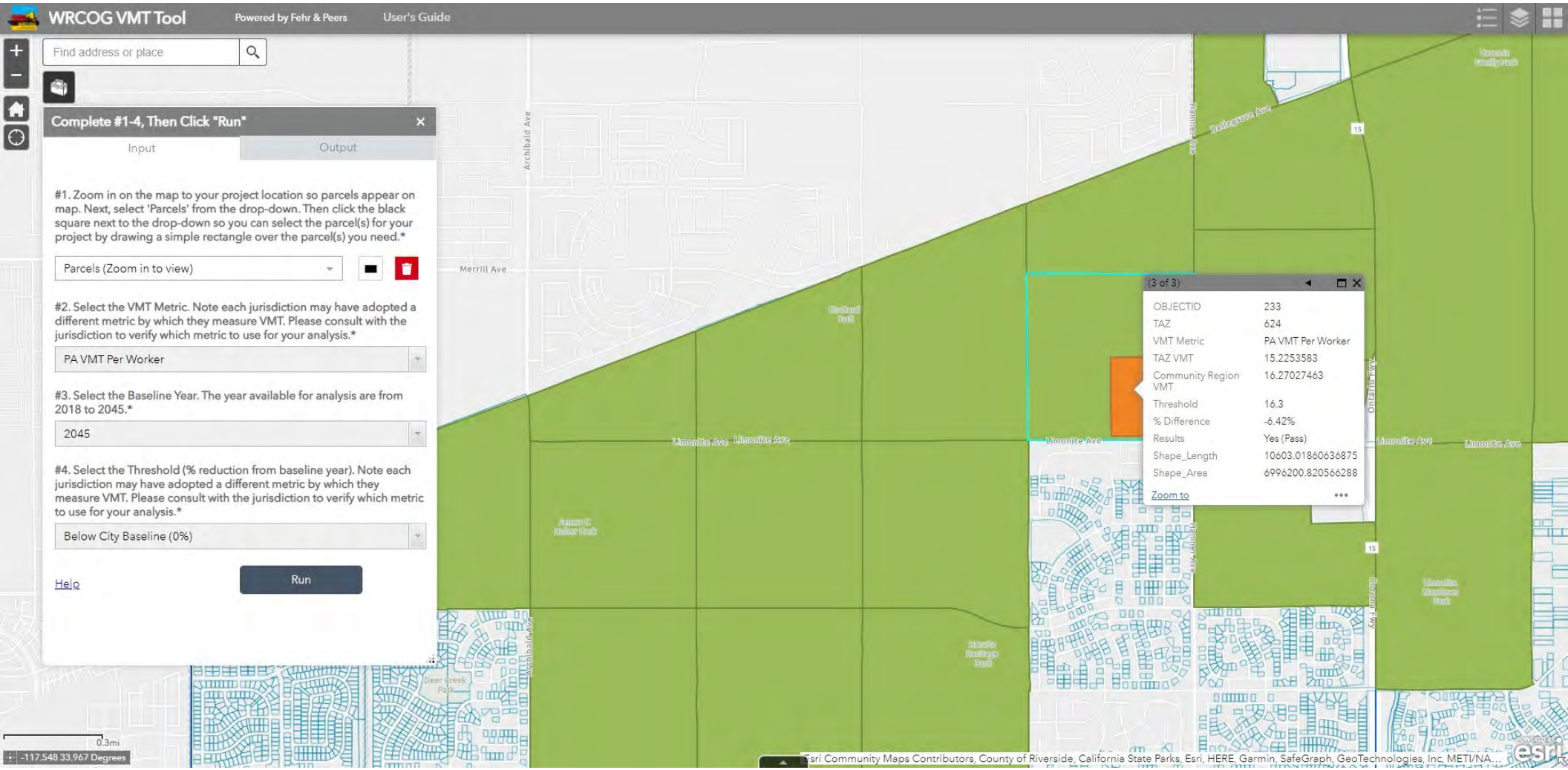
Attachment A

WRCOG VMT Sheets


WRCOG VMT Tool
Powered by Fehr & Peers
User's Guide
Find address or place
Complete #1-4, Then Click "Run"
Input
Output
#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*
Parcels (Zoom in to view)
#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
PA VMT Per Resident
#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*
2018
#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
Below City Baseline (0%)
Help
Run
(3 of 3)
OBJECTID 229
TAZ 624
VMT Metric PA VMT Per Resident
TAZ VMT 7.392988
Community Region VMT 15.19096983
Threshold 15.2
% Difference -51.33%
Results Yes (Pass)
Shape_Length 10603.01860636875
Shape_Area 6996200.820566288
Zoom to
Limonite Ave
Hamner Ave
Bellegrave Ave
Archibald Ave
Etiwanda Ave
Vernola Family Park
Wineville Park
Laramore Park
Limonite Meadows Park
0.3mi
-117.563 33.985 Degrees
Esri Community Maps Contributors, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NA...
esri


WRCOG VMT Tool
Powered by Fehr & Peers
User's Guide
Find address or place
Complete #1-4, Then Click "Run"
Input
Output
#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*
Parcels (Zoom in to view)
#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
PA VMT Per Worker
#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*
2018
#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
Below City Baseline (0%)
Help
Run
(3 of 3)
OBJECTID 234
TAZ 624
VMT Metric PA VMT Per Worker
TAZ VMT 15.64747033
Community Region VMT 16.40454516
Threshold 16.4
% Difference -4.62%
Results Yes (Pass)
Shape_Length 10603.01860636875
Shape_Area 6996200.820566288
Zoom to
Limonite Ave
Hamner Ave
Bellegrave Ave
Etiwanda Ave
Esri Community Maps Contributors, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NA...


WRCOG VMT Tool
Powered by Fehr & Peers
User's Guide
Find address or place
Complete #1-4, Then Click "Run"
Input
Output
#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*
Parcels (Zoom in to view)
#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
PA VMT Per Resident
#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*
2045
#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
Below City Baseline (0%)
Help
Run
(4 of 4)
OBJECTID 246
TAZ 624
VMT Metric PA VMT Per Resident
TAZ VMT 11.7193231
Community Region VMT 14.05939797
Threshold 14.1
% Difference -16.64%
Results Yes (Pass)
Shape_Length 10603.01860636875
Shape_Area 6996200.820566288
Zoom to
Limonite Ave
Hamner Ave
Bellegrave Ave
Harada Heritage Park
Deer Creek Park
Laramore Park
Winevile Park
Esri Community Maps Contributors, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NA...
esri


WRCOG VMT Tool
Powered by Fehr & Peers
User's Guide
Find address or place
Complete #1-4, Then Click "Run"
Input
Output
#1. Zoom in on the map to your project location so parcels appear on map. Next, select 'Parcels' from the drop-down. Then click the black square next to the drop-down so you can select the parcel(s) for your project by drawing a simple rectangle over the parcel(s) you need.*
Parcels (Zoom in to view)
#2. Select the VMT Metric. Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
PA VMT Per Worker
#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*
2045
#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*
Below City Baseline (0%)
Help
Run
(3 of 3)
OBJECTID 233
TAZ 624
VMT Metric PA VMT Per Worker
TAZ VMT 15.2253583
Community Region VMT 16.27027463
Threshold 16.3
% Difference -6.42%
Results Yes (Pass)
Shape_Length 10603.01860636875
Shape_Area 6996200.820566288
Zoom to
Limonite Ave
Archibald Ave
Merrill Ave
Bellegrave Ave
Ontario Fwy
0.3mi
-117.548 33.967 Degrees
Esri Community Maps Contributors, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NA...

Attachment B

Leal Specific Plan Traffic Impact Analysis (TIA), Fehr & Peers, May 2015)

Leal Specific Plan

Prepared for:
Michael Baker International
And
The City of Eastvale

May 12, 2015

OC14-0341

FEHR & PEERS

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1.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES

The purpose of this report is to analyze the projected impact of traffic generated by the proposed Leal Specific Plan on the area surrounding the project site. This report will begin with a summary of impacts in the area due to the proposed project. Mitigation measures for these impacts will then be discussed. This information is presented first to provide decision makers with an up-front summary of the impacts and mitigation measures for the project.

The following chapters summarize the remaining components of this assessment, including the methodology used for the analysis in this project and a detailed description of the environmental setting.

TRANSPORTATION IMPACT ASSESSMENT

According to the California Environmental Quality Act (CEQA) guidelines, a project results in a significant impact from a transportation perspective if the project:

- Conflicts with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit
    - In the City of Eastvale, the performance standards that are identified in the City's General Plan and in this specific plan include:
        - Maintaining Level of Service (LOS) C on local roadways.
            - This specific plan does identify the need to modify the "acceptable" LOS threshold in the study area, particularly on Limonite Avenue, as it will operate at LOS F into the future
            - For Caltrans facilities, LOS C was identified as the minimum acceptable operating level per their guidelines, which state that the threshold between LOS C and LOS D should apply
- Conflicts with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Substantially increases hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Results in inadequate emergency access

- Conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

CEQA also requires the project to be evaluated for its impacts to the existing setting and the cumulative impacts of the project. As such, this transportation assessment evaluates the following scenarios from a transportation perspective:

1. Existing Conditions
2. Existing plus Project Conditions
3. Cumulative No Project Conditions
4. Cumulative plus Project Conditions

IMPACTS

The proposed project and the analysis results were compared to the significance criteria described above to identify project impacts. The results are summarized below.

a) Does the proposed project conflict with an applicable plan, ordinance or policy?

Determination: Significant impacts with mitigation measures

The proposed project is consistent with adopted plans and policies related to non-motorized travel in the area. In fact, the project includes facilities to support bicycles and pedestrians on site. Additionally, the land use plan allows for a mix of uses that will increase project trip internalization and potential land use densities on the project site will support transit use in the study area.

To evaluate motorized facilities, the significance criteria from applicable jurisdictions summarized above were applied to the analysis results to identify significant impacts. The results are summarized in Table 1-1.

All locations where significant project impacts occur are subject to mitigation, if feasible, which is described later in this chapter.

Existing Plus Project impacts are projected to be:

- Limonite Avenue: Between Harrison Avenue & Scholar Way - The addition of project traffic degrades traffic operations from LOS C to LOS D
- Limonite Avenue: Between Scholar Way & Hamner Avenue- The addition of project traffic degrades operations from LOS C to LOS F
- Limonite Avenue: Between Hamner Avenue & I-15 SB Ramp - The addition of project traffic degrades operations from LOS C to LOS F

Table 1-1

Roadway Level of Service

Roadway Segment	Lanes (Existing/ Cumulative)	Existing Conditions			Existing Plus Project Conditions			Cumulative Conditions			Cumulative Plus Project Conditions		
		Volume	V/C[1]	LOS	Volume	V/C[1]	LOS	Volume	V/C[1]	LOS	Volume	V/C[1]	LOS
1. Limonite Avenue: Archibald Avenue to Harrison Avenue	4 / 6	17,425	0.49	C	23,725	0.66	C	44,000	0.82	D	50,300	0.93	E
2. Limonite Avenue: Harrison Avenue to Scholar Way	4 / 6	24,674	0.69	C	30,974	0.86	D	50,780	0.94	E	57080	1.06	F
3. Limonite Avenue: Scholar Way to Hamner Avenue	4 / 6	27,836	0.78	C	59,336	1.65	F	48,960	0.91	E	80,460	1.49	F
4. Limonite Avenue: Hamner Avenue to I-15 Ramps	6	41,744	0.77	C	70,094	1.30	F	69,110	1.28	F	97,460	1.81	F
5. Limonite Avenue: I-15 Ramps to Wineville Avenue	4 / 6	31,893	0.89	D	38,193	1.06	F	65,010	1.21	F	71,310	1.32	F
6. Hamner Avenue: Citrus Street to Schleisman Road	4 / 6	19,424	0.54	C	25,724	0.72	C	25,400	0.47	C	31,700	0.59	C
7. Hamner Avenue: Schleisman Road to 68th Street	6	11,145	0.21	C	17,445	0.32	C	15,030	0.28	C	21,330	0.40	C
8. Hamner Avenue: 68th Street to Limonite Avenue	6	19,016	0.35	C	22,166	0.41	C	22,730	0.42	C	25,880	0.48	C
9. Hamner Avenue: Limonite Avenue to Bellgrave Avenue	4 / 6	14,742	0.41	C	43,092	1.20	F	31,890	0.59	C	60,240	1.12	F
10. Scholar Way: Limonite Avenue to 68th	2	4,627	0.36	C	7,777	0.60	C	6,860	0.53	C	10,010	0.77	C

Table 1-1

Roadway Level of Service

Roadway Segment	Lanes (Existing/ Cumulative)	Existing Conditions			Existing Plus Project Conditions			Cumulative Conditions			Cumulative Plus Project Conditions		
		Volume	V/C[1]	LOS	Volume	V/C[1]	LOS	Volume	V/C[1]	LOS	Volume	V/C[1]	LOS
11. I-15: South of Limonite Avenue	6	75,950	0.65	C	88,550	0.75	C	81,750	0.70	C	94,350	0.80	D
12. I-15: Limonite Avenue to Cantu-Galleano Ranch Road	6	78,515	0.67	C	87,965	0.75	C	81,340	0.69	C	90,790	0.77	C
13. I-15: North of SR-60	8	108,967	0.68	C	118,417	0.74	C	127,570	0.79	C	137,020	0.85	D
14. Cleveland Avenue: Bellgrave Avenue to Limonite Avenue	4	2,110	0.16	C	5,260	0.40	C	2,810	0.22	C	5,960	0.46	C
15. SR-60: West of I-15	10	65,073	0.32	C	74,523	0.37	C	78,910	0.39	C	88,360	0.44	C
16. SR-60: East of I-15	8	76,718	0.48	C	86,168	0.54	C	83,360	0.52	C	92,810	0.58	C
17. Cantu-Galleano Ranch Rd: I-15 Ramps to Hamner Avenue	4	12,335	0.34	C	18,635	0.52	C	23,980	0.67	C	30,280	0.84	D

Notes:

Shading indicates unacceptable operations.

1. Volume to capacity ratio (V/C) measures the actual volume of vehicles observed or counted on any street segment in relation to the throughput capacity of the facility. Any measure higher than about 0.80 indicates some level of congestion. The number can exceed 1.00, indicating an overloaded situation with stop and go traffic.
2. The proposed I-15 Toll Lanes are assumed but are not incorporated in this volume-to-capacity assessment (e.g. the assessment only evaluates the general purpose lanes).

Source: Fehr & Peers, 2015

- Limonite Avenue: Between NB I-15 Ramp & Wineville Avenue - The addition of project traffic degrades operations from LOS D to LOS F
- Hamner Avenue: Between Limonite Avenue & Bellgrave Avenue- The addition of project traffic degrades operations from LOS C to LOS F

Cumulative impacts are projected to be:

- Limonite Anenue: Between Archibald Avenue and Harrison Avenue – The addition of project traffic degrades operations from LOS D to LOS E
- Limonite Avenue: Between Harrison Avenue & Scholar Way – The addition of project traffic degrades operations from LOS E to LOS F
- Limonite Avenue: Between Scholar Way & Hamner Avenue – The addition of project traffic degrades operations from LOS E to LOS F
- Limonite Avenue: Between Hamner Avenue & I-15 SB Ramp – The project adds traffic to a segment already operating at LOS F
- Limonite Avenue: Between I-15 Northbound Ramps & Wineville Avenue – The project adds traffic to a segment already operating at LOS F
- Hamner Avenue: Between Limonite Avenue & Bellgrave Avenue- The addition of project traffic degrades operations from LOS C to LOS F
- I-15 South of Limonite – The addition of project traffic degrades operations from LOS C to LOS D
- Cantu-Galleano Ranch Road: Between I-15 Ramps & Hamner Avenue – The addition of project traffic degrades operations from LOS C to LOS D.

b) Would the project conflict with an applicable congestion management program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Determination: Less than significant

The Riverside County CMP does not require any specific analysis methodology or analysis requirements be addressed in a transportation impact analysis for a development project. Therefore, Part B of the significance thresholds does not apply to analysis of the project.

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Determination: Less than significant

The project does not include any characteristics that would change air traffic in the study area nor is the site within an airport land use influence area. Therefore, the impacts of the project are considered less-than-significant.

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Determination: Less than significant with mitigation

Given that specific tract maps have not been completed for the project, it is unknown whether project driveways and internal circulation would have specific design features that would potentially increase hazards in the study area. Given the potential that increased hazards could occur due to a design feature, this impact is considered potentially significant.

e) Would the project result in inadequate emergency access?

Determination: Less than significant with mitigation

The project includes a series of connectivity that will provide for servicing emergency personnel. However, since tentative tract maps have not been completed yet, not every development building could be assessed, nor could internal neighborhood roadways be reviewed to assess emergency accessibility. Therefore, this impact is considered ***potentially significant***.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Determination: Less than significant

The mixed use nature of the Specific Plan supports use of alternative modes of travel. As such, this impact is considered ***less-than-significant***.

MITIGATION MEASURES

For potentially significant impacts described above, the project is responsible for implementing feasible mitigation measures as described below.

Mitigation 1 – Improvements to Roadway Segments

Improvements to the roadway segments identified below would provide acceptable operations. Additionally, the project will be required to contribute its fair share funding for many regional impacts

through the County's Transportation Uniform Mitigation Fee (TUMF) program, which is the regional funding source for many facilities in Riverside County, and any local transportation fees.

Additionally, future development within the project shall be required to prepare a focused traffic study that will assess the following to ensure consistency with the assessment prepared for this project:

- Parking assessment
- Site access and on-site circulation assessment
- Interaction of driveways with adjacent intersections (if appropriate)
- Impact assessment of local intersections
- Impacts to pedestrian, transit, and bicycle facilities
- Trip generation monitoring study to ensure that, as land develops in the Leal specific plan area, the total development generates traffic at or below those assumed in this EIR

The locational improvements described below were developed to mitigate potentially significant impacts of the project at the study locations. Fehr & Peers also identified the amount of development that can occur from the project prior to triggering the identified impact. This is anticipated to assist the City in identifying levels of development that can occur prior to the impact occurring.

Existing plus Project Mitigation Measures

Limonite Avenue: Between Harrison Avenue & Scholar Way

The addition of project traffic degrades operations from LOS C to LOS D under Existing plus Project Conditions. To mitigate this impact, the roadway would need to be widened to six lanes. Since the regional TUMF program will widen this segment to six lanes, the project shall be responsible to pay its fair share of this improvement through the TUMF program. With this mitigation and implementation of the planned TUMF improvements, the impact would be mitigated to a ***less-than-significant level.***

Limonite Avenue: Between Scholar Way & Hamner Avenue

The addition of project traffic degrades operations from LOS C to LOS F under Existing plus Project Conditions. To mitigate this impact, the roadway would need to be widened to eight lanes. It should be noted that the project shall be responsible for a fair share payment toward the TUMF program, which is responsible for widening this facility to six lanes. However, widening beyond six lanes is inconsistent with the City's General Plan.

Given that the project identifies the need to widen this segment beyond six lanes, the City shall be responsible implementing the proposed general plan policy amendment to change the level of service threshold for acceptability from LOS C to LOS F on Limonite Avenue. With this policy change, although there will be congestion on this segment with the project, it would operate acceptably and the impact would be ***less-than-significant.***

Limonite Avenue: Between Hamner Avenue & I-15 Ramps

The addition of project traffic degrades operations from LOS C to LOS F under Existing plus Project Conditions. To mitigate this impact, the roadway would need to be widened beyond eight lanes which would be inconsistent with the City's General Plan.

Given that the roadway would need to be widened beyond six lanes, the City shall be responsible implementing the proposed general plan policy amendment to change the level of service threshold for acceptability from LOS C to LOS F on Limonite Avenue. With this policy change, although there will be congestion on this segment with the project, it would operate acceptably and the impact would be ***less-than-significant.***

Limonite Avenue: Between I-15 Ramps & Wineville Avenue

The addition of project traffic degrades operations from LOS D to LOS F under Existing plus Project Conditions. To mitigate this impact, the roadway would need to be widened to six lanes. The project shall be responsible to implement this improvement. It should be noted that this segment is a TUMF-designated facility; however, the TUMF program will only widen the roadway to its current cross-section. Additionally, this segment is outside the City of Eastvale and, as such, neither the City nor any developer can guarantee implementation of the mitigation measure. As such, this impact is considered ***significant-and-unavoidable.***

Hamner Avenue: Between Limonite Avenue & Bellgrave Avenue

The addition of project traffic degrades operations from LOS C to LOS F under Existing plus Project Conditions. To mitigate this impact, the roadway would need to be widened to six lanes. The project shall be responsible to implement this improvement. With implementation of the mitigation measure, the impact would be mitigated to a ***less-than-significant level.***

Cumulative plus Project Impacts

Limonite Avenue: Between Archibald Avenue & Harrison Avenue

The addition of project traffic degrades cumulative operations from LOS D to LOS E under Cumulative plus Project Conditions. To mitigate this impact, the roadway would need to be widened beyond six lanes. With this improvement, the roadway segment would operate at an acceptable level of service. However, this widening would be inconsistent with the City's General Plan roadway designation for this facility and the ultimate planned improvements through the regional TUMF program.

Given that the roadway would need to be widened beyond six lanes, the City shall be responsible implementing the proposed general plan policy amendment to change the level of service threshold for acceptability from LOS C to LOS F on Limonite Avenue. With this policy change, although there will be congestion on this segment with the project, it would operate acceptably and the impact would be ***less-than-significant.***

Limonite Avenue: Between Harrison Avenue & Scholar Way

The addition of project traffic degrades cumulative operations from LOS E to LOS F under Cumulative plus Project Conditions. To mitigate this impact, the roadway would need to be widened beyond six lanes. With this improvement, the roadway segment would operate at an acceptable level of service. However, this widening would be inconsistent with the City's General Plan roadway designation for this facility and the ultimate planned improvements through the regional TUMF program.

Given that the roadway would need to be widened beyond six lanes, the City shall be responsible implementing the proposed general plan policy amendment to change the level of service threshold for acceptability from LOS C to LOS F on Limonite Avenue. With this policy change, although there will be congestion on this segment with the project, it would operate acceptably and the impact would be ***less-than-significant.***

Limonite Avenue: Between Scholar Way & Hamner Avenue

The addition of project traffic degrades cumulative operations from LOS E to LOS F under Cumulative plus Project Conditions. To mitigate this impact, the roadway would need to be widened beyond six lanes. With this improvement, the roadway segment would operate at an acceptable level of service. However, this widening would be inconsistent with the City's General Plan roadway designation for this facility and the ultimate planned improvements through the regional TUMF program.

Given that the roadway would need to be widened beyond six lanes, the City shall be responsible implementing the proposed general plan policy amendment to change the level of service threshold for acceptability from LOS C to LOS F on Limonite Avenue. With this policy change, although there will be congestion on this segment with the project, it would operate acceptably and the impact would be ***less-than-significant.***

Limonite Avenue: Between Hamner Avenue & I-15

The project adds traffic to a segment already operating at LOS F under Cumulative plus Project Conditions. To mitigate this impact, the roadway would need to be widened beyond six lanes. However, this widening would be inconsistent with the City's General Plan roadway designation for this facility and the ultimate planned improvements through the regional TUMF program.

Given that the roadway would need to be widened beyond six lanes, the City shall be responsible implementing the proposed general plan policy amendment to change the level of service threshold for acceptability from LOS C to LOS F on Limonite Avenue. With this policy change, although there will be congestion on this segment with the project, it would operate acceptably and the impact would be ***less-than-significant.***

Limonite Avenue: Between I-15 Ramps & Wineville Avenue

The project adds traffic to a roadway segment already projected to operate at LOS F. To mitigate this impact, the roadway would need to be widened beyond six lanes and the project would be responsible to contribute a fair share payment through the TUMF program as it is a TUMF designated facility. It should be noted that the TUMF program will only widen the roadway to its current cross-section. Additionally,

this segment is outside the City of Eastvale and, as such, neither the City nor any developer can guarantee implementation of the mitigation measure. As such, this impact is considered ***significant-and-unavoidable.***

Hamner Avenue: Between Limonite Avenue & Bellgrave Avenue

The addition of project traffic degrades operations from LOS C to LOS F under Cumulative plus Project Conditions. To mitigate this impact, the roadway would need to be widened beyond the six lanes that are planned for in the City's General Plan. The project shall be responsible to for a fair share contribution toward this improvement.

Given that the roadway would need to be widened beyond six lanes (which would be inconsistent with the City's General Plan) the City shall be responsible implementing a proposed general plan policy amendment to change the level of service threshold for acceptability from LOS C to LOS F on this roadway segment. With this policy change, although there will be congestion on this segment with the project, it would operate acceptably and the impact would be ***less-than-significant.***

I-15: South of Limonite

The project is expected to degrade operations on this roadway segment from LOS C to LOS D. To mitigate this impact, the project would be responsible for a fair share contribution toward additional freeway capacity beyond that already planned for along the segment. Additionally, this segment is outside the City of Eastvale and, as such, neither the City nor any developer can guarantee implementation of the mitigation measure. As such, this impact is considered ***significant-and-unavoidable.***

I-15: North of SR-60

The project is expected to degrade operations on this roadway segment from LOS C to LOS D. To mitigate this impact, the project would be responsible for a fair share contribution toward additional freeway capacity beyond that already planned for along the segment. Additionally, this segment is outside the City of Eastvale and, as such, neither the City nor any developer can guarantee implementation of the mitigation measure. As such, this impact is considered ***significant-and-unavoidable.***

Cantu-Galleano Ranch Road: Between the I-15 Ramps & Hamner Avenue

The project is expected to degrade operations on this roadway segment from LOS C to LOS D. To mitigate this impact, the project would be responsible for a fair share contribution toward widening this segment from four lanes to six lanes through the City's development impact fee program. With this improvement, the impacts would be mitigated and the impact would be less-than-significant.

Transportation Impact 2 - Potential Increase in Hazards Due to a Design Feature

The following policy/mitigation measure shall be added to the Leal specific plan to address the impact identified above:

All future improvements in the Leal area shall be consistent with design standards set forth by the City or Leal Specific Plan. All designs, including site access points, shall be reviewed to determine that designs are consistent with appropriate design standards. Implementation of this policy/mitigation measure will reduce this impact to a ***less-than-significant*** level and no further mitigation is required.

Transportation Impact 3 - Potential Inadequate Emergency Access

The following policy/mitigation measure shall be added to the leal specific plan to address the impact identified above:

- All proposed development in the Leal area shall be reviewed by appropriate emergency services personnel to ensure adequate emergency access is provided. Implementation of this policy/mitigation measure will reduce this impact to a ***less-than-significant*** level and no further mitigation is required.

2.0 METHODOLOGY

This section of the report describes the methodologies used to complete this programmatic assessment.

TRAFFIC OPERATIONS

The analysis methodology used to analyze roadway segments is described below. The operations of roadway facilities are described with the term *level of service*. Level of service (LOS) is a qualitative description of traffic flow from the perspective of motorists based on factors such as speed, travel time, delay, freedom to maneuver, traffic volume, and the capacity of the roadway. Six levels are defined from LOS A, as the least congested operating conditions, to LOS F, or the most congested operating conditions. LOS E represents "at-capacity" operations. When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

Roadway segments were analyzed by comparing the average daily traffic (ADT) volume to daily volume thresholds. Table 2-1, Roadway Segment Daily Volume Thresholds**,** displays the daily volume thresholds for various facility types. These thresholds are used as guidelines to identify the need for new or upgraded facilities.

TABLE 2-1

ROADWAY SEGMENT DAILY VOLUME THRESHOLDS[1]

Facility Type	Max Two-Way Traffic Volume		
	LOS C	LOS D	LOS E
Secondary Collector	10,400	11,700	13,000
Urban Arterial (4 Lanes)	28,700	32,300	35,900
Urban Arterial (6 Lanes)	43,100	48,500	53,900
Freeway (6 Lanes)	9,4000	105,800	117,500
Freeway (8 Lanes)	128,400	144,500	160,500
Freeway (10 Lanes)	160,500	180,500	200,600

Notes:

1. All volume thresholds are approximate and assume ideal roadway characteristics. Actual thresholds for each LOS listed above may vary depending on a variety of factors including (but not limited to) roadway curvature and grade, intersection or interchange spacing, driveway spacing, percentage of trucks and other heavy vehicles, lane widths, signal timing, on-street parking, volume of cross traffic and pedestrians, etc.

Source: Highway Capacity Manual, Transportation Research Board, 2000. & City of Eastvale General Plan

TRIP GENERATION AND INTERNALIZATION

This study utilized the 9th Edition of the Institute *of Transportation Engineers* (ITE) Trip Generation rates to determine daily trips generated by the proposed land use. Internalization rates were determined based on Mixed Use Development trip generation methodology (MXD). This methodology evaluates numerous components of a project and identifies the projects' potential to internalize traffic. The MXD model's methodology was developed based on 239 mixed-use sites across the United States, including sites in San Diego and Sacramento. Because of this the MXD model provides the most statistically valid and reliable way to estimate trip internalization for mixed-use development.

Because the specific plan allows for a range of development potential, a "worst case" assumption was made for the specific plan land uses. Our assumptions are summarized below:

- 660 multi-family homes (apartments)
- 1,525,000 sq. ft. of general retail (shopping center)
- 460,000 sq. ft. of general office
- 460,000 sq. ft. of medical office
- 450 hotel rooms
- 100,000 sq. ft. civic center

Utilizing the ITE trip generation and MXD trip internalization estimates, the project is expected to result in the following trip generation:

- 69,900 Gross Daily Trips
- 10% Trip Internalization (e.g. trips that stay within the specific plan area based on the land use information provided above (plus the project's proximity to transit, assumed intersection density, and other factors that affect trip internalization)
- 63,000 Net Daily Trips after accounting for trip internalization

The project trips were distributed to the surrounding roadway system using existing travel patterns in the area and the locations of complementary land uses in the area. The trip distribution information is summarized below:

- Limonite Avenue between Archibald Avenue & Scholar Way will see 10% of the total project trips.
- Limonite Avenue between Scholar Way & Hamner Avenue will see 50% of the total project trips.
- Limonite Avenue between Hamner Avenue & Southbound I-15 Ramps will see 45% of the total project trips.

- Limonite Avenue between the Northbound I-15 Ramps & Wineville Avenue will see 10% of the total project trips.
- Hamner Avenue between Citrus Avenue and 68th Street will see 10% of the total project trips.
- Hamner Avenue between 68th Street & Limonite Avenue, as well as Scholar Way between 68th Street & Limonite Avenue will see 5% of the total project trips.
- Hamner Avenue between Limonite Avenue & Bellgrave Avenue will see 45% of the total project trips.
- Hamner Avenue north of SR-60 will see 5% of total project trips.
- Cleveland Avenue between 58th Street & Limonite Avenue will see 5% of the total project trips.
- I-15 south of Limonite Avenue will see 20% of the total project trips.
- I-15 between Limonite Avenue & Cantu-Galleano Ranch Road will see 15% of the total project trips.
- I-15 north of SR-60 will see 15% of the total project trips.
- Cantu-Galleano Ranch Road will see 10% of the total project trips.
- SR-60 west of I-15 will see 15% of the total project trips.
- SR-60 east of I-15 will see 15% of the total project trips.

TRAVEL DEMAND FORECASTING

The Riverside Traffic Analysis Model (RIVTAM) was used for developing cumulative forecasts in the study area. This model incorporates land use information and roadway network characteristics (roadway alignments, roadway capacities, speeds) to forecast existing and future volumes on area roadways in Riverside County. This model also accounts for projected growth and land use changes within the county allowing for a more accurate forecast of future conditions.

Before the model could be used for this study, the land use and socio-economic components of the model were modified. These modifications are refinements to the model, and are intended to enable the model to more accurately reflect the proposed land use in the Leal Specific Plan study area.

One modification that was made was an update to the socio-economic data within the model to incorporate approved and pending projects in the study area. The approved and pending projects were converted from square feet of development to numbers of employees using conversion factors from the County of Riverside General Plan and were incorporated into the travel demand model. The model was also modified to delete any assumed land use in the Leal specific plan area as that land use was manually added to the "no project" forecasts.

APPROVED/PENDING PROJECTS

The resulting RIVTAM model incorporates several large scale developments in the City of Eastvale. Major land use projects included in the forecasts are listed in Table 2-2 below.

TABLE 2-2

APPROVED/PENDING PROJECTS

Project Name	Location	Description	Year	Source
Estancia by Lennar Homes	Citrus Avenue. between Sumner Avenue & Scholar Way	197 Single Family Homes	2013	City of Eastvale
The Trails at Eastvale	Corner of Archibald Avenue . & 65th Street	224 Single Family Homes	2013	City of Eastvale
Copper Sky	Schleisman Road & Scholar Way	224 Condominium Units	2007	City of Eastvale
Cleveland Square	Scholar Way & Limonite Avenue	350 Condominium Units	2009	City of Eastvale
Eastvale Business Park	North of 65th Street, East of Cucamonga Creek & West of Archibald Avenue	694,770 SF Industrial, 33,600 SF Office, 10,600 SF Retail	2014	City of Eastvale
Eastvale San Antonio Medical Plaza	Eastvale Gateway South	69,562 SF Medical Buildings	2013	City of Eastvale
Arco Gas Station	SE Corner of Hamner Avenue & Riverside Dr.	5,670 SF Gas Station	2014	City of Eastvale
Marketplace at The Enclave	SW Corner of Archibald Avenue & Schleisman Rd	Additional Retail Space	2014	City of Eastvale
Eastvale Gateway I & II	NE Corner of Hamner Avenue & Limonite Avenue	6,000 SF Retail	2014	City of Eastvale
Eastvale Gateway South	SE Corner of Hamner Avenue & Limonite Avenue	11,000 SF Retail	2014	City of Eastvale

Source: City of Eastvale- Development Projects in The City of Eastvale

3.0 REGULATORY CONTEXT

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below. This information provides a context for the input discussion related to the project's consistency with applicable regulatory conditions.

CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

Caltrans policies are applicable to I-15, and SR-60 are summarized in the Caltrans' *Guide for the Preparation of Traffic Impact* Studies (State of California Department of Transportation, December 2002). These guidelines identify when a traffic impact study is required, what should be included in the study, analysis scenarios, and guidance on acceptable analysis methodologies.

Caltrans endeavors to maintain a target service level of LOS C on State highway facilities. However, this may not always be feasible and it is recommended that the lead agency consult with Caltrans to determine the appropriate target LOS. For the purposes of this study, LOS C is considered the minimum acceptable operating level for Caltrans' controlled facilities (SR-60 roadway segments, I-15 roadway segments).

CITY OF EASTVALE GENERAL PLAN

The City of Eastvale provides the following policies regarding traffic and circulation issues such as LOS Standards, roadway funding, growth impacts, road standards, transit, and access:

- **Policy C-3:** The cumulative and indirect traffic impacts of development may be mitigated through the payment of impact mitigation fees.

- **Policy C-10:** Seek to maintain the following target levels of service: "C" along all City-maintained roads. A peak hour level of service of "D" may be allowed in commercial and employment areas, and at intersections of any combination of major highways, urban arterials, secondary highways, or freeway ramp intersections.

- **Policy C-11:** Alternative levels of service may be allowed on intersections in planned development or similar identified mixed-use areas that demonstrate links to transit, trails, and alternative transportation and comfortable walking distance to goods and services.

- **Policy C-13:** Construct and improve traffic signals at appropriate intersections. Traffic signals should be spaced and operated as part of coordinated systems to optimize traffic operation.

RIVERSIDE COUNTY CONGESTION MANAGEMENT PROGRAM

The Riverside County Congestion Management Program provides the following policies regarding LOS and Transportation Demand Management for SR-60, I-15, and Limonite Avenue:

- Minimum LOS threshold is LOS "E". Therefore when a CMP street or highway falls to "F" a deficiency plan is required.

It should be noted that the CMP does not require any specific assessment for development projects. As such, no specific analysis is required to show consistency with the CMP.

4.0 ENVIRONMENTAL SETTING

EXISTING TRANSPORTATION SYSTEM

The proposed Leal Specific Plan project is located in the City of Eastvale in the northeast portion of Riverside County. The site is located east of Cleveland Avenue, west of Hamner Avenue, and north of Limonite Avenue. The site is located approximately 0.5 miles west of Interstate 15 (I-15) which provides the major north-south regional access to the area.

Primary access to the project site is provided by Limonite Avenue, Hamner Avenue, and Cleveland Avenue.

The area surrounding the site is primarily residential. There is retail existing to the east and south of the project site. Automobiles are the primary mode of travel. Limited bus transit service and bicycle and pedestrian facilities exist in the immediate vicinity of the project site. The existing transportation facilities are described in detail below.

ROADWAY NETWORK

Regional access to the project site is provided by I-15 and State Route 60 (SR-60) in the area. Access to the project site from I-15 is provided by the interchange with Cantu-Galleano Ranch Road, and by the interchange at Limonite Avenue. SR-60 provides access to the project site through the I-15 interchange and Hamner Avenue. Local access to the project site is provided by Cleveland Avenue/Scholar Way to the west of the project site, Limonite Avenue to the south, and Hamner Avenue to the east. See Figure 4-1, Project Location for the existing roadway network within the project area. A brief description of the key roadway facilities in the vicinity of the proposed project is provided below.

- Interstate 15 (I-15) is the main north-south facility through Riverside County. It extends the entire length of Riverside County, from its southern border with San Diego County to its northern border with San Bernardino County. I-15 is a six-lane divided freeway from the San Diego County line to the San Bernardino County line. Near the project site, it is a six-lane freeway with interchanges at 6th Street, Cantu-Galleano Ranch Road, and SR-60.
- State Route 60 (SR-60) is a major east-west ten-lane divided freeway, which intersects I-15 in the City of Eastvale. Interchanges near the project site include Archibald Avenue, Haven Avenue to the east, and the I-15 interchange, and Mission Boulevard to the west.

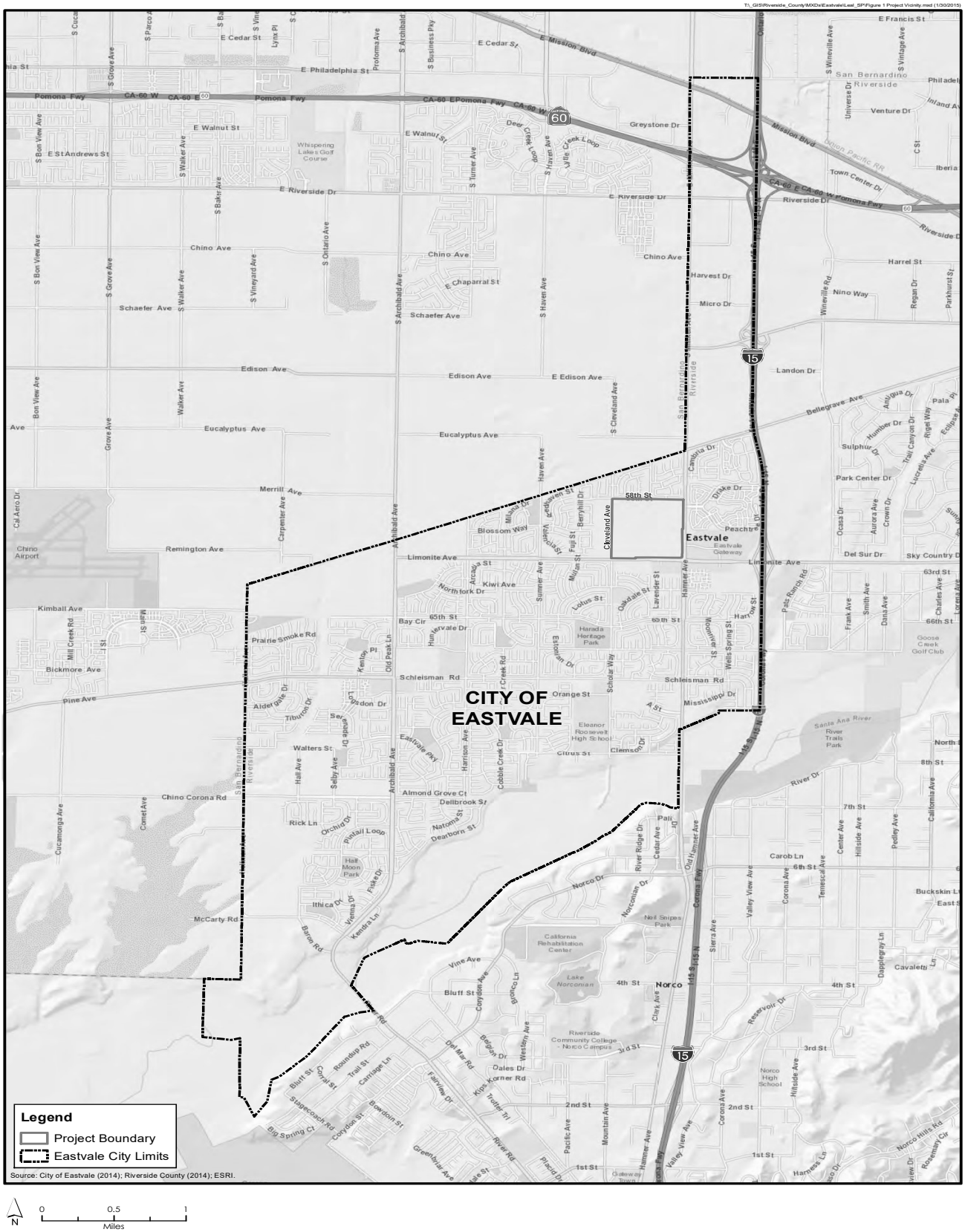


Figure 4-1
Project Location

- Hamner Avenue is a major thoroughfare running north-south through the City of Eastavle. Hamner operates as a four-lane roadway throughout most of the City with two-lanes in some areas, and as many as six lanes in some parts of the city. Hamner provides direct access to the project site from the west, and has two lanes of northbound traffic, and one lane of southbound traffic.
- Cleveland Avenue/Scholar Way is a four-lane roadway running from Citrus Street to Bellgrave Avenue. The roadway is designated as Cleveland Avenue north of Limonite, and Scholar Way south of Limonite in the city. It provides direct access to the project site from the east.
- Limonite Avenue is a major thoroughfare in the City of Eastvale running in the east-west direction. Limonite allows for two-lanes of traffic in each direction, and up to three-lanes in each direction in parts of the city. Limonite provides direct access to the project site from the south.

TRANSIT SYSTEM

Public transportation within Riverside County is provided by Riverside Transit Agency (RTA), which offers both fixed route and Dial-A-Ride service to the City of Eastvale. RTA currently operates two fixed routes to the City, Route 3 and Route 29. Route 3 operates seven days a week with weekday headways of thirty minutes, and weekend headways of one hour. Route 29 operates seven days a week with one hour headways. Route 3 provides access to the project site with stops at Hamner and Swan Lake Estates, and at Limonite and Hamner. Route 29 provides access to the project site with a stop at Limonite and Hamner.

RAIL SYSTEM

Riverside County is served by the Metrolink Riverside Line, which transports commuters from Riverside County to Union Station in Downton Los Angeles. The City of Eastvale has no stations providing service to this line but nearby Jurupa Valley provides riders access to the line.

BIKEWAY SYSTEM

The City of Eastvale does not currently provide an extensive bikeway system. The City identifies three classes of bikeways as:

- Class I: Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians
- Class II: Provides a striped lane for one-way bike travel on a street or highway
- Class III: Provides for shared use with pedestrian or motor vehicle traffic
- Class IV: This is a new classification that has just been created. Class IV bike facilities are called protected bike lanes or cycle tracks – these facilities are a hybrid between a Class I bicycle facility

and a Class II bicycle facility. They can be either on-street or off-street and are protected by some type of barrier from the adjacent travel lanes.

There are currently no bikeways serving the project site, but the City has an on-going Bicycle Master Plan.

TRAFFIC STUDY AREA

The following study locations were included in our assessment.

Roadway Segments (daily operations)

1. Limonite Avenue: Archibald Avenue to Harrison Avenue
2. Limonite Avenue: Harrison Avenue to Scholar Way
3. Limonite Avenue: Scholar Way to Hamner Avenue
4. Limonite Avenue: Hamner Avenue to I-15 Ramps
5. Limonite Avenue: I-15 Ramps to Wineville Avenue
6. Hamner Avenue: Citrus Street to Schleisman Road
7. Hamner Avenue: Schleisman Road to 68th Street
8. Hamner Avenue: 68th Street to Limonite Avenue
9. Hamner Avenue: Limonite Avenue to Bellgrave Avenue
10. Scholar Way: Limonite Avenue to 68th Street
11. Interstate 15: South of Limonite Avenue
12. Interstate 15: Limonite Avenue to Cantu-Galleano
13. Interstate 15: North of State Route 60
14. Cleveland Avenue: Bellgrave Avenueto Limonite Avenue
15. State Route 60: West of Interstate 15
16. State Route 60: East of Interstate 15
17. Cantu-Galleano Ranch Rd: Interstate 15 Ramps to Hamner Avenue

EXISTING TRAFFIC VOLUMES

Fehr & Peers obtained existing daily traffic counts from the Caltrans District 8 Caltrans Performance Measurement System database for the freeway system and traffic counts conducted by Fehr & Peers on April 14th through April 16th 2015 for local roadways. The average of these three days was used to determine existing volumes. These volumes can be found in Table 4-1.

TABLE 4-1

ROADWAY LEVEL OF SERVICE (LOS) – EXISTING CONDITIONS

ROADWAY SEGMENT	EXISTING CONDITIONS			
	LANES	VOLUME1	V/C2	LOS
LIMONITE AVENUE: ARCHIBALD AVENUE TO HARRISON AVENUE	4	17,425	0.49	C
LIMONITE AVENUE: HARRISON AVENUE TO SCHOLAR WAY	4	24,674	0.69	C
LIMONITE AVENUE: SCHOLAR WAY TO HAMNER AVENUE	4	27,836	0.78	C
LIMONITE AVENUE: HAMNER AVENUE TO I-15 RAMPS	6	41,744	0.77	C
LIMONITE AVENUE: I-15 RAMPS TO WINEVILLE AVENUE	4	31,893	0.89	D
HAMNER AVENUE: CITRUS STREET TO SCHLEISMAN ROAD	4	19,424	0.54	C
HAMNER AVENUE: SCHLEISMAN ROAD TO 68TH STREET	6	11,145	0.21	C
HAMNER AVENUE: 68TH STREET TO LIMONITE AVENUE	6	19,016	0.35	C
HAMNER AVENUE: LIMONITE AVENUE TO BELLGRAVEAVENUE	4	14,742	0.41	C
SCHOLAR WAY: LIMONITE AVENUE TO 68TH STREET	2	4,627	0.36	C
I-15: SOUTH OF LIMONITE AVENUE	6	75,950	0.65	C
I-15: LIMONITE AVENUE TO CANTU-GALLEANO RANCH ROAD	6	78,515	0.67	C
I-15: NORTH OF SR-60	8	108,967	0.68	C
CLEVELAND AVENUE: BELLGRAVE AVENUETO LIMONITE AVENUE	4	2,110	0.16	C
SR 60: WEST OF I-15	10	65,073	0.32	C
SR-60: EAST OF I-15	8	76,718	0.48	C
CANTU-GALLEANO RANCH ROAD: I-15 RAMPS TO HAMNER AVENUE	4	12,335	0.34	C

NOTES:

1.EXISITING 2015 TRAFFIC COUNTS

2. VOLUME TO CAPACITY RATIO (V/C) MEASURES THE ACTUAL VOLUME OF VEHICLES OBSERVED OR COUNTED ON ANY STREET SEGMENT IN RELATION TO THE THROUGHPUT CAPACITY OF THE FACILITY. ANY MEASURE HIGHER THAN ABOUT 0.80 INDICATES CONGESTION. THE NUMBER CAN EXCEED 1.00, INDICATING AN OVERLOADED SITUATION WITH STOP AND GO TRAFFIC.

SOURCE: FEHR & PEERS, 2015

EXISTING TRAFFIC CONDITIONS

Fehr & Peers conducted a detailed analysis of the study roadway segments. Areas identified as operating unacceptably are based on the level of service (LOS) policies published in the jurisdictions planning documents. For purposes of this study, the "acceptable" operating level is identified as LOS C, consistent with those thresholds identified in the Riverside County General Plan (which the City of Jurupa Valley operates under), the City of Eastvale General Plan, and the Caltrans Guidelines for Traffic Impact Assessment.

Table 4-1, Roadway Level of Service-Existing Conditions, presents the existing conditions analysis for roadway segments. Currently only one segment, Limonite Avenue from the I-15 Northbound Ramp to Wineville Avenue is operating below the acceptable LOS C.

5.0 EXISTING PLUS PROJECT CONDITIONS

Fehr & Peers added the "with project" forecasts developed for the project to the existing traffic counts to develop Existing Plus Project Traffic Volumes. These volumes are summarized on Figure 5-1 and are presented in Table 5-1.

As shown in Table 5-1, the project is expected to result in a significant impact to the following locations:

- Limonite Avenue: Harrison Avenue to Scholar Way
- Limonite Avenue: Scholar Way to Hamner Avenue
- Limonite Avenue: Hamner Avenue to I-15 Ramps
- Limonite Avenue: I-15 Ramps to Wineville Avenue
- Hamner Avenue: Limonite Avenue to Bellgrave Avenue

Measures to mitigate project impacts are summarized in Chapter 1.

TABLE 5-1

ROADWAY LEVEL OF SERVICE – EXISTING VS. EXISTING PLUS PROJECT CONDITIONS

ROADWAY SEGMENT	LANES	EXISTING NO PROJECT			EXISTING PLUS PROJECT		
		VOLUME[1]	V/C[2]	LOS	VOLUME[1]	V/C[2]	LOS
Limonite Avenue: Archibald Avenue to Harrison Avenue	4	17,425	0.49	C	23,725	0.66	C
Limonite Avenue: Harrison Avenue to Scholar Way	4	24,674	0.69	C	30,974	0.86	D
Limonite Avenue: Scholar Way to Hamner Avenue	4	27,836	0.78	C	59,336	1.65	F
Limonite Avenue: Hamner Avenue to I-15 Ramps	6	41,744	0.77	C	70,094	1.30	F
Limonite Avenue: I-15 Ramps to Wineville Avenue	4	31,893	0.89	D	38,193	1.06	F
Hamner Avenue: Citrus Street to Schleisman Road	4	19,424	0.54	C	25,724	0.72	C
Hamner Avenue: Schleisman Road to 68th Street	6	11,145	0.21	C	17,445	0.32	C
Hamner Avenue: 68th Street to Limonite Avenue	6	19,016	0.35	C	22,166	0.41	C

TABLE 5-1

ROADWAY LEVEL OF SERVICE – EXISTING VS. EXISTING PLUS PROJECT CONDITIONS

Hamner Avenue: Limonite Avenue to Bellgrave Avenue	4	14,742	0.41	C	43,092	1.20	F
Scholar Way: Limonite Avenue to 68th Street	2	4,627	0.36	C	7,777	0.60	C
I-15: South of Limonite Avenue	6	75,950	0.65	C	88,550	0.75	C
I-15: Limonite Avenue to Cantu-Galleano Ranch Road	6	78,515	0.67	C	87,965	0.75	C
I-15: North of SR-60	8	108,967	0.68	C	118,417	0.74	C
Cleveland Avenue: Bellgrave Avenue to Limonite Avenue	4	2,110	0.16	C	5,260	0.40	C
SR-60: West of I-15	10	65,073	0.32	C	74,523	0.37	C
SR-60: East of I-15	8	76,718	0.48	C	86,168	0.54	C
Cantu Galleano Ranch Road: I-15 Ramps to Hamner Avenue	4	12,335	0.34	C	18,635	0.52	C

Notes:

1.Exisiting 2015 Traffic Counts

2. Volume to capacity ratio (V/C) measures the actual volume of vehicles observed or counted on any street segment in relation to the throughput capacity of the facility. Any measure higher than about 0.80 indicates congestion. The number can exceed 1.00, indicating an overloaded situation with stop and go traffic.

Source: Fehr & Peers, 2015

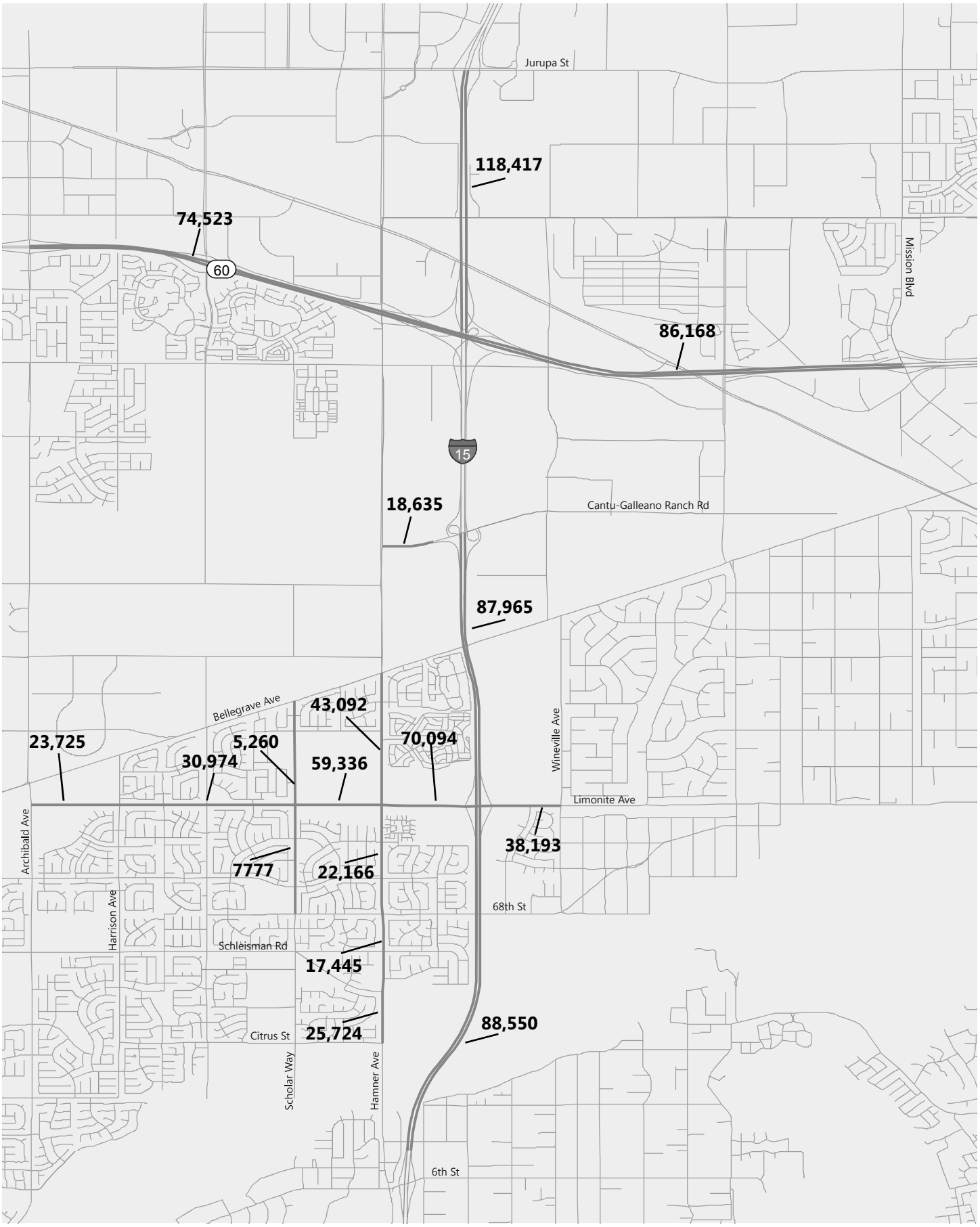


Figure 5-1

Existing (2015) Plus Project Conditions

Daily Volumes

6.0 CUMULATIVE CONDITIONS

As noted previously, cumulative traffic volumes were developed using the RIVTAM travel demand forecasting model after updating the land use information to incorporate approved and pending projects in the study area that were not included in the travel demand model assumptions.

In addition to the modeling modifications, it is assumed that the following roadways improvements would occur by year 2035 and these improvements are included in the forecasting and analysis assumptions:

- Limonite will be widened to six lanes
- Two express lanes each direction will be implemented on I-15 (please note that the reported traffic volumes on I-15 and the assumed capacity in the technical analysis is for the general purpose lanes only)
- Hamner Avenue will be widened to six lanes

Table 6-1 summarizes the results of the Cumulative No Project assessment. The Cumulative No Project traffic volumes are summarized on Figure 6-1.

As shown in Table 6-1, the following roadway segments are expected to operate unacceptably under the Cumulative No Project Condition:

- Limonite Avenue: Archibald Avenue to Harrison Avenue
- Limonite Avenue: Harrison Avenue to Scholar Way
- Limonite Avenue: Scholar Way to Hamner Avenue
- Limonite Avenue: Hamner Avenue to I-15 Ramps
- Limonite Avenue: I-15 Ramps to Wineville Avenue

TABLE 6-1

ROADWAY LEVEL OF SERVICE – CUMULATIVE NO PROJECT CONDITIONS

ROADWAY SEGMENT	LANES	CUMULATIVE NO PROJECT		
		VOLUME	V/C[1]	LOS
LIMONITE AVENUE: ARCHIBALD AVENUE TO HARRISON AVENUE	6	44,000	0.82	D
LIMONITE AVENUE: HARRISON AVENUE TO SCHOLAR WAY	6	50,780	0.94	E
LIMONITE AVENUE: SCHOLAR WAY TO HAMNER AVENUE	6	48,960	0.91	E
LIMONITE AVENUE: HAMNER AVENUE TO I-15 RAMPS	6	69,110	1.28	F
LIMONITE AVENUE: I-15 RAMPS TO WINEVILLE AVENUE	6	65,010	1.21	F
HAMNER AVENUE: CITRUS STREET TO SCHLEISMAN ROAD	6	25,400	0.47	C
HAMNER AVENUE: SCHLEISMAN ROAD TO 68TH STREET	6	15,030	0.28	C
HAMNER AVENUE: 68TH STREET TO LIMONITE AVENUE	6	22,730	0.42	C
HAMNER AVENUE: LIMONITE AVENUE TO BELLGRAVE AVENUE	6	31,890	0.59	C
SCHOLAR WAY: LIMONITE AVENUE TO 68TH STREET	2	6,860	0.53	C
I-15: SOUTH OF LIMONITE AVENUE	6	81,750	0.70	C
I-15: LIMONITE AVENUE TO CANTU-GALLEANO RANCH ROAD	6	81,340	0.69	C
I-15: NORTH OF SR-60	8	127,570	0.79	C
CLEVELAND AVENUE: BELLGRAVE AVENUE TO LIMONITE AVENUE	4	2,810	0.22	C
SR-60: WEST OF I-15	10	78,910	0.39	C
SR-60: EAST OF I-15	8	83,360	0.52	C
CANTU GALLEANO RANCH ROAD: I-15 RAMPS TO HAMNER AVENUE	4	23,980	0.67	C

SHADING INDICATES UNACCEPTABLE OPERATIONS.

1. VOLUME TO CAPACITY RATIO (V/C) MEASURES THE ACTUAL VOLUME OF VEHICLES OBSERVED OR COUNTED ON ANY STREET SEGMENT IN RELATION TO THE THROUGHPUT CAPACITY OF THE FACILITY. ANY MEASURE HIGHER THAN ABOUT 0.80 INDICATES CONGESTION. THE NUMBER CAN EXCEED 1.00, INDICATING AN OVERLOADED SITUATION WITH STOP AND GO TRAFFIC.

SOURCE: FEHR & PEERS, 2015

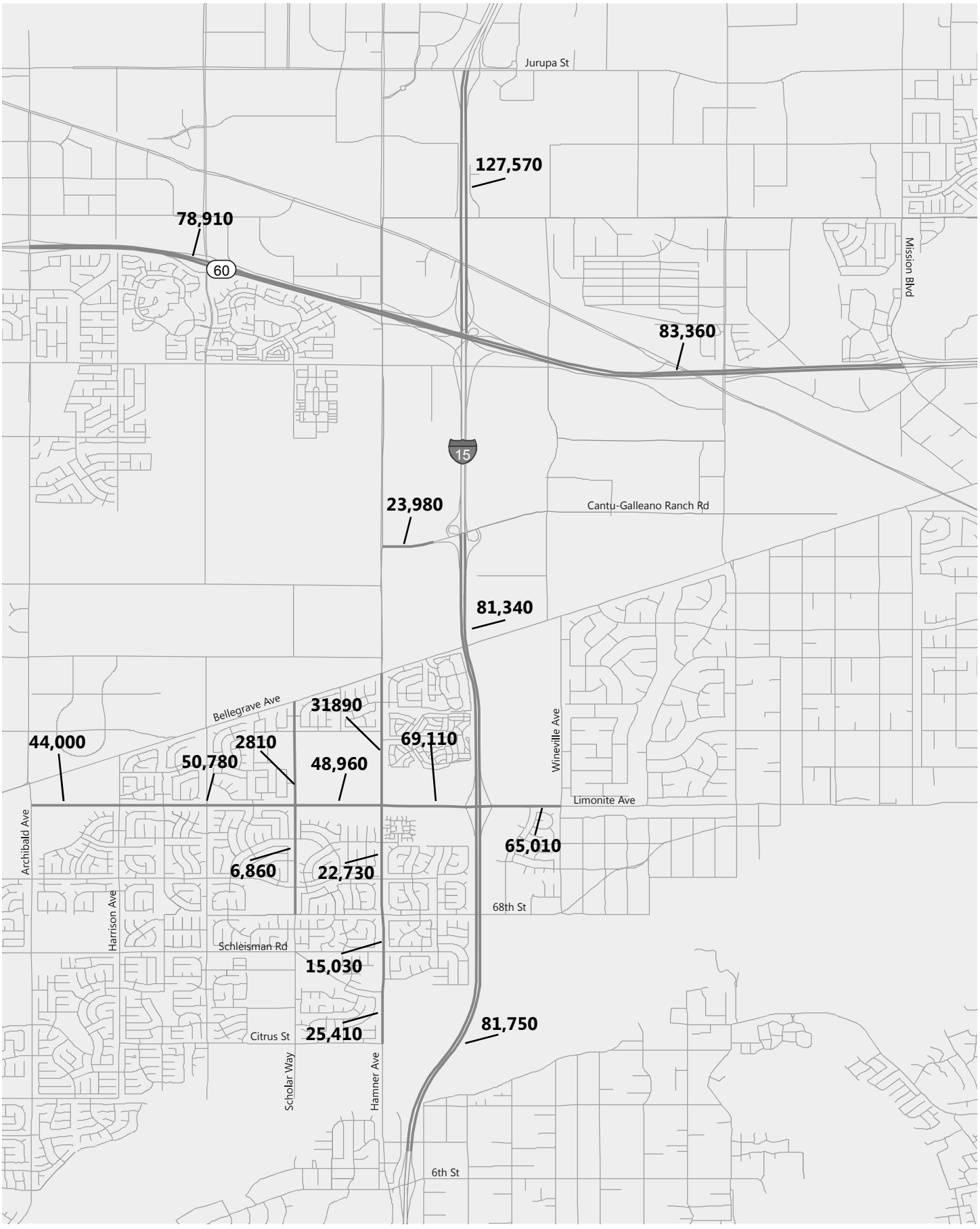


Figure 6-1

Cumulative (2035) No Project Conditions

Daily Volumes

7.0 CUMULATIVE PLUS PROJECT CONDITIONS

Project trips were added to the Cumulative No Project traffic volumes to develop Cumulative Plus Project traffic volumes. These volumes are summarized in Table 7-1 and are shown on Figure 7-1.

As shown in Table 7-1, the following locations are projected to operate at an unacceptable level under the Cumulative Plus Project Condition:

- Limonite Avenue: Archibald Avenue to Harrison Avenue
- Limonite Avenue: Harrison Avenue to Scholar Way
- Limonite Avenue: Scholar Way to Hamner Avenue
- Limonite Avenue: Hamner Avenue to I-15 Ramps
- Limonite Avenue: I-15 Ramps to Wineville Avenue
- Hamner Avenue: Limonite Avenue to Bellgrave Avenue
- I-15: South of Limonite Avenue
- I-15: North of SR-60
- Cantu Galleano Ranch Road: I-15 Ramps to Hamner Avenue

Measures to mitigate cumulative impacts are summarized in Chapter 1.

TABLE 7-1

ROADWAY LEVEL OF SERVICE – CUMULATIVE NO PROJECT VS. CUMULATIVE PLUS PROJECT CONDITIONS

Roadway Segment	Lanes	Cumulative No Project			Cumulative Plus Project		
		Volume	V/C[1]	LOS	Volume	V/C[1]	LOS
1. Limonite Avenue: Archibald Avenue to Harrison Avenue	6	44,000	0.82	D	50,300	0.93	E
2. Limonite Avenue: Harrison Avenue to Scholar Way	6	50,780	0.94	E	57080	1.06	F
3. Limonite Avenue: Scholar Way to Hamner Avenue	6	48,960	0.91	E	80,460	1.49	F
4. Limonite Avenue: Hamner Avenue to I-15 Ramps	6	69,110	1.28	F	97,460	1.81	F
5. Limonite Avenue: I-15 Ramps to Wineville Avenue	6	65,010	1.21	F	71,310	1.32	F
6. Hamner Avenue: Citrus Street to Schleisman Road	6	25,400	0.47	C	31,700	0.59	C
7. Hamner Avenue: Schleisman Road to 68th Street	6	15,030	0.28	C	21,330	0.40	C
8. Hamner Avenue: 68th Street to Limonite Avenue	6	22,730	0.42	C	25,880	0.48	C
9. Hamner Avenue: Limonite Avenue to Bellgrave Avenue	6	31,890	0.59	C	60,240	1.12	F
10. Scholar Way: Limonite Avenue to 68th Street	2	6,860	0.53	C	10,010	0.77	C
11. I-15: South of Limonite Avenue	6	81,750	0.70	C	94,350	0.80	D
12. I-15: Limonite Avenue to Cantu-Galleano Ranch Road	6	81,340	0.69	C	90,790	0.77	C
13. I-15: North of SR-60	8	127,570	0.79	C	137,020	0.85	D
14. Cleveland Avenue: Bellgrave Avenue to Limonite Avenue	4	2,810	0.22	C	5,960	0.46	C
15. SR-60: West of I-15	10	78,910	0.39	C	88,360	0.44	C
16. SR-60: East of I-15	8	83,360	0.52	C	92,810	0.58	C
17. Cantu Galleano Ranch Road: I-15 Ramps to Hamner Avenue	4	23,980	0.67	C	30,280	0.84	D

Shading indicates unacceptable operations.

1. Volume to capacity ratio (V/C) measures the actual volume of vehicles observed or counted on any street segment in relation to the throughput capacity of the facility. Any measure higher than about 0.80 indicates congestion. The number can exceed 1.00, indicating an overloaded situation with stop and go traffic.

Source: Fehr & Peers, 2015

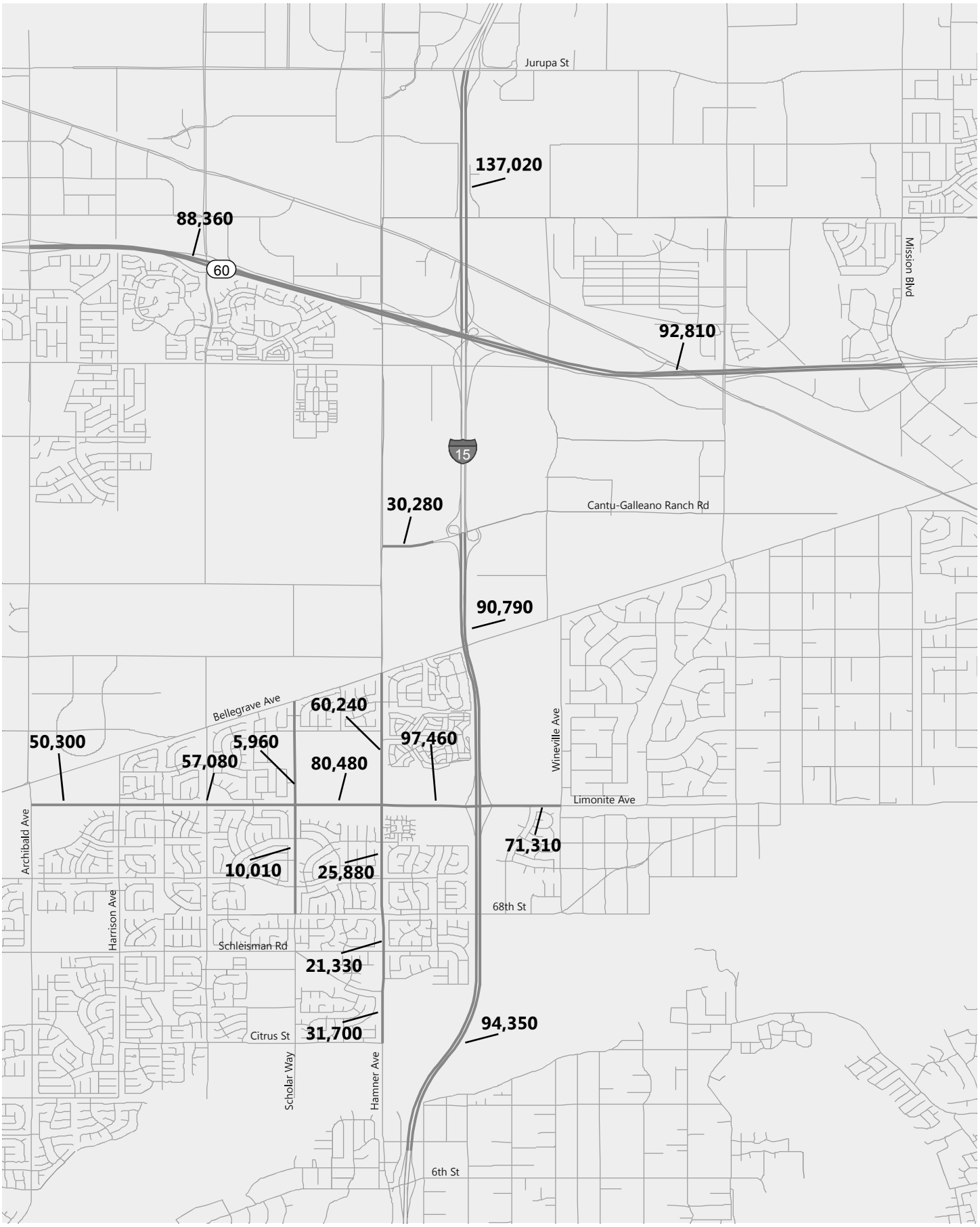


Figure 7-1

Cumulative (2035) Plus Project Conditions

Daily Volumes

APPENDIX A: DATA COUNT SHEETS



Prepared by NDS/ATD

VOLUME

Cantu-Galleano Ranch Rd Bet. I-15 Ramps & Hamner Ave

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_017

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,921	6,407	12,328

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			16		18		34		12:00			79		77		156	
00:15			17		12		29		12:15			82		73		155	
00:30			11		14		25		12:30			106		98		204	
00:45			7	51	9	53	16	104	12:45			74	341	81	329	155	670
01:00			10		12		22		13:00			68		86		154	
01:15			8		9		17		13:15			77		86		163	
01:30			6		8		14		13:30			90		100		190	
01:45			8	32	8	37	16	69	13:45			84	319	95	367	179	686
02:00			9		8		17		14:00			84		82		166	
02:15			7		5		12		14:15			84		100		184	
02:30			7		16		23		14:30			128		119		247	
02:45			12	35	24	53	36	88	14:45			82	378	102	403	184	781
03:00			8		13		21		15:00			113		83		196	
03:15			9		21		30		15:15			103		107		210	
03:30			10		22		32		15:30			135		139		274	
03:45			15	42	51	107	66	149	15:45			113	464	165	494	278	958
04:00			18		11		29		16:00			111		156		267	
04:15			25		19		44		16:15			110		124		234	
04:30			33		29		62		16:30			101		154		255	
04:45			29	105	69	128	98	233	16:45			117	439	146	580	263	1019
05:00			33		50		83		17:00			116		145		261	
05:15			22		65		87		17:15			104		151		255	
05:30			55		64		119		17:30			100		147		247	
05:45			38	148	100	279	138	427	17:45			83	403	123	566	206	969
06:00			47		66		113		18:00			74		105		179	
06:15			91		52		143		18:15			71		82		153	
06:30			128		70		198		18:30			92		86		178	
06:45			144	410	88	276	232	686	18:45			38	275	77	350	115	625
07:00			133		77		210		19:00			45		73		118	
07:15			155		70		225		19:15			45		85		130	
07:30			170		75		245		19:30			42		66		108	
07:45			158	616	92	314	250	930	19:45			42	174	70	294	112	468
08:00			110		94		204		20:00			26		70		96	
08:15			117		75		192		20:15			30		67		97	
08:30			124		70		194		20:30			34		62		96	
08:45			93	444	75	314	168	758	20:45			28	118	64	263	92	381
09:00			89		60		149		21:00			34		50		84	
09:15			80		59		139		21:15			35		55		90	
09:30			80		60		140		21:30			32		57		89	
09:45			46	295	66	245	112	540	21:45			22	123	62	224	84	347
10:00			66		47		113		22:00			29		50		79	
10:15			57		49		106		22:15			23		51		74	
10:30			59		54		113		22:30			32		46		78	
10:45			72	254	61	211	133	465	22:45			19	103	34	181	53	284
11:00			53		44		97		23:00			27		24		51	
11:15			67		65		132		23:15			12		27		39	
11:30			70		57		127		23:30			21		23		44	
11:45			89	279	74	240	163	519	23:45			13	73	25	99	38	172
TOTALS				2711		2257		4968	TOTALS				3210		4150		7360
SPLIT %				54.6%		45.4%		40.3%	SPLIT %				43.6%		56.4%		59.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,921	6,407	12,328

AM Peak Hour			07:00	07:30	07:00	PM Peak Hour			15:30	15:45	15:30
AM Pk Volume			616	336	930	PM Pk Volume			469	599	1053
Pk Hr Factor			0.906	0.894	0.930	Pk Hr Factor			0.869	0.908	0.947
7 - 9 Volume	0	0	1060	628	1688	4 - 6 Volume	0	0	842	1146	1988
7 - 9 Peak Hour			07:00	07:30	07:00	4 - 6 Peak Hour			16:15	16:30	16:30
7 - 9 Pk Volume	0	0	616	336	930	4 - 6 Pk Volume	0	0	444	596	1034
Pk Hr Factor	0.000	0.000	0.906	0.894	0.930	Pk Hr Factor	0.000	0.000	0.949	0.968	0.983

Prepared by NDS/ATD

VOLUME

Cantu-Galleano Ranch Rd Bet. I-15 Ramps & Hamner Ave

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_017

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,031	6,481	12,512

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			15		12		27		12:00			65		59		124	
00:15			13		17		30		12:15			85		68		153	
00:30			17		11		28		12:30			121		78		199	
00:45			16	61	10	50	26	111	12:45			61	332	91	296	152	628
01:00			12		10		22		13:00			70		78		148	
01:15			14		7		21		13:15			78		84		162	
01:30			11		11		22		13:30			93		113		206	
01:45			14	51	8	36	22	87	13:45			90	331	87	362	177	693
02:00			5		6		11		14:00			86		93		179	
02:15			9		9		18		14:15			90		103		193	
02:30			15		13		28		14:30			117		86		203	
02:45			11	40	19	47	30	87	14:45			98	391	119	401	217	792
03:00			7		16		23		15:00			99		81		180	
03:15			8		18		26		15:15			101		103		204	
03:30			10		23		33		15:30			155		104		259	
03:45			18	43	46	103	64	146	15:45			105	460	110	398	215	858
04:00			17		20		37		16:00			92		138		230	
04:15			33		13		46		16:15			126		145		271	
04:30			43		35		78		16:30			134		157		291	
04:45			37	130	62	130	99	260	16:45			90	442	124	564	214	1006
05:00			32		56		88		17:00			95		129		224	
05:15			29		62		91		17:15			97		124		221	
05:30			47		66		113		17:30			116		116		232	
05:45			45	153	92	276	137	429	17:45			91	399	137	506	228	905
06:00			45		75		120		18:00			92		115		207	
06:15			68		74		142		18:15			92		95		187	
06:30			129		87		216		18:30			64		77		141	
06:45			133	375	85	321	218	696	18:45			58	306	76	363	134	669
07:00			129		75		204		19:00			59		95		154	
07:15			154		133		287		19:15			48		86		134	
07:30			171		153		324		19:30			54		71		125	
07:45			170	624	137	498	307	1122	19:45			26	187	59	311	85	498
08:00			110		102		212		20:00			36		62		98	
08:15			131		99		230		20:15			39		79		118	
08:30			130		84		214		20:30			29		56		85	
08:45			97	468	84	369	181	837	20:45			33	137	72	269	105	406
09:00			79		54		133		21:00			30		53		83	
09:15			69		44		113		21:15			23		68		91	
09:30			66		58		124		21:30			25		56		81	
09:45			57	271	78	234	135	505	21:45			28	106	68	245	96	351
10:00			71		56		127		22:00			20		45		65	
10:15			64		65		129		22:15			19		30		49	
10:30			66		49		115		22:30			29		40		69	
10:45			62	263	55	225	117	488	22:45			30	98	37	152	67	250
11:00			48		52		100		23:00			20		32		52	
11:15			74		61		135		23:15			28		22		50	
11:30			75		50		125		23:30			34		24		58	
11:45			69	266	66	229	135	495	23:45			15	97	18	96	33	193
TOTALS				2745		2518		5263	TOTALS				3286		3963		7249
SPLIT %				52.2%		47.8%		42.1%	SPLIT %				45.3%		54.7%		57.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,031	6,481	12,512

AM Peak Hour			07:00	07:15	07:15	PM Peak Hour			15:30	16:00	15:45
AM Pk Volume			624	525	1130	PM Pk Volume			478	564	1007
Pk Hr Factor			0.912	0.858	0.872	Pk Hr Factor			0.771	0.898	0.865
7 - 9 Volume	0	0	1092	867	1959	4 - 6 Volume	0	0	841	1070	1911
7 - 9 Peak Hour			07:00	07:15	07:15	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	624	525	1130	4 - 6 Pk Volume	0	0	445	564	1006
Pk Hr Factor	0.000	0.000	0.912	0.858	0.872	Pk Hr Factor	0.000	0.000	0.830	0.898	0.864

Prepared by NDS/ATD

VOLUME

Cantu-Galleano Ranch Rd Bet. I-15 Ramps & Hamner Ave

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_017

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,955	6,208	12,163

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			9		15		24		12:00			68		63		131	
00:15			15		18		33		12:15			74		79		153	
00:30			12		17		29		12:30			95		77		172	
00:45			4	40	14	64	18	104	12:45			80	317	86	305	166	622
01:00			5		4		9		13:00			74		97		171	
01:15			11		6		17		13:15			72		88		160	
01:30			11		13		24		13:30			97		82		179	
01:45			8	35	8	31	16	66	13:45			69	312	96	363	165	675
02:00			8		6		14		14:00			99		93		192	
02:15			8		4		12		14:15			75		102		177	
02:30			7		9		16		14:30			129		98		227	
02:45			13	36	28	47	41	83	14:45			112	415	83	376	195	791
03:00			16		16		32		15:00			98		72		170	
03:15			10		11		21		15:15			114		100		214	
03:30			14		24		38		15:30			127		104		231	
03:45			22	62	40	91	62	153	15:45			112	451	117	393	229	844
04:00			21		18		39		16:00			117		121		238	
04:15			28		22		50		16:15			112		144		256	
04:30			36		23		59		16:30			106		134		240	
04:45			29	114	60	123	89	237	16:45			95	430	155	554	250	984
05:00			26		50		76		17:00			95		136		231	
05:15			33		64		97		17:15			116		134		250	
05:30			46		81		127		17:30			122		161		283	
05:45			46	151	98	293	144	444	17:45			83	416	129	560	212	976
06:00			52		65		117		18:00			82		105		187	
06:15			83		61		144		18:15			82		125		207	
06:30			115		73		188		18:30			97		82		179	
06:45			136	386	83	282	219	668	18:45			56	317	99	411	155	728
07:00			138		70		208		19:00			59		65		124	
07:15			148		60		208		19:15			38		72		110	
07:30			163		70		233		19:30			54		52		106	
07:45			149	598	93	293	242	891	19:45			46	197	61	250	107	447
08:00			114		96		210		20:00			40		65		105	
08:15			104		83		187		20:15			30		53		83	
08:30			98		85		183		20:30			38		54		92	
08:45			91	407	73	337	164	744	20:45			38	146	70	242	108	388
09:00			86		80		166		21:00			27		58		85	
09:15			67		52		119		21:15			30		67		97	
09:30			67		56		123		21:30			32		56		88	
09:45			57	277	71	259	128	536	21:45			33	122	64	245	97	367
10:00			64		63		127		22:00			26		51		77	
10:15			69		40		109		22:15			16		38		54	
10:30			56		51		107		22:30			30		38		68	
10:45			61	250	46	200	107	450	22:45			28	100	25	152	53	252
11:00			58		69		127		23:00			16		22		38	
11:15			74		53		127		23:15			26		19		45	
11:30			67		66		133		23:30			34		20		54	
11:45			80	279	63	251	143	530	23:45			21	97	25	86	46	183
TOTALS				2635		2271		4906	TOTALS				3320		3937		7257
SPLIT %				53.7%		46.3%		40.3%	SPLIT %				45.7%		54.3%		59.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,955	6,208	12,163

AM Peak Hour			07:00	07:45	07:15	PM Peak Hour			15:15	16:45	16:45
AM Pk Volume			598	357	893	PM Pk Volume			470	586	1014
Pk Hr Factor			0.917	0.930	0.923	Pk Hr Factor			0.925	0.910	0.896
7 - 9 Volume	0	0	1005	630	1635	4 - 6 Volume	0	0	846	1114	1960
7 - 9 Peak Hour			07:00	07:45	07:15	4 - 6 Peak Hour			16:00	16:45	16:45
7 - 9 Pk Volume	0	0	598	357	893	4 - 6 Pk Volume	0	0	430	586	1014
Pk Hr Factor	0.000	0.000	0.917	0.930	0.923	Pk Hr Factor	0.000	0.000	0.919	0.910	0.896

Prepared by NDS/ATD

VOLUME

Cleveland Ave Bet. Bellgrave St & Limonite Ave

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_014

DAILY TOTALS	NB	SB	EB	WB	Total
	1,016	1,086	0	0	2,102

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		2						2		12:00	8		10						18	
00:15	1		1						2		12:15	8		10						18	
00:30	1		0						1		12:30	11		5						16	
00:45	1	3	0	3					1	6	12:45	5	32	9	34					14	66
01:00	0		1						1		13:00	8		7						15	
01:15	0		0						0		13:15	6		8						14	
01:30	1		0						1		13:30	10		7						17	
01:45	1	2	0	1					1	3	13:45	8	32	9	31					17	63
02:00	0		1						1		14:00	6		14						20	
02:15	0		1						1		14:15	7		16						23	
02:30	0		1						1		14:30	10		36						46	
02:45	0		0	3					0	3	14:45	19	42	42	108					61	150
03:00	0		0						0		15:00	46		25						71	
03:15	1		0						1		15:15	39		21						60	
03:30	0		0						0		15:30	41		25						66	
03:45	0	1	0						0	1	15:45	13	139	27	98					40	237
04:00	0		1						1		16:00	20		19						39	
04:15	0		3						3		16:15	22		15						37	
04:30	3		3						6		16:30	21		21						42	
04:45	2	5	1	8					3	13	16:45	17	80	16	71					33	151
05:00	3		7						10		17:00	20		27						47	
05:15	0		2						2		17:15	22		22						44	
05:30	0		4						4		17:30	19		31						50	
05:45	4	7	6	19					10	26	17:45	15	76	24	104					39	180
06:00	5		8						13		18:00	25		25						50	
06:15	6		6						12		18:15	15		22						37	
06:30	17		17						34		18:30	20		14						34	
06:45	22	50	27	58					49	108	18:45	10	70	14	75					24	145
07:00	19		23						42		19:00	16		14						30	
07:15	35		43						78		19:15	18		18						36	
07:30	33		26						59		19:30	16		12						28	
07:45	32	119	26	118					58	237	19:45	18	68	11	55					29	123
08:00	25		58						83		20:00	16		11						27	
08:15	31		26						57		20:15	9		6						15	
08:30	29		12						41		20:30	5		9						14	
08:45	11	96	13	109					24	205	20:45	14	44	5	31					19	75
09:00	9		8						17		21:00	11		9						20	
09:15	9		16						25		21:15	12		4						16	
09:30	5		7						12		21:30	8		4						12	
09:45	7	30	10	41					17	71	21:45	1	32	7	24					8	56
10:00	15		15						30		22:00	5		8						13	
10:15	8		7						15		22:15	5		2						7	
10:30	3		5						8		22:30	6		5						11	
10:45	10	36	8	35					18	71	22:45	1	17	4	19					5	36
11:00	9		3						12		23:00	1		0						1	
11:15	6		6						12		23:15	2		3						5	
11:30	10		10						20		23:30	1		2						3	
11:45	6	31	15	34					21	65	23:45	0	4	2	7					2	11
TOTALS		380		429						809	TOTALS		636		657						1293
SPLIT %		47.0%		53.0%						38.5%	SPLIT %		49.2%		50.8%						61.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,016	1,086	0	0	2,102

AM Peak Hour	07:15	07:15			07:15	PM Peak Hour	14:45	14:30			14:45
AM Pk Volume	125	153			278	PM Pk Volume	145	124			258
Pk Hr Factor	0.893	0.659			0.837	Pk Hr Factor	0.788	0.738			0.908
7 - 9 Volume	215	227	0	0	442	4 - 6 Volume	156	175	0	0	331
7 - 9 Peak Hour	07:15	07:15			07:15	4 - 6 Peak Hour	16:00	17:00			17:00
7 - 9 Pk Volume	125	153	0	0	278	4 - 6 Pk Volume	80	104	0	0	180
Pk Hr Factor	0.893	0.659	0.000	0.000	0.837	Pk Hr Factor	0.909	0.839	0.000	0.000	0.900

Prepared by NDS/ATD

VOLUME

Cleveland Ave Bet. Bellgrave St & Limonite Ave

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_014

DAILY TOTALS	NB	SB	EB	WB	Total
	1,056	1,123	0	0	2,179

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		1						1	
00:15	2		2						4	
00:30	0		1						1	
00:45	2	4	1	5					3	9
01:00	1		0						1	
01:15	1		2						3	
01:30	1		0						1	
01:45	0	3	1	3					1	6
02:00	0		0						0	
02:15	0		1						1	
02:30	0		0						0	
02:45	1	1	0	1					1	2
03:00	1		0						1	
03:15	0		2						2	
03:30	0		1						1	
03:45	1	2	0	3					1	5
04:00	0		0						0	
04:15	1		3						4	
04:30	2		1						3	
04:45	2	5	4	8					6	13
05:00	2		3						5	
05:15	1		3						4	
05:30	3		7						10	
05:45	4	10	4	17					8	27
06:00	4		16						20	
06:15	12		11						23	
06:30	13		16						29	
06:45	19	48	13	56					32	104
07:00	14		19						33	
07:15	19		18						37	
07:30	20		24						44	
07:45	27	80	44	105					71	185
08:00	26		72						98	
08:15	34		30						64	
08:30	34		22						56	
08:45	17	111	18	142					35	253
09:00	13		11						24	
09:15	8		9						17	
09:30	9		6						15	
09:45	5	35	7	33					12	68
10:00	7		6						13	
10:15	6		5						11	
10:30	11		5						16	
10:45	6	30	9	25					15	55
11:00	11		12						23	
11:15	14		6						20	
11:30	9		9						18	
11:45	9	43	5	32					14	75
TOTALS		372		430						802
SPLIT %		46.4%		53.6%						36.8%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	8		10						18	
12:15	10		6						16	
12:30	10		6						16	
12:45	11	39	8	30					19	69
13:00	7		11						18	
13:15	9		19						28	
13:30	17		26						43	
13:45	12	45	33	89					45	134
14:00	30		20						50	
14:15	25		21						46	
14:30	16		14						30	
14:45	14	85	22	77					36	162
15:00	33		17						50	
15:15	24		23						47	
15:30	27		17						44	
15:45	19	103	14	71					33	174
16:00	13		17						30	
16:15	18		21						39	
16:30	12		25						37	
16:45	18	61	24	87					42	148
17:00	17		21						38	
17:15	19		27						46	
17:30	18		27						45	
17:45	27	81	27	102					54	183
18:00	25		19						44	
18:15	10		20						30	
18:30	19		19						38	
18:45	20	74	19	77					39	151
19:00	32		29						61	
19:15	17		13						30	
19:30	12		13						25	
19:45	14	75	12	67					26	142
20:00	19		10						29	
20:15	11		14						25	
20:30	9		10						19	
20:45	9	48	6	40					15	88
21:00	10		8						18	
21:15	15		9						24	
21:30	16		10						26	
21:45	6	47	2	29					8	76
22:00	5		8						13	
22:15	3		2						5	
22:30	7		5						12	
22:45	3	18	2	17					5	35
23:00	2		3						5	
23:15	3		1						4	
23:30	0		3						3	
23:45	3	8	0	7					3	15
TOTALS		684		693						1377
SPLIT %		49.7%		50.3%						63.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,056	1,123	0	0	2,179

AM Peak Hour	07:45	07:30			07:45
AM Pk Volume	121	170			289
Pk Hr Factor	0.890	0.590			0.737
7 - 9 Volume	191	247	0	0	438
7 - 9 Peak Hour	07:45	07:30			07:45
7 - 9 Pk Volume	121	170	0	0	289
Pk Hr Factor	0.890	0.590	0.000	0.000	0.737

PM Peak Hour	15:00	17:00			17:15
PM Pk Volume	103	102			189
Pk Hr Factor	0.780	0.944			0.875
4 - 6 Volume	142	189	0	0	331
4 - 6 Peak Hour	17:00	17:00			17:00
4 - 6 Pk Volume	81	102	0	0	183
Pk Hr Factor	0.750	0.944	0.000	0.000	0.847

Prepared by NDS/ATD

VOLUME

Cleveland Ave Bet. Bellgrave St & Limonite Ave

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_014

DAILY TOTALS	NB	SB	EB	WB	Total
	969	1,078	0	0	2,047

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	2		1				3		12:00	14		17				31	
00:15	0		2				2		12:15	16		9				25	
00:30	4		0				4		12:30	11		6				17	
00:45	2	8	2	5			4	13	12:45	7	48	4	36			11	84
01:00	1		1				2		13:00	7		9				16	
01:15	1		0				1		13:15	11		6				17	
01:30	2		1				3		13:30	7		8				15	
01:45	0	4	0	2			0	6	13:45	7	32	12	35			19	67
02:00	0		0				0		14:00	6		16				22	
02:15	0		0				0		14:15	10		16				26	
02:30	1		0				1		14:30	15		34				49	
02:45	1	2	0				1	2	14:45	28	59	39	105			67	164
03:00	0		1				1		15:00	49		36				85	
03:15	0		0				0		15:15	36		20				56	
03:30	0		0				0		15:30	38		27				65	
03:45	1	1	1	2			2	3	15:45	13	136	29	112			42	248
04:00	2		0				2		16:00	26		19				45	
04:15	1		4				5		16:15	12		15				27	
04:30	3		1				4		16:30	23		27				50	
04:45	2	8	3	8			5	16	16:45	11	72	31	92			42	164
05:00	4		1				5		17:00	11		20				31	
05:15	1		4				5		17:15	13		19				32	
05:30	3		9				12		17:30	13		22				35	
05:45	3	11	4	18			7	29	17:45	14	51	15	76			29	127
06:00	1		12				13		18:00	18		22				40	
06:15	10		13				23		18:15	21		15				36	
06:30	19		12				31		18:30	13		11				24	
06:45	16	46	14	51			30	97	18:45	11	63	13	61			24	124
07:00	30		26				56		19:00	14		17				31	
07:15	26		36				62		19:15	11		13				24	
07:30	31		26				57		19:30	12		11				23	
07:45	36	123	26	114			62	237	19:45	9	46	10	51			19	97
08:00	18		71				89		20:00	10		12				22	
08:15	35		28				63		20:15	5		4				9	
08:30	24		17				41		20:30	7		9				16	
08:45	13	90	9	125			22	215	20:45	8	30	8	33			16	63
09:00	9		10				19		21:00	8		6				14	
09:15	6		10				16		21:15	13		12				25	
09:30	10		12				22		21:30	3		0				3	
09:45	7	32	7	39			14	71	21:45	6	30	5	23			11	53
10:00	8		7				15		22:00	3		2				5	
10:15	3		11				14		22:15	1		6				7	
10:30	9		5				14		22:30	3		1				4	
10:45	9	29	10	33			19	62	22:45	0	7	3	12			3	19
11:00	9		11				20		23:00	2		3				5	
11:15	10		4				14		23:15	1		3				4	
11:30	7		10				17		23:30	2		0				2	
11:45	9	35	13	38			22	73	23:45	1	6	1	7			2	13
TOTALS		389		435				824	TOTALS		580		643				1223
SPLIT %		47.2%		52.8%				40.3%	SPLIT %		47.4%		52.6%				59.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	969	1,078	0	0	2,047

AM Peak Hour	07:00	07:15			07:30	PM Peak Hour	14:45	14:30			14:45
AM Pk Volume	123	159			271	PM Pk Volume	151	129			273
Pk Hr Factor	0.854	0.560			0.761	Pk Hr Factor	0.770	0.827			0.803
7 - 9 Volume	213	239	0	0	452	4 - 6 Volume	123	168	0	0	291
7 - 9 Peak Hour	07:00	07:15			07:30	4 - 6 Peak Hour	16:00	16:30			16:00
7 - 9 Pk Volume	123	159	0	0	271	4 - 6 Pk Volume	72	97	0	0	164
Pk Hr Factor	0.854	0.560	0.000	0.000	0.761	Pk Hr Factor	0.692	0.782	0.000	0.000	0.820

Prepared by NDS/ATD

VOLUME

Scholar Wy Bet. 68th St & Limonite Ave

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_010

DAILY TOTALS	NB	SB	EB	WB	Total
	2,051	2,713	0	0	4,764

AM Period	NB		SB		EB	WB	TOTAL	
00:00	5		5				10	
00:15	3		5				8	
00:30	2		1				3	
00:45	2	12	2	13			4	25
01:00	1		0				1	
01:15	3		4				7	
01:30	1		2				3	
01:45	2	7	0	6			2	13
02:00	1		1				2	
02:15	3		1				4	
02:30	1		2				3	
02:45	0	5	2	6			2	11
03:00	0		6				6	
03:15	0		1				1	
03:30	1		1				2	
03:45	1	2	2	10			3	12
04:00	2		1				3	
04:15	1		1				2	
04:30	2		7				9	
04:45	2	7	6	15			8	22
05:00	4		6				10	
05:15	6		7				13	
05:30	3		8				11	
05:45	3	16	10	31			13	47
06:00	10		14				24	
06:15	10		15				25	
06:30	23		45				68	
06:45	20	63	35	109			55	172
07:00	40		36				76	
07:15	61		65				126	
07:30	40		87				127	
07:45	26	167	77	265			103	432
08:00	27		91				118	
08:15	45		86				131	
08:30	20		67				87	
08:45	14	106	26	270			40	376
09:00	19		36				55	
09:15	17		23				40	
09:30	19		24				43	
09:45	18	73	31	114			49	187
10:00	12		24				36	
10:15	18		22				40	
10:30	13		23				36	
10:45	20	63	25	94			45	157
11:00	16		27				43	
11:15	18		26				44	
11:30	20		29				49	
11:45	17	71	30	112			47	183
TOTALS		592		1045				1637
SPLIT %		36.2%		63.8%				34.4%

PM Period	NB		SB		EB	WB	TOTAL	
12:00	13		43				56	
12:15	24		32				56	
12:30	22		22				44	
12:45	18	77	34	131			52	208
13:00	25		33				58	
13:15	24		33				57	
13:30	21		23				44	
13:45	28	98	32	121			60	219
14:00	20		19				39	
14:15	30		27				57	
14:30	44		59				103	
14:45	69	163	61	166			130	329
15:00	57		68				125	
15:15	47		81				128	
15:30	45		61				106	
15:45	36	185	45	255			81	440
16:00	40		55				95	
16:15	39		34				73	
16:30	34		41				75	
16:45	40	153	36	166			76	319
17:00	41		60				101	
17:15	44		41				85	
17:30	57		33				90	
17:45	49	191	41	175			90	366
18:00	49		56				105	
18:15	59		64				123	
18:30	46		61				107	
18:45	51	205	40	221			91	426
19:00	46		53				99	
19:15	36		47				83	
19:30	36		38				74	
19:45	33	151	28	166			61	317
20:00	23		38				61	
20:15	24		32				56	
20:30	21		29				50	
20:45	17	85	34	133			51	218
21:00	35		27				62	
21:15	14		29				43	
21:30	23		28				51	
21:45	17	89	11	95			28	184
22:00	12		10				22	
22:15	10		9				19	
22:30	13		8				21	
22:45	6	41	2	29			8	70
23:00	3		4				7	
23:15	4		3				7	
23:30	9		0				9	
23:45	5	21	3	10			8	31
TOTALS		1459		1668				3127
SPLIT %		46.7%		53.3%				65.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,051	2,713	0	0	4,764

AM Peak Hour	07:00	07:30			07:30
AM Pk Volume	167	341			479
Pk Hr Factor	0.684	0.937			0.914
7 - 9 Volume	273	535	0	0	808
7 - 9 Peak Hour	07:00	07:30			07:30
7 - 9 Pk Volume	167	341	0	0	479
Pk Hr Factor	0.684	0.937	0.000	0.000	0.914

PM Peak Hour	14:45	14:45			14:45
PM Pk Volume	218	271			489
Pk Hr Factor	0.790	0.836			0.940
4 - 6 Volume	344	341	0	0	685
4 - 6 Peak Hour	17:00	16:30			17:00
4 - 6 Pk Volume	191	178	0	0	366
Pk Hr Factor	0.838	0.742	0.000	0.000	0.906

Prepared by NDS/ATD

VOLUME

Scholar Wy Bet. 68th St & Limonite Ave

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_010

DAILY TOTALS	NB	SB	EB	WB	Total
	1,960	2,709	0	0	4,669

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		5				8		12:00	15		15				30	
00:15	4		2				6		12:15	10		24				34	
00:30	2		4				6		12:30	16		25				41	
00:45	1	10	1	12			2	22	12:45	16	57	21	85			37	142
01:00	1		2				3		13:00	22		29				51	
01:15	0		1				1		13:15	30		28				58	
01:30	2		3				5		13:30	33		76				109	
01:45	2	5	1	7			3	12	13:45	43	128	62	195			105	323
02:00	2		1				3		14:00	41		44				85	
02:15	1		1				2		14:15	45		65				110	
02:30	0		3				3		14:30	31		48				79	
02:45	0	3	2	7			2	10	14:45	51	168	30	187			81	355
03:00	0		5				5		15:00	37		65				102	
03:15	1		2				3		15:15	36		50				86	
03:30	2		1				3		15:30	39		44				83	
03:45	3	6	2	10			5	16	15:45	36	148	40	199			76	347
04:00	0		2				2		16:00	19		36				55	
04:15	0		3				3		16:15	32		38				70	
04:30	3		9				12		16:30	30		40				70	
04:45	2	5	7	21			9	26	16:45	38	119	41	155			79	274
05:00	1		7				8		17:00	39		38				77	
05:15	4		8				12		17:15	31		49				80	
05:30	2		6				8		17:30	62		48				110	
05:45	1	8	10	31			11	39	17:45	54	186	34	169			88	355
06:00	10		15				25		18:00	59		46				105	
06:15	8		20				28		18:15	37		47				84	
06:30	15		35				50		18:30	37		44				81	
06:45	11	44	28	98			39	142	18:45	44	177	50	187			94	364
07:00	23		28				51		19:00	47		73				120	
07:15	31		39				70		19:15	33		38				71	
07:30	21		58				79		19:30	37		37				74	
07:45	35	110	70	195			105	305	19:45	32	149	45	193			77	342
08:00	40		87				127		20:00	35		48				83	
08:15	55		84				139		20:15	34		32				66	
08:30	42		68				110		20:30	34		30				64	
08:45	44	181	64	303			108	484	20:45	15	118	18	128			33	246
09:00	17		48				65		21:00	21		36				57	
09:15	29		23				52		21:15	20		33				53	
09:30	16		26				42		21:30	12		16				28	
09:45	11	73	23	120			34	193	21:45	10	63	22	107			32	170
10:00	13		23				36		22:00	10		23				33	
10:15	12		36				48		22:15	14		11				25	
10:30	12		27				39		22:30	8		8				16	
10:45	16	53	32	118			48	171	22:45	7	39	11	53			18	92
11:00	23		41				64		23:00	9		6				15	
11:15	25		29				54		23:15	7		3				10	
11:30	25		22				47		23:30	5		1				6	
11:45	15	88	23	115			38	203	23:45	1	22	4	14			5	36
TOTALS		586		1037				1623	TOTALS		1374		1672				3046
SPLIT %		36.1%		63.9%				34.8%	SPLIT %		45.1%		54.9%				65.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,960	2,709	0	0	4,669

AM Peak Hour	08:00	07:45			08:00	PM Peak Hour	17:30	13:30			13:30
AM Pk Volume	181	309			484	PM Pk Volume	212	247			409
Pk Hr Factor	0.823	0.888			0.871	Pk Hr Factor	0.855	0.813			0.930
7 - 9 Volume	291	498	0	0	789	4 - 6 Volume	305	324	0	0	629
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	17:00	16:45			17:00
7 - 9 Pk Volume	181	309	0	0	484	4 - 6 Pk Volume	186	176	0	0	355
Pk Hr Factor	0.823	0.888	0.000	0.000	0.871	Pk Hr Factor	0.750	0.898	0.000	0.000	0.807

Prepared by NDS/ATD

VOLUME

Scholar Wy Bet. 68th St & Limonite Ave

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_010

DAILY TOTALS	NB	SB	EB	WB	Total
	1,888	2,558	0	0	4,446

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	2		2				4		12:00	22		43				65	
00:15	4		1				5		12:15	19		29				48	
00:30	2		2				4		12:30	16		22				38	
00:45	4	12	2	7			6	19	12:45	21	78	25	119			46	197
01:00	2		1				3		13:00	22		17				39	
01:15	0		0				0		13:15	17		23				40	
01:30	2		1				3		13:30	17		13				30	
01:45	3	7	2	4			5	11	13:45	14	70	20	73			34	143
02:00	1		0				1		14:00	17		22				39	
02:15	1		1				2		14:15	27		31				58	
02:30	0		2				2		14:30	31		60				91	
02:45	0	2	3	6			3	8	14:45	69	144	73	186			142	330
03:00	0		3				3		15:00	67		61				128	
03:15	0		2				2		15:15	43		81				124	
03:30	1		0				1		15:30	48		63				111	
03:45	2	3	3	8			5	11	15:45	46	204	49	254			95	458
04:00	0		0				0		16:00	35		56				91	
04:15	0		3				3		16:15	43		40				83	
04:30	1		12				13		16:30	36		44				80	
04:45	4	5	7	22			11	27	16:45	43	157	39	179			82	336
05:00	1		6				7		17:00	40		28				68	
05:15	3		6				9		17:15	40		43				83	
05:30	5		11				16		17:30	49		50				99	
05:45	5	14	7	30			12	44	17:45	49	178	49	170			98	348
06:00	5		13				18		18:00	37		40				77	
06:15	8		19				27		18:15	37		48				85	
06:30	21		34				55		18:30	32		57				89	
06:45	19	53	36	102			55	155	18:45	35	141	36	181			71	322
07:00	45		45				90		19:00	33		51				84	
07:15	63		52				115		19:15	25		50				75	
07:30	34		88				122		19:30	37		41				78	
07:45	31	173	68	253			99	426	19:45	38	133	31	173			69	306
08:00	28		83				111		20:00	29		29				58	
08:15	39		89				128		20:15	13		25				38	
08:30	23		59				82		20:30	18		17				35	
08:45	19	109	41	272			60	381	20:45	21	81	24	95			45	176
09:00	12		31				43		21:00	32		22				54	
09:15	12		28				40		21:15	22		19				41	
09:30	16		25				41		21:30	11		22				33	
09:45	15	55	22	106			37	161	21:45	17	82	15	78			32	160
10:00	14		21				35		22:00	9		8				17	
10:15	15		32				47		22:15	6		6				12	
10:30	9		21				30		22:30	3		11				14	
10:45	14	52	24	98			38	150	22:45	6	24	5	30			11	54
11:00	17		24				41		23:00	3		5				8	
11:15	26		23				49		23:15	7		4				11	
11:30	19		30				49		23:30	3		5				8	
11:45	31	93	21	98			52	191	23:45	5	18	0	14			5	32
TOTALS		578		1006				1584	TOTALS		1310		1552				2862
SPLIT %		36.5%		63.5%				35.6%	SPLIT %		45.8%		54.2%				64.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,888	2,558	0	0	4,446

AM Peak Hour	07:00	07:30			07:30	PM Peak Hour	14:45	14:45			14:45
AM Pk Volume	173	328			460	PM Pk Volume	227	278			505
Pk Hr Factor	0.687	0.921			0.898	Pk Hr Factor	0.822	0.858			0.889
7 - 9 Volume	282	525	0	0	807	4 - 6 Volume	335	349	0	0	684
7 - 9 Peak Hour	07:00	07:30			07:30	4 - 6 Peak Hour	17:00	16:00			17:00
7 - 9 Pk Volume	173	328	0	0	460	4 - 6 Pk Volume	178	179	0	0	348
Pk Hr Factor	0.687	0.921	0.000	0.000	0.898	Pk Hr Factor	0.908	0.799	0.000	0.000	0.879

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Limonite Ave & Bellgrave St

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_009

DAILY TOTALS	NB	SB	EB	WB	Total
	7,510	7,480	0	0	14,990

AM Period	NB		SB		EB		WB		TOTAL	
00:00	7		17						24	
00:15	3		9						12	
00:30	6		13						19	
00:45	6	22	9	48					15	70
01:00	8		6						14	
01:15	3		7						10	
01:30	3		9						12	
01:45	11	25	5	27					16	52
02:00	2		10						12	
02:15	3		1						4	
02:30	4		8						12	
02:45	9	18	4	23					13	41
03:00	14		9						23	
03:15	5		6						11	
03:30	8		9						17	
03:45	17	44	9	33					26	77
04:00	13		7						20	
04:15	21		10						31	
04:30	32		12						44	
04:45	38	104	14	43					52	147
05:00	25		12						37	
05:15	42		26						68	
05:30	44		26						70	
05:45	56	167	17	81					73	248
06:00	55		27						82	
06:15	79		38						117	
06:30	111		43						154	
06:45	127	372	70	178					197	550
07:00	154		71						225	
07:15	171		66						237	
07:30	184		71						255	
07:45	167	676	79	287					246	963
08:00	140		89						229	
08:15	151		66						217	
08:30	136		70						206	
08:45	102	529	63	288					165	817
09:00	85		66						151	
09:15	96		65						161	
09:30	95		76						171	
09:45	79	355	80	287					159	642
10:00	49		84						133	
10:15	77		75						152	
10:30	98		79						177	
10:45	90	314	76	314					166	628
11:00	94		90						184	
11:15	104		89						193	
11:30	104		93						197	
11:45	113	415	85	357					198	772
TOTALS		3041		1966						5007
SPLIT %		60.7%		39.3%						33.4%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	86		121						207	
12:15	105		113						218	
12:30	108		103						211	
12:45	97	396	99	436					196	832
13:00	138		106						244	
13:15	95		75						170	
13:30	116		84						200	
13:45	127	476	97	362					224	838
14:00	96		105						201	
14:15	105		137						242	
14:30	117		126						243	
14:45	123	441	182	550					305	991
15:00	157		139						296	
15:15	125		143						268	
15:30	128		167						295	
15:45	147	557	216	665					363	1222
16:00	106		198						304	
16:15	137		183						320	
16:30	141		231						372	
16:45	115	499	220	832					335	1331
17:00	96		200						296	
17:15	151		211						362	
17:30	115		209						324	
17:45	119	481	184	804					303	1285
18:00	113		161						274	
18:15	94		153						247	
18:30	132		132						264	
18:45	88	427	117	563					205	990
19:00	108		125						233	
19:15	112		130						242	
19:30	94		112						206	
19:45	94	408	98	465					192	873
20:00	77		97						174	
20:15	103		95						198	
20:30	86		78						164	
20:45	100	366	81	351					181	717
21:00	67		57						124	
21:15	67		74						141	
21:30	52		49						101	
21:45	57	243	44	224					101	467
22:00	35		42						77	
22:15	21		38						59	
22:30	34		44						78	
22:45	30	120	42	166					72	286
23:00	17		28						45	
23:15	10		19						29	
23:30	19		27						46	
23:45	9	55	22	96					31	151
TOTALS		4469		5514						9983
SPLIT %		44.8%		55.2%						66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	7,510	7,480	0	0	14,990

AM Peak Hour	07:00	11:45			07:15	PM Peak Hour	15:00	16:30			16:30
AM Pk Volume	676	422			967	PM Pk Volume	557	862			1365
Pk Hr Factor	0.918	0.872			0.948	Pk Hr Factor	0.887	0.933			0.917
7 - 9 Volume	1205	575	0	0	1780	4 - 6 Volume	980	1636	0	0	2616
7 - 9 Peak Hour	07:00	07:15			07:15	4 - 6 Peak Hour	16:30	16:30			16:30
7 - 9 Pk Volume	676	305	0	0	967	4 - 6 Pk Volume	503	862	0	0	1365
Pk Hr Factor	0.918	0.857	0.000	0.000	0.948	Pk Hr Factor	0.833	0.933	0.000	0.000	0.917

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Limonite Ave & Bellgrave St

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_009

DAILY TOTALS	NB	SB	EB	WB	Total
	7,660	7,079	0	0	14,739

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	9		18				27		12:00	89		94				183	
00:15	11		13				24		12:15	104		92				196	
00:30	8		12				20		12:30	112		105				217	
00:45	5	33	7	50			12	83	12:45	104	409	96	387			200	796
01:00	3		9				12		13:00	107		107				214	
01:15	2		7				9		13:15	127		102				229	
01:30	2		7				9		13:30	121		105				226	
01:45	6	13	5	28			11	41	13:45	116	471	104	418			220	889
02:00	1		1				2		14:00	132		84				216	
02:15	3		5				8		14:15	130		109				239	
02:30	7		4				11		14:30	130		129				259	
02:45	7	18	3	13			10	31	14:45	100	492	118	440			218	932
03:00	7		3				10		15:00	108		124				232	
03:15	7		6				13		15:15	108		114				222	
03:30	9		2				11		15:30	127		137				264	
03:45	14	37	4	15			18	52	15:45	122	465	135	510			257	975
04:00	13		7				20		16:00	121		152				273	
04:15	22		9				31		16:15	103		201				304	
04:30	34		14				48		16:30	155		178				333	
04:45	39	108	13	43			52	151	16:45	102	481	190	721			292	1202
05:00	30		16				46		17:00	118		225				343	
05:15	39		17				56		17:15	136		191				327	
05:30	43		27				70		17:30	131		208				339	
05:45	47	159	17	77			64	236	17:45	107	492	194	818			301	1310
06:00	47		26				73		18:00	115		160				275	
06:15	83		35				118		18:15	107		150				257	
06:30	103		55				158		18:30	104		124				228	
06:45	152	385	51	167			203	552	18:45	86	412	139	573			225	985
07:00	150		58				208		19:00	93		123				216	
07:15	176		70				246		19:15	93		106				199	
07:30	216		81				297		19:30	117		112				229	
07:45	235	777	112	321			347	1098	19:45	86	389	95	436			181	825
08:00	239		108				347		20:00	71		83				154	
08:15	236		88				324		20:15	87		91				178	
08:30	176		90				266		20:30	78		73				151	
08:45	121	772	70	356			191	1128	20:45	62	298	56	303			118	601
09:00	88		64				152		21:00	61		65				126	
09:15	85		60				145		21:15	71		61				132	
09:30	84		82				166		21:30	54		56				110	
09:45	70	327	66	272			136	599	21:45	45	231	39	221			84	452
10:00	84		69				153		22:00	35		41				76	
10:15	80		74				154		22:15	33		37				70	
10:30	96		84				180		22:30	25		35				60	
10:45	93	353	54	281			147	634	22:45	27	120	27	140			54	260
11:00	93		101				194		23:00	18		19				37	
11:15	78		100				178		23:15	14		25				39	
11:30	85		97				182		23:30	16		37				53	
11:45	102	358	89	387			191	745	23:45	12	60	21	102			33	162
TOTALS		3340		2010				5350	TOTALS		4320		5069				9389
SPLIT %		62.4%		37.6%				36.3%	SPLIT %		46.0%		54.0%				63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	7,660	7,079	0	0	14,739

AM Peak Hour	07:30	07:45			07:30	PM Peak Hour	16:30	17:00			17:00
AM Pk Volume	926	398			1315	PM Pk Volume	511	818			1310
Pk Hr Factor	0.969	0.888			0.947	Pk Hr Factor	0.824	0.909			0.955
7 - 9 Volume	1549	677	0	0	2226	4 - 6 Volume	973	1539	0	0	2512
7 - 9 Peak Hour	07:30	07:45			07:30	4 - 6 Peak Hour	16:30	17:00			17:00
7 - 9 Pk Volume	926	398	0	0	1315	4 - 6 Pk Volume	511	818	0	0	1310
Pk Hr Factor	0.969	0.888	0.000	0.000	0.947	Pk Hr Factor	0.824	0.909	0.000	0.000	0.955

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Limonite Ave & Bellgrave St

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_009

DAILY TOTALS	NB	SB	EB	WB	Total
	7,394	7,101	0	0	14,495

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	6		12						18		12:00	124		123						247	
00:15	5		17						22		12:15	108		100						208	
00:30	7		12						19		12:30	96		100						196	
00:45	2	20	5	46					7	66	12:45	109	437	97	420					206	857
01:00	8		5						13		13:00	110		97						207	
01:15	3		5						8		13:15	99		111						210	
01:30	4		4						8		13:30	112		103						215	
01:45	5	20	6	20					11	40	13:45	122	443	99	410					221	853
02:00	1		4						5		14:00	123		102						225	
02:15	5		5						10		14:15	117		108						225	
02:30	8		3						11		14:30	103		149						252	
02:45	10	24	4	16					14	40	14:45	98	441	161	520					259	961
03:00	5		4						9		15:00	137		113						250	
03:15	8		6						14		15:15	142		141						283	
03:30	8		5						13		15:30	126		157						283	
03:45	13	34	3	18					16	52	15:45	131	536	154	565					285	1101
04:00	12		8						20		16:00	118		178						296	
04:15	25		3						28		16:15	129		191						320	
04:30	33		7						40		16:30	105		191						296	
04:45	32	102	17	35					49	137	16:45	100	452	198	758					298	1210
05:00	28		14						42		17:00	112		183						295	
05:15	37		23						60		17:15	130		181						311	
05:30	47		19						66		17:30	140		201						341	
05:45	50	162	25	81					75	243	17:45	113	495	201	766					314	1261
06:00	64		29						93		18:00	123		162						285	
06:15	86		34						120		18:15	108		149						257	
06:30	106		51						157		18:30	121		118						239	
06:45	126	382	54	168					180	550	18:45	100	452	120	549					220	1001
07:00	143		54						197		19:00	116		147						263	
07:15	160		60						220		19:15	102		106						208	
07:30	188		62						250		19:30	103		99						202	
07:45	172	663	79	255					251	918	19:45	89	410	90	442					179	852
08:00	168		99						267		20:00	78		95						173	
08:15	155		82						237		20:15	72		74						146	
08:30	130		64						194		20:30	72		66						138	
08:45	134	587	76	321					210	908	20:45	76	298	87	322					163	620
09:00	100		74						174		21:00	66		43						109	
09:15	107		73						180		21:15	51		57						108	
09:30	86		60						146		21:30	43		46						89	
09:45	77	370	57	264					134	634	21:45	35	195	44	190					79	385
10:00	90		76						166		22:00	36		47						83	
10:15	84		82						166		22:15	24		45						69	
10:30	82		61						143		22:30	34		44						78	
10:45	72	328	80	299					152	627	22:45	24	118	30	166					54	284
11:00	97		84						181		23:00	13		27						40	
11:15	95		109						204		23:15	18		12						30	
11:30	81		103						184		23:30	17		19						36	
11:45	95	368	95	391					190	759	23:45	9	57	21	79					30	136
TOTALS		3060		1914						4974	TOTALS		4334		5187						9521
SPLIT %		61.5%		38.5%						34.3%	SPLIT %		45.5%		54.5%						65.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	7,394	7,101	0	0	14,495

AM Peak Hour	07:15	11:15			07:30	PM Peak Hour	15:00	17:00			17:00
AM Pk Volume	688	430			1005	PM Pk Volume	536	766			1261
Pk Hr Factor	0.915	0.874			0.941	Pk Hr Factor	0.944	0.953			0.924
7 - 9 Volume	1250	576	0	0	1826	4 - 6 Volume	947	1524	0	0	2471
7 - 9 Peak Hour	07:15	07:45			07:30	4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	688	324	0	0	1005	4 - 6 Pk Volume	495	766	0	0	1261
Pk Hr Factor	0.915	0.818	0.000	0.000	0.941	Pk Hr Factor	0.884	0.953	0.000	0.000	0.924

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. 68th St & Limonite Ave

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_008

DAILY TOTALS	NB	SB	EB	WB	Total
	10,193	8,928	0	0	19,121

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	17		15				32		12:00	146		98				244	
00:15	10		18				28		12:15	144		139				283	
00:30	9		10				19		12:30	144		122				266	
00:45	6	42	3	46			9	88	12:45	141	575	156	515			297	1090
01:00	3		8				11		13:00	116		131				247	
01:15	13		10				23		13:15	136		120				256	
01:30	4		4				8		13:30	160		155				315	
01:45	6	26	7	29			13	55	13:45	153	565	117	523			270	1088
02:00	8		3				11		14:00	157		115				272	
02:15	10		2				12		14:15	163		153				316	
02:30	5		2				7		14:30	155		173				328	
02:45	9	32	3	10			12	42	14:45	160	635	166	607			326	1242
03:00	9		2				11		15:00	234		164				398	
03:15	4		5				9		15:15	206		166				372	
03:30	13		5				18		15:30	221		161				382	
03:45	26	52	4	16			30	68	15:45	133	794	144	635			277	1429
04:00	17		6				23		16:00	158		139				297	
04:15	28		5				33		16:15	149		199				348	
04:30	33		11				44		16:30	177		209				386	
04:45	37	115	17	39			54	154	16:45	148	632	170	717			318	1349
05:00	48		23				71		17:00	161		167				328	
05:15	40		15				55		17:15	167		182				349	
05:30	69		31				100		17:30	176		212				388	
05:45	44	201	22	91			66	292	17:45	153	657	190	751			343	1408
06:00	54		46				100		18:00	202		177				379	
06:15	83		56				139		18:15	177		170				347	
06:30	125		58				183		18:30	188		166				354	
06:45	166	428	68	228			234	656	18:45	151	718	191	704			342	1422
07:00	170		103				273		19:00	161		185				346	
07:15	192		161				353		19:15	167		164				331	
07:30	294		127				421		19:30	120		160				280	
07:45	222	878	110	501			332	1379	19:45	137	585	133	642			270	1227
08:00	167		106				273		20:00	106		141				247	
08:15	189		131				320		20:15	129		113				242	
08:30	186		91				277		20:30	86		118				204	
08:45	155	697	70	398			225	1095	20:45	80	401	119	491			199	892
09:00	146		79				225		21:00	101		136				237	
09:15	145		83				228		21:15	95		91				186	
09:30	117		107				224		21:30	69		99				168	
09:45	108	516	80	349			188	865	21:45	55	320	87	413			142	733
10:00	113		101				214		22:00	56		73				129	
10:15	140		98				238		22:15	45		66				111	
10:30	126		87				213		22:30	38		55				93	
10:45	132	511	105	391			237	902	22:45	28	167	43	237			71	404
11:00	137		106				243		23:00	22		47				69	
11:15	117		103				220		23:15	13		28				41	
11:30	168		119				287		23:30	11		23				34	
11:45	160	582	151	479			311	1061	23:45	18	64	18	116			36	180
TOTALS		4080		2577				6657	TOTALS		6113		6351				12464
SPLIT %		61.3%		38.7%				34.8%	SPLIT %		49.0%		51.0%				65.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	10,193	8,928	0	0	19,121

AM Peak Hour	07:00	11:45			07:00	PM Peak Hour	14:45	17:15			14:45
AM Pk Volume	878	510			1379	PM Pk Volume	821	761			1478
Pk Hr Factor	0.747	0.844			0.819	Pk Hr Factor	0.877	0.897			0.928
7 - 9 Volume	1575	899	0	0	2474	4 - 6 Volume	1289	1468	0	0	2757
7 - 9 Peak Hour	07:00	07:15			07:00	4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	878	504	0	0	1379	4 - 6 Pk Volume	657	751	0	0	1408
Pk Hr Factor	0.747	0.783	0.000	0.000	0.819	Pk Hr Factor	0.933	0.886	0.000	0.000	0.907

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. 68th St & Limonite Ave

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_008

DAILY TOTALS	NB	SB	EB	WB	Total
	10,243	9,038	0	0	19,281

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	12		11						23		12:00	138		130						268	
00:15	8		16						24		12:15	153		107						260	
00:30	12		15						27		12:30	122		122						244	
00:45	5	37	13	55					18	92	12:45	141	554	128	487					269	1041
01:00	7		11						18		13:00	118		136						254	
01:15	4		6						10		13:15	145		158						303	
01:30	4		11						15		13:30	154		126						280	
01:45	4	19	10	38					14	57	13:45	144	561	149	569					293	1130
02:00	3		6						9		14:00	193		122						315	
02:15	12		9						21		14:15	184		130						314	
02:30	6		2						8		14:30	155		139						294	
02:45	8	29	10	27					18	56	14:45	132	664	152	543					284	1207
03:00	4		2						6		15:00	232		152						384	
03:15	9		8						17		15:15	166		178						344	
03:30	7		5						12		15:30	182		198						380	
03:45	23	43	6	21					29	64	15:45	153	733	174	702					327	1435
04:00	23		9						32		16:00	150		139						289	
04:15	23		9						32		16:15	156		166						322	
04:30	33		11						44		16:30	179		179						358	
04:45	44	123	14	43					58	166	16:45	141	626	166	650					307	1276
05:00	48		16						64		17:00	162		184						346	
05:15	52		23						75		17:15	183		171						354	
05:30	69		18						87		17:30	168		177						345	
05:45	57	226	24	81					81	307	17:45	156	669	202	734					358	1403
06:00	53		40						93		18:00	178		164						342	
06:15	107		48						155		18:15	165		168						333	
06:30	114		67						181		18:30	157		169						326	
06:45	133	407	80	235					213	642	18:45	152	652	192	693					344	1345
07:00	183		101						284		19:00	192		180						372	
07:15	172		118						290		19:15	145		148						293	
07:30	216		111						327		19:30	111		164						275	
07:45	222	793	128	458					350	1251	19:45	120	568	130	622					250	1190
08:00	289		99						388		20:00	124		146						270	
08:15	208		153						361		20:15	144		137						281	
08:30	229		169						398		20:30	108		141						249	
08:45	223	949	108	529					331	1478	20:45	127	503	124	548					251	1051
09:00	169		96						265		21:00	106		130						236	
09:15	117		89						206		21:15	94		114						208	
09:30	117		102						219		21:30	57		108						165	
09:45	116	519	89	376					205	895	21:45	41	298	78	430					119	728
10:00	122		93						215		22:00	49		68						117	
10:15	111		100						211		22:15	38		70						108	
10:30	123		96						219		22:30	41		55						96	
10:45	149	505	99	388					248	893	22:45	32	160	47	240					79	400
11:00	135		110						245		23:00	25		33						58	
11:15	140		126						266		23:15	13		27						40	
11:30	152		120						272		23:30	20		23						43	
11:45	112	539	118	474					230	1013	23:45	8	66	12	95					20	161
TOTALS		4189		2725						6914	TOTALS		6054		6313						12367
SPLIT %		60.6%		39.4%						35.9%	SPLIT %		49.0%		51.0%						64.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	10,243	9,038	0	0	19,281

AM Peak Hour	08:00	07:45			07:45	PM Peak Hour	15:00	17:00			15:00
AM Pk Volume	949	549			1497	PM Pk Volume	733	734			1435
Pk Hr Factor	0.821	0.812			0.940	Pk Hr Factor	0.790	0.908			0.934
7 - 9 Volume	1742	987	0	0	2729	4 - 6 Volume	1295	1384	0	0	2679
7 - 9 Peak Hour	08:00	07:45			07:45	4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	949	549	0	0	1497	4 - 6 Pk Volume	669	734	0	0	1403
Pk Hr Factor	0.821	0.812	0.000	0.000	0.940	Pk Hr Factor	0.914	0.908	0.000	0.000	0.980

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. 68th St & Limonite Ave

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_008

DAILY TOTALS	NB	SB	EB	WB	Total
	9,765	8,879	0	0	18,644

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	16		19				35		12:00	159		115				274	
00:15	15		20				35		12:15	124		131				255	
00:30	7		12				19		12:30	132		111				243	
00:45	9	47	9	60			18	107	12:45	152	567	135	492			287	1059
01:00	7		9				16		13:00	108		129				237	
01:15	5		5				10		13:15	114		132				246	
01:30	4		7				11		13:30	139		142				281	
01:45	6	22	12	33			18	55	13:45	125	486	136	539			261	1025
02:00	8		4				12		14:00	106		129				235	
02:15	4		3				7		14:15	142		132				274	
02:30	7		6				13		14:30	134		160				294	
02:45	12	31	4	17			16	48	14:45	182	564	149	570			331	1134
03:00	10		4				14		15:00	219		177				396	
03:15	13		9				22		15:15	208		191				399	
03:30	13		8				21		15:30	176		174				350	
03:45	20	56	5	26			25	82	15:45	161	764	151	693			312	1457
04:00	15		7				22		16:00	138		152				290	
04:15	22		6				28		16:15	132		174				306	
04:30	32		11				43		16:30	159		198				357	
04:45	40	109	15	39			55	148	16:45	153	582	176	700			329	1282
05:00	47		23				70		17:00	136		175				311	
05:15	60		19				79		17:15	186		195				381	
05:30	58		25				83		17:30	170		196				366	
05:45	47	212	24	91			71	303	17:45	159	651	214	780			373	1431
06:00	63		43				106		18:00	165		185				350	
06:15	72		58				130		18:15	149		176				325	
06:30	113		68				181		18:30	168		173				341	
06:45	159	407	70	239			229	646	18:45	172	654	181	715			353	1369
07:00	159		111				270		19:00	175		164				339	
07:15	189		149				338		19:15	148		152				300	
07:30	254		120				374		19:30	135		156				291	
07:45	220	822	100	480			320	1302	19:45	112	570	123	595			235	1165
08:00	190		92				282		20:00	122		155				277	
08:15	175		122				297		20:15	126		118				244	
08:30	175		106				281		20:30	97		134				231	
08:45	153	693	74	394			227	1087	20:45	94	439	128	535			222	974
09:00	132		75				207		21:00	96		121				217	
09:15	155		82				237		21:15	71		102				173	
09:30	128		95				223		21:30	68		98				166	
09:45	111	526	84	336			195	862	21:45	52	287	81	402			133	689
10:00	139		96				235		22:00	40		70				110	
10:15	123		90				213		22:15	45		61				106	
10:30	129		82				211		22:30	33		49				82	
10:45	125	516	116	384			241	900	22:45	37	155	50	230			87	385
11:00	121		92				213		23:00	21		37				58	
11:15	129		94				223		23:15	25		24				49	
11:30	153		108				261		23:30	14		28				42	
11:45	129	532	131	425			260	957	23:45	13	73	15	104			28	177
TOTALS		3973		2524				6497	TOTALS		5792		6355				12147
SPLIT %		61.2%		38.8%				34.8%	SPLIT %		47.7%		52.3%				65.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	9,765	8,879	0	0	18,644

AM Peak Hour	07:15	11:45			07:15	PM Peak Hour	14:45	17:15			14:45
AM Pk Volume	853	488			1314	PM Pk Volume	785	790			1476
Pk Hr Factor	0.840	0.931			0.878	Pk Hr Factor	0.896	0.923			0.925
7 - 9 Volume	1515	874	0	0	2389	4 - 6 Volume	1233	1480	0	0	2713
7 - 9 Peak Hour	07:15	07:00			07:15	4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	853	480	0	0	1314	4 - 6 Pk Volume	651	780	0	0	1431
Pk Hr Factor	0.840	0.805	0.000	0.000	0.878	Pk Hr Factor	0.875	0.911	0.000	0.000	0.939

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Schleisman Rd & 68th St

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_007

DAILY TOTALS	NB	SB	EB	WB	Total
	5,948	5,135	0	0	11,083

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	9		12				21		12:00	97		62				159	
00:15	5		7				12		12:15	98		86				184	
00:30	4		6				10		12:30	95		88				183	
00:45	1	19	6	31			7	50	12:45	82	372	81	317			163	689
01:00	3		4				7		13:00	75		77				152	
01:15	3		6				9		13:15	81		75				156	
01:30	0		6				6		13:30	92		82				174	
01:45	3	9	3	19			6	28	13:45	97	345	62	296			159	641
02:00	3		3				6		14:00	118		68				186	
02:15	3		2				5		14:15	97		80				177	
02:30	4		1				5		14:30	99		101				200	
02:45	3	13	8	14			11	27	14:45	123	437	114	363			237	800
03:00	2		0				2		15:00	194		129				323	
03:15	3		1				4		15:15	159		105				264	
03:30	4		2				6		15:30	156		88				244	
03:45	9	18	5	8			14	26	15:45	118	627	107	429			225	1056
04:00	3		8				11		16:00	103		87				190	
04:15	9		5				14		16:15	112		86				198	
04:30	10		7				17		16:30	125		97				222	
04:45	9	31	13	33			22	64	16:45	109	449	93	363			202	812
05:00	12		6				18		17:00	104		90				194	
05:15	13		17				30		17:15	104		108				212	
05:30	16		11				27		17:30	128		92				220	
05:45	13	54	9	43			22	97	17:45	89	425	131	421			220	846
06:00	19		23				42		18:00	98		86				184	
06:15	25		21				46		18:15	102		84				186	
06:30	56		36				92		18:30	102		102				204	
06:45	69	169	38	118			107	287	18:45	73	375	83	355			156	730
07:00	78		89				167		19:00	111		91				202	
07:15	123		145				268		19:15	85		71				156	
07:30	179		91				270		19:30	70		72				142	
07:45	110	490	84	409			194	899	19:45	69	335	70	304			139	639
08:00	95		73				168		20:00	50		60				110	
08:15	102		64				166		20:15	59		69				128	
08:30	76		63				139		20:30	56		60				116	
08:45	89	362	41	241			130	603	20:45	45	210	55	244			100	454
09:00	78		57				135		21:00	45		55				100	
09:15	78		51				129		21:15	49		60				109	
09:30	63		60				123		21:30	37		42				79	
09:45	51	270	60	228			111	498	21:45	21	152	28	185			49	337
10:00	66		70				136		22:00	21		33				54	
10:15	74		62				136		22:15	25		34				59	
10:30	75		62				137		22:30	10		22				32	
10:45	86	301	79	273			165	574	22:45	17	73	11	100			28	173
11:00	98		75				173		23:00	11		19				30	
11:15	78		63				141		23:15	10		13				23	
11:30	104		76				180		23:30	7		11				18	
11:45	98	378	71	285			169	663	23:45	6	34	13	56			19	90
TOTALS		2114		1702				3816	TOTALS		3834		3433				7267
SPLIT %		55.4%		44.6%				34.4%	SPLIT %		52.8%		47.2%				65.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,948	5,135	0	0	11,083

AM Peak Hour	07:15	07:00			07:15	PM Peak Hour	14:45	14:30			14:45
AM Pk Volume	507	409			900	PM Pk Volume	632	449			1068
Pk Hr Factor	0.708	0.705			0.833	Pk Hr Factor	0.814	0.870			0.827
7 - 9 Volume	852	650	0	0	1502	4 - 6 Volume	874	784	0	0	1658
7 - 9 Peak Hour	07:15	07:00			07:15	4 - 6 Peak Hour	16:15	17:00			17:00
7 - 9 Pk Volume	507	409	0	0	900	4 - 6 Pk Volume	450	421	0	0	846
Pk Hr Factor	0.708	0.705	0.000	0.000	0.833	Pk Hr Factor	0.900	0.803	0.000	0.000	0.961

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Schleisman Rd & 68th St

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_007

DAILY TOTALS	NB	SB	EB	WB	Total
	6,189	5,052	0	0	11,241

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		2				5		12:00	100		71				171	
00:15	4		6				10		12:15	103		51				154	
00:30	2		5				7		12:30	88		82				170	
00:45	5	14	5	18			10	32	12:45	100	391	76	280			176	671
01:00	3		6				9		13:00	106		75				181	
01:15	1		1				2		13:15	89		105				194	
01:30	2		4				6		13:30	111		85				196	
01:45	1	7	3	14			4	21	13:45	97	403	85	350			182	753
02:00	0		2				2		14:00	135		112				247	
02:15	6		4				10		14:15	143		88				231	
02:30	3		1				4		14:30	117		105				222	
02:45	2	11	4	11			6	22	14:45	126	521	118	423			244	944
03:00	1		1				2		15:00	194		98				292	
03:15	1		1				2		15:15	132		94				226	
03:30	3		4				7		15:30	143		103				246	
03:45	9	14	5	11			14	25	15:45	131	600	88	383			219	983
04:00	9		1				10		16:00	127		99				226	
04:15	7		5				12		16:15	131		82				213	
04:30	8		9				17		16:30	124		104				228	
04:45	11	35	11	26			22	61	16:45	110	492	93	378			203	870
05:00	17		11				28		17:00	112		104				216	
05:15	12		9				21		17:15	121		94				215	
05:30	14		4				18		17:30	114		100				214	
05:45	15	58	18	42			33	100	17:45	122	469	111	409			233	878
06:00	10		20				30		18:00	121		102				223	
06:15	38		28				66		18:15	103		79				182	
06:30	48		32				80		18:30	81		93				174	
06:45	59	155	47	127			106	282	18:45	80	385	85	359			165	744
07:00	80		57				137		19:00	108		77				185	
07:15	76		53				129		19:15	83		79				162	
07:30	114		50				164		19:30	68		66				134	
07:45	112	382	70	230			182	612	19:45	66	325	64	286			130	611
08:00	131		66				197		20:00	76		71				147	
08:15	101		128				229		20:15	78		77				155	
08:30	122		121				243		20:30	68		57				125	
08:45	152	506	76	391			228	897	20:45	61	283	42	247			103	530
09:00	93		61				154		21:00	50		41				91	
09:15	49		59				108		21:15	45		43				88	
09:30	67		77				144		21:30	27		36				63	
09:45	54	263	57	254			111	517	21:45	28	150	38	158			66	308
10:00	69		56				125		22:00	24		21				45	
10:15	59		59				118		22:15	16		21				37	
10:30	65		50				115		22:30	19		20				39	
10:45	83	276	59	224			142	500	22:45	18	77	14	76			32	153
11:00	83		74				157		23:00	14		17				31	
11:15	89		74				163		23:15	11		19				30	
11:30	95		67				162		23:30	10		13				23	
11:45	65	332	81	296			146	628	23:45	5	40	10	59			15	99
TOTALS		2053		1644				3697	TOTALS		4136		3408				7544
SPLIT %		55.5%		44.5%				32.9%	SPLIT %		54.8%		45.2%				67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	6,189	5,052	0	0	11,241

AM Peak Hour	08:00	08:00			08:00	PM Peak Hour	15:00	14:00			14:45
AM Pk Volume	506	391			897	PM Pk Volume	600	423			1008
Pk Hr Factor	0.832	0.764			0.923	Pk Hr Factor	0.773	0.896			0.863
7 - 9 Volume	888	621	0	0	1509	4 - 6 Volume	961	787	0	0	1748
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	17:00			17:00
7 - 9 Pk Volume	506	391	0	0	897	4 - 6 Pk Volume	492	409	0	0	878
Pk Hr Factor	0.832	0.764	0.000	0.000	0.923	Pk Hr Factor	0.939	0.921	0.000	0.000	0.942

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Schleisman Rd & 68th St

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_007

DAILY TOTALS	NB	SB	EB	WB	Total
	6,067	5,044	0	0	11,111

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	8		9						17		12:00	96		77						173	
00:15	5		9						14		12:15	104		76						180	
00:30	5		5						10		12:30	106		81						187	
00:45	4	22	2	25					6	47	12:45	96	402	87	321					183	723
01:00	4		6						10		13:00	81		81						162	
01:15	2		7						9		13:15	81		97						178	
01:30	3		3						6		13:30	90		93						183	
01:45	1	10	2	18					3	28	13:45	98	350	77	348					175	698
02:00	1		1						2		14:00	95		64						159	
02:15	2		1						3		14:15	87		75						162	
02:30	2		4						6		14:30	82		94						176	
02:45	3	8	2	8					5	16	14:45	153	417	100	333					253	750
03:00	2		1						3		15:00	166		119						285	
03:15	6		2						8		15:15	163		95						258	
03:30	5		2						7		15:30	139		86						225	
03:45	5	18	11	16					16	34	15:45	139	607	88	388					227	995
04:00	4		1						5		16:00	102		92						194	
04:15	7		5						12		16:15	96		75						171	
04:30	13		12						25		16:30	100		79						179	
04:45	14	38	8	26					22	64	16:45	101	399	100	346					201	745
05:00	13		14						27		17:00	94		90						184	
05:15	22		10						32		17:15	115		97						212	
05:30	16		10						26		17:30	107		88						195	
05:45	14	65	17	51					31	116	17:45	106	422	96	371					202	793
06:00	17		26						43		18:00	100		93						193	
06:15	32		31						63		18:15	80		87						167	
06:30	47		49						96		18:30	114		81						195	
06:45	62	158	38	144					100	302	18:45	99	393	94	355					193	748
07:00	80		73						153		19:00	104		71						175	
07:15	133		154						287		19:15	88		76						164	
07:30	182		105						287		19:30	83		68						151	
07:45	126	521	73	405					199	926	19:45	75	350	60	275					135	625
08:00	111		73						184		20:00	72		65						137	
08:15	86		68						154		20:15	81		56						137	
08:30	89		67						156		20:30	52		54						106	
08:45	94	380	64	272					158	652	20:45	49	254	58	233					107	487
09:00	91		49						140		21:00	56		49						105	
09:15	75		46						121		21:15	42		54						96	
09:30	59		53						112		21:30	35		43						78	
09:45	85	310	53	201					138	511	21:45	30	163	32	178					62	341
10:00	84		78						162		22:00	20		32						52	
10:15	78		59						137		22:15	25		24						49	
10:30	86		67						153		22:30	9		23						32	
10:45	75	323	90	294					165	617	22:45	19	73	22	101					41	174
11:00	77		69						146		23:00	8		16						24	
11:15	93		60						153		23:15	10		7						17	
11:30	97		77						174		23:30	7		17						24	
11:45	86	353	81	287					167	640	23:45	6	31	8	48					14	79
TOTALS		2206		1747						3953	TOTALS		3861		3297						7158
SPLIT %		55.8%		44.2%						35.6%	SPLIT %		53.9%		46.1%						64.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	6,067	5,044	0	0	11,111

AM Peak Hour	07:15	07:00			07:15	PM Peak Hour	14:45	14:30			14:45
AM Pk Volume	552	405			957	PM Pk Volume	621	408			1021
Pk Hr Factor	0.758	0.657			0.834	Pk Hr Factor	0.935	0.857			0.896
7 - 9 Volume	901	677	0	0	1578	4 - 6 Volume	821	717	0	0	1538
7 - 9 Peak Hour	07:15	07:00			07:15	4 - 6 Peak Hour	17:00	16:45			17:00
7 - 9 Pk Volume	552	405	0	0	957	4 - 6 Pk Volume	422	375	0	0	793
Pk Hr Factor	0.758	0.657	0.000	0.000	0.834	Pk Hr Factor	0.917	0.938	0.000	0.000	0.935

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Citrus St & Schleisman Rd

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_006

DAILY TOTALS	NB	SB	EB	WB	Total
	10,239	9,217	0	0	19,456

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	18		15						33		12:00	150		138						288	
00:15	11		12						23		12:15	142		128						270	
00:30	14		7						21		12:30	145		143						288	
00:45	6	49	12	46					18	95	12:45	126	563	144	553					270	1116
01:00	7		4						11		13:00	121		141						262	
01:15	10		3						13		13:15	135		124						259	
01:30	3		5						8		13:30	136		157						293	
01:45	4	24	5	17					9	41	13:45	146	538	128	550					274	1088
02:00	7		2						9		14:00	168		129						297	
02:15	6		3						9		14:15	156		158						314	
02:30	8		4						12		14:30	173		171						344	
02:45	4	25	4	13					8	38	14:45	187	684	182	640					369	1324
03:00	3		4						7		15:00	262		177						439	
03:15	2		3						5		15:15	231		178						409	
03:30	7		6						13		15:30	192		179						371	
03:45	12	24	13	26					25	50	15:45	174	859	154	688					328	1547
04:00	9		20						29		16:00	160		180						340	
04:15	10		20						30		16:15	194		150						344	
04:30	16		26						42		16:30	185		184						369	
04:45	15	50	23	89					38	139	16:45	202	741	176	690					378	1431
05:00	24		23						47		17:00	175		153						328	
05:15	26		32						58		17:15	217		182						399	
05:30	44		29						73		17:30	205		221						426	
05:45	42	136	36	120					78	256	17:45	180	777	201	757					381	1534
06:00	45		58						103		18:00	206		179						385	
06:15	71		61						132		18:15	173		159						332	
06:30	124		95						219		18:30	175		145						320	
06:45	137	377	129	343					266	720	18:45	153	707	139	622					292	1329
07:00	176		192						368		19:00	194		124						318	
07:15	231		241						472		19:15	154		94						248	
07:30	263		220						483		19:30	147		104						251	
07:45	173	843	169	822					342	1665	19:45	131	626	93	415					224	1041
08:00	175		147						322		20:00	139		90						229	
08:15	147		158						305		20:15	148		83						231	
08:30	141		141						282		20:30	101		72						173	
08:45	149	612	133	579					282	1191	20:45	90	478	74	319					164	797
09:00	132		142						274		21:00	100		51						151	
09:15	128		121						249		21:15	96		71						167	
09:30	121		130						251		21:30	68		48						116	
09:45	84	465	142	535					226	1000	21:45	62	326	36	206					98	532
10:00	118		125						243		22:00	51		45						96	
10:15	98		118						216		22:15	51		31						82	
10:30	117		127						244		22:30	30		25						55	
10:45	134	467	124	494					258	961	22:45	25	157	23	124					48	281
11:00	155		123						278		23:00	39		19						58	
11:15	131		126						257		23:15	21		19						40	
11:30	185		129						314		23:30	16		12						28	
11:45	150	621	132	510					282	1131	23:45	14	90	9	59					23	149
TOTALS		3693		3594						7287	TOTALS		6546		5623						12169
SPLIT %		50.7%		49.3%						37.5%	SPLIT %		53.8%		46.2%						62.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	10,239	9,217	0	0	19,456

AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	14:45	17:15			17:15
AM Pk Volume	843	822			1665	PM Pk Volume	872	783			1591
Pk Hr Factor	0.801	0.853			0.862	Pk Hr Factor	0.832	0.886			0.934
7 - 9 Volume	1455	1401	0	0	2856	4 - 6 Volume	1518	1447	0	0	2965
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:45	17:00			17:00
7 - 9 Pk Volume	843	822	0	0	1665	4 - 6 Pk Volume	799	757	0	0	1534
Pk Hr Factor	0.801	0.853	0.000	0.000	0.862	Pk Hr Factor	0.921	0.856	0.000	0.000	0.900

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Citrus St & Schleisman Rd

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_006

DAILY TOTALS	NB	SB	EB	WB	Total
	10,566	9,062	0	0	19,628

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	11		5						16		12:00	132		129						261	
00:15	7		10						17		12:15	152		121						273	
00:30	8		8						16		12:30	146		127						273	
00:45	12	38	8	31					20	69	12:45	142	572	130	507					272	1079
01:00	5		5						10		13:00	139		126						265	
01:15	2		4						6		13:15	161		139						300	
01:30	7		6						13		13:30	164		141						305	
01:45	5	19	6	21					11	40	13:45	133	597	142	548					275	1145
02:00	3		6						9		14:00	175		181						356	
02:15	10		4						14		14:15	183		154						337	
02:30	7		1						8		14:30	159		173						332	
02:45	1	21	7	18					8	39	14:45	205	722	177	685					382	1407
03:00	5		5						10		15:00	241		156						397	
03:15	5		9						14		15:15	195		167						362	
03:30	3		9						12		15:30	207		170						377	
03:45	12	25	15	38					27	63	15:45	183	826	156	649					339	1475
04:00	12		15						27		16:00	179		188						367	
04:15	10		20						30		16:15	204		154						358	
04:30	13		22						35		16:30	191		162						353	
04:45	26	61	23	80					49	141	16:45	173	747	192	696					365	1443
05:00	23		24						47		17:00	201		197						398	
05:15	29		31						60		17:15	209		182						391	
05:30	41		35						76		17:30	224		201						425	
05:45	36	129	43	133					79	262	17:45	192	826	213	793					405	1619
06:00	49		45						94		18:00	233		170						403	
06:15	89		64						153		18:15	186		138						324	
06:30	88		91						179		18:30	149		158						307	
06:45	119	345	123	323					242	668	18:45	171	739	156	622					327	1361
07:00	167		141						308		19:00	227		131						358	
07:15	172		150						322		19:15	150		102						252	
07:30	226		159						385		19:30	133		82						215	
07:45	239	804	147	597					386	1401	19:45	125	635	82	397					207	1032
08:00	241		154						395		20:00	162		90						252	
08:15	163		213						376		20:15	144		94						238	
08:30	207		253						460		20:30	132		78						210	
08:45	244	855	156	776					400	1631	20:45	126	564	70	332					196	896
09:00	157		119						276		21:00	110		56						166	
09:15	93		122						215		21:15	119		50						169	
09:30	106		129						235		21:30	73		45						118	
09:45	100	456	110	480					210	936	21:45	49	351	44	195					93	546
10:00	109		118						227		22:00	48		30						78	
10:15	91		116						207		22:15	45		28						73	
10:30	118		111						229		22:30	44		22						66	
10:45	127	445	111	456					238	901	22:45	33	170	22	102					55	272
11:00	127		111						238		23:00	29		20						49	
11:15	143		148						291		23:15	20		10						30	
11:30	140		131						271		23:30	18		12						30	
11:45	122	532	136	526					258	1058	23:45	20	87	15	57					35	144
TOTALS		3730		3479						7209	TOTALS		6836		5583						12419
SPLIT %		51.7%		48.3%						36.7%	SPLIT %		55.0%		45.0%						63.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	10,566	9,062	0	0	19,628

AM Peak Hour	07:15	08:00			08:00	PM Peak Hour	17:15	17:00			17:15
AM Pk Volume	878	776			1631	PM Pk Volume	858	793			1624
Pk Hr Factor	0.911	0.767			0.886	Pk Hr Factor	0.921	0.931			0.955
7 - 9 Volume	1659	1373	0	0	3032	4 - 6 Volume	1573	1489	0	0	3062
7 - 9 Peak Hour	07:15	08:00			08:00	4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	878	776	0	0	1631	4 - 6 Pk Volume	826	793	0	0	1619
Pk Hr Factor	0.911	0.767	0.000	0.000	0.886	Pk Hr Factor	0.922	0.931	0.000	0.000	0.952

Prepared by NDS/ATD

VOLUME

Miliken Ave/Hamner Ave Bet. Citrus St & Schleisman Rd

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_006

DAILY TOTALS	NB	SB	EB	WB	Total
	10,162	9,026	0	0	19,188

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	13		10						23		12:00	156		124						280	
00:15	12		7						19		12:15	148		138						286	
00:30	12		8						20		12:30	164		135						299	
00:45	10	47	4	29					14	76	12:45	127	595	122	519					249	1114
01:00	7		7						14		13:00	131		144						275	
01:15	6		4						10		13:15	122		123						245	
01:30	3		5						8		13:30	135		163						298	
01:45	3	19	3	19					6	38	13:45	130	518	129	559					259	1077
02:00	3		5						8		14:00	170		122						292	
02:15	8		4						12		14:15	125		140						265	
02:30	5		5						10		14:30	140		141						281	
02:45	7	23	3	17					10	40	14:45	226	661	175	578					401	1239
03:00	5		0						5		15:00	228		181						409	
03:15	5		5						10		15:15	196		147						343	
03:30	7		6						13		15:30	219		183						402	
03:45	5	22	14	25					19	47	15:45	207	850	150	661					357	1511
04:00	9		12						21		16:00	188		161						349	
04:15	9		18						27		16:15	172		163						335	
04:30	19		30						49		16:30	174		181						355	
04:45	22	59	19	79					41	138	16:45	173	707	157	662					330	1369
05:00	21		27						48		17:00	165		158						323	
05:15	39		27						66		17:15	200		171						371	
05:30	39		37						76		17:30	210		185						395	
05:45	35	134	41	132					76	266	17:45	192	767	174	688					366	1455
06:00	57		56						113		18:00	193		170						363	
06:15	75		62						137		18:15	176		141						317	
06:30	97		103						200		18:30	193		139						332	
06:45	126	355	113	334					239	689	18:45	177	739	162	612					339	1351
07:00	156		168						324		19:00	194		115						309	
07:15	211		256						467		19:15	151		109						260	
07:30	264		231						495		19:30	128		95						223	
07:45	218	849	163	818					381	1667	19:45	113	586	77	396					190	982
08:00	177		153						330		20:00	119		70						189	
08:15	147		155						302		20:15	149		80						229	
08:30	147		163						310		20:30	134		79						213	
08:45	170	641	138	609					308	1250	20:45	95	497	65	294					160	791
09:00	132		141						273		21:00	100		64						164	
09:15	141		127						268		21:15	80		56						136	
09:30	117		129						246		21:30	75		49						124	
09:45	111	501	138	535					249	1036	21:45	63	318	36	205					99	523
10:00	117		141						258		22:00	34		38						72	
10:15	117		122						239		22:15	34		29						63	
10:30	122		124						246		22:30	16		32						48	
10:45	130	486	151	538					281	1024	22:45	23	107	16	115					39	222
11:00	131		139						270		23:00	28		16						44	
11:15	158		129						287		23:15	20		11						31	
11:30	160		126						286		23:30	14		14						28	
11:45	151	600	158	552					309	1152	23:45	19	81	9	50					28	131
TOTALS		3736		3687						7423	TOTALS		6426		5339						11765
SPLIT %		50.3%		49.7%						38.7%	SPLIT %		54.6%		45.4%						61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	10,162	9,026	0	0	19,188

AM Peak Hour	07:15	07:00			07:15	PM Peak Hour	14:45	17:15			14:45
AM Pk Volume	870	818			1673	PM Pk Volume	869	700			1555
Pk Hr Factor	0.824	0.799			0.845	Pk Hr Factor	0.953	0.946			0.950
7 - 9 Volume	1490	1427	0	0	2917	4 - 6 Volume	1474	1350	0	0	2824
7 - 9 Peak Hour	07:15	07:00			07:15	4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	870	818	0	0	1673	4 - 6 Pk Volume	767	688	0	0	1455
Pk Hr Factor	0.824	0.799	0.000	0.000	0.845	Pk Hr Factor	0.913	0.930	0.000	0.000	0.921

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. I-15 Entrance/Exit Ramps & Wineville Ave

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	15,282	17,182	32,464

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			37		17		54		12:00			206		226		432	
00:15			44		19		63		12:15			199		249		448	
00:30			27		13		40		12:30			245		261		506	
00:45			24	132	11	60	35	192	12:45			236	886	251	987	487	1873
01:00			22		15		37		13:00			236		246		482	
01:15			23		8		31		13:15			237		260		497	
01:30			20		18		38		13:30			242		230		472	
01:45			20	85	12	53	32	138	13:45			270	985	262	998	532	1983
02:00			9		9		18		14:00			263		243		506	
02:15			18		9		27		14:15			271		272		543	
02:30			18		19		37		14:30			238		268		506	
02:45			14	59	17	54	31	113	14:45			276	1048	198	981	474	2029
03:00			16		16		32		15:00			283		270		553	
03:15			13		27		40		15:15			299		246		545	
03:30			24		50		74		15:30			255		286		541	
03:45			15	68	61	154	76	222	15:45			277	1114	260	1062	537	2176
04:00			26		75		101		16:00			296		230		526	
04:15			31		118		149		16:15			264		274		538	
04:30			43		174		217		16:30			292		285		577	
04:45			43	143	201	568	244	711	16:45			303	1155	272	1061	575	2216
05:00			38		176		214		17:00			291		252		543	
05:15			46		240		286		17:15			310		260		570	
05:30			47		254		301		17:30			282		252		534	
05:45			82	213	182	852	264	1065	17:45			276	1159	224	988	500	2147
06:00			98		232		330		18:00			297		276		573	
06:15			99		241		340		18:15			268		252		520	
06:30			115		226		341		18:30			265		279		544	
06:45			145	457	265	964	410	1421	18:45			247	1077	223	1030	470	2107
07:00			144		268		412		19:00			241		199		440	
07:15			171		308		479		19:15			227		236		463	
07:30			184		285		469		19:30			217		203		420	
07:45			174	673	267	1128	441	1801	19:45			221	906	186	824	407	1730
08:00			159		240		399		20:00			216		229		445	
08:15			185		252		437		20:15			211		197		408	
08:30			192		273		465		20:30			190		156		346	
08:45			165	701	221	986	386	1687	20:45			207	824	147	729	354	1553
09:00			149		215		364		21:00			214		120		334	
09:15			169		243		412		21:15			157		116		273	
09:30			174		218		392		21:30			172		127		299	
09:45			162	654	222	898	384	1552	21:45			144	687	108	471	252	1158
10:00			174		239		413		22:00			118		104		222	
10:15			182		209		391		22:15			111		74		185	
10:30			204		249		453		22:30			100		70		170	
10:45			209	769	245	942	454	1711	22:45			116	445	49	297	165	742
11:00			200		236		436		23:00			79		43		122	
11:15			200		249		449		23:15			56		35		91	
11:30			194		241		435		23:30			51		35		86	
11:45			227	821	231	957	458	1778	23:45			35	221	25	138	60	359
TOTALS				4775		7616		12391	TOTALS				10507		9566		20073
SPLIT %				38.5%		61.5%		38.2%	SPLIT %				52.3%		47.7%		61.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	15,282	17,182	32,464

AM Peak Hour			11:45	07:00	11:45	PM Peak Hour			16:30	16:15	16:30
AM Pk Volume			877	1128	1844	PM Pk Volume			1196	1083	2265
Pk Hr Factor			0.895	0.916	0.911	Pk Hr Factor			0.965	0.950	0.981
7 - 9 Volume	0	0	1374	2114	3488	4 - 6 Volume	0	0	2314	2049	4363
7 - 9 Peak Hour			07:45	07:00	07:00	4 - 6 Peak Hour			16:30	16:15	16:30
7 - 9 Pk Volume	0	0	710	1128	1801	4 - 6 Pk Volume	0	0	1196	1083	2265
Pk Hr Factor	0.000	0.000	0.924	0.916	0.940	Pk Hr Factor	0.000	0.000	0.965	0.950	0.981

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. I-15 Entrance/Exit Ramps & Wineville Ave

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	15,277	16,608	31,885

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			25		14		39		12:00			201		252		453	
00:15			35		12		47		12:15			244		235		479	
00:30			29		16		45		12:30			210		245		455	
00:45			25	114	8	50	33	164	12:45			233	888	246	978	479	1866
01:00			23		15		38		13:00			247		277		524	
01:15			25		6		31		13:15			243		282		525	
01:30			14		18		32		13:30			222		253		475	
01:45			15	77	8	47	23	124	13:45			239	951	237	1049	476	2000
02:00			10		15		25		14:00			280		231		511	
02:15			14		6		20		14:15			241		263		504	
02:30			17		17		34		14:30			238		222		460	
02:45			14	55	20	58	34	113	14:45			275	1034	228	944	503	1978
03:00			18		20		38		15:00			268		257		525	
03:15			14		26		40		15:15			256		265		521	
03:30			15		47		62		15:30			290		294		584	
03:45			17	64	59	152	76	216	15:45			271	1085	253	1069	524	2154
04:00			15		81		96		16:00			306		257		563	
04:15			26		109		135		16:15			299		253		552	
04:30			36		179		215		16:30			300		199		499	
04:45			35	112	169	538	204	650	16:45			289	1194	254	963	543	2157
05:00			40		198		238		17:00			272		261		533	
05:15			52		209		261		17:15			317		259		576	
05:30			45		224		269		17:30			273		271		544	
05:45			74	211	224	855	298	1066	17:45			325	1187	260	1051	585	2238
06:00			100		200		300		18:00			316		253		569	
06:15			104		237		341		18:15			296		253		549	
06:30			120		248		368		18:30			283		227		510	
06:45			123	447	258	943	381	1390	18:45			235	1130	216	949	451	2079
07:00			171		269		440		19:00			232		241		473	
07:15			168		314		482		19:15			224		201		425	
07:30			257		285		542		19:30			199		182		381	
07:45			209	805	241	1109	450	1914	19:45			226	881	188	812	414	1693
08:00			219		261		480		20:00			205		215		420	
08:15			176		265		441		20:15			190		174		364	
08:30			157		245		402		20:30			207		147		354	
08:45			188	740	212	983	400	1723	20:45			224	826	128	664	352	1490
09:00			166		219		385		21:00			187		124		311	
09:15			152		195		347		21:15			191		127		318	
09:30			187		207		394		21:30			148		93		241	
09:45			170	675	213	834	383	1509	21:45			123	649	89	433	212	1082
10:00			161		228		389		22:00			141		69		210	
10:15			182		218		400		22:15			104		60		164	
10:30			193		219		412		22:30			87		50		137	
10:45			195	731	189	854	384	1585	22:45			100	432	39	218	139	650
11:00			165		234		399		23:00			75		49		124	
11:15			201		214		415		23:15			61		36		97	
11:30			184		219		403		23:30			54		32		86	
11:45			199	749	244	911	443	1660	23:45			50	240	27	144	77	384
TOTALS				4780		7334		12114	TOTALS				10497		9274		19771
SPLIT %				39.5%		60.5%		38.0%	SPLIT %				53.1%		46.9%		62.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	15,277	16,608	31,885

AM Peak Hour			07:30	06:45	07:15	PM Peak Hour			17:15	15:00	17:15
AM Pk Volume			861	1126	1954	PM Pk Volume			1231	1069	2274
Pk Hr Factor			0.838	0.896	0.901	Pk Hr Factor			0.947	0.909	0.972
7 - 9 Volume	0	0	1545	2092	3637	4 - 6 Volume	0	0	2381	2014	4395
7 - 9 Peak Hour			07:30	07:00	07:15	4 - 6 Peak Hour			16:00	17:00	17:00
7 - 9 Pk Volume	0	0	861	1109	1954	4 - 6 Pk Volume	0	0	1194	1051	2238
Pk Hr Factor	0.000	0.000	0.838	0.883	0.901	Pk Hr Factor	0.000	0.000	0.975	0.970	0.956

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. I-15 Entrance/Exit Ramps & Wineville Ave

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,700	16,629	31,329

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			39		18		57		12:00			209		220		429	
00:15			29		9		38		12:15			196		235		431	
00:30			22		17		39		12:30			225		217		442	
00:45			26	116	10	54	36	170	12:45			205	835	245	917	450	1752
01:00			22		8		30		13:00			237		211		448	
01:15			16		9		25		13:15			232		243		475	
01:30			21		10		31		13:30			242		231		473	
01:45			24	83	11	38	35	121	13:45			229	940	258	943	487	1883
02:00			13		14		27		14:00			232		249		481	
02:15			17		13		30		14:15			240		295		535	
02:30			8		21		29		14:30			211		261		472	
02:45			15	53	15	63	30	116	14:45			296	979	276	1081	572	2060
03:00			9		14		23		15:00			254		244		498	
03:15			19		32		51		15:15			273		281		554	
03:30			18		41		59		15:30			263		274		537	
03:45			11	57	67	154	78	211	15:45			314	1104	267	1066	581	2170
04:00			12		71		83		16:00			302		276		578	
04:15			27		134		161		16:15			289		237		526	
04:30			29		192		221		16:30			313		243		556	
04:45			45	113	195	592	240	705	16:45			279	1183	261	1017	540	2200
05:00			53		200		253		17:00			234		285		519	
05:15			59		208		267		17:15			318		307		625	
05:30			64		245		309		17:30			305		266		571	
05:45			81	257	236	889	317	1146	17:45			312	1169	253	1111	565	2280
06:00			73		205		278		18:00			318		252		570	
06:15			110		260		370		18:15			285		237		522	
06:30			107		267		374		18:30			266		263		529	
06:45			147	437	257	989	404	1426	18:45			244	1113	242	994	486	2107
07:00			145		260		405		19:00			257		215		472	
07:15			194		311		505		19:15			214		211		425	
07:30			175		273		448		19:30			227		206		433	
07:45			182	696	242	1086	424	1782	19:45			243	941	193	825	436	1766
08:00			166		214		380		20:00			206		203		409	
08:15			158		234		392		20:15			195		173		368	
08:30			149		237		386		20:30			208		145		353	
08:45			168	641	187	872	355	1513	20:45			199	808	107	628	306	1436
09:00			158		231		389		21:00			188		138		326	
09:15			142		211		353		21:15			164		103		267	
09:30			153		208		361		21:30			144		90		234	
09:45			136	589	211	861	347	1450	21:45			122	618	88	419	210	1037
10:00			172		215		387		22:00			108		61		169	
10:15			179		185		364		22:15			98		77		175	
10:30			149		227		376		22:30			83		49		132	
10:45			179	679	207	834	386	1513	22:45			82	371	37	224	119	595
11:00			156		206		362		23:00			80		44		124	
11:15			181		208		389		23:15			65		33		98	
11:30			174		191		365		23:30			60		27		87	
11:45			165	676	239	844	404	1520	23:45			37	242	24	128	61	370
TOTALS				4397		7276		11673	TOTALS				10303		9353		19656
SPLIT %				37.7%		62.3%		37.3%	SPLIT %				52.4%		47.6%		62.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,700	16,629	31,329

AM Peak Hour			11:45	06:45	07:00	PM Peak Hour			17:15	16:45	17:15
AM Pk Volume			795	1101	1782	PM Pk Volume			1253	1119	2331
Pk Hr Factor			0.883	0.885	0.882	Pk Hr Factor			0.985	0.911	0.932
7 - 9 Volume	0	0	1337	1958	3295	4 - 6 Volume	0	0	2352	2128	4480
7 - 9 Peak Hour			07:15	07:00	07:00	4 - 6 Peak Hour			16:00	16:45	17:00
7 - 9 Pk Volume	0	0	717	1086	1782	4 - 6 Pk Volume	0	0	1183	1119	2280
Pk Hr Factor	0.000	0.000	0.924	0.873	0.882	Pk Hr Factor	0.000	0.000	0.945	0.911	0.912

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Hamner Ave & I-15 Entrance/Exit Ramps

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	22,246	19,709	41,955

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			58		48		106		12:00			349		284		633	
00:15			68		58		126		12:15			320		280		600	
00:30			38		35		73		12:30			337		298		635	
00:45			40	204	33	174	73	378	12:45			331	1337	272	1134	603	2471
01:00			31		43		74		13:00			360		274		634	
01:15			34		22		56		13:15			366		305		671	
01:30			29		29		58		13:30			380		296		676	
01:45			13	107	29	123	42	230	13:45			372	1478	250	1125	622	2603
02:00			24		27		51		14:00			377		264		641	
02:15			24		23		47		14:15			372		288		660	
02:30			20		24		44		14:30			377		276		653	
02:45			29	97	25	99	54	196	14:45			349	1475	302	1130	651	2605
03:00			29		16		45		15:00			399		300		699	
03:15			37		30		67		15:15			384		288		672	
03:30			42		37		79		15:30			353		239		592	
03:45			46	154	51	134	97	288	15:45			360	1496	278	1105	638	2601
04:00			64		40		104		16:00			387		244		631	
04:15			68		47		115		16:15			356		273		629	
04:30			101		90		191		16:30			351		250		601	
04:45			100	333	116	293	216	626	16:45			321	1415	288	1055	609	2470
05:00			101		148		249		17:00			317		328		645	
05:15			115		220		335		17:15			349		332		681	
05:30			165		252		417		17:30			373		350		723	
05:45			153	534	212	832	365	1366	17:45			332	1371	312	1322	644	2693
06:00			177		254		431		18:00			333		359		692	
06:15			260		260		520		18:15			311		302		613	
06:30			283		266		549		18:30			341		320		661	
06:45			246	966	234	1014	480	1980	18:45			307	1292	301	1282	608	2574
07:00			331		272		603		19:00			298		284		582	
07:15			387		235		622		19:15			327		318		645	
07:30			355		226		581		19:30			284		280		564	
07:45			290	1363	228	961	518	2324	19:45			270	1179	281	1163	551	2342
08:00			280		239		519		20:00			249		276		525	
08:15			325		266		591		20:15			270		301		571	
08:30			332		240		572		20:30			248		246		494	
08:45			293	1230	259	1004	552	2234	20:45			198	965	248	1071	446	2036
09:00			279		231		510		21:00			255		236		491	
09:15			308		226		534		21:15			199		215		414	
09:30			292		222		514		21:30			216		239		455	
09:45			283	1162	236	915	519	2077	21:45			193	863	203	893	396	1756
10:00			270		213		483		22:00			179		172		351	
10:15			299		235		534		22:15			126		157		283	
10:30			319		229		548		22:30			104		128		232	
10:45			295	1183	262	939	557	2122	22:45			100	509	110	567	210	1076
11:00			294		253		547		23:00			117		117		234	
11:15			294		245		539		23:15			75		83		158	
11:30			333		259		592		23:30			58		72		130	
11:45			289	1210	287	1044	576	2254	23:45			73	323	58	330	131	653
TOTALS				8543		7532		16075	TOTALS				13703		12177		25880
SPLIT %				53.1%		46.9%		38.3%	SPLIT %				52.9%		47.1%		61.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	22,246	19,709	41,955

AM Peak Hour			07:00	11:45	11:45	PM Peak Hour			14:30	17:15	17:15
AM Pk Volume			1363	1149	2444	PM Pk Volume			1509	1353	2740
Pk Hr Factor			0.880	0.964	0.962	Pk Hr Factor			0.945	0.942	0.947
7 - 9 Volume	0	0	2593	1965	4558	4 - 6 Volume	0	0	2786	2377	5163
7 - 9 Peak Hour			07:00	08:00	07:00	4 - 6 Peak Hour			16:00	17:00	17:00
7 - 9 Pk Volume	0	0	1363	1004	2324	4 - 6 Pk Volume	0	0	1415	1322	2693
Pk Hr Factor	0.000	0.000	0.880	0.944	0.934	Pk Hr Factor	0.000	0.000	0.914	0.944	0.931

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Hamner Ave & I-15 Entrance/Exit Ramps

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	22,394	19,828	42,222

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			56		60		116		12:00			359		282		641	
00:15			41		42		83		12:15			348		298		646	
00:30			34		44		78		12:30			321		251		572	
00:45			47	178	42	188	89	366	12:45			343	1371	316	1147	659	2518
01:00			34		40		74		13:00			329		313		642	
01:15			28		19		47		13:15			338		310		648	
01:30			31		21		52		13:30			345		330		675	
01:45			20	113	26	106	46	219	13:45			340	1352	281	1234	621	2586
02:00			27		26		53		14:00			383		246		629	
02:15			23		32		55		14:15			407		284		691	
02:30			31		20		51		14:30			368		263		631	
02:45			23	104	28	106	51	210	14:45			385	1543	279	1072	664	2615
03:00			36		33		69		15:00			336		275		611	
03:15			31		25		56		15:15			394		308		702	
03:30			31		31		62		15:30			364		278		642	
03:45			56	154	53	142	109	296	15:45			387	1481	293	1154	680	2635
04:00			74		62		136		16:00			378		290		668	
04:15			82		54		136		16:15			367		281		648	
04:30			98		109		207		16:30			338		257		595	
04:45			96	350	115	340	211	690	16:45			324	1407	273	1101	597	2508
05:00			131		184		315		17:00			325		319		644	
05:15			128		205		333		17:15			371		305		676	
05:30			164		256		420		17:30			348		302		650	
05:45			139	562	238	883	377	1445	17:45			347	1391	337	1263	684	2654
06:00			181		233		414		18:00			323		365		688	
06:15			243		275		518		18:15			331		353		684	
06:30			300		285		585		18:30			337		302		639	
06:45			279	1003	256	1049	535	2052	18:45			305	1296	306	1326	611	2622
07:00			333		225		558		19:00			303		278		581	
07:15			348		235		583		19:15			299		288		587	
07:30			369		235		604		19:30			290		264		554	
07:45			288	1338	250	945	538	2283	19:45			277	1169	268	1098	545	2267
08:00			284		255		539		20:00			279		247		526	
08:15			276		282		558		20:15			262		287		549	
08:30			308		263		571		20:30			271		237		508	
08:45			322	1190	284	1084	606	2274	20:45			234	1046	221	992	455	2038
09:00			309		235		544		21:00			233		232		465	
09:15			269		260		529		21:15			257		229		486	
09:30			284		233		517		21:30			211		201		412	
09:45			288	1150	229	957	517	2107	21:45			167	868	161	823	328	1691
10:00			271		221		492		22:00			199		154		353	
10:15			297		243		540		22:15			180		115		295	
10:30			299		238		537		22:30			130		132		262	
10:45			291	1158	239	941	530	2099	22:45			124	633	97	498	221	1131
11:00			283		251		534		23:00			96		93		189	
11:15			313		266		579		23:15			76		72		148	
11:30			323		234		557		23:30			91		95		186	
11:45			284	1203	316	1067	600	2270	23:45			71	334	52	312	123	646
TOTALS				8503		7808		16311	TOTALS				13891		12020		25911
SPLIT %				52.1%		47.9%		38.6%	SPLIT %				53.6%		46.4%		61.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	22,394	19,828	42,222

AM Peak Hour			07:00	11:45	11:45	PM Peak Hour			14:00	17:30	17:30
AM Pk Volume			1338	1147	2459	PM Pk Volume			1543	1357	2706
Pk Hr Factor			0.907	0.907	0.952	Pk Hr Factor			0.948	0.929	0.983
7 - 9 Volume	0	0	2528	2029	4557	4 - 6 Volume	0	0	2798	2364	5162
7 - 9 Peak Hour			07:00	08:00	07:00	4 - 6 Peak Hour			16:00	17:00	17:00
7 - 9 Pk Volume	0	0	1338	1084	2283	4 - 6 Pk Volume	0	0	1407	1263	2654
Pk Hr Factor	0.000	0.000	0.907	0.954	0.945	Pk Hr Factor	0.000	0.000	0.931	0.937	0.970

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Hamner Ave & I-15 Entrance/Exit Ramps

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	21,559	19,496	41,055

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			59		44		103		12:00			295		276		571	
00:15			50		49		99		12:15			328		261		589	
00:30			42		40		82		12:30			330		253		583	
00:45			40	191	40	173	80	364	12:45			300	1253	268	1058	568	2311
01:00			38		27		65		13:00			347		268		615	
01:15			27		22		49		13:15			338		281		619	
01:30			29		29		58		13:30			334		245		579	
01:45			20	114	27	105	47	219	13:45			316	1335	301	1095	617	2430
02:00			23		21		44		14:00			334		274		608	
02:15			20		21		41		14:15			387		297		684	
02:30			14		23		37		14:30			325		274		599	
02:45			28	85	29	94	57	179	14:45			374	1420	302	1147	676	2567
03:00			16		20		36		15:00			385		324		709	
03:15			39		29		68		15:15			364		330		694	
03:30			37		32		69		15:30			383		298		681	
03:45			43	135	51	132	94	267	15:45			365	1497	293	1245	658	2742
04:00			45		51		96		16:00			367		306		673	
04:15			77		45		122		16:15			341		319		660	
04:30			109		90		199		16:30			362		279		641	
04:45			87	318	133	319	220	637	16:45			296	1366	282	1186	578	2552
05:00			114		156		270		17:00			335		322		657	
05:15			122		212		334		17:15			384		347		731	
05:30			171		235		406		17:30			348		328		676	
05:45			151	558	231	834	382	1392	17:45			325	1392	349	1346	674	2738
06:00			153		256		409		18:00			349		324		673	
06:15			244		289		533		18:15			329		368		697	
06:30			280		267		547		18:30			313		336		649	
06:45			280	957	239	1051	519	2008	18:45			325	1316	327	1355	652	2671
07:00			326		247		573		19:00			303		295		598	
07:15			352		258		610		19:15			283		293		576	
07:30			328		223		551		19:30			307		273		580	
07:45			309	1315	227	955	536	2270	19:45			292	1185	280	1141	572	2326
08:00			275		213		488		20:00			283		263		546	
08:15			325		230		555		20:15			253		257		510	
08:30			313		253		566		20:30			258		222		480	
08:45			249	1162	210	906	459	2068	20:45			238	1032	209	951	447	1983
09:00			229		230		459		21:00			228		200		428	
09:15			275		235		510		21:15			210		228		438	
09:30			304		234		538		21:30			174		196		370	
09:45			253	1061	235	934	488	1995	21:45			148	760	178	802	326	1562
10:00			288		206		494		22:00			160		165		325	
10:15			275		222		497		22:15			161		148		309	
10:30			269		216		485		22:30			126		102		228	
10:45			304	1136	232	876	536	2012	22:45			100	547	109	524	209	1071
11:00			240		211		451		23:00			101		91		192	
11:15			306		223		529		23:15			82		80		162	
11:30			268		254		522		23:30			61		67		128	
11:45			315	1129	277	965	592	2094	23:45			51	295	64	302	115	597
TOTALS				8161		7344		15505	TOTALS				13398		12152		25550
SPLIT %				52.6%		47.4%		37.8%	SPLIT %				52.4%		47.6%		62.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	21,559	19,496	41,055

AM Peak Hour			07:00	11:30	11:45	PM Peak Hour			14:45	17:45	14:45
AM Pk Volume			1315	1068	2335	PM Pk Volume			1506	1377	2760
Pk Hr Factor			0.934	0.964	0.986	Pk Hr Factor			0.978	0.935	0.973
7 - 9 Volume	0	0	2477	1861	4338	4 - 6 Volume	0	0	2758	2532	5290
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	1315	955	2270	4 - 6 Pk Volume	0	0	1392	1346	2738
Pk Hr Factor	0.000	0.000	0.934	0.925	0.930	Pk Hr Factor	0.000	0.000	0.906	0.964	0.936

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Scholar Wy & Hamner Ave

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,719	13,414	28,133

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			22		35		57		12:00			214		165		379	
00:15			19		33		52		12:15			219		173		392	
00:30			19		25		44		12:30			217		163		380	
00:45			16	76	27	120	43	196	12:45			201	851	164	665	365	1516
01:00			9		30		39		13:00			194		169		363	
01:15			13		21		34		13:15			203		193		396	
01:30			15		17		32		13:30			192		196		388	
01:45			5	42	26	94	31	136	13:45			215	804	184	742	399	1546
02:00			9		13		22		14:00			250		183		433	
02:15			8		15		23		14:15			254		200		454	
02:30			10		12		22		14:30			288		187		475	
02:45			17	44	10	50	27	94	14:45			233	1025	187	757	420	1782
03:00			18		13		31		15:00			285		186		471	
03:15			17		12		29		15:15			301		220		521	
03:30			18		21		39		15:30			294		194		488	
03:45			23	76	8	54	31	130	15:45			279	1159	210	810	489	1969
04:00			26		19		45		16:00			308		175		483	
04:15			37		28		65		16:15			243		198		441	
04:30			59		60		119		16:30			258		183		441	
04:45			57	179	80	187	137	366	16:45			246	1055	222	778	468	1833
05:00			54		102		156		17:00			248		248		496	
05:15			63		165		228		17:15			271		215		486	
05:30			105		231		336		17:30			283		231		514	
05:45			103	325	150	648	253	973	17:45			230	1032	214	908	444	1940
06:00			122		179		301		18:00			268		245		513	
06:15			166		218		384		18:15			261		225		486	
06:30			177		202		379		18:30			254		206		460	
06:45			154	619	162	761	316	1380	18:45			194	977	236	912	430	1889
07:00			211		180		391		19:00			223		207		430	
07:15			284		160		444		19:15			202		205		407	
07:30			218		159		377		19:30			209		223		432	
07:45			210	923	150	649	360	1572	19:45			194	828	201	836	395	1664
08:00			210		159		369		20:00			198		196		394	
08:15			239		158		397		20:15			174		208		382	
08:30			214		128		342		20:30			140		205		345	
08:45			236	899	152	597	388	1496	20:45			123	635	203	812	326	1447
09:00			201		128		329		21:00			125		220		345	
09:15			208		122		330		21:15			110		180		290	
09:30			196		112		308		21:30			113		155		268	
09:45			181	786	126	488	307	1274	21:45			85	433	161	716	246	1149
10:00			186		158		344		22:00			100		119		219	
10:15			199		139		338		22:15			77		121		198	
10:30			203		135		338		22:30			49		88		137	
10:45			170	758	164	596	334	1354	22:45			61	287	77	405	138	692
11:00			180		149		329		23:00			37		65		102	
11:15			202		161		363		23:15			24		55		79	
11:30			217		148		365		23:30			26		53		79	
11:45			192	791	151	609	343	1400	23:45			28	115	47	220	75	335
TOTALS				5518		4853		10371	TOTALS				9201		8561		17762
SPLIT %				53.2%		46.8%		36.9%	SPLIT %				51.8%		48.2%		63.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,719	13,414	28,133

AM Peak Hour			07:00	05:30	07:00	PM Peak Hour		15:15	16:45	15:15
AM Pk Volume			923	778	1572	PM Pk Volume		1182	916	1981
Pk Hr Factor			0.813	0.842	0.885	Pk Hr Factor		0.959	0.923	0.951
7 - 9 Volume	0	0	1822	1246	3068	4 - 6 Volume	0	2087	1686	3773
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour		16:00	16:45	16:45
7 - 9 Pk Volume	0	0	923	649	1572	4 - 6 Pk Volume	0	1055	916	1964
Pk Hr Factor	0.000	0.000	0.813	0.901	0.885	Pk Hr Factor	0.000	0.856	0.923	0.955

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Scholar Wy & Hamner Ave

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,624	13,205	27,829

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			27		47		74		12:00			206		151		357	
00:15			14		25		39		12:15			191		175		366	
00:30			6		28		34		12:30			198		169		367	
00:45			19	66	23	123	42	189	12:45			186	781	209	704	395	1485
01:00			17		28		45		13:00			199		190		389	
01:15			11		17		28		13:15			181		184		365	
01:30			6		18		24		13:30			208		216		424	
01:45			16	50	16	79	32	129	13:45			221	809	173	763	394	1572
02:00			18		20		38		14:00			254		176		430	
02:15			10		12		22		14:15			269		181		450	
02:30			14		14		28		14:30			237		180		417	
02:45			9	51	15	61	24	112	14:45			244	1004	170	707	414	1711
03:00			26		21		47		15:00			243		195		438	
03:15			12		13		25		15:15			269		197		466	
03:30			21		18		39		15:30			270		175		445	
03:45			29	88	21	73	50	161	15:45			300	1082	184	751	484	1833
04:00			30		40		70		16:00			273		182		455	
04:15			41		25		66		16:15			267		189		456	
04:30			62		70		132		16:30			206		191		397	
04:45			53	186	80	215	133	401	16:45			292	1038	194	756	486	1794
05:00			68		130		198		17:00			249		221		470	
05:15			79		167		246		17:15			254		227		481	
05:30			90		213		303		17:30			288		197		485	
05:45			97	334	186	696	283	1030	17:45			233	1024	229	874	462	1898
06:00			119		155		274		18:00			267		224		491	
06:15			166		239		405		18:15			231		206		437	
06:30			181		229		410		18:30			229		186		415	
06:45			181	647	188	811	369	1458	18:45			200	927	195	811	395	1738
07:00			247		169		416		19:00			206		185		391	
07:15			253		167		420		19:15			215		219		434	
07:30			268		158		426		19:30			192		199		391	
07:45			228	996	191	685	419	1681	19:45			195	808	217	820	412	1628
08:00			208		158		366		20:00			172		207		379	
08:15			244		179		423		20:15			155		219		374	
08:30			230		146		376		20:30			150		188		338	
08:45			225	907	169	652	394	1559	20:45			123	600	153	767	276	1367
09:00			207		116		323		21:00			122		150		272	
09:15			198		164		362		21:15			123		184		307	
09:30			204		124		328		21:30			100		151		251	
09:45			181	790	125	529	306	1319	21:45			94	439	100	585	194	1024
10:00			173		111		284		22:00			102		106		208	
10:15			220		145		365		22:15			85		95		180	
10:30			172		142		314		22:30			58		80		138	
10:45			196	761	166	564	362	1325	22:45			64	309	71	352	135	661
11:00			201		145		346		23:00			38		57		95	
11:15			201		181		382		23:15			28		64		92	
11:30			203		133		336		23:30			31		56		87	
11:45			200	805	151	610	351	1415	23:45			25	122	40	217	65	339
TOTALS				5681		5098		10779	TOTALS				8943		8107		17050
SPLIT %				52.7%		47.3%		38.7%	SPLIT %				52.5%		47.5%		61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,624	13,205	27,829

AM Peak Hour			07:00	06:15	07:00	PM Peak Hour			15:15	17:15	16:45
AM Pk Volume			996	825	1681	PM Pk Volume			1112	877	1922
Pk Hr Factor			0.929	0.863	0.987	Pk Hr Factor			0.927	0.957	0.989
7 - 9 Volume	0	0	1903	1337	3240	4 - 6 Volume	0	0	2062	1630	3692
7 - 9 Peak Hour			07:00	07:30	07:00	4 - 6 Peak Hour			16:45	17:00	16:45
7 - 9 Pk Volume	0	0	996	686	1681	4 - 6 Pk Volume	0	0	1083	874	1922
Pk Hr Factor	0.000	0.000	0.929	0.898	0.987	Pk Hr Factor	0.000	0.000	0.927	0.954	0.989

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Scholar Wy & Hamner Ave

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,401	13,143	27,544

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			34		32		66		12:00			211		164		375	
00:15			20		32		52		12:15			218		158		376	
00:30			22		28		50		12:30			213		159		372	
00:45			18	94	33	125	51	219	12:45			213	855	176	657	389	1512
01:00			11		19		30		13:00			190		172		362	
01:15			17		13		30		13:15			224		178		402	
01:30			17		18		35		13:30			194		159		353	
01:45			7	52	16	66	23	118	13:45			189	797	171	680	360	1477
02:00			12		13		25		14:00			247		179		426	
02:15			9		8		17		14:15			235		182		417	
02:30			7		13		20		14:30			235		174		409	
02:45			20	48	11	45	31	93	14:45			266	983	200	735	466	1718
03:00			8		12		20		15:00			260		220		480	
03:15			22		10		32		15:15			277		180		457	
03:30			14		21		35		15:30			243		197		440	
03:45			20	64	20	63	40	127	15:45			268	1048	183	780	451	1828
04:00			21		27		48		16:00			286		187		473	
04:15			44		24		68		16:15			229		208		437	
04:30			60		56		116		16:30			210		222		432	
04:45			46	171	90	197	136	368	16:45			237	962	201	818	438	1780
05:00			54		113		167		17:00			264		201		465	
05:15			71		163		234		17:15			288		210		498	
05:30			113		208		321		17:30			278		227		505	
05:45			104	342	174	658	278	1000	17:45			270	1100	225	863	495	1963
06:00			106		183		289		18:00			248		238		486	
06:15			175		206		381		18:15			246		244		490	
06:30			177		236		413		18:30			246		228		474	
06:45			199	657	168	793	367	1450	18:45			212	952	220	930	432	1882
07:00			205		177		382		19:00			230		231		461	
07:15			254		188		442		19:15			220		201		421	
07:30			254		172		426		19:30			204		201		405	
07:45			216	929	151	688	367	1617	19:45			171	825	203	836	374	1661
08:00			211		132		343		20:00			169		190		359	
08:15			247		147		394		20:15			161		198		359	
08:30			212		154		366		20:30			124		177		301	
08:45			204	874	128	561	332	1435	20:45			141	595	169	734	310	1329
09:00			207		126		333		21:00			114		179		293	
09:15			173		145		318		21:15			111		160		271	
09:30			200		140		340		21:30			83		148		231	
09:45			203	783	127	538	330	1321	21:45			78	386	141	628	219	1014
10:00			195		118		313		22:00			91		134		225	
10:15			196		124		320		22:15			99		99		198	
10:30			163		155		318		22:30			68		80		148	
10:45			170	724	140	537	310	1261	22:45			45	303	71	384	116	687
11:00			181		136		317		23:00			33		58		91	
11:15			189		141		330		23:15			30		63		93	
11:30			177		147		324		23:30			24		64		88	
11:45			207	754	171	595	378	1349	23:45			16	103	47	232	63	335
TOTALS				5492		4866		10358	TOTALS				8909		8277		17186
SPLIT %				53.0%		47.0%		37.6%	SPLIT %				51.8%		48.2%		62.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,401	13,143	27,544

AM Peak Hour			07:15	05:45	06:45	PM Peak Hour			17:00	17:45	17:15
AM Pk Volume			935	799	1617	PM Pk Volume			1100	935	1984
Pk Hr Factor			0.920	0.846	0.915	Pk Hr Factor			0.955	0.958	0.982
7 - 9 Volume	0	0	1803	1249	3052	4 - 6 Volume	0	0	2062	1681	3743
7 - 9 Peak Hour			07:15	07:00	07:00	4 - 6 Peak Hour			17:00	17:00	17:00
7 - 9 Pk Volume	0	0	935	688	1617	4 - 6 Pk Volume	0	0	1100	863	1963
Pk Hr Factor	0.000	0.000	0.920	0.915	0.915	Pk Hr Factor	0.000	0.000	0.955	0.950	0.972

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Harrison Ave & Scholar Wy

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,706	12,166	24,872

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			18		32		50		12:00			186		155		341	
00:15			19		28		47		12:15			177		148		325	
00:30			12		17		29		12:30			180		151		331	
00:45			11	60	26	103	37	163	12:45			149	692	149	603	298	1295
01:00			7		24		31		13:00			144		147		291	
01:15			10		18		28		13:15			157		163		320	
01:30			10		14		24		13:30			152		172		324	
01:45			3	30	24	80	27	110	13:45			185	638	150	632	335	1270
02:00			10		9		19		14:00			200		154		354	
02:15			10		12		22		14:15			233		158		391	
02:30			8		13		21		14:30			266		149		415	
02:45			14	42	8	42	22	84	14:45			224	923	159	620	383	1543
03:00			14		14		28		15:00			274		173		447	
03:15			15		10		25		15:15			282		196		478	
03:30			19		19		38		15:30			273		190		463	
03:45			19	67	8	51	27	118	15:45			260	1089	178	737	438	1826
04:00			25		18		43		16:00			264		156		420	
04:15			26		27		53		16:15			250		188		438	
04:30			48		54		102		16:30			246		171		417	
04:45			42	141	79	178	121	319	16:45			223	983	192	707	415	1690
05:00			46		96		142		17:00			238		197		435	
05:15			49		168		217		17:15			246		201		447	
05:30			85		234		319		17:30			246		220		466	
05:45			82	262	176	674	258	936	17:45			220	950	171	789	391	1739
06:00			103		174		277		18:00			206		214		420	
06:15			141		209		350		18:15			243		207		450	
06:30			148		193		341		18:30			221		173		394	
06:45			139	531	182	758	321	1289	18:45			160	830	207	801	367	1631
07:00			192		171		363		19:00			180		188		368	
07:15			228		163		391		19:15			172		186		358	
07:30			202		163		365		19:30			183		197		380	
07:45			200	822	166	663	366	1485	19:45			171	706	185	756	356	1462
08:00			217		158		375		20:00			153		173		326	
08:15			211		160		371		20:15			151		177		328	
08:30			181		135		316		20:30			100		173		273	
08:45			223	832	146	599	369	1431	20:45			104	508	177	700	281	1208
09:00			169		129		298		21:00			97		179		276	
09:15			160		116		276		21:15			90		176		266	
09:30			194		108		302		21:30			93		133		226	
09:45			140	663	116	469	256	1132	21:45			67	347	142	630	209	977
10:00			144		125		269		22:00			93		103		196	
10:15			151		134		285		22:15			68		114		182	
10:30			176		116		292		22:30			36		76		112	
10:45			142	613	121	496	263	1109	22:45			48	245	77	370	125	615
11:00			148		131		279		23:00			30		59		89	
11:15			163		133		296		23:15			30		47		77	
11:30			163		126		289		23:30			19		44		63	
11:45			158	632	130	520	288	1152	23:45			21	100	38	188	59	288
TOTALS				4695		4633		9328	TOTALS				8011		7533		15544
SPLIT %				50.3%		49.7%		37.5%	SPLIT %				51.5%		48.5%		62.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,706	12,166	24,872

AM Peak Hour			07:15	05:30	07:15	PM Peak Hour			15:00	17:30	15:00
AM Pk Volume			847	793	1497	PM Pk Volume			1089	812	1826
Pk Hr Factor			0.929	0.847	0.957	Pk Hr Factor			0.965	0.923	0.955
7 - 9 Volume	0	0	1654	1262	2916	4 - 6 Volume	0	0	1933	1496	3429
7 - 9 Peak Hour			07:15	07:00	07:15	4 - 6 Peak Hour			16:00	16:45	16:45
7 - 9 Pk Volume	0	0	847	663	1497	4 - 6 Pk Volume	0	0	983	810	1763
Pk Hr Factor	0.000	0.000	0.929	0.969	0.957	Pk Hr Factor	0.000	0.000	0.931	0.920	0.946

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Harrison Ave & Scholar Wy

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,535	12,095	24,630

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			17		38		55		12:00			167		134		301	
00:15			11		22		33		12:15			160		169		329	
00:30			4		21		25		12:30			152		170		322	
00:45			12	44	21	102	33	146	12:45			141	620	172	645	313	1265
01:00			12		22		34		13:00			158		182		340	
01:15			6		15		21		13:15			147		161		308	
01:30			6		12		18		13:30			190		166		356	
01:45			14	38	11	60	25	98	13:45			189	684	163	672	352	1356
02:00			14		15		29		14:00			219		154		373	
02:15			9		16		25		14:15			212		165		377	
02:30			12		15		27		14:30			183		158		341	
02:45			8	43	13	59	21	102	14:45			236	850	142	619	378	1469
03:00			18		19		37		15:00			224		174		398	
03:15			8		15		23		15:15			246		170		416	
03:30			19		14		33		15:30			257		156		413	
03:45			27	72	15	63	42	135	15:45			284	1011	175	675	459	1686
04:00			20		33		53		16:00			256		162		418	
04:15			31		21		52		16:15			258		187		445	
04:30			54		69		123		16:30			198		186		384	
04:45			42	147	86	209	128	356	16:45			241	953	156	691	397	1644
05:00			53		123		176		17:00			245		184		429	
05:15			66		168		234		17:15			225		190		415	
05:30			83		226		309		17:30			243		202		445	
05:45			80	282	198	715	278	997	17:45			235	948	182	758	417	1706
06:00			109		166		275		18:00			249		211		460	
06:15			119		242		361		18:15			218		185		403	
06:30			152		238		390		18:30			197		185		382	
06:45			156	536	193	839	349	1375	18:45			165	829	171	752	336	1581
07:00			218		165		383		19:00			194		153		347	
07:15			222		176		398		19:15			182		188		370	
07:30			213		173		386		19:30			168		165		333	
07:45			209	862	165	679	374	1541	19:45			160	704	201	707	361	1411
08:00			218		178		396		20:00			144		193		337	
08:15			217		182		399		20:15			125		190		315	
08:30			213		139		352		20:30			116		160		276	
08:45			174	822	156	655	330	1477	20:45			101	486	132	675	233	1161
09:00			150		124		274		21:00			89		138		227	
09:15			160		148		308		21:15			90		154		244	
09:30			165		109		274		21:30			84		146		230	
09:45			150	625	108	489	258	1114	21:45			74	337	91	529	165	866
10:00			142		104		246		22:00			77		102		179	
10:15			182		121		303		22:15			65		74		139	
10:30			141		142		283		22:30			50		67		117	
10:45			159	624	128	495	287	1119	22:45			56	248	64	307	120	555
11:00			168		114		282		23:00			32		46		78	
11:15			158		136		294		23:15			28		57		85	
11:30			164		135		299		23:30			26		51		77	
11:45			172	662	126	511	298	1173	23:45			22	108	35	189	57	297
TOTALS				4757		4876		9633	TOTALS				7778		7219		14997
SPLIT %				49.4%		50.6%		39.1%	SPLIT %				51.9%		48.1%		60.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,535	12,095	24,630

AM Peak Hour			07:00	05:45	07:30	PM Peak Hour			15:30	17:15	17:15
AM Pk Volume			862	844	1555	PM Pk Volume			1055	785	1737
Pk Hr Factor			0.971	0.872	0.974	Pk Hr Factor			0.929	0.930	0.944
7 - 9 Volume	0	0	1684	1334	3018	4 - 6 Volume	0	0	1901	1449	3350
7 - 9 Peak Hour			07:00	07:30	07:30	4 - 6 Peak Hour			16:45	17:00	17:00
7 - 9 Pk Volume	0	0	862	698	1555	4 - 6 Pk Volume	0	0	954	758	1706
Pk Hr Factor	0.000	0.000	0.971	0.959	0.974	Pk Hr Factor	0.000	0.000	0.973	0.938	0.958

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Harrison Ave & Scholar Wy

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,445	12,073	24,518

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			26		29		55		12:00			163		146		309	
00:15			15		27		42		12:15			204		145		349	
00:30			16		22		38		12:30			172		136		308	
00:45			13	70	28	106	41	176	12:45			145	684	154	581	299	1265
01:00			11		20		31		13:00			184		164		348	
01:15			15		13		28		13:15			169		142		311	
01:30			17		16		33		13:30			164		137		301	
01:45			4	47	9	58	13	105	13:45			156	673	155	598	311	1271
02:00			13		9		22		14:00			192		160		352	
02:15			5		9		14		14:15			214		151		365	
02:30			7		9		16		14:30			223		149		372	
02:45			13	38	12	39	25	77	14:45			230	859	180	640	410	1499
03:00			5		15		20		15:00			257		194		451	
03:15			18		9		27		15:15			219		168		387	
03:30			13		17		30		15:30			238		178		416	
03:45			14	50	15	56	29	106	15:45			243	957	146	686	389	1643
04:00			25		21		46		16:00			248		169		417	
04:15			34		25		59		16:15			232		188		420	
04:30			44		53		97		16:30			208		194		402	
04:45			34	137	93	192	127	329	16:45			233	921	181	732	414	1653
05:00			45		115		160		17:00			238		168		406	
05:15			69		161		230		17:15			274		194		468	
05:30			87		211		298		17:30			235		196		431	
05:45			89	290	190	677	279	967	17:45			248	995	215	773	463	1768
06:00			85		177		262		18:00			232		216		448	
06:15			157		222		379		18:15			225		214		439	
06:30			140		227		367		18:30			207		220		427	
06:45			173	555	187	813	360	1368	18:45			189	853	195	845	384	1698
07:00			194		182		376		19:00			187		204		391	
07:15			226		184		410		19:15			196		193		389	
07:30			210		162		372		19:30			175		183		358	
07:45			226	856	155	683	381	1539	19:45			150	708	184	764	334	1472
08:00			193		142		335		20:00			129		165		294	
08:15			207		140		347		20:15			129		187		316	
08:30			186		158		344		20:30			110		156		266	
08:45			161	747	143	583	304	1330	20:45			117	485	147	655	264	1140
09:00			172		127		299		21:00			98		146		244	
09:15			141		142		283		21:15			87		147		234	
09:30			165		127		292		21:30			55		134		189	
09:45			170	648	113	509	283	1157	21:45			58	298	117	544	175	842
10:00			156		109		265		22:00			86		112		198	
10:15			163		112		275		22:15			81		101		182	
10:30			124		145		269		22:30			48		74		122	
10:45			143	586	108	474	251	1060	22:45			39	254	58	345	97	599
11:00			149		114		263		23:00			27		58		85	
11:15			157		133		290		23:15			30		56		86	
11:30			158		118		276		23:30			21		49		70	
11:45			175	639	152	517	327	1156	23:45			17	95	40	203	57	298
TOTALS				4663		4707		9370	TOTALS				7782		7366		15148
SPLIT %				49.8%		50.2%		38.2%	SPLIT %				51.4%		48.6%		61.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,445	12,073	24,518

AM Peak Hour			07:00	06:15	07:00	PM Peak Hour		17:00	17:45	17:15
AM Pk Volume			856	818	1539	PM Pk Volume		995	865	1810
Pk Hr Factor			0.947	0.901	0.938	Pk Hr Factor		0.908	0.983	0.967
7 - 9 Volume	0	0	1603	1266	2869	4 - 6 Volume	0	1916	1505	3421
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour		17:00	17:00	17:00
7 - 9 Pk Volume	0	0	856	683	1539	4 - 6 Pk Volume	0	995	773	1768
Pk Hr Factor	0.000	0.000	0.947	0.928	0.938	Pk Hr Factor	0.000	0.908	0.899	0.944

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Archibald Ave & Harrison Ave

Day: Thursday
Date: 4/23/2015

City: Eastvale
Project #: CA15_6063_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,897	9,365	17,262

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			16		17		33		12:00			93		115		208	
00:15			20		14		34		12:15			93		99		192	
00:30			10		10		20		12:30			99		100		199	
00:45			8	54	17	58	25	112	12:45			94	379	110	424	204	803
01:00			11		15		26		13:00			91		107		198	
01:15			6		11		17		13:15			89		107		196	
01:30			4		8		12		13:30			100		108		208	
01:45			5	26	12	46	17	72	13:45			113	393	98	420	211	813
02:00			12		10		22		14:00			142		110		252	
02:15			6		9		15		14:15			179		95		274	
02:30			12		9		21		14:30			157		87		244	
02:45			8	38	4	32	12	70	14:45			160	638	86	378	246	1016
03:00			8		12		20		15:00			194		115		309	
03:15			10		15		25		15:15			173		128		301	
03:30			6		32		38		15:30			196		117		313	
03:45			9	33	19	78	28	111	15:45			215	778	129	489	344	1267
04:00			16		23		39		16:00			193		138		331	
04:15			8		33		41		16:15			193		124		317	
04:30			17		89		106		16:30			178		121		299	
04:45			17	58	118	263	135	321	16:45			194	758	117	500	311	1258
05:00			21		138		159		17:00			166		130		296	
05:15			29		189		218		17:15			208		129		337	
05:30			37		291		328		17:30			200		122		322	
05:45			42	129	217	835	259	964	17:45			193	767	117	498	310	1265
06:00			62		206		268		18:00			170		126		296	
06:15			60		235		295		18:15			197		107		304	
06:30			68		236		304		18:30			139		125		264	
06:45			61	251	227	904	288	1155	18:45			123	629	127	485	250	1114
07:00			70		211		281		19:00			123		102		225	
07:15			99		183		282		19:15			118		88		206	
07:30			98		202		300		19:30			111		101		212	
07:45			85	352	193	789	278	1141	19:45			109	461	100	391	209	852
08:00			92		195		287		20:00			84		76		160	
08:15			103		158		261		20:15			93		86		179	
08:30			94		151		245		20:30			70		95		165	
08:45			90	379	170	674	260	1053	20:45			65	312	72	329	137	641
09:00			81		121		202		21:00			68		93		161	
09:15			68		111		179		21:15			44		74		118	
09:30			94		108		202		21:30			77		80		157	
09:45			77	320	97	437	174	757	21:45			54	243	80	327	134	570
10:00			67		102		169		22:00			68		51		119	
10:15			78		93		171		22:15			44		41		85	
10:30			87		120		207		22:30			42		40		82	
10:45			54	286	79	394	133	680	22:45			33	187	35	167	68	354
11:00			88		82		170		23:00			17		34		51	
11:15			82		76		158		23:15			21		24		45	
11:30			90		102		192		23:30			25		21		46	
11:45			87	347	87	347	174	694	23:45			16	79	21	100	37	179
TOTALS				2273		4857		7130	TOTALS				5624		4508		10132
SPLIT %				31.9%		68.1%		41.3%	SPLIT %				55.5%		44.5%		58.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,897	9,365	17,262

AM Peak Hour			08:00	05:30	06:15	PM Peak Hour			15:30	15:15	15:30
AM Pk Volume			379	949	1168	PM Pk Volume			797	512	1305
Pk Hr Factor			0.920	0.815	0.961	Pk Hr Factor			0.927	0.928	0.948
7 - 9 Volume	0	0	731	1463	2194	4 - 6 Volume	0	0	1525	998	2523
7 - 9 Peak Hour			08:00	07:00	07:15	4 - 6 Peak Hour			16:45	16:00	16:45
7 - 9 Pk Volume	0	0	379	789	1147	4 - 6 Pk Volume	0	0	768	500	1266
Pk Hr Factor	0.000	0.000	0.920	0.935	0.956	Pk Hr Factor	0.000	0.000	0.923	0.906	0.939

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Archibald Ave & Harrison Ave

Day: Wednesday
Date: 4/22/2015

City: Eastvale
Project #: CA15_6063_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,151	9,658	17,809

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			12		17		29		12:00			88		87		175	
00:15			13		11		24		12:15			97		105		202	
00:30			7		10		17		12:30			90		121		211	
00:45			7	39	11	49	18	88	12:45			83	358	119	432	202	790
01:00			5		13		18		13:00			76		113		189	
01:15			5		5		10		13:15			93		111		204	
01:30			6		4		10		13:30			101		117		218	
01:45			15	31	12	34	27	65	13:45			118	388	104	445	222	833
02:00			8		14		22		14:00			128		103		231	
02:15			9		11		20		14:15			162		120		282	
02:30			11		13		24		14:30			141		106		247	
02:45			9	37	14	52	23	89	14:45			164	595	102	431	266	1026
03:00			8		23		31		15:00			148		128		276	
03:15			4		18		22		15:15			198		125		323	
03:30			8		20		28		15:30			211		119		330	
03:45			16	36	26	87	42	123	15:45			225	782	100	472	325	1254
04:00			15		35		50		16:00			218		118		336	
04:15			16		31		47		16:15			216		106		322	
04:30			27		109		136		16:30			209		134		343	
04:45			20	78	113	288	133	366	16:45			207	850	126	484	333	1334
05:00			22		155		177		17:00			212		118		330	
05:15			34		197		231		17:15			184		126		310	
05:30			29		275		304		17:30			223		118		341	
05:45			42	127	242	869	284	996	17:45			185	804	142	504	327	1308
06:00			55		196		251		18:00			192		114		306	
06:15			57		279		336		18:15			164		134		298	
06:30			84		252		336		18:30			151		118		269	
06:45			87	283	247	974	334	1257	18:45			136	643	106	472	242	1115
07:00			97		200		297		19:00			154		77		231	
07:15			100		198		298		19:15			114		107		221	
07:30			77		207		284		19:30			116		98		214	
07:45			109	383	190	795	299	1178	19:45			107	491	112	394	219	885
08:00			85		215		300		20:00			98		99		197	
08:15			117		168		285		20:15			95		98		193	
08:30			121		161		282		20:30			68		72		140	
08:45			79	402	194	738	273	1140	20:45			73	334	68	337	141	671
09:00			70		132		202		21:00			55		64		119	
09:15			70		128		198		21:15			81		77		158	
09:30			79		129		208		21:30			64		70		134	
09:45			70	289	116	505	186	794	21:45			56	256	45	256	101	512
10:00			80		87		167		22:00			61		46		107	
10:15			81		106		187		22:15			45		39		84	
10:30			68		94		162		22:30			36		32		68	
10:45			73	302	124	411	197	713	22:45			49	191	39	156	88	347
11:00			86		82		168		23:00			33		18		51	
11:15			69		93		162		23:15			27		28		55	
11:30			86		110		196		23:30			23		32		55	
11:45			108	349	95	380	203	729	23:45			20	103	15	93	35	196
TOTALS				2356		5182		**7538**	**TOTALS**				5795		4476		**10271**
SPLIT %				31.3%		68.7%		**42.3%**	**SPLIT %**				56.4%		43.6%		**57.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,151	9,658	17,809

AM Peak Hour			07:45	05:30	**06:15**	**PM Peak Hour**			15:30	17:30	**16:00**
AM Pk Volume			432	992	**1303**	**PM Pk Volume**			870	508	**1334**
Pk Hr Factor			0.893	0.889	**0.969**	**Pk Hr Factor**			0.967	0.894	**0.972**
7 - 9 Volume	0	0	785	1533	**2318**	**4 - 6 Volume**	0	0	1654	988	**2642**
7 - 9 Peak Hour			07:45	07:15	**07:15**	**4 - 6 Peak Hour**			16:00	16:30	**16:00**
7 - 9 Pk Volume	0	0	432	810	**1181**	**4 - 6 Pk Volume**	0	0	850	504	**1334**
Pk Hr Factor	0.000	0.000	0.893	0.942	**0.984**	**Pk Hr Factor**	0.000	0.000	0.975	0.940	**0.972**

Prepared by NDS/ATD

VOLUME

Limonite Ave Bet. Archibald Ave & Harrison Ave

Day: Tuesday
Date: 4/21/2015

City: Eastvale
Project #: CA15_6063_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,857	9,345	17,202

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			17		15		32		12:00			101		84		185	
00:15			14		13		27		12:15			113		103		216	
00:30			14		12		26		12:30			106		112		218	
00:45			8	53	10	50	18	103	12:45			91	411	102	401	193	812
01:00			10		8		18		13:00			120		121		241	
01:15			13		7		20		13:15			108		98		206	
01:30			8		7		15		13:30			97		109		206	
01:45			6	37	8	30	14	67	13:45			112	437	105	433	217	870
02:00			8		6		14		14:00			126		98		224	
02:15			6		7		13		14:15			148		93		241	
02:30			9		5		14		14:30			169		99		268	
02:45			4	27	9	27	13	54	14:45			192	635	110	400	302	1035
03:00			3		15		18		15:00			170		117		287	
03:15			10		15		25		15:15			167		120		287	
03:30			4		21		25		15:30			165		107		272	
03:45			8	25	27	78	35	103	15:45			211	713	105	449	316	1162
04:00			13		26		39		16:00			201		117		318	
04:15			13		48		61		16:15			178		132		310	
04:30			19		87		106		16:30			173		113		286	
04:45			13	58	110	271	123	329	16:45			185	737	117	479	302	1216
05:00			10		157		167		17:00			181		117		298	
05:15			31		185		216		17:15			203		130		333	
05:30			41		249		290		17:30			211		111		322	
05:45			35	117	228	819	263	936	17:45			164	759	119	477	283	1236
06:00			47		215		262		18:00			197		129		326	
06:15			77		251		328		18:15			178		123		301	
06:30			74		274		348		18:30			153		118		271	
06:45			86	284	233	973	319	1257	18:45			139	667	99	469	238	1136
07:00			72		200		272		19:00			115		122		237	
07:15			91		220		311		19:15			99		96		195	
07:30			86		226		312		19:30			111		75		186	
07:45			104	353	175	821	279	1174	19:45			92	417	83	376	175	793
08:00			78		158		236		20:00			85		88		173	
08:15			81		167		248		20:15			83		97		180	
08:30			88		163		251		20:30			94		76		170	
08:45			79	326	166	654	245	980	20:45			68	330	76	337	144	667
09:00			85		138		223		21:00			65		70		135	
09:15			76		141		217		21:15			72		71		143	
09:30			84		126		210		21:30			42		72		114	
09:45			79	324	110	515	189	839	21:45			53	232	62	275	115	507
10:00			90		102		192		22:00			61		58		119	
10:15			75		89		164		22:15			53		39		92	
10:30			73		115		188		22:30			44		37		81	
10:45			65	303	90	396	155	699	22:45			36	194	29	163	65	357
11:00			85		73		158		23:00			25		30		55	
11:15			77		103		180		23:15			27		25		52	
11:30			88		90		178		23:30			12		20		32	
11:45			86	336	95	361	181	697	23:45			18	82	16	91	34	173
TOTALS				2243		4995		7238	TOTALS				5614		4350		9964
SPLIT %				31.0%		69.0%		42.1%	SPLIT %				56.3%		43.7%		57.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,857	9,345	17,202

AM Peak Hour			11:45	06:00	06:15	PM Peak Hour	16:45	17:15	17:15
AM Pk Volume			406	973	1267	PM Pk Volume	780	489	1264
Pk Hr Factor			0.898	0.888	0.910	Pk Hr Factor	0.924	0.940	0.949
7 - 9 Volume	0	0	679	1475	2154	4 - 6 Volume	1496	956	2452
7 - 9 Peak Hour			07:15	07:00	07:00	4 - 6 Peak Hour	16:45	16:00	16:45
7 - 9 Pk Volume	0	0	359	821	1174	4 - 6 Pk Volume	780	479	1255
Pk Hr Factor	0.000	0.000	0.863	0.908	0.941	Pk Hr Factor	0.924	0.907	0.942

Appendix K

HUNSAKER
& ASSOCIATES
IRVINE, INC.

PLANNING
ENGINEERING
SURVEYING
GOVERNMENT RELATIONS

IRVINE
LOS ANGELES
RIVERSIDE
SAN DIEGO

Sewer System Development Analysis

Date: December 6, 2021

For: Peter Carlson
Carlson Strategic Land Solutions

By: Katie O'Connor, P.E.
Hunsaker & Associates Irvine, Inc.

Project: **Leal Ranch Development Area**

Hunsaker & Associates Irvine, Inc. (H&A) is pleased to submit the Sewer System Development Analysis for the Leal Ranch Development Area. This analysis has been prepared to describe the proposed sewer points of connections for the aforementioned development project in the City of Eastvale. The project lies within the jurisdiction of the Jurupa Community Services District (JCSD) and their standards have been used for this report.

FOUNDING PARTNERS:
RICHARD HUNSAKER
TOM R. McGANNON
JOHN A. MICHLER
DOUGLAS G. SNYDER

This evaluation is based on existing and known conditions and should be re-evaluated if these conditions change or new information becomes available. Any interpretation of the information presented in this report should be referred to H&A to ensure the integrity of the results.

Project Location

The Leal Ranch Development Area is located in the City of Eastvale west of Hamner Avenue, north of Limonite Avenue, east of Scholar Way and south of 58th Street.

PRINCIPALS:
FRED GRAYLEE
BRADLEY HAY
PAUL HUDDLESTON
KAMAL H. KARAM
DOUGLAS L. STALEY
KRIS WEBER
JOSEPH E. WIGHTMAN

Project Description

The Leal Ranch Development Area is master planned development that will include residential, mixed use commercial, recreation, and community facilities.

Summary of Findings

SANITARY SEWER

JCSD provided preliminary hydraulic analysis (performed by Webb and Associates, August 2021) of the existing sewer system that would be impacted by the proposed Leal Ranch Development Area. The purpose of this analysis was to determine the maximum average daily sewer generation from Leal Ranch Development without causing downstream sewer capacity issues in the existing system. JCSD determined that the maximum allowed average daily flows from the Leal Ranch development would be 555,000 GPD. Attached is the exhibit provided by JCSD depicting the sewer loading points for the project and the impact that flow has on the existing system.

The project is designed in such a way that the sewer points of connection will all be provided from the existing sewer in Limonite. There will be no points of connection to the existing sewer in Hamner Ave. The current Leal Ranch development land

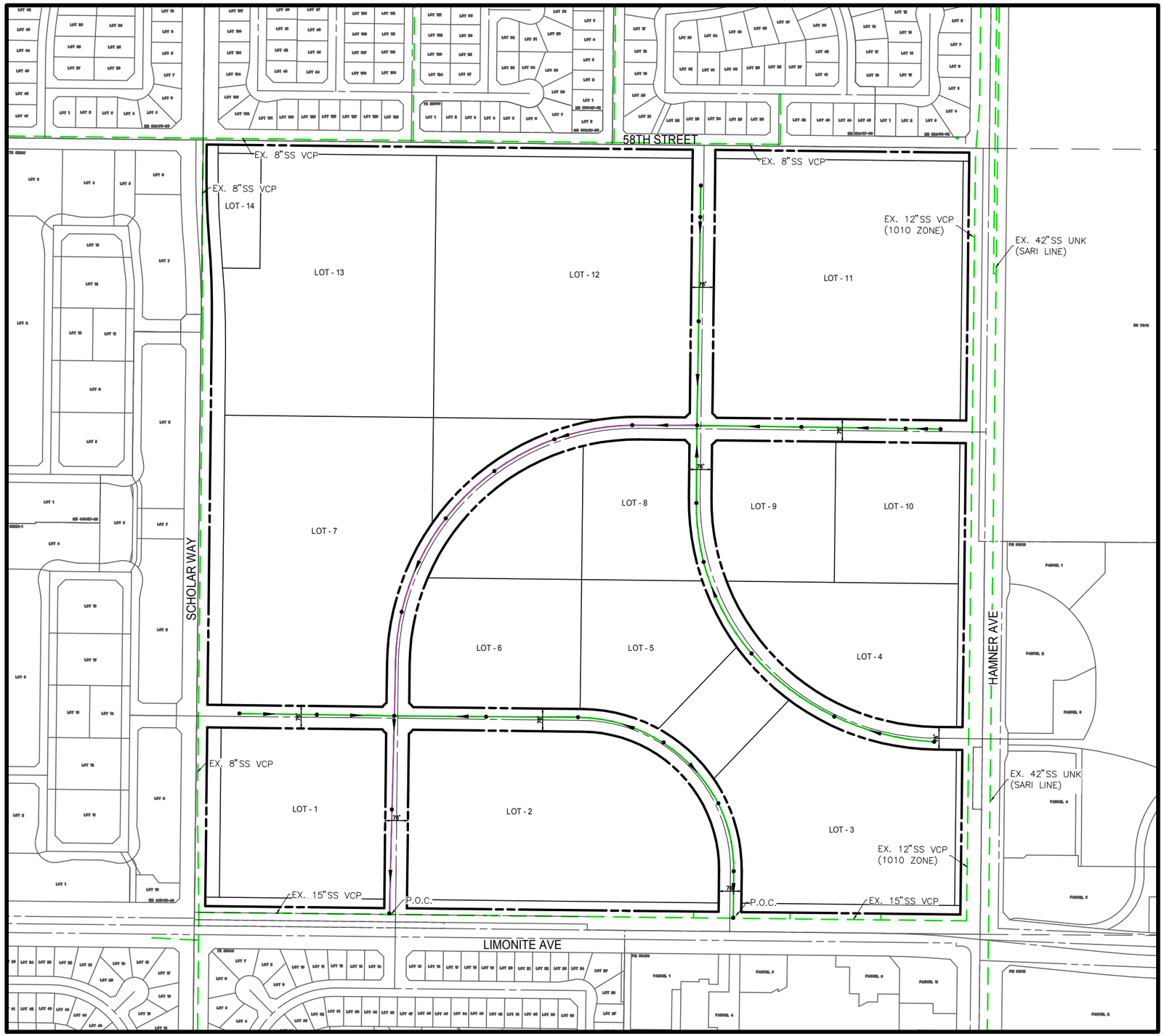
Three Hughes
Irvine, California
92618-2021
(949) 583-1010 PH
(949) 583-0759 FX
www.hunsaker.com

uses and densities produce average sewer flows of 544,710 GPD. The proposed project is 1.85% less than the maximum allowed average sewer flows from the site. Please see the attached summary comparing current design sewer generation flows with maximum acceptable sewer generation flows.

We sincerely trust these calculations will provide sufficient insight to the proposed and existing facilities that will serve the Leal Ranch Development Area. Please contact me at (949) 458-5437 with any questions.

KO:klo
Enclosures

W.O. 2749-44
(F:\0736\Planning\SY_WS STUDIES\H&A LETTERHEAD_Leal Ranch Summary.doc)



SEWER EXHIBIT
LEAL RANCH
CITY OF EASTVALE, CA

LEGEND

PROPOSED 8" SEWER LINE

PROPOSED 12" SEWER LINE

EXISTING SEWER LINE

NOTE:

✳ ALL PIPE SIZES ARE PRELIMINARY

0 200 400 800

SCALE: 1" = 400'

PREPARED BY

HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING ▪ ENGINEERING ▪ SURVEYING
Three Hughes ▪ Irvine, CA 92618 ▪ PH: (949) 583-1010 ▪ FX: (949) 583-0759

DATE PREPARED: September 15, 2021

W.O.: 2749-44X

PLOT DATE: November 29, 2021

DATE: Nov. 29, 2021 10:44:19 AM FILE: H:\00750\Planning\Project Exhibits\Utility Exhibit\Leal Ranch– Utility Exhibit.dwg

Appendix L

EASTVALE LEAL PROPERTY

Water Supply Assessment

DECEMBER 2021 | FINAL

Prepared By:

Kimley»Horn

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Section 1. Introduction

Purpose

This document prepared for the New Home Company is a Water Supply Assessment (WSA) intended to meet the requirements of Senate Bill (SB) 610. The water demand for the Eastvale Leal Property ("proposed project") is calculated and the adequacy of water supplies to meet the proposed project is evaluated.

SB 610 established the primary legal standards for assessing the sufficiency of water supplies for new development projects. These statutes require as part of the environmental review conducted for a qualifying project pursuant to the California Environmental Quality Act (CEQA), the public water supplier or land use agency – in this case Jurupa Community Services District – must prepare a "water supply assessment" of the reliability of water supplies for the project, considering normal, single dry, and multiple dry years over a 20-year horizon. The basic requirement is that a WSA must "include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the water system's existing and planned future uses, including agricultural and manufacturing uses."[1]

References used in preparing this document include the following:

- JCSD 2020 Urban Water Management Plan (UWMP)
- JCSD Draft 2020 Water Master Plan
- Chino Basin Desalter Authority 2015 UWMP

This Assessment follows the report outline suggested by the DWR Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001.

Project Description

The Eastvale Leal Property project is located within the City of Eastvale, California. The site is known as the Leal property located at 58th Street, Hamner Avenue, Limonite Avenue and Scholar Way and is approximately 160 acres. The proposed project will include mixed uses including mixed-use retail, office, housing, and civic development including police and fire stations and community center as well as a hotel and community spaces. Jurupa Community Services District (JCSD) is the water supplier for the Project site. Site location is shown in **Figure 1-1**, and a land use plan is provided in **Figure 1-2**.

For the purposes of this WSA, it is assumed that only potable water will be available to meet the project's water demand.

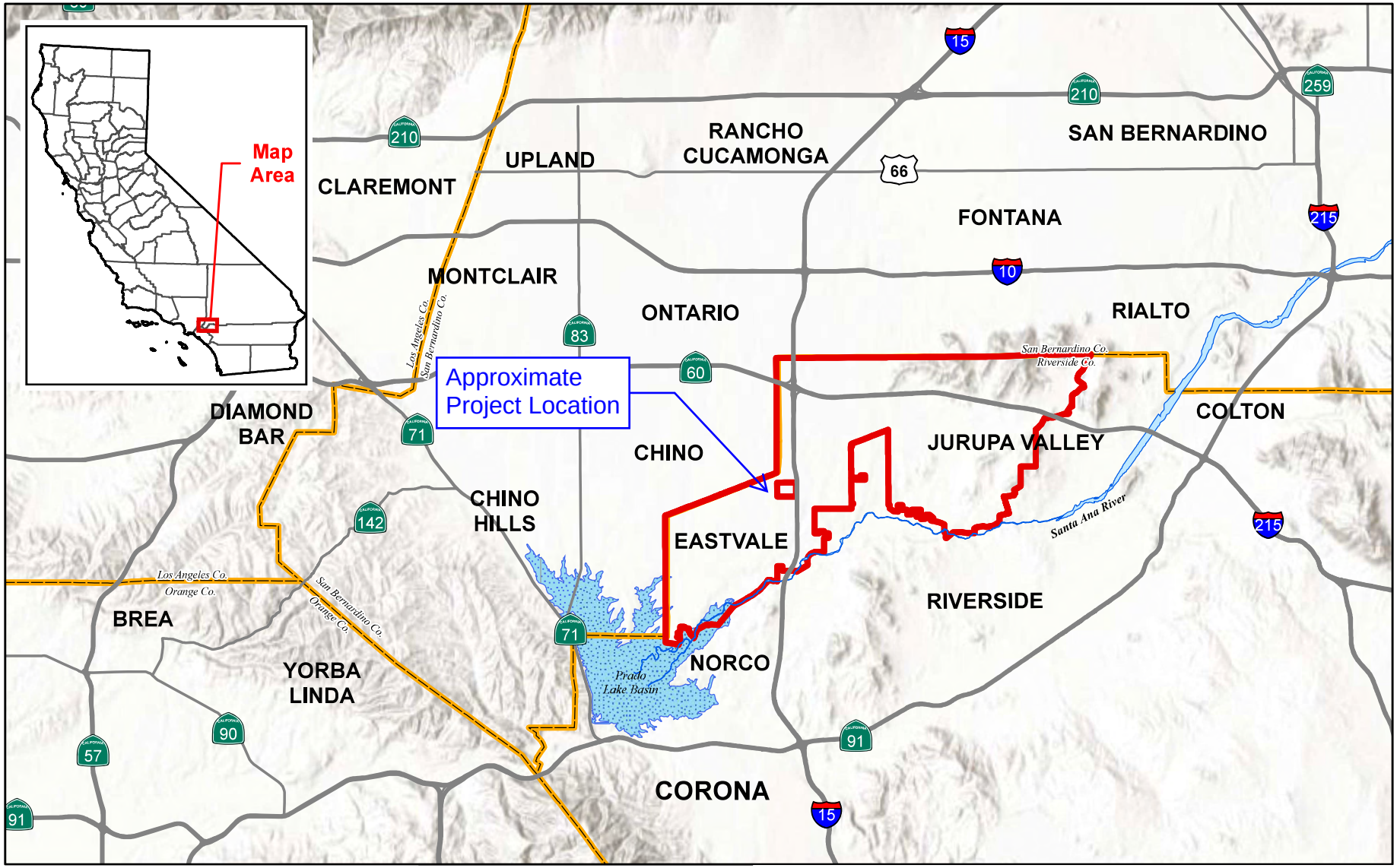
Project Relation to Urban Water Management Plan

JCSD is the water supplier for the Project and has prepared a 2020 UWMP, a copy of which is provided in **Appendix A**. The 2020 UWMP was adopted by JCSD Board of Directors on June 28, 2021 and reviewed by the state Department of Water Resources (DWR). The 2020 UWMP assumptions on growth projections within the service area were derived from an analysis of the additional water demand from the land uses assigned to vacant parcels by City-approved General Plans that could be developed in the future. As part

[1] California Water Code Section 10910(c)(3).

of this Assessment, it is assumed that there have been no substantial changes to the water supply portfolio as described in the 2020 UWMP.

As discussed further in Section 3 – Water Supply Analysis, JCSD is a member agency of the Chino Basin Desalter Authority (CDA), a Joint Exercise of Powers Agency from which JCSD purchases treated groundwater from the Chino Groundwater Basin. CDA has prepared a 2015 UWMP which is provided in **Appendix B**.



Source: JCSD Urban Water Management Plan 2020

Figure 1-1: Regional Location and Project Vicinity

0 5 10 Miles

jurupa COMMUNITY SERVICES DISTRICT

Kimley»Horn

2063



Source: The New Home Company

Figure 1-2: Proposed Site Location and Land Use Plan

Section 2. Water Demand Analysis

The purpose of this section is to evaluate whether the proposed project was considered in the water supplier's planning for water demand. This section will: 1) show the calculated water demand of the proposed Project, 2) identify the various water use sectors, 3) identify water demand by those sectors for the next twenty years, and 4) compare the calculated water demand of the proposed Project to the water demand assumed in the most recent Urban Water Management Plan (UWMP) for the same property.

Project Water Demand

In the 2020 UWMP, the Project site was assumed to be half high-density residential (HDR) and half commercial-retail (CR). Water demand projections in the UWMP were based on developed properties and their underlying General Plan designations.

To calculate individual project water demands, JCSD currently uses the "Unit Values of Applied Water" from **Table 5-1 of JCSD's 2020 Draft Master Water Plan** (dated March 2021). Based on this table, JCSD uses a unit water demand factor of 3,600 gpd/ac for high density residential and 2,000 gpd/ac for commercial-retail and parks. As determined by the land use summary of the 158-acres for the proposed Project (**Table 2-1**), the Project water demand is estimated to be 461 AFY, as shown in **Table 2-2**.

Table 2-1. Project Land Use Summary

Lot	Land Use Category	Area (ac)
1	Residential	7.33
2	Mixed Use[a]	12.79
3	Commercial	9.80
4	Mixed Use[a]	6.45
5	Mixed Use[a]	4.66
6	Residential	5.61
7	Residential	14.13
8	Residential	3.94
9	Residential	4.39
10	Mixed Use[a]	4.52
11	Residential	16.49
12	Residential	17.20
13	Residential	13.15
14	Commercial[b]	1.22
A – I	Roadway	25.61
J – L	Open Space Recreation	7.16
M - V	Roadway	4.15
	Total Area	**158.58**

(a) Mixed use area was split 50-50 between residential and commercial
(b) Lot 14 is designated for a fire station, but was considered commercial land usage

Table 2-2. Project Water Demand

Land Use Category	Duty Factor (gpd/ac)	Area (ac)	Demand (gpd)	Demand (AFY)
Residential	3,600	82.23	296,021	331.59
Mixed Use (Residential)	3,600	14.21	51,151	57.30
Mixed Use (Commercial)	2,000	14.21	51,151	57.30
Commercial Retail	2,000	11.02	22,040	24.69
Open Space Recreation	2,000	7.16	14,312	16.03
Roadway	0	29.76	0	0
Total	**--**	**158.58**	**411,940**	**461.43**

In the 2020 UWMP, the Eastvale Leal Property was assumed to be 50% high density residential and 50% commercial retail, for a total demand of 450,800 gpd or 505 AFY.

Demographic Factors

A variety of demographic factors may affect water use. The Urban Water Management Planning Act lists several demographic factors to be detailed in UWMP's including climate, current and projected population, density, and the mix of customer types. As suggested by DWR, these data are provided herein and are taken generally from the Jurupa Community Services District's latest UWMP.

Climate

JCSD's service area is located within the greater Chino Basin valley, which is generally semi-arid and warm. Summers are dry with average temperatures as high as 95ºF and maximum daily temperatures that sometimes exceed 100ºF. Winters are cool with average temperatures as low as 40ºF. As shown in the UWMP, average annual rainfall between 2001-2019 was approximately 8 inches per year, whereas the historical average rainfall from 1908-1988 was approximately 13 inches per year. Recent rainfall measured from 2016 to 2019 at U.C. Riverside had an annual average of 9 inches per year. The elevations within the service area range from 560 feet to 2,230 feet above mean sea level.

Population

The City of Eastvale and approximately 65 percent of the City of Jurupa Valley make up the JCSD service area. Each year the JCSD Board of Directors adopts a population estimate for the District service area; in 2020, the estimated population is 130,546 persons, which includes the Swan Lake Mobile Home Park (not yet within the service area) in Eastvale. Population projections from the UWMP are shown in **Table 2-3**. Based on each City's General Plans and anticipated development patterns, JCSD service area population at buildout in 2040 is estimated at 171,300 persons.

Table 2-3. Service Area Population, 2020-2045

	2020	2025	2030	2035	2040[a]	2045
Service Area Population	130,546	140,735	150,923	161,112	171,300	171,300

Source: 2020 UWMP, Table 3-1, p. 3-19.
(a) Service area buildout is estimated to happen by 2040.

JCSD actively tracks the status of properties within their service area as they develop (e.g. whether residential or non-residential; vacant, proceeding through development process, or under construction; undeveloped or inactive) for the primary purpose of forecasting future water demand.

JCSD Water Demand

JCSD's most recently reported water demand data was for calendar year (CY) 2020. As of 2020, JCSD delivered to its customers approximately 28,505 acre-feet (AF) of potable water and 767 AF of non-potable water for a total of approximately 29,272 AF. The recorded and projected water demands by customer type for the JCSD service area are provided in **Table 2-4**. The recorded data is for 2016-2019, and the data from 2020 to 2040 is from the 2020 Urban Water Management Plan.

Table 2-4. Recorded and Future Water Demand (AFY)

Description	2016	2017	2018	2019	2020	2025	2030	2035	2040
Single Family Residential[a]	15,173	15,737	16,869	15,280	17,300	18,551	20,082	21,174	22,375
Multifamily Residential	1,237	1,311	1,400	1,375	1,323	1,606	1,731	1,821	1,919
Commercial[b]	2,174	2,289	2,505	2,253	2,282	2,251	2,451	2,595	2,752
Industrial	631	649	631	607	675	722	782	825	872
Landscape	2,203	2,390	2,812	2,470	2,945	3,007	3,758	3,437	3,634
Other[d]	297	280	272	251	190	210	228	241	254
Total Urban Retail Demand	**21,714**	**22,655**	**24,489**	**22,236**	**24,715**	**26,347**	**29,032**	**30,093**	**31,806**
Sales, transfers, and exchanges	1,353	1,487	1,517	1,468	1,658	1,624	1,759	1,856	1,962
Losses[e]	901	2,064	1,229	1,530	2,133	2,255	2,444	2,578	2,726
Other (Non-Potable)	654	693	815	876	627	500	500	500	500
Losses (Non-Potable)	--	--	--	--	140	140	140	140	140
Total Demand	**24,621**	**26,899**	**28,050**	**26,110**	**29,272**	**30,865**	**33,375**	**35,165**	**37,135**

Source: 2020 UWMP
(a) Includes water-only customers that do not have sewer service with JCSD.
(b) Includes governmental/institutional and non-billing meters for commercial landscape irrigation.
(d) Includes fire hydrants for fire suppression, dust control, and construction. Includes line breaks.
(e) From 2020-2040, includes non-potable losses with potable losses.
AFY = acre-feet per year

The water demand projections in the UWMP are based on site development information tracked by the District that includes the underlying or known land use designations and the where the project (if any) is in the development process with the respective city. Specifically, the assigned land use designations of undeveloped properties. These assumptions projected an increase of 9,460 AFY of potable water consumption for the service area by buildout (i.e. 2040).

The City of Eastvale makes up 30 percent of the JCSD service area and Eastvale is nearly built-out. JCSD anticipates buildout of the City of Eastvale within the next 10 years, and buildout of JCSD's service area within the City of Jurupa Valley is projected to be between 2040 and the year 2060.

JCSD is currently working on developing a recycled water plan for its customers within selected areas of the City Tang Amendment 4. JCSD has applied for grants and loans from the State Water Resources Control Board and other public agencies for the non-potable water system. The 2020 UWMP plans for 500 AFY of recycled water being available for landscape irrigation (excluding golf courses) from 2025 to 2040.

This WSA is required by the Water Code to address demand from existing and planned future uses, including agricultural and manufacturing uses. Agricultural activities have decreased in the JCSD service area as a result of planned urbanization according to approved city land use plans. JCSD expects water use for agricultural activities to continue declining and potentially replaced with non-potable sources. As shown in **Table 2-4**, JCSD expects an increase in the water demands from commercial and industrial properties combined, consistent with known projects and approved city land use plans.

Summary

The land use types for the Project site that were used in the 2020 UWMP water demand projections are similar to the land use types which are proposed by the subject Project. The 2020 UWMP projected a water demand of 505 AFY for the Eastvale Leal Property. Based on the District's current unit water demand factors, the Project will generate a potable water demand of approximately 461 AFY (**Table 2-3**). Therefore, the Project's water demands were accounted for in the most recent UWMP.

Section 3. Water Supply Analysis

This section identifies the sources of potable water utilized and available to Jurupa Community Services District (JCSD or District), which is the water supplier for the proposed Eastvale Leal Property (Project), The purpose of this section is to evaluate the water supplies that could be utilized by the proposed Project during normal, single-dry and multiple-dry water years during a 20-year projection.

Wholesale Water Supplies

Many retail water suppliers in California, including JCSD, receive supplies from one or more water wholesalers. SB 610 requires this Assessment to document wholesale supplies received, by: i) describing the quantities of water received from each wholesaler in prior years; ii) identifying existing entitlements, water rights, and/or water service contracts held by the District for the wholesale supply; iii) provide proof of entitlements, water rights, service contracts, relevant capital outlay programs, and construction permits for necessary infrastructure to deliver wholesale supplies, if any; and iv) regulatory approvals required to convey or deliver the wholesale supply.

Wholesale Supplies Received

JCSD is a member of the Chino Basin Desalter Authority (CDA), a Joint Exercise of Powers Agency, along with Santa Ana River Water Company, Inland Empire Utilities Agency (wholesaler), and the Cities of Chino, Chino Hills, Ontario, and Norco (UWMP, p. 6-2). CDA is a wholesale water supplier and its 2015 UWMP is provided in **Appendix B**. Each of the retail members of CDA have contractual "take or pay" commitments to purchase water produced by CDA (CDA, p. ES-2).

JCSD is currently entitled to 11,733 AFY of potable water from CDA. As of calendar year 2020, JCSD received 11,414 AF from CDA and the District projected CDA supplies is 11,733 AFY. Quantities of water received by JCSD in prior years from CDA are provided in **Table 3-1**.

Table 3-1. Recorded CDA Wholesale Deliveries

	2016	2017	2018	2019	2020
Volume (AF)	8,073	8,164	8,971	9,574	11,414

Note: From JCSD 2020 UWMP, Table 6A, p. 6-2.
AF = acre-feet

CDA provides high-quality drinking water from two desalters (salt removers) that was anticipated to treat approximately 35,200 AFY of Chino Basin groundwater in 2020 and thereafter. The Chino I Desalter, located at 6905 Kimball Avenue in Chino, was completed in 2000 and expanded in August 2005 to its current rated capacity of 15,906 AFY (14.2 mgd). However, the Chino I Desalter cannot provide this rated capacity due to the high total dissolved solids in the raw water supply. The Chino II Desalter was completed in 2006 and is located at 11202 Harrel Street in the City of Jurupa Valley. The current rated capacity is 11,201 AFY (10 mgd) and permitted capacity is 16,802 AFY (15 mgd), including 5,600 AFY (5 mgd) raw water bypass. As of March 2021, Plant 1 produced 11.97 MGD. Although Chino Desalter I capacity will not be increased, additional raw water capacity will be provided by five new wells in the Chino Creek Well Field. All five wells have been drilled and equipped. The Chino II Desalter is in the process of achieving their permitted capacity as a result of the construction of the South Archibald Plume Cleanup project. CDA is currently expanding the Chino II Desalter to a rated capacity of 25,427 AFY (22.7 mgd). As of March 2021, Plant 2 produced 20.3 mgd.

As stated in CDA's 2015 UWMP:

> Its primary authority is to desalinate brackish groundwater for its member agencies. The supply is 100 percent reliable under all water year types because pumping is in response to the OBMP [Optimum Basin Management Plan] to remove salts and nitrates from the basin and prevent highly saline groundwater from reaching the Santa Ana River. No water shortages are anticipated due to the mandate to continually pump 40,000 AFY from the basin. (CDA 2016, p. ES-2)

During calendar year 2020, JCSD negotiated the purchase of WMWD's CDA supply totaling 3,445 AF. JCSD is currently in negotiations with WMWD to purchase Mills Gravity Pipeline water supply in addition to WMWD's CDA supply. In addition, JCSD is in negotiations with Cucamonga Valley Water District to purchase imported and groundwater from them. A Preliminary Design Report has been prepared for JCSD's proposed Etiwanda Pipeline to CVWD.

Dry Year Yield Storage Program

The Dry Year Yield (DYY) storage program is a cooperative Conjunctive Use Program Agreement (No. 49960) between The Metropolitan Water District of Southern California (MWD), Inland Empire Utilities Agency (IEUA), Chino Basin Watermaster, Three Valleys Municipal Water District, and the Chino Basin groundwater producers (**Appendix D**). Under the DYY Program, MWD can store up to 100,000 AFY of imported water in the Chino Basin during wet years when surplus water is available, and to reduce imported water deliveries up to 33,000 AFY in dry, drought, or emergency periods, but not to exceed the amount of water in the MWD storage account. The DYY program provides MWD the right to store groundwater in the basin, in exchange for paying the costs of developing the facilities that deliver that water.

DYY funds were used by JCSD for the construction of the Roger D. Teagarden Ion-Exchange Facility. When MWD makes a call for its stored water, JCSD can operate this facility and utilize water from the CDA to meet the District's water supply obligation.

Through a Local Agency Agreement with the City of Ontario, JCSD can purchase Ontario's portion of CDA water during years when MWD is not making a call for the stored water (i.e. "wet" or "non-call" years) (**Appendix E**). Up to 2,000 AF over 12 months is anticipated. During dry or "call" years, JCSD will stop receiving Ontario's portion of CDA water and return to District well supply. (UWMP, p. 6-31)

Water deliveries received from the DYY Program from calendar year (CY) 2015 to 2020 are provided in **Table 3-2**.

Table 3-2. Recorded DYY Program Deliveries

	2015	2016	2017	2018	2019	2020
Volume (AF)	1,667	2,031	2,002	1,805	0	1,446
Note: From JCSD Staff, Water Supply History. AF = acre-feet						

Water Supplies

Water within the JCSD service area is entirely from groundwater production. The majority of that comes from the Chino Basin, which is supplemented with groundwater produced from the Riverside-Arlington Basin (aka Riverside South Basin). Water is obtained by way of District-owned wells and agreements with

neighboring agencies. JCSD does not directly rely on imported water, surface water, stormwater, or recycled water to supplement the water supply. However, these sources can, and are, being used by other agencies in the Chino Basin to recharge the basin supply. (UWMP, p. 6-1)

Wholesale water from CDA and DYY Program deliveries are described previously in Section 3.1. The following is a description of the supplies produced and projected supplies reasonably available to JCSD.

JCSD Wells in Chino Basin

The Chino Basin covers approximately 240 square miles and is one of the largest groundwater basins in Southern California. There is an estimated five million AF of water in storage, and an unused storage capacity of approximately one million AF (UWMP, p. 6-8). The Chino Basin has been adjudicated, and pumping activities are closely monitored by the court-appointed Chino Basin Watermaster. A copy of the 1978 Chino Basin Judgment is provided in **Appendix F**. This is discussed in detail in Section 4.0 – Groundwater Analysis.

JCSD currently operates 18 potable water wells in the Chino Basin that have a theoretical maximum production rate of 33,090 gallons per minute (gpm). However, JCSD does not operate its wells at maximum capacity, but rather they fluctuate on and off as demand changes (UWMP, p. 6-7). The ultimate well production capacity is estimated at 43,315 gpm (JCSD 2020). JCSD's current production (2019-2020) right to this source is 19,547.9 AF, as recorded in the Watermaster's (2019/2020) annual report. During 2020, JCSD produced 11,051.8 AF from its potable wells in the Chino Basin (JCSD 2020). JCSD has assumed in the UWMP that the future pumped volumes from its potable well field, within JCSD service area in the Chino Basin, will peak at 14,000 AFY, beginning in 2030. This level of production aims to minimize a decline in the groundwater table in the vicinity of JCSD's well field.

Two new potable wells are expected to be operational within the next five years (Wells 29 and 30). They will each contribute an additional 2,500 AFY. With the additional two wells, the total maximum day groundwater production capacity will be approximately 54.8 MGD (38,000 GPM). (UWMP, p. 6-7)

JCSD operates five non-potable wells within the Chino Basin. In 2020, the District produced 275.881 AF from this supply source to serve local park landscape irrigation-only accounts, and future production is estimated at 310 AFY (UWMP, p. 6-33).

The District operates two ion-exchange plants to denitrify water from several wells. The first is the Roger D. Teagarden Ion Exchange Facility which removes nitrates from seven potable wells. The other plant is the Well 17/18 Ion Exchange Facility that removes nitrates from JCSD Well Nos. 17 and 18. (UWMP, p. 6-7)

JCSD Wells in Riverside South Basin

The Riverside South Basin is the Riverside County portion of the larger Riverside-Arlington Basin. This basin has been adjudicated by the 1969 Orange County Judgment located in **Appendix G**, and basin pumping rights are further defined in the 1969 Western-San Bernardino Judgment located in **Appendix H**. JCSD operates two non-potable wells within the Riverside South Basin. Water from these wells is used to irrigate Oak Quarry Golf Club located at 7151 Sierra Avenue in Jurupa Valley. During CY 2020, JCSD pumped 490.774 AF from this source. JCSD expects future production from this source will be approximately 450 AFY. (UWMP, p. 6-8)

Rubidoux Community Services District

Since 2000, JCSD has purchased water extracted from the Riverside South Basin from Rubidoux Community Services District (RCSD). Through an agreement established in 2014, JCSD can pump potable water from RCSD's system into the District's 1,110 Pressure Zone through the Jewel Street Booster Station (**Appendix I**). As shown in **Table 3-3**, no supply was received by JCSD from this source since CY 2018 (JCSD Staff). JCSD anticipates future annual purchases of approximately 2,000 AF from RCSD. (UWMP, p. 6-2)

Table 3-3. Recorded Rubidoux Community Services District Deliveries

	2016	2017	2018	2019	2020
Volume (AF)	2,029	2,322	0	0	0
Note: From JCSD 2020 UWMP, Table 6B, p. 6-3. AF = acre-feet					

The current water supplies reasonably available to JCSD are summarized in **Table 3-4**, including the mechanism by which the District can use the water (e.g. water supply entitlement, water right, or water service contract), pursuant to SB 610 guidance.

Table 3-4. Current Water Supplies

Supply Type	Supply Method	Water Quality	Form of Right	Supply (AFY)
Groundwater	JCSD Wells[a]	Potable	Right	19,550
Wholesaler	CDA	potable	Contract	11,733
Groundwater	RCSD	Potable	Contract	2,000
Groundwater	DYY Program	Potable	Contract	2,000
Groundwater	JCSD Wells[b]	Non-potable	Right	450
			Total	**35,733**
Note: From District staff, Jan. 17, 2020. (a) Annual production rights in the Chino Basin (Production Year 2019-2020). (b) Within Riverside South Basin. AFY = acre-feet per year				

The water supply used by the District is only that which is required to meet actual demand. JCSD can extract, from the Chino Groundwater Basin, above their annual production rights, which is permitted with payment of appropriate fees to the Chino Watermaster.

According to information reasonably available to JCSD during preparation of the 2020 UWMP, **Table 3-5** provides the recorded and projected water supply sources for the District. This includes three sources that have not yet been used by JCSD: imported water from WMWD, Cucamonga Valley Water District, and recycled water from the WRCRWA Plant through a pending grant project authorization from the State Water Resources Control Board.

Table 3-5. Actual and Projected Water Supplies

Supply Type	Source	Water Quality	Ever Used?	Past (AF)						Current (AF)	Reasonably Available Future Volume (AF)			
				2011	2012	2013	2014	2015	2018	2020	2025	2030	2035	2040
Groundwater	JCSD Wells[a]	Potable	Yes	15,174	12,599	16,724	16,249	8,993	14,829	11,052	14,000	18,000	18,000	18,000
Purchased	CDA[b]	Potable	Yes	8,088	8,032	8,642	8,690	8,616	8,972	11,414	11,733	11,733	11,733	11,733
Purchased	WMWD and/or CVWD	Potable	Yes	--	--	--	--	--	--	3,446	10,000	10,000	10,000	10,000
Purchased	ECSD	Potable	Yes	808	702	774	1,062	2,250	--	--	2,000	2,000	2,000	2,000
Other	DYY Program	Potable	Yes	--	--	--	457	1,677	1,805	1,446	2,000	--	--	--
Recycled Water	WRCRWA Plant	Non-Potable	No	--	--	--	--	--	--	--	660	660	660	660
Transfers	CDA	Potable	Yes								1,200	1,200	1,200	1,200
Groundwater	JCSD Wells[c]	Non-Potable	Yes	509	532	511	484	464	516	491	500	500	500	500
Groundwater	JCSD Wells[a]	Non-Potable	Yes	324	330	295	343	266	304	276	-	-	-	-
			Total[1]	**24,903**	**22,195**	**26,963**	**26,963**	**22,381**	**26,426**	**28,124**	**42,093**	**44,093**	**44,093**	**42,093**

Note: From JCSD 2020 UWMP, p. 6-28, p. 6-29.
(a) Located within Chino Basin.
(b) Wholesale agency. No project has been determined; wholesaler supplier subject to change.
(c) Located within Riverside South Basin.
AF = acre-feet
(1) Due to rounding, sum of the individual items may not equal the total value.

As shown in **Table 3-5**, recycled water from WRCRWA has not been used by JCSD but grants and loans are currently being pursued by JCSD. Pursuant to SB 610 guidance, availability must be demonstrated for supply sources that have never been used by the water supplier. This can be done by identifying other water suppliers or contract holders that receive and have rights, entitlements, or contracts to the same source.

Western Municipal Water District

JCSD is one of 14 local retail agencies within the WMWD service area, and as such, JCSD can receive water from WMWD. WMWD is a member agency of MWD with responsibility to provide wholesale imported water to the retail agencies within its service area (CDA 2016, p. ES-1). This includes imported water supplies from the State Water Project obtained through WMWD's membership with MWD. WMWD provides supplemental water and/or water resources management to the cities of Norco, Corona, and Riverside and the water agencies of JCSD, SARWC, Box Springs Mutual, Eagle Valley Mutual, Elsinore Valley, Lee Lake, and Rancho California, and unincorporated areas of El Sobrante, Eagle Valley, Temescal Creek, Woodcrest, Lake Mathews, and March Air Reserve Base (CDA 2016, p. 2-2).

WMWD noted in their 2015 UWMP that JCSD may purchase water from them in the future (WMWD, p. 3-6). Further, WMWD's demand projections in the 2015 UWMP include 5,000 AFY to JCSD starting in 2020, increasing to 7,500 in 2025, then 10,000 from 2030 to 2040, which is consistent with the District's projection in **Table 3-5** (ibid, p. 4-7). Future water supply projects between JCSD and WMWD would directly connect imported supplies to JCSD; however, no project has yet been determined (UWMP, p. 6-32). Because of the assurance from MWD to its member agencies, WMWD's accounting for potential future demand from JCSD in their UWMP, and WMWD's ability to meet the demands of its other member agencies, the availability of future supply from WMWD is demonstrated.

Western Riverside County Regional Wastewater Authority

WRCRWA is a Joint Powers Authority consisting of the cities of Norco, Corona, JCSD, Home Gardens Sanitary District, and WMWD. The WRCRWA treatment plant is a tertiary treatment facility with an ultimate capacity of 32 mgd (WMWD, p. 6-11). JCSD is entitled to the recycled water generated from the District's share of sewage flow into the treatment plant. In 2020, approximately 5,120 AF of wastewater from the JCSD service area was sent to the WRCRWA Plant for treatment2. Currently, the effluent from the WRCRWA facility is discharged directly to the Santa Ana River immediately upstream of Prado Dam (IEUA, p. 6).

WRCRWA is in the final planning stages of providing recycled water to the City of Norco. As of 2015, seven miles of recycled water pipeline, a small reservoir, and a pump station have been installed. Norco is anticipated to take delivery of up to 895 AFY of recycled water. Western Riverside County Regional Wastewater Authority obtained an order approving a change of use permit (February 5, 2018) that would allow the WRCRWA member agencies to use recycled water from the treatment plant. (WMWD, p. 6-12).

JCSD is in the process of developing a recycled water system that will deliver irrigation water to parks and playgrounds utilizing a portion of the recycled water that they are entitled to from the WRCRWA facility. To further conserve local water supplies, JCSD would like to deliver the remaining portion of its recycled water entitlement to IEUA for reuse and replenishment of the Chino Basin (IEUA, p. 1). Therefore, IEUA and JCSD have partnered on a grant application to the State Water Resources Control Board under Prop. 1 and the Clean Water State Revolving Fund (CWSRF) Loan program for a joint regional recycled water intertie project (CWSRF No. 8167-110). The availability of this water supply source is demonstrated through the District's right to its share of sewer flow, the successful distribution of recycled water to the

City of Norco and ongoing efforts to distribute recycled water to other member agencies, and the District's ongoing efforts to create a distribution network.

Etiwanda Intervalley Pipeline

Jurupa Community Services District (JCSD) and Cucamonga Valley Water District (CVWD) are collaborating to develop a domestic water supply and conveyance project that will benefit both Districts by increasing water supply, improving water quality, enhancing infrastructure resiliency, and promoting sustainability. By working together, both Districts will benefit financially and operationally due to facilities that can be utilized by either or both Districts depending on needs and availability of the various water supplies. The total Etiwanda Water Quality and Water Resiliency Project is a model for how independent water purveyors can work together to benefit their stakeholders and provide increased reliability regarding water quality, availability, and sustainability.

JCSD's ultimate average daily demand for potable water is projected to be approximately 36,340 acre-feet per year (AF/YR) by about the year 2040. This demand will be supplied from a portfolio of sources including existing groundwater wells, Chino Basin Desalter Authority, and imported supply.

In order to meet ultimate demand of 36,340 AF/YR, JCSD needs to secure additional water supply of approximately 10,800 AF/YR. The Etiwanda lntervalley Water Quality and Water Resiliency Project will be the water supply and conveyance mechanism to satisfy the long-term water supply deficit. Water will be supplied from one of CVWD's surface water treatment plants and new wells to be drilled in the upper portion of the Chino Basin. CVWD owns and operates two surface water treatment plants that are fed water from the Rialto Feeder. The Rialto Feeder is a large diameter pipeline owned by The Metropolitan Water District of Southern California (MWD) that delivers raw water from the State Water Project (SWP) to local water purveyors who treat and deliver SWP water to their customers. CVWD currently operates the Lloyd Michael Water Treatment Plant (LMWTP), which has a permitted capacity of 30 MGD. CVWD also owns the Royer Nesbit Water Treatment Plant (RNWTP), which was permitted at 11.5 MGD but has been taken out of service and not currently operational. It has not been determined yet whether the LMWTP or the RNWTP will be the point of connection on the north end of the project but the southern connection will be at JCSD's 1110 and 980 pressure zone facilities near the Jurupa Hills along Country Village Road. The backbone conveyance portion of this project is called the Etiwanda Pipeline and it will be utilized to move water south into JCSD's service area and/or north into CVWD's service area. This project will be able to deliver the required imported water and allow JCSD to complete its water portfolio.

CVWD's long-term water supply will be provided through a combination of SWP water coming though the Rialto Feeder, local surface water captured in the local watershed, and groundwater wells in the Chino and Cucamonga Basins. It is anticipated that these sources are adequate to satisfy CVWD's demands. CVWD will benefit from this project through the development of additional groundwater wells, recharge of the aquifer during times of excess water on the SWP, additional storage facilities, enhanced ability to transfer water to multiple pressure zones, and to generate electricity to offset operating costs.

In general, the Etiwanda Intervalley Water Quality and Water Resiliency Project includes the following components:

- Etiwanda Pipeline (63,070 LF in 3 Phases)
- Storage reservoir(s) totaling approximately 10 million gallons
- Pressure reducing / flow control station(s)

- Upgrade existing pumping facilities to deliver water from CVWD's Reservoir 2C to their upper pressure zones
- Five (5) new wells, to be constructed in the northern portion of the Chino Groundwater Basin, including aquifer storage recharge (ASR) capabilities on two of the wells
- Upgrade/Expansion of either the LMWTP or the RNWTP
- Groundwater treatment of existing JCSD groundwater wells
- Hydroelectric generating facilities on the diversion from the Rialto Feeder to the LMWTP and Etiwanda Pipeline near the JCSD 1110 and 980 pressure zone tanks

Descriptions of All Water Supply Projects

JCSD has budgeted $10,875,000 for water source development in fiscal year (FY) 2021-2022, and a total of $192,616,900 from FY 21/22 to beyond 2024-25, as shown in **Table 3-6**.

Normal, Single-Dry, and Multiple-Dry Year Conditions

JCSD has various sources of water supplies available to meet demands during, normal, single-dry, and multiple-dry years. In the 2010 and 2015 UWMPs, JCSD assumed 2004 as its Normal Year and 1977 as the Single Dry Year. The Multiple-Dry Year period was established at 2012-2015 for the recent UWMP.

JCSD expects 100 percent of its supply to be available in all year types because the District's supply source is groundwater, and in particular the Chino Basin has five million AF in storage. Therefore, production of water would be a function of cost and not a lack of supply. Because JCSD does not operate its wells at full capacity, it can be assumed that groundwater pumping could increase to meet demand if drought conditions persisted or worsened.

A normal water year is a year, or an average of years, that most closely represents the average water supply available to the agency. The normal year water supplies available to JCSD and the normal year water demand projections are compared in **Table 3-7**. The District has determined with the addition of an imported water source, it will have sufficient supply and groundwater pumping capacity to meet maximum day water demands through 2040 (UWMP, p. 7-5)

As shown previously in **Table 3-5**, the projected supply from an imported water source is 7,500 AFY in 2025, and 10,000 AFY beginning in 2030. Also, the projected recycled water supply from WRCRWA is 500 AFY beginning in 2020. If both supply sources were subtracted from the total supply in **Table 3-7**, then a potential shortfall would not appear until sometime between 2025 and 2030.

The single dry year is the year that represents the lowest water supply available to the District. JCSD established in the 2010 UWMP that this is best represented by the dry year in 1977 (UWMP, p. 7-3). As shown in **Table 3-8**, JCSD has assumed the same water supply and demand as the Normal Year scenario shown in **Table 3-7**.

JCSD expects by 2025 that recycled water will meet some of the irrigation water demand, thus making available several hundred acre-feet of potable groundwater potentially available for urban use.

JCSD has observed in recent years reductions in water demand due to significant water conservation efforts on behalf of customers. Current and future drought regulations could further decrease water demands and ensure that existing supplies meet future demands during single or multiple dry years. (UWMP, p. 7-3)

The multiple dry year period is the range of years representing the lowest average water supply available to the District for a consecutive multiple year period (three years or more). This was established as 2012 to 2015 in the UWMP. Notably, JCSD had sufficient supplies to meet demands during the drought period from 2011-2017.

Because the District's supply source is groundwater, and specifically the Chino Basin has five million AF of water in storage, the District's ability to provide water during drought conditions would result in increased pumping costs but not the ability to produce water.

The multiple dry year supply and demand comparisons are shown in **Table 3-9**. Demand is expected to gradually decrease in response to drought regulations and water conservation. During the first dry year, JCSD assumes no change in projected water demand. During the second, third, and fourth dry years, JCSD assumes a decrease in water use of 5, 10, and 20 percent, respectively (as measured from the first-year baseline). This demonstrates the expected time-lag between the first dry year until water conservation efforts start to show an impact in water use. A multiple dry year decrease in demand of 20 percent has been demonstrated by JCSD, which reduced water production by 23 percent from 2013 to 2015. (UWMP, p. 7-5)

Table 3-6. Normal Year Supply and Demand (AFY)

	2025	2030	2035	2040	2045
Supply Totals	42,093	44,093	44,093	44,093	44,093
Demand Totals	31,525	34,035	35,825	37,795	37,795
Difference	**10,568**	**10,058**	**8,268**	**6,298**	**6,298**
Note: From JCSD 2020 UWMP, Table 7-2. AFY = acre-feet per year					

Table 3-7. Single-Dry Year Supply and Demand (AFY)

	2025	2030	2035	2040	2045
Supply Totals	42,303	44,534	44,446	44,402	44,313
Demand Totals	31,714	34,477	36,506	38,740	39,004
Difference	**10,589**	**10,057**	**7,940**	**5,662**	**5,309**
Note: From JCSD 2020 UWMP, Table 7-3. AFY = acre-feet per year					

Table 3-8. Multiple-Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
First Year	Supply Totals	41,883	43,608	43,432	43,255	43,079
	Demand Totals	31,462	34,443	36,470	38,702	38,928
	Difference	**10,420**	**9,165**	**6,962**	**4,554**	**4,150**
Second Year	Supply Totals	41,883	43,608	43,432	43,255	43,079
	Demand Totals	28,316	30,999	32,823	34,832	35,036
	Difference	**13,567**	**12,609**	**10,609**	**8,424**	**8,043**
Third Year	Supply Totals	41,883	43,608	43,432	43,255	43,079
	Demand Totals	25,170	27,554	29,176	30,961	31,143
	Difference	**16,713**	**15,054**	**14,256**	**12,294**	**11,936**
Fourth Year	Supply Totals	41,883	43,608	43,432	43,255	43,079
	Demand Totals	22,024	24,110	25,529	27,091	27,250
	Difference	**19,859**	**19,498**	**17,903**	**16,164**	**15,829**
Fifth Year	Supply Totals	41,883	43,608	43,432	43,255	43,079
	Demand Totals	18,877	20,666	21,882	23,221	23,357
	Difference	**23,005**	**22,942**	**21,550**	**20,034**	**19,722**

Note: From JCSD 2020 UWMP, Table 7-4.
AFY = acre-feet per year

As shown in Tables 3-6, 3-7, and 3-8 above, JCSD expects to have adequate water supplies to meet future planned water demands during normal, single-dry, and multiple-dry years through the 20-year planning period.

Summary

As described in Section 2, the projected annual potable water demand for the proposed Eastvale Leal Property is estimated at 461 AFY. Based on the information provided in the 2020 UWMP, the District has sufficient water supplies to meet the water demands of the Project by purchasing water from CDA that is within their contractual rights and by using existing groundwater supplies and pumping capacities that are more than adequate to meet the additional water demand of the proposed Project during normal, single-dry, and multiple-dry water years. With the ongoing water conservation efforts, JCSD will further ensure its ability to provide sufficient supply for the proposed Project. Section 4 will discuss the District's water rights in light of this water supply and capacity analysis.

Section 4. Groundwater Analysis

SB 610 requires specific groundwater information to be included in the WSA if groundwater will be a source of water for the proposed project. As discussed in Section 3, groundwater is a source of supply for the proposed Eastvale Leal Property Project.

Review of Urban Water Management Plan

The 2020 Urban Water Management Plan (UWMP), prepared by Albert A. Webb Associates (WEBB) on behalf of the Jurupa Community Services District (JCSD or District) was adopted by the Board of Directors on June 28, 2021 (**Appendix A**). The UWMP includes information relevant to the identified water supply for the proposed Project and is incorporated herein. Relevant information includes: 1) current and projected water demands through year 2040; 2) a description of the Chino Groundwater Basin; 3) the reliability of the water supply, projected supply and demand comparisons, and water shortage contingency plans; and 4) water demand management efforts.

Groundwater Basin Descriptions

As discussed in Section 3, the Chino Groundwater Basin (Chino Basin) is the direct source of groundwater for JCSD. The use of groundwater from the Riverside South Basin is limited to non-potable wells used for irrigation purposes. **Figure 4-1**, Groundwater Basin Map shows the JCSD service area in relation to underlying groundwater basins.

Chino Basin Description

The Chino Basin covers approximately 240 square miles in the upper Santa Ana River Watershed, and underlies parts of Los Angeles, San Bernardino, and Riverside Counties. The state Department of Water Resources (DWR) identifies the Chino Basin as No. 8-002.01, a sub-basin of the Upper Santa Ana Valley (Bulletin 118). While still considered a single basin for hydrologic purposes, the Chino Basin is divided into five management zones based on similar hydrologic conditions, and shown in **Figure 4-2**, Groundwater Management Zones.

It is estimated the Chino Basin has approximately 5 million acre-feet (AF) of water in storage, and an estimated 1 million AF of additional unused storage capacity (UWMP, p. 6-8). Geographically speaking, JCSD's service area covers the southeast corner of the Chino Basin.

Legal Right to Pump from the Chino Basin

Water rights to the Chino Basin were adjudicated by the Superior Court of the State of California for the County of San Bernardino in 1978 (a copy of the Judgment is provided in **Appendix F**). The Judgment created the Chino Basin Watermaster (Watermaster) which is comprised of three stakeholder committees (or "pools"): Overlying Agricultural Pool Committee (representing dairymen, farmers, and the State of California); Overlying Non-Agricultural Pool Committee (representing businesses and industries); and Appropriative Pool Committee (representing local cities, public water districts and private water companies). The Watermaster carries out the provisions of the Judgment including monitoring of the basin and files an annual report on pumping and replenishment.

JCSD is a member of the Appropriative Pool and therefore has adjudicated production rights to the basin. The Judgment established the total Appropriative Right for the Appropriative Pool at 78,763.82 AF. The District's portion of the Appropriative Right is 2,960.60 AF, which does not change from year to year.

The court's original Judgment declared the safe yield of the Chino Basin at 140,000 AFY. The Watermaster may determine that the operating safe yield (OSY) can be higher from year-to-year depending on factors including favorable precipitation and management efforts that maximize the beneficial use of the groundwater Basin. On July 31, 2020, the Court ordered that the safe yield be set at 131,000 AFY for the period of July 1, 2020 to June 30, 2030. The Judgment does not limit a Party's groundwater production to its share of safe yield.

As of June 30, 2020, the Judgment allocated an OSY of 44,834 AFY to the Appropriative Pool. Because JCSD has rights to 3.759 percent of the OSY, the District's current share of the OSY is 1,685.31 AF. This amount will change from year to year as directed by the Watermaster.

JCSD also gains water rights through agricultural land use conversions. Since 2000, JCSD has been credited two AF per acre per year of water rights for every acre converted to non-agricultural use within the JCSD service area. As of fiscal year 2019/2020, total land use conversion rights claimed by JCSD is 15,051 AF. Annual adjustments to this right may be made by the Watermaster as part of their "Reallocation of Agricultural Pool Safe Yield" calculations.

The Judgment allocates safe yield of the Chino Basin according to the three pools. There is a clear expectation that parties, including JCSD, would produce water in excess of their adjudicated production rights. The injunction in Paragraph 13 of the Judgment should thus be interpreted to mean that parties are enjoined from producing water in excess of their adjudicated rights except to the extent that they will pay a replenishment assessment.

The ability to produce water from the Chino Basin is accordingly not a matter of availability, as contemplated and sanctioned by the Judgment for the reasons discussed above, but rather a matter of cost. Water produced in excess of production rights will cost more than water produced within a party's production rights. Thus, the quantity and reliability of groundwater supplies under the Judgment for purposes of this Assessment is a matter of cost of the water produced from the Basin rather than limitations on production which may otherwise operate to reduce the sufficiency of the groundwater supply.

In addition to the Appropriative Pool water rights, the contract obligations in the Dry Year Yield (DYY) Program, purchases from RCSD and CDA as described in Section 3, the District has groundwater rights held in the Chino Basin as described below:

> **Annual Early Transfers**. The Watermaster can approve an "Early Transfer" of water to the Appropriative Pool equal to the quantity of water not produced by the Overlying Agricultural Pool that is remaining after all land use conversions are satisfied, pursuant to the Peace Agreement. The Early Transfer Water is annually allocated among the Appropriative Pool members in accordance with their pro-rata share of the initial Safe Yield. For JCSD, this is 3.759 percent of the amount transferred and therefore changes from year to year. In FY 2019/2020, JCSD was allocated 938.3 AF as its share of the Early Transfer.
>
> **Groundwater Storage Accounts**. JCSD has rights to store water in the Chino Basin. Currently (Production Year 2019-2020), there is a total of 31,861.3 AF in storage as recorded by the Watermaster (**Table 4-1**). As such, this is enough water in the District's storage accounts to meet at least one year of total demands, should its other water supply sources be unavailable.

Table 4-1. Groundwater Rights Summary

Description	Fiscal Year 2019/2020
Appropriative Right	2,960.60 AFY
Percent of OSY	3.759%
Carryover Beginning Balance	1,685.3 AFY
Assigned Share of OSY	1,685.3 AFY
Net Ag Pool Reallocation[a]	16,177.2 AFY
Total Annual Production Right in Acre-Feet Per Year	19,547.9
Groundwater Storage Accounts[b]	27,795 AF (Beginning Balance)
	(19.5) (Storage Loss)
	(1,535.2) (Transfer To/From)
	5,621 (From Under Production)
Storage Account Subtotal In Acre-Feet	31,861.3

Note: From CBWM 2020.
(a) For Production Year 2019-2020 (CBWM pp. N-12)
(b) Ending balances for production year 2019-2020 (CBWM, pp. N-13, N-14, N-15).
OSY = operating safe yield, AFY = acre-feet per year.

Recorded Use of Groundwater

JCSD currently operates 18 potable water wells in the Chino Basin that have a current production rate of 33,090 gallons per minute (gpm), and ultimate capacity is estimated at 43,315 gpm (JCSD 2020). JCSD does not operate its wells at maximum capacity, but rather they fluctuate on and off as demand changes. JCSD also operates seven non-potable wells in the Chino and Riverside South basins. Recorded groundwater production of potable and non-potable JCSD wells are listed in **Table 4-2**.

Table 4-2. Recorded Groundwater Production

Year	Potable (AFY)	Non-Potable (AFY)
2020	16,695	51
2005	18,913	--
2010	13,688	591
2015	8,993	845
2016	10,716	712
2017	12,906	795
2018	14,829	750
2020	11,052	767

Note:
2000, 2005, 2010 from DWR Public Water Systems Statistics (PWSS) reports.
2015 from UWMP, p. 6-4.
2016-2018 from JCSD Staff, Water Supply History.
Values are rounded to nearest whole number.

Projected Use of Groundwater

Projected groundwater use by JCSD is dependent upon the cost of extracting, treating, and transporting the water to customers. Groundwater from the Chino Basin will be utilized by JCSD either directly by pumping into its distribution system or by obtaining groundwater through the CDA, RCSD, and/or through the DYY program.

Table 4-3. Projected Use of Groundwater

Supply Type	Source	Water Quality	Projected Use (AFY)				
			2020	2025	2030	2035	2040
Groundwater	JCSD Wells[a]	Potable	11,029	14,000	18,000	18,000	18,000
Purchased	CDA[b]	Potable	11,414	11,733	11,733	11,733	11,733
Purchased	RCSD	Potable	--	2,000	2,000	2,000	2,000
Other	DYY Program	Potable	1,446	2,000	--	--	--
Transfers	CDA (for SARWC)	Potable	1,170	1,200	1,200	1,200	1,200
Potable Sub-Total			**25,059**	**30,933**	**32,933**	**32,933**	**32,933**
Recycled Water	WRCRWA Plant	Non-Potable	--	660	660	660	660
Groundwater	JCSD Wells[c]	Non-Potable	491	500	500	500	500
Groundwater	JCSD Wells[a]	Non-Potable	276	--	--	--	--
Non-Potable Sub-Total			**767**	**1,160**	**1,160**	**1,160**	**1,160**
Total			**25,826**	**32,093**	**34,093**	**34,093**	**34,093**

Note: See Table 3-5 of this report. From JCSD 2020 UWMP, p. 6-28, p. 6-29.
(a) Located within Chino Basin.
(b) Wholesale agency. No project has been determined; wholesaler supplier subject to change.
(c) Located within Riverside South Basin.
AF = acre-feet
(1) Due to rounding, sum of the individual items may not equal the total value.

The amount of water that JCSD plans to produce from the Chino Basin as shown in **Table 4-3** is well within their rights pursuant to the Chino Basin Judgment (**Appendix F**). Further, projections of groundwater obtained by JCSD from the other sources listed in **Table 4-3** are also within the District's rights and agreements. Therefore, the projected supplies needed to meet future demands are met from the various sources discussed in this report.

Sufficiency of Groundwater Basin

JCSD's legal right to pump water in an amount necessary to meet all demands as sanctioned and protected by the Judgment as discussed above, is buttressed by several programs and projects directed at ensuring the sufficiency of groundwater supplies from the Basin, particularly during dry years. An adjudicated water right has perhaps the most substantial indicia of reliability of any water right that currently exists in California. An adjudicated right is based upon long-term studies whose purpose it is to protect the long-term functionality of the water source. These rights are coordinated in an established and binding manner with all the other users of the Basin and are overseen by Watermaster which has the authority to mandate and proscribe activities whose purpose is to protect the water source and maximize its long-term beneficial use.

All Watermaster processes are governed by Rules and Regulations and receive active oversight from the Court which, as noted above, retains continuing jurisdiction over the administration of the Judgment. Consequently, the sufficiency of the groundwater is not only directed by rigorous Watermaster management processes but validated and ensured by continuing Court oversight.

The Optimum Basin Management Program (OBMP) for the Chino Basin has guided the Chino Basin Watermaster's activities since its adoption in 1998. Watermaster-led basin management activities to ensure the maximization of safe yield and OSY of the Chino Basin include objectives, projects, and programs identified in the Peace Agreement and the OBMP. Progress is reported in annual reports, biennial and triennial reports.

As stated, the referenced elements of the OBMP collectively comprise a comprehensive regimen directed to ensuring and maximizing the long-term beneficial use of water in the Chino Basin. In particular, and specific to the location of current and future groundwater production facilities upon which JCSD relies or will rely to provide water to meet water demands within its service area, OBMP Program Element No. 3, "Develop and Implement Water Supply Plan for the Impaired Areas of the Basin" and Program Element No. 5, "Develop and Implement Regional Supplemental Water Program", address the sufficiency of groundwater from the Basin. Fundamentally, the goal of Program Elements 3 and 5 is to develop a regional, long range, cost-effective, equitable, water supply plan for producers in the Chino Basin that incorporates sound basin management.

The JCSD service area overlies groundwater supplies in the southern part of the Chino Basin which must be pumped for purposes of meeting new demands, maintaining safe yield, and to protect water quality in the Santa Ana River. The JCSD service area overlies groundwater supplies in the southern part of the Chino Basin which must be pumped for purposes of meeting new demands, maintaining safe yield, and to protect water quality in the Santa Ana River. As agricultural production in the southern part of the Chino Basin declines, it will be necessary for these reasons to increase production for municipal uses. This is being achieved through the Chino I and Chino II Desalters, of which the JCSD has a contractual right to purchase 8,200 AFY pursuant to the original agreement, and 11,733 AFY as a result of subsequent amendments and expanded treatment facilities (**Appendix C**). Thus, not only was increased Chino Basin water production by JCSD foreseen in the OBMP but sanctioned and encouraged for purposes of achieving OBMP objectives.

The sufficiency of the groundwater supply that is available to JCSD is assured due to the abundance of groundwater in the central and southern portion of the Chino Basin, OBMP objectives that prioritize and assure production from the southern Chino Basin coupled with desalting and ion-exchange treatment facilities that enable the use of this abundant supply for municipal (potable) purposes. As indicated in the quoted text of the OBMP, southern basin production, where JCSD is partially located, is the linchpin of several critical OBMP objectives. Thus, the sufficiency of groundwater is heightened and prioritized by the necessity of continued pumping from the southern Chino Basin under the OBMP which is administered by the Watermaster and ultimately enforced by continuing Court jurisdiction over the Judgment.

The other referenced OBMP Program Elements are collectively directed to ensuring the sufficiency of Chino Basin groundwater supplies, particularly during dry years, and comprehensively address water quality and quantity, thus maximizing beneficial use over the long-term. Sufficiency of groundwater from the Chino Basin is further assured for the following reasons:

- Inland Empire Utilities Agency (IEUA) is a member agency of MWD, which provides imported water from the State Water Project for direct use by parties to the Judgment in the Chino Basin

and for Chino Basin recharge purposes (when supplies are available). IEUA has also reviewed the sufficiency of supplies for its service territory that includes the Chino Basin in connection with its 2015 UWMP (**Appendix J**).

- IEUA's UWMP is consistent with, and reiterative of, OBMP projects and programs (see Section 7.4 of **Appendix J**). IEUA anticipates increased limitations for imported water for direct and recharge use while noting reductions during dry years (due to increased reliance on groundwater from the Basin) and in the higher amount otherwise required in the absence of OBMP projects and programs. The UWMP also analyzes the sufficiency of water supplies for single and multiple year drought scenarios and concludes the region is expected to meet 100 percent of its dry year demand under every scenario. Key assumptions included:

    - Reliance on assurances provided by MWD in its 2015 UWMP (**Appendix K**) that it could meet 100 percent of projected supplemental full-service water supply demands through 2040;

    - Implementation of MWD's Chino Basin DYY Storage Program consistent with the contractual shift obligations of the participating agencies of up to 33,000 AF in a twelve-month period; and

    - Sustain per capita water use reductions of 10 percent by 2015 and 20 percent by 2020.

IEUA concluded in its 2015 UWMP that the projected available water supply will meet projected water demand due to diversified water supply and water conservation measures. Based on IEUA water supply projections, there are sufficient water supplies to meet normal year water demands and single dry year demands. However, in the multiple dry year scenario a local supply gap of 283 AF is projected for 2040. IEUA and retail agencies plan to close the supply gap through utilizing local supplemental water supply opportunities and securing additional imported water as needed to accommodate for the variability in supply from the State Water Project (**Appendix J**, p. 3-16).

CWC section 10631(j) provides that urban water suppliers, that rely upon a wholesale agency for a source of water may rely upon water supply information provided by the wholesale agency in fulfilling UWMP informational requirements.

IEUA's independent analysis of contemporary regional water conditions in conjunction with MWD's most recent report, provide additional and reliable assurances concerning the sufficiency of imported water supplies that comprise a portion of overall Chino Basin supply sufficiency. As stated in the above-quoted OBMP text, however, "expanded use of imported water in the northern part of the Chino Basin will have a lower priority than maintaining groundwater production in the southern part of the Chino Basin."

JCSD's participation in the DYY Storage Program described in Section 3, along with future water storage and recovery projects will drought-proof the Chino Basin and all other appropriative pool members from imported water shortages. This program is consistent with OBMP Program Element No. 9, "Develop and Implement Storage and Recovery Program." Benefits to the Chino Basin associated with this program include the construction of facilities to enhance imported water deliveries and the production of water from the Chino Basin. Further demonstrating the sufficiency of Chino Basin groundwater is MWD's program to use the Chino Basin for dry year supply purposes, thus underscoring that sufficient Chino Basin groundwater is available during dry years not only for local use by agencies like JCSD but also in connection with MWD's regional reliability programs.

In conclusion, the sufficiency of groundwater supplies available to JCSD is assured because of the OBMP programs overseen by the Chino Basin Watermaster and conducted under the auspices of continuing Court jurisdiction that specifically direct and assure the long-term production of water pursuant to the District's legal rights to produce such water necessary to meet ultimate water demands.

Summary

As discussed in Section 2, the proposed Project's annual water demand is estimated at 461 AFY. The proposed land use types are similar to the 2020 UWMP, which estimated an annual demand of 505 AFY. For the purposes of this analysis potable water is assumed. District-wide potable water consumption in CY 2020 was 27,357 AF (JCSD 2020). With passage of recent statewide water conservation standards, unit water consumption of potable water is anticipated to decline.

As discussed in Section 3, the water supply portfolio available to serve the Project includes local potable water from District wells, CDA, RCSD, and the DYY Program. The District also maintains water storage accounts through the Chino Basin Watermaster. As of 2020, the potable water supplies utilized by JCSD totaled approximately 27,357 AF, which is commensurate with the District-wide potable demand during the same time period (JCSD 2020).

As of CY 2020, the potable groundwater production by JCSD was approximately 11,502 AF, which is less than the District's projected peak groundwater production of potable ground water (**Table 4-2**). Further, the District currently uses their total rights to potable water available from the CDA (**Table 4-3**).

Currently, JCSD's annual production right in the Chino Basin as calculated by the Watermaster totals 19,547.9 AF, with an additional 31,861.3 AF in storage (**Table 4-1**).

Although annual fluctuations to rights and storage accounts will occur, the District's rights are projected to increase over the next 20 years due to more land use conversions.

In conclusion, the water supplies available to JCSD currently meet and exceed water demands. Groundwater production by JCSD is currently less than their existing rights and within their groundwater well production capacity. Regardless, JCSD has the means and right to exceed their groundwater allocation in the Chino Basin when required to meet demand pursuant to the Judgment. Further, JCSD has rights to water held in storage that would supply customer demands for more than one year. On the other hand, JCSD also can supply water to the Project purchased from CDA that is within their existing entitlements and capacities. Therefore, the District can meet the planned water demand of the proposed Project by utilizing JCSD's existing water supply.

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Figure 4-1. Groundwater Basin Map

Figure 4-2. Chino Basin Management Zones

Section 5. Conclusions

Jurupa Community Services District (JCSD) has been identified as the water supplier for the proposed Eastvale Leal Property ("Project"). JCSD prepared an Urban Water Management Plan (UWMP) in 2020.

The Project is in the City of Eastvale and consists of 158 acres of proposed development. The proposed project will include mixed uses including mixed-use retail, office, housing, and civic development including police and fire stations and community center as well as a hotel and community spaces.

The estimated potable water demand for the Project is 461 acre-feet per year (AFY) (**Table 2-3**). No recycled water is assumed available to serve this Project at this time. The Project site was accounted for in the 2020 UWMP, which estimated a demand of 505 AFY for the Project site. Thus the Project was accounted for in the water demand projections of the most recent UWMP.

JCSD produced 11,051.8 AF of groundwater for potable use in CY 2020. JCSD has water production rights in the Chino Groundwater Basin that currently total 19,547.9 AF, as well as groundwater storage accounts that total 31,861.3 AF (**Table 4-1**).

JCSD holds a contractual commitment as a member of the Chino Basin Desalter Authority (CDA) for potable supplies in the amount of 11,733 AFY, and an agreement to purchase potable water from Rubidoux Community Services District (RCSD) in the amount of approximately 2,000 AFY. During dry years, JCSD can also purchase the City of Ontario's share of CDA water in the amount of approximately 2,000 AF through the DYY Program. In CY 2020, JCSD received 11,414 AF from CDA and 1,446 AF through the DYY Program. No supply was received from RCSD in CY 2020 (**Table 3-5**). In addition, JCSD obtained WMWD's CDA's supply of 3,445.5 AF of WMWD's CDA supply in CY 2020.

JCSD has forecasted excess water supplies will be available to meet customer demand during single-dry and multiple dry water years over the next 20 years (**Tables 3-8** and **3-9**), assuming a new water supply source is brought online around 2025. Current projects and supply sources include Western Municipal Water District and Cucamonga Valley Water District (**Table 3-6**). The District currently has an application before the State Water Resources Control Board to obtain grant funding and a low interest rate loan for a recycled water system.

Potable water demand in the JCSD service area was 27,357.3 AF as of CY 2020. By 2040, ultimate potable water demands are estimated at 36,289 AFY (**Table 2-2**). The current groundwater pumping capacity (33,090 gpm) will be increased ultimately to 43,315 gpm to meet customer demands under buildout conditions.

Based on the evidence provided herein, the total projected water supplies available to JCSD during normal, single dry, and multiple dry water years over a 20-year projection will be sufficient to meet the projected water demand associated with the proposed Project in addition to the water supplier's existing and planned future uses, including agricultural and manufacturing uses. State mandated conservation efforts will reduce demand in the future.

References

1. Jurupa Community Services District, 2020 Urban Water Management Plan.
2. Jurupa Community Services District, 2020 Draft Water Master Plan. March 2021.
3. Chino Basin Desalter Authority, 2015 Urban Water Management Plan. June 2016.
4. Western Municipal Water District 2015 Urban Water Management Plan Update, Final Report. June 2016.
5. The Metropolitan Water District of Southern California, 2015 Urban Water Management Plan. June 2016.
6. Chino Basin Watermaster, Fiscal Year 2019-20, 43rd Annual Report.
7. Amendment No. 8 to Groundwater Storage Program Funding Agreement No. 49960 By and Among The Metropolitan Water District of Southern California and Inland Empire Utilities Agency and Chino Basin Watermaster. September 17, 2014.
8. Judgment, Chino Basin Municipal Water District v. City of Chino, et al., San Bernardino Ct. No. 164327 (filed Jan. 30, 1978). Includes amendments thereto.
9. Agreement by and between the City of Ontario and Jurupa Community Services District establishing an operational plan for Metropolitan Water District/Chino Basin Groundwater Storage Program, Providing for Water Supply to Ontario's New Model Colony and Interconnection to Increase Water Supply Reliability. November 21, 2014.
10. Judgment, Orange County Water District v. City of Chino, et al., Superior Court for the State of California for the County of Orange No. 117628 (filed April 17, 1969).
11. Judgment, Western Municipal Water District, et al. v. East San Bernardino County Water District, et al., Superior Court of the State of California in and for the County of Riverside No. 784726 (filed April 17, 1969).



AGENCY SUBMITTAL
EASTVALE, CA
DECEMBER 19, 2024

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Project Team

APPLICANT / OWNER
QUARTERRA
95 Enterprise, Suite 200
Aliso Viejo, CA 92656
949.448.1600
Contact: DAN FERGUSON
ALEC CHASMAN

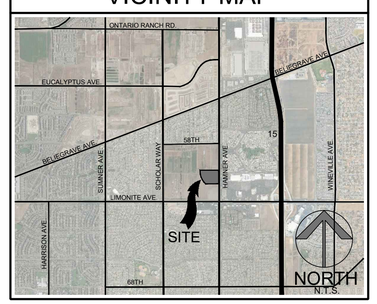
RESIDENTIAL ARCHITECT
ARCHITECTS ORANGE
144 N. Orange Street
Orange, CA 92866
714.639.9860
Contact: SERAFIN MARANAN
KAI LAU

LANDSCAPE ARCHITECT
KIMLEY-HORN
1100 Town and Country Road, Suite 700
Orange, CA 92868
714.939.1030
Contact: MICHAEL LEDBETTER

CIVIL ENGINEER
KIMLEY-HORN
1100 Town and Country Road, Suite 700
Orange, CA 92868
714.939.1030
Contact: ELIZABETH COBB

FIRE AGENCY
FIRESAFE PLANNING
28486 Airoso Street
Rancho Mission Viejo, CA 92694
(949) 240-5911
Contact: JERRY CANALES
DAVID OATIS

VICINITY MAP



REVISION LOG

NO.	DESCRIPTION	Date
1	1ST SUBMITTAL	04.17.2024
2	2ND SUBMITTAL	07.18.2024
3	3RD SUBMITTAL	10.14.2024
4	4TH SUBMITTAL	12.19.2024

Quarterra

LEAL RANCH

EASTVALE, CA

COVER SHEET

AO

G1.0

JOB NO. 2022-1036
DATE 09-16-2024

PROJECT DESCRIPTION

360 UNIT MIXED-USE APARTMENT PROJECT CONSISTING OF 12 FOUR STORY TYPE VA APARTMENT BUILDINGS WITH TUCK UNDER GARAGES AND SURFACE PARKING AND 2 STORY TYPE VA CLUB/LEASE BUILDING

TOTAL UNITS	**360 UNITS**
SITE AREA	**10.6 AC NET**
DENSITY	**34 DU/AC**
ZONING	**LEAL MASTER PLAN**
ADJACENT ZONING	**LEAL MASTER PLAN, SPECIFIC PLAN (S-P), MOBILE HOME SUBDIVISION AND MOBILE HOME PARK (R-T)**
EXISTING USE	**VACANT**

A. BUILDING / UNIT MIX

BLDG. TYPE	1 BR / 1 BA			2 BR / 2 BA			3 BR / 2 BA		TOTAL UNIT	TOTAL GARAGE
	A1	A1A	A2	B1	B1A	B2	C1	C2		
1-A.3	0	15	10	3	0	2	0	0	30	16
2-A.4	0	15	10	3	0	2	0	0	30	16
3-G.1	9	0	14	12	0	0	0	0	35	21
4-D.4	0	0	0	9	0	6	3	2	20	17
5-G.1	9	0	14	12	0	0	0	0	35	21
6-A.2	0	15	10	3	0	2	0	0	30	16
7-D.5	0	0	0	9	0	6	3	2	20	17
8-D.4	0	0	0	9	0	6	3	2	20	17
9-G.3	9	0	14	12	0	0	0	0	35	21
10-G.2	9	0	14	12	0	0	0	0	35	21
11-G.1	9	0	14	12	0	0	0	0	35	21
12-G.1	9	0	14	12	0	0	0	0	35	21
SUB-TOTAL	54	45	114	108	0	24	9	6	360	223
	213			132			15			
%	59%			37%			4%		100%	

B. NET RENTABLE

UNIT TYPE	QTY.	NET RENTABLE PER UNIT SQ.FT	TOTAL NET RENTABLE SQ.FT.
A1	54	700	37,800
A1-BLDG A	0	835	0
A2	114	825	94,050
A2-BLDG A	0	757	0
A1A	45	842	37,890
B1	108	1,053	113,724
B1-BLDG A	0	1,173	0
B2	24	1,061	25,464
B2-BLDG A	0	1,101	0
B1A	0	1,243	0
C1	9	1,414	12,726
C2	6	1,309	7,854
TOTAL	360	915	329,508

C. PARKING SUMMARY

TOTAL RESIDENT PARKING REQUIRED

UNIT TYPE	UNITS	RATIO	QTY.
1 BR	213	1.35	288
2 BR	132	2.27	300
3 BR	15	2.88	43
RESIDENT TOTAL REQUIRED	360		631

ACCESSIBLE STALLS

ACCESSIBLE STALLS			REQUIRED ACCESSIBLE		PROVIDED ACCESSIBLE
GROUND FLOOR ACCESSIBLE UNITS	631	2%	12.62	=13 Req'd	10
ACCESSIBLE VAN PARKING	1 PER 6 HC STALLS		3		3
TOTAL ACCESSIBLE STALLS					13

TOTAL PARKING PROVIDED

RESIDENT PARKING PROVIDED	QTY.	%	ACCESSIBLE	
GARAGE	223	35%	4.5	5
STANDARD STALL	155	25%	3.1	4
TANDEM STALL	91	14%	1.8	2
CARPORT	162	26%	3.2	4
TOTAL RES. PKG PROVIDED	631	100%	15	
PARKING RATIO	1.75	STALL/ DU		

ELECTRIC VEHICLE STALLS

RESIDENT PARKING PROVIDED	STALLS	FACTOR		TOTAL EV STALLS
ASSIGNED PARKING	631			
EV CHARGERS		5%	32	253
EV READY - LOW POWER		25%	158	
EV CAPABLE		10%	63	

D. TOTAL RESIDENTIAL BUILDING FOOTPRINT

BLDG TYPE	Level 1	Level 2	Level 3	TOTAL SQ. FT.
A.2	11,936	12,015	12,015	35,966
D.1 & D.4	10,427	10,851	10,851	32,129
G.1 & G.2 & G.3	14,295	14,551	14,551	43,397
TOTAL	36,658	37,417	37,417	111,492

E. TOTAL NON-RESIDENTIAL BUILDING FOOTPRINT

BLDG TYPE	TOTAL SQ. FT.
CLUB / LEASING / FITNESS / COWORKING / MAILROOM	7,556

F. LOT COVERAGE

AREA TYPE	AREA (SF)	%
BUILDING FOOTPRINT AREA	152,859	33%
LANDSCAPE AREA	119,331	26%
DRIVE AISLE / PARKING AREA	189,110	41%
GROSS SITE AREA	461,300	100%

G. OPEN SPACE

COMMON OPEN SPACE REQUIRED	S.F.
40% OF NET AREA*	108,876

*NET AREA EXCLUDES ALL STREETS, DRIVES, AND AUTOMOBILE STORAGE AREAS PER SECTION 120.04.050 SECTION D

COMMON OPEN SPACE PROVIDED	S.F.
LANDSCAPE AND POOL	118,680
CLUB / LEASING / FITNESS / COWORKING / MAILROOM	7,556
TOTAL	126,236

TYPE	S.F. PROVIDED
PRIVATE RESIDENTIAL OPEN SPACE	21,063
COMMON RESIDENTIAL OPEN SPACE	126,236
TOTAL	147,299

H. PRIVATE OPEN SPACE

UNIT TYPE	PRIVATE OPEN SPACE SQ.FT.	TOTAL PRIVATE OPEN SPACE SQ.FT.
A1	61	3,294
A2	53	6,042
A1A	61	2,745
B1	64	6,912
B2	51	1,224
C1	58	522
C2	54	324
TOTAL		21,063



VIEW FROM HAMNER AVE. 1

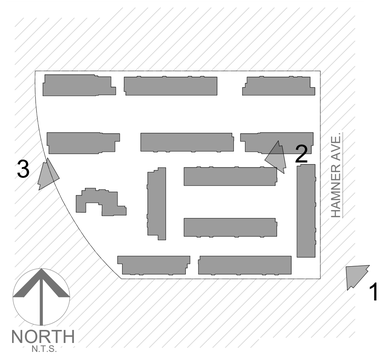


VIEW FROM PASEO BETWEEN BLDG 6 & BLDG 11 2



VIEW FROM MAIN PROJECT ENTRY 3

KEY MAP



Quarterra

LEAL RANCH

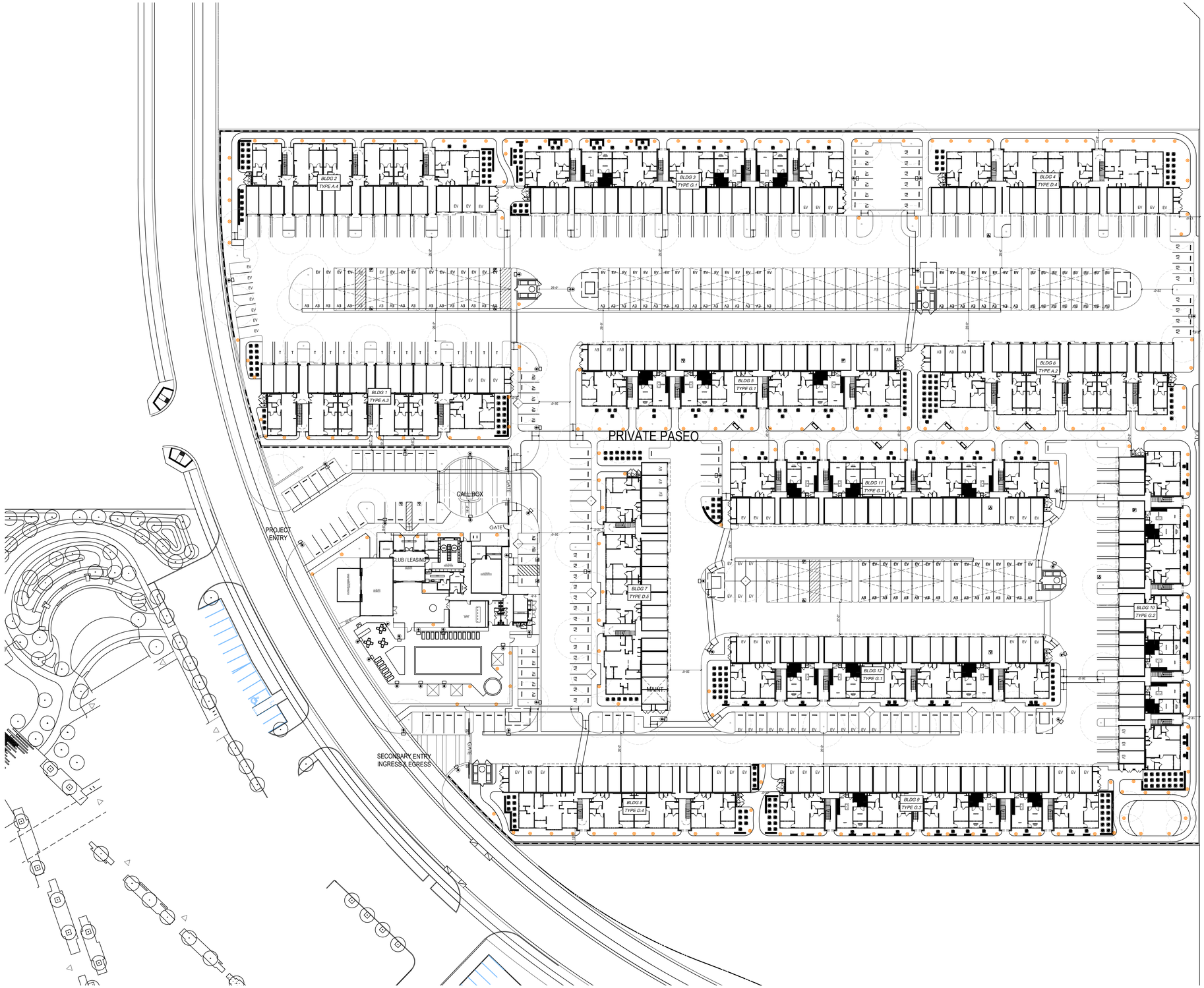
EASTVALE, CA

CONCEPTUAL PERSPECTIVES

AO

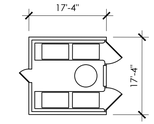
A1.0

JOB NO. 2022-1036
DATE 09-16-2024

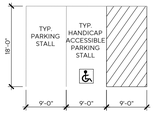


LEGEND

TRANSFORMER



RESIDENTIAL TRASH ENCLOSURE



TYP. PARKING SPACE DIMENSIONS

A/C CONDENSER UNIT

CARPORT

Quarterra

LEAL RANCH

EASTVALE, CA

SITE PLAN

NORTH

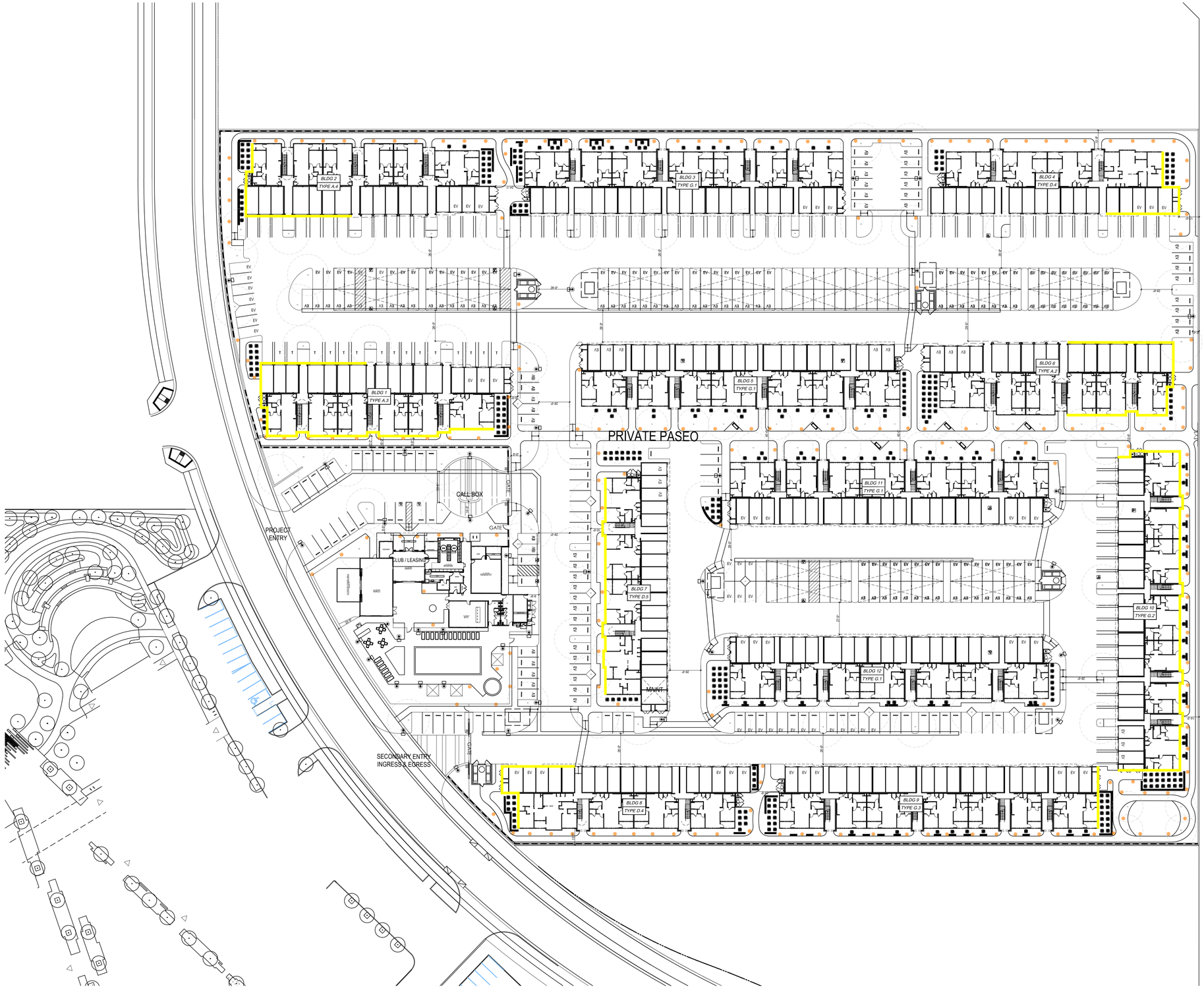
0 40' 80' 120' 160'

1"=40'

AO

A1.1

JOB NO. 2022-1036
DATE 09-16-2024



LEGEND

DENOTES ENHANCED ELEVATION

Quarterra

LEAL RANCH

EASTVALE, CA

ENHANCED BUILDING ELEVATIONS - KEY MAP

NORTH

0 40' 80' 120' 160' 1"=40'

A1.1B

JOB NO. 2022-1036
DATE 09-16-2024

LEGEND

X'-X" BUILDING SETBACKS
(TO PROPERTY LINES & BETWEEN BLDGS.)

X'-X" WALL/FENCE SETBACKS
(TO PROPERTY LINES)

HAMNER AVENUE

PRIVATE PASEO

PROJECT ENTRY

SECONDARY ENTRY INGRESS & EGRESS

CALL BOX

GATE

CLUB / LEASING

MAINT

BLDG 1 TYPE A.3

BLDG 2 TYPE A.4

BLDG 3 TYPE G.1

BLDG 4 TYPE D.4

BLDG 5 TYPE G.1

BLDG 6 TYPE A.2

BLDG 7 TYPE D.5

BLDG 8 TYPE D.4

BLDG 9 TYPE G.3

BLDG 10 TYPE G.2

BLDG 11 TYPE G.1

BLDG 12 TYPE G.1

LEAL RANCH

EASTVALE, CA

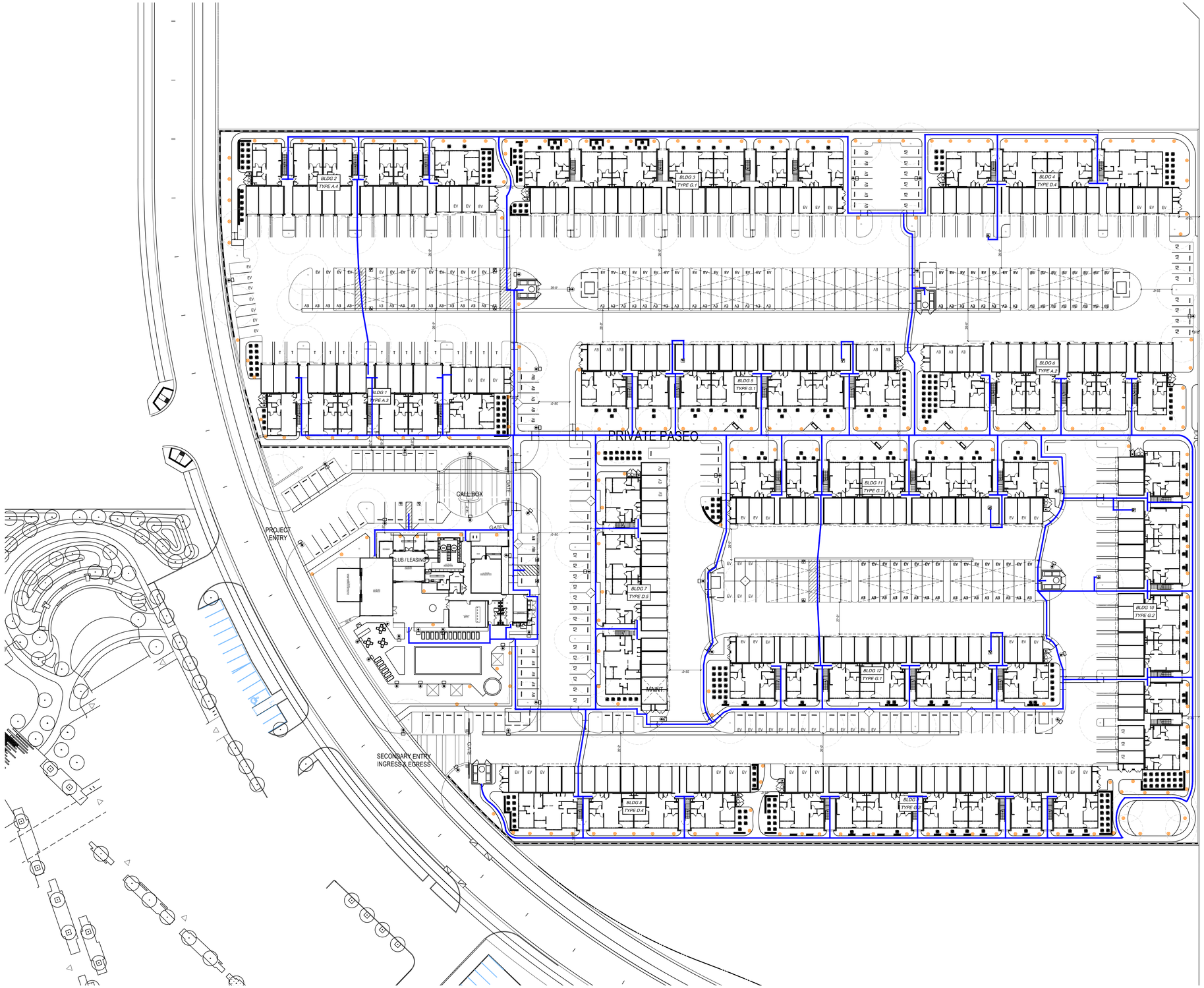
SETBACK EXHIBIT

NORTH

0 40' 80' 120' 160' 1"=40'

A1.1C

JOB NO. 2022-1036
DATE 09-16-2024



HAMNER AVENUE

LEGEND

PATH OF TRAVEL

Quarterra

LEAL RANCH

EASTVALE, CA

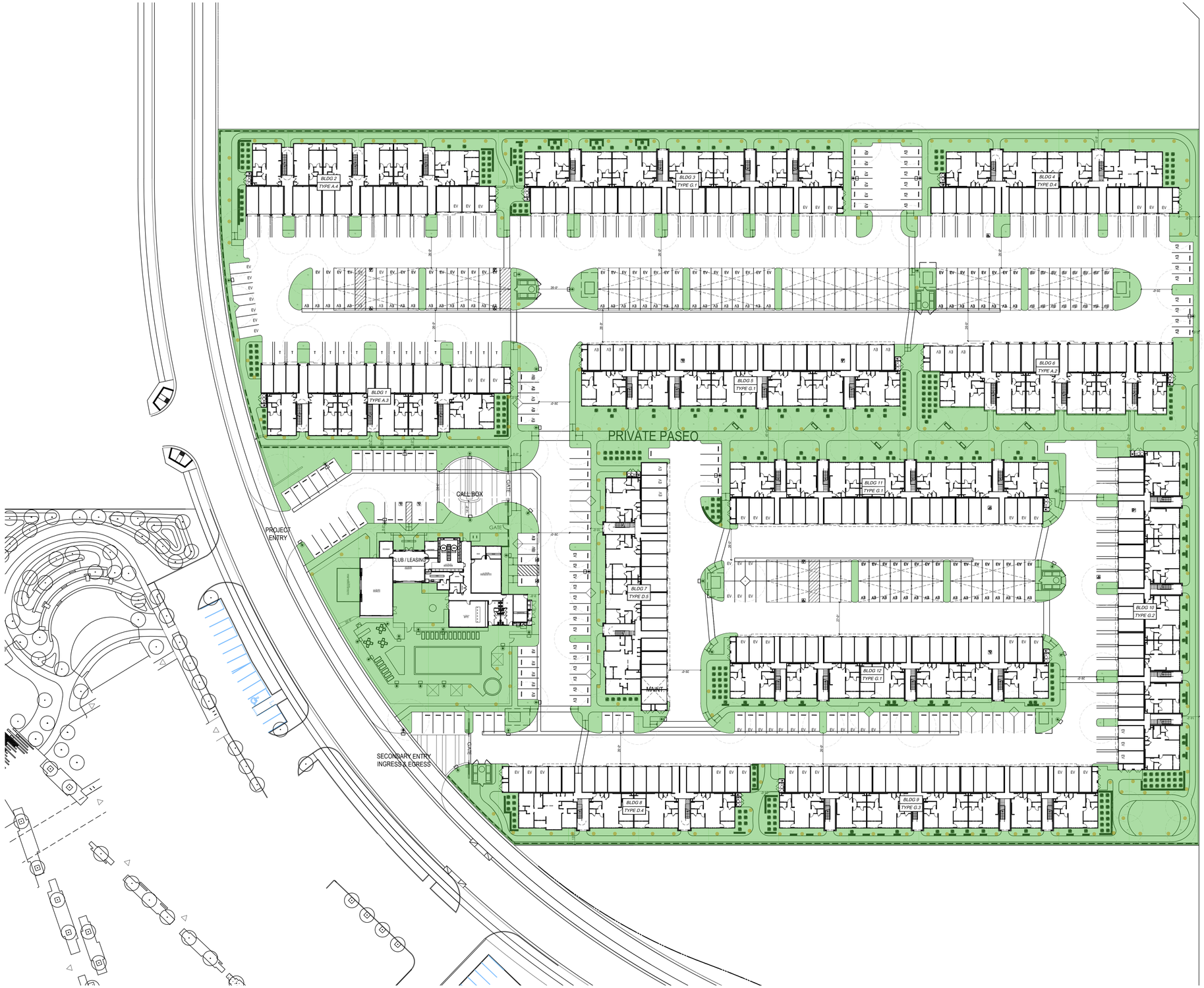
PATH OF TRAVEL

1"=40'

0 40' 80' 120' 160'

A1.2

JOB NO. 2022-1036
DATE 09-16-2024



LEGEND

PATH OF TRAVEL

F. LOT COVERAGE

AREA TYPE	AREA (SF)	%
BUILDING FOOTPRINT AREA	152,859	33%
LANDSCAPE AREA	119,331	26%
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TOTAL	**147,299**

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A2	53	6,042
A1A	61	2,745
B1	64	6,912

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LEAL RANCH

EASTVALE, CA

OPEN SPACE PLAN

NORTH

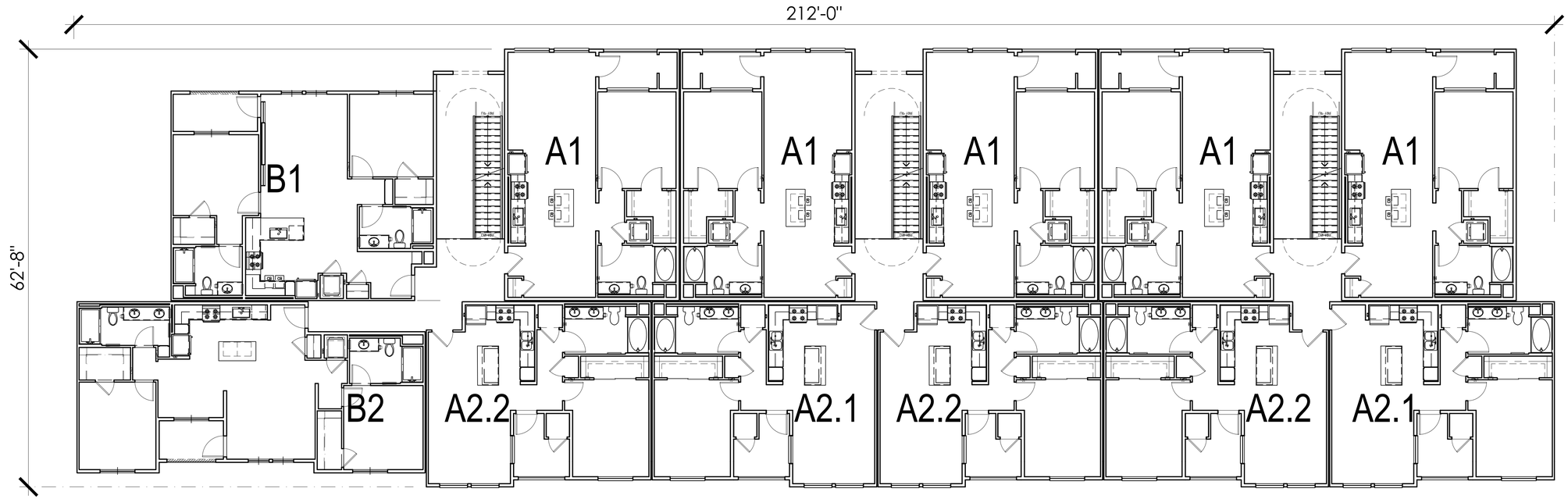
0 40' 80' 120' 160'

1"=40'

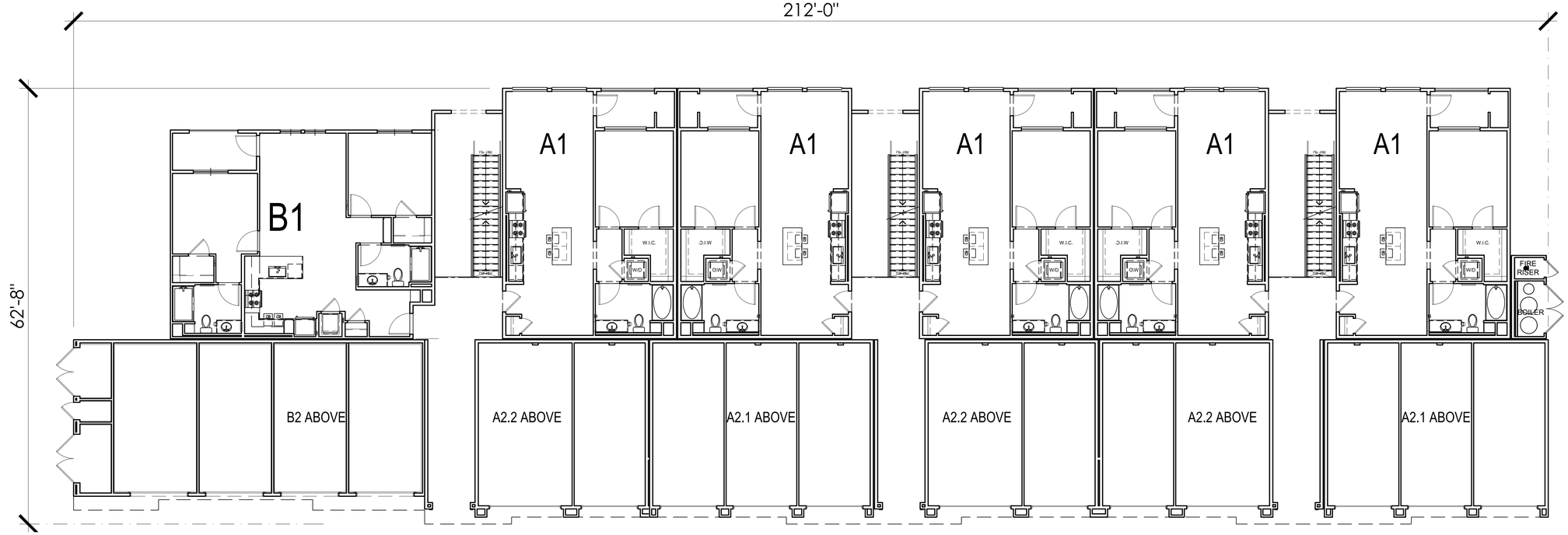
AO

A1.3

JOB NO. 2022-1036
DATE 09-16-2024



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING A.2 - BUILDING PLAN

1"=8'

0 8' 16' 24' 32'

A2.0

JOB NO. 2022-1036
DATE 09-16-2024

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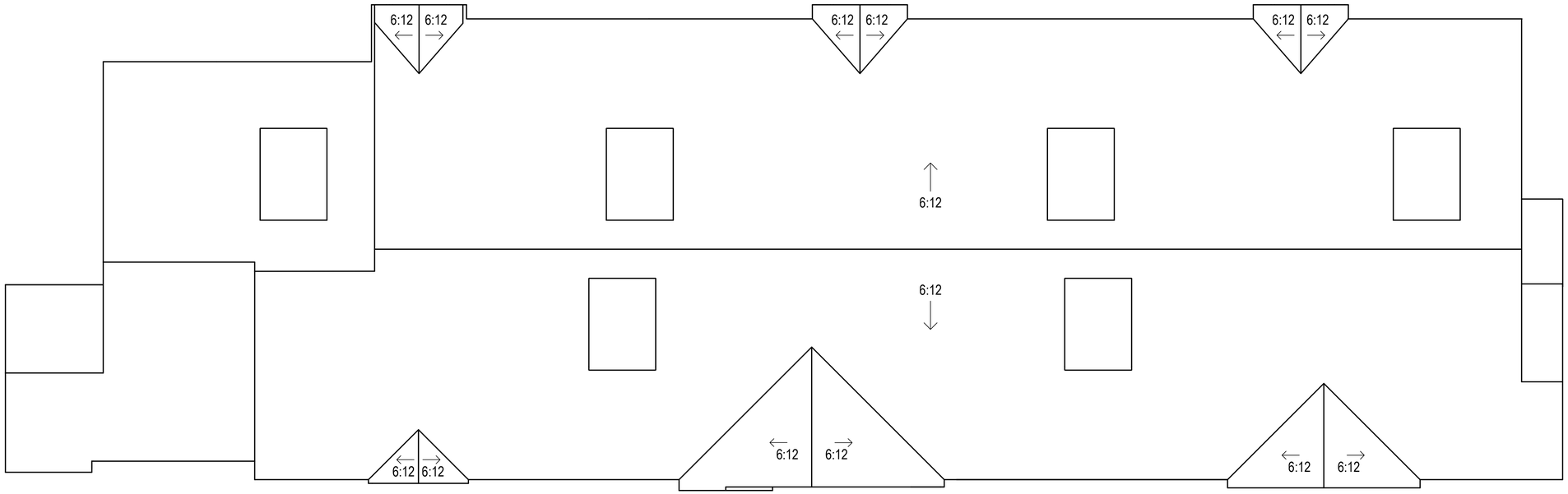
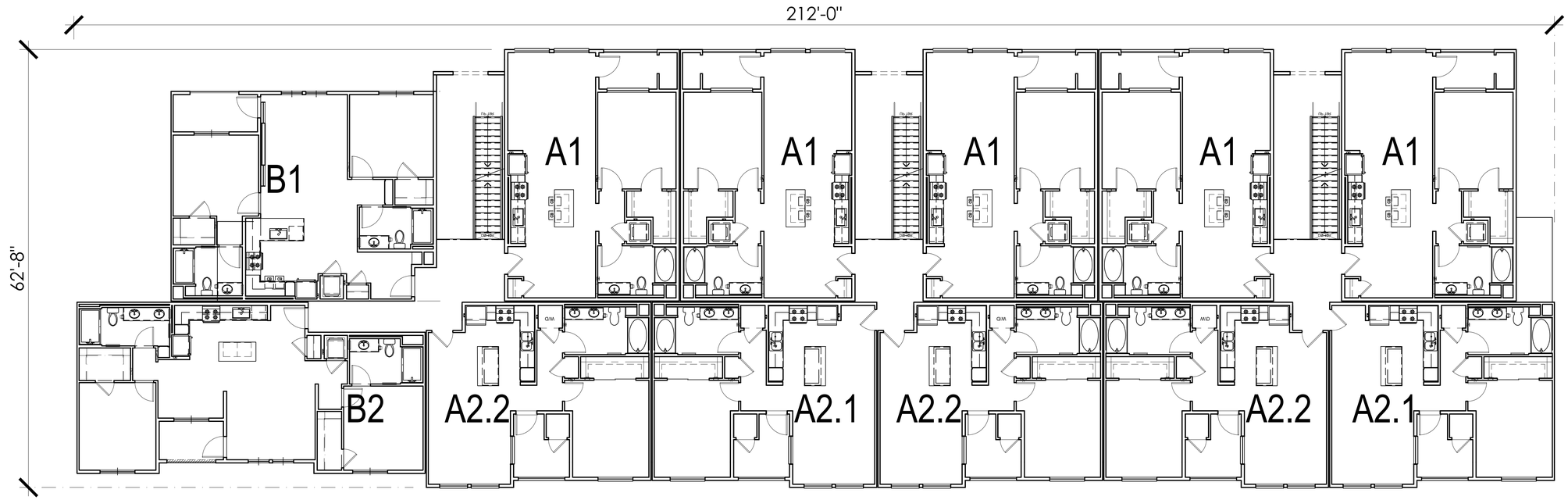


ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING A.2 - BUILDING PLAN

1"=8'

0 8' 16' 24' 32'

A2.1

JOB NO. 2022-1036
DATE 09-16-2024

2100

Xref .\Xref\X_24x36_TB_Design.dwg

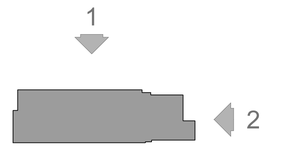


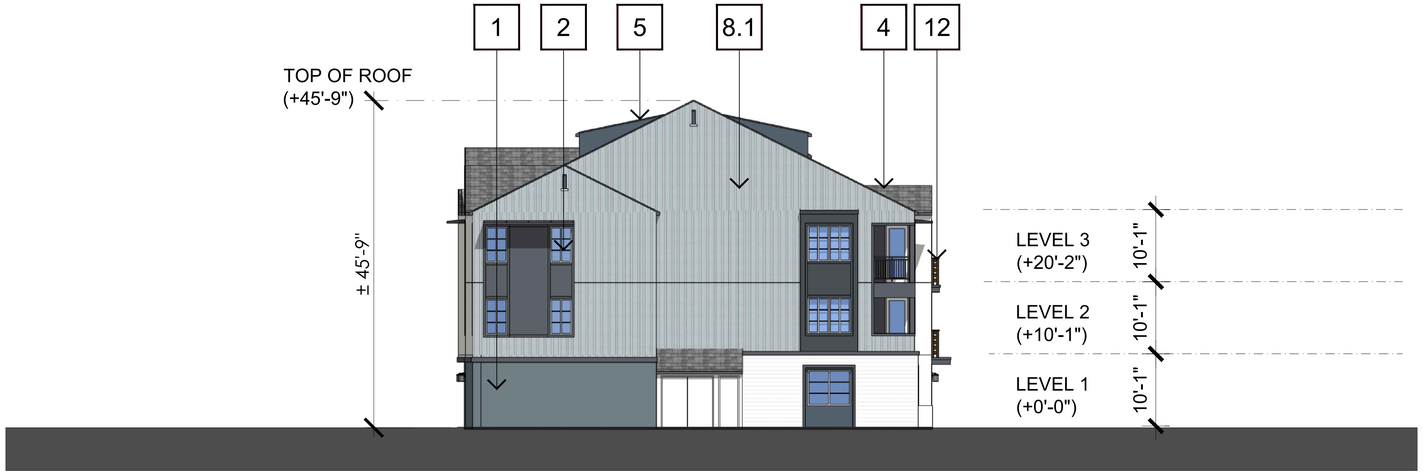
FRONT ELEVATION 1

MATERIAL / COLOR LEGEND

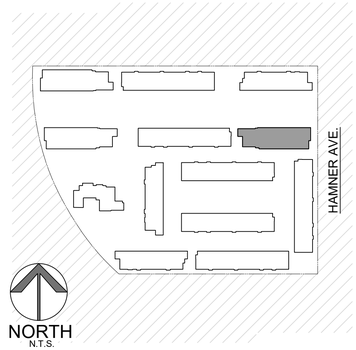
1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD





LEFT ELEVATION 2



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE A.2 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

A2.2

JOB NO. 2022-1036
DATE 09-16-2024

MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD

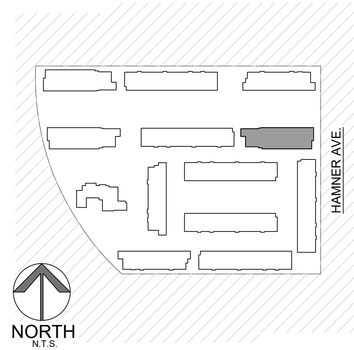


REAR ELEVATION 3



RIGHT ELEVATION 4





Quarterra

LEAL RANCH

EASTVALE, CA

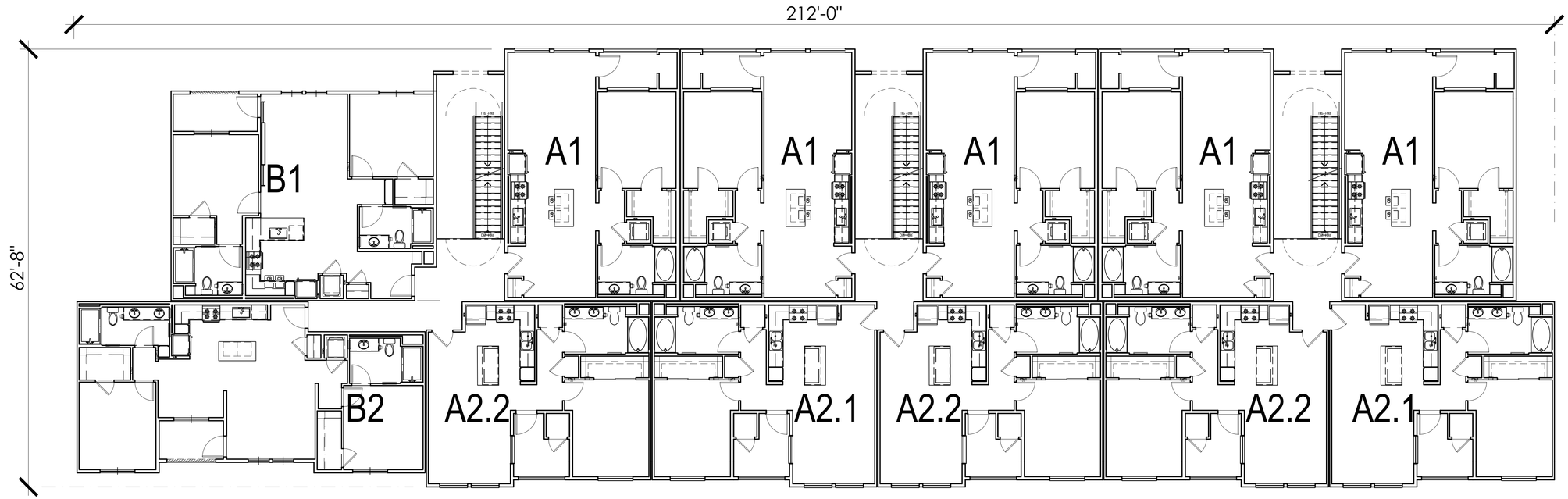
BUILDING TYPE A.2 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

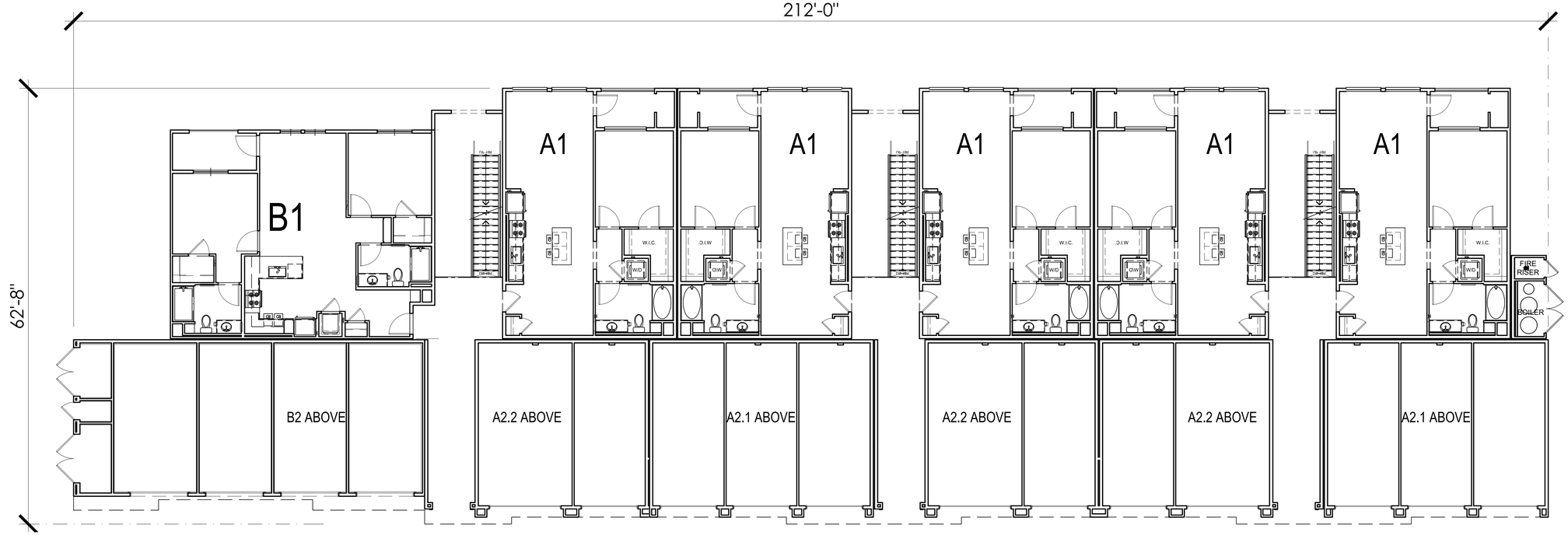
A2.3

JOB NO. 2022-1036
DATE 09-16-2024

2102



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING A.3 - BUILDING PLAN

1"=8'

0 8' 16' 24' 32'

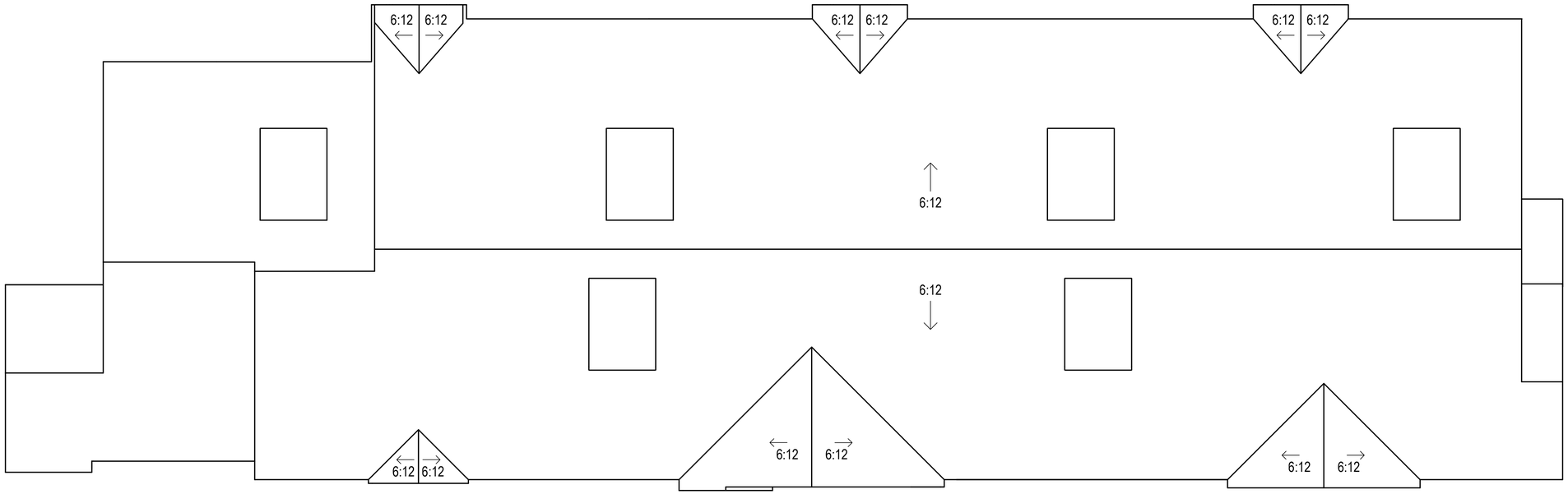
AO

A2.4

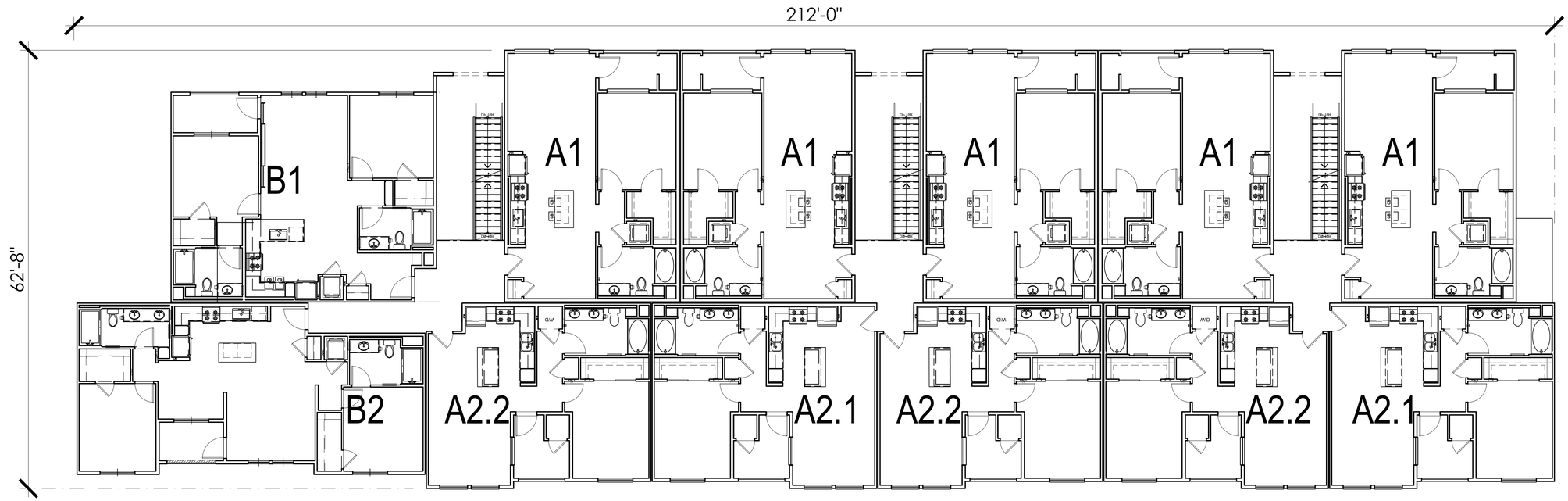
JOB NO. 2022-1036
DATE 09-16-2024

2103

Xref ..\Xref\X 24x36 TB Design.dwg



ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING A.3 - BUILDING PLAN

1"=8'

0 8' 16' 24' 32'

A2.5

JOB NO. 2022-1036
DATE 09-16-2024

2104

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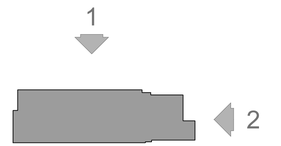
FRONT ELEVATION 1

MATERIAL / COLOR LEGEND

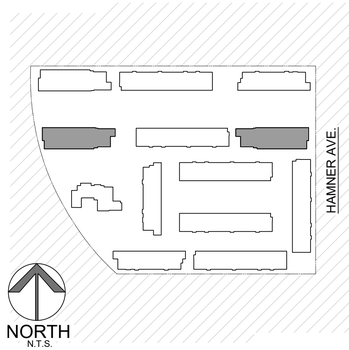
1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD





LEFT ELEVATION 2



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE A.3 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

AO

A2.6

JOB NO. 2022-1036
DATE 09-16-2024

MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

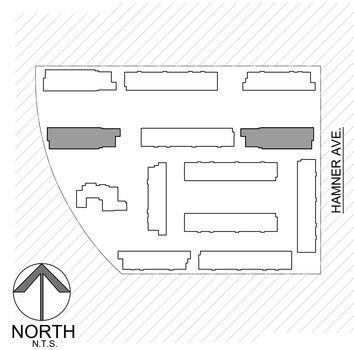
FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD



REAR ELEVATION 3



RIGHT ELEVATION 4



4 3

Quarterra

LEAL RANCH

EASTVALE, CA

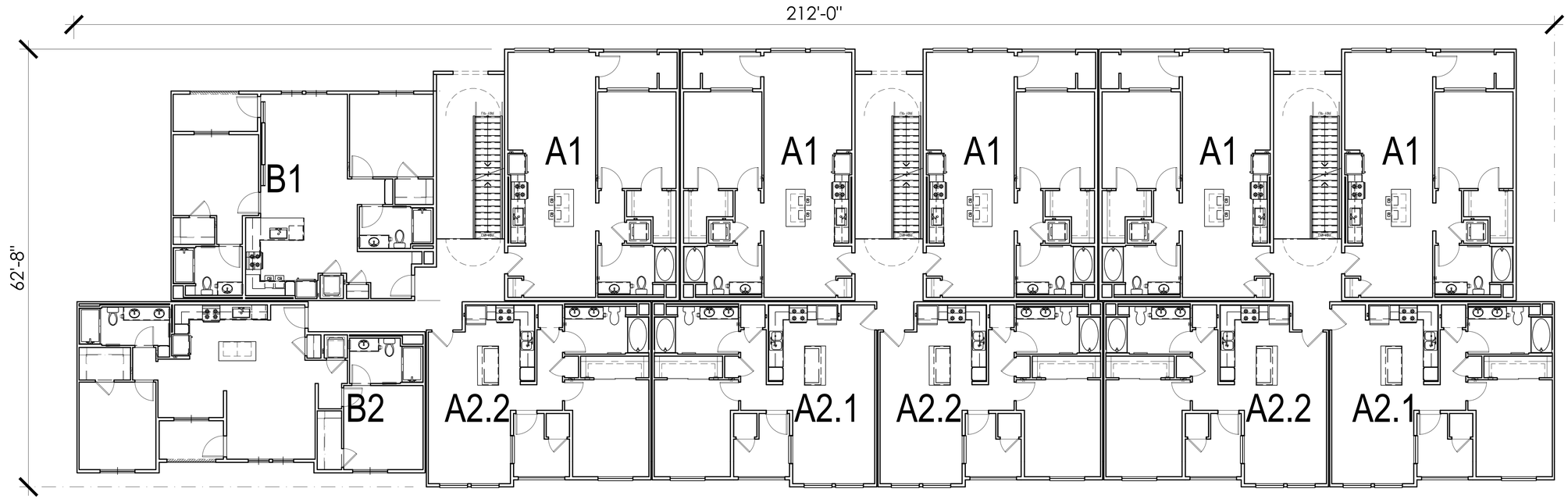
BUILDING TYPE A.3 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

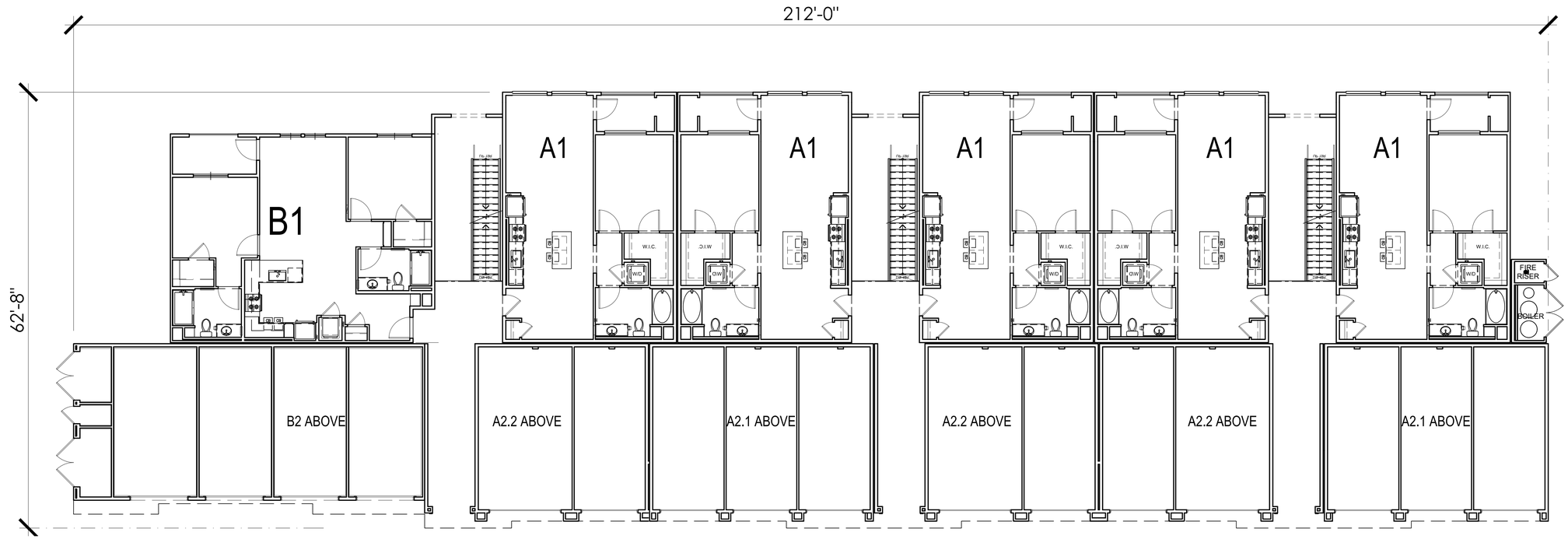
A2.7

JOB NO. 2022-1036
DATE 09-16-2024

2106



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING A.4 - BUILDING PLAN

1"=8'

0 8' 16' 24' 32'

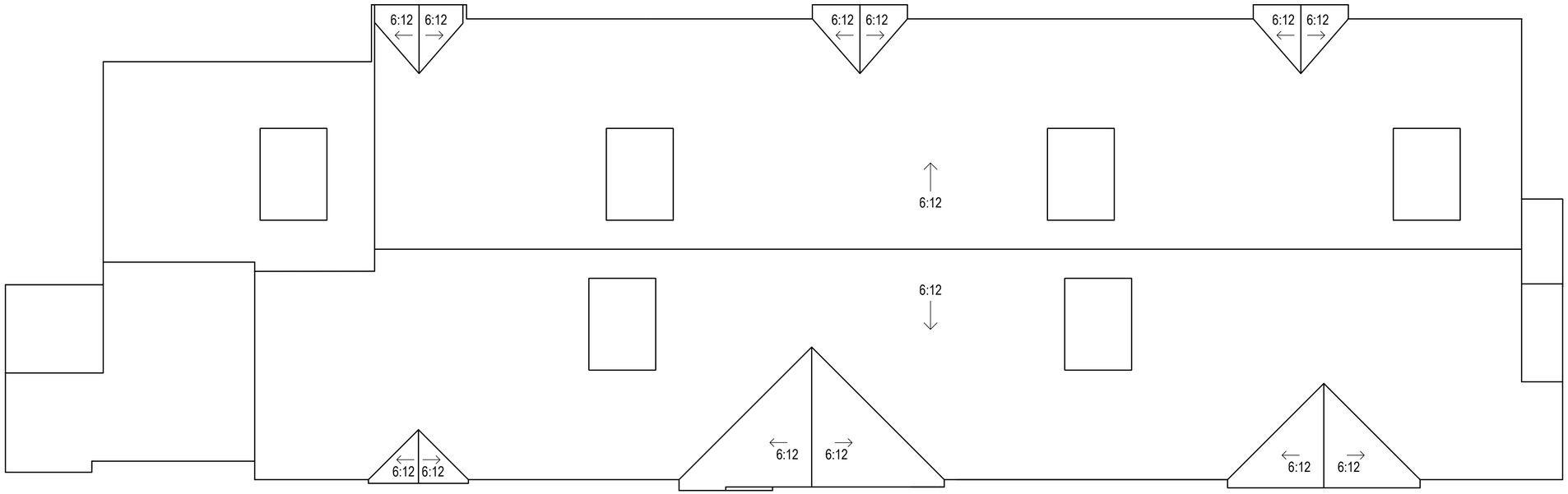
AO

A2.8

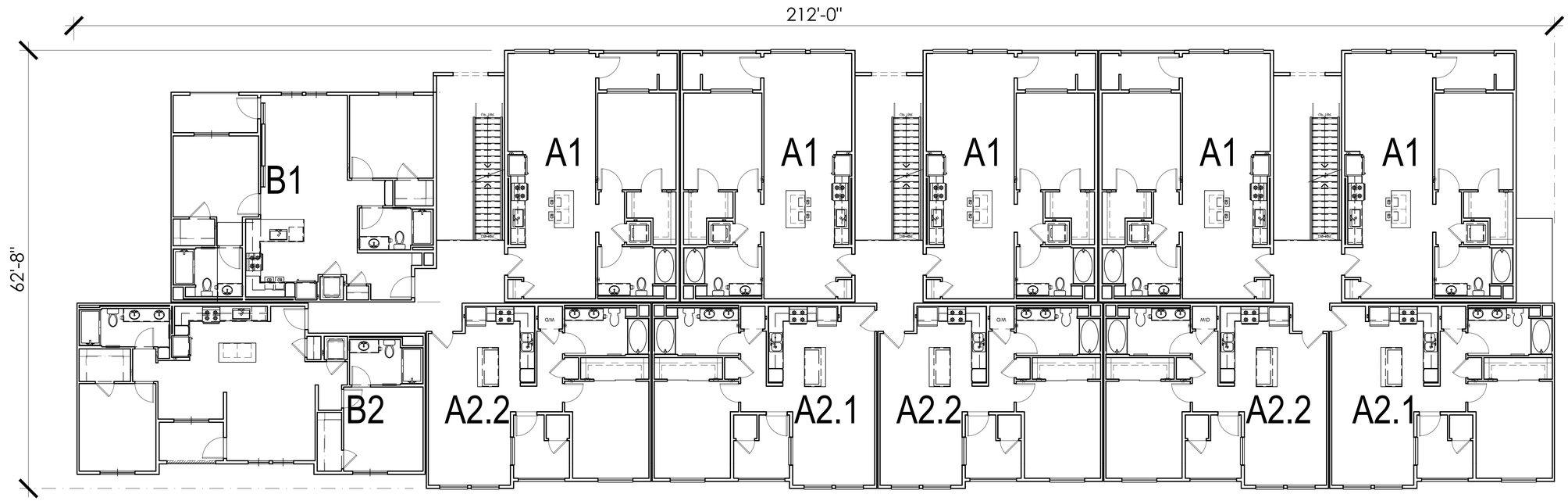
JOB NO. 2022-1036
DATE 09-16-2024

2107

Xref ..\Xref\X_24x36_TB_Design.dwg



ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING A.4 - BUILDING PLAN

1"=8'

0 8' 16' 24' 32'

A2.9

JOB NO. 2022-1036
DATE 09-16-2024

2108

Xref .\Xref\X_24x36_TB_Design.dwg

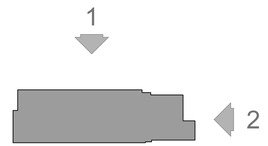


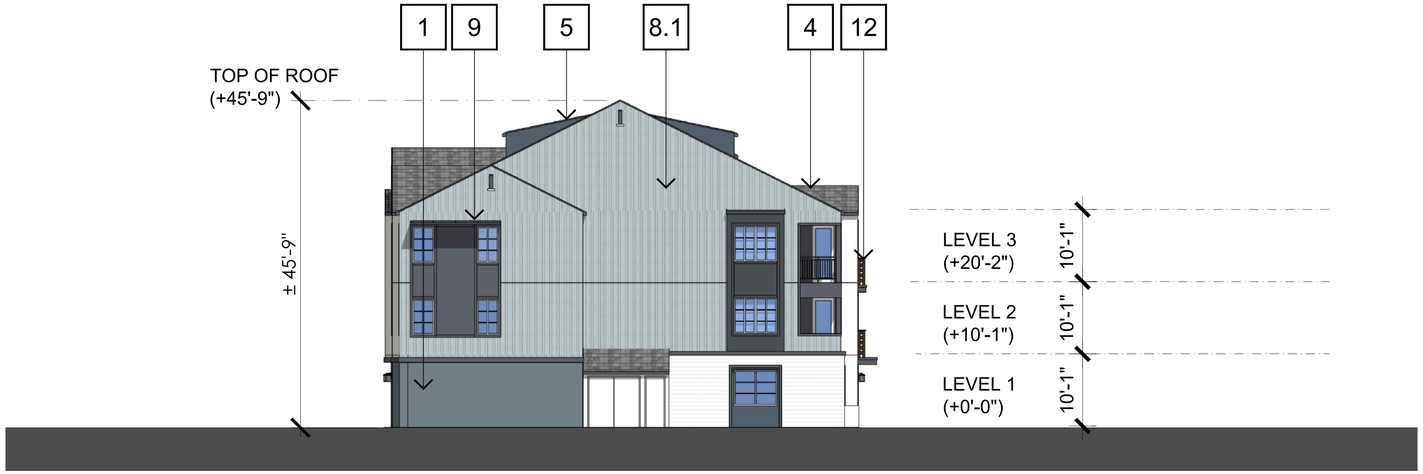
FRONT ELEVATION 1

MATERIAL / COLOR LEGEND

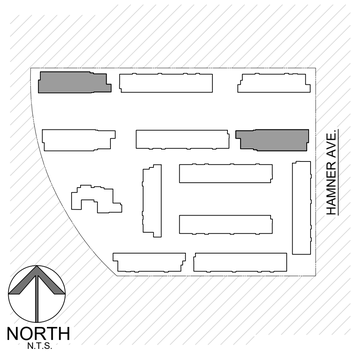
1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD





LEFT ELEVATION 2



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE A.4 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

A2.10

JOB NO. 2022-1036
DATE 09-16-2024

MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD

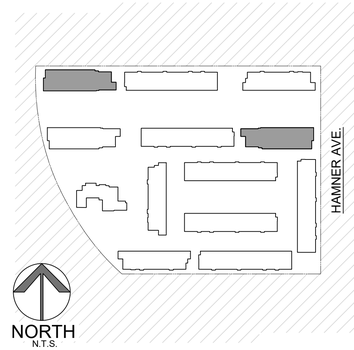


REAR ELEVATION 3



RIGHT ELEVATION 4





Quarterra

LEAL RANCH

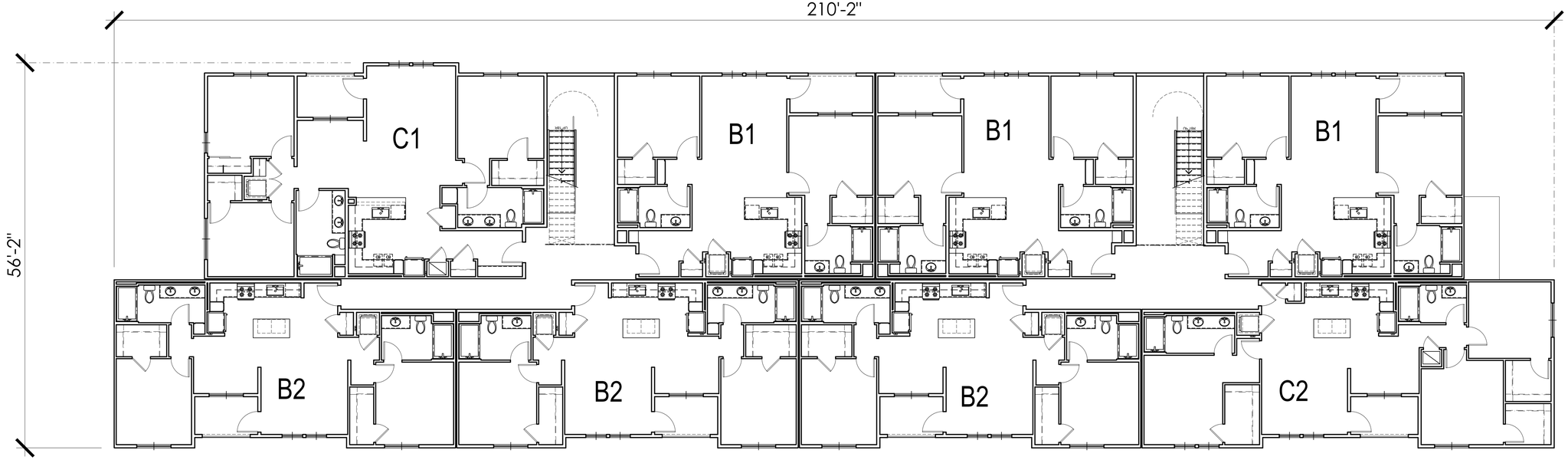
EASTVALE, CA

BUILDING TYPE A.4 ELEVATIONS

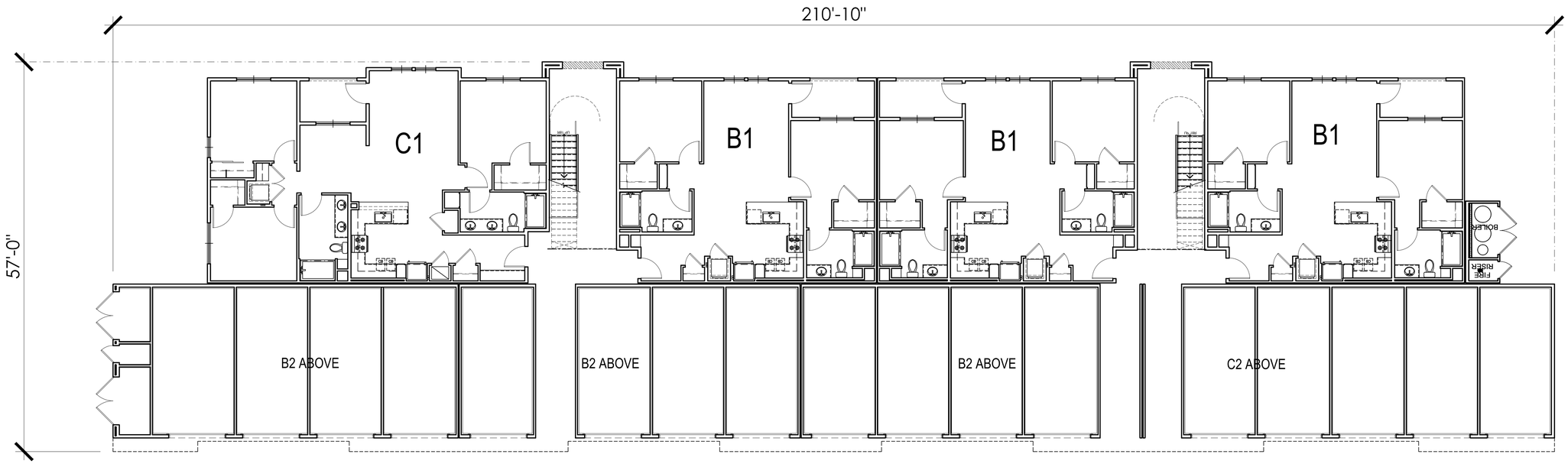
1"=10'
0 10' 20' 30' 40'

A2.11

JOB NO. 2022-1036
DATE 09-16-2024



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

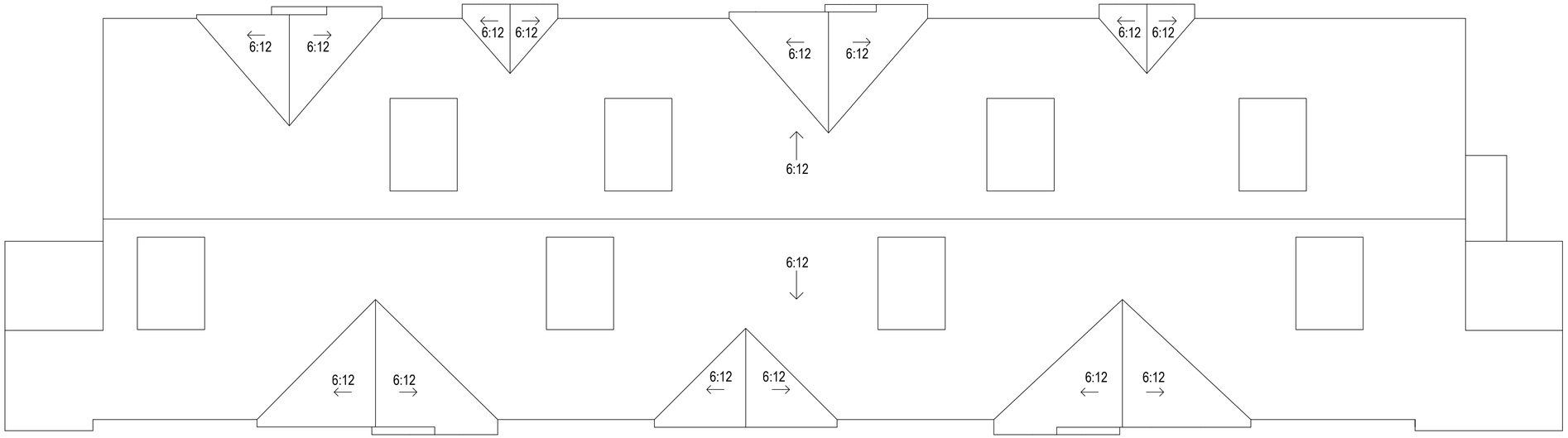
BUILDING D.4 - BUILDING PLAN

1"=8'

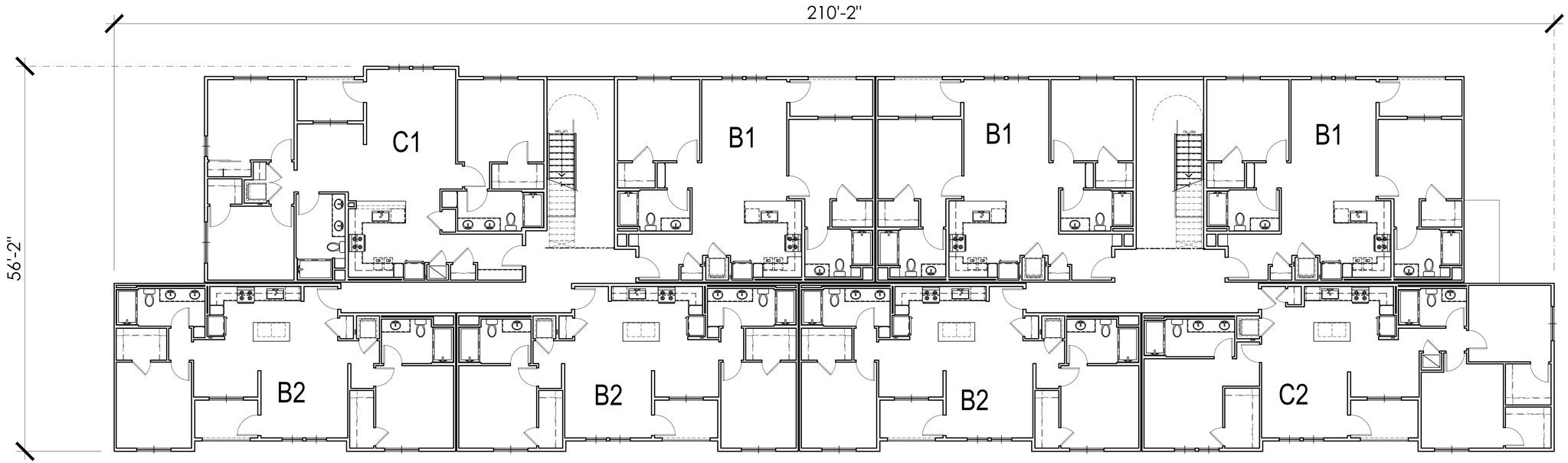
0 8' 16' 24' 32'

A2.12

JOB NO. 2022-1036
DATE 09-16-2024



ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING D.4 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

A2.13

JOB NO. 2022-1036
DATE 09-16-2024

MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

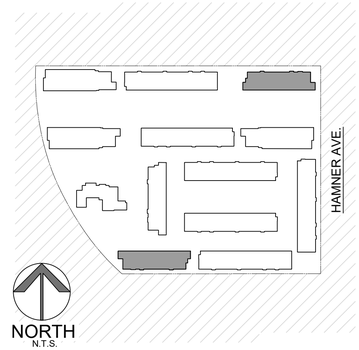
FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD

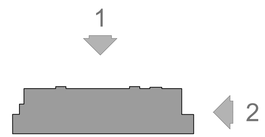


FRONT ELEVATION 1



LEFT ELEVATION 2





Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE D.4 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

A2.14

JOB NO. 2022-1036
DATE 09-16-2024

MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD



REAR ELEVATION 3



RIGHT ELEVATION 4

4

3

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE D.4 ELEVATIONS

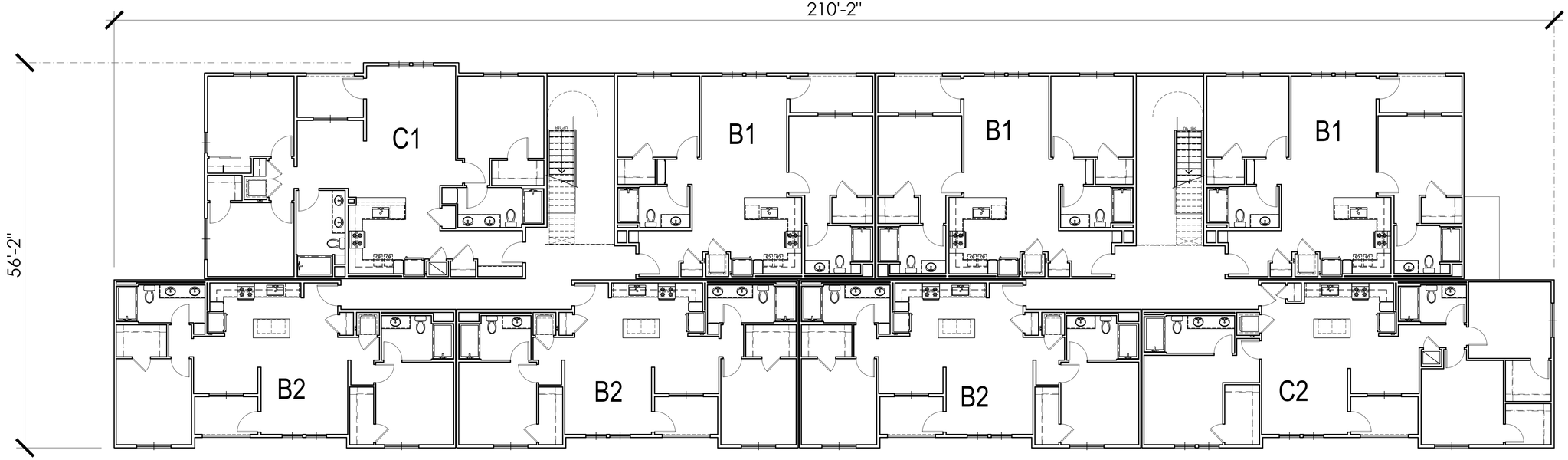
1"=10'
0 10' 20' 30' 40'

AO

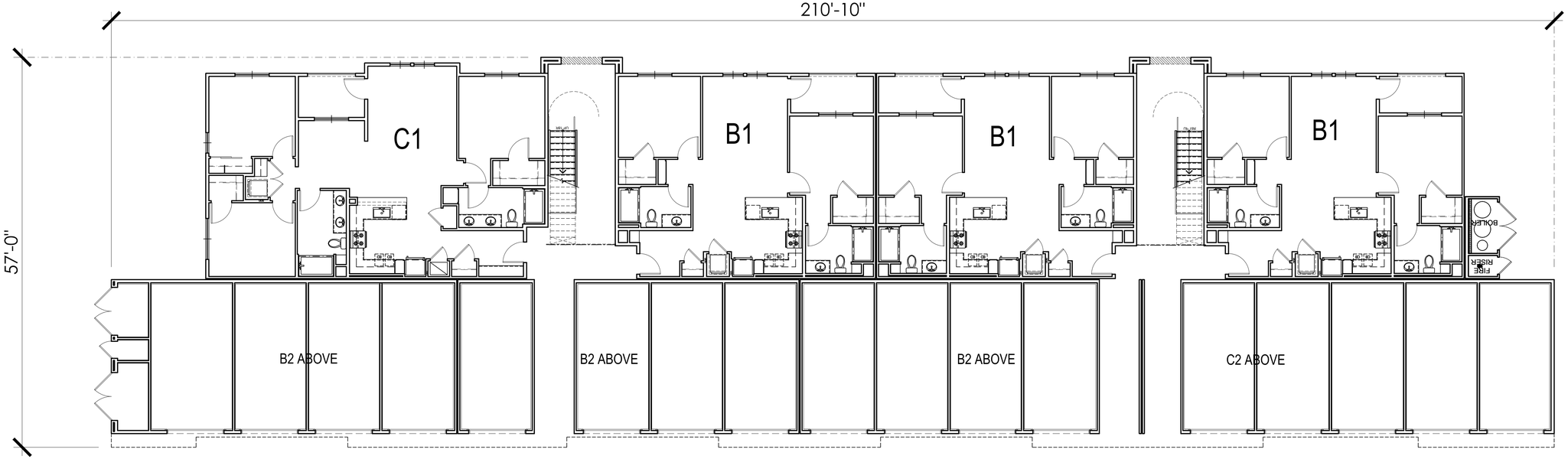
A2.15

JOB NO. 2022-1036
DATE 09-16-2024

2114



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

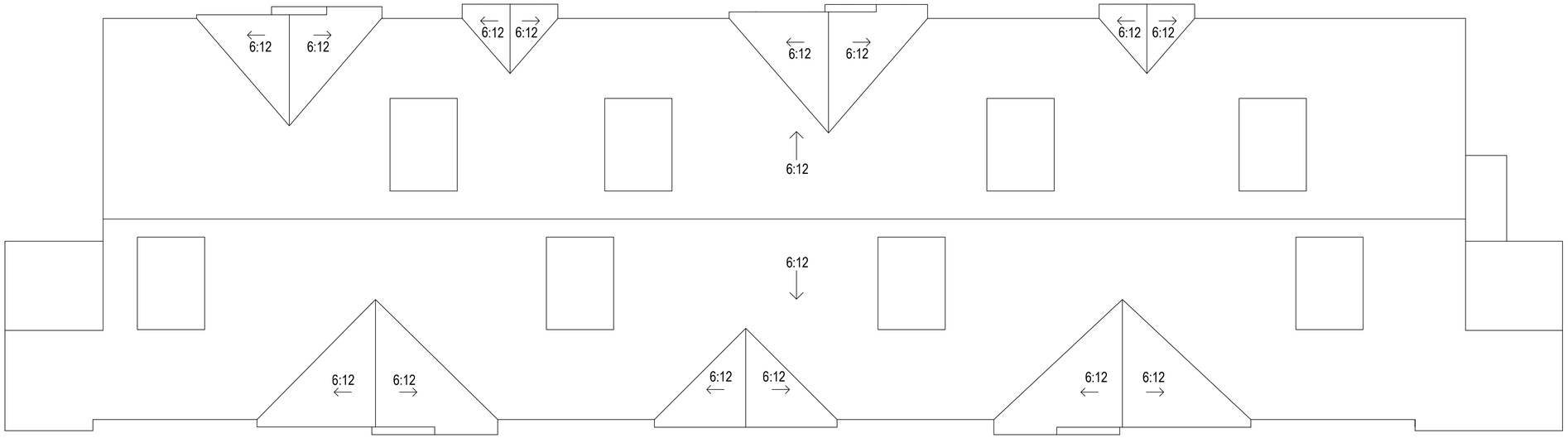
BUILDING D.5 - BUILDING PLAN

1"=8'

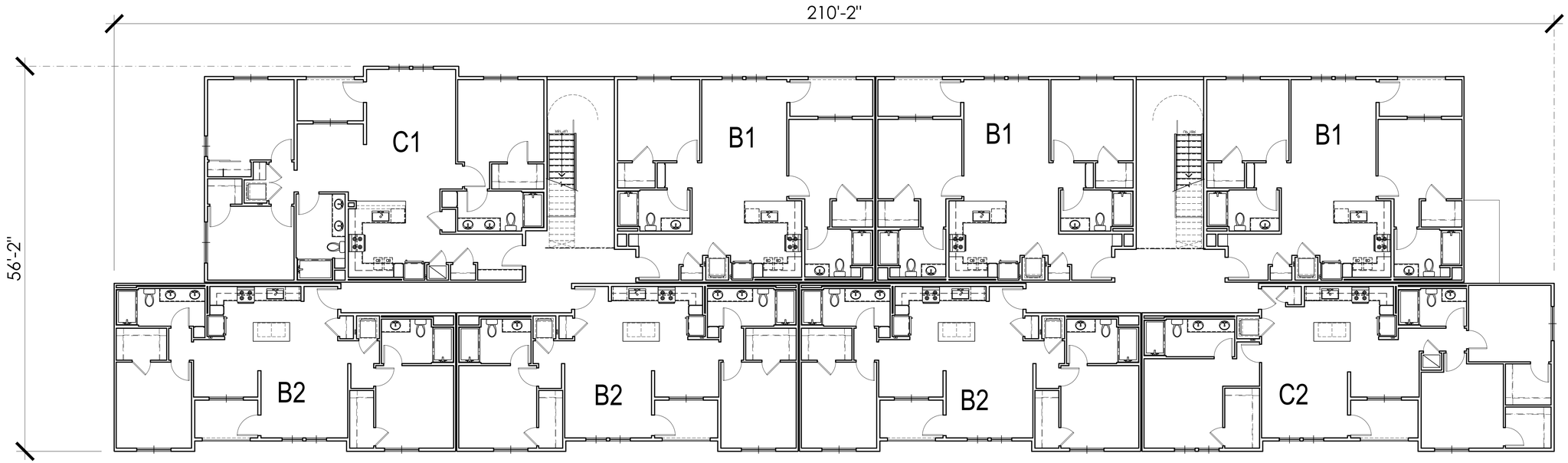
0 8' 16' 24' 32'

A2.16

JOB NO. 2022-1036
DATE 09-16-2024



ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING D.5 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

A2.17

JOB NO. 2022-1036
DATE 09-16-2024

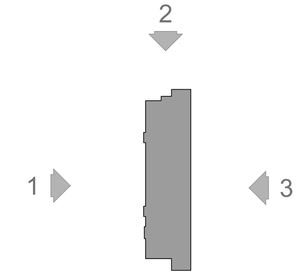


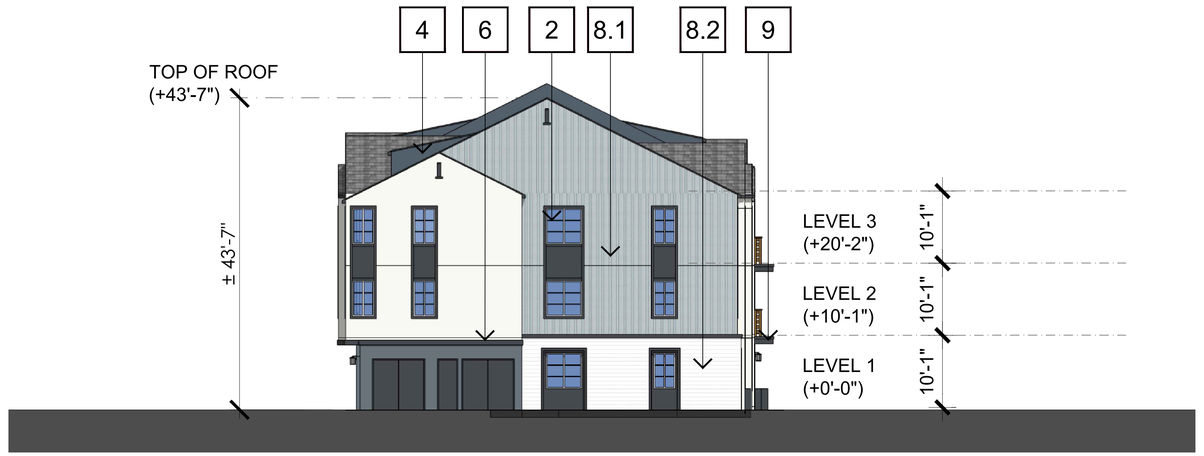
FRONT ELEVATION 1

MATERIAL / COLOR LEGEND

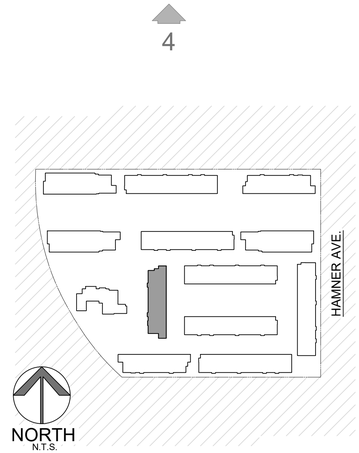
1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD





LEFT ELEVATION 2



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE D.5 ELEVATIONS

1"=10'

0 10' 20' 30' 40'

A2.18

JOB NO. 2022-1036
DATE 09-16-2024

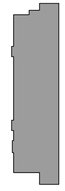
MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD



REAR ELEVATION 3



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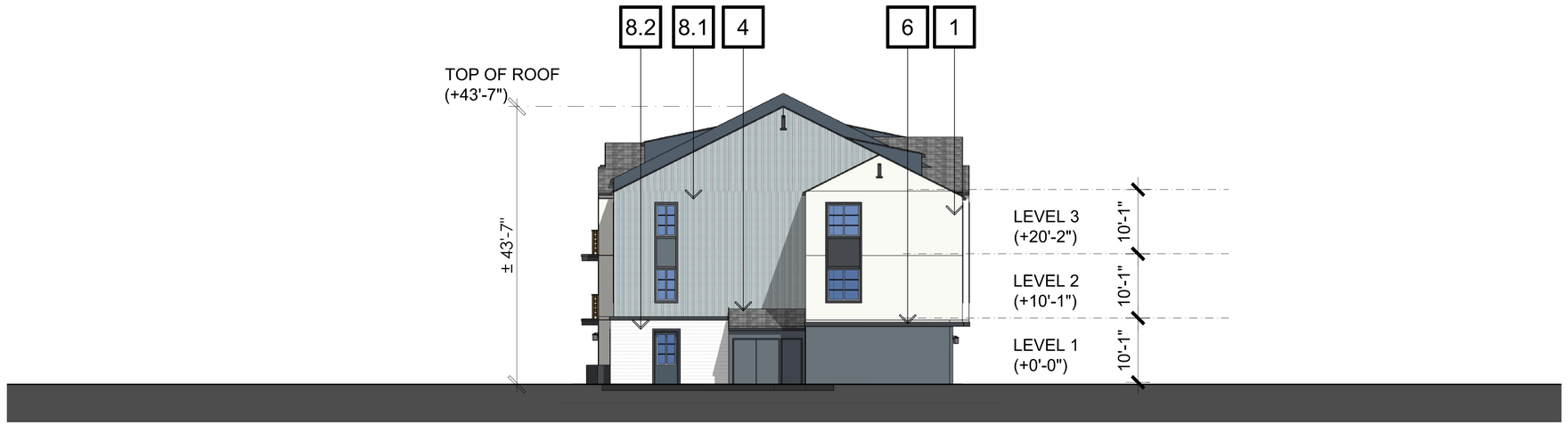
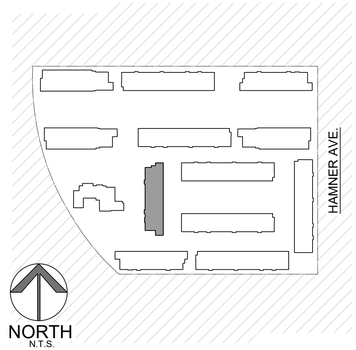


RIGHT ELEVATION 4

4



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE D.5 ELEVATIONS

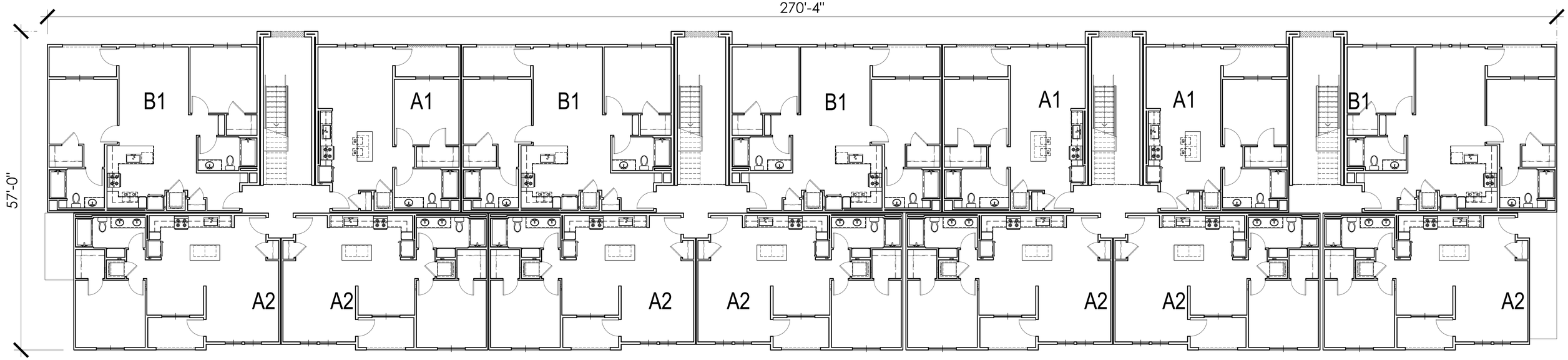
1"=10'

0 10' 20' 30' 40'

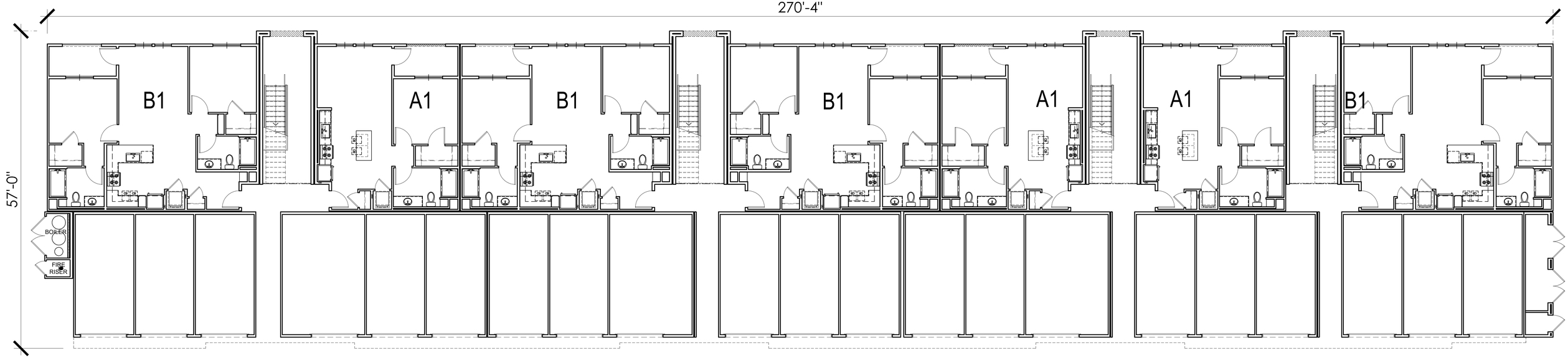
AO

A2.19

JOB NO. 2022-1036
DATE 09-16-2024



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

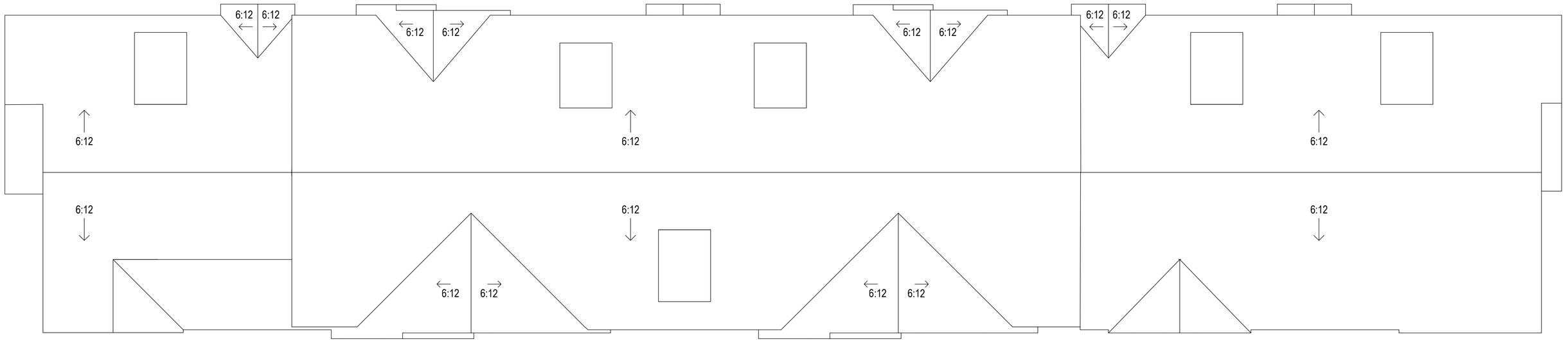
BUILDING G.1 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

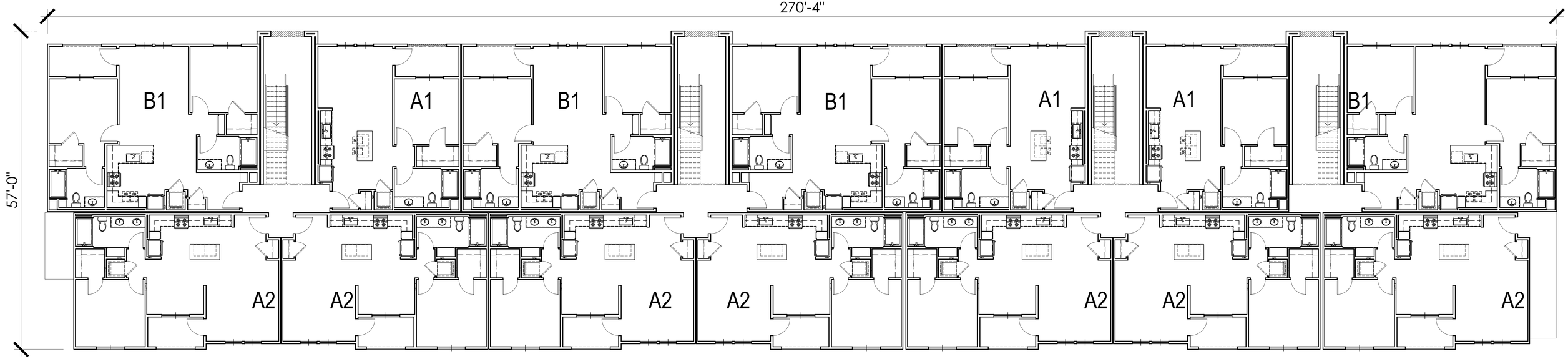
AO

A2.20

JOB NO. 2022-1036
DATE 09-16-2024



ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING G.1 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

A2.21

JOB NO. 2022-1036
DATE 09-16-2024

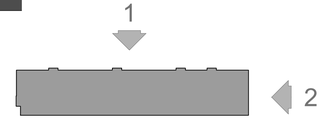


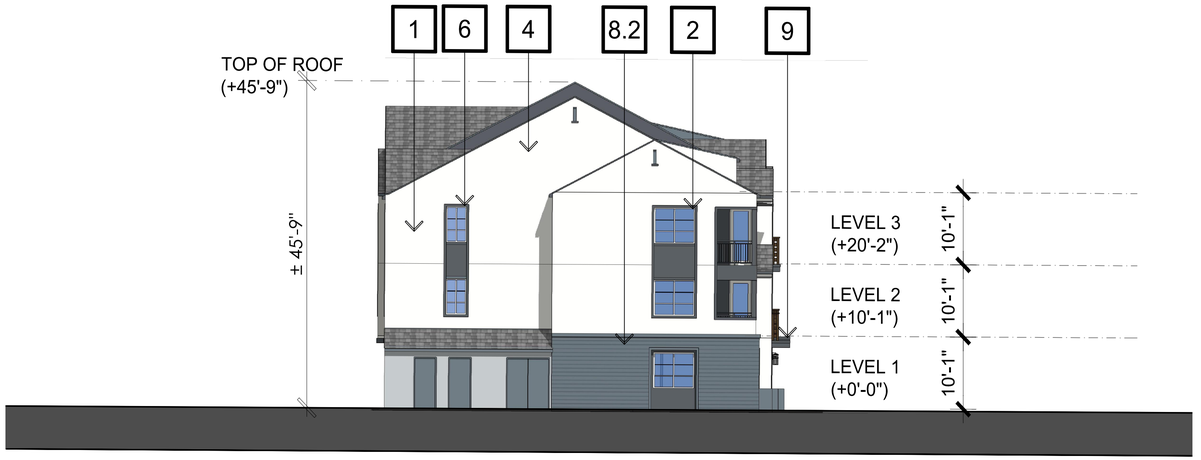
FRONT ELEVATION 1

MATERIAL / COLOR LEGEND

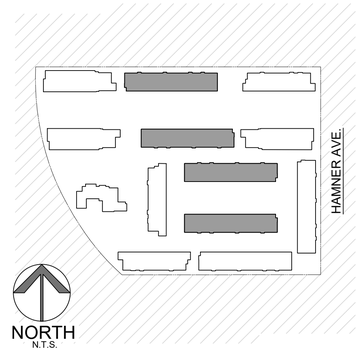
1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD





LEFT ELEVATION 2



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE G.1 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

A2.22

JOB NO. 2022-1036
DATE 09-16-2024

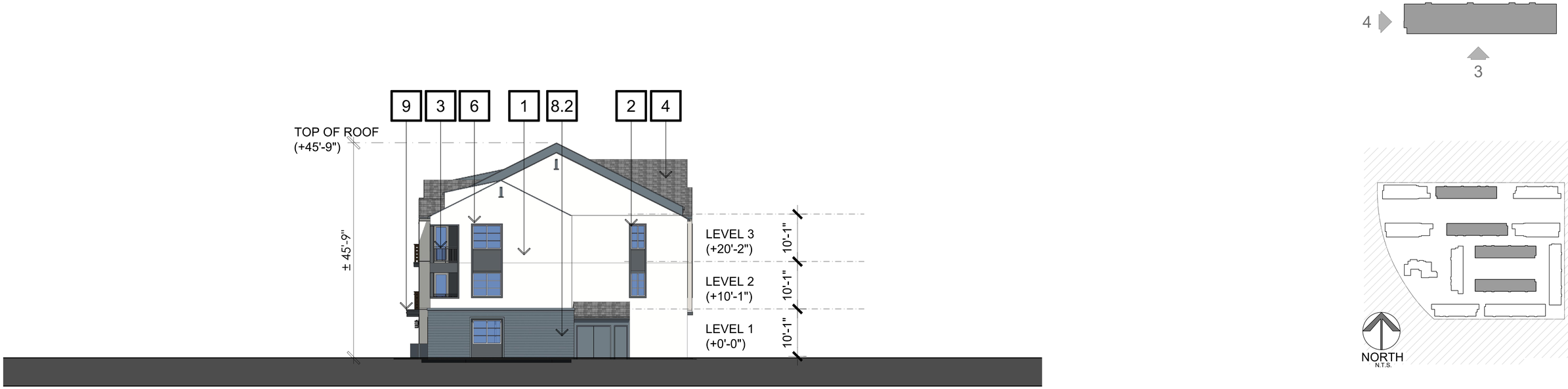


REAR ELEVATION 3

MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD



RIGHT ELEVATION 4

Quarterra

LEAL RANCH

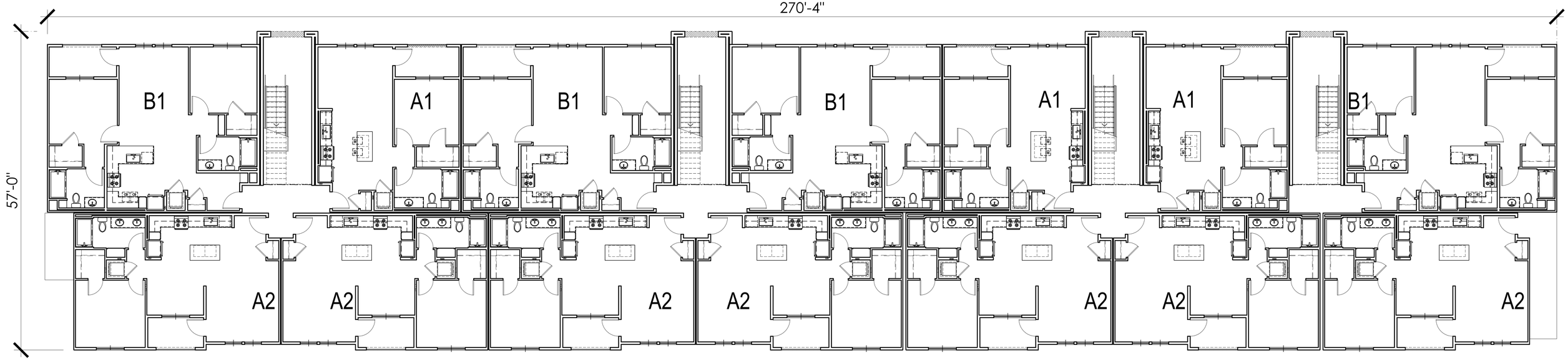
EASTVALE, CA

BUILDING TYPE G.1 ELEVATIONS

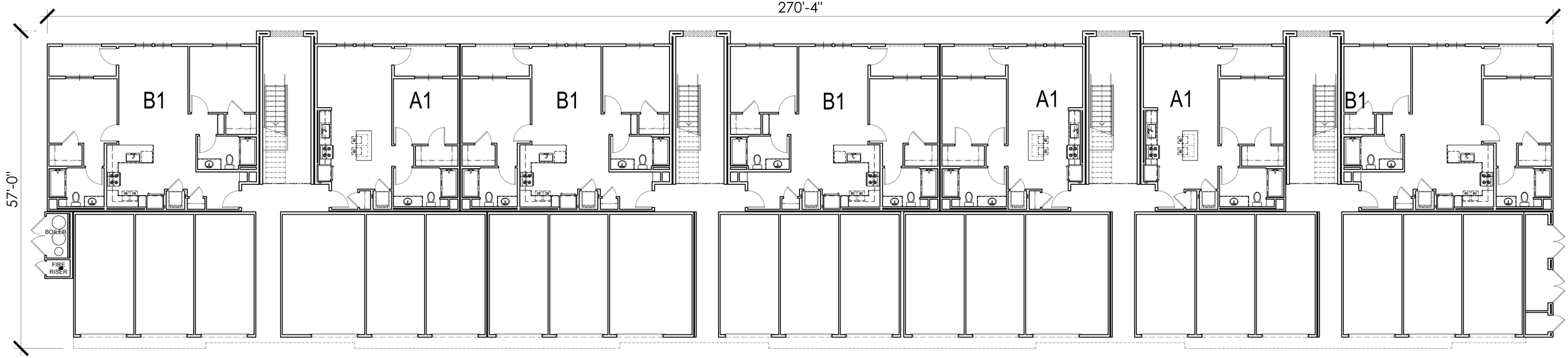
1"=10'
0 10' 20' 30' 40'

A2.23

JOB NO. 2022-1036
DATE 09-16-2024



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

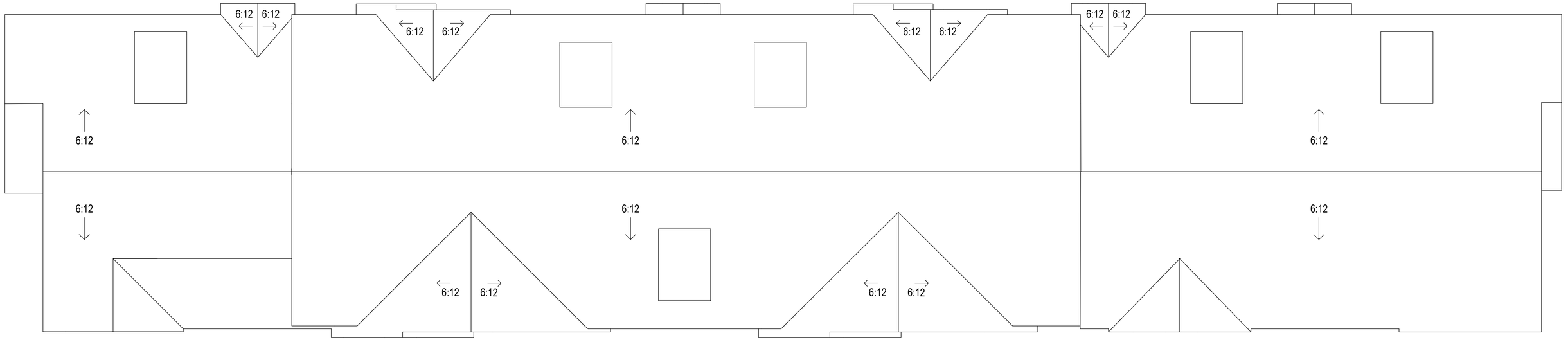
BUILDING G.2 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

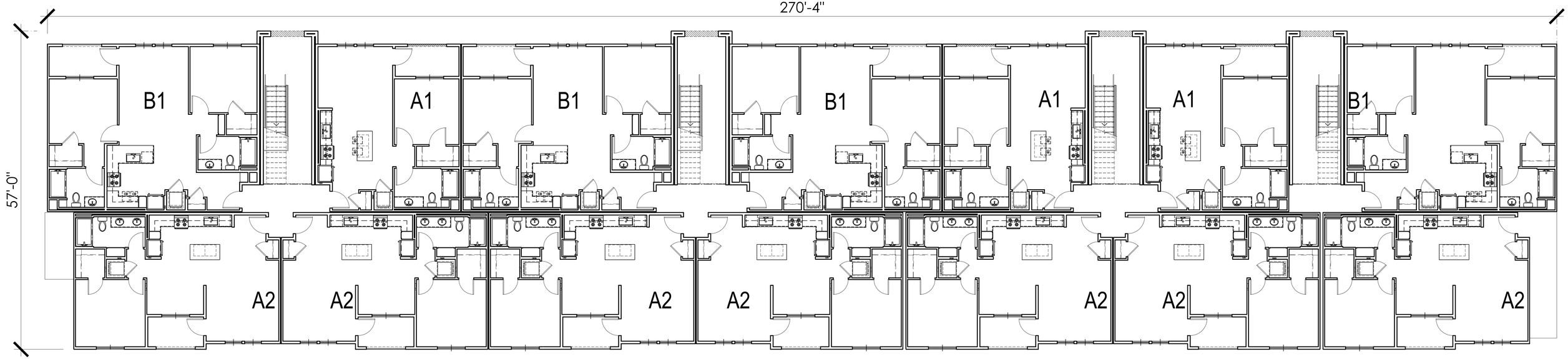
AO

A2.24

JOB NO. 2022-1036
DATE 09-16-2024



ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING G.2 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

AO

A2.25

1" = 8'

JOB NO. 2022-1036
DATE 09-16-2024

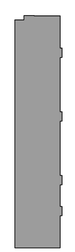


FRONT ELEVATION 1

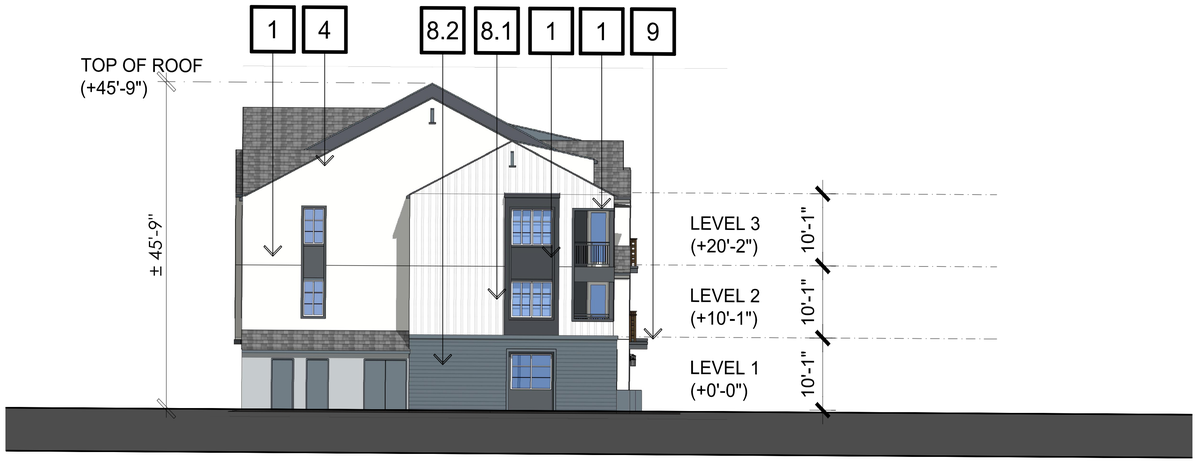
MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD

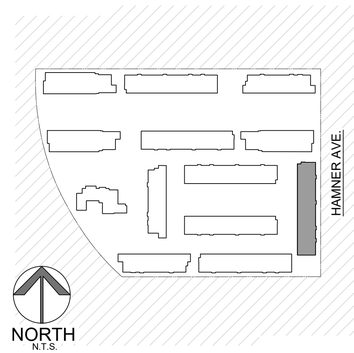


1



LEFT ELEVATION 2

2



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE G.2 ELEVATIONS

1"=10'

0 10' 20' 30' 40'

A2.26

JOB NO. 2022-1036
DATE 09-16-2024

2125

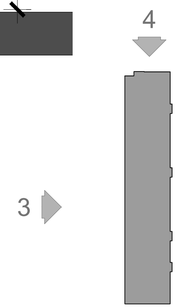
MATERIAL / COLOR LEGEND

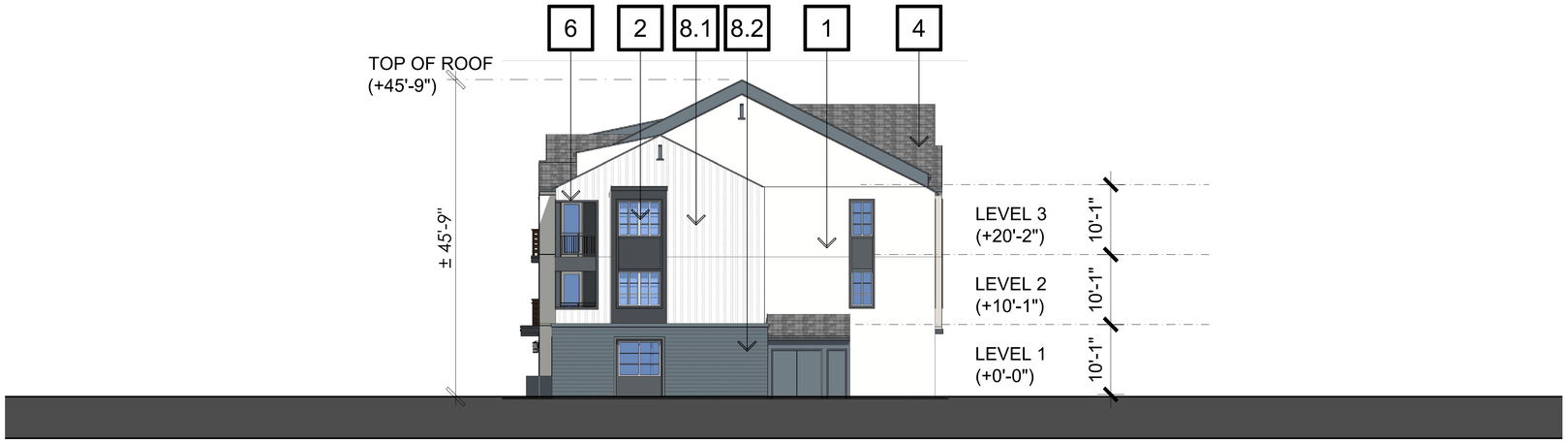
1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD

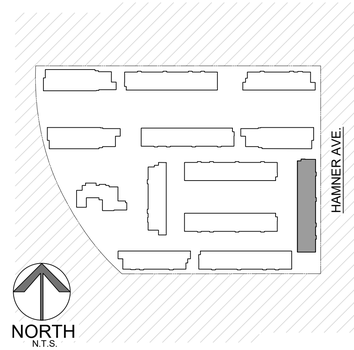


REAR ELEVATION 3





RIGHT ELEVATION 4



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE G.2 ELEVATIONS

1"=10'

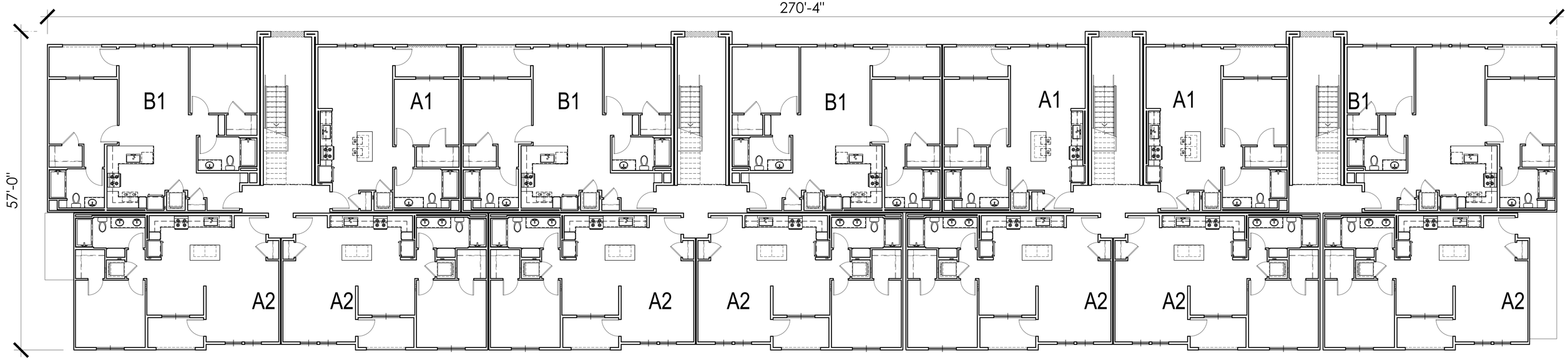
0 10' 20' 30' 40'

AO

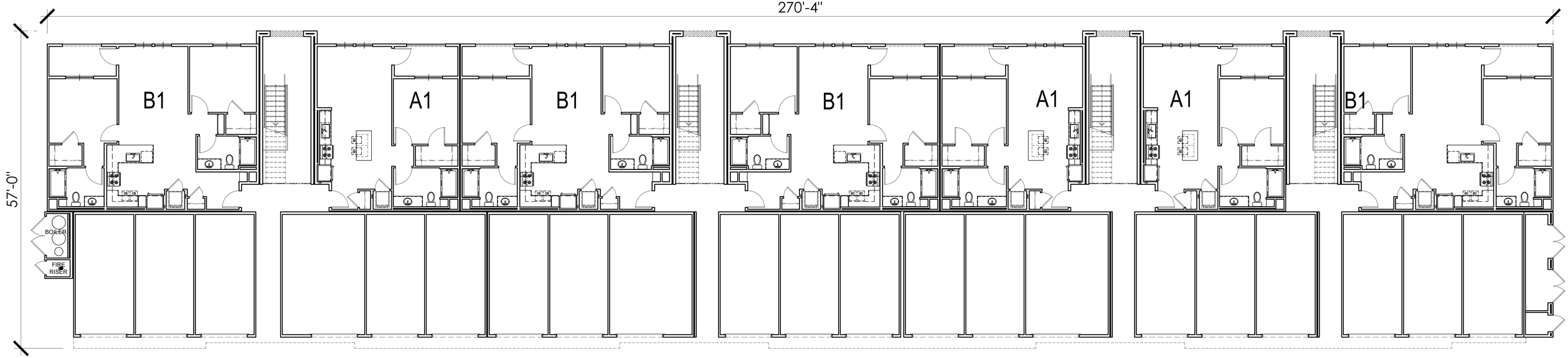
A2.27

JOB NO. 2022-1036
DATE 09-16-2024

2126



2ND LEVEL



1ST LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

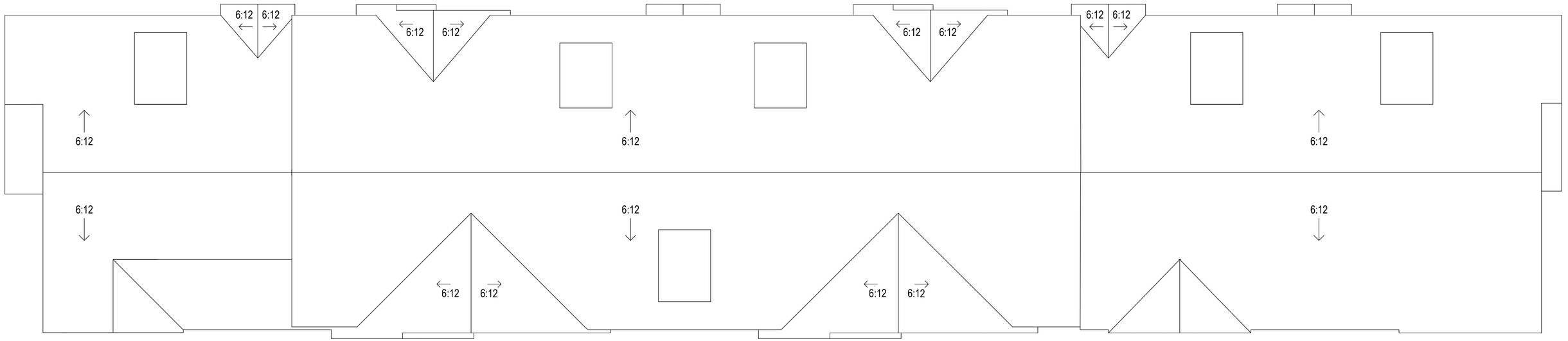
BUILDING G.3 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

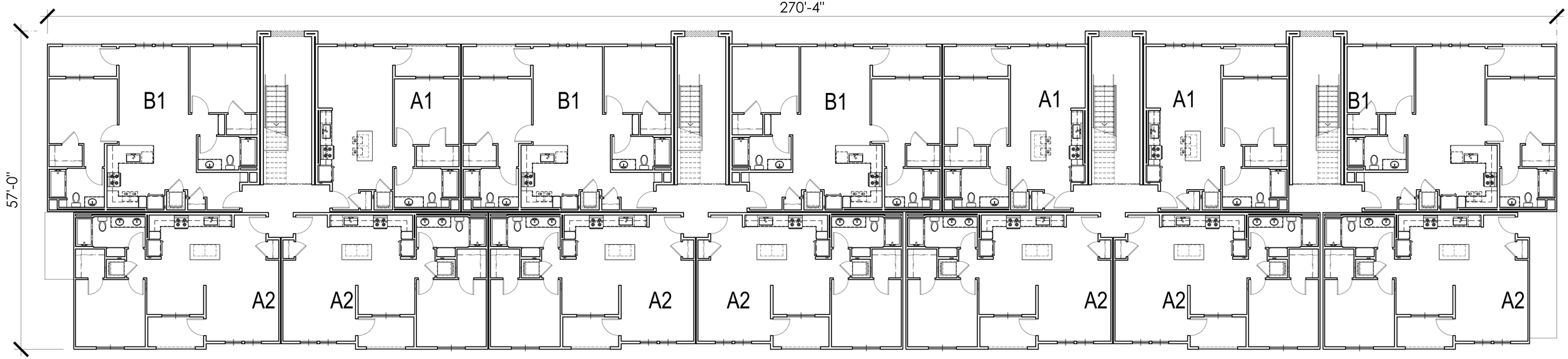
AO

A2.28

JOB NO. 2022-1036
DATE 09-16-2024



ROOF



3RD LEVEL

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING G.3 - BUILDING PLAN

1"=8'
0 8' 16' 24' 32'

AO

A2.29

JOB NO. 2022-1036
DATE 09-16-2024



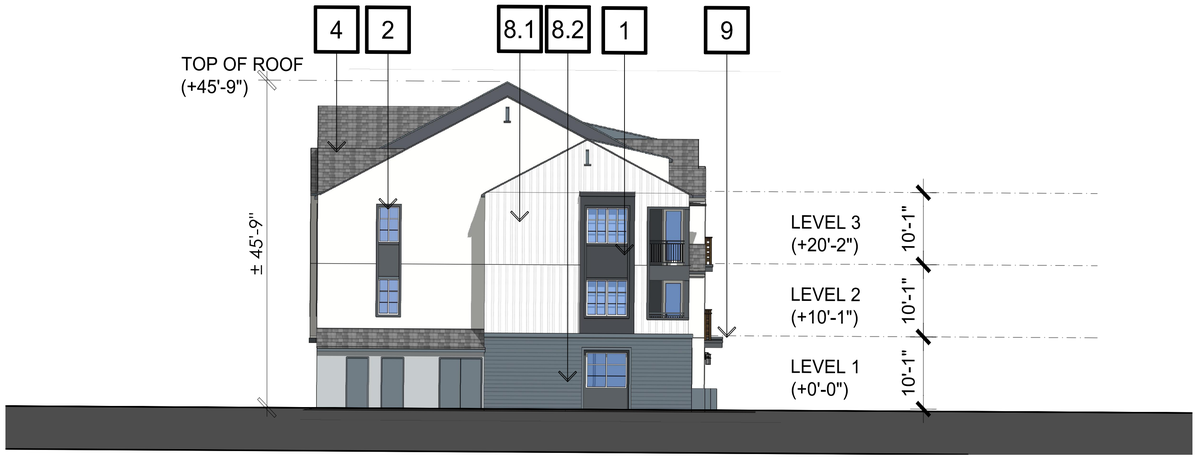
FRONT ELEVATION 1

MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

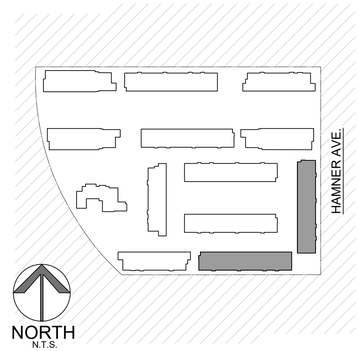
FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD

2



LEFT ELEVATION 2

1



Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE G.3 ELEVATIONS

1"=10'
0 10' 20' 30' 40'

A2.30

JOB NO. 2022-1036
DATE 09-16-2024

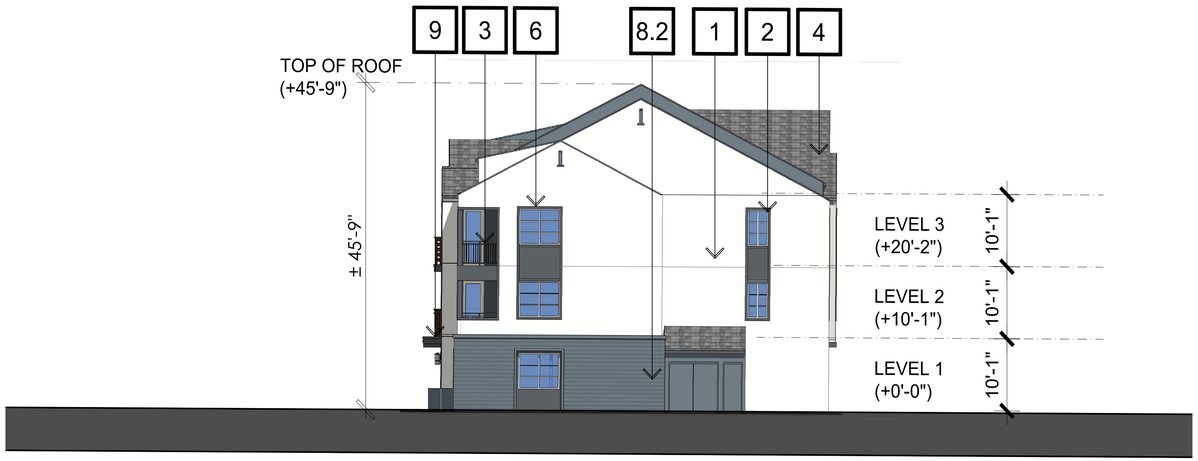
MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

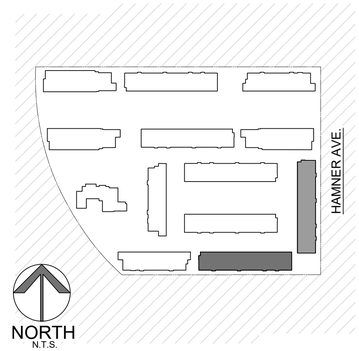
FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD



REAR ELEVATION 3



RIGHT ELEVATION 4



3

4

Quarterra

LEAL RANCH

EASTVALE, CA

BUILDING TYPE G.3 ELEVATIONS

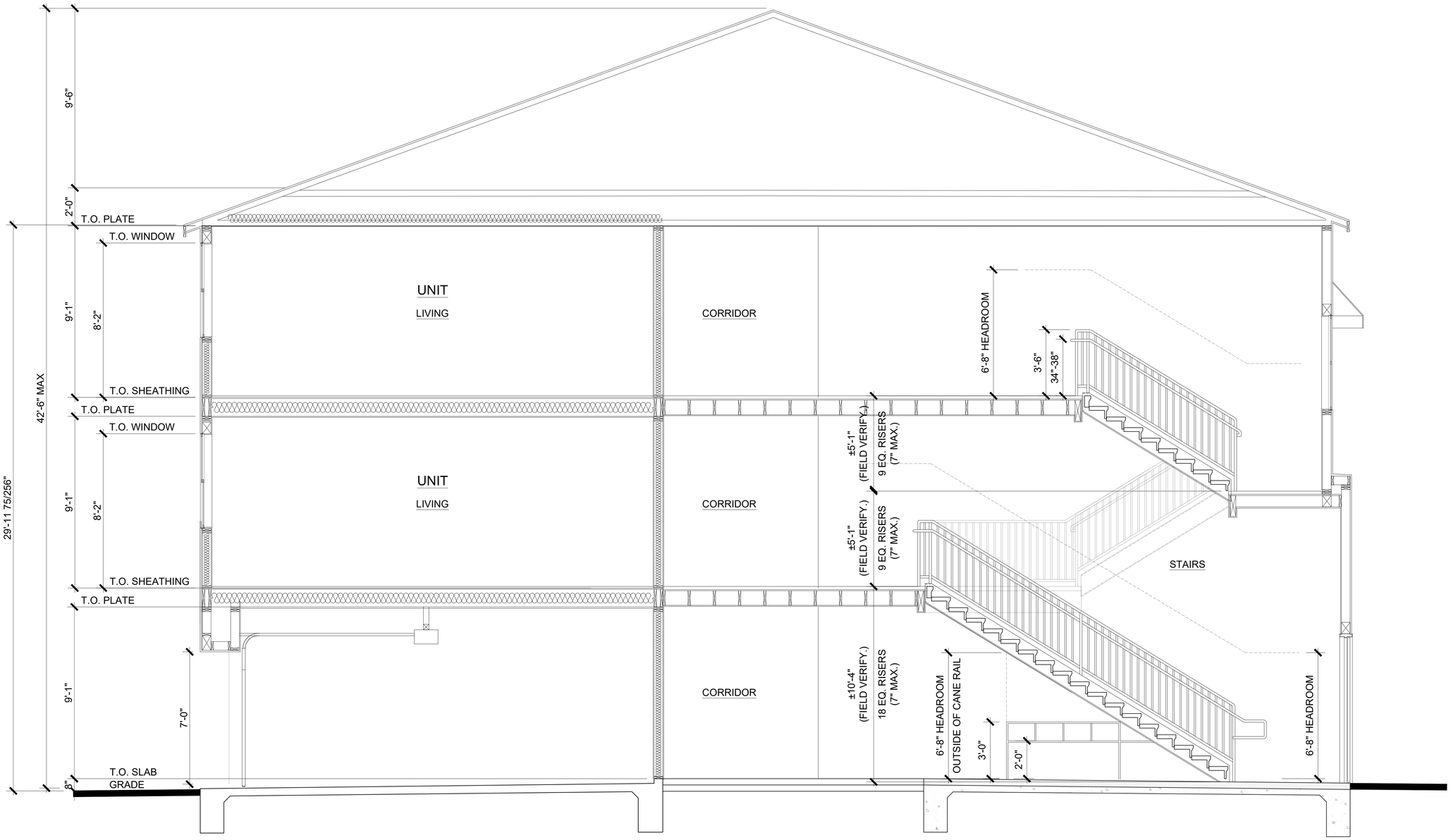
1"=10'
0 10' 20' 30' 40'

AO

A2.31

JOB NO. 2022-1036
DATE 09-16-2024

2130



Quarterra

LEAL RANCH

EASTVALE, CA

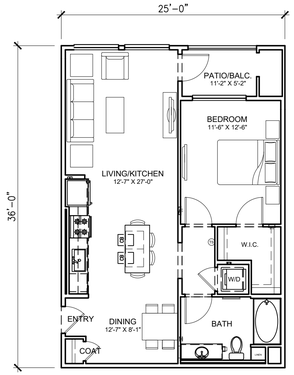
TYPICAL BUILDING SECTION

1"=8'

0 8' 16' 24' 32'

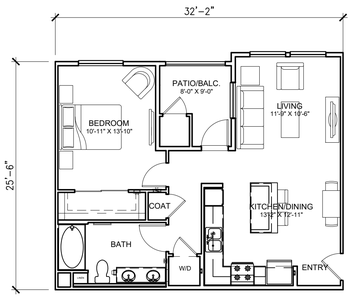
A2.32

JOB NO. 2022-1036
DATE 09-16-2024



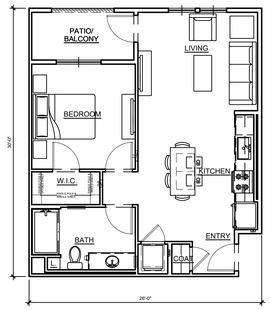
UNIT A1-BLDG A: 1BR / 1BA

LIVABLE AREA: 835 SQ. FT.
PATIO/BALCONY: 43 SQ. FT.

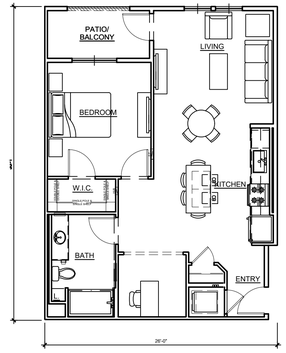


UNIT A2-BLDG A: 1BR / 1BA

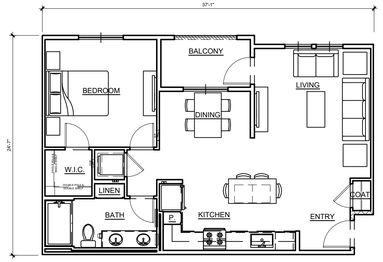
LIVABLE AREA: 757 SQ. FT.
PATIO/BALCONY: 59 SQ. FT.



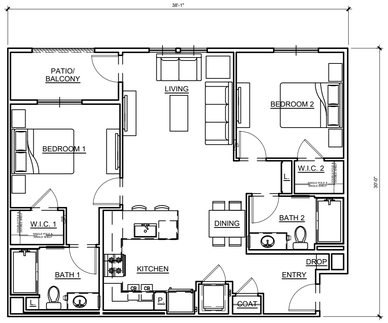
UNIT A1: 1BR / 1BA
LIVABLE AREA: 700 SQ. FT.
PATIO/ BALCONY AREA: 61 SQ. FT.



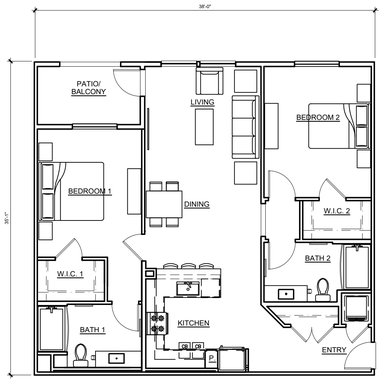
UNIT A1A: 1BR / 1BA
LIVABLE AREA: 842 SQ. FT.
PATIO/ BALCONY AREA: 61 SQ. FT.



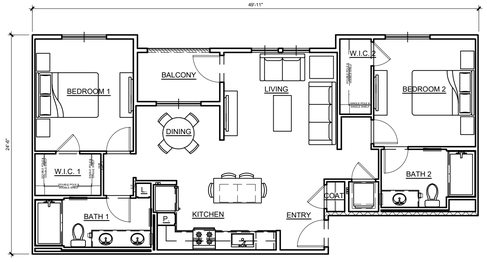
UNIT A2: 1BR / 1BA
LIVABLE AREA: 825 SQ. FT.
PATIO/ BALCONY AREA: 53 SQ. FT.



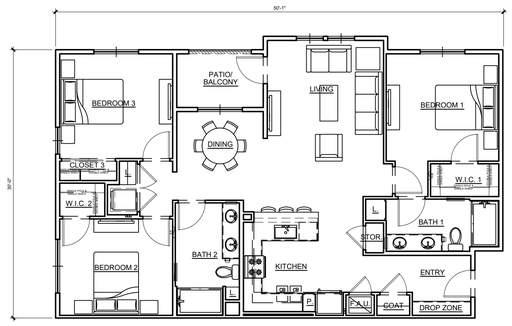
UNIT B1: 2BR / 2BA
LIVABLE AREA: 1053 SQ. FT.
PATIO/ BALCONY AREA: 64 SQ. FT.



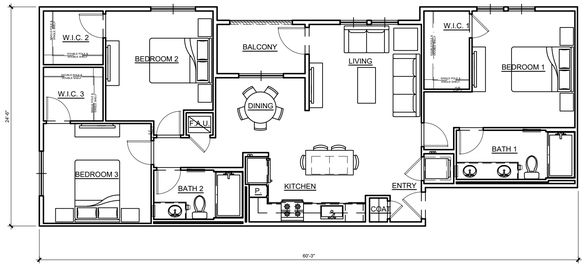
UNIT B1A: 2BR / 2BA
LIVABLE AREA: 1243 SQ. FT.
PATIO/ BALCONY AREA: 78 SQ. FT.



UNIT B2: 2BR / 2BA
LIVABLE AREA: 1061 SQ. FT.
PATIO/ BALCONY AREA: 51 SQ. FT.



UNIT C1: 3BR / 3BA
LIVABLE AREA: 1435 SQ. FT.
PATIO/ BALCONY AREA: 58 SQ. FT.



UNIT C2: 3BR / 3BA
LIVABLE AREA: 1309 SQ. FT.
PATIO/ BALCONY AREA: 54 SQ. FT.

Tuesday, September 17, 2024 4:46:07 PM
R:\2022\2022-1036 QMC - LIMONITE & HAMNER PH2 - EASTVALE\03 DESIGN\SCHEMATIC\CAD\22-1036_A3.0-A3.1 UNIT PLANS.DWG

Quarterra

LEAL RANCH

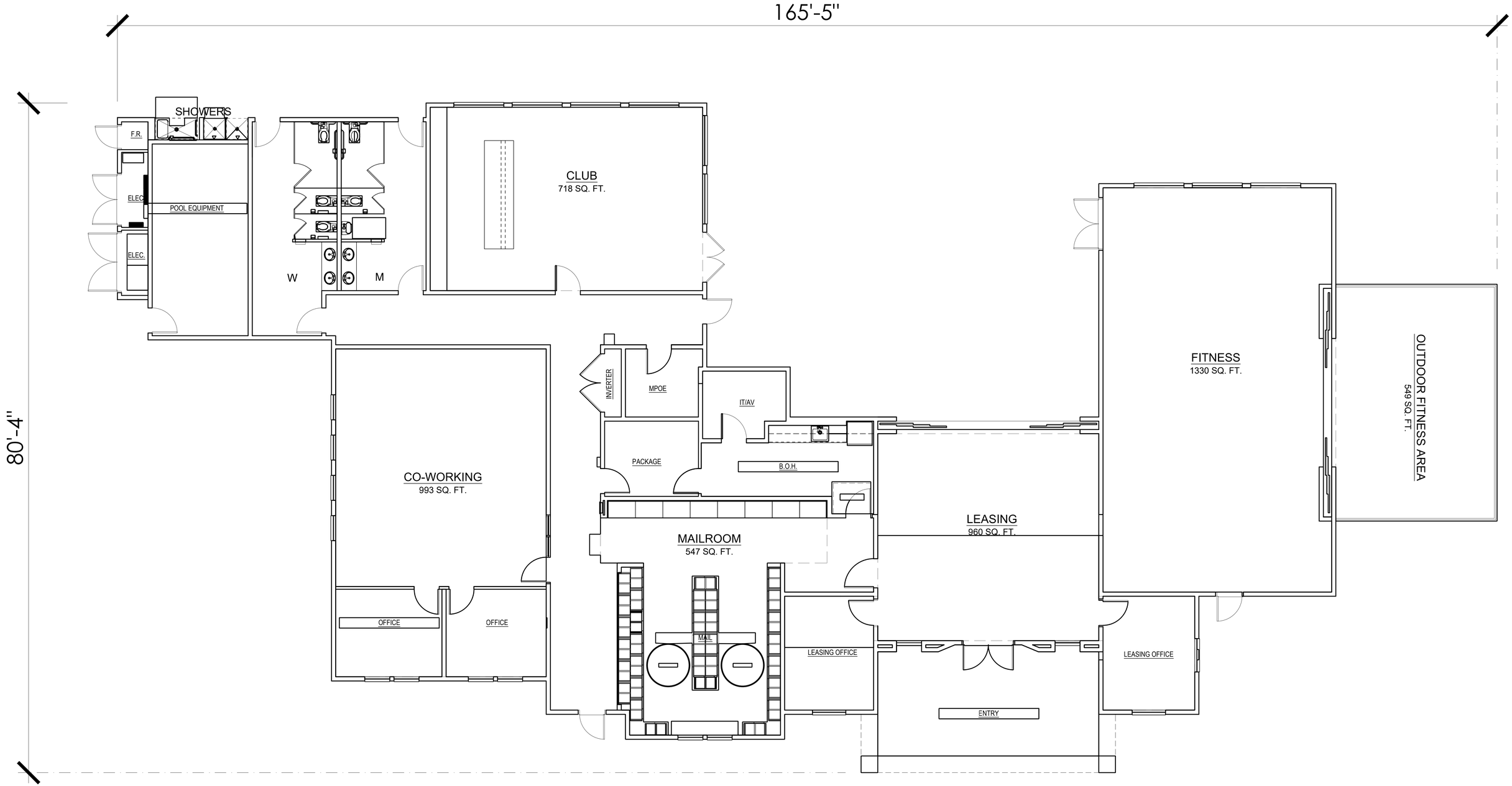
EASTVALE, CA

UNIT PLANS

1"=8'
0 8' 16' 24' 32'

A3.0

JOB NO. 2022-1036
DATE 09-16-2024



Quarterra

LEAL RANCH

EASTVALE, CA

CLUBHOUSE PLAN

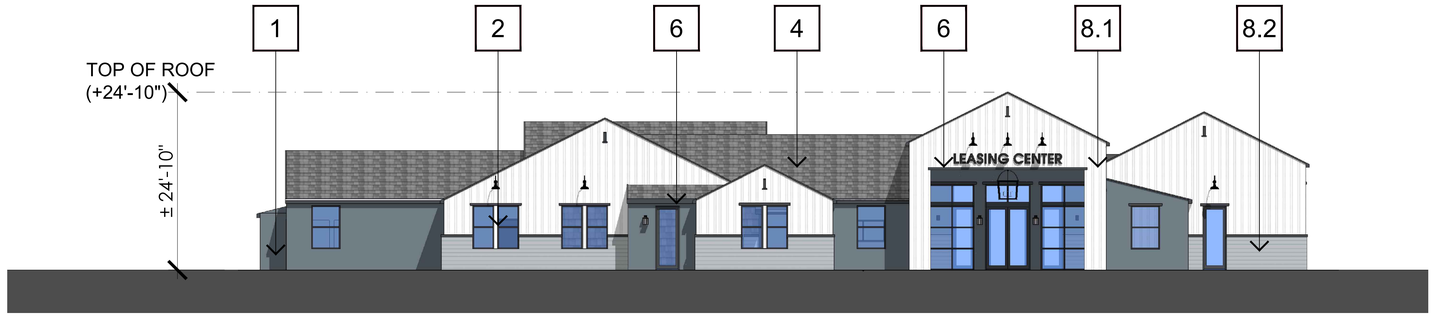
1"=8'

0 8' 16' 24' 32'

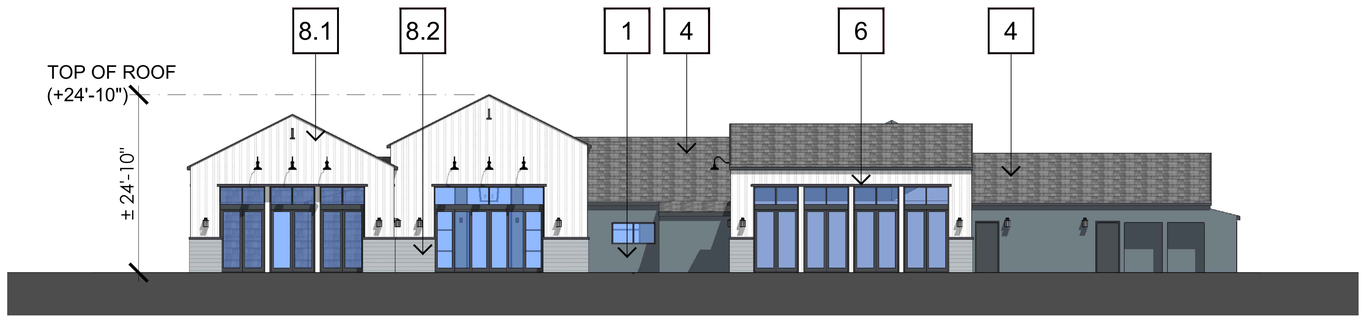
A4.0

JOB NO. 2022-1036
DATE 09-16-2024

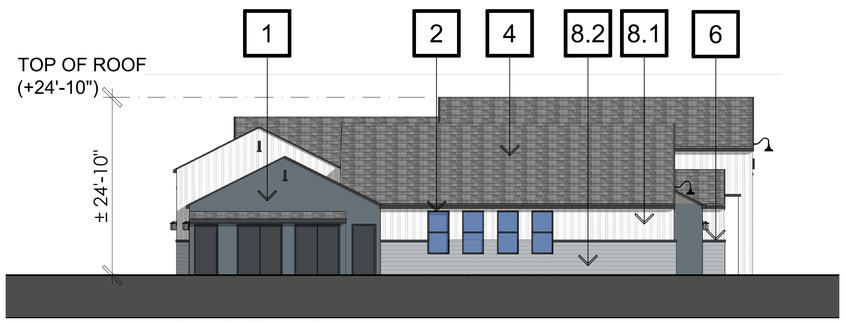
2133



FRONT ELEVATION 1



REAR ELEVATION 3



LEFT ELEVATION 2



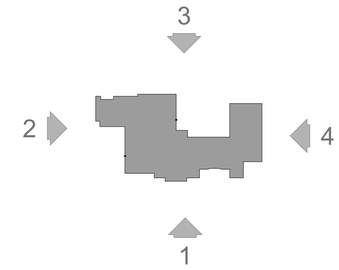
RIGHT ELEVATION 4

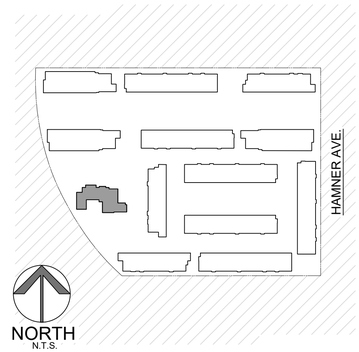
MATERIAL / COLOR LEGEND

1	EXTERIOR PLASTER
2	VINYL WINDOW
3	RAILING
4	ROOF SHINGLES
5	STANDING SEAM ROOF
6	FOAM TRIM
7	GARAGE DOOR
8.1	FIBER CEMENT SIDING 1
8.2	FIBER CEMENT SIDING 2
9	AWNING
10	CONTROL JOINT
11	ATTIC VENT
12	WOOD-LOOK COMPOSITE RAILING

FOR FURTHER INFORMATION NOT SHOWN HERE, REFER TO SHEET A5.0 & A5.1 FOR THE COLOR AND MATERIAL BOARD

KEY MAP





Quarterra

LEAL RANCH

EASTVALE, CA

CLUB HOUSE ELEVATIONS

1"=10'
0 10' 20' 30' 40'

AO

A4.1

JOB NO. 2022-1036
DATE 09-16-2024

2134



BUILDING A.4 - FRONT ELEVATION

COLOR SCHEME 1

A — SHERWIN WILLIAMS EXTRA WHITE SW 7006

B — SHERWIN WILLIAMS MONORAIL SILVER SW7663

C — SHERWIN WILLIAMS SLATE TILE SW7642

D — SHERWIN WILLIAMS WALL STREET SW7665

E — SHERWIN WILLIAMS SEA SERPENT SW7615

F — SHERWIN WILLIAMS GREENBLACK SW6994



1 SAND FINISH EXTERIOR PLASTER TO MATCH PAINT SPECS



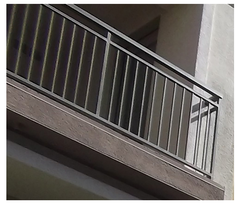
2 BOARD & BATTEN SMOOTH PANELS & TRIM TO MATCH PAINT SPECS



3 FRY REGLETS 1/2" CHANNEL SCREED CLEAR ANODIZED



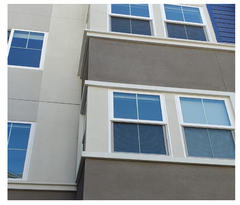
4 VINYL WINDOWS & DOORS WHITE



5 RAILINGS TO MATCH PAINT SPEC



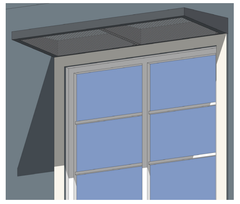
6 AWNINGS TO MATCH PAINT SPECS



7 FOAM TRIMS SHAPES AND SIZES WILL VARY TO MATCH PAINT SPECS



8 COMPOSITE WOOD-LOOK RAILING



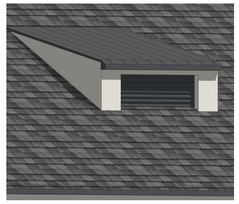
9 AWNING/ SUNSHADE TO MATCH PAINT SPEC



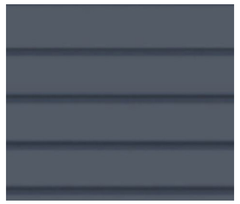
10 ASPHALT SHINGLES VIRGINIA SLATE OR EQUAL



11 STANDING SEAM ROOF TO MATCH PAINT SPEC OR EQUAL



12 ATTIC DORMER VENT TO MATCH PAINT SPEC



13 FIBER CEMENT LAP SIDING SMOOTH PANELS PAINT GRADE TO MATCH PAINT SPECS

Quarterra

LEAL RANCH

EASTVALE, CA

MATERIAL BOARD (COLOR SCHEME 1)

AO

A5.0

JOB NO. 2022-1036
DATE 07-18-2024



BUILDING G.2 - PARTIAL FRONT ELEVATION

COLOR SCHEME 2

A — SHERWIN WILLIAMS EXTRA WHITE SW 7006

B — SHERWIN WILLIAMS MONORAIL SILVER SW7663

C — SHERWIN WILLIAMS SLATE TILE SW7642

D — SHERWIN WILLIAMS WALL STREET SW7665

E — SHERWIN WILLIAMS SEA SERPENT SW7615

F — SHERWIN WILLIAMS GREENBLACK SW6994



1 SAND FINISH
EXTERIOR PLASTER
TO MATCH PAINT SPECS



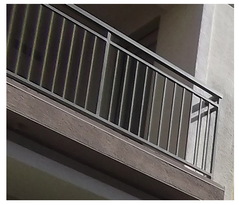
2 BOARD & BATTEN
SMOOTH PANELS & TRIM
TO MATCH PAINT SPECS



3 FRY REGLETS
1/2" CHANNEL SCREED
CLEAR ANODIZED



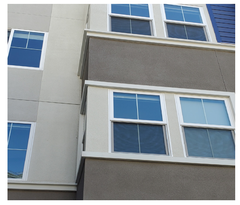
4 VINYL WINDOWS &
DOORS
WHITE



5 RAILINGS
TO MATCH PAINT SPEC



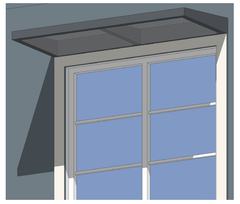
6 AWNINGS
TO MATCH PAINT SPECS



7 FOAM TRIMS
SHAPES AND SIZES WILL VARY
TO MATCH PAINT SPECS



8 COMPOSITE WOOD-LOOK
RAILING



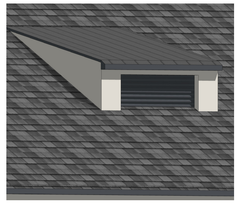
9 AWNING/ SUNSHADE
TO MATCH PAINT SPEC



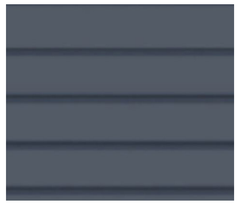
10 ASPHALT SHINGLES
VIRGINIA SLATE OR EQUAL



11 STANDING SEAM ROOF
TO MATCH PAINT SPEC OR
EQUAL



12 ATTIC DORMER VENT
TO MATCH PAINT SPEC



13 FIBER CEMENT LAP SIDING
SMOOTH PANELS
PAINT GRADE TO MATCH
PAINT SPECS

Quarterra

LEAL RANCH

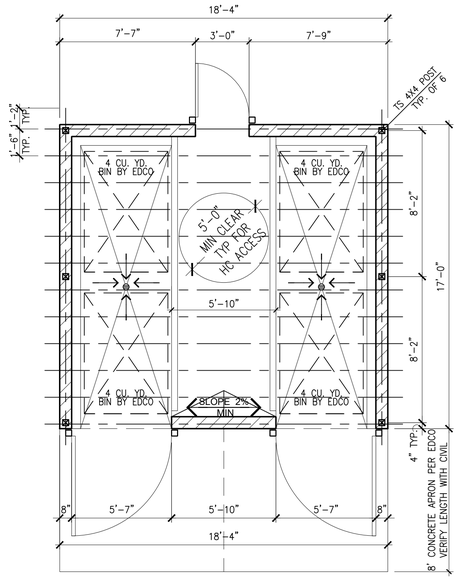
EASTVALE, CA

MATERIAL BOARD (COLOR SCHEME 2)

AO

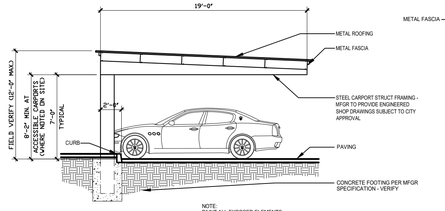
A5.1

JOB NO. 2022-1036
DATE 07-18-2024

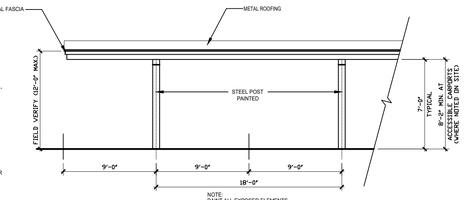


TRASH ENCLOSURE TYPICAL PLAN

NOTE: CARPORT SHOWN FOR DESIGN CONCEPT ONLY. PLANS, AND DETAILS BY MANUFACTURER REQUIRE SEPARATE SUBMITTAL AND REVIEW FOR BUILDING PERMITS.



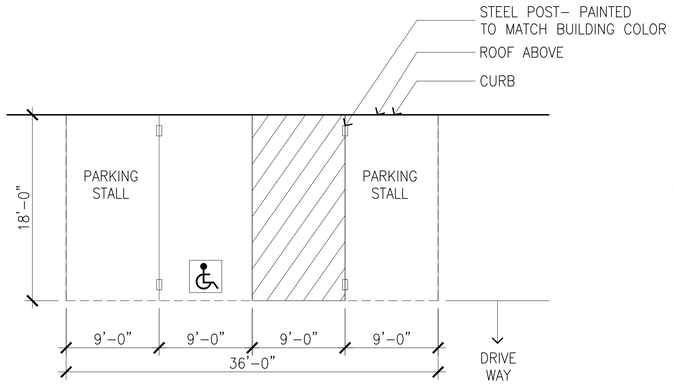
SIDE ELEVATION



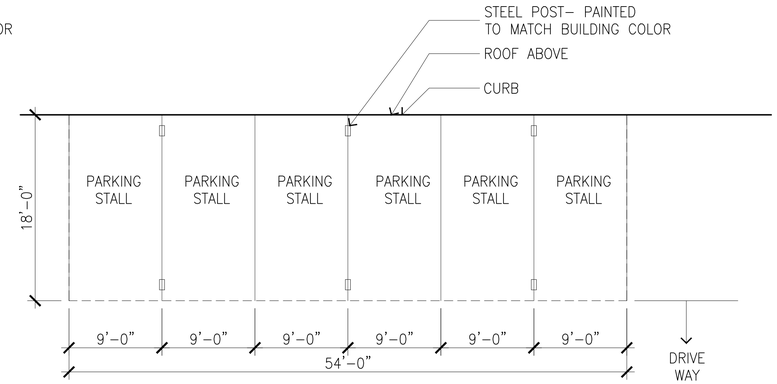
FRONT ELEVATION REAR-SIM.

NOTES:
1. SHOP DRAWINGS AND CALCULATIONS REQUIRED TO BE DRAWN AND SEALED BY A REGISTERED STRUCTURAL ENGINEER.
2. CARPORT UNDER SEPARATE PERMIT AND REVIEW. DETAIL FOR REFERENCE ONLY.
3. PAINT TO MATCH APARTMENT BUILDING COLOR INCLUDING THE UNDERSIDE OF THE ROOF.

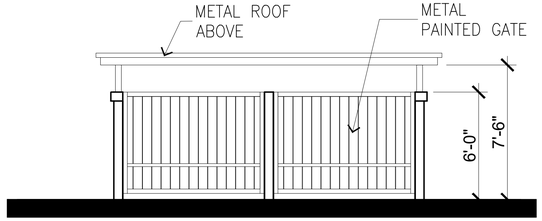
STANDARD CARPORT ELEVATIONS



STANDARD HANDICAP CARPORT PLAN



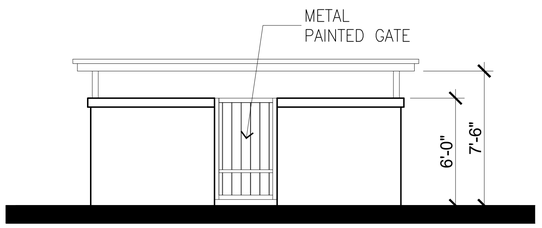
STANDARD CARPORT PLAN



FRONT

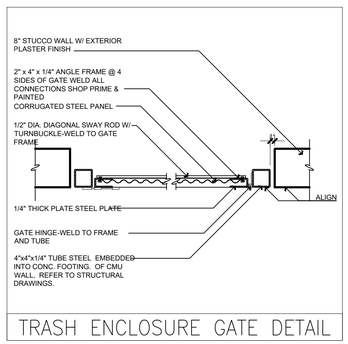


LEFT/RIGHT

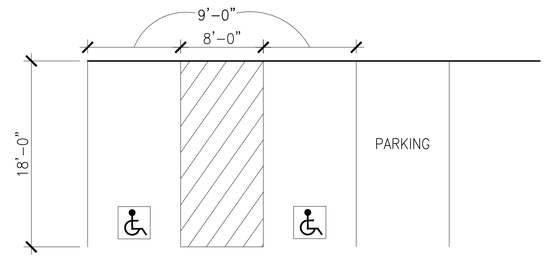


REAR

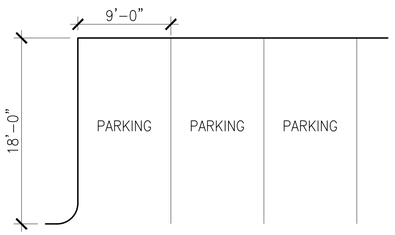
TRASH ENCLOSURE TYPICAL ELEVATIONS



TRASH ENCLOSURE GATE DETAIL



STANDARD HANDICAP PARKING PLAN



STANDARD PARKING PLAN

Quarterra

LEAL RANCH

EASTVALE, CA

PARKING, CARPORT, & TRASH ENCLOSURE DETAIL

A6.0

JOB NO. 2022-1036
DATE 09-16-2024

(NOT APART)

PREMIER PLACE

HAMNER AVENUE

PROP. 2' MAX RETAINING WALL

PROP. 3' MAX RETAINING WALL

PROP. CONCRETE GUTTER

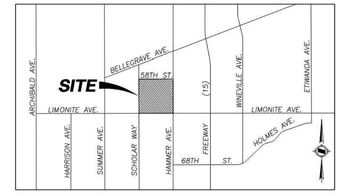
PROP. 12" PVC

PROPERTY LINE

PROP. SETBACK LINE

7 E.C.

(NOT APART)



VICINITY MAP

NOT TO SCALE

SOUTHEAST QUARTER OF SECTION 24
TOWNSHIP 2 SOUTH, RANGE 7 WEST

OWNER/APPLICANT
QUARTERRA MULTIFAMILY COMMUNITIES, LLC
95 ENTERPRISE, SUITE 200
ALISO VIEJO, CA 92656
(949) 606-5536

CIVIL ENGINEER
NIKKI KERRY, PE
KIMLEY-HORN AND ASSOCIATES, INC.
1100 TOWN AND COUNTRY, SUITE 700
ORANGE, CA 92868
(714) 939-1030
(714) 938-9488 FAX
NIKKI.KERRY@KIMLEY-HORN.COM

LEGAL DESCRIPTION: BEING THE SOUTHEAST QUARTER OF SECTION 24, TOWNSHIP 2 SOUTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF EASTVALE, COUNTY OF RIVERSIDE STATE OF CALIFORNIA, AS SHOWN BY SECTIONALIZED SURVEY OF THE MAP OF THE JURUPA RANCHO ON FILE IN BOOK 9, PAGE 33 OF MAPS, COUNTY OF SAN BERNARDINO RECORDS, STATE CALIFORNIA.

BENCHMARK: CITY OF ONTARIO BENCHMARK GG-34-1 DESCRIBED AS 2.5" BRASS DISK STAMPED CITY OF ONTARIO GG-34-1. SET IN TOP OF CURB, APPROXIMATELY 2'± NORTH OF THE DRIVEWAY AT 5815 SUMMER AVE., NAVD88 ELEVATION: 683.023 DATED 2018 EASTVALE.

SITE ADDRESS: PORTIONS OF LOTS 4, 9, AND 10 OF TRACT 38290, WITHIN PHASE II OF THE LEAL RANCH MASTER PLAN, SPECIFICALLY, THE BOUNDARIES OF LOT A, LOT E, AND LOT H ALONG HAMNER AVENUE.

ZONE: LEAL MASTER PLAN

UTILITY PURVEYORS

SEWER & WATER
JURUPA COMMUNITY SERVICE DISTRICT
11201 HARREL STREETS
MIRA LOMA, CA 91752
(951) 685-7437

AT&T
1265 NORTH VAN BUREN STREET
SUITE 180
ANAHEIM, CA 92807
(800) 750-2355

ELECTRICITY
SOUTHERN CALIFORNIA EDISON (SCE)
1351 E. FRANCIS STREET
ONTARIO, CA 91761
(909) 930-8431

VERIZON
1400 EAST PHILLIPS BLVD.
POMONA, CA 91766
(909) 469-2260

GAS
SOUTHERN CALIFORNIA GAS COMPANY
155 SOUTH G STREET
SAN BERNARDINO, CA 92410
(909) 930-8431

LEGEND:

- LIMIT OF WORK
- PROPERTY LINE
- SETBACK LINE
- ROAD CENTERLINE
- PROPOSED FENCE
- PROPOSED STORM DRAIN PIPE
- PROPOSED CATCH BASIN
- AC UNITS
- PROPOSED FIRE HYDRANT
- (XX.XX TC) / (XX.XX FS) — ELEVATION PER HENSAKER 05/23/23 OFF-SITE PLAN
- CARPORT
- EV — ELECTRICAL VEHICLE PARKING
- PROP. — PROPOSED
- CB — CATCH BASIN
- STREET LIGHT
- A-A C1.1 — SECTIONS

Kimley»Horn
EXPECT MORE. EXPERIENCE BETTER.
1100 TOWN AND COUNTRY RD SUITE 700
ORANGE, CA. 92868
T: 714.939.1031

NOTE: EXISTING ELEVATIONS PROVIDED ARE BASED ON: HUNSAKER ROUGH GRADING FILE HUNSAKER MASS GRADING PLAN TRACT NO. 38595 DATED 09/03/2024 (PLOTTED 09/03/2024) FOR ON-SITE AND HUNSAKER OFF-SITE STREET IMPROVEMENT PLANS DATED 09/17/24.

LEAL RANCH

EASTVALE, CA

EASTVALE GARDEN APARTMENTS - PH2

CONCEPTUAL GRADING EXHIBIT

NORTH

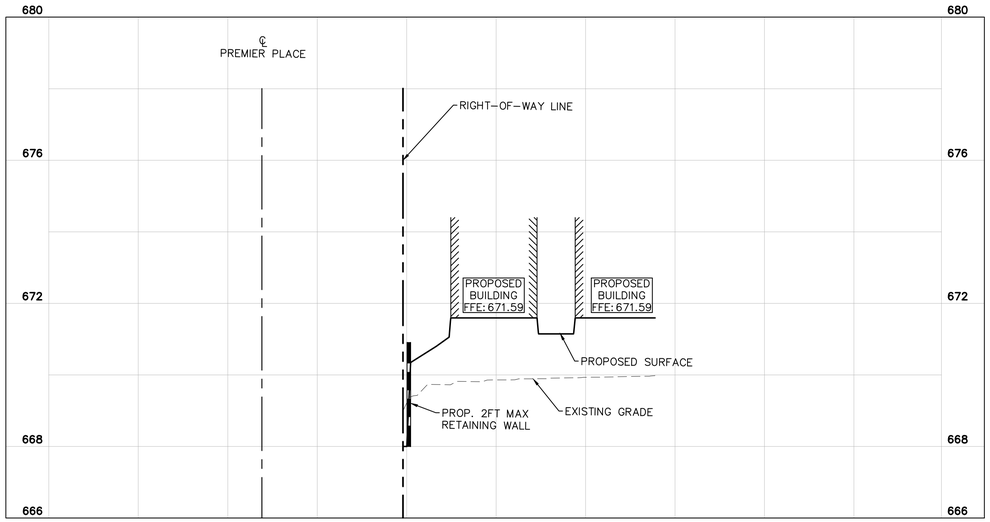
GRAPHIC SCALE IN FEET
0 20 40 80

C1.0

DATE: 12-19-24
JOB NO.: 2022-687

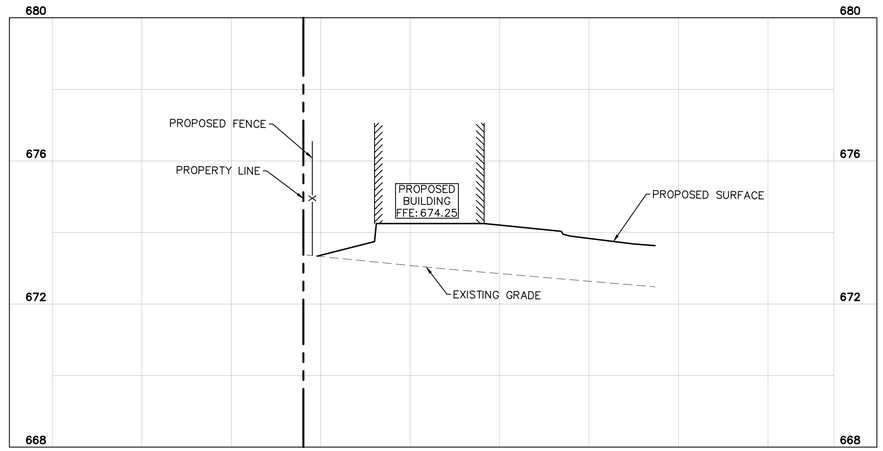
QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

AO ARCHITECTS
144 NORTH ORANGE ST., ORANGE, CA 92866
(714) 639-9860
Architecture. Design. Relationships.



SECTION A-A:

SCALE: V: 1" = 4'
H: 1" = 20'



SECTION B-B:

SCALE: V: 1" = 4'
H: 1" = 20'

Kimley»Horn
EXPECT MORE. EXPERIENCE BETTER.
1100 TOWN AND COUNTRY RD SUITE 700
ORANGE, CA. 92868
T: 714.939.1031

NOTE: EXISTING ELEVATIONS PROVIDED ARE BASED ON: HUNSAKER ROUGH GRADING FILE HUNSAKER MASS GRADING PLAN TRACT NO. 38290 DATED 10/10/2022 (PLOTTED 9/27/2022) FOR ON-SITE AND HUNSAKER OFF-SITE STREET IMPROVEMENT PLANS DATED 05/23/23.

EASTVALE GARDEN APARTMENTS - PH2

GRADING SECTIONS

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

C1.1

DATE: 12-19-24
JOB NO.: 2022-687

LEAL RANCH
EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

AO ARCHITECTS
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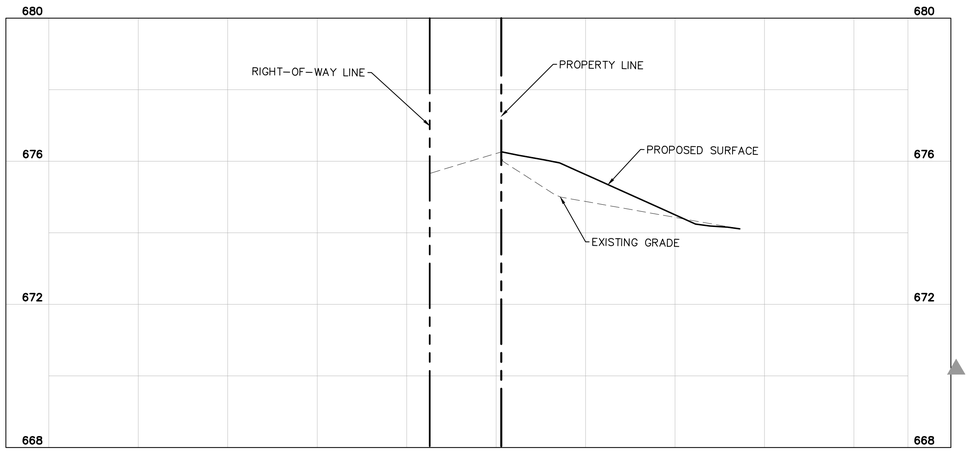
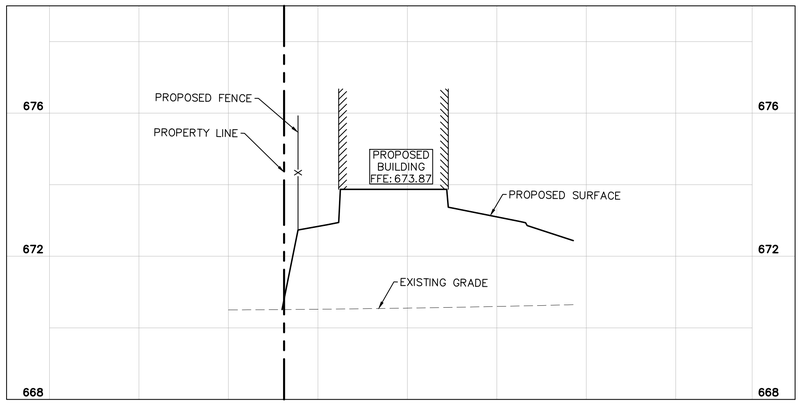
(714) 639-9860
Architecture.
Design.
Relationships.



SECTION C-C:

SCALE: V: 1" = 4'
H: 1" = 20'



SECTION D-D:

SCALE: V: 1" = 4'
H: 1" = 20'

Kimley»Horn
EXPECT MORE. EXPERIENCE BETTER.
1100 TOWN AND COUNTRY RD SUITE 700
ORANGE, CA. 92868
T: 714.939.1031

NOTE: EXISTING ELEVATIONS PROVIDED ARE BASED ON: HUNSAKER ROUGH GRADING FILE HUNSAKER MASS GRADING PLAN TRACT NO. 38290 DATED 10/10/2022 (PLOTTED 9/27/2022) FOR ON-SITE AND HUNSAKER OFF-SITE STREET IMPROVEMENT PLANS DATED 05/23/23.

EASTVALE GARDEN APARTMENTS - PH2

CONCEPTUAL GRADING EXHIBIT

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

C1.2

DATE: 12-19-24
JOB NO.: 2022-687

LEAL RANCH
EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
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144 NORTH ORANGE ST., ORANGE, CA 92866
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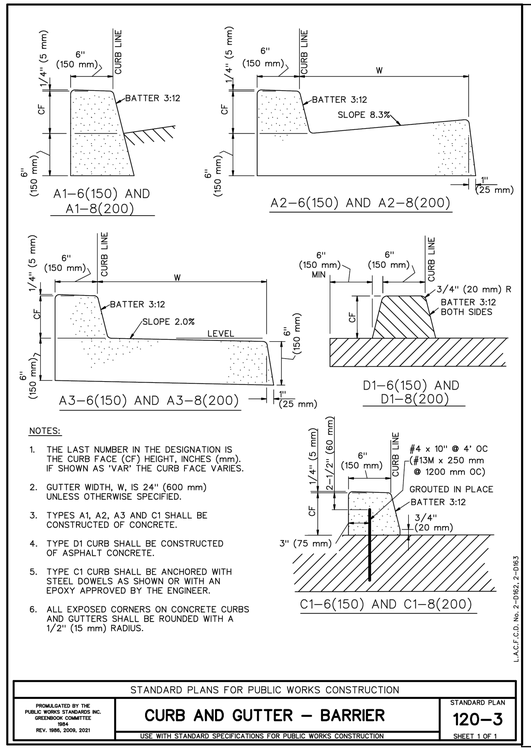
Design.
Relationships.

2140



NOTES:

1. THE LAST NUMBER IN THE DESIGNATION IS THE CURB FACE (CF) HEIGHT, INCHES (mm). IF SHOWN AS 'VAR' THE CURB FACE VARIES.
2. GUTTER WIDTH, W, IS 24" (600 mm) UNLESS OTHERWISE SPECIFIED.
3. TYPES A1, A2, A3 AND C1 SHALL BE CONSTRUCTED OF CONCRETE.
4. TYPE D1 CURB SHALL BE CONSTRUCTED OF ASPHALT CONCRETE.
5. TYPE C1 CURB SHALL BE ANCHORED WITH STEEL DOWELS AS SHOWN OR WITH AN EPOXY APPROVED BY THE ENGINEER.
6. ALL EXPOSED CORNERS ON CONCRETE CURBS AND GUTTERS SHALL BE ROUNDED WITH A 1/2" (15 mm) RADIUS.

L.A.C.F.C.D. No. 2-0162, 2-0163

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

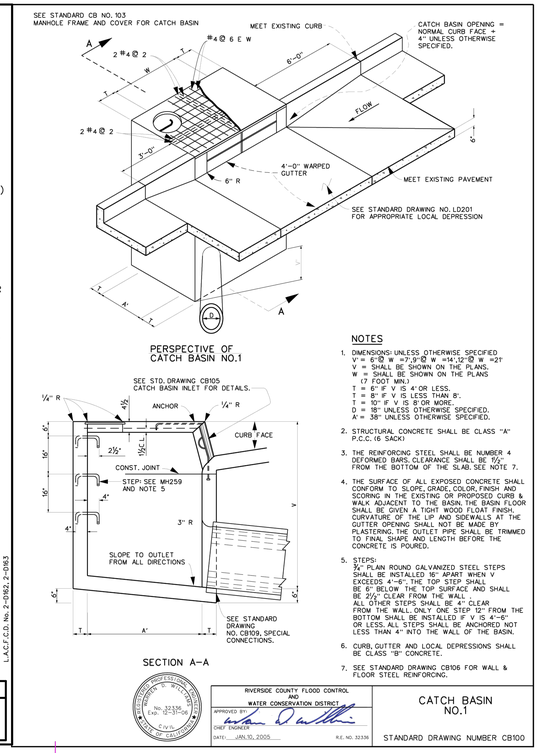
PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE SOCAL REV. 1988, 2009, 2021

CURB AND GUTTER – BARRIER

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN 120–3

SHEET 1 OF 1



NOTES

1. DIMENSIONS: UNLESS OTHERWISE SPECIFIED
   V = 6" @ W =7', 9" @ W =14', 12" @ W =21'
   V = SHALL BE SHOWN ON THE PLANS.
   W = SHALL BE SHOWN ON THE PLANS (7 FOOT MIN.)
   T = 6" IF V IS 4' OR LESS.
   T = 8" IF V IS LESS THAN 8'.
   T = 10" IF V IS 8' OR MORE.
   D = 18" UNLESS OTHERWISE SPECIFIED.
   A' = 38" UNLESS OTHERWISE SPECIFIED.
2. STRUCTURAL CONCRETE SHALL BE CLASS "A" P.C.C. (6 SACK)
3. THE REINFORCING STEEL SHALL BE NUMBER 4 DEFORMED BARS, CLEARANCE SHALL BE 1½" FROM THE BOTTOM OF THE SLAB. SEE NOTE 7.
4. THE SURFACE OF ALL EXPOSED CONCRETE SHALL CONFORM TO SLOPE, GRADE, COLOR, FINISH AND SCORING IN THE EXISTING OR PROPOSED CURB & WALK ADJACENT TO THE BASIN. THE BASIN FLOOR SHALL BE GIVEN A TIGHT WOOD FLOAT FINISH. CURVATURE OF THE LIP AND SIDEWALLS AT THE GUTTER OPENING SHALL NOT BE MADE BY PLASTERING. THE OUTLET PIPE SHALL BE TRIMMED TO FINAL SHAPE AND LENGTH BEFORE THE CONCRETE IS POURED.
5. STEPS:
   ¾" PLAIN ROUND GALVANIZED STEEL STEPS SHALL BE INSTALLED 16" APART WHEN V EXCEEDS 4'-6". THE TOP STEP SHALL BE 6" BELOW THE TOP SURFACE AND SHALL BE 2½" CLEAR FROM THE WALL. ALL OTHER STEPS SHALL BE 4" CLEAR FROM THE WALL. ONLY ONE STEP 12" FROM THE BOTTOM SHALL BE INSTALLED IF V IS 4'-6" OR LESS. ALL STEPS SHALL BE ANCHORED NOT LESS THAN 4" INTO THE WALL OF THE BASIN.
6. CURB, GUTTER AND LOCAL DEPRESSIONS SHALL BE CLASS "B" CONCRETE.
7. SEE STANDARD DRAWING CB106 FOR WALL & FLOOR STEEL REINFORCING.

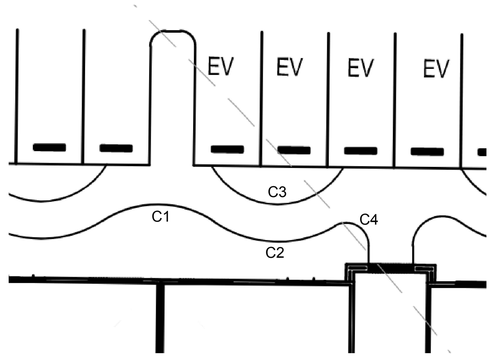
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

APPROVED BY: _____ CHIEF ENGINEER

DATE: JAN. 10, 2005 R.E. NO. 32338

CATCH BASIN NO.1

STANDARD DRAWING NUMBER CB100



TYPICAL WALKWAY HORIZONTAL CONTROL:

Curb Curve Table			
Curve #	Length (FT)	Radius (FT)	Delta (°)
C1	38.57	12.28	180.00
C2	34.82	108.59	18.37
C3	34.82	108.59	18.37
C4	15.68	10.00	89.82
C5	15.74	10.00	90.18

Kimley»Horn
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ORANGE, CA. 92868
T: 714.939.1031

LEAL RANCH

EASTVALE, CA

EASTVALE GARDEN APARTMENTS - PH2

DETAILS

DATE: 12-19-24
JOB NO.: 2022-687

C1.3

QUARTERRA
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949.606.5536

AO ARCHITECTS
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(714) 639-9860
Architecture. Design. Relationships.

(NOT APART)

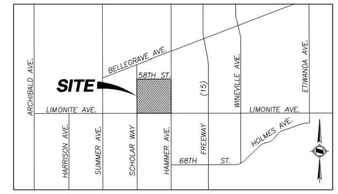
PROPERTY LINE
PROP. SETBACK LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE

HAMNER AVENUE

PREMIER PLACE

PROP. SS BLDG. POC 665.87 INV
PROP. SS BLDG. POC 665.82 INV
PROP. SS BLDG. POC 670.34 INV
INV 660.00' EX INV 657.32'
PROP. 18" SD PVC
PROP. 6" SS PVC
PROP. 6" SS PVC
PROP. CB
PROP. 18" SD PVC
PROP. CB
PROP. 12" SD PVC
672.83 TG 662.58 INV
PROP. CB
PROP. 12" SD PVC
PROP. CB
673.70 TG 663.45 INV
670.01 TG 660.48 INV
PROP. 18" SD PVC
670.57 TG 664.28 INV
PROP. 8" SS PVC
PROP. MH
672.81 TG 661.97 INV
PROP. 6" SS PVC
PROP. MH
673.34 TG 664.23 INV
PROP. 8" SS PVC
PROP. MH
PROP. 6" SS PVC
674.08 TG 668.75 INV
664.94 INV
PROP. SS BLDG. POC
664.55 INV
PROP. SS BLDG. POC
669.41 INV
PROP. SS BLDG. POC
PROP. 8" SS PVC
PROP. 12" SD PVC
PROP. CB
672.84 TG 666.00 INV
672.76 TG 666.00 INV
673.14 TG 666.00 INV
PROP. CB
PROP. CB
672.26 TG 659.41 INV
656.79 INV
PROP. 8" SS PVC
PROP. 12" SD PVC
658.57 INV
PROP. SS BLDG. POC
654.97 INV
PROP. MH
PROP. CB 668.27 TG 662.45 INV
PROP. 12" SD PVC
PROP. SS BLDG. POC
667.90 INV
662.75 INV
PROP. SS BLDG. POC
671.88 TG 662.13 INV
PROP. CB
PROP. 6" SS PVC
PROP. 12" SD PVC
672.07 TG 662.91 INV
PROP. 6" SS PVC
PROP. CB
1672.65 TG 665.25 INV
PROP. CB
PROP. SS BLDG. POC 668.51 INV
PROP. 8" SS PVC
PROP. 6" SS PVC
PROP. MH
PROP. 8" SS PVC
PROP. CONCRETE GUTTER
665.50 INV
PROP. SS BLDG. POC
PROP. 8" SS PVC
PROP. 12" SD PVC
PROP. 18" SD PVC
PROP. CONCRETE GUTTER
PROP. CB
671.52 TG 660.96 INV
PROP. CB
671.91 TG 661.49 INV
PROP. 12" SD PVC
PROP. CB
670.29 TG 660.12 INV
671.06 TG 660.34 INV
PROP. 24" SD PVC
658.98 INV
671.64 TG 659.92 INV
PROP. MH
PROP. 6" SS PVC
663.92 INV
672.67 TG 662.12 INV
PROP. CB
PROP. SS BLDG. POC
PROP. 8" SS PVC
INV 660.00' EX INV 657.93'
659.29 INV
PROP. SS BLDG. POC
655.22 INV
(667.35 TC) (666.85 FS)
PROP. 9' MAX RETAINING WALL (START)
PROP. 9' MAX RETAINING WALL
PROP. 9' MAX RETAINING WALL (END)

(NOT APART)



VICINITY MAP

NOT TO SCALE

SOUTHEAST QUARTER OF SECTION 24
TOWNSHIP 2 SOUTH, RANGE 7 WEST

OWNER/APPLICANT
QUARTERRA MULTIFAMILY COMMUNITIES, LLC
95 ENTERPRISE, SUITE 200
ALISO VIEJO, CA 92656
(949) 606-5536

CIVIL ENGINEER
NIKKI KERRY, PE
KIMLEY-HORN AND ASSOCIATES, INC.
1100 TOWN AND COUNTRY, SUITE 700
ORANGE, CA 92868
(714) 939-1030
(714) 938-9488 FAX
NIKKI.KERRY@KIMLEY-HORN.COM

LEGAL DESCRIPTION: BEING THE SOUTHEAST QUARTER OF SECTION 24, TOWNSHIP 2 SOUTH, RANGE 7 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF EASTVALE, COUNTY OF RIVERSIDE STATE OF CALIFORNIA, AS SHOWN BY SECTIONALIZED SURVEY OF THE MAP OF THE JURUPA RANCHO ON FILE IN BOOK 9, PAGE 33 OF MAPS, COUNTY OF SAN BERNARDINO RECORDS, STATE CALIFORNIA.

SITE ADDRESS: PORTIONS OF LOTS 4, 9, AND 10 OF TRACT 38290, WITHIN PHASE II OF THE LEAL RANCH MASTER PLAN, SPECIFICALLY, THE BOUNDARIES OF LOT A, LOT E, AND LOT H ALONG HAMNER AVENUE.

ZONE: LEAL MASTER PLAN

UTILITY PURVEYORS

SEWER, & WATER
JURUPA COMMUNITY SERVICE DISTRICT
11201 HARREL STREETS
MIRA LOMA, CA 91752
(951) 685-7437

AT&T
1265 NORTH VAN BUREN STREET
SUITE 180
ANAHEIM, CA 92807
(800) 750-2355

ELECTRICITY
SOUTHERN CALIFORNIA EDISON (SCE)
1351 E. FRANCIS STREET
ONTARIO, CA 91761
(909) 930-8431

VERIZON
1400 EAST PHILLIPS BLVD.
POMONA, CA 91766
(909) 469-2260

GAS
SOUTHERN CALIFORNIA GAS COMPANY
155 SOUTH G STREET
SAN BERNARDINO, CA 92410
(909) 930-8431

LEGEND:

	LIMIT OF WORK
	PROPERTY LINE
	SETBACK LINE
	ROAD CENTERLINE
	PROPOSED FENCE
SD	PROPOSED STORM DRAIN PIPE
SS	PROPOSED SEWER PIPE
	PROPOSED CATCH BASIN
	PROPOSED FIRE HYDRANT
S	PROPOSED MANHOLE
PROP.	PROPOSED
CB	CATCH BASIN
MH	MANHOLE
BLDG POC	BUILDING POINT OF CONNECTION

Kimley»Horn
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1100 TOWN AND COUNTRY RD SUITE 700
ORANGE, CA. 92868
T: 714.939.1031

NOTE: EXISTING ELEVATIONS PROVIDED ARE BASED ON: HUNSAKER ROUGH GRADING FILE HUNSAKER MASS GRADING PLAN TRACT NO. 38290 DATED 10/10/2022 (PLOTTED 9/27/2022) FOR ON-SITE AND HUNSAKER OFF-SITE STREET IMPROVEMENT PLANS DATED 05/23/23.

LEAL RANCH

EASTVALE, CA

EASTVALE GARDEN APARTMENTS - PH2

CONCEPTUAL GRADING EXHIBIT

NORTH

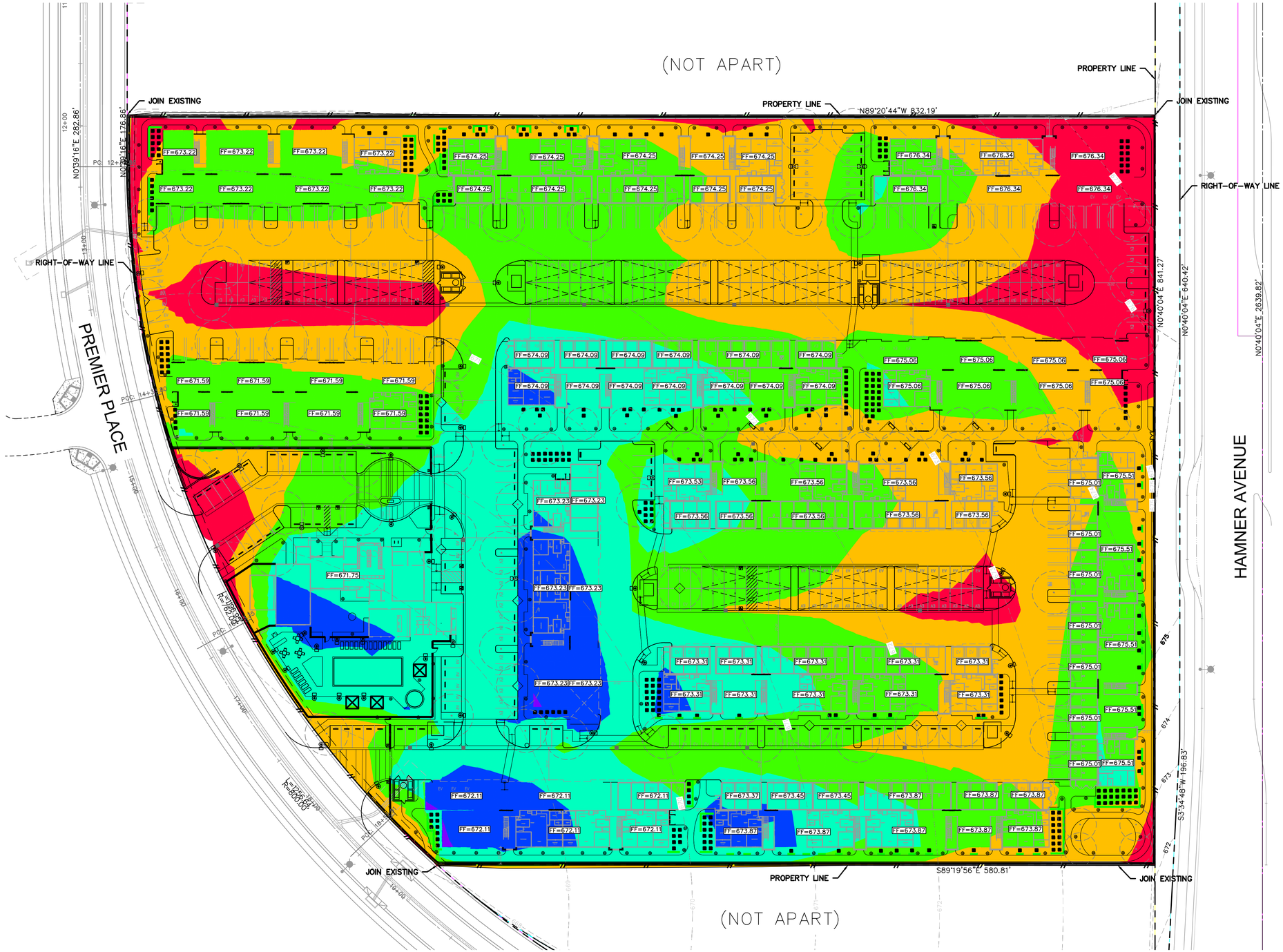
GRAPHIC SCALE IN FEET
0 20 40 80

C2.0

DATE: 12-19-24
JOB NO.: 2022-687

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

AO ARCHITECTS
144 NORTH ORANGE ST., ORANGE, CA 92866
(714) 639-9860
Architecture. Design. Relationships.





VICINITY MAP

NOT TO SCALE

SOUTHEAST QUARTER OF SECTION 24
TOWNSHIP 2 SOUTH, RANGE 7 WEST

OWNER/APPLICANT
QUARTERRA MULTIFAMILY COMMUNITIES, LLC
95 ENTERPRISE, SUITE 200
ALISO VIEJO, CA 92656
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SITE ADDRESS: PORTIONS OF LOTS 4, 9, AND 10 OF TRACT 38290, WITHIN PHASE II OF THE LEAL RANCH MASTER PLAN, SPECIFICALLY, THE BOUNDARIES OF LOT A, LOT E, AND LOT H ALONG HAMNER AVENUE.

ZONE: LEAL MASTER PLAN

EARTHWORK ESTIMATE:

CUT = 700 CY

FILL = 25,000 CY

NET = 24,300 CY (FILL)

NOTE: THE ABOVE QUANTITIES ARE APPROXIMATE IN PLACE VOLUMES CALCULATED FROM THE EXISTING GROUND TO THE PROPOSED FINISHED GRADE. EXISTING GROUND IS DEFINED BY THE CONTOURS AND SPOT GRADES ON THE BASE SURVEY. PROPOSED FINISHED GRADE IS DEFINED AS THE FINAL GRADE AS INDICATED ON THE GRADING PLAN(S).

EARTHWORK CALCULATIONS WERE DETERMINED USING A AERIAL TOPO SURVEY OF THE EXISTING SITE. CUT AND FILL NUMBERS ARE APPROXIMATE AT THIS TIME.

THE EARTHWORK QUANTITIES ABOVE ARE FOR PERMIT PURPOSES ONLY. THEY HAVE NOT BEEN FACTORED TO ACCOUNT FOR CHANGES IN VOLUME DUE TO BULKING, CLEARING AND GRUBBING, SHRINKAGE, OVER- EXCAVATION AND RE-COMPACTION, AND CONSTRUCTION METHODS NOR DO THEY ACCOUNT FOR THE THICKNESS OF PAVEMENT SECTIONS, FOOTINGS, SLABS, REUSE OF PULVERIZED MATERIALS THAT WILL UNDERLIE NEW PAVEMENTS, ETC. THE CONTRACTOR SHALL RELY ON THEIR OWN EARTHWORK ESTIMATES FOR BIDDING PURPOSES.

LEGEND:

- LIMIT OF WORK
- RIGHT-OF-WAY LINE
- PROPERTY LINE
- SETBACK LINE
- ROAD CENTERLINE
- DAYLIGHT LINE
- PROPOSED CATCH BASIN

Elevations Table			
Minimum Elevation	Maximum Elevation	Area (ACRES)	Color
-2.00	0.00	0.98	
0.00	1.00	3.21	
1.00	2.00	3.60	
2.00	3.00	2.25	
3.00	4.00	0.51	
4.00	4.50	0.00	

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ORANGE, CA. 92868
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NOTE: EXISTING ELEVATIONS PROVIDED ARE BASED ON: HUNSAKER ROUGH GRADING FILE HUNSAKER MASS GRADING PLAN TRACT NO. 38290 DATED 10/10/2022 (PLOTTED 9/27/2022) FOR ON-SITE AND HUNSAKER OFF-SITE STREET IMPROVEMENT PLANS DATED 05/23/23.

EASTVALE GARDEN APARTMENTS - PH2

CUT / FILL MAP EXHIBIT

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

C3.0

DATE: 12-19-24
JOB NO.: 2022-687

LEAL RANCH
EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

AO ARCHITECTS
144 NORTH ORANGE ST., ORANGE, CA 92866
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FIRE MASTER PLAN

QUARTERRA EASTVALE II

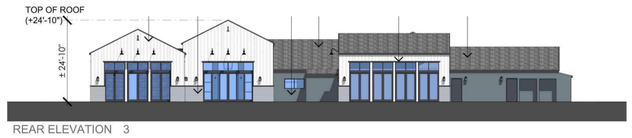
EASTVALE, CA

REC. CENTER/LEASING ARCHITECTURAL ELEVATIONS

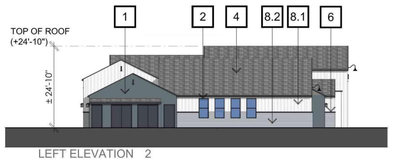
ELEVATIONS PROVIDED BY ARCHITECT ORANGE FOR REFERENCE ONLY



FRONT ELEVATION 1



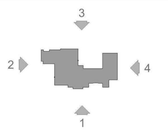
REAR ELEVATION 3

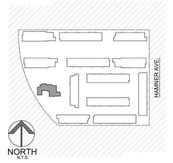


LEFT ELEVATION 2



RIGHT ELEVATION 4





ALTERNATE MATERIALS AND METHODS REQUEST

PREMISE IDENTIFICATION REQUIREMENTS

RVC – OFM MAY REQUIRE COMPLIANCE WITH THESE REQUIREMENTS WHEN NECESSARY TO FACILITATE EMERGENCY RESPONSE.
THREE POSSIBLE CONFIGURATIONS OF BUILDINGS OR UNITS WITHIN A BUILDING MAY EXIST AND ARE IDENTIFIED AS FOLLOWS: FREESTANDING BUILDINGS, MULTI-UNIT BUILDINGS, OR MULTI-BUILDING CLUSTERS. COMMON TO ALL CONFIGURATIONS ARE THE FOLLOWING REQUIREMENTS:

A. APPROVED NUMBERS OR ADDRESSES SHALL BE PLACED ON THE FRONT ELEVATION OF ALL NEW OR EXISTING BUILDINGS IN SUCH A POSITION THAT IS PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD ON WHICH THE PROPERTY IS ADDRESSED. ADDRESSES SHALL NOT BE LOCATED WHERE THEY HAVE THE POTENTIAL OF BEING OBSTRUCTED BY SIGNS, AWNINGS, VEGETATION, OR OTHER BUILDING/SITE ELEMENTS. AN ADDRESS MONUMENT AT THE VEHICLE ENTRANCE OR OTHER LOCATION CLEARLY VISIBLE AND LEGIBLE FROM THE PUBLIC ROAD MAY BE PROVIDED IN LIEU OF AN ADDRESS ON THE STRUCTURE WHERE ONLY A SINGLE BUILDING WITH A SINGLE STREET ADDRESS IS PRESENT AND NO OTHER STRUCTURES ARE ACCESSIBLE FROM THE FIRE APPARATUS ACCESS ROAD SERVING THAT STRUCTURE. CBC 501.2, CFC 505.1

B. THE NUMBERS/ LETTERS SHALL CONTRAST WITH THEIR BACKGROUND.
   1) ONE & TWO FAMILY RESIDENTIAL - THE NUMBERS/ LETTERS SHALL BE A MINIMUM OF 4" IN HEIGHT WITH A 1/2" STROKE.
   2) COMMERCIAL AND MULTI-FAMILY - THE NUMBERS/ LETTERS SHALL BE A MINIMUM OF 12" FOR STRUCTURES UP TO 25 FT. IN HEIGHT. ADDRESS NUMBERS MUST BE A MINIMUM OF 24" WHEN THE BUILDING EXCEEDS 25 FT., THE NUMBERS SHALL HAVE A MINIMUM 1/2-INCH STROKE. WHEN A BUILDING CONTAINS MULTIPLE ADDRESSES, AN ADDRESS RANGE MAY BE POSTED ON THE STRUCTURE.

(NOTE BUILDINGS THAT ARE SET BACK FROM THE PRIMARY ROADS MORE THAN 150 FEET OR OTHERWISE NOT VISIBLE FROM THE PUBLIC ROAD, SHALL HAVE A MONUMENT PROVIDED AS APPROVED BY RVC-OFM).

C. NUMBERS FOR NEW BUILDINGS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED, TO BE VISIBLE AT NIGHT. THIS REQUIREMENT ALSO APPLIES TO MONUMENTS. NOTE: REFLECTIVE TYPE NUMBERS MAY BE ACCEPTABLE FOR A SINGLE LOT RESIDENTIAL DEVELOPMENT PROJECT, WHEN SPECIFICALLY APPROVED BY RVC-OFM.

D. WHERE IT IS UNCLEAR AS TO WHICH STREET A BUILDING IS ADDRESSED TO (E.G., A BUILDING IS ACCESSED ONLY FROM A STREET OTHER THAN THE ONE IT IS ADDRESSED TO; MULTIPLE MAIN ENTRANCES TO THE SITE OR BUILDING ITSELF FRONT DIFFERENT STREETS), THE NAME OF THE STREET SHALL ALSO BE IDENTIFIED AS PART OF THE POSTED ADDRESS.

E.
IN ADDITION TO COMMON REQUIREMENTS SPECIFIED ABOVE, THE FOLLOWING ADDITIONAL REQUIREMENTS PERTAIN TO EACH BUILDING CONFIGURATION:

F. E.MULTI-UNIT BUILDINGS - SUITE/APARTMENT 6" NUMBERS/ LETTERS SHALL BE PLACED ON OR ADJACENT TO THE PRIMARY ENTRANCE FOR EACH SUITE/APARTMENT AND ANY OTHER DOOR PROVIDING ACCESS TO FIRE DEPARTMENT PERSONNEL DURING AN EMERGENCY. MULTIPLE RESIDENTIAL AND COMMERCIAL UNITS HAVING ENTRANCE DOORS NOT VISIBLE FROM THE STREET OR ROAD SHALL, IN ADDITION, HAVE APPROVED NUMBERS GROUPED FOR ALL UNITS WITHIN EACH STRUCTURE AND POSITIONED TO BE PLAINLY VISIBLE FROM THE STREET OR ROAD.

G. F.MULTI-BUILDING CLUSTERS - APPROVED NUMBERS OR ADDRESSES SHALL BE PLACED ON THE FRONT ELEVATION(S) OF ALL BUILDINGS THAT FORM THE CLUSTER. IF ALL BUILDING ADDRESSES ARE NOT CLEARLY VISIBLE OR LEGIBLE FROM THE PUBLIC ROAD SERVING THE STRUCTURES, AN ADDRESS MONUMENT SHALL ALSO BE PROVIDED AT THE ENTRY POINT(S) TO THE SITE INDICATING THE RANGE OF ADDRESSES ACCESSIBLE FROM THAT ENTRANCE.

WATER SUPPLY REQUIREMENTS

15.24.160 SECTION 507.2 REVISED--TYPE OF WATER SUPPLY.
SECTION 507.2 OF THE CALIFORNIA FIRE CODE IS REVISED TO READ:

SEC. 507.2 TYPE OF WATER SUPPLY. WATER SUPPLY MAY CONSIST OF RESERVOIRS, PRESSURE TANKS, ELEVATED TANKS, WATER MAINS OR OTHER FIXED SYSTEMS, AS APPROVED BY THE FIRE CODE OFFICIAL, CAPABLE OF PROVIDING THE REQUIRED FIRE FLOW IN A RELIABLE MANNER. IN SETTING THE REQUIREMENTS FOR FIRE FLOW, THE FIRE CODE OFFICIAL SHALL FOLLOW SECTION 507.3 OR APPENDIX B OF THE CALIFORNIA FIRE CODE, OR THE STANDARD PUBLISHED BY THE INSURANCE SERVICES OFFICE, "GUIDE FOR DETERMINATION OF REQUIRED FIRE FLOW".

SEC. 507.2.1 PRIVATE FIRE SERVICE MAINS. PRIVATE FIRE SERVICE MAINS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND 24 AS AMENDED IN CHAPTER 80.

15.24.170 SECTION 507.3 REVISED--FIRE FLOW.
SECTION 507.3 OF THE CALIFORNIA FIRE CODE IS REVISED TO READ:
SEC. 507.3 FIRE FLOW. FIRE FLOW REQUIREMENTS SHALL BE BASED ON APPENDIX B OF THE CALIFORNIA FIRE CODE OR THE STANDARD PUBLISHED BY THE INSURANCE SERVICES OFFICE, "GUIDE FOR DETERMINATION OF REQUIRED FIRE FLOW." CONSIDERATION SHOULD BE GIVEN TO INCREASING THE GALLONS PER MINUTE TO PROTECT STRUCTURES OF EXTREMELY LARGE SQUARE FOOTAGE AND FOR SUCH REASONS AS: POOR ACCESS ROADS, GRADE AND CANYON RIMS, HAZARDOUS BRUSH AND RESPONSE TIMES GREATER THAN FIVE MINUTES BY A RECOGNIZED FIRE DEPARTMENT OR FIRE SUPPRESSION COMPANY. ONCE FIRE FLOW IS ESTABLISHED, APPLICANT SHALL WORK WITH LOCAL WATER PURVEYOR TO ENSURE ADEQUATE SERVICE.
IN HAZARDOUS FIRE AREAS THE MAIN CAPACITY FOR NEW SUBDIVISIONS SHALL NOT BE LESS THAN 2,500 GALLONS PER MINUTE, UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL. IF FIRE FLOW INCREASES ARE NOT FEASIBLE, THE FIRE CODE OFFICIAL MAY REQUIRE ALTERNATIVE DESIGN STANDARDS SUCH AS: ALTERNATIVE TYPES OF CONSTRUCTION THAT PROVIDES A HIGHER LEVEL OF FIRE RESISTANCE, FUEL BREAK REQUIREMENTS, WHICH MAY INCLUDE REQUIRED IRRIGATION, MODIFIED ACCESS ROAD REQUIREMENTS, SPECIFIED SETBACK DISTANCES FOR BUILDING SITES ADDRESSING CANYON RIM DEVELOPMENTS AND HAZARDOUS BRUSH AREAS, AND OTHER REQUIREMENTS AS AUTHORIZED BY THIS CHAPTER AND AS REQUIRED BY THE FIRE CODE OFFICIAL.
(ORD. 535 §5 (PART), 2018)

15.24.180 SECTION 507.5.7 ADDED--FIRE HYDRANT AND FIRE VALVE LOCATION.
SECTION 507.5.7 IS ADDED TO THE CALIFORNIA FIRE CODE TO READ:

SEC. 507.5.7 FIRE HYDRANT AND FIRE VALVE LOCATION. THE FIRE HYDRANT OR FIRE VALVE SHALL BE BETWEEN 18 TO 24 INCHES ABOVE GRADE, NO CLOSER THAN 4 FEET NOR FURTHER THAN 12 FEET FROM THE ROADWAY, ANY LANDSCAPING WITHIN 8 FEET OF A FIRE HYDRANT SHALL CONSIST OF IGNITION RESISTANT GROUND COVER.

SEC. 507.5.7.1 SIGNING OF FIRE HYDRANTS. THE FIRE CODE OFFICIAL SHALL REQUIRE FIRE HYDRANTS TO BE IDENTIFIED. FIRE HYDRANTS MAY BE IDENTIFIED BY A REFLECTORIZED BLUE MARKER WITH A MINIMUM DIMENSION OF 3 INCHES, IN THE CENTER OF THE TRAVEL LANE ADJACENT THE WATER SOURCE, OR BY OTHER METHODS APPROVED BY THE FIRE CODE OFFICIAL.
(ORD. 535 §5 (PART), 2018)

15.24.190 SECTION 507.5.8 ADDED--FIRE HYDRANT CONSTRUCTION AND CONFIGURATION.
SECTION 507.5.8 IS ADDED TO THE CALIFORNIA FIRE CODE TO READ:
SEC. 507.5.8 FIRE HYDRANT SIZE AND OUTLETS. AS DETERMINED BY THE FIRE CODE OFFICIAL, FIRE HYDRANT SIZES AND OUTLETS SHALL BE BASED ON THE FOLLOWING:
1. RESIDENTIAL STANDARD - ONE (1) FOUR (4) INCH OUTLET AND ONE (1) TWO AND HALF (2 ½) INCH OUTLET.
2. SUPER HYDRANT STANDARD - ONE (1) FOUR (4) INCH OUTLET AND TWO (2) TWO AND ONE HALF (2 ½) INCH OUTLET.
3. SUPER HYDRANT ENHANCED - TWO (2) FOUR (4) INCH OUTLET AND ONE (1) TWO AND ONE HALF (2 ½) INCH OUTLET. (ORD. 535 §5 (PART), 2018)

ATTACHMENT 8 - FIRE LANE PARKING VIOLATIONS

THE CALIFORNIA FIRE CODE (CFC) AND CALIFORNIA VEHICLE CODE (CVC) SPECIFY RULES OF THE ROAD FOR STOPPING, STANDING, AND PARKING IN FIRE LANES OR NEAR FIRE HYDRANTS.

A. SECTION 22500.1 STATES THAT NO PERSON SHALL STOP, PARK, OR LEAVE STANDING ANY VEHICLE WHETHER ATTENDED OR UNATTENDED, IN ANY LOCATION DESIGNATED AS A FIRE LANE BY THE FIRE DEPARTMENT OR FIRE DISTRICT HAVING AUTHORITY OVER THE AREA IN WHICH THE PLACE IS LOCATED, EXCEPT WHEN NECESSARY TO AVOID CONFLICT WITH OTHER TRAFFIC OR IN COMPLIANCE WITH THE DIRECTION OF A PEACE OFFICER OR OFFICIAL TRAFFIC CONTROL DEVICE. VEHICLES ILLEGALLY PARKED IN A FIRE LANE MAY BE TOWED PER CVC 22953(B).

B. THERE SHALL BE NO PARKING OF ANY VEHICLES OTHER THAN FIRE DEPARTMENT VEHICLES WITHIN 15 FEET OF EITHER SIDE OF A FIRE HYDRANT IN ACCORDANCE WITH CVC 22514(C). SUCH VEHICLES MAY BE TOWED PER CVC 22651(E).

C. CVC 22658(A) PERMITS THE OWNER OR PERSON IN LAWFUL POSSESSION OF ANY PRIVATE PROPERTY, AFTER NOTIFYING LOCAL LAW ENFORCEMENT, TO CAUSE THE REMOVAL OF A VEHICLE PARKED ON SUCH PROPERTY TO THE NEAREST PUBLIC GARAGE, IF:
   1) A SIGN IS DISPLAYED IN PLAIN VIEW AT ALL ENTRANCES TO THE PROPERTY SPECIFYING:
      a) THE ORDINANCE PROHIBITING PUBLIC PARKING, AND
      b) A NOTATION INDICATING THAT VEHICLES WILL BE REMOVED AT THE OWNER'S EXPENSE, AND
      c) THE TELEPHONE NUMBER OF THE LOCAL TRAFFIC LAW ENFORCEMENT AGENCY, OR
   2) THE LOT OR PARCEL UPON WHICH THE VEHICLE IS PARKED HAS A SINGLE-FAMILY DWELLING.

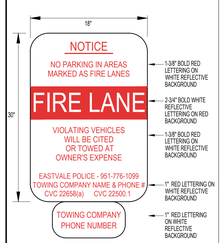
D. CFC 503.4 STATES THAT THE REQUIRED WIDTH OF A FIRE APPARATUS ACCESS ROAD SHALL NOT BE OBSTRUCTED IN ANY MANNER, INCLUDING PARKING OF VEHICLES. MINIMUM REQUIRED WIDTHS AND CLEARANCES SHALL BE MAINTAINED AT ALL TIMES.

E. CFC 507.5.4 STATES THAT VEHICLES AND OTHER OBSTRUCTIONS SHALL NOT BE PLACED OR KEPT NEAR FIRE HYDRANTS, FIRE DEPARTMENT INLET CONNECTIONS OR FIRE-PROTECTION SYSTEM CONTROL VALVES IN A MANNER THAT WOULD PREVENT SUCH EQUIPMENT OR FIRE HYDRANTS FROM BEING IMMEDIATELY DISCERNIBLE. THE FIRE DEPARTMENT SHALL NOT BE DETERRED OR HINDERED FROM GAINING IMMEDIATE ACCESS TO FIRE-PROTECTION EQUIPMENT OR HYDRANTS.

FIRE LANE SIGN ENTRY DETAIL

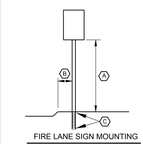
NOTE:
1. ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS.
2. SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED.

THIS SIGN SHALL BE POSTED AT VEHICLE ENTRANCES TO THE COMMUNITY



TOWING COMPANY CONTACT INFORMATION IS REQUIRED FOR ALL PROPERTIES WITH A STANDING WRITTEN AGREEMENT FOR SERVICES WITH A TOWING COMPANY PER THE CALIFORNIA VEHICLE CODE.

1 'FIRE LANE ENTRANCE' SIGN



FIRE LANE SIGN MOUNTING

A HEIGHT OF SIGN IN SIDEWALK OR PEDESTRIAN AREA SHALL BE 7'-0", AND 5'-0" IN ALL OTHER AREAS.

B DEPTH OF SIGN SHALL BE 18 INCHES FROM TOP OF VERTICAL CURB AND 24 INCHES FROM THE BACK OF A ROLLED CURB TO THE POST

C BURY DEPTH SHALL BE A MINIMUM OF 24 INCHES. CONCRETE FOOTING OR OTHER APPROVED MEANS OF STABILIZATION SHALL BE PROVIDED.

SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL.

SIGNS MAY BE MOUNTED ON EXISTING POSTS OR BUILDINGS WHERE THE CENTERLINE OF THE SIGN IS NO MORE THAN 24" FROM THE EDGE OF THE ROADWAY.

DEPTH OF BURY SHALL BE A MINIMUM OF 24" AND REBAR, A CONCRETE FOOTING, OR ANOTHER METHOD TO PREVENT REMOVAL OF THE SIGN IS RECOMMENDED. FOOTINGS FOR SIGNS LOCATED IN THE PUBLIC RIGHT-OF-WAY SHALL BE PER THE LOCAL JURISDICTIONS REQUIREMENTS.

FIRE DEPARTMENT NOTES

SEC. 503.2.1 DIMENSIONS. THE DIMENSIONS OF FIRE APPARATUS ACCESS ROADS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

a. FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED IMPROVED WIDTH OF NOT LESS THAN 24 FEET, EXCEPT FOR SINGLE-FAMILY RESIDENTIAL DRIVEWAYS SERVING NO MORE THAN TWO SINGLE-FAMILY DWELLINGS, WHICH SHALL HAVE A MINIMUM OF 12 FEET OF UNOBSTRUCTED IMPROVED WIDTH. ANY OF THE FOLLOWING, WHICH HAVE SEPARATED LANES OF ONE-WAY TRAFFIC: GATED ENTRANCES WITH CARD READERS, GUARD STATIONS OR CENTER MEDIANS, ARE ALLOWED, PROVIDED THAT EACH LANE IS NOT LESS THAN 14 FEET WIDE.

b. FIRE APPARATUS ACCESS ROADS SERVING MULTI-FAMILY STRUCTURES SHALL HAVE AN UNOBSTRUCTED IMPROVED WIDTH OF NOT LESS THAN 24 FEET. THE FIRE CODE OFFICIAL MAY REQUIRE ADDITIONAL ACCESS ROAD IMPROVEMENTS INCLUDING ROADWAY WIDTH NECESSARY TO ACCOMMODATE AN AERIAL FIRE APPARATUS.

c. FIRE APPARATUS ACCESS ROADS SERVING COMMERCIAL, INDUSTRIAL OR BUILDINGS GREATER THAN TWO STORIES SHALL HAVE AN UNOBSTRUCTED IMPROVED WIDTH OF NOT LESS THAN 26 FEET TO ACCOMMODATE AN AERIAL FIRE APPARATUS. THE FIRE CODE OFFICIAL MAY REQUIRE ADDITIONAL ACCESS ROAD IMPROVEMENTS INCLUDING ROADWAY WIDTH NECESSARY TO ACCOMMODATE AN AERIAL APPARATUS.

d. FIRE APPARATUS ACCESS ROADS THAT ARE PUBLIC OR PRIVATE ROADS WHICH ARE PROVIDED OR IMPROVED AS A RESULT OF A TENTATIVE MAP, TENTATIVE PARCEL MAP OR A MAJOR/MINOR USE PERMIT SHALL HAVE THE DIMENSIONS AS SET FORTH BY THE CITY OF EASTVALE STANDARDS FOR PUBLIC AND PRIVATE ROADS.

e. ALL FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FEET 6 INCHES.

f. VERTICAL CLEARANCES OR ROAD WIDTHS SHALL BE INCREASED WHEN THE FIRE CODE OFFICIAL DETERMINES THAT VERTICAL CLEARANCES OR ROAD WIDTHS ARE NOT ADEQUATE TO PROVIDE FIRE APPARATUS ACCESS.

g. VERTICAL CLEARANCES OR ROAD WIDTH MAY BE REDUCED WHEN THE FIRE CODE OFFICIAL DETERMINES THE REDUCTION DOES NOT IMPAIR ACCESS BY FIRE APPARATUS. IN CASES WHERE THE VERTICAL CLEARANCE HAS BEEN REDUCED, APPROVED SIGNS SHALL BE INSTALLED AND MAINTAINED INDICATING THE AMOUNT OF VERTICAL CLEARANCE.

h. THE STANDARD CROSS-SLOPE SHALL BE 2 PERCENT; MINIMUM CROSS-SLOPE SHALL BE 1 PERCENT; MAXIMUM CROSS-SLOPE SHALL BE 5 PERCENT; OR AS APPROVED BY THE FIRE CODE OFFICIAL.

SEC. 503.2.3 SURFACE. FIRE APPARATUS ACCESS ROAD SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS (NOT LESS THAN 75,000 LBS. UNLESS AUTHORIZED BY THE EASTVALE FIRE & RESCUE) AND SHALL BE PROVIDED WITH AN APPROVED SURFACE SO AS TO PROVIDE ALL WEATHER DRIVING CAPABILITIES. THE SURFACING SHALL BE INSTALLED TO THE STANDARDS SPECIFIED IN THE CITY OF EASTVALE.

SEC. 503.2.4 ROADWAY RADIUS. THE HORIZONTAL INSIDE RADIUS OF A FIRE APPARATUS ACCESS ROAD SHALL BE A MINIMUM OF 28 FEET, AS MEASURED ON THE INSIDE EDGE OF THE IMPROVEMENT WIDTH OR AS APPROVED BY THE FIRE CODE OFFICIAL. THE LENGTH OF VERTICAL CURVES OF FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 100 FEET OR AS APPROVED BY THE FIRE CODE OFFICIAL.

SEC. 503.2.5 DEAD ENDS. ALL DEAD-END FIRE ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH APPROVED PROVISIONS FOR TURNING AROUND EMERGENCY APPARATUS. A CUL-DE-SAC SHALL BE PROVIDED IN RESIDENTIAL AREAS WHERE THE ACCESS ROADWAY SERVES MORE THAN 2 PRIMARY RESIDENTIAL STRUCTURES. THE MINIMUM UNOBSTRUCTED RADIUS WIDTH FOR A CUL-DE-SAC SHALL BE 38 FEET PAVED, OR AS APPROVED BY THE FIRE CODE OFFICIAL. THE FIRE CODE OFFICIAL SHALL ESTABLISH A POLICY IDENTIFYING ACCEPTABLE TURNAROUNDS FOR VARIOUS PROJECT TYPES.

SEC. 503.2.6 BRIDGES AND ELEVATED SURFACES. WHERE A BRIDGE OR AN ELEVATED SURFACE IS PART OF A FIRE APPARATUS ACCESS ROAD, THE BRIDGE SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH AASHTO HB-17. BRIDGES AND ELEVATED SURFACES SHALL BE DESIGNED FOR A LIVE LOAD SUFFICIENT TO CARRY THE IMPOSED LOADS OF FIRE APPARATUS. VEHICLE LOAD LIMITS AND CLEARANCE LIMITATIONS SHALL BE POSTED AT BOTH ENTRANCES TO BRIDGES WHEN REQUIRED BY THE FIRE CODE OFFICIAL. WHERE ELEVATED SURFACES DESIGNED FOR EMERGENCY VEHICLE USE ARE ADJACENT TO SURFACES WHICH ARE NOT DESIGNED FOR SUCH USE, APPROVED BARRIERS, APPROVED SIGNS OR BOTH SHALL BE INSTALLED AND MAINTAINED WHEN REQUIRED BY THE FIRE CODE OFFICIAL.

SEC. 503.2.7 GRADE. THE GRADIENT FOR A FIRE APPARATUS ACCESS ROADWAY SHALL NOT EXCEED 15.0%. THE FIRE CODE OFFICIAL MAY REQUIRE ADDITIONAL MITIGATION MEASURES WHERE DEEMED APPROPRIATE FOR EXCESSIVE GRADE. THE ANGLE OF DEPARTURE AND ANGLE OF APPROACH OF A FIRE ACCESS ROADWAY SHALL NOT EXCEED 7 DEGREES (12 PERCENT) OR AS APPROVED BY THE FIRE CODE OFFICIAL.

SEC. 503.3.1 FIRE LANE DESIGNATION. WHERE THE FIRE CODE OFFICIAL DETERMINES THAT IT IS NECESSARY TO ENSURE ADEQUATE FIRE ACCESS, THE FIRE CODE OFFICIAL MAY DESIGNATE EXISTING ROADWAYS AS FIRE ACCESS ROADWAYS AS PROVIDED BY VEHICLE CODE SECTION 22500.1.

SEC. 503.4 OBSTRUCTION OF FIRE APPARATUS ACCESS ROADS. FIRE APPARATUS ACCESS ROADS SHALL NOT BE OBSTRUCTED IN ANY MANNER, INCLUDING THE PARKING OF VEHICLES. THE MINIMUM ROAD WIDTHS AND CLEARANCES ESTABLISHED IN SECTIONS 503.2.1 AND 503.2.2 SHALL BE MAINTAINED AT ALL TIMES.

SEC. 503.4.1 TRAFFIC CALMING DEVICES. TRAFFIC CALMING DEVICES (INCLUDING, BUT NOT LIMITED TO, SPEED BUMPS, SPEED HUMPS, ROUND-ABOUTS, SPEED CONTROL DIPS, ETC.) SHALL BE PROHIBITED, UNLESS APPROVED BY THE FIRE CODE OFFICIAL.

SECTION 510.1.1 IS ADDED TO THE CALIFORNIA FIRE CODE TO READ AS FOLLOWS:

510.1.1 FOR NEW CONSTRUCTION. PROJECTS ARE GENERALLY APPROVED THROUGH THE DEVELOPMENT PLAN REVIEW PROCESS (DP). PRIOR TO APPROVAL, THE DEVELOPER SHALL MEET WITH EASTVALE FIRE & RESCUE AND POLICE DEPARTMENT TO ENSURE A REQUIRED EMERGENCY COMMUNICATIONS RADIO STUDY IS PREPARED TO ASSESS EXISTING AND PROPOSED SIGNAL STRENGTH AND CLARITY. THE RADIO STUDY SHALL PROVIDE SPECIFIC RECOMMENDATIONS TO THE DEVELOPER TO ACHIEVE COMPLIANCE AND SHALL BE REVIEWED AND APPROVED BY EASTVALE FIRE & RESCUE AND EASTVALE POLICE DEPARTMENT. THE RADIO STUDY SHALL BE SUBMITTED ALONG WITH THE APPLICANT'S FORMAL APPLICATION.

MOTORIZED GATE NOTES

1) ELECTRIC GATE OPENERS SHALL COMPLY WITH UL 325. IN THE EVENT OF LOSS OF NORMAL POWER TO THE GATE OPERATING MECHANISM, IT SHALL BE AUTOMATICALLY TRANSFERRED TO A FAIL-SAFE MODE ALLOWING THE GATE TO BE PUSHED OPEN BY A SINGLE FIREFIGHTER WITHOUT ANY OTHER ACTIONS, KNOWLEDGE, OR MANIPULATION OF THE OPERATING MECHANISM BEING NECESSARY AND WITHOUT THE USE OF BATTERY BACK-UP POWER; THIS SHALL BE NOTED ON THE PLAN. THE MANUFACTURER'S SPECIFICATION SHEET DEMONSTRATING COMPLIANCE WITH THIS METHOD OF OPERATION DURING POWER LOSS SHALL BE PROVIDED OR SCANNED DIRECTLY ONTO THE PLAN. SHOULD THE GATE BE TOO LARGE OR HEAVY FOR A SINGLE FIREFIGHTER TO OPEN MANUALLY, A SECONDARY SOURCE OF POWER BY MEANS OF AN EMERGENCY GENERATOR OR A CAPACITOR WITH ENOUGH RESERVE TO AUTOMATICALLY AND IMMEDIATELY OPEN THE GATE UPON LOSS OF PRIMARY POWER SHALL BE PROVIDED.

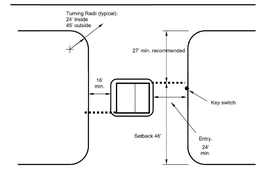
2) THE GATE CONTROL FOR ELECTRONIC GATES SHALL BE OPERABLE BY A KNOX EMERGENCY OVERRIDE KEY SWITCH (WITH DUST COVER). THE KEY SWITCH SHALL BE PLACED BETWEEN 42" AND 48" ABOVE THE ROAD SURFACE AT THE RIGHT SIDE OF THE ACCESS GATE WITHIN TWO FEET OF THE EDGE OF THE ROAD. THE KEY SWITCH SHALL BE READILY VISIBLE AND UNOBSTRUCTED FROM THE FIRE LANE LEADING TO THE GATE. THE KEY SWITCH SHALL BE CLEARLY LABELED "FIRE DEPT."

3) UPON ACTIVATION OF THE KEY SWITCH, THE GATE SHALL OPEN AND REMAIN OPEN UNTIL RETURNED TO NORMAL OPERATION BY MEANS OF THE KEY SWITCH. WHERE A GATE CONSISTS OF TWO LEAVES, THE KEY SWITCH SHALL OPEN BOTH SIMULTANEOUSLY IF OPERATION OF A SINGLE LEAF ON THE INGRESS SIDE DOES NOT PROVIDE FOR THE WIDTH, TURNING RADII, OR SETBACKS NECESSARY FOR FIRE APPARATUS TO NAVIGATE THE VEHICLE ENTRY POINT. NOTE THIS REQUIREMENT ON THE PLAN.

4) THE KEY SWITCH SHALL BE LABELED WITH A PERMANENT RED SIGN WITH NOT LESS THAN ½" CONTRASTING LETTERS READING "FIRE DEPT" OR WITH A "KNOX" DECAL. NOTE THIS REQUIREMENT ON THE PLAN.

5) NEW MOTORIZED GATES SHALL ALSO BE EQUIPPED WITH OPTICAL RECEIVERS TO ALLOW EMERGENCY RESPONSE PERSONNEL TO REMOTELY OPEN THE GATE WHEN THE EMERGENCY VEHICLE APPROACHES THE GATE. THE RECEIVER SHALL BE LOCATED TO MAXIMIZE SIGNAL RECEPTION FROM AN APPROACHING RVC APPARATUS DEVICES SHALL BE COMPATIBLE WITH RVC PREEMPTION DEVICES. A FUNCTIONAL TEST OF THE AUTOMATIC OPENING EQUIPMENT, WITNESSED BY RVC-OFM IS REQUIRED PRIOR TO FINAL ACCEPTANCE.

ATTACHMENT 15 - MINIMUM GATE SETBACKS



BUILDING INFORMATION AND DATA

BUILDING #, TYPE & UNIT QUANTITY	STORIES	OCCUPANCY TYPE	CONSTRUCTION TYPE	AUTOMATIC FIRE SPRINKLERS	SQUARE FOOTAGE
BLDG 1, A.3 ★ (30 UNITS)	3	R-2 / U	III-A	NFPA 13	~35,966 SQ.FT
BLDG 2, A.4 ★ (30 UNITS)	3	R-2 / U	III-A	NFPA 13	~35,966 SQ.FT
BLDG 3, G.1 ★ (35 UNITS)	3	R-2 / U	III-A	NFPA 13	~43,397 SQ.FT.
BLDG 4, D.4 ★ (20 UNITS)	3	R-2 / U	III-A	NFPA 13	~32,129 SQ.FT.
BLDG 5, G.1 (35 UNITS)	3	R-2 / U	V-A	NFPA 13	~43,397 SQ.FT.
BLDG 6, A.2 (30 UNITS)	3	R-2 / U	V-A	NFPA 13	~35,966 SQ.FT
BLDG 7, D.5 (20 UNITS)	3	R-2 / U	V-A	NFPA 13	~32,129 SQ.FT.
BLDG 8, D.4 (20 UNITS)	3	R-2 / U	V-A	NFPA 13	~32,129 SQ.FT.
BLDG 9, G.3★★ (35 UNITS)	3	R-2 / U	V-A	NFPA 13	~43,397 SQ.FT.
BLDG 10, G.2 ★ (35 UNITS)	3	R-2 / U	III-A	NFPA 13	~43,397 SQ.FT.
BLDG 11, G.1 (35 UNITS)	3	R-2 / U	V-A	NFPA 13	~43,397 SQ.FT.
BLDG 12, G.1 (35 UNITS)	3	R-2 / U	V-A	NFPA 13	~43,397 SQ.FT.
CLUB/LEASE	2	A & B	V-A	NFPA 13	~7,556 SQ.FT.

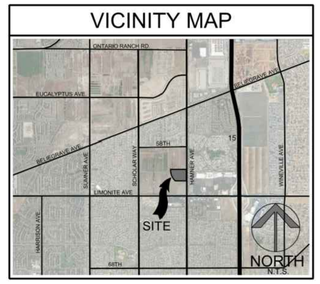
★ BUILDINGS 1, 2, 3, 4 & 10 HAVE BEEN PROVIDED WITH AN INCREASE IN CONSTRUCTION TYPE FROM V-A TO III-A TO MEET THE EXCEPTION 1 OF CBC SECTION 1031.2 TO ELIMINATE THE REQUIREMENT FOR EMERGENCY ESCAPE AND RESCUE OPENINGS TO SLEEPING AREAS.

★★ BUILDING 9 SHALL MEET TYPE III-A CONSTRUCTION REQUIREMENTS FOR EXTERIOR WALL ASSEMBLY ALONG THE SOUTHERN FACE ONLY (AS INDICATED ON THE FIRE MASTER PLAN LAYOUT SHEET) AS MITIGATION FOR THE HOSE PULL DEFICIENCY.

MIN. FIRE FLOW AND FIRE HYDRANT SPACING REQUIREMENTS

MINIMUM FIRE FLOW OF 1,500 GPM AT 20PSI FOR 2 HOURS REQUIRED PER THE LARGEST BUILDING OF APPROXIMATELY 43,397 SQ.FT. AND TYPE III-A CONSTRUCTION. A MINIMUM OF ONE (1) FIRE HYDRANT IS REQUIRED SPACED NO MORE THAN 450-FEET FROM HYDRANT TO HYDRANT, NO MORE THAN 225-FEET FROM ANY BUILDING, AND NO MORE THAN 350-FEET FROM THE END OF A DEAD-END FIRE ACCESS ROAD.

VICINITY MAP



PARKING ENFORCEMENT LETTER

04/28/2025

COUNTY OF RIVERSIDE FIRE DEPARTMENT
EASTVALE, CA

RE: PARKING ENF

EXISTING EASTWALK PARKWAY

FUTURE RESIDENTIAL
NOT A PART

FUTURE RESIDENTIAL
NOT A PART

EXISTING PREMIER PLACE

EXISTING HAMNER AVENUE

REFER TO SHEET F-3
FOR AUTO-TURN
DEMONSTRATIONS

REFER TO SHEET F-3
FOR AUTO-TURN
DEMONSTRATIONS

BLDG 2, TYPE A.4
(TYPE III-A CONSTRUCTION)

BLDG 3, TYPE G.1
(TYPE III-A CONSTRUCTION)

BLDG 4, TYPE D.4
(TYPE III-A CONSTRUCTION)

CARPORTS

CARPORTS

CARPORTS

BLDG 1, TYPE A.3
(TYPE III-A CONSTRUCTION)

BLDG 5
TYPE G.1

BLDG 6
TYPE A.2

CALL BOX

GATE 1

GATE 2

CLUB/LEASING

BLDG 11
TYPE G.1

BLDG 7
TYPE D.5

BLDG 12
TYPE G.1

BLDG 10,
TYPE G.2
(TYPE III-A CONSTRUCTION)

BLDG 8
TYPE D.4

BLDG 9
TYPE G.3

R=25'

R=25'

R=25'

R=25'

R=28'

R=30'

80' TOTAL HOSE PULL DEFICIENCY

80' TOTAL HOSE PULL DEFICIENCY

80' TOTAL HOSE PULL DEFICIENCY

45 TOTAL HOSE PULL DEFICIENCY

147 TOTAL HOSE PULL DEFICIENCY

LEGEND

- EXISTING FIRE HYDRANT WITH BLUE REFLECTIVE MARKER
- PROPOSED FIRE HYDRANT WITH BLUE REFLECTIVE FIRE HYDRANT MARKER. MARKER SHALL BE PLACED 6" FROM CENTERLINE OF HYDRANT SIDE OF STREET.
- PROPOSED FIRE LANE SIGNAGE AS INDICATED ON PLAN AND DETAILS HEREON
- INDICATES APPROXIMATE LOCATION OF SUB-KEYED KNOX BOX WITH 3-SETS OF ENTRY DOOR/GATE KEYS OR SUBKEYED KNOX KEY SWITCH. SEE CONSTRUCTION NOTES FOR DESIGNATION.
- PAINT CURB RED WITH 'NO PARKING FIRE LANE' STENCIL AT 30' O.C. PER DETAILS HEREON AND RIVERSIDE COUNTY FIRE DEPARTMENT REQUIREMENTS
- 150' HOSE PULL DISTANCE - MAXIMUM
- INDICATED HOSE PULL DEFICIENCY AS INDICATED HEREON
- INDICATES VEHICULAR GATE ENTRY TO PROJECT
- MINIMUM 24" BUILDING ADDRESSING FOR RESIDENTIAL BUILDINGS & MINIMUM 12" BUILDING ADDRESS FOR THE CLUBHOUSE (SEE ARCHITECTURAL PLAN FOR FINAL DESIGN AND LOCATIONS)
- INDICATES WALK-IN GATE FOR HOSE PULL ACCESS
- AERIAL TRUCK LADDER ACCESS TO BUILDING (BETWEEN 15' - 30' FROM ACCESS ROAD)
- GROUND LADDER ACCESS TO BUILDING ROOF. REFER TO SHEETS F-3 THRU F-5.
- RESIDENTIAL BUILDING FOOTPRINT
- LEASING/CLUB HOUSE FOOTPRINT
- INDICATES STAIR LOCATIONS
- PROPOSED PAVED ACCESS ROAD THAT SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 75,000 LBS. AND SURFACED TO PROVIDE ALL WEATHER DRIVING CAPABILITIES PER RIVERSIDE COUNTY FIRE DEPARTMENT REQUIREMENTS.
- INDICATES PORTION OF THE ACCESS DRIVE THAT IS NOT A PART OF FIRE ACCESS
- EXISTING PAVED DRIVE - NOT A PART OF THIS REVIEW
- INDICATES APPROXIMATE LOCATION OF AN EXTERIOR WET STANDPIPE TO MITIGATE FOR HOSE PULL DEFICIENCY
- BUILDINGS NOT MEETING THE MINIMUM HOSE PULL AND OR AERIAL TRUCK LADDERING REQUIREMENTS, SHALL BE PROVIDED WITH A FULL NFPA 13 FIRE SPRINKLER SYSTEM WITH AN INCREASED SPRINKLER FLOW DENSITY FROM TO MITIGATE THE DEFICIENCY OF .10 TO .15 WITH A 4-HEAD CALC. THE CODE EXCEPTION TO NOT PROVIDE SPRINKLER COVERAGE WITHIN ALL CLOSETS, SMALL SPACES AND BATHROOMS SHALL NOT BE TAKEN. ALSO, ONE (1) ADDITIONAL 2-HOUR RATED FIRE WALL SHALL BE PROVIDED.
- PROPOSED 2-HOUR FIRE WALL LOCATION
- THE SOUTHERN FACE OF BUILDING 9 SHALL COMPLY WITH TYPE III-A EXTERIOR WALL ASSEMBLY REQUIREMENTS AS MITIGATION FOR THE HOSE PULL DEFICIENCY.
- FIRE APPARATUS PATH OF TRAVEL PER EASTVALE FIRE AND RESCUE REQUIREMENTS.

LEGEND

1. INSTALL FIRE LANE ENTRANCE SIGN PER CAL FIRE AND RESCUE STANDARDS AND DETAILS ON SHEET F-1.
2. INSTALL FIRE HYDRANT MARKER THAT SHALL BE PLACED 6" FROM CENTERLINE ON HYDRANT SIDE OF STREET.
3. INSTALL SUB-KEYED KNOX KEY SWITCH FOR MOTORIZED VEHICULAR GATES PER RIVERSIDE COUNTY FIRE DEPARTMENT STANDARDS.
4. INSTALL SUB-KEYED KNOX BOX WITH 3-SETS OF ENTRY DOOR/GATE KEYS OR KEY FOBS, PER RIVERSIDE COUNTY FIRE DEPARTMENT STANDARDS
5. INSTALL RED CURB PER RIVERSIDE COUNTY FIRE DEPARTMENT AND RESCUE STANDARDS AND DETAILS ON SHEET F-1.
6. INSTALL WALK IN ACCESS GATE FOR HOSE PULL ACCESS. GATES UTILIZED BY THE RESIDENTS SHALL BE PROVIDED WITH A KNOX BOX WITH 3-SETS OF KEYS OR KEY FOBS. FIRE ACCESS ONLY GATES SHALL BE PROVIDED WITH A SUB-KEYED KNOX BOX WITH 3-SETS OF KEYS OR KEY FOBS, OR SUB-KEYED KNOX PAD LOCK.

DRAWING SCALE

GRAPHIC SCALE
0 30' 60'
1 inch = 30 ft.

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F-4 ARCHITECTURAL ELEVATIONS
F-5 ARCHITECTURAL ELEVATIONS
F-6 ARCHITECTURAL ELEVATIONS
F-7 ARCHITECTURAL ELEVATIONS

CIVIL ENGINEER:
KIMLEY HORN
1100 W. TOWN & COUNTRY ROAD
SUITE 700
ORANGE, CA 9286

ARCHITECTURE/PLANNING:
ARCHITECTS ORANGE
144 N. ORANGE ST.
ORANGE, CALIFORNIA 92866
(714) 639-9860

PREPARED BY:
firesafe PLANNING, INC.
28506 AIROSO STREET
RANCHO MISSION VIEJO, CA 92694
OFFICE: (949) 240-5911

PREPARED FOR:
Quarterra
95 ENTERPRISE, SUITE 200
ALISO VIEJO, CA 92656

TITLE:
FIRE MASTER PLAN
FIRE ACCESS LAYOUT
QUARTERRA EASTVALE II
EASTVALE, CA

RIVERSIDE COUNTY FIRE DEPARTMENT

DATE: 04/28/2025

SHEET: F-2

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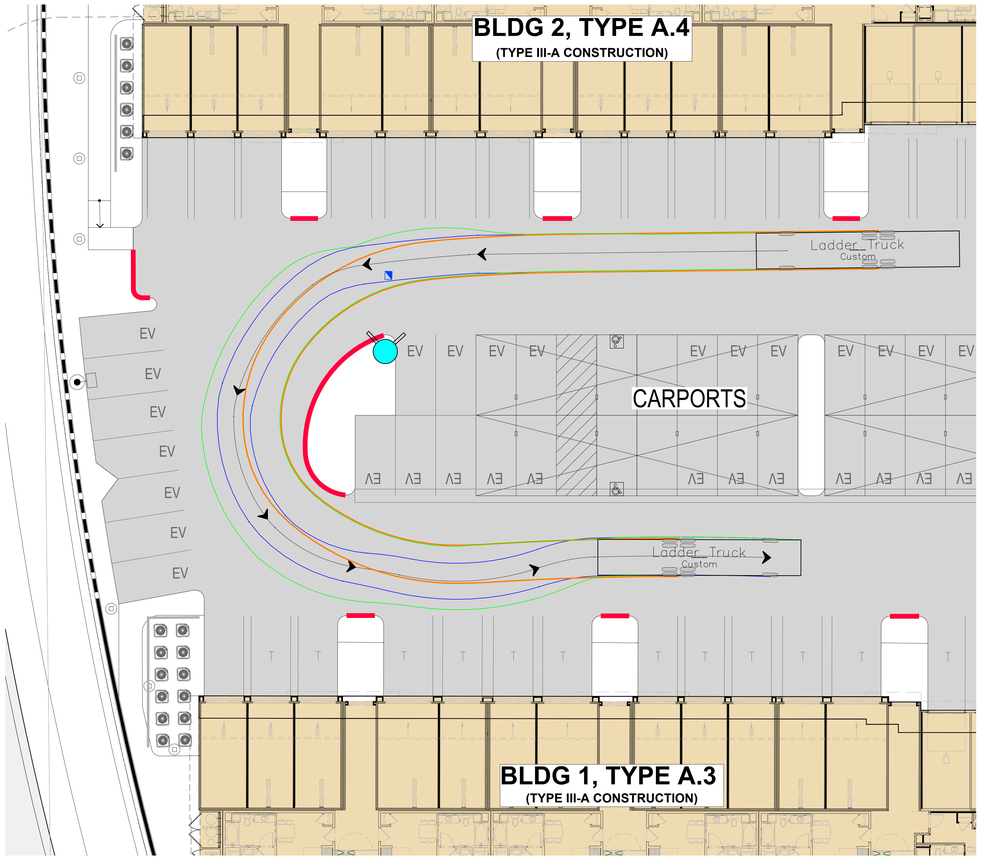
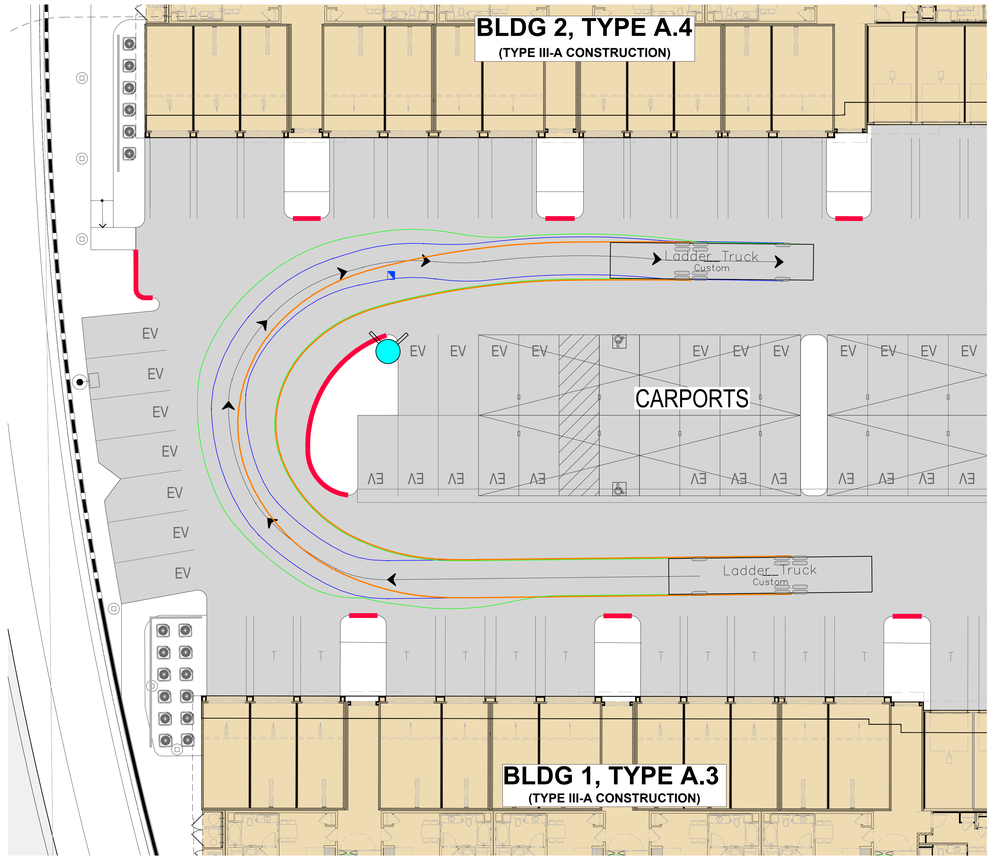
BUILDING 1& 2 AUTO-TURN DEMONSTRATIONS

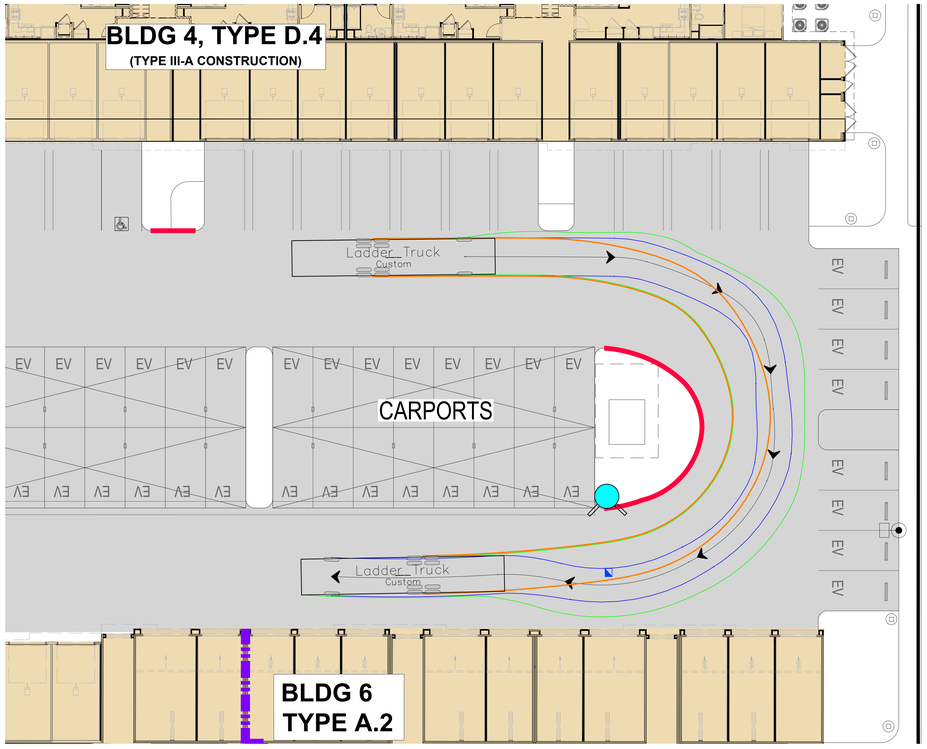
SCALE: 1" = 10'

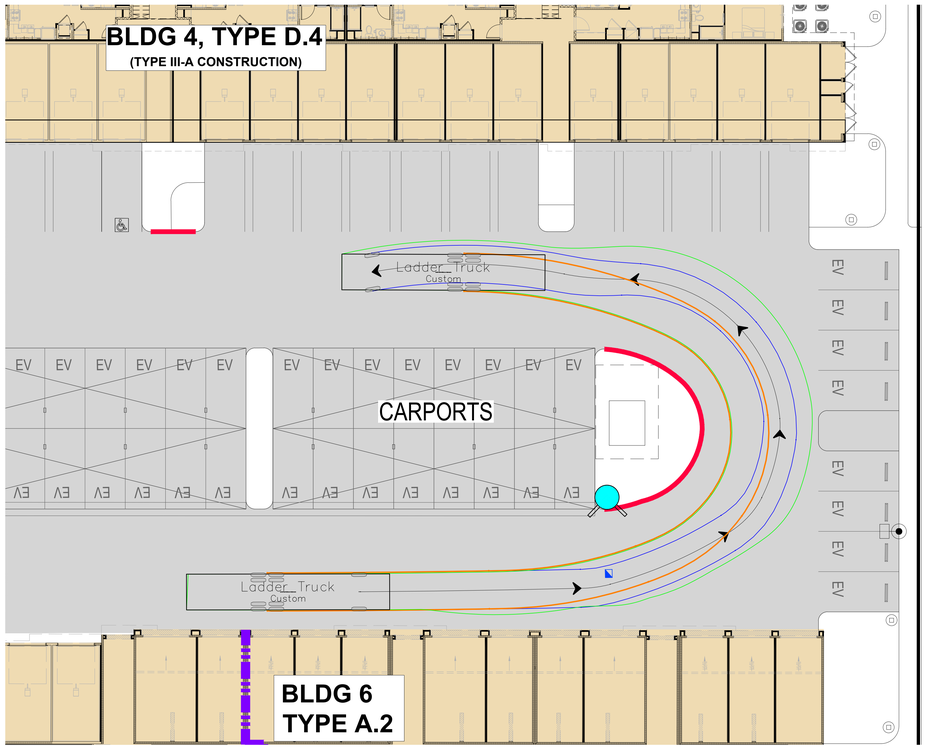




BUILDING 4 & 6 AUTO-TURN DEMONSTRATIONS

SCALE: 1" = 10'





LEGEND



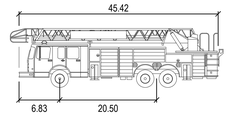
INDICATES LADDER TRUCK

INDICATES LIMITS OF APPARATUS FRAME/BODY

INDICATES EXTERIOR LIMITS OF APPARATUS FRONT TIRES

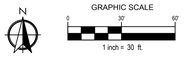
INDICATES EXTERIOR LIMITS OF APPARATUS REAR TIRES

APPARATUS DATA FOR AUTOTURN PATH ANALYSIS



		feet
Width	:	9.50
Track	:	8.50
Lock to Lock Time	:	6.0
Steering Angle	:	40.0

DRAWING SCALE



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RIVERSIDE COUNTY FIRE DEPARTMENT

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SHEET: F-3

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BUILDING TYPE A.2 ELEVATIONS

NOT TO SCALE

NOTE: THESE DETAILS PROVIDED FOR REFERENCE ONLY.



FRONT ELEVATION 1



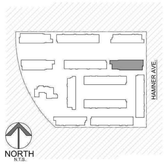
REAR ELEVATION 3





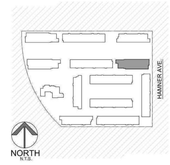


LEFT ELEVATION 2





RIGHT ELEVATION 4



BUILDING TYPE A.3 ELEVATIONS

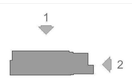
NOT TO SCALE



FRONT ELEVATION 1



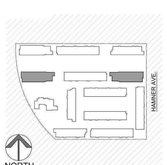
REAR ELEVATION 3





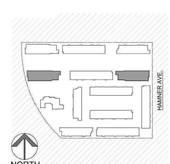


LEFT ELEVATION 2





RIGHT ELEVATION 4



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firesafe PLANNING, INC.
28506 AIROSO STREET
RANCHO MISSION VIEJO, CA 92694
OFFICE: (949) 240-5911

PREPARED FOR:
Quarterra
95 ENTERPRISE, SUITE 200
ALISO VIEJO, CA 92656

TITLE:
FIRE MASTER PLAN
BUILDING ELEVATIONS
QUARTERRA EASTVALE II
EASTVALE, CA

RIVERSIDE COUNTY FIRE DEPARTMENT

DATE: 04/28/2025

SHEET: F-4

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BUILDING TYPE A.4 ELEVATIONS

NOT TO SCALE



FRONT ELEVATION 1



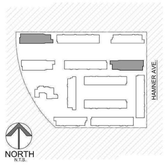
REAR ELEVATION 3





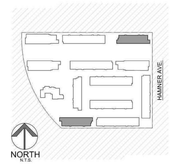


LEFT ELEVATION 2





RIGHT ELEVATION 4



BUILDING TYPE D.4 ELEVATIONS

NOT TO SCALE



FRONT ELEVATION 1



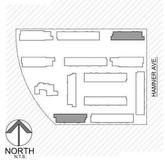
REAR ELEVATION 3





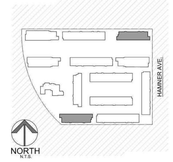


LEFT ELEVATION 2





RIGHT ELEVATION 4



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CIVIL ENGINEER:
KIMLEY HORN
1100 W. TOWN & COUNTRY ROAD
SUITE 700
ORANGE, CA 9286

ARCHITECTURE/PLANNING:
ARCHITECTS ORANGE
144 N. ORANGE ST.
ORANGE, CALIFORNIA 92866
(714) 639-9860

PREPARED BY:
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RIVERSIDE COUNTY FIRE DEPARTMENT

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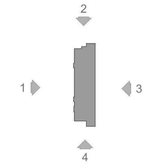
BUILDING TYPE D.5 ELEVATIONS

NOT TO SCALE

NOTE: THESE DETAILS PROVIDED FOR REFERENCE ONLY.



FRONT ELEVATION 1

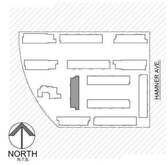




REAR ELEVATION 3

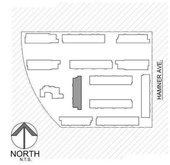


LEFT ELEVATION 2





RIGHT ELEVATION 4



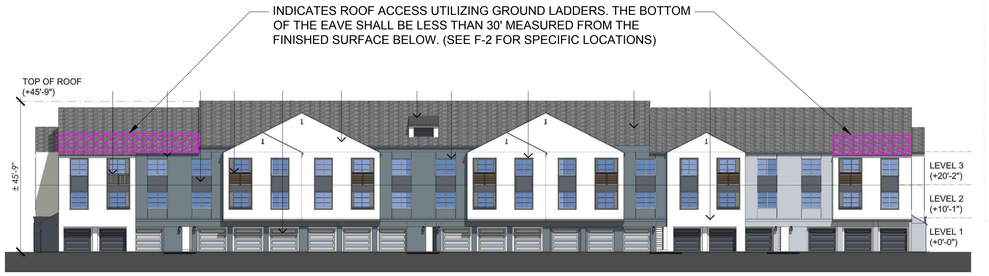
BUILDING TYPE G.1 ELEVATIONS

NOT TO SCALE



FRONT ELEVATION 1



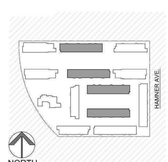


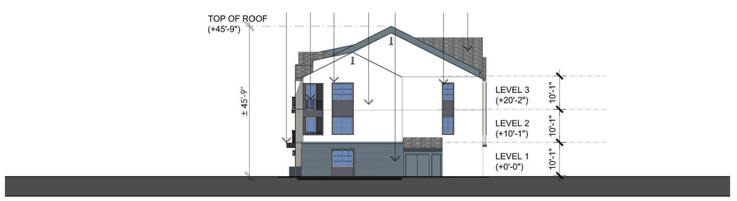
REAR ELEVATION 3



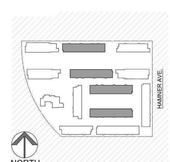


LEFT ELEVATION 2





RIGHT ELEVATION 4



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RIVERSIDE COUNTY FIRE DEPARTMENT

DATE:
04/28/2025

SHEET:
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BUILDING TYPE G.2 ELEVATIONS

NOT TO SCALE

NOTE: THESE DETAILS PROVIDED FOR REFERENCE ONLY.



FRONT ELEVATION 1

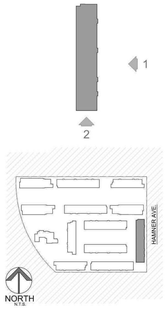
INDICATES ROOF ACCESS UTILIZING GROUND LADDERS. THE BOTTOM OF THE EAVE SHALL BE LESS THAN 30' MEASURED FROM THE FINISHED SURFACE BELOW. (SEE F-2 FOR SPECIFIC LOCATIONS)



REAR ELEVATION 3

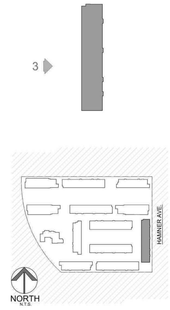


LEFT ELEVATION 2





RIGHT ELEVATION 4

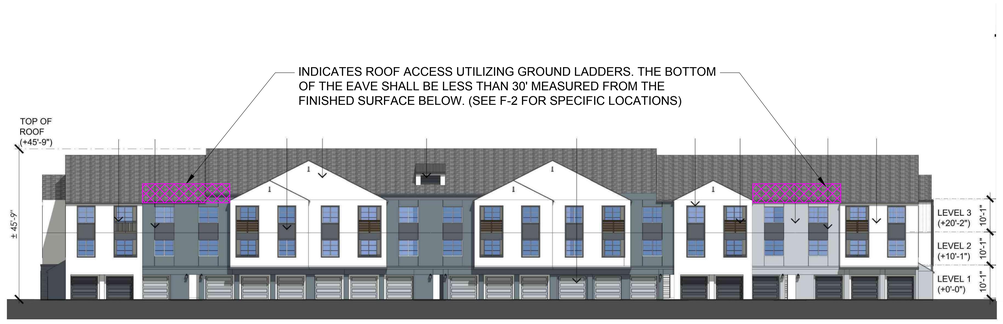


BUILDING TYPE G.3 ELEVATIONS

NOT TO SCALE



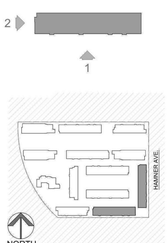
FRONT ELEVATION 1

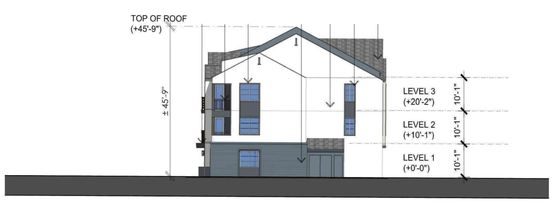


REAR ELEVATION 3

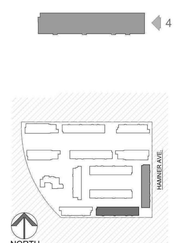


LEFT ELEVATION 2





RIGHT ELEVATION 4



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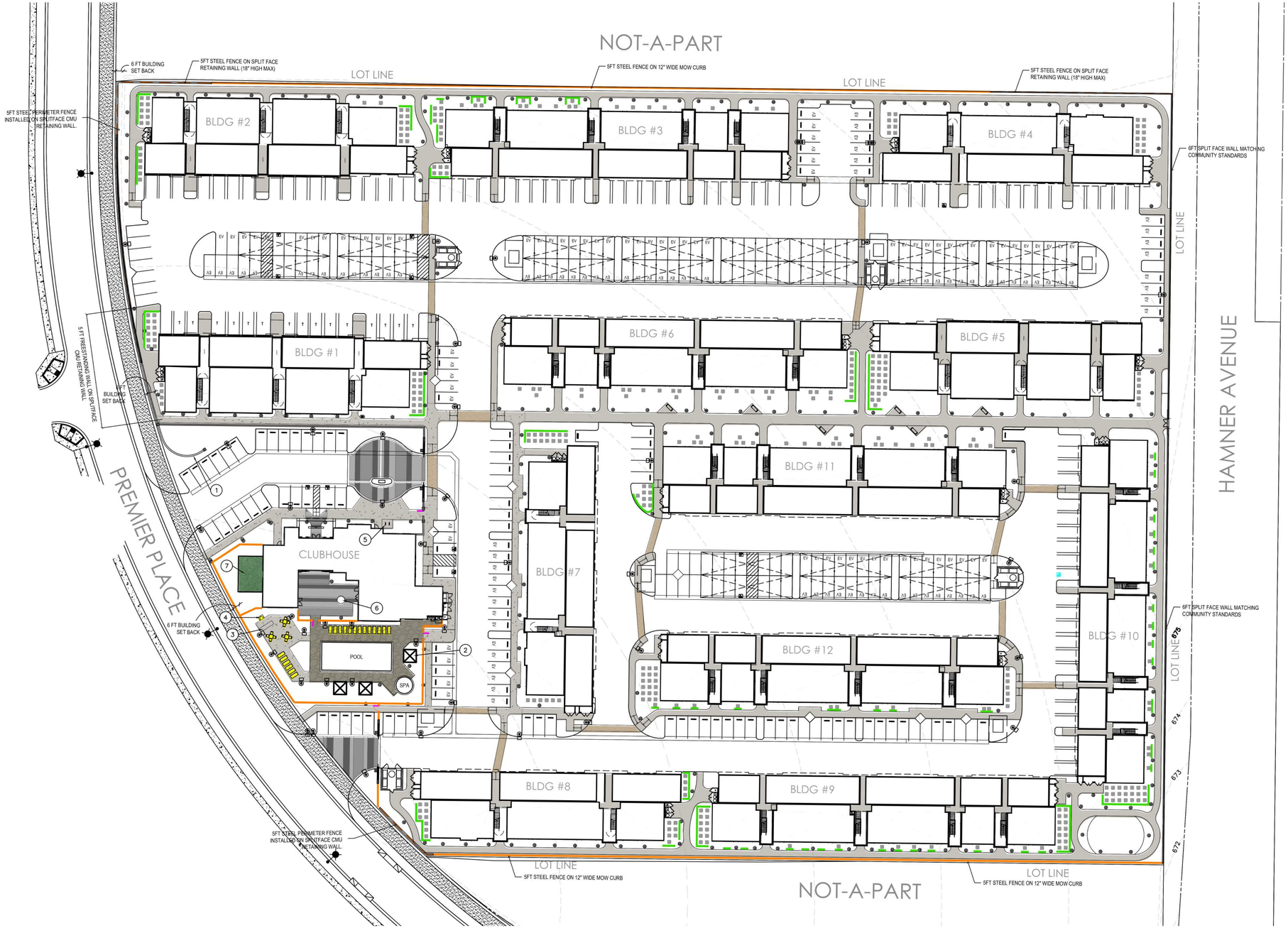


CONSTRUCTION LEGEND

HARDSCAPE LEGEND

- NATURAL GREY CONCRETE WITH MEDIUM BROOM FINISH
- INTEGRAL COLOR CONCRETE WITH SAND FINISH SEE SHEET L1.1, DETAIL A
- NATURAL GREY CONCRETE WITH SAND FINISH SEE SHEET L1.1, DETAIL B
- NATURAL GREY CONCRETE WITH EXPOSED AGGREGATE SEE SHEET L1.1, DETAIL C
- DECORATIVE PRECAST PAVERS IN HERRINGBONE PATTERN SEE SHEET L1.1, DETAIL D
  LIGHT GREY
  MEDIUM GREY
  DARK GREY

FENCING AND GATE LEGEND

- 6FT CMU BLOCK WALL SEE SHEET L1.1, DETAIL E
- RETAINING WALL WITH 5FT STEEL FENCE
- 5FT STEEL PERIMETER FENCING SEE SHEET L1.1, DETAIL I
- ACCESS GATES - SIZES VARY
  * PERIMETER GATES SHALL BE EQUIPPED WITH AUTOMATIC LOCKS AND KNOX BOX FOR FIRE ACCESS. *
  ** POOL GATES SHALL BE EQUIPPED WITH SIGNAGE AND PANIC HARDWARE AS REQUIRED PER HEALTH DEPARTMENT REGULATIONS. **
- GATE — AUTOMATIC VEHICULAR GATE
- GREEN SCREEN
- T — TRANSFORMER
- TRASH ENCLOSURE
- EV — ELECTRIC VEHICLE CHARGING STALL (TYPE VARIES PER ARCHITECT'S DRAWINGS)

AMMENITIES LEGEND

SYMBOL	DESCRIPTION	DETAIL
1	ENTRY MONUMENT / SIGNAGE - LAZER CUT CORTEN STEEL, BACKLIT DECORATIVE LIGHTING	J / L1.1
2	POOL SIDE CABANA (3 TOTAL)	K & L / L1.1
3	BAR COUNTER - OUTSIDE CLUBHOUSE LOUNGE	M / L1.1
4	FREESTANDING STAINLESS STEEL BBQ	N / L1.1
5	BIKE RACK (2 TOTAL)	O / L1.1
6	FIRETABLE	I / L1.1
7	FITNESS PATIO / ARTIFICIAL TURF	O / L1.1

SITE LIGHTING

POLE MOUNTED FIXTURES	SEE ELECTRICAL PLAN
PEDESTRIAN BOLLARDS	SEE ELECTRICAL PLAN

Quarterra

LEAL RANCH

EASTVALE, CA

HARDSCAPE & FENCING CONCEPT PLAN

1"=40'

0 40' 80' 120' 160'

Kimley»Horn

L1.0

SCALE 1" = 40'
JOB NO. 2022-1036
DATE 12-19-2024



A INTEGRAL COLOR CONCRETE WITH SAND FINISH



B NATURAL GREY CONCRETE WITH SAND FINISH



C NATURAL GREY CONCRETE WITH EXP. AGGREGATE



D DECORATIVE PRECAST PAVERS -
LIGHT/MEDIUM/DARK GREY IN HERRINGBONE PATTERN



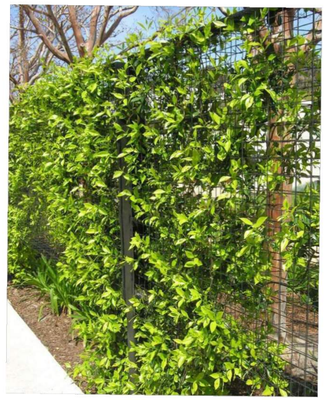
E 6FT SPLIT-FACE BLOCK WALL



F POOL SIDE CABANA (OPTION 1)
(STEEL CONSTRUCTION W/ WOOD SLATS)



G 5FT STEEL PERIMETER FENCING



H GREENSCREEN W/ VINE PLANTINGS
SCREENING MATERIAL AT AC UNITS, TYPICAL.



I ROUND FIRE TABLE
INDOOR/OUTDOOR



J ENTRY MONUMENT / SIGNAGE
LAZER CUT CORTEN STEEL WITH BACKLIT DECORATIVE
NIGHT LIGHTING TREATMENT



K POOL SIDE CABANA (OPTION 2)
PREFABRICATED STRUCTURE W/ CLOTH SCREENING



L BAR COUNTER
OUTSIDE CLUBHOUSE LOUNGE



M FREESTANDING STAINLESS STEEL GRILL
OUTSIDE CLUBHOUSE LOUNGE



N BIKE RACK



O ARTIFICIAL TURF

Quarterra

LEAL RANCH

EASTVALE, CA

DETAILS, FINISHES, & IMAGES

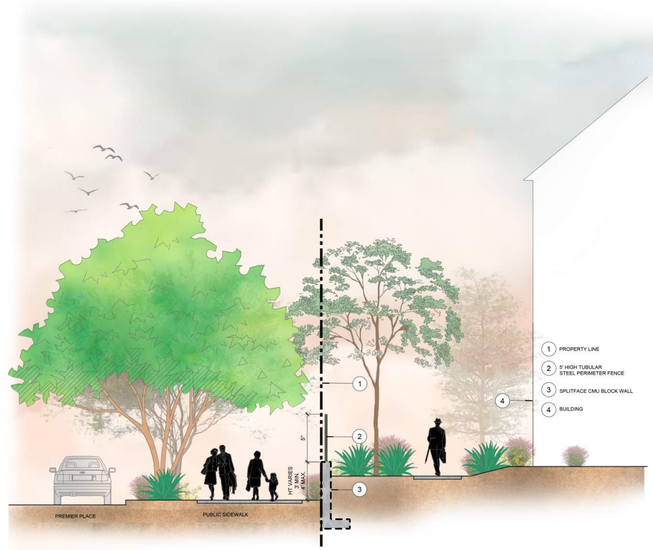
Kimley»Horn

L1.1

SCALE 1" = 40'
JOB NO. 2022-1036
DATE 09-19-2024



KEYMAP



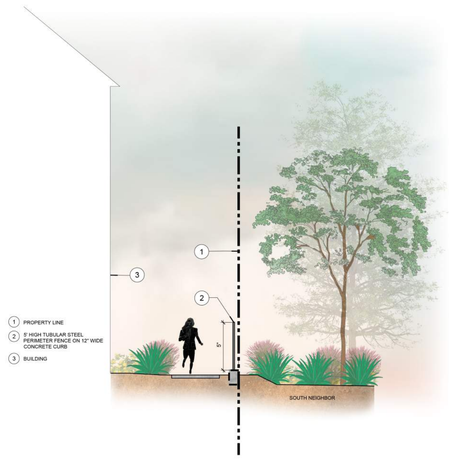
1 SECTION 1
NTS



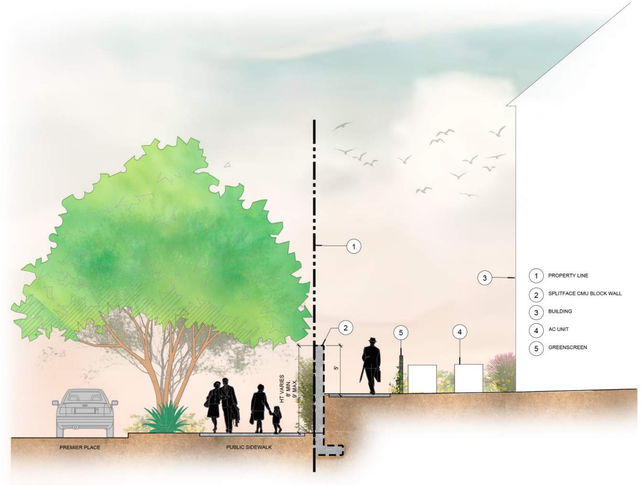
2 SECTION 2
NTS



3 SECTION 3
NTS



4 SECTION 4
NTS



5 SECTION 5
NTS

Quarterra

LEAL RANCH

EASTVALE, CA

TYPICAL EDGE CONDITIONS - PERIMETER FENCING

Kimley»Horn

L1.2

JOB NO. 2022-1036
DATE 12-19-2024



PLANT LEGEND

TREES

BOTANICAL / COMMON NAME

PARKING LOT TREE SUCH AS: (24" BOX MIN.)
Agonis flexuosa / Peppermint Willow
Geijera parviflola / Australlian Willow
Koelreuteria bipinatta / Chinese Flame Tree
Pistacia chinensis / Chinese Pistache

ACCENT TREE SUCH AS: (24" BOX MIN.)
Ceiba speciosa / Silk Floss Tree
Olea europa 'Swan Hill' / Fruitless Olive
Rhus lancea / African Sumac
Robinia x ambigua 'Purple Robe' - Purple Locust

SHADE TREE SUCH AS: (24" BOX MIN.)
Pinus canariensis / Canary Island Pine
Quercus ilex / Holly Oak
Quercus suber / Cork Oak

All trees shall be a mix of 24" box minimum (50% of total), 36" box (30% of total) and 48" box (20% of total) maximum based on the current maxtrix.

PALM TREE: (12FT BTH MIN.)
Archontophoenix cunninghamiana / King Palm
** Single Trunk inside pool enclosure
** Triple-trunk Multi outside pool enclosure

SHRUBS

BOTANICAL / COMMON NAME

FOUNDATION SHRUBS SUCH AS: (5 GAL MIN.)
Lep. 'Ruby Glow' / New Zealand Tea Tree
Leucophyllum frutescens / Texas Ranger
Myrica californica / Pacific Wax Myrtle
Philodendron selloum / Split Leaf Philodendron
Pittosporum tobira / Mock Orange
Xylosma congestum / Shiny Xylosma

MEDIUM SHRUBS SUCH AS: (5 GAL. MIN.)
Arctostaphylos species
Agave species
Aloe species
Cistus species
Myrtus communis 'compacta' / Dwarf Myrtle
Nephrolepis cordifolia / Southern Sword Fern
Polystichum munitum / Western Sword Fern
Rhamnus californica / Coffeeberry
Salvia species
Westringia species
Woodwardia fimbriata / Giant Chain Fern

SMALL SHRUBS & GROUNDCOVERS SUCH AS: (5 & 1 GAL. MIN.)
Acacia redolens 'Low Boy' / Prostrate Acacia
Arctostaphylos 'Pacific Mist' / Manzanita
Asparagus densiflorus / Foxtail Fern
Carex tumulicola / Foothill Sedge
Dianella revoluta 'Baby Bliss' / Flax Lily
Heuchera species
Lavandula stoechas / Spanish Lavender
Senecio serpens / Blue Chalk Sticks

GRASSES

BOTANICAL / COMMON NAME

GRASSES SUCH AS: (1 GAL. MIN.)
Bouteloua 'Blonde Ambition' / Blonde Ambition
Calamagrostis foliosa / Mendo Reed Grass
Lymus condensatus 'Canyon Prince' / Wild Rye
Koeleria macrantha / Prairie Junegrass
Carex tumulicola / Foothill Sedge
Lomondra longifolia 'Lomion' / Lime Tuff
Muhlenbergia rigens / Deer Grass
Pen. set. 'Eaton Canyon' / Dwarf Red Fountain Grass

VINES AT GREENSCREEN FENCES

BOTANICAL / COMMON NAME

ESPALIER SUCH AS: (5 GAL. MIN.)
BOUG. 'PURPLE MAJESTY' / PURPLE BOUGAINVILLEA
BOUG. 'WHITE MADONNA' / WHITE BOUGAINVILLEA
GELSEMIUM SEMPERVIRENS / YELLOW JESSAMINE
LONICERA JAP. 'HALLIANA' / JAPANESE HONEYSUCKL
TECOMARIA CAPENSIS / CAPE HONEYSUCKLE
WISTERIA SINENSIS / CHINESE WISTERIA

LAWN

BOTANICAL / COMMON NAME

Cynadon dactylon / Bermuda Grass

OFFSITE

ADJACENT OFFSITE TREES BY OTHERS (PREMIER PLACE)

LANDSCAPE AREA CALCULATIONS:

TOTAL PROJECT AREA = 461,702 S.F.

TOTAL LANDSCAPE AREA = 73,259 S.F.

TOTAL LANDSCAPE % = (73,259 / 461,702 = 15.8%)

SHADE SUMMARY CALCULATIONS:

TOTAL PARKING AREA = 41,945 S.F.
** EXCLUDES DRIVE AISLES AND COVERED PARKING SPACES **

PARKING AREA SHADE REQUIREMENT = 50% (PARKING AREAS WITH 50+ SPACES)

TOTAL SHADED PARKING AREAS REQUIRED = 20,973 S.F.

TOTAL SHADED PARKING AREAS PROVIDED = 21,454 S.F.

** TREES SHOWN AT 15 YEARS MATURITY PER CODE REQUIREMENTS. **

GENERAL NOTES:

1. TREES SHALL BE LOCATED OUTSIDE OF UTILITY SETBACKS OR EASEMENTS AND SHALL MEET THE FOLLOWING MINIMUM DISTANCE STANDARDS.
   1.1. 10FT CLR. - WATER AND SEWER LINES
   1.2. 10FT CLR. - DRIVEWAY APPROACH
   1.3. 10FT CLR. - STREET LIGHT / PARKING LOT LIGHT
   1.4. 10FT CLR. - FIRE HYDRANTS
2. SIGHT DISTANCE TRIANGLES AT DRIVEWAYS SHALL BE IN ACCORDANCE WITH COUNTY STANDARD NO. 821, NO VEGETATION WILL BE ALLOWED OVER 30" MAX IN THESE AREAS.
3. ALL SHRUB AREAS SHALL RECEIVE 3" DARK, HARDWOOD BARK MUCH. SHALL BE 'DECOBARK' AVAILABLE FROM EARTHWORKS SOIL AMENDMENTS OR APPROVED EQUAL. NO SHREDDED MATERIAL WILL BE ACCEPTED.
4. WHERE ANY TREE IS LOCATED WITHIN SIX FEET OF ANY PAVING SURFACE IN ANY DIRECTION, CONTRACTOR SHALL INSTALL A ROOT BARRIER TEN FEET IN EACH DIRECTION FROM THE CENTER OF THE TREE, ALL SIDES OF THE TREE AS REQUIRED.
5. ALL LANDSCAPE AREAS SHOWN HERE SHALL BE MAINTAINED BY PRIVATE HOMEOWNER'S ASSOCIATION.

IRRIGATION:

1. IRRIGATION SYSTEM SHALL UTILIZE SEPARATE IRRIGATION METER FOR ALL LANDSCAPE AREA. POINT-OF-CONNECTION SHALL INCLUDE BACKFLOW PREVENTOR, MASTER VALVE, FLOW SENSOR AND PRESSURE REGULATOR (IF NEEDED).
2. IRRIGATION SYSTEM SHALL UTILIZE AUTOMATIC IRRIGATION 'SMART' CONTROLLER. OPERATIONAL RUN-TIMES WILL BE BASED ON HISTORIC ET FOR THE SITE WITH RAIN SENSOR TO SHUT THE SYSTEM OFF DURING RAIN EVENTS.
3. IRRIGATION SHALL INCLUDE BUBBLER SYSTEMS FOR ALL TREES AND PALMS. PALM TREES SHALL BE ISOLATED FOR MAINTENANCE CONTROL. SHRUBS AND GROUNDCOVER AREAS SHALL BE IRRIGATED USING BELOW GRADE DRIP IRRIGATION. LAWN AREAS SHALL BE IRRIGATED USING POP-UP ROTATORS.
4. IRRIGATION SHALL UTILIZE SLEEVES UNDER ALL PAVED AREAS (VEHICULAR AND PEDESTRIAN, ETC.) AT A MINIMUM. SLEEVES ARE TO BE 2X THE DIAMETER OF THE PIPE OR WIRE BUNDLE CARRIED. SLEEVES SHALL EXTEND 6" MIN. PAST THE EDGE OF PAVED AREAS ABOVE.

Quarterra

LEAL RANCH

EASTVALE, CA

PLANTING CONCEPT PLAN

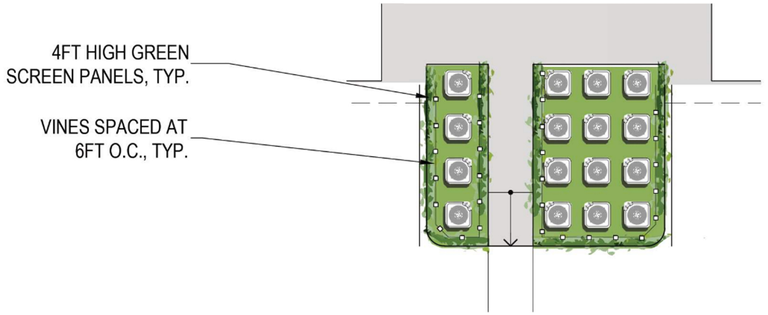
1" = 40'

0 40' 80' 120' 160'

Kimley»Horn

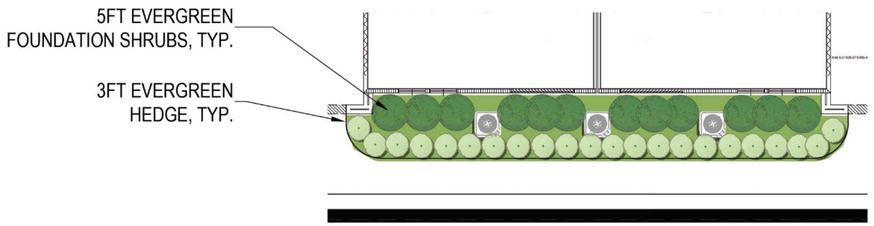
L2.0

SCALE 1" = 40'
JOB NO. 2022-1036
DATE 09-19-2024



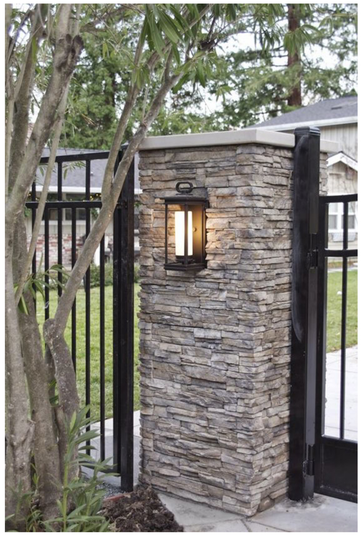
ENLARGEMENT A : GREEN SCREEN (TYP.)

SCALE: 1" = 8'-0"



ENLARGEMENT B : LANDSCAPE SCREEN (TYP.)

SCALE: 1" = 8'-0"



ENLARGEMENT C: GATE ENTRY

SCALE: 1" = 8'-0"

Quarterra

LEAL RANCH

EASTVALE, CA

LANDSCAPE ENLARGEMENTS

1"=8'
0 8' 16' 24' 32'

Kimley»Horn

L2.1

SCALE 1" = 40'
JOB NO. 2022-1036
DATE 07-23-2024



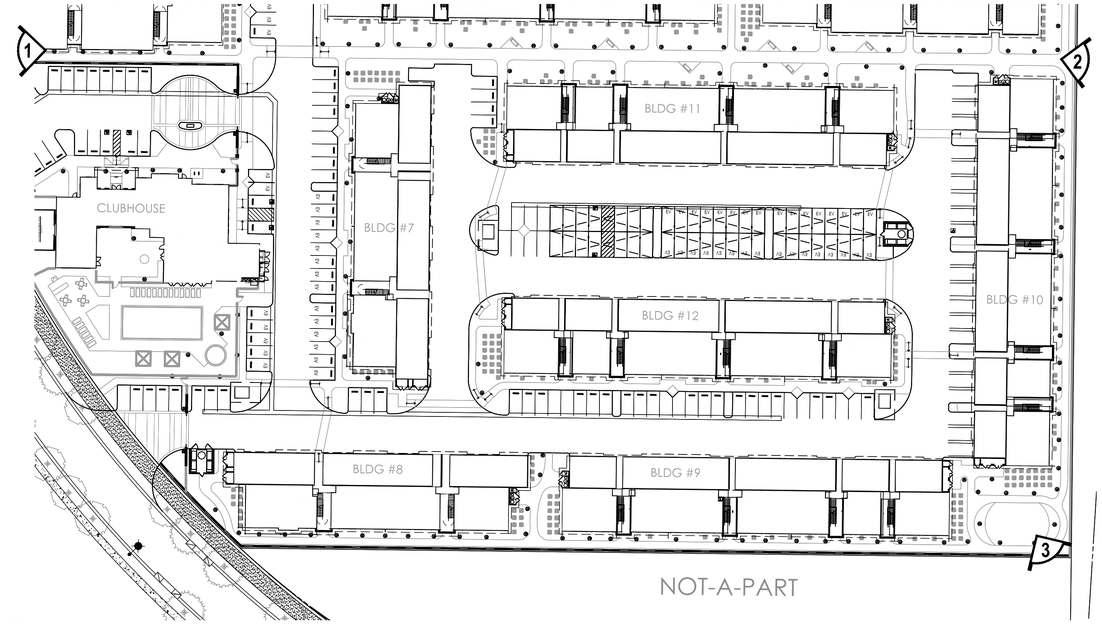
1 PASEO ENTRY WEST



2 PASEO ENTRY EAST



3 PET RELIEF AREA



VICINITY MAP

Quarterra

LEAL RANCH

EASTVALE, CA

LANDSCAPE PERSPECTIVES

Kimley»Horn

L2.2

SCALE 1" = 40'
JOB NO. 2022-1036
DATE 07-23-2024



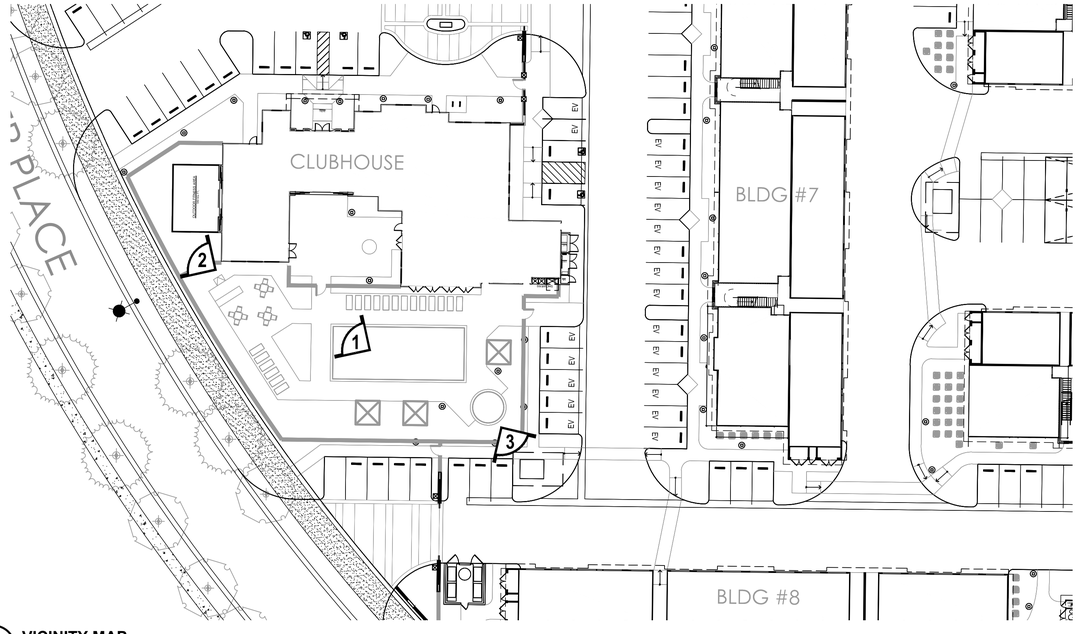
1 POOL AREA LOOKING TOWARD BLDG. #7



2 POOL AREA - BIRD'S EYE VIEW



3 POOL AREA - SPA



VICINITY MAP

Quarterra

LEAL RANCH

EASTVALE, CA

LANDSCAPE PERSPECTIVES

Kimley»Horn

L2.3

SCALE 1" = 40'
JOB NO. 2022-1036
DATE 07-23-2024

PARKING LOT TREES



BOTANICAL NAME: AGONIS FLEXUOSA
COMMON NAME: AUSTRALIAN WILLOW



BOTANICAL NAME: GEIGERA PARVIFOLIA
COMMON NAME: PEPPERMINT WILLOW



BOTANICAL NAME: KOELREUTERIA BIPINATTA
COMMON NAME: CHINESE FLAME TREE



BOTANICAL NAME: PISTACIA CHINENSIS
COMMON NAME: CHINESE PISTACHE

ACCENT TREES



BOTANICAL NAME: CEIBA SPECIOSA
COMMON NAME: SILK FLOSS TREE



BOTANICAL NAME: OLEA EUROPAEA 'SWAN HILL'
COMMON NAME: FRUITLESS OLIVE



BOTANICAL NAME: RHUS LANCEA
COMMON NAME: AFRICAN SUMAC



BOTANICAL NAME: ROBINIA X AMBIGUA 'PURPLE ROBE'
COMMON NAME: PURPLE LOCUST

FOUNDATION SHRUBS



BOTANICAL NAME: LEP. 'RUBY GLOW'
COMMON NAME: NEW ZEALAND TEA TREE



* BOTANICAL NAME: LEUCOPHYLLUM FRUTESCENS
COMMON NAME: TEXAS RANGER



* BOTANICAL NAME: MYRICA CALIFORNICA
COMMON NAME: PACIFIC WAX MYRTLE



BOTANICAL NAME: PHILODENDRON SELLOUM
COMMON NAME: SPLIT LEAF PHILODENDRON



* BOTANICAL NAME:PITTOSPORUM TOBIRA
COMMON NAME: MOCK ORANGE



* BOTANICAL NAME: XYLOSMA CONGESTUM
COMMON NAME: SHINY XYLOSMA

GRASSES



BOTANICAL NAME: BOUTELOUA 'BLONDE AMBITION'
COMMON NAME: BLONDE AMBITION



BOTANICAL NAME: CALAMAGROSTIS FOLIOSA
COMMON NAME: MENDO REED GRASS



BOTANICAL NAME: LYMUS CONDENSATUS 'CANYON PRINCE'
COMMON NAME: WILD RYE



BOTANICAL NAME: KOELERIA MACRANTHA
COMMON NAME: PRAIRIE JUNEGRASS



BOTANICAL NAME: CAREX TUMULICOLA
COMMON NAME: FOOTHILL SEDGE



BOTANICAL NAME: LOMANDRA LONGIFOLIA 'LOMION'
COMMON NAME: LIME TUFF



BOTANICAL NAME: MUHLENBERGIA RIGENS
COMMON NAME: DEER GRASS

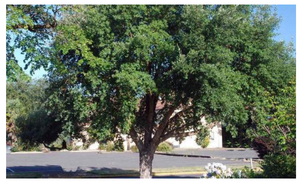


BOTANICAL NAME: PEN. SET. 'EATON CANYON'
COMMON NAME: DWARF RED FOUNTAIN GRASS

SHADE TREES



BOTANICAL NAME: QUERCUS ILEX
COMMON NAME: HOLLY OAK



BOTANICAL NAME: QUERCUS SUBER
COMMON NAME: CORK OAK



BOTANICAL NAME: PINUS CANARIENSIS
COMMON NAME: CANARY ISLAND PINE

PALM TREES



BOTANICAL NAME: ARCHONTOPHOENIX CUNNINGHAMIANA
COMMON NAME: KING PALM

LAWN



BOTANICAL NAME: CYNADON DACTYLON
COMMON NAME: BERMUDA GRASS

* DENOTES PLANTS TO BE PLANTED CAN-TO-CAN WHERE PLANT IS NEEDED TO SCREEN AC UNITS

Quarterra

LEAL RANCH

EASTVALE, CA

PLANT MATERIAL BOARD

Kimley»Horn

L3.0

SCALE 1" = 40'
JOB NO. 2022-1036
DATE 07-23-2024

MEDIUM SHRUBS



BOTANICAL NAME:ARCTOSTAPHYLOS SPP.
COMMON NAME: MANZANITA



BOTANICAL NAME: AGAVE SPP.
COMMON NAME: AGAVE



BOTANICAL NAME: ALOE SPP.
COMMON NAME: ALOE



BOTANICAL NAME: CISTUS SPP.
COMMON NAME: ROCKROSE



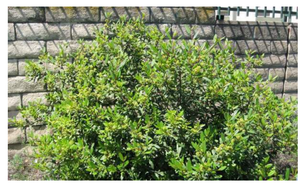
* BOTANICAL NAME:MYRTUS COMUNIS 'COMPACTA'
COMMON NAME: DWARF MYRTLE



BOTANICAL NAME: NEPHROLEPIS CORDIFOLIA
COMMON NAME: SOUTHERN SWORD FERN



BOTANICAL NAME: POLYSTICHUM MUNITUM
COMMON NAME: WESTERN SWORD FERN



* BOTANICAL NAME: RHAMNUS CALIFORNICA
COMMON NAME: COFFEEBERRY



BOTANICAL NAME: SALVIA SPP.
COMMON NAME: SAGE



BOTANICAL NAME: WESTRINGIA SPP.
COMMON NAME: COAST ROSEMARY



BOTANICAL NAME: WOODWARDIA FIMBRIATA
COMMON NAME: GIANT CHAIN FERN

SMALL SHRUBS



BOTANICAL NAME: ACACIA REDOLENS 'LOW BOY'
COMMON NAME: PROSTRATE ACACIA



BOTANICAL NAME: ARCTOSTAPHYLOS 'PACIFIC MIST'
COMMON NAME: MANZANITA



BOTANICAL NAME: ASPARAGUS DENSIFLORUS
COMMON NAME: FOXTAIL FERN



BOTANICAL NAME: CAREX TUMULICOLA
COMMON NAME: FOOTHILL SEDGE



BOTANICAL NAME: DIANELLA REVOLUTA 'BABY BLISS'
COMMON NAME: FLAX LILY



BOTANICAL NAME: HEUCHERA SPP.
COMMON NAME: HEUCHERA



BOTANICAL NAME: LAVANDULA STOECHAS
COMMON NAME: SPANISH LAVENDER



BOTANICAL NAME: SENECIO SERPENS
COMMON NAME: BLUE CHALK STICKS

VINES



BOTANICAL NAME: LONICERA JAPONICA 'HALLIANA'
COMMON NAME: JAPANESE HONEYSUCKLE



BOTANICAL NAME: TECOMARIA CAPENSIS
COMMON NAME: CAPE HONEYSUCKLE



BOTANICAL NAME: WISTERIA SINENSIS
COMMON NAME: CHINESE WISTERIA



BOTANICAL NAME: BOUGAINVILLEA 'PURPLE MAJESTY'
COMMON NAME: PURPLE MAJESTY BOUGAINVILLEA



BOTANICAL NAME: BOUGAINVILLEA 'WHITE MADONNA'
COMMON NAME: WHITE MADONNA BOUGAINVILLEA



BOTANICAL NAME: GELSEMIUM SEMPERVIRENS
COMMON NAME: YELLOW JESSAMINE

* DENOTES PLANTS TO BE PLANTED CAN-TO-CAN WHERE PLANT IS NEEDED TO SCREEN AC UNITS

Quarterra

LEAL RANCH

EASTVALE, CA

PLANT MATERIAL BOARD

Kimley»Horn

L3.1

SCALE 1" = 40'
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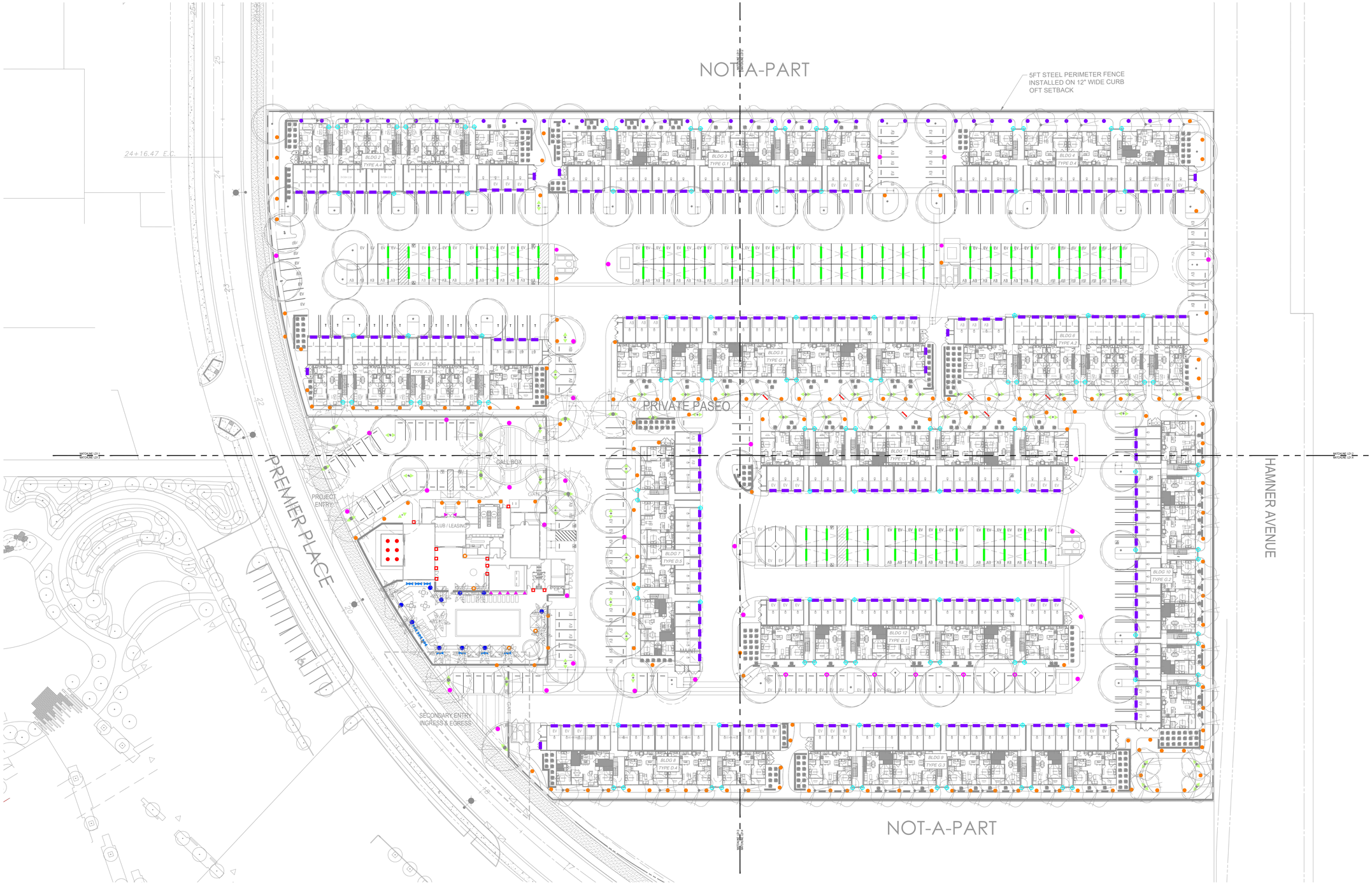

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12. Type AL1 - Stake-mounted adjustable LED bullet tree accent lights. 3000K
13. Type AL2 - Tree ring-mounted adjustable LED bullet accent for palm trees. 3000K
14. Type SS1 - Surface-mounted linear LED low voltage tapelight. 3000K
15. Type SD1 - Surface-mounted LED downlight. 3000K

NORTH

1"=40'-0" 0 20' 40' 80' 120'

OVERALL SITE LIGHTING PLAN

LD1.0

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

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T: 562.989.3843 F: 562.989.3847
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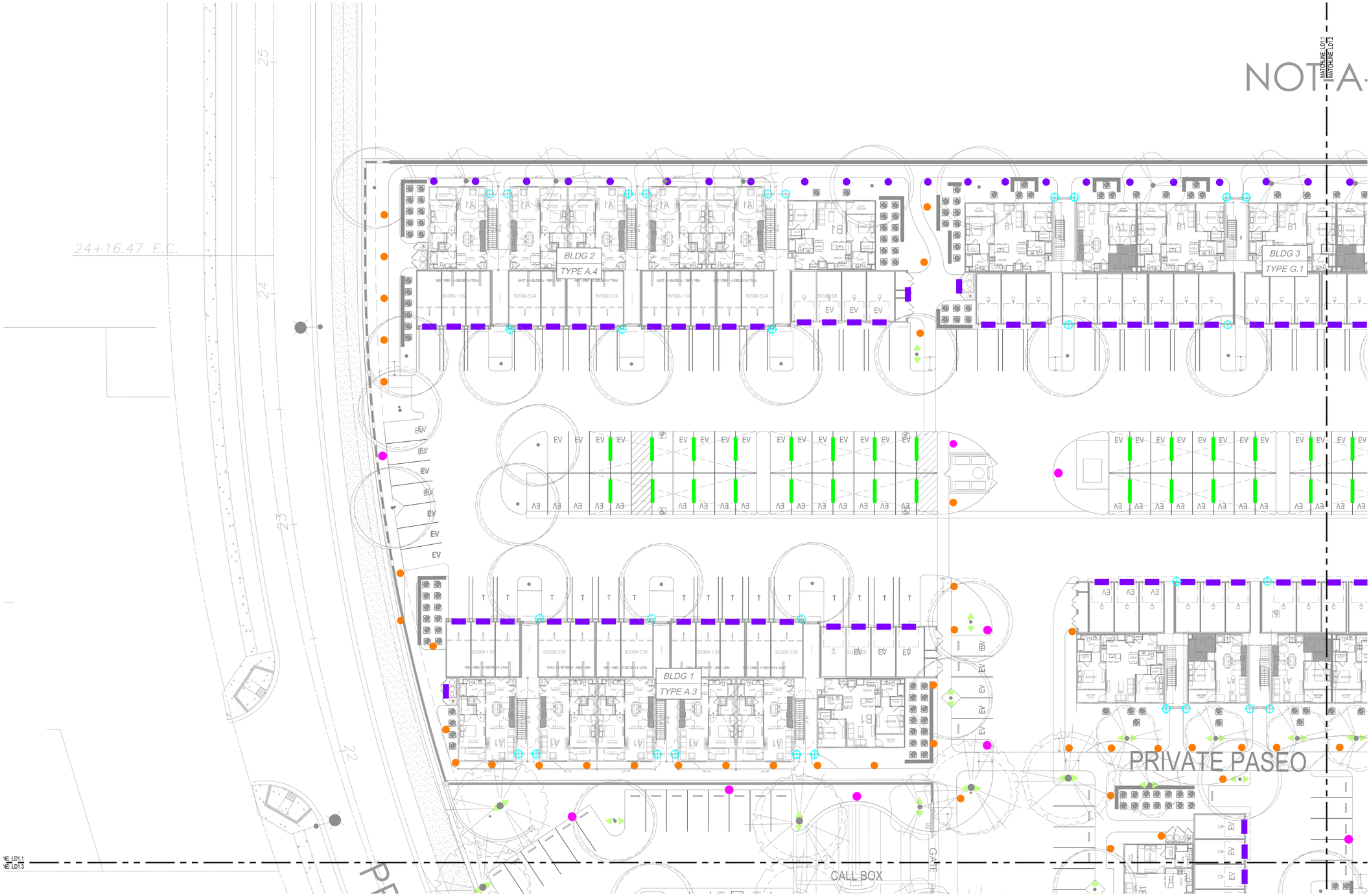

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NORTH

1"=20'-0" 0 10' 20' 40' 60'

ENLARGED SITE LIGHTING PLAN

LD1.1

DATE:10-10-24
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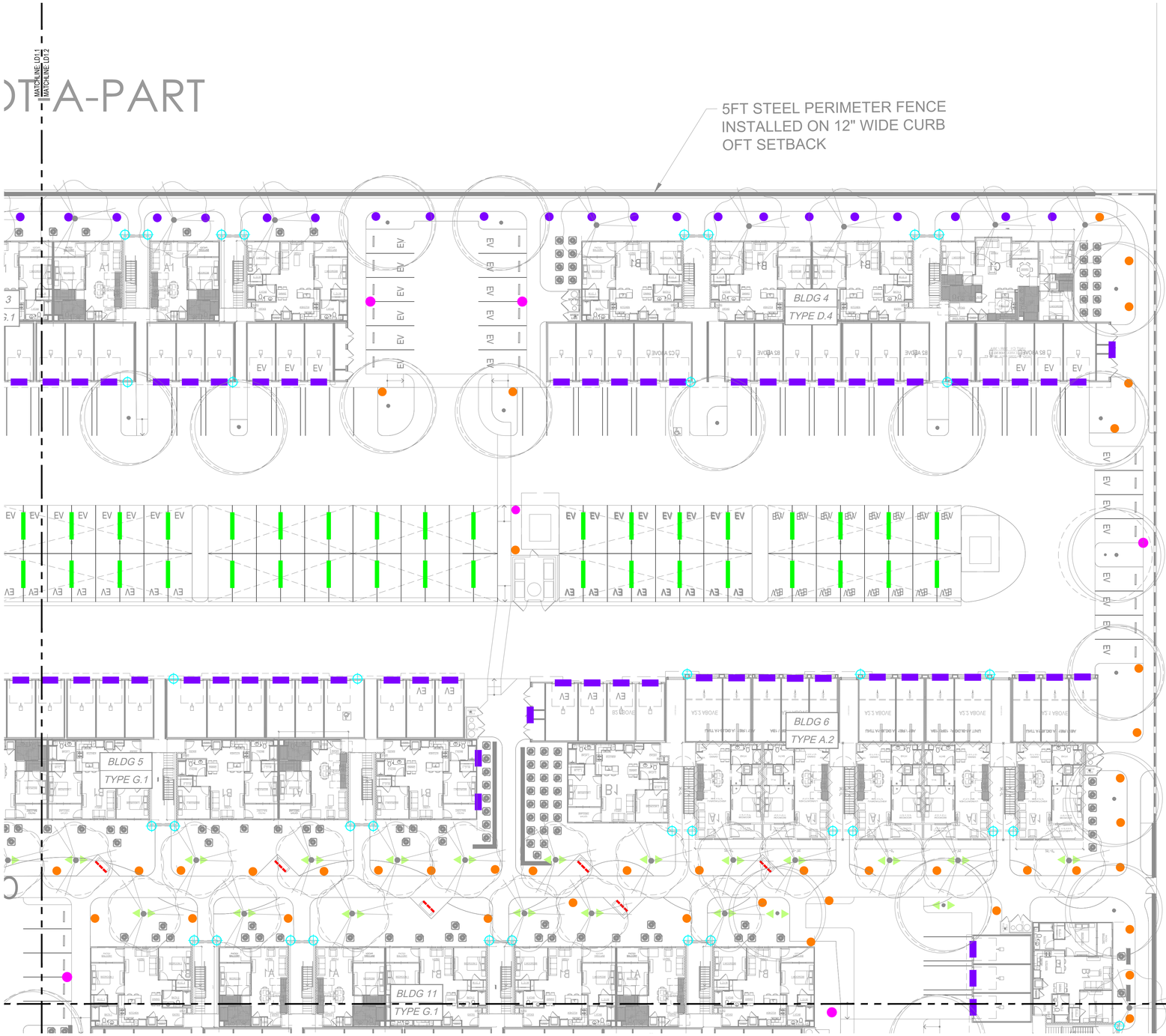

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NORTH

1"=20'-0" 0 10' 20' 40' 60'

ENLARGED SITE LIGHTING PLAN

LD1.2

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

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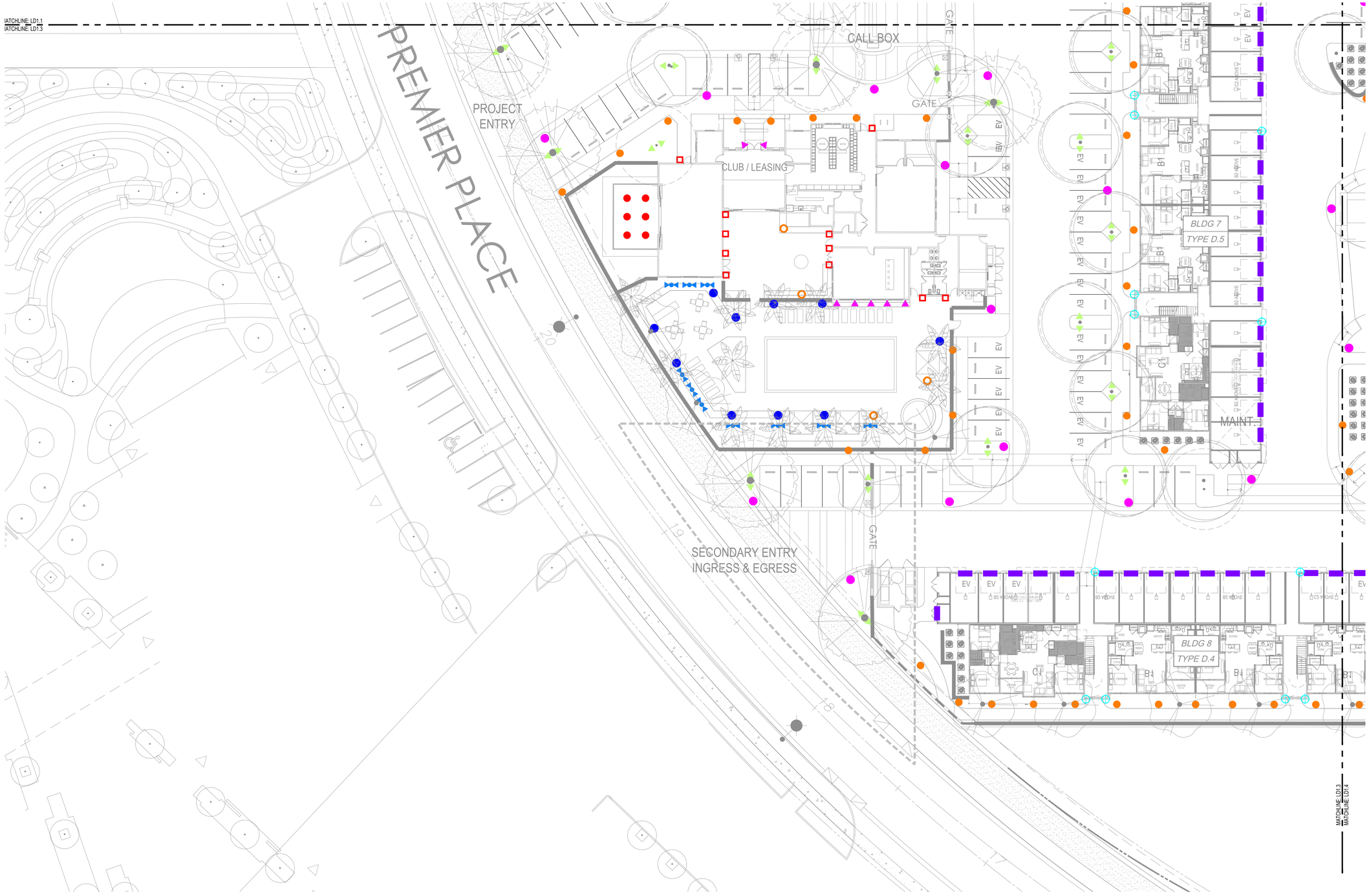

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NORTH

1"=20'-0" 0 10' 20' 40' 60'

ENLARGED SITE LIGHTING PLAN

LD1.3

LEAL RANCH

EASTVALE, CA

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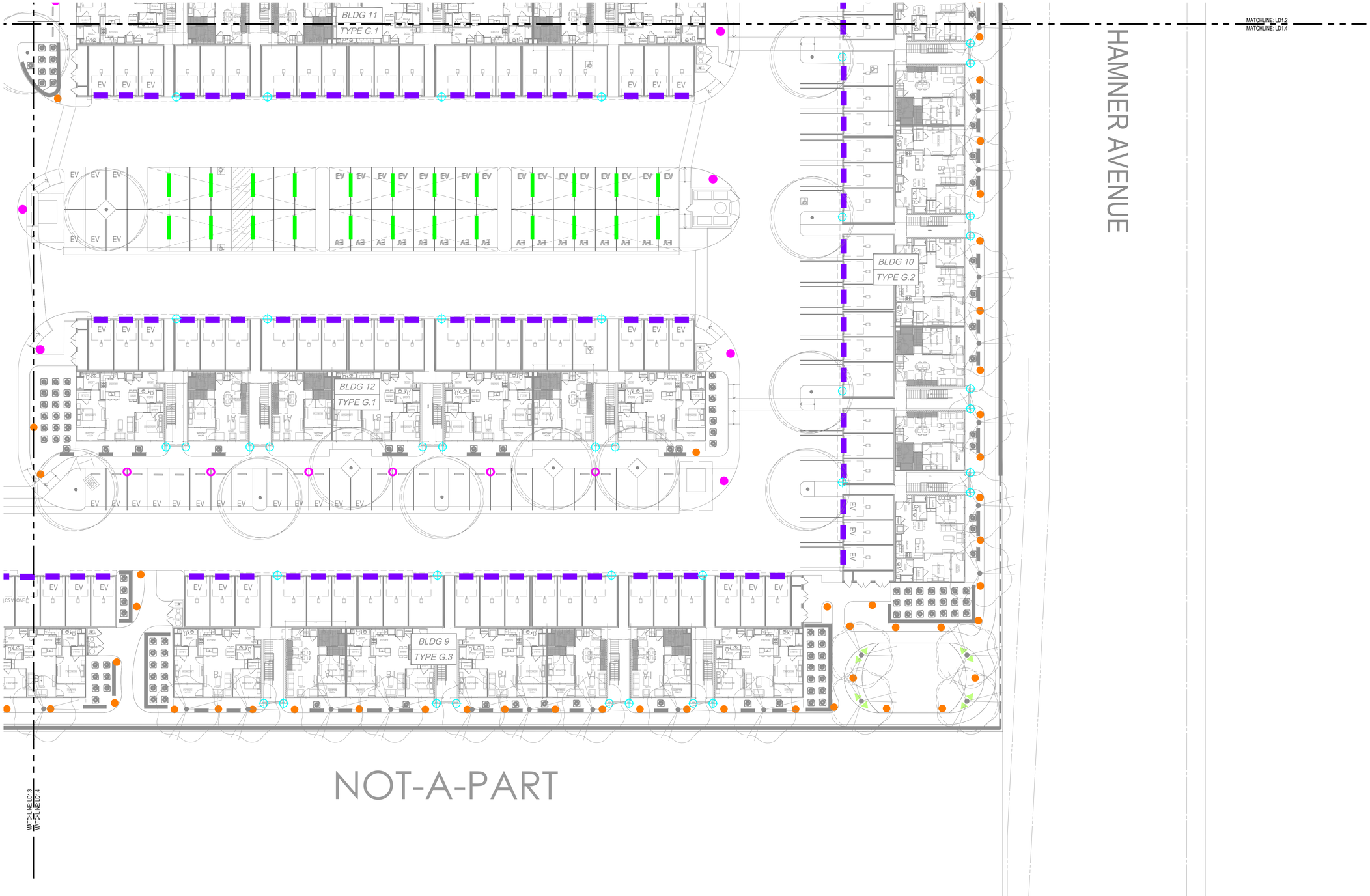

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NORTH

1"=20'-0" 0 10' 20' 40' 60'

ENLARGED SITE LIGHTING PLAN

LD1.4

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

EASTVALE, CA

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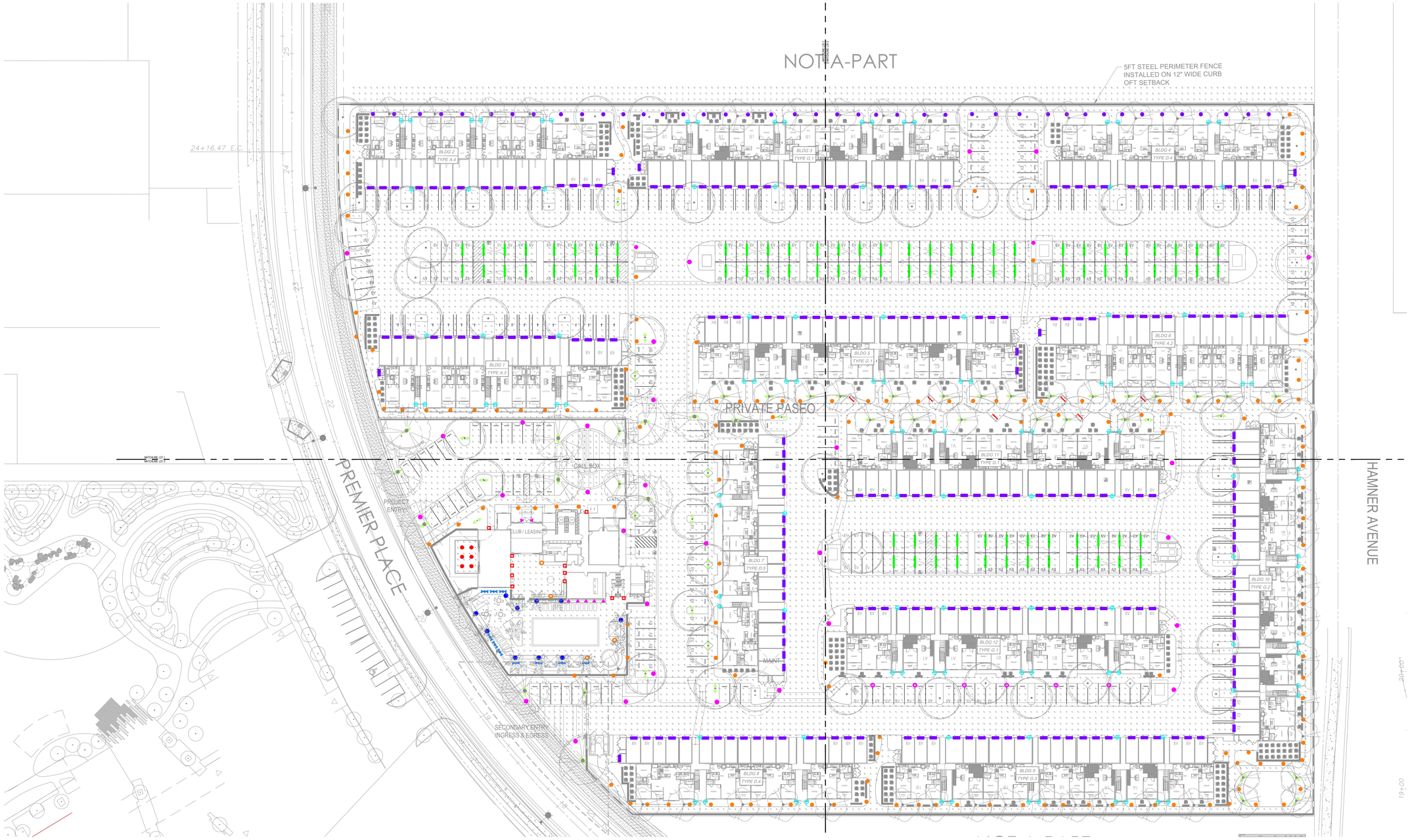

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Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
Vehicle Entrance	Illuminance	Fc	1.39	10.5	0.1	13.90
Amenities Hardscape	Illuminance	Fc	1.88	10.5	0.2	9.40
Driveway and parking	Illuminance	Fc	0.71	10.5	0.0	23.67
Mission Style	Illuminance	Fc	1.05	6.1	0.2	5.25
Pedestrian Walkway (all LF)	Illuminance	Fc	0.65	6.1	0.0	16.25
Primary Vehicular Road (LF)	Illuminance	Fc	0.25	6.1	0.0	6.25
Pathway_1	Illuminance	Fc	0.37	0.4	0.3	1.24
Pathway_10	Illuminance	Fc	1.15	1.9	0.5	2.30
Pathway_11	Illuminance	Fc	1.15	1.9	0.5	2.30
Pathway_12	Illuminance	Fc	0.39	0.5	0.2	1.95
Pathway_13	Illuminance	Fc	0.39	0.5	0.2	1.95
Pathway_14	Illuminance	Fc	0.15	0.3	0.0	7.50
Pathway_15	Illuminance	Fc	0.60	0.9	0.3	2.00
Pathway_16	Illuminance	Fc	0.60	0.9	0.3	2.00
Pathway_17	Illuminance	Fc	0.53	0.9	0.3	1.77
Pathway_18	Illuminance	Fc	0.48	0.9	0.2	2.40
Pathway_19	Illuminance	Fc	0.15	0.3	0.0	7.50
Pathway_2	Illuminance	Fc	0.37	0.4	0.3	1.24
Pathway_20	Illuminance	Fc	0.53	0.9	0.2	2.65
Pathway_21	Illuminance	Fc	0.39	0.5	0.2	1.95
Pathway_22	Illuminance	Fc	0.39	0.5	0.2	1.95
Pathway_23	Illuminance	Fc	1.46	2.2	0.7	2.09
Pathway_24	Illuminance	Fc	1.46	2.2	0.7	2.09
Pathway_25	Illuminance	Fc	0.94	12.9	0.2	4.70
Pathway_26	Illuminance	Fc	1.07	12.9	0.2	5.35
Pathway_27	Illuminance	Fc	0.38	0.5	0.2	1.90
Pathway_28	Illuminance	Fc	0.38	0.5	0.2	1.90
Pathway_3	Illuminance	Fc	0.65	0.9	0.3	2.17
Pathway_4	Illuminance	Fc	0.65	0.9	0.3	2.17
Pathway_5	Illuminance	Fc	0.53	0.9	0.2	2.65
Pathway_6	Illuminance	Fc	0.53	0.9	0.2	2.65
Pathway_7	Illuminance	Fc	0.48	0.9	0.2	2.40
Pathway_8	Illuminance	Fc	0.48	0.9	0.2	2.40
Pathway_9	Illuminance	Fc	0.15	0.3	0.0	7.50
Pathway_A	Illuminance	Fc	0.38	0.5	0.2	1.90
Pathway_B	Illuminance	Fc	0.38	0.5	0.2	1.90
Pathway_C	Illuminance	Fc	0.65	0.9	0.3	2.17
Pathway_D	Illuminance	Fc	0.65	0.9	0.3	2.17
Pathway_E	Illuminance	Fc	0.53	0.9	0.2	2.65
Pathway_F	Illuminance	Fc	0.53	0.9	0.2	2.65
Pathway_G	Illuminance	Fc	0.48	0.9	0.2	2.40
Pathway_H	Illuminance	Fc	0.48	0.9	0.2	2.40
Pathway_I	Illuminance	Fc	0.15	0.3	0.0	7.50
Pathway_J	Illuminance	Fc	0.37	0.4	0.3	1.24
Pathway_K	Illuminance	Fc	1.15	1.9	0.5	2.30
Pathway_L	Illuminance	Fc	1.15	1.9	0.5	2.30

NORTH

1"=40'-0" 0 20' 40' 80' 120'

OVERALL SITE PHOTOMETRIC PLAN

LD2.0

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE. LONG BEACH, CA 90806-2213, USA
T: 562.989.3843 F: 562.989.3847
www.LightingDesignAlliance.com



LIGHTING LEGEND

1. Type BH1 - Hardscape-mounted 33" tall LED bollard. Match PH1. 3000K. Type V. 19W. B1-U4-G2
2. Type BH2 - Hardscape-mounted 42" tall LED bollard. Match PH2/PH2A. 3000K. Type V. 9W. B2-U3-G1
3. Type BH3 - Hardscape-mounted 36" tall LED bollard. Match PH2/PH2A. 3000K. Type II. 9W. B2-U3-G1
4. Type DW1 - Decorative building entry sconce. 3000K
5. Type DW2 - Decorative building facade sconce. 3000K
6. Type DW3 - Architectural wall sconce with uplight & downlight. 3000K
7. Type LR1 - Surface-mounted linear LED striplight under carports. 3000K
8. Type PH1 - Hardscape-mounted 12' tall decorative LED area pole. 3000K. Type V. 27W. B1-U3-G2
9. Type PH2 - Hardscape-mounted 14' tall LED roadway pole. 3000K. Type IV. 53W. B1-U0-G2
10. Type PH2A - Hardscape-mounted 12' tall LED pedestian pole. 3000K. Type IV. 28W. B2-U3-G1
11. Type WP1 - Building surface mounted wall pack. Forward throw. 3000K. B0-U0-G0
12. Type AL1 - Stake-mounted adjustable LED bullet tree accent lights. 3000K
13. Type AL2 - Tree ring-mounted adjustable LED bullet accent for palm trees. 3000K
14. Type SS1 - Surface-mounted linear LED low voltage tapelight. 3000K
15. Type SD1 - Surface-mounted LED downlight. 3000K

NORTH

ENLARGED SITE PHOTOMETRIC PLAN

LD2.1

1"=20'-0" 0 10' 20' 40' 60'

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

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OT-A-PART

MATCHLINE: LD1.1
MATCHLINE: LD1.2

5FT STEEL PERIMETER FENCE
INSTALLED ON 12" WIDE CURB
OFT SETBACK

BLDG 4
TYPE D.4

BLDG 6
TYPE A.2

BLDG 5
TYPE G.1

BLDG 11
TYPE G.1

MATCHLINE: LD1.2
MATCHLINE: LD1.4

HA

LIGHTING LEGEND

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14. Type SS1 - Surface-mounted linear LED low voltage tapelight. 3000K
15. Type SD1 - Surface-mounted LED downlight. 3000K

NORTH

ENLARGED SITE PHOTOMETRIC PLAN

LD2.2

1"=20'-0" 0 10' 20' 40' 60'

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

EASTVALE, CA

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10. Type PH2A - Hardscape-mounted 12' tall LED pedestian pole. 3000K. Type IV. 28W. B2-U3-G1
11. Type WP1 - Building surface mounted wall pack. Forward throw. 3000K. B0-U0-G0
12. Type AL1 - Stake-mounted adjustable LED bullet tree accent lights. 3000K
13. Type AL2 - Tree ring-mounted adjustable LED bullet accent for palm trees. 3000K
14. Type SS1 - Surface-mounted linear LED low voltage tapelight. 3000K
15. Type SD1 - Surface-mounted LED downlight. 3000K

NORTH

1"=20'-0" 0 10' 20' 40' 60'

ENLARGED SITE PHOTOMETRIC PLAN

LD2.3

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

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NOT-A-PART

LIGHTING LEGEND

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9. Type PH2 - Hardscape-mounted 14' tall LED roadway pole. 3000K. Type IV. 53W. B1-U0-G2
10. Type PH2A - Hardscape-mounted 12' tall LED pedestian pole. 3000K. Type IV. 28W. B2-U3-G1
11. Type WP1 - Building surface mounted wall pack. Forward throw. 3000K. B0-U0-G0
12. Type AL1 - Stake-mounted adjustable LED bullet tree accent lights. 3000K
13. Type AL2 - Tree ring-mounted adjustable LED bullet accent for palm trees. 3000K
14. Type SS1 - Surface-mounted linear LED low voltage tapelight. 3000K
15. Type SD1 - Surface-mounted LED downlight. 3000K

NORTH

ENLARGED SITE PHOTOMETRIC PLAN

LD2.4

1"=20'-0" 0 10' 20' 40' 60'

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

EASTVALE, CA

QUARTERRA
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949.606.5536

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2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

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2830 TEMPLE AVE. LONG BEACH, CA 90806-2213, USA
T: 562 989 3843 F: 562 989 3847
www.LightingDesignAlliance.com

LIGHT FIXTURE - TYPE AL1

FOCUS INDUSTRIES
landscape • entertainment • architectural • hospitality • illumination

RXD-02 DIRECTIONAL LIGHTS







25301 COMMERCENTRE DRIVE • LAKE FOREST, CA 92630 • 949.830.1350 • 888.882.1350 • FAX 949.830.3390

LIGHT FIXTURE - TYPE AL1

FOCUS INDUSTRIES® RX — DIRECTIONAL LIGHTS — RXD-02 SERIES — LED READY — TYPE

SPECIFICATIONS

CONSTRUCTION:
COPPER: Copper bullet and cast brass adjustable swivel with 240° rotation
ALUMINUM: Aluminum bullet; matching cast aluminum adjustable swivel with 240° rotation

LENS: High impact clear tempered convex glass

O-RING: High temperature red silicone

LAMP SUPPLIED: 20w MR16 FL(BAB) 5000 hours average rating
(35w max copper 50w max aluminum)

LAMP OPTIONS: We recommend 40,000 hour ARROW 3w LED (L24) or 5w (-L36) or 7w (-L48) ARROW Super Saver LED

SOCKET: High temperature ceramic GU5.3 bi-pin with 250°C silicone lead wires

WIRING: Black 3 foot 18/2 zip cord from base of fixture (12v only)
For 25 foot 16/2 fixture lead wire add -25F to catalog number.

CONNECTION: FA-05 Quick-Connector (not supplied) from fixture to main cable (12/2, 10/2 or 8/2 only)

MOUNTING: FA-03 black 9" ABS stake threaded 1/2" NPS

FINISH: Copper - Unfinished only
Aluminum - Black texture polyester powder coat. Optional finishes available

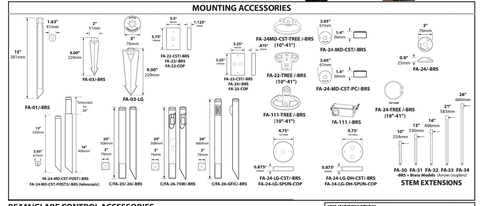


LAMP AND STAKE ***INSTALLED*** TO SAVE YOU TIME AND MONEY

ORDERING INFORMATION

CATALOG NO.	DESCRIPTION	LAMP	SHIP WEIGHT
RXD-02-COP	Copper Bullet	20w MR16 FL(BAB)	3.0 lbs.
RXD-02-BLT	Aluminum Bullet	20w MR16 FL(BAB)	3.0 lbs.

MOUNTING ACCESSORIES



BEAM/GLARE CONTROL ACCESSORIES

FA-08-21	Round 1/4" Hex Cell Louver
FA-11-RXDO2-BLUE	Blue Tempered Glass Insert Lens
FA-11-RXDO2-GREEN	Green Tempered Glass Insert Lens
FA-11-RXDO2-AMBER	Amber Tempered Glass Insert Lens
FA-11-RXDO2-RED	Red Tempered Glass Insert Lens
FA-98-02	Linear Spread Tempered Glass Lens
FA-104-36C15	Wide Spread/Softener Glass Lens for RXD-02 Copper Series
FA-104-RXD02ALUM	Wide Spread/Softener Glass Lens for RXD-02 Aluminum Series

JOB INFORMATION
Type: Date:
Job Name:
Cat No.:
Lamp(s):
Specifier:
Contractor:
Notes:

FOCUS INDUSTRIES INC.
25301 COMMERCENTRE DRIVE
LAKE FOREST, CA 92630
www.focusindustries.com
info@focusindustries.com
(949) 830-1350 • FAX (949) 830-3390

Black Texture (Standard)	Antique Verde	Bronze Texture	Camel	White Texture	Hunter Texture	Rust	Weathered Iron	Weathered Bronze	Stucco	Rubbed Verde	Chrome Powder	Acid Rust	Acid Verde	Black Acid Treatment
-BLT	-ATV	-BRT	-CAM	-WTX	-HTX	-RST	-WIR	-WBR	-STU	-RBV	-CPR	-BAR/CAR	-BAV/CAV	-BAT

BRASS & COPPER ONLY

RXD-02 Cut Sheet 091018

LIGHT FIXTURE - TYPE AL1

FOCUS INDUSTRIES — ARROW LED — FL-LED-MR16-SS7W — TYPE

GO*GREEN*
EXCEEDS 50w HALOGEN



12v Only
7w MR16 PLUG & PLAY LED FOR GU5.3 BI-PIN SOCKETS
COMPATIBLE WITH MOST 12v MR16 ENCLOSED FIXTURES

120v Only
7w GU10 BASE MR16 COMPATIBLE WITH MOST 120v MR16 ENCLOSED FIXTURES

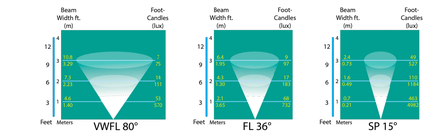
- Long Life - 40,000 Hours L7 Average Rating (rated life to 70% initial light output)
- High Power White LED Light Source
- 550 Lumens (exceeds 50w Halogen)
- CRI 83 (Color Rendering Index)
- 2700K - 3000K Warm White Color
- Cool Beam, No UV or IR
- Mercury Free
- Input Voltage Range
  12v: 9v - 15v
  120v: 110v - 130v
- Dimmable
- DOE LM79 Tested / LM80 Compliant
- Power Factor >90%
- 5 Year Limited Warranty
- RoHS Compliant - Energy Efficient - Environmentally Friendly
- ETL/cETL/CE & Energy Star Certified
- Available in 15° / 36° / 80°
- Must be installed in sealed fixture
- 12v LEDs must be powered by a magnetic transformer or 12v DC power source (ie: Battery)



ORDERING INFORMATION

CATALOG NO.	WATTAGE	VOLTAGE	VOLTAGE RANGE	LUMEN OUTPUT	COLOR TEMP	BEAM ANGLE	BASE
FL-LED-MR16S57W15	7w	12v	9v - 15v	550	2700K-3000K	SP 15°	GU5.3 Bi-Pin
FL-LED-MR16S57W36	7w	12v	9v - 15v	550	2700K-3000K	FL 36°	GU5.3 Bi-Pin
FL-LED-MR16S57W80	7w	12v	9v - 15v	550	2700K-3000K	VWFL 80°	GU5.3 Bi-Pin
FL-LED-MR16S51207W15	7w	120v	110v - 130v	550	2700K-3000K	SP 15°	GU10
FL-LED-MR16S51207W36	7w	120v	110v - 130v	550	2700K-3000K	FL 36°	GU10
FL-LED-MR16S51207W80	7w	120v	110v - 130v	550	2700K-3000K	VWFL 80°	GU10

LIGHT DISTRIBUTIONS AND PHOTOMETRICS



FL-LED-MR16-S57WCutSheet 091417

LIGHT FIXTURE - TYPE AL2

DENALI - PALM TREE RING LED (INTEGRAL) — IP66 RATED

DATE: PROJECT: TYPE:

CATALOG NUMBER LOGIC:



**Accommodates up to 2 lens/shielding/cap media. Price reflects per fixture cost.*

CATALOG NUMBER LOGIC
Example: PTR - 4 - 26 - DE - LED - TR - x62 - SP - BZW - 12 - 11 - B - INC - MT
MATERIAL
Aluminum
SERIES
PTR - Palm Tree Ring
FIXTURE QUANTITY
2 - 2 @ 180° 3 - 3 @ 120° 4 - 4 @ 90° 6 - 6 @ 60°
STRAP SIZES
16 - 16" min. to 22" max. tree diameter
21 - 21" min. to 27" max. tree diameter
26 - 26" min. to 32" max. tree diameter
31 - 31" min. to 38" max. tree diameter
FIXTURE
DE - Denali Series
SOURCE
LED - Chip on Board Technology
HOUSING
TR - Integral Driver
LED TYPE
x58 - 12W/2700K/80CRI x62 - 20W/3000K/80CRI x66 - 27W/4000K/80CRI
x59 - 12W/3000K/80CRI x63- 20W/4000K/80CRI x67 - 27W/2700K/90CRI
x60 - 12W/4000K/80CRI x64 - 27W/2700K/80CRI x68 - 27W/3000K/90CRI
x61 - 20W/2700K/80CRI x65 - 27W/3000K/80CRI x69 - 27W/3500K/80CRI
OPTICS
SP - Spot (15°) FL - Flood (40°) MFL - Medium Flood (60°)
FINISH (See page 2 for full-color swatches)
Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)
Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRI, CRM, HUG, MDS, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)
Also available in RAL Finishes
LENS TYPE*
9 - Clear (Standard)
12 - Soft Focus (per fixture) 13 - Rectilinear (per fixture)
SHIELDING*
11 - Honeycomb Baffle (per fixture)
CAP STYLE*
A - 45° (per fixture)
B - 90° (per fixture)
C - Flush
CONTROL
INC - Dimming Driver (For use with incandescent dimmer) 120V only
INPUT VOLTAGE
MT - 120-277 VAC Input

TITLE 24, JA8 COMPLIANT

B-K LIGHTING | MADE IN THE USA | 559.438.5800 | INFO@BKLIGHTING.COM | BKLIGHTING.COM

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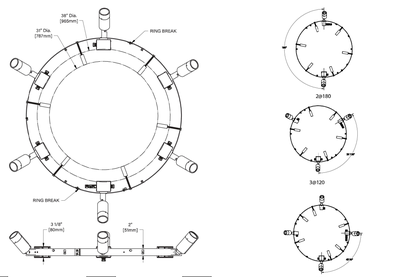
09/01/2020 SKU - 1331
SUB-2802-00

LIGHT FIXTURE - TYPE AL2

DENALI - PALM TREE RING LED (INTEGRAL) — IP66 RATED

DATE: PROJECT: TYPE:



STANDARD FINISHES

Satin Black (BLP) · Satin Bronze (BZP) · Satin White (WHP) · Satin Aluminum (SAP) · Black Wrinkle (BLW) · Bronze Wrinkle (BZW) · White Wrinkle (WHW) · Verde (VER)

Click Here to view larger, full-color swatches of all available finishes on our website.

PREMIUM FINISHES

Cascade Mtn. Granite (CMG) · Rocky Mtn. Granite (RMG) · Sierra Mtn Granite (SMG) · Aleutian Mtn Granite (AMG) · Textured Forest (TXF) · Black Chrome (BCM) · Beige (BGE) · Weathered Copper (WCP) · Old Copper (OCP) · Hunter Green (HUG) · Cracked Ice (CRI) · Mojave Desert Sandstone (MDS) · Antique Brass Powder (ABP) · Brown Patina Powder (BPP) · Sonoran Desert Sandstone (SDS) · Weathered Iron (WIR) · Clear Anodized Powder (CAP) · Cream (CRM) · Antique White (AQW) · Natural Brass Powder (NBP)

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09/01/2020 SKU - 1331
SUB-2802-00

LIGHT FIXTURE - TYPE AL2

DENALI - PALM TREE RING LED (INTEGRAL) — IP66 RATED

DATE: PROJECT: TYPE:

ACCESSORIES (Configure separately)

SPECIFICATIONS

ELECTRICAL	WATTAGE	12W, 20W, or 27W LED
	WIRING	Fixture factory pre-wired with SEOOW(16/3GA,105C,600V , Nylon Cord Grip for primary wiring from power line. (Primary wiring by Others.) Min. Cable Dia .230IB- Max. Cable Dia .548IB-.
	DRIVER	700mA, Class A, constant current driver. 120-277VAC (nominal) primary input voltage. 50/60Hz. .0.94 Power Factor, 6A in-rush current, 0.25A input current, .5%THD (nominal at 120VAC fu l load). Output over-voltage, over-current, and short circuit protection with auto recovery. EMC FCC47CFR Part 15 Class B compliant. Dimming driver for use with standard incandescent dimmers. 10-100% range.
PHYSICAL	MATERIALS	Palm Tree Ring - 1/8" thick AISI 304 stainless steel. Fixture - copper-free aluminum (6061-T6).
	BODY	Unibody design is fully machined from solid billet and provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.
	KNUCKLE	Patented 360HD mounting system features a mechanical taperlock, which allows a full 180° vertical adjustment without the use of anti-limiting serrated teeth. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 7lb. lbs. static load prior to movement to ensure decades of optical alignment. Biaxial source control additionally provides 360° horizontal rotation in addition to vertical adjustment. Aim & Lock technology allows precision adjustment without the redundant tightening and loosening of knuckle screw.
	CAP	Fully mach ned and accommodates two (2) lens or louver media.
	LENS	Shock-resistant, tempered glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment.
	LED	Integrated solid state system. High power, forward throw source complies with ANSI C78.377 binning requirements and exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components. Title 24, JA8 compliant. Integral non-dimming driver. Minimum 50,000 hour rated life at 70% of initial lumens (L70). LED technology provides long life, significant energy reduction and exceptional thermal management.
	COLOR MANAGEMENT	Corrected cold phosphor technology delivers near-perfect natural white light. Long term phosphor maintenance over product life. Exact color point conformity exceeds ANSI C78.377 standard. Provides uniform beam with no color variation over angle. Module exceeds 80 CRI (RAi-80, R9>16).
	OPTICS	Interchangeable, color-coded OPTIKIT. modules permit field changes to optical distribution.
	HARDWARE	Tamper-resistant, stainless steel hardware. LOCK aiming screw is black oxide treated for additional corrosion resistance.
	FINISH	StarGuard, our 15-stage chromate-free process cleans and conversion coats a uminum components prior to application of Class 'A' TGIC polyester powder coating and is RoHS compliant. Powder coat or metal finish options available for brass material and metal finish option only for stainless steel material.
	WARRANTY	5-year limited warranty.
	CERTIFICATION & LISTING	UL tested to IESNA LM-79. UL Listed. Certified to CAN/CSA/ANSI Standards. RoHS compliant. Title 24, JA8 compliant. Suitable for indoor or outdoor use and in wet locations. IP66 Rated. Made in the USA with sustainable processes.

TITLE 24, JA8
cULus LISTED
RoHS
MADE IN THE USA

B-K LIGHTING | MADE IN THE USA | 559.438.5800 | INFO@BKLIGHTING.COM | BKLIGHTING.COM

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09/01/2020 SKU - 1331
SUB-2802-00

LIGHT FIXTURE - TYPE AL2

LAMP & DRIVER DATA (x58, x59, x60, x61, x62, x63, x64, x65, x66)

DATE: PROJECT: TYPE:

DRIVER ELECTRICAL DATA

Type	LED Type	AC Input Range	Frequency Hz	Power Factor: At Full Load (Efficiency)	THD	Inflush Current	Operating Current	Operation Ambient Temperature	Dimmer Type	Dimmer Range
INC	x58-x63	105-305Vac	50/60	> 0.94	≤5%	< 250mA	700mA	-30° C ~ 50°C	Incandescent	10-100%
INC	x64-x66	105-305Vac	50/60	> 0.94	≤5%	< 250mA	700mA	-30° C ~ 50°C	TRIAC/ELV, (120 Only)	10-100%
010	x64-x66	120-277Vac	50/60	> 0.90	<20%	6A	700mA	-30° C ~ 70°C	0-10, (120 only)	10-100%

LM79 DATA

BK No.	CCT (Typ.)	CRI (Typ.)	Input Watts (Typ.)
x58	2700K	80	12W
	2700K	80	12W
	2700K	80	12W
x59	3000K	80	12W
	3000K	80	12W
	3000K	80	12W
x60	4000K	80	12W
	4000K	80	12W
	4000K	80	12W
x61	2700K	80	20W
	2700K	80	20W
	2700K	80	20W
x62	3000K	80	20W
	3000K	80	20W
	3000K	80	20W
x63	4000K	80	20W
	4000K	80	20W
	4000K	80	20W
x64	2700K	80	27W
	2700K	80	27W
	2700K	80	27W
x65	3000K	80	27W
	3000K	80	27W
	3000K	80	27W
x66	4000K	80	27W
	4000K	80	27W
	4000K	80	27W

L70 DATA

Minimum Rated Life (hrs.) 70% of initial lumens (L_{70})
50,000
50,000
50,000
50,000
50,000
50,000
50,000
50,000
50,000
50,000
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OPTICAL DATA

Angle	CBCP	Delivered Lumens
15°	3877	724
35°	1498	663
60°	629	625
15°	4059	758
35°	1568	694
60°	659	655
15°	4561	851
35°	1762	780
60°	740	736
15°	7098	1306
35°	2621	1124
60°	1048	1063
15°	7488	1378
35°	2765	1186
60°	1106	1121
15°	7800	1435
35°	2880	1235
60°	1152	1168
15°	15679	1769
35°	4656	1588
60°	1517	1386
15°	16190	1827
35°	4808	1640
60°	1567	1431
15°	17042	1923
35°	5061	1726
60°	1649	1506

OPTICS

Optic	Angle
Spot	15°
Flood	35°
Wide Flood	60°

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04/22/2020
1638.2193.v9

LIGHT FIXTURE - TYPE AL2

DELTA STAR LED — IP66 RATED

DATE: PROJECT: TYPE:

CATALOG NUMBER LOGIC:



**Designed for use with LED transformer. Requires magnetic low voltage dimmer.*

***Please see Adjust-a-Lume photometry to determine desired intensity.*

****The 360SL cost is already included in the price of UPM, UPM dual, and Power Canopy.*

CATALOG NUMBER LOGIC
Example: B - DS - LED - e64 - SP - A7 - BZP - 12 - 11 - A - 360SL
MATERIAL
(Blank) - Aluminum B - Brass S - Stainless Steel
SERIES
DS - Delta Star
SOURCE
LED - with Integral Dimming Driver (25W min. load when dimmed)*
LED TYPE
e64 - 7W LED/2700K e66 - 7W LED/4000K
e65 - 7W LED/3000K e74 - 7W LED/Amber
OPTICS
NSP - Narrow Spot (13°) MFL - Medium Flood (23°)
SP - Spot (16°) WFL - Wide Flood (31°)
ADJUST-E-LUME® OUTPUT INTENSITY**
A9 (Standard) A8, A7, A6, A5, A4, A3, A2, A1
FINISH (See page 2 for full-color swatches)
Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)
Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRI, CRM, HUG, MDS, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)
Also available in RAL Finishes
Brass Finishes (MAC, POL, MIT)
Stainless Steel Finishes (MAC, POL)
LENS TYPE
12 - Soft Focus 13 - Rectilinear
SHIELDING
11 - Honeycomb Baffle
CAP STYLE
A - 45°
B - 90°
C - Flush Lens
D - 45° Less Weephole (Interior use only)
E - 90° Less Weephole (Interior use only)
F - 90° with Flush Lens
OPTIONS
360SL - Knuckle Mounting System***

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01/15/2020 SKU-739
SUB000000

LEAL RANCH

EASTVALE, CA

LIGHTING SPECIFICATIONS

DATE:10-10-24
JOB NO.: 2024-047

LD3.0

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

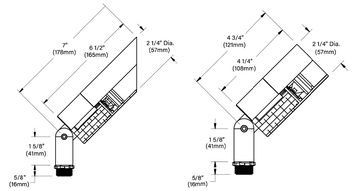
LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

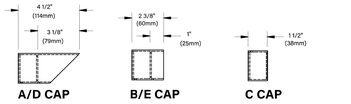
LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE. LONG BEACH, CA 90806-2213, USA
T: 562.989.3843 F: 562.989.3847
www.LightingDesignAlliance.com

LIGHT FIXTURE - TYPE AL2

DELTA STAR LED — IP66 RATED

DATE: | PROJECT: | TYPE:





A/D CAP | B/E CAP | C CAP | F CAP

STANDARD FINISHES

Satin Black (BLP) | Satin Bronze (BZP) | Satin White (WHP) | Satin Aluminum (SAP)
Black Wrinkle (BLW) | Bronze Wrinkle (BZW) | White Wrinkle (WHW) | Verde (VER)

PREMIUM FINISHES

Cascade Mtn. Granite (CMG) | Rocky Mtn. Granite (RMG) | Sierra Mtn Granite (SMG) | Aleutian Mtn Granite (AMG) | Textured Forest (TXF)
Black Chrome (BCM) | Beige (BGE) | Weathered Copper (WCP) | Old Copper (OCP) | Hunter Green (HUG)
Cracked Ice (CRI) | Mojave Desert Sandstone (MDS) | Antique Brass Powder (ABP) | Brown Patina Powder (BPP) | Sonoran Desert Sandstone (SDS)
Weathered Iron (WIR) | Clear Anodized Powder (CAP) | Cream (CRM) | Antique White (AQW) | Natural Brass Powder (NBP)

Click Here to view larger, full-color swatches of all available finishes on our website.

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01/15/2020 SKU-739
SUB000930

LIGHT FIXTURE - TYPE AL2

DELTA STAR LED — IP66 RATED

DATE: | PROJECT: | TYPE:

Accessories (Configure separately)



SPECIFICATIONS

ELECTRICAL	WATTAGE	7W LED
	WIRING	XLPE, 18GA,150C, 600V, rated and certified to UL3321.
	REMOTE TRANSFORMER	For use with 12VAC remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.
PHYSICAL	MATERIALS	Furnished in copper-free aluminum (6061-T6), brass (360) or stainless steel (304).
	BODY	Unibody design with enclosed, water-proof wireway and integral heat sink is fully machined from solid billet.
	KNUCKLE	LOCK Knuckle is integral to the body and features an interior taper machined from solid billet and a second, reverse angle taper allowing full 180° vertical adjustment without the use of aim-limiting serrated teeth. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lbs. static load prior to movement for optical alignment with a ½" pipe thread for mounting. Optional 360SL provides biaxial source control with 360° horizontal rotation in addition to vertical adjustment.
	CAP	Fully machined and accommodates two (2) lens or louver media.
	LENS	Shock-resistant, tempered glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment.
	LED	Integrated solid state system and modular design with electrical disconnects allow for easy field upgrade and maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements and exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components. Integral, constant current driver. 12VAC/VDC input, 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current (limited to <250mA non-dimming). Output, overvoltage, open-circuit, and short circuit protection. Conforms to Safety Std. C22.2 No. 25013-12.
	DIMMING	Line voltage dimmable via magnetic low voltage dimmer with dedicated neutral conductor. Remote magnetic transformer with LED loads should be loaded to 25% of the transformer VA (watts) rated value.
	ADJUST-E-LUME	Integral electronics allow for dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed. Specify factory preset output intensity.
	OPTICS	Interchangeable OPTIKIT modules permit optical field changes. Color-code: Narrow Spot (NSP) = red; Spot (SP) = green; Medium Flood (MFL) = yellow; Wide Flood (WFL) = blue.
	HARDWARE	Tamper-resistant, stainless steel Hardware. LOCK aiming screw is black oxide treated for additional corrosion resistance.
	FINISH	StarGuard, our 15-stage chromate-free process cleans and conversion coats aluminum components prior to application of Class A TGIC polyester powder coating and is RoHS compliant. Powder coat or metal finish options available for brass material and metal finish option only for stainless steel material.
	WARRANTY	5-year limited warranty
	CERTIFICATION & LISTING	ITL tested to IESNA LM-79. UL Listed. Certified to CAN/CSA/ANSI Standards. RoHS compliant. Suitable for indoor or outdoor use, in wet locations, and for installation within 4' of the ground. IP66 Rated. Made in the USA with sustainable processes.

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01/15/2020 SKU-739
SUB000930

LIGHT FIXTURE - TYPE AL2

LAMP & DRIVER DATA (e64, e65, e66, e74)

DATE: | PROJECT: | TYPE:

DRIVER DATA	Input Volts	InRush Current	Operating	Dimmable	Operation Ambient Temperature
	12VAC/DC 50/60Hz	<250mA (non-dimmed)	700mA	Magnetic Low Voltage Dimmer	-22°F-194°F (-30°C - 90°C)

	LM79 DATA			L70 DATA	OPTICAL DATA		
BK No.	CCT (Typ.)	CRI (Typ.)	Input Watts (Typ.)	Minimum Rated Life (hrs.) 70% of initial lumens (L_{70})	Angle	CBCP	Delivered Lumens
e64	2700K	80	7	50,000	13°	5993	456
	2700K	80	7	50,000	16°	4546	445
	2700K	80	7	50,000	23°	1726	397
	2700K	80	7	50,000	31°	1131	399
e65	3000K	80	7	50,000	13°	6131	466
	3000K	80	7	50,000	16°	4650	455
	3000K	80	7	50,000	23	1766	406
	3000K	80	7	50,000	31°	1157	409
e66	4000K	80	7	50,000	13°	6889	524
	4000K	80	7	50,000	16°	5225	511
	4000K	80	7	50,000	23°	1984	456
	4000K	80	7	50,000	31°	1300	459
e74	Amber (590nm)	~	7	50,000	~	~	~

OPTICS

Optic	Angle
NSP - Narrow Spot:	13°
SP - Spot	16°
MFL - Medium Flood	23°
WFL - Wide Flood	31°

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LIGHT FIXTURE - TYPE BH1

LED bollard - Unshielded symmetrical light distribution — **BEGA**

Application
LED bollard luminaires with unshielded symmetrical light distribution. These robust luminaires can delineate and structure outside areas. Provided with mounting system that allows the luminaire to be adjusted independent of anchor bolt orientation.

Materials
Luminaire housing, posts and base plate constructed of die-cast and extruded marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy
White acrylic diffuser
High temperature silicone gasket
Mechanically captive stainless steel fasteners
Anchorage constructed of galvanized steel

NRTL listed to North American Standards, suitable for wet locations
Protection class IP65
Weight: 15.5 lbs

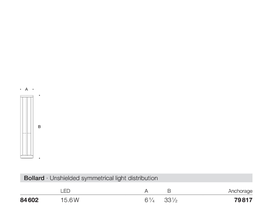
Electrical

Operating voltage	120-277VAC
Minimum start temperature	-30° C
LED module wattage	15.6 W
System wattage	19.0 W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	1793 lumens (3000K)
Lifetime at Ta = 15° C	>500,000 h (L70)
Lifetime at Ta = 35° C	399,000 h (L70)

LED color temperature
☐ 4000K - Product number + **K4**
☐ 3500K - Product number + **K35**
☐ 3000K - Product number + **K3**
☐ 2700K - Product number + **K27**
BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish
All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.
Available colors ☐ Black (BLK) ☐ White (WHT) ☐ RAL:
☐ Bronze (BRZ) ☐ Silver (SLV) ☐ CUS:

Type:
BEGA Product:
Project:
Modified:



Bollard : Unshielded symmetrical light distribution

LED	A	B	Anchorage
84602	15.6W	6¼	33½	**79817**

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us. com
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Updated 06/19/18

LIGHT FIXTURE - TYPE BH2, BH3

NLS LIGHTING

CALIFORNIA BOLLARD

BOLLARD + LANDSCAPE LIGHTING

The California Bollard is a combination of security, style and Vandal resistance that blends into any pathway environment.

The California Bollard is constructed of heavy duty cast aluminum top, bars, and fitter. Extruded Aluminum Shaft available in 36", 42", 60", and 96" heights. Base cover is heavy duty cast aluminum.

With 16 LED offering, the California Bollard is able to range from 10 to 56 watts at a beautiful Type 2, 3, 4 and 5 light distribution. Kelvin temperature offering of 2700K, 3000K, 3500K, 4000K and 5000K is available.

It is finished with 3-5 mils of rich-textured powder coat and stainless steel hardware. Conforms to the strictest Made in America standards—designed, tooled, fabricated and assembled in the USA.



MICROOPTICS — MICRO OPTIC SYSTEM

Our new cell-enclosed, micro optic silicone modules produce high clarity and outstanding performance.

LED WATTAGE CHART

	16L
175 milliamps	10w
350 milliamps	19w
530 milliamps	29w
700 milliamps	36w
1050 milliamps	56w

Project Name | Type:

Cat#	Light Dist.	# of LEDs	Milliamps	Kelvin	Volts	Mounting	Color	Options
California Bollard 36" **(CAB-36)**	Type 2 **(T2)**	16 **(16L)**	175 **(175)**	2700K, 82 CRI **(27KM)** ❶	120-277 **(UNV)**	Anchor Base **(AN)**	Bronze Textured **(BRZ)**	Marine Grade Finish **(MGF)**
California Bollard 42" **(CAB-42)**	Type 3 **(T3)**		350 **(35)**	3000K, 70 CRI **(30K7)**			White Textured **(WHT)**	GFI Kit **(GFI)** ❷
California Bollard 60" **(CAB-60)**	Type 4 **(T4)**		530 **(53)**	3000K, 80 CRI **(30KB)** ❶			Smooth White Gloss **(SWT)**	
California Bollard 96" **(CAB-96)**	Type 5 **(T5)**		700 **(7)**	3500K, 80 CRI **(35KB)**			Silver **(SVR)**	
			1050 **(1)**	4000K, 70 CRI **(40K7)**			Black Textured **(BLK)**	
				4000K, 80 CRI **(40KB)** ❶			Smooth Black Gloss **(SBK)**	
				5000K, 70 CRI **(50K7)**			Graphite Textured **(GRY)**	
				5000K, 80 CRI **(50KB)** ❶			Custom **(CS)**	

Notes:
❶ Consult Factory for Lead Time. Consult Factory for 90 CRI Requests
❷ GFI installed 12" from base.

REV. 12.22.22

LIGHT FIXTURE - TYPE BH2, BH3

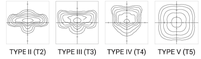
PRODUCT SPECIFICATIONS

ELECTRICAL
- 120-277 Volts (UNV) or 347-480 Volts (HV)
- 0-10V dimming driver
- Driver power factor at maximum load is ≥ .95, THD maximum load is 15%
- LED Drivers Ambient Temp. Min is -40°C and Ambient Temp. Max. ranges from 50°C to 55°C and, in some cases, even higher. Consult the factory for revalidation by providing the fixture catalog string before quoting and specifying it.
- All internal wiring UL certified for 600 VAC and 105°C
- CRI 70, 80 or 90
- Color temperatures: 2700K, 3000K, 3500K, 4000K, 5000K
- Surge Protection: 20KA supplied as standard.

CONSTRUCTION
- Cast Aluminum

OPTIONS
- MARINE GRADE FINISH (MGF) - A multi-step process creating protective finishing coat against harsh environments. Chemically washed in a 5 stage cleaning system. Pre-baked, Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer. Oven Baked. Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness.
- GFI KIT

OPTICS
Silicone optics high photo-thermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.
- IES Types



TYPE II (T2) | TYPE III (T3) | TYPE IV (T4) | TYPE V (T5)

FINISH
- 3-5 mils electrostatic powder coat.
- NLS Light's standard high-quality finishes prevent corrosion protects against and extreme environmental conditions

WARRANTY
Five-year limited warranty for drivers and LEDs.

LISTINGS
- Certified to UL 1598
- UL 8750
- CSA C22.2 No. 250.0

The information and specifications on this document are subject to change without any notification. All values are design, nominal, typical or prorated values when measured under internal and external laboratory conditions.

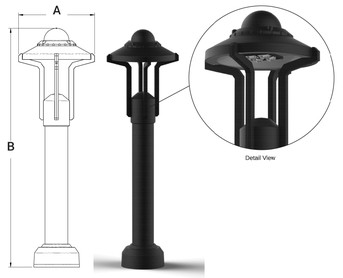
NLS LIGHTING — 701 Kingshill Place, Carson, CA 90746 — **Call Us Today** (310) 341-2037 — **nlslighting.com**

LIGHT FIXTURE - TYPE BH2, BH3

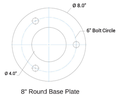
PRODUCT SPECIFICATIONS

CALIFORNIA BOLLARD - LUMEN DATA CHART

PART NUMBER	T2 OPTIC	Lm/W	B.U.G.	T3 OPTIC	Lm/W	B.U.G.	T4 OPTIC	Lm/W	B.U.G.	T5 OPTIC	Lm/W	B.U.G.	WATTS
CAB-XX-16L-175-30K	954	95	-	945	92	-	916	92	-	881	88	-	10
CAB-XX-16L-175-40K	990	99	-	981	98	-	954	95	-	1026	103	-	10
CAB-XX-16L-175-50K	1026	103	-	1017	102	-	990	99	-	1062	106	-	10
CAB-XX-16L-35-30K	1908	106	B1-U2-G1	1890	105	B1-U2-G1	1836	102	B1-U0-G1	1962	109	B2-U2-G1	18
CAB-XX-16L-35-40K	1980	110	B1-U2-G1	1962	109	B1-U2-G1	1908	106	B1-U0-G1	2052	114	B2-U2-G1	18
CAB-XX-16L-35-50K	2052	114	B1-U2-G1	2034	113	B1-U2-G1	1980	110	B1-U0-G1	2124	118	B2-U2-G1	18
CAB-XX-16L-53-30K	2966	106	B1-U2-G1	2940	105	B1-U2-G1	2856	102	B1-U0-G1	3052	109	B2-U3-G1	28
CAB-XX-16L-53-40K	3080	110	B1-U2-G1	3052	109	B1-U2-G1	2968	106	B1-U0-G1	3192	114	B2-U3-G1	28
CAB-XX-16L-53-50K	3192	114	B1-U2-G1	3164	113	B1-U2-G1	3080	110	B1-U0-G1	3304	118	B2-U3-G1	28
CAB-XX-16L-7-30K	3816	106	B1-U2-G1	3780	105	B1-U2-G1	3672	102	B1-U0-G1	3924	109	B3-U3-G1	36
CAB-XX-16L-7-40K	3960	110	B1-U2-G1	3924	109	B1-U2-G1	3816	106	B1-U0-G1	4104	114	B3-U3-G1	36
CAB-XX-16L-7-50K	4104	114	B1-U2-G1	4068	113	B1-U2-G1	3960	110	B1-U0-G1	4248	118	B3-U3-G1	36
CAB-XX-16L-1-30K	5936	106	B1-U2-G1	5880	105	B1-U2-G1	5712	102	B1-U0-G2	6104	109	B3-U3-G1	56
CAB-XX-16L-1-40K	6160	110	B1-U2-G1	6104	109	B2-U2-G2	5936	106	B1-U0-G2	6384	114	B3-U3-G1	56
CAB-XX-16L-1-50K	6384	114	B1-U2-G1	6328	113	B1-U2-G1	6160	110	B1-U0-G2	6608	118	B3-U3-G1	56



DIMENSION	CAB-36	CAB-42	CAB-60	CAB-96
A	13.23"	13.23"	13.23"	13.23"
B	36"	42"	60"	96"



8" Round Base Plate

NLS LIGHTING — 701 Kingshill Place, Carson, CA 90746 — **Call Us Today** (310) 341-2037 — **nlslighting.com**

LIGHT FIXTURE - TYPE DW1



Project:
Location:
Fixture Type:
Catalog Number:

AVAILABLE FINISHES:

Cambridge

WS-W24211

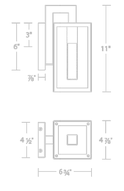
PRODUCT DESCRIPTION
A classic sensibility with timeless style. This exterior LED wall luminaire beckons like a glowing lantern to welcome guests to your fine home. Available in three sizes.

FEATURES
- Driver concealed within the canopy
- Diffuser rotates up to 45 degree for a modern twist to the classic lantern design
- Clear glass panels are framed with an etched border
- IDA Dark Sky compliant

SPECIFICATIONS

Rated Life	50000 Hours
Standards	ETL, cETLWet Location Listed,IP65,Dark Sky Friendly
Input	120/277V,50/60Hz
Dimming	ELV: 100-5%,TRIAC: 100-10%
Mounting	Can be mounted on wall vertically or upside down
Color Temp	3000K
CRI	90
Construction	Extruded aluminum body and etched acrylic diffuser framed in clear glass panels etched along the border

REPLACEMENT PARTS
RPL-GLA-24211 - Replacement Glass
RPL-DIF-24211 - Replacement Diffuser



WS-W24211

Model & Size	Color Temp	Finish	LED Watts	LED Lumens	Delivered Lumens
WS-W24211 11"	3000K	BK Black	7.6W	500	189

Example: **WS-W24211-BK**
For custom requests please contact customs@modernforms.com

ModernForms.com | Phone: (856) 810-6615 | Fax (800) 526-2585
Central Distribution Center: 1600 Distribution Ct, Lithia Springs, GA 30122
Western Distribution Center: 1750 Archibald Avenue, Ontario, CA 91760

MODERN FORMS

LIGHTING SPECIFICATIONS

DATE:10-10-24
JOB NO.: 2024-047

LD3.1

LEAL RANCH
EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE. LONG BEACH, CA 90806-2213, USA
T: 562.989.3843 F: 562.989.3647
www.LightingDesignAlliance.com

LIGHT FIXTURE - TYPE DW1



Project:

Location:

Fixture Type:

Catalog Number:

AVAILABLE FINISHES:

Cambridge

WS-W24218

PRODUCT DESCRIPTION

A classic sensibility with timeless style. This exterior LED wall luminaire beckons like a glowing lantern to welcome guests to your fine home. Available in three sizes.

FEATURES

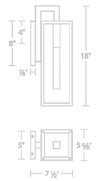
- Driver concealed within the canopy
- Diffuser rotates up to 45 degrees for a modern twist to the classic lantern design
- Clear glass panels are framed with an etched border
- IDA Dark Sky compliant

SPECIFICATIONS

Rated Life	50000 Hours
Standards	ETL, cETL,Wet Location Listed,IP65,Dark Sky Friendly
Input	120/277V,50/60Hz
Dimming	ELV: 100-5%,TRIAC: 100-10%
Mounting	Can be mounted on wall vertically or upside down
Color Temp	3000K
CRI	90
Construction	Extruded aluminum body and etched acrylic diffuser framed in clear glass panels etched along the border

REPLACEMENT PARTS

RPL-GLA-24218 - Replacement Glass
RPL-DIF-24218 - Replacement Diffuser



WS-W24218

Model & Size	Color Temp	Finish	LED Watts	LED Lumens	Delivered Lumens
○ WS-W24218 18"	3000K	○ BK Black	11.7W	800	378

Example: **WS-W24218-BK**

For custom requests please contact customs@modernforms.com

ModernForms.com | Phone: (866) 810-6615 | Fax (800) 526-2585
Central Distribution Center: 1600 Distribution Ct, Lithia Springs, GA 30122
Western Distribution Center: 1750 Archibald Avenue, Ontario, CA 91760

MODERN FORMS

LIGHT FIXTURE - TYPE DW1



Project:

Location:

Fixture Type:

Catalog Number:

AVAILABLE FINISHES:

Cambridge

WS-W24225

PRODUCT DESCRIPTION

A classic sensibility with timeless style. This exterior LED wall luminaire beckons like a glowing lantern to welcome guests to your fine home. Available in three sizes.

FEATURES

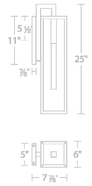
- Driver concealed within the canopy
- Diffuser rotates up to 45 degrees for a modern twist to the classic lantern design
- Clear glass panels are framed with an etched border
- IDA Dark Sky compliant

SPECIFICATIONS

Rated Life	50000 Hours
Standards	ETL, cETL,Wet Location Listed,IP65,Dark Sky Friendly
Input	120/277V,50/60Hz
Dimming	ELV: 100-5%,TRIAC: 100-10%
Mounting	Can be mounted on wall vertically or upside down
Color Temp	3000K
CRI	90
Construction	Extruded aluminum body and etched acrylic diffuser framed in clear glass panels etched along the border

REPLACEMENT PARTS

RPL-GLA-24225 - Replacement Glass
RPL-DIF-24225 - Replacement Diffuser



WS-W24225

Model & Size	Color Temp	Finish	LED Watts	LED Lumens	Delivered Lumens
○ WS-W24225 25"	3000K	○ BK Black	16.8W	1200	335

Example: **WS-W24225-BK**

For custom requests please contact customs@modernforms.com

ModernForms.com | Phone: (866) 810-6615 | Fax (800) 526-2585
Central Distribution Center: 1600 Distribution Ct, Lithia Springs, GA 30122
Western Distribution Center: 1750 Archibald Avenue, Ontario, CA 91760

MODERN FORMS

LIGHT FIXTURE - TYPE DW2

ANGLE REFLECTOR

Aluminum Shade with Glass and Guard Options

RA8, RA10, RA12

SPEC-00021 UPDATED 07/14/2022

PROJECT:

NOTE:

ELECTRICAL

- 120V input (277V available in arm and post option only)
- Integrated power supply allows the fixture to be connected directly into line voltage
- Pre-wired and ready for install
- LED is dimmable with Incandescent/Triac dimmers

MOUNTING

- ½" or ¾" IP for arms. Flush mount available only in ½"

FINISHES

- Shade and mounting finish options
- Available in 22 standard and 1 specialty finishes with optional coastal coating to protect finish in coastal environments (add "-C" to the finish)
- Inner shade is painted gloss white
- Consult factory for custom finish options

OPTIONAL ACCESSORIES

Glass, Cast Guard, Wire Cage or Wire Guard options available

LISTING

UL listed to US and Canadian standards for wet locations



ANGLE REFLECTOR ORDER MATRIX (EXAMPLE: RA10LED1227BK-2)

Diameter	Lamp / LED	Finish	Coastal Coating	Accessories	Mounting Type
☐ RA8 (8")	☐ M (Medium Base, 100W max.)	☐ ABL (Aegean Blue)	☐ (blank) (No Coating)	☐ (blank) (No Accessories)	☐ -2 (½" IP)
☐ RA10 (10")	☐ LED1227[2,3] (12W LED, 2700K, 90 CRI, 844lm)	☐ BB (Burnished Bronze)	☐ -C (Coating)	☐ -CG (Clear Glass w/ Cast Guard)	☐ -3 (¾" IP)
☐ RA12 (12")	☐ LED1230[2,3] (12W LED, 3000K, 90 CRI, 861lm)	☐ BK (Gloss Black)		☐ -FG (Frosted Glass)	☐ -F (Flush Mount)
	☐ LED1235[2,3] (12W LED, 3500K, 90 CRI, 872lm)	☐ BLU (Blue)		☐ -CGG (Clear Glass w/ Cast Guard)	
	☐ LED1240[2,3] (12W LED, 4000K, 90 CRI, 880lm)	☐ DVG (Dove Gray)		☐ -FGG (Frosted Glass w/ Cast Guard)	
	☐ LED1827[2,3] (18W LED, 2700K, 90 CRI, 1265lm)	☐ FLG (Flannel Gray)		☐ -CGWC (Clear Glass w/ Wire Cage)	
	☐ LED1830[2,3] (18W LED, 3000K, 90 CRI, 1288lm)	☐ GA (Galvanized)		☐ -FGWC (Frosted Glass w/ Wire Cage)	
	☐ LED1835[2,3] (18W LED, 3500K, 90 CRI, 1311lm)	☐ LG (Lime Green)		☐ -WG (Wire Guard)	
	☐ LED1840[2,3] (18W LED, 4000K, 90 CRI, 1334lm)	☐ MB (Matte Black)			
		☐ MBL (Midnight Blue)			
		☐ PNA (Painted Natural Aluminum)			
		☐ PNC (Painted Natural Copper)			
		☐ RD (Red)			
		☐ SGR (Sage Green)			
		☐ SGW (Semi Gloss White)			
		☐ SND (Sand)			
		☐ SS (Satin Silver)			
		☐ TBZ (Textured Bronze)			
		☐ TGP (Textured Graphite)			
		☐ TNG (Tangerine)			
		☐ TTL (Tahitian Teal)			
		☐ WT (Gloss White)			
		☐ YEL (Yellow)			

1. Lamps must be specified, and are not included in shade cost
2. Glass enclosure must be specified
3. Lumen are raw LED value

STANDARD FINISHES

ABL (Aegean Blue) · BB (Burnished Bronze) · BK (Gloss Black) · BLU (Blue) · DVG (Dove Gray) · FLG (Flannel Gray) · LG (Lime Green) · MB (Matte Black) · MBL (Midnight Blue) · PNA (Painted Natural Aluminum) · PNC (Painted Natural Copper) · RD (Red) · SGR (Sage Green) · SGW (Semi Gloss White) · SND (Sand) · SS (Satin Silver) · TBZ (Textured Bronze) · TGP (Textured Graphite) · TNG (Tangerine) · TTL (Tahitian Teal) · WT (Gloss White) · YEL (Yellow)

SPECIALTY FINISHES

GA (Galvanized)

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LIGHT FIXTURE - TYPE DW2

ANGLE REFLECTOR

Aluminum Shade with Glass and Guard Options

RA8, RA10, RA12

SPEC-00021 UPDATED 07/14/2022

PROJECT:

NOTE:

ARM MOUNT ORDER MATRIX (EXAMPLE: 2SL30BK)

Pipe Size	Arm Type	Finish	Coastal Coating	Input Voltage
☐ 2 (¾" IP)	☐ SL23 (Small Loop- 23")	☐ ABL (Aegean Blue)	☐ (blank) (No coating)	☐ (blank) (120V)
☐ 3 (¾" IP)	☐ SL30 (Small Loop- 30")	☐ BB (Burnished Bronze)	☐ -C (Coating)	☐ -27 (277V)
	☐ LL23 (Large Loop - 23")	☐ BK (Gloss Black)		
	☐ LL30 (Large Loop - 30")	☐ BLU (Blue)		
	☐ LC18 (Curve Arm - 18")	☐ DVG (Dove Gray)		
	☐ LC24 (Curve Arm - 24")	☐ FLG (Flannel Gray)		
	☐ LC30 (Curve Arm - 30")	☐ GA (Galvanized)		
	☐ LM18 (Miter Arm - 18")	☐ LG (Lime Green)		
	☐ LM24 (Miter Arm - 24")	☐ MB (Matte Black)		
	☐ LM30 (Miter Arm - 30")	☐ MBL (Midnight Blue)		
	☐ SA18 (Sign Arm - 18")	☐ PNA (Painted Natural Aluminum)		
	☐ SA23 (Sign Arm - 23")	☐ PNC (Painted Natural Copper)		
	☐ LSA23 (Large Loop Sign Arm - 23")	☐ RD (Red)		
	☐ LSA30 (Large Loop Sign Arm - 30")	☐ SGR (Sage Green)		
	☐ A6 (Straight Arm - 6")	☐ SGW (Semi Gloss White)		
	☐ A12 (Straight Arm - 12")	☐ SND (Sand)		
	☐ A18 (Straight Arm - 18")	☐ SS (Satin Silver)		
	☐ A24 (Straight Arm - 24")	☐ TBZ (Textured Bronze)		
	☐ A30 (Straight Arm - 30")	☐ TGP (Textured Graphite)		
	☐ MA18 (Modern Arm - 18")	☐ TNG (Tangerine)		
	☐ MA24 (Modern Arm - 24")	☐ TTL (Tahitian Teal)		
	☐ MA30 (Modern Arm - 30")	☐ WT (Gloss White)		
		☐ YEL (Yellow)		

STANDARD FINISHES

ABL (Aegean Blue) · BB (Burnished Bronze) · BK (Gloss Black) · BLU (Blue) · DVG (Dove Gray) · FLG (Flannel Gray) · LG (Lime Green) · MB (Matte Black) · MBL (Midnight Blue) · PNA (Painted Natural Aluminum) · PNC (Painted Natural Copper) · RD (Red) · SGR (Sage Green) · SGW (Semi Gloss White) · SND (Sand) · SS (Satin Silver) · TBZ (Textured Bronze) · TGP (Textured Graphite) · TNG (Tangerine) · TTL (Tahitian Teal) · WT (Gloss White) · YEL (Yellow)

SPECIALTY FINISHES

GA (Galvanized)

Note: All arm mounts include canopy

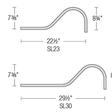
120V CANOPY



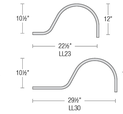
277V CANOPY



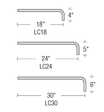
SMALL LOOP ARM



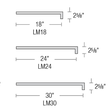
LARGE LOOP ARM



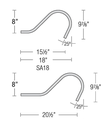
CURVE ARM



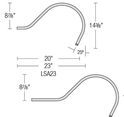
MITER ARM



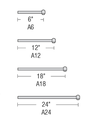
SIGN ARM



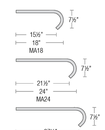
LARGE LOOP SIGN ARM



STRAIGHT ARM



MODERN ARM



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LIGHT FIXTURE - TYPE DW2

ANGLE REFLECTOR

Aluminum Shade with Glass and Guard Options

RA8, RA10, RA12

SPEC-00021 UPDATED 07/14/2022

PROJECT:

NOTE:

GLASS AND GUARD OPTIONS

Optional

GLASS ENCLOSURE

- Glass is available in clear (-CG) or frosted (-FG)

-CG (Clear Glass Enclosure)
-FG (Frosted Glass Enclosure)



CAST GUARD WITH GLASS ENCLOSURE

- Cast guard can be specified in all standard and specialized finishes, and will match shade finish unless otherwise specified (Note: For galvanized shade finishes, cast guard is unfinished Raw Aluminum)
- Glass is available in clear (-CGQ) or frosted (-FGQ)

-CGQ (Clear Glass w/ Cast Guard)
-FGQ (Frosted Glass w/ Cast Guard)



WIRE CAGE WITH GLASS ENCLOSURE

- Wire cage can be specified in all standard and specialized finishes, and will match shade finish unless otherwise specified (Note: For galvanized shade finishes, wire cage is finished in Painted Natural Aluminum)
- Glass is available in clear (-CGWC) or frosted (-FGWC)
- See fixture pages for availability

-CGWC (Clear Glass w/ Wire Cage)
-FGWC (Frosted Glass w/ Wire Cage)



WIRE GUARD

- Wire guard can be specified in all standard and specialized finishes, and will match shade finish unless otherwise specified (Note: For galvanized shade finishes, wire guard is finished in Painted Natural Aluminum)
- See fixture pages for availability

-WG (Wire Guard)



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LIGHT FIXTURE - TYPE DW2

ANGLE REFLECTOR

Aluminum Shade with Glass and Guard Options

RA8, RA10, RA12

SPEC-00021 UPDATED 07/14/2022

PROJECT:

NOTE:

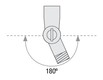
ACCESSORIES

KNUCKLE ACCESSORY ORDER MATRIX (EXAMPLE: 2KNLBK)

Pipe Size	Knuckle	Finish	Coastal Coating
☐ 2 (¾" IP)	☐ KNL (Adjustable 180° Knuckle for Arm Mounts)	☐ ABL (Aegean Blue)	☐ (blank) (No Coating)
☐ 3 (¾" IP)		☐ BB (Burnished Bronze)	☐ -C (Coating)
		☐ BK (Gloss Black)	
		☐ BLU (Blue)	
		☐ DVG (Dove Gray)	
		☐ FLG (Flannel Gray)	
		☐ GA (Galvanized)	
		☐ LG (Lime Green)	
		☐ MB (Matte Black)	
		☐ MBL (Midnight Blue)	
		☐ PNA (Painted Natural Aluminum)	
		☐ PNC (Painted Natural Copper)	
		☐ RD (Red)	
		☐ SGR (Sage Green)	
		☐ SGW (Semi Gloss White)	
		☐ SND (Sand)	
		☐ SS (Satin Silver)	
		☐ TBZ (Textured Bronze)	
		☐ TGP (Textured Graphite)	
		☐ TNG (Tangerine)	
		☐ TTL (Tahitian Teal)	
		☐ WT (Gloss White)	
		☐ YEL (Yellow)	

KNUCKLE ACCESSORY

Adjustable knuckle for arm mounts that allow luminaire to be rotated up to 180°.



STANDARD FINISHES

ABL (Aegean Blue) · BB (Burnished Bronze) · BK (Gloss Black) · BLU (Blue) · DVG (Dove Gray) · FLG (Flannel Gray) · LG (Lime Green) · MB (Matte Black) · MBL (Midnight Blue) · PNA (Painted Natural Aluminum) · PNC (Painted Natural Copper) · RD (Red) · SGR (Sage Green) · SGW (Semi Gloss White) · SND (Sand) · SS (Satin Silver) · TBZ (Textured Bronze) · TGP (Textured Graphite) · TNG (Tangerine) · TTL (Tahitian Teal) · WT (Gloss White) · YEL (Yellow)

SPECIALTY FINISHES

GA (Galvanized)

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LIGHT FIXTURE - TYPE DW2

ANGLE REFLECTOR

Aluminum Shade with Glass and Guard Options

RA8, RA10, RA12

SPEC-00021 UPDATED 07/14/2022

PROJECT:

NOTE:

FINISHES

STANDARD FINISHES



SPECIALTY FINISHES



GA
Galvanized

5 / 5

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LIGHT FIXTURE - TYPE DW3

WAC LIGHTING

Caliber

Outdoor Wall Sconce 3000K

Fixture Type:

Catalog Number:

Project:

Location:

Model & Size	Color Temp & CRI	Watt	Lumens	Finish
○ WS-W36610 10" 1 Light	○ 3000K 90	11W	560	○ AL Brushed Aluminum ○ BK Black ○ BZ Bronze

Example: **WS-W36610-BZ**

For custom requests please contact customs@waclighting.com

DESCRIPTION

Light projection tuned with precision.

FEATURES

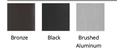
- Discrete cylinder with minimal mounting hardware
- Weather-resistant powder coated finish
- WS-W36614 is Up & down light, WS-W36610 is one direction
- Light engine is factory sealed for maximum protection from the elements
- Driver concealed within the fixture
- 5 year warranty

SPECIFICATIONS

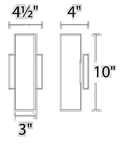
Color Temp:	3000K
Input:	120-277V,50/60Hz
CRI:	90
Dimming:	ELV: 100-10%
Rated Life:	72000 Hours
Mounting:	Can be mounted on wall vertically or horizontally
Standards:	ETL, cETLJP65 Wet Location Listed
Construction:	Aluminum hardware with lens diffuser



FINISHES:



LINE DRAWING:



WS-W36610

waclighting.com | Phone (800) 526.2588 | Fax (800) 526.2585 | Headquarters/Eastern Distribution Center 44 Harbor Park Drive Port Washington, NY 11050

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. August 2023

1

LEAL RANCH

EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

LD3.2 - LIGHTING SPECIFICATIONS

DATE: 09-23-24
JOB NO.: 2024-047

LD3.2

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE. LONG BEACH, CA 90806-2213, USA
T: 562.989.3843 F: 562.989.3847
www.LightingDesignAlliance.com

LIGHT FIXTURE - TYPE DW3

WAC LIGHTING

Caliber

Outdoor Wall Sconce 3000K

Fixture Type:
Catalog Number:
Project:
Location:

Model & Size	Color Temp & CRI	Watt	Lumens	Finish
❑ WS-W36614 14" - 2 Lights	❑ 3000K 90	21W	1140	❑ AL Brushed Aluminum ❑ BK Black ❑ BZ Bronze

Example: **WS-W36614-BZ**

For custom requests please contact customs@waclighting.com

DESCRIPTION

Light projection tuned with precision.

FEATURES

- Discrete cylinder with minimal mounting hardware
- Weather-resistant powder coated finish
- WS-W36614 is Up & down light, WS-W36610 is one direction
- Light engine is factory sealed for maximum protection from the elements
- Driver concealed within the fixture
- 5 year warranty

SPECIFICATIONS

Color Temp:	3000K
Input:	120-277V,50/60Hz
CRI:	90
Dimming:	ELV: 100-10%
Rated Life:	72000 Hours
Mounting:	Can be mounted on wall in all orientations
Standards:	ETL, cETL,IP65
	Wet Location Listed
Construction:	Aluminum hardware with lens diffuser

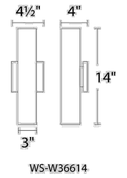


FINISHES:



Bronze Black Brushed Aluminum

LINE DRAWING:



WS-W36614

LIGHT FIXTURE - TYPE LS1

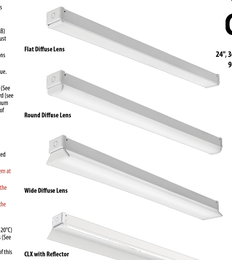
LITHONIA LIGHTING®

Catalog Number
Notes
Type

LED Linear

CLX

24", 36", 48" and 96" Lengths



FEATURES & SPECIFICATIONS

INTENDED USE — The CLX is a linear lighting solution that is available in multiple lengths, lumen packages and distributions. Designed for versatility, the CLX can address virtually any indoor lighting need. The CLX is also offered in standard and high efficacy configurations and capable of being continuous row mounted or installed as a stand-alone fixture. Ideal for uplight and downlight in commercial, retail, manufacturing, warehouse, and display applications. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. Click here for Acrylic/Polycarbonate Compatibility table for available sizes.**

CONSTRUCTION — Channel and cover are formed from code-gauge cold-rolled steel. Housing and lens endcaps are injection molded plastic to provide a more architectural look and feel. The endcaps come standard with a 7/8" knock out for continuous mounting but can be ordered without.

Finish: Paint options include high-gloss, baked white polyester (WH), galvanized (GALV), matte black (MB) and smoke gray (SMGY). Five-stage iron phosphate pre-treatment ensures superior paint adhesion and rust resistance.

OPTICS — Offered with acrylic lens and less lens configurations. Provides a choice of optical distributions including, wide, narrow, and axile.

Models with wide diffuse lens provide up to 12% uplight. Please check the IES file for specific uplight value.

ELECTRICAL — Utilizes high-output LEDs integrated on a two-layer circuit board, ensuring cool-running operation. Optional internal pluggable wiring harness for reduced labor cost in row mounting applications. (See PLR_ ordering information on page 7.) Electronic LED driver is multi-volt input and 0-10V dimming standard (see Operational Data on page 6 for actual wattage consumption). This fixture is designed to withstand a maximum line surge of 2.5kV at 0.75kA combination wave for indoor locations. For applications requiring higher level of protection additional surge protection must be provided.

L70>100,000 hours at 25˚C.

LEDs provide nominal 80 CRI or 90 CRI at 3000 K, 3500 K, 4000 K, or 5000 K.

Lumen output up to 2,500 lumens per foot.

INSTALLATION — Fixture may be ceiling or wall mounted (with or without THCLX hanger or angle mounted with CLXANGBKT), pendant or stem mounted with appropriate mounting options.

WARNING — Removing the lens and opening the fixture during installation exposes the LEDs, putting them at risk for damage.

If you plan to surface mount the fixture, we recommend using the THCLX. This eliminates the need to open the fixture.

If you plan to continuous row mount, we recommend using the PLR wiring harness option. This eliminates the need to open the fixture.

Damage to the LEDs caused during installation will not be covered under the warranty.

LISTINGS — CSA certified to US and Canadian safety standards. For use in damp locations between -4°F (-20°C) and 104°F (40°C). Optional High Ambient (HA) ranging to 122°F(50°C) available on certain lumen packages (See ambient temperature chart for additional information.).

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Stock configurations are offered for shorter lead times:

Stock Part Number	UPC
CLX L48 3000LM SEF FDL MVOLT GZ10 40K 80CRI WH	00191723525816
CLX L48 3000LM SEF FDL MVOLT GZ10 50K 80CRI WH	00191723525885
CLX L48 5000LM SEF FDL MVOLT GZ10 40K 80CRI WH	00191723525939
CLX L48 5000LM SEF FDL MVOLT GZ10 50K 80CRI WH	00191723525908
CLX L96 6000LM SEF FDL MVOLT GZ10 40K 80CRI WH	00191723525861
CLX L96 6000LM SEF FDL MVOLT GZ10 50K 80CRI WH	00191723525915
CLX L96 10000LM SEF FDL MVOLT GZ10 40K 80CRI WH	00191723525922
CLX L96 10000LM SEF FDL MVOLT GZ10 50K 80CRI WH	00191723525830
CLX L48 3000LM SEF RDL MVOLT GZ10 40K 80CRI WH	00191723525960
CLX L48 3000LM SEF RDL MVOLT GZ10 50K 80CRI WH	00191723525892
CLX L48 5000LM SEF RDL MVOLT GZ10 40K 80CRI WH	00191723525854
CLX L48 5000LM SEF RDL MVOLT GZ10 50K 80CRI WH	00191723525946
CLX L96 6000LM SEF RDL MVOLT GZ10 40K 80CRI WH	00191723525878
CLX L96 6000LM SEF RDL MVOLT GZ10 50K 80CRI WH	00191723525823
CLX L96 10000LM SEF RDL MVOLT GZ10 40K 80CRI WH	00191723525953
CLX L96 10000LM SEF RDL MVOLT GZ10 50K 80CRI WH	00191723525847

LIGHT FIXTURE - TYPE LS1

CLX LED Linear

Design Select options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** CLX L48 5000LM SEF WDL MVOLT GZ10 40K 80CRI WH

Series	Length	Nominal lumens	Performance package	Louver	Lens
CLX LED linear	L24 24"	1500LM 1,500 lumens 2000LM 2,000 lumens 2500LM 2,500 lumens 3500LM 3,500 lumens 4500LM 4,500 lumens 5000LM 5,000 lumens	SEF Standard efficiency HEF Premium efficiency	(Blank) Less louver SBLW Straight blade louver, white SBLMB Straight blade louver, matte black SBLGV Straight blade louver, galvanized SBLSMGY Straight blade louver, smoke gray	L/Less Less lens FDL Flat diffuse RDL Round diffuse WDL Wide diffuse
	L36 36"	2250LM 2,250 lumens 3000LM 3,000 lumens 3750LM 3,750 lumens 5250LM 5,250 lumens 6750LM 6,750 lumens 7500LM 7,500 lumens			
	L48 48"	3000LM 3,000 lumens 4000LM 4,000 lumens 5000LM 5,000 lumens 7000LM 7,000 lumens 9000LM 9,000 lumens 10000LM 10,000 lumens			
	L96 96"	6000LM 6,000 lumens 8000LM 8,000 lumens 10000LM 10,000 lumens 14000LM 14,000 lumens 18000LM 18,000 lumens 20000LM 20,000 lumens			

Distribution	Voltage	Driver	Glare Reflector	Color temperature	Coloring rendering index
(Blank) General ND Narrow WD Wide AXD Axile, 24° off center	MVOLT 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	GZ1 Generic 0-10V, dims to 1% GZ10 Generic 0-10V, dims to 10% EZ1 eldoLED 0-10V, dims to 1%	(blank) No reflectors LUGR Reflectors for additional glare reduction	30K 3000K 35K 3500K 40K 4000K 50K 5000K	80CRI 80 CRI 90CRI 90 CRI

Options			Finish
PS1050	Emergency battery pack, 10W, CA Title 20 Noncompliant	PLR_ Plug-in wiring, see page 14 for ordering information	WH White
E10WLCP	Emergency battery pack, 10W Linear Constant Power, Certified in CA Title 20 MAEDBS	PLR1G Plug-in wiring, single circuit, Gen2	GALVW Galvanized with white lens end caps
BGTD	Generator transfer device, not available with PS1050	PLR1LVG Plug-in wiring, single-circuit, low voltage dimming, Gen2	GALVB Galvanized with black lens end caps
DCS	5", 18/3 Relay selectable One Pass cable (fixture will bear dry location label)	RRL_ RELOC® ready luminaire. See page 14 for ordering information	MB Matte black
HA	High ambient, for use in ambient temperatures up to 50°C	SPD Surge protection device, provides up to 6kV protection	SMGYW Smoke gray with white lens end caps
EPKIO	Decorative endplate, no knock out	BAA Buy American(n) Act Compliant	SMGYB Smoke gray with black lens end caps
OUTCTR	Wiring leads pulled through back center of fixture	nLight® Wireless:	
OUTEND	Wiring leads pulled through end of fixture	NLTAIR2 RES7 nLight® Generation 2 enabled PIR integral occupancy sensor with automatic dimming photocell	
Cord Sets:		NLTAIR2 RES7POT nLight AIR Generation 2 enabled dual technology integral occupancy sensor with automatic dimming photocell	
CSTW	6' Straight blade plug, 120V	NLTAIR2 RIO No sensor control	
CSXW	NEMA twist-lock plug, 120V		
CSJW	Straight blade plug, 277V		
CSTTW	NEMA twist-lock plug, 277V		
CSJ18W	NEMA twist-lock plug, 347V		
CS97W	NEMA twist-lock plug, 480V		
CS90W	600V SEOOW white cord, no plug (no voltage required)		
CSAWG16STOWDSO	6' white cord, 16/5, no plug, includes low voltage dimming wires (no voltage required)		

nLight® Wired:	
NT00	nLight® without lumen management
NT00EMG	nLight® without lumen management For use with generator supply 1at power
NES7	nLight® nES 7 PIR integral occupancy sensor
NESPDT7	nLight® nES PDT 7 dual technology integral occupancy control
NES7ADCX	nLight® nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell
NESPDT7ADCX	nLight® nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell
Individual controls:	
MSD7	PIR integral occupancy sensor
MSDPDT7	PDT 7 dual technology integral occupancy control
MSD7ADC	PIR integral occupancy sensor with automatic dimming control photocell
MSDPDT7ADC	PDT integral occupancy sensor with automatic dimming control photocell

See Accessories and footnotes on next page

LIGHT FIXTURE - TYPE LS1

CLX LED Linear

Accessories: *Order as separate catalog number.*

Mounting:			
ZACWM1030	Adjustable 10' aircraft cable with Y hanger (1 pair)	SQ_	Swivel stem hanger (specify length in 2" increments up to 48") Ships White
ZAC120	One adjustable aircraft cable with canopy 120", white	THCLX ____	Tong hanger (Must specify color) (one pair)
ZACFP120	One adjustable aircraft cable with feed (1 conductor) and canopy, 120", white	CLXANGBKT ____	Angle bracket, (Must specify color) (one pair)
ZACFP120	One adjustable aircraft cable with feed (5 conductor) and canopy 120", white	HCMs M12	Hanger chain, 36" (1 pair)
ZAC240	One adjustable aircraft cable with canopy 240", white		
ZACFP240	One adjustable aircraft cable with feed (1 conductor) and canopy, 240", white	Wireguards:	
ZACFP0240	One adjustable aircraft cable with feed (5 conductor) and canopy 240", white	WGLX24_____	24" wireguard, (Must specify color)
		WGLX36_____	36" wireguard, (Must specify color)
		WGLX48_____	48" wireguard, XX, (Must specify color) 96" fixture requires two

4 Option Value Ordering Restrictions

Option value	Restriction
347V, 480V	Voltage selected utilizes a step-down transformer. Not available with L24 when ordered with N100. Not available with PS1050, E10WLCP or BGTD option.
BGTD	Not available with MVOLT, 208V or 240V. Not available with HA. Available with L48 or L96 only. 20 Not available with PS1050 or E10WLCP options. Not available with 208 or 240V. Not available Individual controls, NLight Wired, or NLight Wireless options.
CSTW, CSTW, CSTW, CSTTW, CS25W, CS97W	Not available with BGTD option. Must specify voltage.
CSAWG16STOWDSO	Not available with Individual controls, nLight wired networking, nLight wireless networking, nLight wireless zone control options.
Driver	When continuous row mounting, fixtures must all have the same driver selection.
E10WLCP	Not available with OUTCH, Not available with HA. Not available with 347V or 480V. Not available with BGTD option. Requires SPD option. Not available with L24 or L36. Not available with L48 in combination with N100.
EPKNO	Not available OUTEND.
EZ1	Not available with HA option. Not available with 5000LM ,7500LM .
FDL, RDL, WDL	Only available with general distribution. Not available with CLXRN accessories.
GZ1, GZ10	Not available with Individual controls, nLight wired networking, nLight wireless networking, nLight wireless zone control options.
HA	Not available with L24, L26. Not available with BGTD option. Not available with EZ1. Only available with L48 3000/4000/5000LM and L96 6000/8000/10000LM.
HEF	not available with L48 3000LM and L96 6000LM
LUGR	Not available with L36 length. Only available with WH finish. Not compatible with THCLX Hanger or wireguard accessories. LUGR option required for some DLC premium qualifications - Please check the DLC Qualified Products List to determine if LUGR option is necessary to meet requirement. If mounting in continuous rows, ensure all models ordered with LUGR option if required on any configuration to ensure max match to form factor. LUGR reflectors ship in standard flatter carton and are not sold as separate accessory - this option MUST be specified as part of the CLX model number.
MSD7, MSDPDT7, MSD7ADC, MSDPDT7ADC	Not available with any other control option. Requires E7. Sensor housing will be be same color as lens end caps.
N100, N100EMG	nLight EMG option requires a connection to existing nLight network. Power is provided from separate N100 enabled fixture.
ND, WD, AD2	Not available with CLXRN accessories. Available L1/ENS only.
NES7, NESPDT7, NES7ADCX, NESPDT7ADCX	Not available with any other control option. Requires E7. Requires N100 or N100EMG option, N100EMG with NES7 requires HFA. Sensor housing will be be same color as lens end caps.
NLTAIR2 RES7, NLTAIR2 RESSPDT, NLTAIR2 RIO	Not available with 10000LM in L48, 14000LM, 18000LM, 20000LM in L96. Sensor housing will be be same color as lens end caps.
OCS	Must specify voltage.
OUTCH	Not available with L24, Not available with PLR options.
OUTEND	Not available with PLR options.
PLR1EVG	Not available with Individual controls, NLight Wired, or NLight Wireless options. Refer to page 14 for more PLR details.
PS1050	Not available with 347V or 480V. Not available with BGTD option. Requires SPD option. Not available with L24 or L36. Not available with L48 in combination with N100. Not available with HA.
SBLW, SBLMB, SBLGV, SBLSMGY	When ordered with L24 only available with 1500LM or 2000LM in combination with GZ10 driver. Not for use with THCLX, CLXANGBKT or WGCLX accessories. Not available with RDL lens options.
SEF	Not available with EZ1 when ordered with L24 with 5000LM or L36 with 7500LM.
SPD	Required with PS1050, E10WLCP, BGTD, BAD, or XATOLX.
THCLX_____CLXANGBKT	Not available with louver or wireguards. THCLX_____ not available with LUGR.
Wireguards	Not for use with LUGR option.

LIGHT FIXTURE - TYPE LS1

CLX LED Linear

OPTIONS AND ACCESSORIES



Wireguard
Ships separately from fixture. 96" fixture requires two WGCLX48.
Order as:
WGCLX24_____
WGCLX36_____
WGCLX48_____

LUGR glare reflector
NOT available as accessory - must be specified as part of the fixture nomenclature. See ordering notes on page 3.



Aircraft Cable with Canopy
Available in 120" or 240"
Order as:
ZAC120
ZAC240



HANGER CHAIN
36" chain with Y hanger. ships as a pair
Order as:
HC36



ZACYH HANGER
10' Aircraft cable with Y hanger.
Order as:
ZACYH



Tong hanger
Ships as a pair
Order As:
THCLX____

LIGHT FIXTURE - TYPE LS1

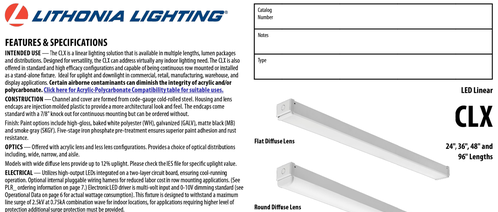
CLX LED Linear

DIMENSIONS

All dimensions are in inches (centimeters) unless otherwise indicated.
Dimensions may vary with options or accessories.

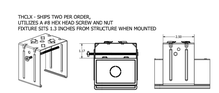
INTEGRATED SENSOR ADDS 2.0 INCHES TO STANDALONE FIXTURE LENGTH
HOUSING END CAP ADDS 0.236 INCHES TO FIXTURE LENGTH PER SIDE. DIMENSIONS BELOW INCLUDE ENDCAPS.

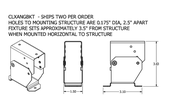
A - 7/8" KNOCK OUT
B - 0.5" by 0.10" SLOT
C - 0.3" DIA HOLE

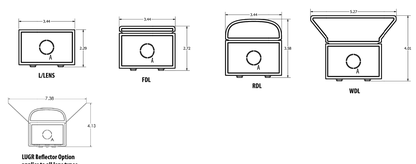


PALLET DIMENSIONS

Length	Approx Weight	Fixtures per pallet	Pallet Dims (L X W X H)
L24	4 lb	100	54x46x37
L36	5 lb	80	54x46x37
L48	7.5 lb	64	54x46x37
L96	14 lb	64	98x46x37







PHOTOMETRICS

See www.lithonia.com.

LIGHT FIXTURE - TYPE LS1

CLX LED Linear

POWER SENTRY EMERGENCY BATTERY PACKS

		SEF Emergency Lumens	HEF Emergency Lumens
PS1050	Factory installable	1400	1500
E10WLCP	Factory installable	1400	1500
PS1355SCP	Field installable, remote mount only	2000	2100

Note: For emergency lumen output of specific model, please consult factory. One board will be illuminated during emergency operation.

CLX CHARACTERISTICS

Nominal Lumen Package	Length	Wattage								Length	Width	Depth	Comparable Light Source
		Standard Efficiency				High Efficiency							
		120V	277V	347V	480V	120V	277V	347V	480V	Dimensions are shown in inches			
2500LM	24"	18.4	18.4	24.0	24.0	17.4	17.4	23.1	23.1	24	3.5	3.75	1-lamp 32WTB, 1-lamp 54WT5HO, 50W HID
5000LM	24"	41.5	41.5	47.4	47.4	38.1	38.1	44.1	44.1	24	3.5	3.75	2-lamp 32WTB, 1-lamp 54WT5HO, 70W HID
3750LM	36"	26.5	26.5	32.1	32.1	25.1	25.1	30.7	30.7	36	3.5	3.75	1-lamp 32WTB, 1-lamp 54WT5HO, 50W HID
7500LM	36"	62.6	62.6	68.6	68.6	54.0	54.0	59.7	59.7	36	3.5	3.75	2-lamp 32WTB, 1-lamp 54WT5HO, 70W HID
5000LM	48"	31.8	31.8	37.2	37.2	30.3	30.3	35.8	35.8	48	3.5	3.75	2-lamp 32WTB, 1-lamp 54WT5HO, 70W HID
10000LM	48"	70.7	70.7	76.2	76.2	65.3	65.3	70.8	70.8	48	3.5	3.75	3-lamp 32WTB, 2-lamp 54WT5HO, 100W HID
10000LM	96"	63.7	63.7	69.0	69.0	60.6	60.6	66.1	66.1	96	3.5	3.75	3-lamp 32WTB, 2-lamp 54WT5HO, 100W HID
20000LM	96"	141.3	141.3	146.8	146.8	130.5	130.5	136.1	136.1	96	3.5	3.75	6-lamp 32WTB, 4-lamp 54WT5HO, 200W HID

Note: For wattage by configuration, please reference the CLX Operational Data Document.

Lumen Package	UGR Values of CLX L24 @ 80CRI and 3500K UGR (70% 50% 20% reflectance using a 4H x 8H room size)															
	FDL		RDL		WDL		FDL LUGR		RDL LUGR		WDL LUGR		L/ENS			
	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise		
1500LM SEF	21.2	23.8	19.4	25.2	17.4	21.1	16.8	14	17.8	16.6	18.1	17.9	24.9	25.1		
2000LM SEF	22.3	24.9	20.5	26.3	18.6	22.3	17.9	15.1	18.8	17.6	19.2	18.9	26.1	26.2		
2500LM SEF	23.1	25.7	21.3	27.1	19.4	23.1	18.6	15.8	19.6	18.4	19.9	19.7	26.9	27		
3500LM SEF	24.1	26.7	22.3	28.1	20.4	24.1	19.7	16.9	20.7	19.5	21	20.8	27.9	28.1		
4500LM SEF	25.4	28	23.6	29.4	21.7	25.4	20.7	17.9	21.7	20.5	22	21.8	29.2	29.3		
5000LM SEF	25.6	28.2	23.3	29.1	21.4	25.1	21	18.3	21.5	20.3	21.8	21.5	29.4	29.5		
1500LM HEF	21.1	23.7	19.3	25.1	21.8	25.5	16.5	13.7	17.6	16.3	17.8	17.6	24.9	25		
2000LM HEF	22.2	24.8	20.4	26.2	17.4	21.1	17.6	14.8	18.6	17.4	18.8	18.6	26	26.2		
2500LM HEF	23	25.7	21.3	27	18.5	22.2	18.4	15.6	19.4	18.2	19.7	19.4	26.8	27		
3500LM HEF	24.1	26.7	22.3	28.1	19.3	23	19.8	17	20.9	19.7	21.1	20.9	27.9	28		
4500LM HEF	25.3	27.9	23.5	29.3	20.4	24.1	20.8	18	21.8	20.6	22.1	21.8	29.1	29.3		
5000LM HEF	25.5	28.1	23.7	29.5	21.6	25.3	21.1	18.3	22.1	20.9	22.3	22.1	29.3	29.5		

UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application

LIGHT FIXTURE - TYPE LS1

CLX LED Linear

Lumen Package	UGR Values of CLX L36 @ 80CRI and 3500K UGR (70% 50% 20% reflectance using a 4H x 8H room size)															
	FDL		RDL		WDL		FDL LUGR		RDL LUGR		WDL LUGR		L/ENS			
	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise		
2250LM SEF	21.4	24.1	19.7	25.6	17.7	21.6	15.2	25.2	25.4							
3000LM SEF	22.3	25	20.6	26.5	18.6	22.5	16.2	26.2	26.3							
3750LM SEF	23.2	25.9	21.4	27.3	19.5	23.4	27	27.2								
5250LM SEF	24.2	26.9	22.5	28.4	20.5	24.4	28	28.2								
6750LM SEF	25.1	27.8	23.3	29.2	21.4	25.3	28.9	29								
7500LM SEF	25.4	28.1	23.6	29.5	21.7	25.6	29.2	29.4								
2250LM HEF	25	27.7	20.5	26.4	18.6	22.5	25.2	25.3								
3000LM HEF	25.3	28	21.4	27.3	19.4	23.3	26.1	26.2								
3750LM HEF	21.4	24.1	22.4	28.3	20.5	24.4	27	27.1								
5250LM HEF	22.3	25	23.2	29.2	21.3	25.2	28	28.1								
6750LM HEF	23.1	25.8	23.6	29.5	21.6	25.5	28.8	29								
7500LM HEF	24.2	26.8	19.6	25.5	17.7	21.6	29.1	29.3								

UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application

Lumen Package	UGR Values of CLX L48 @ 80CRI and 3500K UGR (70% 50% 20% reflectance using a 4H x 8H room size)															
	FDL		RDL		WDL		FDL LUGR		RDL LUGR		WDL LUGR		L/ENS			
	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise		
3000LM SEF	21.8	24.5	19.7	25.3	18.6	23.4	19.2	16.5	20.2	19	20.6	20.3	24.8	25.6		
4000LM SEF	22.8	25.5	20.7	26.3	19.6	24.4	20.3	17.5	21.2	20	21.6	21.4	25.8	26.6		
5000LM SEF	23.6	26.3	21.4	27	20.4	25.2	21	18.2	21.9	20.7	22.3	22.1	26.6	27.3		
7000LM SEF	24.8	27.6	22.7	28.3	21.6	26.5	22.3	19.6	23.3	22.1	23.7	23.4	27.8	28.6		
9000LM SEF	25.6	28.4	23.5	29.1	22.5	27.3	23.2	20.4	24.1	22.9	24.5	24.3	28.6	29.4		
10000LM SEF	26	28.7	23.8	29.5	22.8	27.6	23.6	20.8	24.5	23.3	24.9	24.7	29	29.8		
3000LM HEF	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
4000LM HEF	22.8	25.6	20.7	26.3	22.8	25.6	20.3	17.5	21.3	20.1	21.7	21.4	29.5	30.3		
5000LM HEF	23.6	26.3	21.4	27	23.6	26.3	21	18.2	21.9	20.7	22.3	22.1	30.2	31		
7000LM HEF	24.8	27.6	22.7	28.3	24.8	27.6	22.4	19.6	23.4	22.2	23.8	23.5	27.8	28.6		
9000LM HEF	25.7	28.4	23.6	29.2	25.7	28.4	23.2	20.4	24.2	23	24.6	24.3	28.7	29.5		
10000LM HEF	26	28.7	23.9	29.5	26	28.7	23.6	20.9	24.6	23.4	25	24.7	29	29.8		

UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application

LD3.3 - LIGHTING SPECIFICATIONS

DATE:10-10-24
JOB NO.: 2024-047

LD3.3

LEAL RANCH

EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

LIGHTINGDESIGNALLIANCE
2830 T

LIGHT FIXTURE - TYPE LS1

CLX LED Linear

Lumen Package	UGR Values of CLX L96 @ 80CRI and 3500K UGR (70% 50% 20% reflectance using a 4H x 8H room size)															
	FDL		RDL		WDL		FDL LUGR		RDL LUGR		WDL LUGR		L/LENS			
	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise	Crosswise	Endwise		
6000LM SEF	21.8	24.6	19.7	25.4	17.9	22.4	19.3	16.5	20.2	19	20.6	20.4	24.8	25.6		
8000LM SEF	22.8	25.5	20.7	26.4	18.8	23.4	20.3	17.6	21.2	20.1	21.6	21.4	25.8	26.6		
10000LM SEF	23.6	26.3	21.4	27.2	19.6	24.2	21	18.3	21.9	20.8	22.3	22.1	26.5	27.3		
14000LM SEF	24.8	27.6	22.7	28.5	20.9	25.5	22.4	19.6	23.3	22.1	23.7	23.5	27.8	28.6		
18000LM SEF	25.7	28.4	23.5	29.3	21.7	26.3	23.2	20.5	24.1	23	24.5	24.3	28.6	29.4		
20000LM SEF	26	28.7	23.9	29.6	22	26.6	23.6	20.9	24.5	23.4	24.9	24.7	29	29.7		
6000LM HEF	21.8	24.6	19.7	25.4	17.9	22.4	19.3	16.5	20.2	19	20.6	20.4	24.8	25.6		
8000LM HEF	22.8	25.6	20.7	26.5	18.9	23.5	20.4	17.6	21.3	20.1	21.7	21.5	25.8	26.6		
10000LM HEF	23.6	26.3	21.4	27.2	19.6	24.2	21	18.3	21.9	20.8	22.3	22.1	27	27.8		
14000LM HEF	24.9	27.6	22.7	28.5	20.9	25.5	22.4	19.7	23.4	22.2	23.8	23.5	27.8	28.6		
18000LM HEF	25.7	28.4	23.6	29.3	21.7	26.3	23.2	20.5	24.2	23	24.6	24.3	28.7	29.5		
20000LM HEF	26	28.8	23.9	29.6	22.1	26.6	23.7	20.9	24.6	23.4	25	24.8	29	29.8		

UGR scores based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire- UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application

COMMERCIAL INDOOR: One Lithonia Way, Conyers, GA 30012 Phone: 800-705-SERV (7378) techsupport-commercialindoor@acuitybrands.com www.lithonia.com

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LIGHT FIXTURE - TYPE LS1

CLX LED Linear

RRL - RELOC®-Ready Luminaire

- RRL connectors can be used with Quick-Flex®, System 820 and OnePass® systems.
- Load side of connector factory installed to luminaire.
- 4-pole mating connector with push-in terminations allows for simple installation.
- Touch-safe design on both halves meets UL/CSA requirement.
- Wiring contact design allows safe disconnect under load.



ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: RRLA

Series	Wiring instructions	
RRL RELOC® ready luminaire	A	Hot conductor wired to position #1 (phase A)
	B	Hot conductor wired to position #2 (phase B)
	C	Hot conductor wired to position #3 (phase C) 1

Compatible RELOC® Cables for Industrial Luminaires (ordered and shipped separately)



0C5 0CU 0D DC PT

Notes
1 C, ABE, and C135 options are not used with Quick-Flex QDC, QSFC, QPT, and QD.

PLUG-IN WIRING INFORMATION

Advanced plug-in system with two-circuit capability. Available on industrial and strip products and a variety of architectural products mounted in continuous rows. PLR22 (2-circuit) and crossover harness switches but circuit serving next fixture in row. Reduces fixture types on job for alternating circuit applications (see example below.)

Easy one-step installation, saves up to 35% on labor costs. Expanded switching flexibility helps save energy.

Rows can be 50% longer with two-circuit systems. Polarized, lock-together nylon connectors prevent miswiring in the field. #12 THHN conductor, rated 600V, 90°C. White neutral wire included. Grounding accomplished by fixture in-row connectors.

CSA certified systems available with up to 2-circuits. G-ground required.

Not for use with dedicated emergency circuits.

Note: Specifications subject to change without notice.



Wiring

PLR

Advanced 1 or 2-Circuit Plug-In

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Series	Number of hot wires		Branch circuits				Dimming	Ground
			Circuits to which driver is connected		Battery charging circuit (must be unswitched)			
PLR	(blank)	Not required for PLR22	(blank)	Not required for PLR22	(blank)	No battery charging circuit	LV Low-voltage dimming	G Ground (required)
PLR22	1	Black	A	Black wire	ELA	Battery pack wired to black wire		
	2	Black and red	B	Red wire	ELB	Battery pack wired to red wire		

Typical Applications

- Multiple-circuit and single-circuit for longer continuous rows
- Multiple-circuit with alternating fixtures or separate circuits and 2-circuit PLR22
- Multiple circuit with night-lights located along row as desired

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LIGHT FIXTURE - TYPE PH1

Pole top luminaires with symmetrical light distribution

Housing/fitter: Die-cast aluminum construction with a spun aluminum cap. The fixture slip fits a 3" O.D. pole top or tenon and is secured by four (4) socket head stainless steel set screws threaded into stainless steel inserts. Die castings are marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy.

Enclosure: Molded ¼" high impact acrylic diffuser with light diffusing matte white surface.

Electrical: 23.4-W LED luminaire, 27 total system watts, -30° C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. Standard LED color temperature is 4000K with a >80 CRI. Available in 3000K (>80 CRI); add suffix K3 to order.

Note: Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

UL listed for US and Canadian Standards, suitable for wet locations. Protection class: IP65.

Weight: 22.0 lbs.

EPA (Effective projection area): 1.3 sq. ft.

Luminaire Lumens: 2654

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:





Lamp	A	B
77 120 23.4-W LED Recommended for use with 14' to 16' poles	25%	25%

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 FAX (805) 566-9474 www.bega-us.com

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LIGHT FIXTURE - TYPE PH2, PH2A

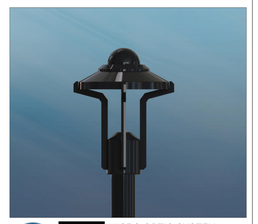
NLS LIGHTING **CAB-PT**

ARCHITECTURAL LIGHTING

CAB Post Mount is a combination of security, style and Vandal resistance that blends into any pathway environment.

With 16 LED offering, this luminaire ranges from 18 to 56 watts at beautiful Types 2, 3, 4, and 5 light distribution. Its illuminating glow is produced by Silicone Micro Optics. Kelvin temperature offering of 2700K, 3000K, 3500K, 4000K and 5000K is available.

It is finished with 3-5 mils of rich-textured powder coat and stainless steel hardware. Conforms to the strictest Made in America standards—designed, tooled, fabricated and assembled in the USA.



MICRO OPTIC SYSTEM

Our new cell-enclosed, micro optic silicone modules produce high clarity and outstanding performance.

LED WATTAGE CHART

	16L
350 milliamps	18w
530 milliamps	25w
700 milliamps	30w
1050 milliamps	40w

Project Name | Type:

Cat#	Light Dist.	# of LEDs	Milliamps	Kelvin	Volts	Mounting	Color	Options
Cab Post Top **(CAB-PT)**	Type 2 **(T2)**	16 **(16L)**	350 **(35)**	2700K, 70 CRI **(27K7)**	T20-277 **(UNV)**	Post Top Over 4" OD **(PTA)** ❶	Bronze Textured **(BRZ)**	Marine Grade Finish **(MGF)**
	Type 3 **(T3)**		530 **(53)**	2700K, 80 CRI **(27K8)** ❶			White Textured **(WHT)**	
	Type 4 **(T4)**		? 700 **(7)**	3000K, 70 CRI **(30K7)**			Smooth White Gloss **(SWT)**	House Side Shield **(HSS)**
	Type 5 **(T5)**		1050 **(1)**	3000K, 80 CRI **(30K8)** ❶			Silver **(SVN)**	
				3500K, 80 CRI **(35K8)**			Black Textured **(BLK)**	
				4000K, 70 CRI **(40K7)**			Smooth Black Gloss **(SBK)**	
				4000K, 80 CRI **(40K8)** ❶			Graphite Textured **(GPH)**	
				5000K, 70 CRI **(50K7)**			Grey Textured **(GRY)**	
				5000K, 80 CRI **(50K8)** ❶			Custom **(CS)**	

Notes:
❶ Consult Factory for Lead Time. Consult Factory for 90 CRI Requests.
❷ Consult factory for other provisions.

REV: 12.23.22

LIGHT FIXTURE - TYPE PH2, PH2A

PRODUCT SPECIFICATIONS

ELECTRICAL
- 120-277 Volts (UNV) or 347-480 Volts (HV)
- 0-10V dimming driver
- Driver power factor at maximum load is ≥ .95, THD maximum load is 15%
- LED Drivers Ambient Temp. Min is -40°C and Ambient Temp. Max ranges from 50°C to 55°C and, in some cases, even higher. Consult the factory for revalidation by providing the fixture catalog string before quoting and specifying it.
- All internal wiring UL certified for 600 VAC and 105°C
- CRI 70, 80 or 90
- Color temperatures: 2700K, 3000K, 3500K, 4000K, 5000K
- Surge Protection: 20KA supplied as standard.

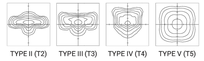
CONSTRUCTION
- Cast Aluminum

OPTIONS
- MARINE GRADE FINISH (MGF) - A multi-step process creating protective finishing coat against harsh environments. Chemically washed in a 5 stage cleaning system. Pre-baked, Powder coated 3-5 mils of Zinc Rich Super Durable Polyester Primer. Oven Baked. Finished Powder Coating of Super Durable Polyester Powder Coat 3-5 mil thickness.
- House Side Shield (HSS)

OPTICS

Silicone optics high photo-thermal stability and light output provides higher powered LEDs with minimized lumen depreciation LED life. UV and thermal stability with scratch resistance increases exterior application durability.

- IES Types



TYPE II (T2) TYPE III (T3) TYPE IV (T4) TYPE V (T5)

FINISH
- 3-5 mils electrostatic powder coat.
- NLS Light's standard high-quality finishes prevent corrosion protects against and extreme environmental conditions

WARRANTY

Five-year limited warranty for drivers and LEDs.

LISTINGS
- IK10 Rated

The information and specifications on this document are subject to change without any notification. All values are design, nominal, typical or prorated values when measured under internal and external laboratory conditions.

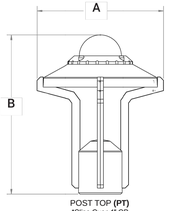
NLS LIGHTING 701 Kingshill Place, Carson, CA 90746 **Call Us Today** (310) 341-2037 **nlslighting.com**

LIGHT FIXTURE - TYPE PH2, PH2A

PRODUCT SPECIFICATIONS

CAB-PT - LUMEN DATA CHART

PART NUMBER	T2 OPTIC	Lm/W	B.U.G.	T3 OPTIC	Lm/W	B.U.G.	T4 OPTIC	Lm/W	B.U.G.	T5 OPTIC	Lm/W	B.U.G.	WATTS
CAB-16L-35-30K7	1908	106	B1-U3-G1	1890	105	B1-U3-G1	1836	102	B1-U0-G1	1962	109	B2-U2-G1	18
CAB-16L-35-40K7	1980	110	B1-U3-G1	1962	109	B1-U3-G1	1908	106	B1-U0-G1	2052	114	B2-U2-G1	18
CAB-16L-35-50K7	2052	114	B1-U3-G1	2034	113	B1-U3-G1	1980	110	B1-U0-G1	2124	118	B2-U2-G1	18
CAB-16L-53-30K7	2968	106	B1-U3-G1	2940	105	B1-U3-G1	2856	102	B1-U0-G1	3052	109	B2-U3-G1	28
CAB-16L-53-40K7	3080	110	B1-U3-G1	3052	109	B1-U3-G1	2968	106	B1-U0-G1	3192	114	B2-U3-G1	28
CAB-16L-53-50K7	3192	114	B1-U3-G1	3164	113	B1-U3-G1	3080	110	B1-U0-G1	3304	118	B2-U3-G1	28
CAB-16L-7-30K7	3816	106	B1-U3-G1	3780	105	B1-U3-G1	3672	102	B1-U0-G1	3924	109	B3-U3-G1	36
CAB-16L-7-40K7	3960	110	B1-U3-G1	3924	109	B1-U3-G1	3816	106	B1-U0-G1	4104	114	B3-U3-G1	36
CAB-16L-7-50K7	4104	114	B1-U3-G1	4068	113	B1-U3-G1	3960	110	B1-U0-G1	4248	118	B3-U3-G1	36
CAB-16L-1-30K7	5936	106	B1-U3-G1	5880	105	B1-U3-G1	5712	102	B1-U0-G2	6104	109	B3-U3-G1	56
CAB-16L-1-40K7	6160	110	B1-U3-G1	6104	109	B2-U3-G2	5936	106	B1-U0-G2	6384	114	B3-U3-G1	56
CAB-16L-1-50K7	6384	114	B1-U3-G1	6328	113	B1-U3-G1	6160	110	B1-U0-G2	6608	118	B3-U3-G1	56



POST TOP **(PT)**
"Slips Over 4" OD

DIMENSION	CAB-PT
A	13.27"
B	16.73"
C	-

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LIGHT FIXTURE - TYPE SD1

WAC LIGHTING

Downtown

Round Outdoor Ceiling Mount

Fixture Type:
Catalog Number:
Project:
Location:

Model & Size	Color Temp	Finish	LED Watts	LED Lumens	Delivered Lumens
❍ FM-W47205 5"	❍ 3000K ❍ 3500K ❍ 4000K	❍ BK Black ❍ WT White	11.9W 11.9W 11.9W	900 925 950	607 647 618

Example: **FM-W47205-40-WT**

For custom requests please contact customs@waclighting.com

FEATURES
- Built in color temperature adjustability. Switch from 3000K/3500K/4000K
- Option to pre-select color temperature or adjust in the field
- ACLED driverless technology
- 5 Year warranty

SPECIFICATIONS

Color Temp:	3500K,3000K,4000K
Input:	120 VAC,50/60Hz
CRI:	90
Dimming:	ELV: 100-10% ,TRIAC: 100-10%
Rated Life:	54000 Hours
Mounting:	Can be mounted on ceiling or wall in all orientations
Standards:	ETL, cETL,IP65,Title 24 JA8 Compliant Wet Location Listed
Construction:	Aluminum body, glass diffuser

FINISHES:



White Black

LINE DRAWING:



FM-W47205

waclighting.com | **Phone** (800) 526.2588 | **Fax** (800) 526.2585 | **Headquarters/Eastern Distribution Center** 44 Harbor Park Drive Port Washington, NY 11050

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. April 2024

LIGHT FIXTURE - TYPE SS1

ANYBEND™ STATIC WHITE
Flexible Fixtures - Q-CAP





- Fully encapsulated flexible micro-fixture with up/down and side bending capabilities
- 60% smaller than Q-Tran's standard fixture (KURV)
- Perfect for not only indoor use but also as outdoor accent lighting where the fixture is visible
- Features a 9" bending radius and seven different mounting hardware options to ensure our product fits any design need

1 PRODUCT	2 MOUNTING	3 RATED	4 CCT	5 WATTAGE	6 LENS	7 WIRE INPUT/ OUTPUT	8 CONNECTOR/ WIRE IN	9 CONNECTOR/ WIRE OUT	10 END CAPS	11 LENGTH (IN)	12 EXACT/ OPTIMAL
ANBD-SW											

Sample Part Number: **ANBD-SW-PPS-2-DRY-30-L0-ENCTL-P1A-BW-BW-N/A-48"-E**

1 PRODUCT
ANBD-SW
See last page for compatible power supplies.

2 MOUNTING
PPS-2 PVC Clip
PPS-96 PVC Channel
PPS-FT PVC Channel Custom Length
PPS-LP-2 PVC Low Profile Clip
PPS-LP-FT PVC Low Profile Channel Custom Length
PPS-96 PVC Low Profile Channel
WSC White Snap Clip
White snap-clip only for indirect zone use, not intended for hanging fixtures upside down.

3 RATED
DRY IP20
WET IP67

4 CCT
24 2400K
27 2700K
30 3000K
35 3500K
40 4000K

5 WATTAGE
1.0 1.0W-BO
2.0 2.0W-HO
4.0 4.0W-VHO
BO: Standard Output
HO: High Output
VHO: Very High Output

6 LENS
ENC/CL Encapsulated in Clear
ENC/TL Encapsulated in Translucent
For representation of LED visibility, see Diode Visibility section on following pages.

7 WIRE INPUT/OUTPUT
S1A Single 1 (Input only) - End Feed
S1B Single 1 (Input only) - End Feed
P1A Pass Through 1 (Input/Output) - End Feed
P1B Pass Through 1 (Input/Output) - End Feed

8 CONNECTOR/WIRE IN
BW Bare Wire (Standard 24") **BRL** Barrel **CON6** Connector 6" **CON24** Connector 24"
Connector/Wire In not needed to specify product. Typical selection is BW. BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

9 CONNECTOR/WIRE OUT
N/A Closed End (No feed)
BW Bare Wire (Standard 24") **BRL** Barrel **CON6** Connector 6" **CON24** Connector 24"
Connector/Wire Out not needed to specify product. Typical selection is N/A or BW. BW: Standard length is 24". Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

10 END CAPS
Single: **CL** Clear, **WH** White
Pass Through: **N/A** Not Applicable

11 LENGTH (IN)
Fixture length min 12", max 191". Consult factory for lengths under 12". Available in 1" increments.

12 EXACT/OPTIMAL
O Optimal Illumination
E Exact Specified Length
Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +/- 1/8". See charts on following pages.

Field modifications are not covered under Q-Tran warranty | 5 year warranty | Up/Down, Side Bend | Data subject to change, all data has +/- 5% tolerance | PPS-FT and PPS-LP-FT is to be cut at Q-Tran to requested length | Not field cuttable

© 2023 Q-Tran Inc. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@q-tran.com | www.q-tran.com

Specification subject to change. Rev-09-08-23

LD3.4 - LIGHTING SPECIFICATIONS

LD3.4

DATE:10-10-24
JOB NO.: 2024-047

LEAL RANCH

EASTVALE, CA

QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE. LONG BEACH, CA 90806-2213, USA
T: 562.989.3843 F: 562.989.3847
www.LightingDesignAlliance.com

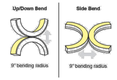
LIGHT FIXTURE - TYPE SS1

ANYBEND™ STATIC WHITE
Flexible Fixtures - Q-CAP

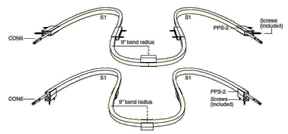
1 PRODUCT - DIMENSIONS



BEND RADIUS



FLEXIBILITY



2 MOUNTING

WSC



White Snug Clip
Indirect uplight

To order separately use WSC-02

Each clip comes with a #4x5/8" flat screw

PPS-2



PVC Mounting Clip

To order separately use MICROS-PPS2

PPS-96

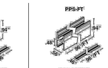


90° straight linear run

To order separately use MICROS-PPS-96

Each clip comes with a #6" flat screw

PPS-FT



PVC-channel
Custom length

To order separately use MICROS-PPS-FT

Each clip comes with a #6" flat screw

PPS-LP-2



Low profile PVC
Mounting Clip

To order separately use MICROS-PPS-LP-2

PPS-LP-FT



Low profile PVC channel
Custom length

To order separately use MICROS-PPS-LP-FT

Each clip comes with a #6" flat screw

PPS-LP-96



Low profile PVC channel
90° straight linear run

To order separately use MICROS-PPS-LP-96

Each clip comes with a #6" flat screw

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LIGHT FIXTURE - TYPE SS1

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Flexible Fixtures - Q-CAP

4 / 5 DELIVERED LUMENS

[Calculated L70 = 40000 hrs]
Tested with ANSI/D3W WSC/ORY

	1,000/FT				2,000/FT				4,000/FT			
	ENC/CL		ENC/TL		ENC/CL		ENC/TL		ENC/CL		ENC/TL	
CCT	LM	CRI	LM	CRI	LM	CRI	LM	CRI	LM	CRI	LM	CRI
3000K	44	93	48	92	105	95	101	95	393	95	359	93
2700K	48	96	33	96	103	97	89	96	283	97	196	96
3500K	52	95	47	96	140	95	137	97	303	96	217	97
3000K	51	98	41	96	137	98	109	96	206	97	247	99
4000K	46	97	63	99	125	97	136	99	215	96	304	97

6 DIODE VISIBILITY



BUG RATING

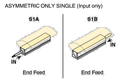
WATTAGE	B	U	G
1.0 (ALL CCTs), 2.0 (ALL CCTs), 4.0 (ALL CCTs)	B0	U0	G0

TEMPERATURE RATINGS

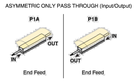
W/FT	Mounting	Minimum Limit (°F)	Maximum Limit (°F)
4.0	Millwork	-4	77
	Surface Mount	-4	95
2.0	Millwork	-4	113
	Surface Mount	-4	122
1.0	Millwork	-4	122
	Surface Mount	-4	122

7 WIRE INPUT/OUTPUT

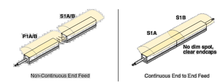
ASYMMETRIC ONLY SINGLE (Input only)



ASYMMETRIC ONLY PASS THROUGH (Input/Output)



CONFIGURATION OPTIONS



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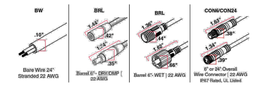
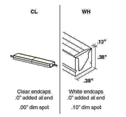
ANYBEND™ STATIC WHITE
Flexible Fixtures - Q-CAP

8 / 9 CONNECTOR/WIRE – IN/OUT

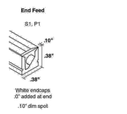
Connector/Wire in or Out not needed to specify product. Typical selection is S1 for Wire Input/Output, BW for Connector/Wire In, N/A for Connector/Wire Out, and WH for End Caps



10 END CAPS (NO FEED)

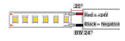


END CAPS (WITH FEED)



11 LENGTH - WIRING DETAIL

Available in 1" increments: 12"-120"



12 EXACT/OPTIMAL FIXTURE LENGTH

SW LENGTHS BY INCH

Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 – 1/8". Consult factory for lengths under 12".

EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	.5"
13"	.5"
14"	.5"
15"	.5"
16"	.5"
17"	.5"
18"	.5"
19"	.5"
20"	.5"
21"	.5"
22"	.5"
23"	.5"
24"	.5"
36"	.5"
48"	.5"
60"	.5"
72"	.5"
84"	.5"
96"	.5"

OPTIMAL LENGTH

Requested Nominal Length	S1A/B	P1A/B
	W	PI
	End feed	End feed
12"	11.5"	11.75"
13"	12.5"	12.75"
14"	13.5"	13.75"
15"	14.5"	14.75"
16"	15.5"	15.75"
17"	16.5"	16.75"
18"	17.5"	17.75"
19"	18.5"	18.75"
20"	19.5"	19.75"
21"	20.5"	20.75"
22"	21.5"	21.75"
23"	22.5"	22.75"
24"	23.5"	23.75"
36"	35.5"	35.75"
48"	47.5"	47.75"
60"	59.5"	59.75"
72"	71.5"	71.75"
84"	83.5"	83.75"
96"	95.5"	95.75"

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LIGHT FIXTURE - TYPE SS1

ANYBEND™ STATIC WHITE
Flexible Fixtures - Q-CAP

COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR	OUTDOOR
	MICRO 5-SW	MICRO 5-SW
Dim to Black	QIM-OC-CAP QTM-OC-CAP iQ-PH iQ-PH+QD1	QOM-OC-CAP QOM-PH iQ-PH
0.1%	QTM-eLED-0-10V QTM-eLED-AWN QC-DMX QZ-SYS-0-10V QZ-SYS-PHS-10V QZLP	Q-SET-QZ-DMX Q-SET-QZ-PHS-10V Q-SET-eLED-0-10V QOM-0-10-10V QZ-DMX QZ-PHS-10V
1%	QTM-eLED(E) QTM-eLED(L) QTM-eLED-DALI-DT6 QTM-eLED-DALI-DT6-AWN	QOM-eLED-DALI-DT6
10%	Non-Dim Power Supply with SW App Dongle	Q-HEX-mini-OC Q-SET-eLED

DIMMING PROTOCOL	INDOOR	OUTDOOR
	MICRO 5-SW	MICRO 5-SW
Non-Dim	QTM-eLED-ND QZ-ND	Q-SET-QZ-ND Q-SET-eLED-ND QOM-eLED-ND QZ-ND iQ-ND-50-65
Phase	QIM-OC-CAP QTM-OC-CAP QTM-eLED(E) QTM-eLED(L) QZ-SYS-PHS-10V QZLP iQ-PH iQ-PH+QD1	Q-HEX-mini-OC Q-SET-QZ-PHS-10V Q-SET-eLED QOM-eLED QOM-PH QZ-PHS-10V iQ-PH
0-10V	QTM-eLED-0-10V QTM-eLED-AWN QZ-PHS-10V QZ-SYS-PHS-10V QZLP	Q-SET-QZ-PHS-10V Q-SET-eLED-0-10V QOM-eLED-0-10V QZ-PHS-10V
Lutron Athena	QTM-eLED-DALI-DT6-AWN QTM-eLED-AWN	
ECO System	QTM-eLED(E)	
DMX	QZ-DMX	Q-SET-QZ-DMX QZ-DMX
DALI-2: DT6	QTM-eLED-DALI-DT6 QTM-eLED-DALI-DT6-AWN	QOM-eLED-DALI-DT6
SCENE App Dimmed	Non-Dim Power Supply with SW App Dongle	

COMPATIBLE MOUNTING ACCESSORIES

Q-ANGLE



Adjustable mounting accessory

Q-mini-J



UL Listed, miniature junction box

SCENE APP DONGLE



Wi-Fi or Bluetooth Connectivity

BARREL-EXT



6ft barrel cable extension

BARREL FOUR-PER



Splits lead from one to four LED Barrel connector fixtures

CON-EXT

10ft iCon cable extension

CON FOUR-PER

Splits lead from one to four LED iCon connectors

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LIGHT FIXTURE - TYPE WP1



WDGE1 LED
Architectural Wall Sconce

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Buy American

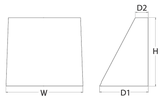
Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

Specifications

Depth (D1): 5.5"
Depth (D2): 1.5"
Height: 8"
Width: 9"
Weight: 9 lbs
(without options)



WDGE LED Family Overview

Luminaire	Standard Eff. 0° C	Cold Eff. -20° C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE1 LED	P1 P2	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K* 5000K	80CRI 90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLT 347*	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)* Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry) Use when there is no junction box available.

Options		Finish			
E4WH[1]	Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)	DDBXD	Dark bronze	DDBTXD	Textured dark bronze
PE*	Photocell, Button Type	DBLXD	Black	DBLBXD	Textured black
DS	Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)	DNAXD	Natural aluminum	DNATXD	Textured natural aluminum
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD	White	DWHGXD	Textured white
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD	Sandstone	DSSTXD	Textured sandstone
BAA	Buy America(n) Act Compliant				

Accessories
Ordered and shipped separately.
WDGEAWS DDBXD — WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGEPBBW DDBXD U — WDGE1 surface-mounted back box (specify finish)

NOTES
1 SDK: not available in 90CRI.
2 347V not available with E4WH, DS or PE.
3 E4WH not available with PE or DS.
4 PE not available with DS.
5 Not qualified for DLC. Not available with E4WH.

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LIGHT FIXTURE - TYPE WP1

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI)				30K (3000K, 90 CRI)				35K (3500K, 90 CRI)				40K (4000K, 90 CRI)				50K (5000K, 90 CRI)			
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1	10W	VF	1,120	112	0	0	0	1,161	116	0	0	0	1,194	119	0	0	0	1,227	123	0	0	0	1,235	123	0	0	0
		VW	1,122	112	0	0	0	1,163	116	0	0	0	1,196	120	0	0	0	1,229	123	0	0	0	1,237	124	0	0	0
P2	15W	VF	1,806	120	1	0	0	1,872	125	1	0	0	1,925	128	1	0	0	1,978	132	1	0	0	1,992	133	1	0	0
		VW	1,809	120	1	0	0	1,876	125	1	0	0	1,929	128	1	0	0	1,982	132	1	0	0	1,996	133	1	0	0

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P1	10W	0.082	0.049	0.043	0.038	--
	13W	--	--	--	--	0.046
P2	15W	0.132	0.081	0.072	0.064	--
	18W	--	--	--	--	0.056

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91

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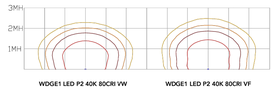
LIGHT FIXTURE - TYPE WP1

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND
0.25 fc
0.5 fc
1.0 fc
3.0 fc

MH = 8ft
Grid = 8ft x 8ft



WDGE1 LED P2 40K 80CRI VW



WDGE1 LED P2 40K 80CRI VF

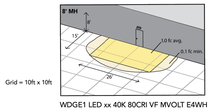
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E4WH and VF distribution.

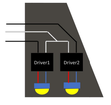


WDGE1 LED xx 40K 80CRI VF MVOLT E4WH

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back-up generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9



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LIGHT FIXTURE - TYPE WP1

Mounting, Options & Accessories



E4WH – 4W Emergency Battery Backup
D = 5.5"
H = 8"
W = 9"



PBBW – Surface-Mounted Back Box
Use when there is no junction box available.
D = 1.75"
H = 8"
W = 9"



AWS – 3/8inch Architectural Wall Spacer
D = 0.38"
H = 4.4"
W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE
Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION
The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH
Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A lightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS
Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and BRM mounting only.

BUY AMERICAN
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buyamerican for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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LEAL RANCH
EASTVALE, CA
QUARTERRA
95 ENTERPRISE, SUITE 200 ALISO VIEJO, CA 92656
949.606.5536

LD3.5 - LIGHTING SPECIFICATIONS
DATE:10-10-24
JOB NO.: 2024-047

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE., LONG BEACH, CA 90806
(562) 989-3843

LD3.5

LIGHTING DESIGN ALLIANCE
2830 TEMPLE AVE. LONG BEACH, CA 90806-2213, USA
T: 562.989.3843 F: 562.989.3847
www.LightingDesignAlliance.com

PROJECT NARRATIVE

Major Development Review Application
Leal Ranch Phase 2 Apartments
April 30, 2024

This project narrative is submitted concurrently with the formal submittal of a Major Development Review application for the **Leal Ranch Phase 2 Apartments** project. Kimley-Horn & Associates, Inc. ("Kimley-Horn") is submitting the project narrative on behalf of the applicant, Quarterra Multifamily Communities, LLC ("Quarterra"). This project proposes the development of 360 multi-family dwelling units within approximately 10.6 acres of portions of Planning Areas ("PA") 4, 9, and 10 ("Project") of the Leal Master Plan ("LMP"). Quarterra and The New Home Company ("Master Developer"), have been in discussions with the city to reorganize the boundaries of PAs 4, 9, and 10, in accordance with the minor adjustment provisions of the LMP. A formal narrative supporting the findings for approval for the boundary adjustment is forthcoming from the Master Developer.

Background

The LMP is an approximately 153.8 gross acre site within northeastern Eastvale, bounded by 58th Street, Hamner Avenue, Limonite Avenue, and Scholar Way. The LMP is bordered by High Density Residential land uses to the west, Medium Density Residential land uses to the north, Medium-High Density Residential and Commercial Retail land uses to the east, and Medium-High Density Residential and Commercial Retail uses to the south. The LMP's highest density land use area is the approximately 21-acre Downtown land use. A maximum of 700 dwelling units are planned within the Downtown land use area, at a minimum density of 22 DU/ac and a maximum density of 40 DU/ac, consistent with the City of Eastvale's High-Density Residential land use category. The Project is located within the approximately Downtown land use area. The project proposes a density of 34 DU/ac in accordance with the General Plan and LMP.

Additionally, the LMP was identified in the 6th Cycle 2021-2029 Housing Element and Implementation Program, adopted in as a site to support Regional Housing Needs Assessment (RHNA) housing growth targets. The Housing Element allocated 740 units within the Downtown land use of the Leal Master Plan. Quarterra's Eastvale Garden Apartments (PLN23-20036) was approved on February 21, 2024, for 320-units. There are 420 units within the Downtown land use designation available. The proposed Project seeks to obtain Design Review approval for 360 units. Therefore, the proposed project is consistent with the General Plan.

Architecture and Treatments

The Project includes twelve (12) three-story buildings within six (6) different building types for a total of 360 dwelling units. The project also includes a community recreation space and a leasing office. The site is bounded by "C" Road to the west, Residential land uses to the north, Hamner Avenue to the east, and Downtown land uses to the south. The Project proposed multi-family residential buildings are oriented both vertically and horizontally in relation to Hamner Avenue. The building orientation creates varying views of street and an enhanced sense of security and

richness to the street environment. Buildings adjacent to "C" Street are plotted in a manner to side onto the street. Parking is internal to the site, shielded by the residential buildings to further enhance the pedestrian experience.

Quarterra is proposing a contemporary agrarian architectural style for the project like what was approved in the Eastvale Garden Apartments project (PLN23-20036). Typical elements included in the contemporary agricultural style include a rectangular shape designed primarily for functionality, a mix of materials, specifically natural materials such as wood and stone, heavy use of windows to ensure that the building is filled with natural light, and large expansive porches. The project proposes a contemporary interpretation of this style.

Community Recreation

To service residents, a community recreation and leasing building is proposed as part of the Project. The community recreation and leasing building is situated at the community entrance accessed via "C" Street. The building includes a leasing office, fitness center, mailroom, co-working space, clubhouse, and restroom facility for the adjacent pool and spa. In addition to the community recreation and leasing building, residents have outdoor recreational amenities such as a pool, spa, outdoor cabanas, and barbeques. The building, like the residential units, utilizes a contemporary agrarian architectural style.

Landscape

A variety of both accent and screen trees, shrubs and hedges, and groundcovers are proposed throughout the Project. Statement landscaping can be found at each of the vehicular access points. The internal pedestrian paseo is decoratively planted with accent trees. Decorative pavers are proposed at both vehicular entrances and surrounding the clubhouse and pool. Vegetative screening is proposed at key on and off-site vantage points throughout the site to obscure ground-mounted mechanical equipment. All proposed landscaping within the project will be maintained by Quarterra's property management to ensure its long-term viability.

Access and Circulation

The main entry driveway takes access from "C" Street on the northwest side of the property. The main entry is equipped with a vehicular gate. A secondary driveway is located on the northeast side of "C" Street, equipped with a vehicular gate. Vehicular circulation through the Project is designed to support resident and visitor traffic while also encouraging pedestrian movement throughout the site. Pedestrian sidewalks are interlaced throughout the Project. A fenced pedestrian paseo traverses the Project from east to west, creating offsite pedestrian connectivity consistent with the LMP.

Development Standards

The project provides off-street parking for one-, two- and three-bedroom units, consistent with Section 120.05.060 of the city's municipal code (see Table 1 below). The project proposes a total of 605 parking stalls for the 360 proposed units (1.89 spaces/unit), 110 parking spaces more than required by the LMP. Parking is provided within 223 garage spaces, 145 uncovered standard

surfaces spaces, 75 tandem spaces, and 162 carport spaces. Fifteen (15) accessible parking stalls (ADA) are provided onsite. Of the 605 total parking stalls, 30 EV chargers will be provided, 151 EV Ready (low voltage) stalls and 61 EV Capable stalls will be provided. The project's proposed parking ratio exceeds the requirements of the LMP and are consistent with the California Building Code, Title 11, and the California Green Building Code.

Table 1. PROPOSED PARKING VERSUS REQUIRED PARKING

Unit Type	Units Proposed	Proposed Parking Ratio[1]	Proposed Parking	LMP's Parking Ratio[2]	LMP Parking Requirement	Delta
1 BR	213	1.25	266	1.25	266	+0
2 BR	132	2.25	297	1.50	198	+99
3 BR	15	2.75	41	2.00	30	+11
Total	**320**	**1.89**	**605**	**1.54**	**494**	**+110**

1. The proposed parking ratio is consistent with the City of Eastvale's off-street parking ratio for multi-family developments (Section 120.05.060- Off-street vehicle parking).
2. Leal Master Plan, Amendment #1 (May 25, 2022), Table 4-8: Parking Requirements

The Project adheres to LMP's development standards for the Downtown land use as summarized in Table 2.

Table 2. PROPOSED PROJECT'S DEVELOPMENT STANDARDS

Development Standards	LMP Requirement	Proposed
Maximum Site Coverage	75%	63%
Maximum Building Height	65' (4 stories)	45' 9" (3 stories)
Minimum Building Setback:	-	-
Hamner Avenue ROW	30'	34' 3"
"C" Street	6'	10' 1"
Minimum Building Separation:	-	-
Residential- Front to Front	20'	55'
Residential- Side to Side	15'	20'

Off-Site Improvements

Off-site improvements will be completed by the Master Developer in accordance with the Tentative Tract Map, MMRPs, and infrastructure phasing plan. The off-site improvements shall be along Limonite Avenue, Hamner Avenue, and 58th Street. Improvements to off-site backbone roads are as follows:

- Construct 6.5" A.C. over 16.5" A.B. per soils engineer recommendations.
- Construct 5.5" A.C. over 13.5" A/B/ per soils engineer recommendations.
- Construct type "A-8" curb and gutter per County of Riverside Standard Number 201
- Construct 4" thick Class 1 bike trail, width of 10.'
- Construct 4" thick access ramp per County of Riverside Standard Number 403
- Construct type "D" curb per County of Riverside Standard Number 204

Additionally, frontage improvements along Limonite Avenue and Hamner Avenue will be constructed by the Master Developer. The street parkway shall be improved along the project frontage, providing ultimate width with curb/gutter, sidewalk, parkway, and lighting. The street

improvements will tie into existing conditions, with finish seal from centerline (or raised median) to curb. Improvements to project frontage are as follows:

- Construct 4” A.C. over 8” A.B.
- Construct curb and gutter type A-6 per County of Riverside Standard Number 200
- Construct 4” thick access ramp per the County of Riverside Standard Number 403
- Construct 4” thick sidewalk per County of Riverside Standard Number 400 and 401
- Construct 11’ wide trail.

Kimley»Horn

July 22, 2024

Ms. Jamie Cerda
Senior Planner
City of Eastvale
12363 Limonite Avenue
Eastvale, CA 91752

Subject: Parking Management Enforcement and Parking Supply

Dear Ms. Cerda:

Kimley-Horn submitted a Major Development Review application (PLN24-20035) for the development of Planning Areas 4 and 10 in the Leal Master Plan (LMP) project on behalf of the Project Applicant, Quarterra Multifamily Communities, LLC on May 5, 2024. The City of Eastvale provided a List of Corrections letter to Kimley-Horn on June 3, 2024, listing information required to process the submittal. The purpose of this memorandum is to respond to comments number 6 and 7 of the City's *List of Corrections for PLN24-20035* letter concerning the Applicant's parking management plan.

List of Corrections for PLN23-20036

The City of Eastvale's Planning Department provided the following comment regarding the proposed onsite parking in the multi-family residential development.

Comment #6- As conditioned in the Leal Master Plan, please provide a parking management plan including any
future Covenants, Conditions, and Restrictions related to parking.

a) Please include how the plan will control overflow of project residents/guests from using adjacent neighborhoods to park.
b) Please be aware of the proposed neighboring project's management plan and how it could affect parking in your project.
c) Please note whether garage spaces will accommodate resident storage or be limited to vehicular parking only.

Comment #7- While the proposed ratios are higher than the adopted Leal Master Plan ratios, they are less than what was approved for Quarterra's Phase 1 project parking ratios. Staff requests revising the parking ratios and site plan to match the approved parking ratios of Quarterra's Phase 1 project (i.e., 1-bedroom at 1.35 parking spaces, 2-bedroom at 2.27 parking spaces, and 3-bedroom at 2.88 parking spaces).

Parking Management Enforcement

The Applicant will implement a robust parking management program to minimize impact on city streets and adjacent property owners. All the residential parking spaces will be located on-site and assigned within lease agreements. There will be a total of 630 parking spaces that will include both residential and guest spaces. This results in an overall parking ratio of 1.75 parking spaces per unit. All residential parking will be secured parking protected by an access gate. Resident parking spaces are assigned, with the guest parking identified. Additionally, all tandem garages spaces are assigned to two- and three-bedroom units only to ensure that two separate units are not beholden to one another. Parking management is enforced by Quarterra's regional manager, who works with on-site staff to adhere to company-wide parking

management standards. The regional manager will oversee the proposed project in Eastvale and will apply the same parking management regulations to this community.

The goal is to provide convenient parking for tenants and residents, while eliminating overflow into the surrounding areas. On-site Management and third-party security will monitor surface parking and perform garage audits to ensure that assigned garages are not being used for storage purposes. An additional layer of management is required for residential parking, in which all vehicles must be registered with management. This includes rental/borrowed and guest/visitor vehicles when parked within the on-site. Parking areas will include both assigned and unassigned parking.

GUIDELINES

A. Parking agreement is included in all lease agreements to ensure compliance from all residents/guests that utilize the parking area.

B. All vehicles parked on Quarterra residential properties are required to observe the following rules and regulations of the property.

1. All vehicles are required to be registered prior to parking on Quarterra Properties. All non-registered vehicles are subject to tow.
2. All vehicles not parked within a clearly marked parking stall are considered “Firelane/No Parking” areas and are subject to immediate tow.
3. All vehicles parked in “UNASSIGNED/ASSIGNED” spaces within Quarterra residential properties must display, in plain sight, a permit issued by the office. Vehicles in violation are subject to tow.
4. All vehicles parked in “Handicapped” spaces without a current/valid DMV issued Handicapped Permit are subject to tow.
5. Stored/inoperative vehicles not moved within 72 hours are subject to tow. Any vehicle not having the required components required by law to operate safely and legally on city streets (engine, tires, OEM lighting equipment) may be deemed immediately as a stored/inoperative vehicle and subject to tow immediately.
6. All vehicles must be currently registered, insured, and display valid DMV Registration Tags or are subject to tow.
7. Resident vehicles parked in “Guest or Visitor” parking spaces are subject to tow.
8. All vehicles parked in “Future/Prospective Resident” parking during office hours, not conducting business in the property management office, are subject to tow.
9. Resident agrees that they are responsible to inform and assure that all guest/visitors comply with said rules.
10. Resident also understands that if his/her vehicle is towed as a result of parking in violation of these rules, incorrect or invalid information or transferring of the issued permit to another vehicle, they accept full financial responsibility for all fees incurred.
11. At no time shall any resident park, store, or drive any commercial vehicle, RV, boat, trailer, ATV, golf cart or any other type of licensed or non-licensed vehicle on the property without written consent from Quarterra Properties.

C. The following information must be provided to management in order to be registered:

1. Resident’s name, address, phone number, make, model, color, License Plate and/or VIN number of the vehicle.
2. Parking tags or Confirmation numbers must be always displayed on the rear-view mirror or lower right-hand corner (passenger’s side) of the front windshield. Any vehicles found without a valid permit will be subject to tow.
3. Guests must call management or visit resident portal to register when visiting to obtain a Temporary guest confirmation number to place in your windshield.

Kimley»Horn

PARKING MANAGEMENT ENFORCEMENT

a) Surface Parking: Surface parking will be monitored regularly for resident and guest parking compliance of all parking rules and regulations. Vehicles that are not in compliance will receive parking violations from management or third-party management. Vehicles that are parked in no parking or fire lanes will be towed.
b) Abandoned Vehicles: Surface parking and residential parking structure will be monitored regularly for abandoned vehicles which will be removed.
c) Large Vehicle Restrictions: Parking rules do not permit trailers, commercial vehicle, RV, boat, trailer, ATV and will monitor to identify and remove large unauthorized vehicles.
d) Guest Parking: All guest parking is designated on the property and required to obtain a temporary guest confirmation number or pass.

Parking Ratios

The Applicant has added additional parking stalls to provide parking in conformance with the parking ratios entitled during Leal Ranch- Phase 1. Table 1 below shows the revised parking provided per unit type.

TABLE 1
LEAL RANCH PHASE 2 PARKING RATIO

Unit Type	Units Proposed	PA 2 Parking Ratio (spaces/unit)	Parking Required
1BR	213	1.35	288
2BR	132	2.27	300
3BR	15	2.88	43
TOTAL	**360**	**1.75**	**630**

Please let me know if you have any questions or need further clarification.

Sincerely,

Damian Arnaiz, AICP

RESOLUTION NO. 25-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF EASTVALE, CALIFORNIA, APPROVING THE MASTER SITE PLANNING AND ARCHITECTURE OF PLANNING AREA 4 (PA-4) OF THE LEAL MASTER PLAN TO ACCOMMODATE A 360-UNIT APARTMENT COMMUNITY, WITH ASSOCIATED POOL/RECREATIONAL FACILITY, PARKING AREAS, LANDSCAPING, AND OPEN SPACE AMENITIES LOCATED AT THE NORTHWEST CORNER OF LIMONITE AVENUE AND HAMNER AVENUE, ASSESSOR'S PARCEL NUMBER 164-030-044.

WHEREAS, the Planning Division of the City of Eastvale received an application (PLN24-20035) on May 7, 2024, from Quarterra Multifamily Communities, LLC. (the "Applicant") requesting Major Development Review for the master site planning and architecture of Planning Area 4 (PA-4) of the Leal Master Plan or Lot 35 of Tentative Tract Map 38595, to accommodate a 360-unit apartment community, with associated pool/recreational facility, parking areas, landscaping, and open space amenities (the "Project"); and

WHEREAS, the proposed project (Project No. PLN24-20035) is considered a "Project" as defined by the California Environmental Quality Act, Public Resources Code Section 21000 et seq.; and

WHEREAS, review of the proposed project with respect to the proposed use was evaluated in the Addendum to the Program Environmental Impact Report (State Clearinghouse No. 2015031028) certified by City Council on May 11, 2022, for the Leal Master Plan project; therefore, no additional environmental analysis is necessary; however, a Notice of Determination will be filed following any action taken on the project; and

WHEREAS, on May 11, 2025, the City of Eastvale City Clerk published a legal notice in compliance with state law concerning PLN24-20035 in the *Press Enterprise*, a local newspaper of general circulation, regarding the Planning Commission meeting on May 21, 2025. In addition, on May 8, 2025, a public hearing notice was also mailed to commercial tenants and residents within a 600-foot radius of the projects site indicating time, date, and place of the public hearing for PLN24-20035; and

WHEREAS, the City of Eastvale Planning Commission conducted a duly noticed public hearing on May 21, 2025, at which time it received public testimony concerning Project No. PLN24-20035 and considered the proposed Major Development Review for the master site planning and architecture of PA-4 of the Leal Master.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF EASTVALE, DOES HEREBY FIND, DETERMINE, AND RESOLVE AS FOLLOWS:

SECTION 1. ENVIRONMENTAL FINDINGS

Pursuant to the California Environmental Quality Act, including Public Resources Code Sections 21080(e) and 21082.2, and based on the record and/or as provided at the public hearing, the Planning Commission hereby finds and determines that the project was adequately analyzed according to the CEQA Guidelines, as supported by the following Findings and Evidence:

Finding 1: The proposed project is exempt from further environmental review requirements.

Evidence: On May 11, 2022, the Eastvale City Council adopted an Addendum to the previously Certified Program Environmental Impact Report (PEIR) for approval of a Leal Master Plan Amendment, Tentative Tract Map 38290, and Major Development Review. The California Environmental Quality Act (CEQA) Statutes and Guidelines states that when an environmental impact report (EIR) has been certified for a project, no subsequent EIR shall be prepared unless the lead agency determines so on the basis of substantial change in the project which would require major revisions in the EIR. The requested approval of PLN24-20035 requests Major Development Review for the master site planning and architecture of PA-4 of the Leal Master Plan to accommodate a proposed 360-unit apartment community. As such, the proposed project does not exceed the maximum development assumptions of the certified PEIR and would not represent an increased development intensity within the overall approved project area. As such, no further CEQA documentation would be warranted for the proposed project pursuant to CEQA Guidelines Section 15168.

SECTION 2. FINDINGS FOR MAJOR DEVELOPMENT REVIEW PLN23-20036

Pursuant to Section 120.02.010(c)(6) of the Eastvale Municipal Code, and in light of the record before it, including the staff report dated May 21, 2025, and all evidence and testimony heard at the public hearing of this item, the Planning Commission hereby finds and determines as follows:

Finding 1: The proposed project is consistent with the objectives of the general Plan and complies with applicable zoning regulations, specific plan provisions, special planning area provisions, design guidelines, and improvement standards adopted by the city.

Evidence: The General Plan land use designation of the proposed site is Leal Policy Area. The Leal Policy Area land use designation allows for the development of high density residential (i.e., apartment communities). Therefore, the proposed project would be consistent with the General Plan designation for the site and will further the objectives of the General Plan. Additionally, the proposed project is consistent with the Leal Master Plan Amendment site characteristics, design guidelines, and development standards for the apartments/flats residential product type.

Finding 2: The proposed architecture, site design, and landscape are suitable for the purposes of the building and site and will enhance the character of the neighborhood and community.

Evidence: The proposed project has been designed to comply with the development and design standards of the Leal Master Plan Amendment, such as providing identifiable entries with decorative paving, front entries oriented towards the street, paseos, and open space, building articulation with roof design, balconies, building projections, and a consistent plant palette creating to an urban forest. The proposed architecture, site plan, and landscaping are suitable for the mixed-used downtown, lifestyle center contemplated for the site in the General Plan and Leal Master Plan Amendment and will enhance the character of the neighborhood and community with novel architecture. For these reasons, the proposed project, as conditioned will enhance the character of the neighborhood and community.

Finding 3: The architecture, including the character, scale, and quality of design, relationship with the site and other buildings, building materials, colors, screening of exterior appurtenances, exterior lighting, and signing and similar elements, establishes a clear design concept and is compatible with the character of buildings on adjoining and nearby properties.

Evidence: The architecture of the proposed residential community has been designed to satisfy the development and design standards of the Leal Master Plan Amendment. The project includes building facades oriented towards the street, paseos, and open space. The proposed elevations show a contemporary agrarian style architectural theme for the residential development including, simplified massing with surfaces finished with stucco, vertical board and batten siding, and cement fiber horizontal siding. The buildings include gable roofs, decorative wood and metal balcony railings along with metal awnings. All elevations of the building have been designed to create variation and visual interest with the use of various materials and colors. Buildings provide transitional spaces such as porches and covered entries and are accentuated with a minimum of three materials and three colors. Additionally, decorative street lighting and enhanced pavement at pedestrian crossing and community entry points add to the design of the community. For these reasons, the proposed architecture is well-suited and is consistent with the character of the buildings on adjoining and nearby properties.

Finding 4: The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation.

Evidence: The proposed project is conditioned to ensure adequate circulation to and from the site. All streets and internal drive aisle have been designed to handle the type and quantity of vehicular traffic associated with the proposed project. Wide sidewalks, designated bike lanes, and changes in materials (i.e., asphalt, concrete, and decorative pavers) clearly distinguish each mode of circulation reducing

conflicts between motorized vehicles and pedestrians. Finally, the City Engineer and Riverside County Sheriff's Department have reviewed the proposed project access and on-site circulation design and do not have any concerns.

Finding 5: The proposed project is consistent with the most recently adopted version of the Chino Airport Land Use Compatibility Plan.

Evidence: The project site is not with the Chino Airport Influence Area.

SECTION 3. MULTIPLE SPECIES HABITAT CONSERVATION PLAN (MSHCP)

The project is found to be consistent with the MSHCP. The project is located outside of any MSHCP criteria area, and mitigation is provided through payment of the MSHCP Mitigation Fee.

SECTION 4. RECORD OF PROCEEDING

The documents and other materials that constitute the record of the proceedings upon which the Planning Commission's decision is based, which include but are not limited to the staff reports as well as all materials that support the staff reports for the proposed project, are located in the City Clerk's office of the City of Eastvale at 12363 Limonite Avenue, Suite 910, Eastvale, CA 91752. The custodian of these documents is the City Clerk of the City of Eastvale.

SECTION 5. DETERMINATION

Based upon the findings outlined in Sections 1 through 3, the Planning Commission of the City of Eastvale hereby approves Major Development Review No. PLN 24-20035 for the master site planning and architecture of Planning Area 4 (PA-4) of the Leal Master Plan, subject to the conditions of approval.

PASSED, APPROVED AND ADOPTED this 21st day of May 2025.

_____
Josh Lee
Chair

APPROVED AS TO FORM:

_____
Chad Herrington
Assistant City Attorney

ATTEST:

_____
Jessica Cooper, MMC
Senior Management Analyst

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) §
CITY OF EASTVALE)

I, Jessica Cooper, Senior Management Analyst of the City of Eastvale, California, do hereby certify that the foregoing Planning Commission Resolution No. 25-XX, was duly adopted by the Planning Commission of the City of Eastvale, California, at a regular meeting held on the 21st day of May 2025, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Jessica Cooper, MMC
Senior Management Analyst

CONDITIONS OF APPROVAL
Planning Application Number and Description: Project No. PLN24-20035– Major Development Reviews (DR) for the overall site planning and architecture of Planning Area 4 of the Leal Master Plan to accommodate a 360-unit multi-family community, with associated pool/recreation facility, parking areas, landscaping, and open space amenities, located at the northwest corner of Limonite Avenue and Hamner Avenue.
Assessor's Parcel Number: 164-030-044
Planning Commission Review Date: May 21, 2025

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
General Conditions/Requirements				
1.	The applicant shall review and sign below verifying the "Acceptance of the Conditions of Approval" and return the signed page to the Eastvale Planning Division. The signed statement of acceptance is required and must be returned to the Planning Division prior to issuance of first residential Building Permit. Applicant Signature Date	Prior to 1st Residential Building Permit	Planning Division	
2.	The applicant shall indemnify, protect, defend, and hold harmless the City as provided for in the Development Agreement by and between the New Home Company and the City for the project (DA 003).	Ongoing	Planning Division	
3.	Any approval shall not be final until and unless the applicant's deposit account with Public Works has a balance of at least $10,000 to cover staff time to follow-up, monitoring, and other post-approval work by staff. The City reserves the right to request additional deposits to cover post-approval staff work and to half work if the deposit account is exhausted.	Ongoing	Public Works Department	
4.	Applicant understands and agrees that failure to comply with all conditions of approval may result in the City Council/Planning Commission taking action resulting in modification of conditions of approval and/or suspension or revocation of the **project.**	Ongoing	Planning Division	

DRAFT

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
5.	**PLN24-20035** is granted for a period of two years and shall become void as of May 21, 2027, unless building permits have been issued and construction has commenced and diligently pursued towards completion, or a time extension is requested in writing prior to that date.	May 21, 2027	Planning Division	
6.	All applicable Tentative Tract Map 38290, and Development Agreement conditions of approval for PLN21-20039 shall be incorporated herein by reference.	Ongoing	Planning Division	
7.	All applicable Tentative Tract Map 38595 conditions of approval for PLN24-20074 shall be incorporated herein by reference.	Ongoing	Planning Division	
8.	The project shall be developed in accordance with the Major Development Review applications approved by the Planning Commission on **May 21, 2025**, including the approved site plan, architectural elevations, conceptual landscape plans, etc. The applicant may request modifications or revisions to the approved project as outlined in Section 120.01.050(2) of the Eastvale Zoning Code, as existing prior to May 11, 2022.	Ongoing	Planning Division	
General **Prior to the Issuance of Grading Permit**				
9.	A site-specific air toxics pollutant analysis shall be conducted in accordance with the SCAQMD (2008) Final Localized Significance Threshold Methodology for operational activities. If SCAQMD screening thresholds would be exceeded, air toxic reduction measures shall be identified in order to reduce potential impacts to a level that is less than significant. If it is the case that emissions remain in excess of SCAQMD localized significance thresholds despite the imposition of air toxic reduction measures, project-specific operations-related dispersion modeling acceptable to the SCAQMD shall be used to identify potential toxic air contaminant impacts, including diesel particulate matter generated by heavy-duty haul trucks. If SCAQMD risk thresholds would be exceeded, additional mitigation measures shall be identified in the air toxics analysis to address potential impacts and shall be based on site-specific information such as the distance to the nearest sensitive receptors, project site plan details, and merchandise delivery schedule. The City shall ensure that operations include all identified measures and that the	Prior to Grading Permit	Planning, Building and Safety, or Public Works Division	Conditions satisfied

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	measures reduce the health risk below SCAQMD risk thresholds. Operations-generated air toxic pollutant mitigation measures may include but not be limited to: 1. Redesigning the project site plan to locate proposed loading dock facilities as far from sensitive receptors as possible. 2. Posting signage stating the State-mandated prohibition on all project trucks idling in excess of 5 minutes under the Heavy-Duty Vehicle City of Eastvale Page 21 Leal Master Plan EIR Addendum No. 1 Idling Emission Reduction Program. 3. Restricting the number of daily heavy-duty haul truck deliveries. *(Mitigation Measure 3.3.5b Air Quality)*			
10.	The following Addendum No.1 to the Leal Master Plan EIR mitigation measures shall be implemented and specified on all project construction plans: a) Clearing and construction activities shall be conducted outside of 6:00 p.m. and 6:00 a.m. during the months of June through September, and outside of 6:00 p.m. and 7:00 a.m. during the months of October through May (Municipal Code Chapter 8.52, Noise Regulation). b) All construction equipment shall be kept properly tuned and use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. c) Construction equipment staging areas shall be centrally located on the project site or located at the farthest distance possible from nearby residential land uses. d) All motorized construction equipment and vehicles shall be turned off when not in use. *(Mitigation Measure 3.6.4 Noise)*	Prior to Grading Permit	Planning Division	

DRAFT

Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
11.	MM 3.7.1 All construction and clearing activities shall be conducted outside of the avian nesting season (January 15– August 31), when feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusions zones widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged. *(Mitigation Measures 3.7.1 Biological Resources)*	Prio to Grading Permit	Planning Division	
12.	If cultural resources (i.e., prehistoric sites, historic sites, and isolated artifacts) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history shall be retained to determine the significance of the discovery. The City shall consider mitigation recommendations presented by a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in archaeology and/or history for any unanticipated discoveries. The City and the project applicant of the site where the discovery is made shall consult and agree on implementation of a measure or measures that the City deems feasible. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be	Ongoing	Planning Division	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	required to implement any mitigation necessary for the protection of cultural resources. *(Mitigation Measure 3.8.2 Cultural Resources)*			
13.	If human remains are discovered during any ground-disturbing activities in the project area, all work shall be halted immediately within 50 feet of the discovery, the City Planning Department shall be notified, and the Riverside County Coroner must be notified per California Public Resources Code Section 7050.5 and California Health and Safety Code Section 5097.98. If the remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and I shall be followed. *(Mitigation Measure 3.8.3 Cultural Resources)*	Ongoing	Planning Division	
14.	Prior to issuance of a grading permit, a certified professional paleontologist will be retained by the developer to provide professional paleontological services, which will include survey, education of construction workers, onsite construction monitoring, appropriate recovery, and reporting. A paleontological monitor shall be present during ground disturbing activities in the eastern half of the Project. The monitor shall work under the direct supervision of a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated competence in paleontological research, fieldwork, reporting, and curation). 1. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols. 2. The paleontological monitor shall be present full-time during ground disturbance in the eastern half of the Project, including but not limited to grading, trenching, utilities, and offsite easements. If, after excavation begins, the qualified paleontologist determines that the sediments are not likely to produce fossil resources, monitoring efforts shall be reduced.	Prior to Grading Permit	Planning Division	Conditions satisfied

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	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	3. The monitor shall be empowered to temporarily halt or redirect grading efforts if paleontological resources are discovered. 4. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area. 5. In consultation with the qualified paleontologist the monitor shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly mapped, documented, removed, and the area cleared. 6. If the discovery is significant the qualified paleontologist shall notify the CLIENT and CITY immediately. 7. In consultation with the CLIENT and CITY the qualified paleontologist shall develop a plan of mitigation which will likely include full-time monitoring, salvage excavation, scientific removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find. For the remaining portions of the Project site, if If any paleontological resources (fossils) are discovered during grading or construction activities in the project area, work shall be halted immediately within 50 feet of the discovery, and the City Planning Department shall be immediately notified. At that time, the City will coordinate any necessary investigation of the discovery with a qualified paleontologist. The City shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries of paleontological resources. The City and the project applicant shall consult and agree on implementation of a measure or measures that the City deems feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The project applicant shall be required to implement any mitigation necessary for the protection of paleontological resources.			

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	(Mitigation Measure 3.8.4 Cultural Resources)			
15.	The project applicant shall conduct a Phase II ESA and shall follow its recommendations to remediate any potentially contaminated soil or groundwater. On-site contaminants must be addressed to the satisfaction of either Cal/EPA or the Riverside County Waste Management Department, with their approval of completion of activities/remedial action plans (RAP) submitted to the Eastvale Department of Building and Construction prior to the issuance of a grading permit. *(Mitigation Measure 3.10.2b Hazards and Hazardous Materials)*	Prior to Grading Permit	Building and Planning Divisions	Conditions satisfied
16.	All trash and debris observed on-site shall be removed prior to construction activities and disposed of at a landfill or approved dumpsite. *(Mitigation Measure 3.10.2c Hazards and Hazardous Materials)*	Prior to Grading Permit	Building and Planning Divisions	
17.	The Precise Grading Plan shall be City Engineer approved prior to issuance of a Precise Grading Permit.	Prior to Precise Grading Permit	Public Works Department	
18.	Grading in excess of 199 cubic yards will require performance security to be posted with the City.	Prior to Grading Permit	Public Works Department	
19.	Prior to the issuance of a grading permit, the developer shall pay all necessary fees as determined by the City Engineer including but not limited to MSCHP fees and grading permit fees.	Prior to Grading Permit	Public Works Department	
20.	A permit for the hauling of material to and from the project site shall be submitted to the City for approval.	Prior to Grading Permit	Public Works Department	
21.	Submit a California civil engineer prepared earthwork cut and fill certification letter to the Engineering Division for review. If the required earthwork in cubic yards is 50 CY or less, a Precise Grading/Paving Plan will not be required; however, the applicant is required to pull an NPDES/Public Works permit prior to issuance of a Building Permit for record purposes.	Prior to Grading Permit	Public Works Department	
22.	Development of the site is subject to the requirements of the National Pollution Discharge Elimination System (NPDES) Permit for the City of Eastvale, under the Santa Ana Regional Water Quality Control Board, Board	Prior to Precise Grading Permit	Public Works Department	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	Order No. R8-2010-0036. Pursuant to the NPDES Permit, the developer shall ensure development of the site incorporates post-construction Best Management Practices ("BMPs") in accordance with the Model Water Quality Management Plan ("WQMP") approved for use for the Santa Ana River Watershed. The developer is advised that applicable Site Design BMPs will be required to be incorporated into the final site design, pursuant to a site specific WQMP submitted to the City Engineer for review and approval. The site specific WQMP shall be submitted to the City Engineer for review and approval with the Precise Grading/Paving Plan.			
23.	Prior to commencing with any grading, the required erosion and dust control measures shall be in place. In addition, the following shall be included if not already identified: a. 6 foot high tan colored perimeter screened fencing b. Contractor information signage including contact information along the street frontage. c. Post dust control signage with the following verbiage: "Project Name, WDID No., IF YOU SEE DUST COMING FROM THIS PROJECT CALL: NAME (XXX) XXX-XXX, If you do not receive a response, please call the AQMD at 1-800-CUT-SMOG/1-800-228-7664"	Prior to Grading Permit	Public Works Department	
24.	A Notice of Intent ("NOI") to comply with the California General Construction Stormwater Permit is required via the California Regional Water Quality Control Board online Stormwater Multiple Application and Report Tracking System ("SMARTS"). A copy of the executed letter issuing a Waste Discharge Identification ("WDID") number shall be provided to the City Engineer. The Construction General Permit requires the Developer's contractor to prepare and maintain a Storm Water Pollution Prevention Plan ("SWPPP"). The SWPPP requires all appropriate measures be implemented to prevent erosion and water pollution during construction.	Prior to Grading Permit	Public Works Department	
25.	A California registered Geotechnical Engineer prepared Geotechnical/Soils Report shall be required for and incorporated as an integral part of the grading/paving plan for the proposed development. A copy of the Geotechnical/Soils Report shall be submitted to the Public Works Division	Prior to Grading Permit	Public Works Department	Conditions satisfied

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	with the first submittal of the Precise Grading/Offsite Street Improvement Plan.			
26.	All stormwater runoff passing through the site shall be accepted and conveyed across the property in a manner acceptable to the City Engineer. All on-site City Engineer approved retention or other facilities are required to contain the increase stormwater runoff generated from the proposed development. Provide a hydrology study to determine the volume of increased stormwater runoff due to development of the site, and to determine required stormwater runoff mitigation measures for the proposed development. The City Engineer must approve the final retention basin sizing and other stormwater runoff mitigation measures determined upon review and approval of the hydrology and may require redesign or changes to site configuration or layout consistent with the findings of the final hydrology study. The existing "pre-developed" condition compared to the proposed "developed" condition shall be used to calculate the volume of increased stormwater runoff to retain on-site under the 100-year frequency storm.	Prior to Grading Permit	Public Works Department	
27.	Direct release of on-site nuisance water or stormwater runoff shall not be permitted to the adjacent public streets. Provisions for the interception of nuisance water from entering adjacent public streets from the project site shall be provided through the use of a minor storm drain system that collects and conveys nuisance water to landscape or parkway areas, and in only a stormwater runoff condition, pass runoff directly to the streets through parkway or under sidewalk drains.	Prior to Grading Permit	Public Works Department	
Prior to Issuance of Encroachment Permit				
28.	Landscape plans for all landscaping improvements within existing or future right-of-way shall be submitted to the Public Works Division and Planning Division for review and approval.	Prior to Issuance of Encroachment Permit	Planning and Public Works Division	
29.	The minimum pavement section for all on-site pavements shall be 3 inches asphalt concrete pavement over 6 inches crushed aggregate base with a minimum subgrade of 24 inches at 95% relative compaction, or equal. The pavement section shall be determined using appropriate Traffic Index ("TI")	Prior to Issuance of Encroachment Permit	Public Works Department	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	accepted by the City Engineer. A California registered Geotechnical Engineer shall design the pavement section using "R" values from the project site and submitted to the City Engineer for approval.			
30.	Traffic Control Plan prepared by a licensed civil/traffic engineer shall be submitted to the City Engineer for review and approval.	Prior to Issuance of Encroachment Permit	Public Works Department	
Prior to Issuance of Building Permit				
31.	MSHCP Standard Condition: The MSHCP requires that projects pay a mitigation fee. The following requirements of the MSHCP apply to the proposed project and will be required of all subsequent development plans and/or projects within the Leal Master Plan area: A. The project applicant shall submit fees to the City in accordance with the requirements of the MSHCP Mitigation Fee Ordinance (Chapter 4.62 of the City of Eastvale Municipal Code). As noted above, because the City has adopted the MSHCP and enforces its provisions, these requirements do not need to be included as mitigation measures. *Mitigation Measure 3.7.1 Biological Resources:* All construction and clearing activities shall be conducted outside of the avian nesting season (January 15–August 31), when feasible. If clearing and/or construction activities occur during the nesting season, preconstruction surveys for nesting raptors, special-status resident birds, and other migratory birds protected by the Migratory Bird Treaty Act shall be conducted by a qualified biologist, up to 3 days before initiation of construction activities. The qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no Ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet, as appropriate, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS, as necessary. The City shall be notified if altered exclusions zones	Prior to Building Permit	Planning Division	

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	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	widths are authorized by these agencies prior to the initiation of work. The exclusion zones shall remain in force until all young have fledged.			
32.	Street names shall be approved by the Community Development Director. Suggested street names and alternatives shall be submitted in writing to the Community Development Director for approval. Phonic similarity with existing street names should be avoided.	Prior to Building Permit	Planning Division.	Condition satisfied
33.	Nonglare glass shall be used in all nonresidential buildings to minimize and reduce impacts from glare. Buildings that are allowed to use semi-reflective glass must be oriented so that the reflection of sunlight is minimized. Types of nonglare glass shall be specified on final development plan. *(Mitigation Measure 3.5.1 Aesthetics, Light, and Glare)*	Prior to Building Permit Issuance	Planning Division	
34.	**Asbestos.** Prior to the issuance of any permit for the demolition or alteration of existing structure(s), a letter shall be provided to the Planning Department from a qualified asbestos abatement consultant indicating that no asbestos-containing materials (ACM) are present in the building. If ACMs are found to be present, they will need to be abated in compliance with the South Coast Air Quality Management District's Rule 1403 and all other applicable state and federal rules and regulations. **Lead Paint**. Prior to issuance of any permit for the demolition or alteration of the existing structure(s), a lead-based paint survey shall be performed to the written satisfaction of the Eastvale Building Safety and Inspection Department. Should lead-based paint materials be identified, standard handling and disposal practices shall be implemented pursuant to OSHA regulations. **Polychlorinated Biphenyls**. Prior to issuance of a demolition permit, a polychlorinated biphenyls (PCB) abatement contractor shall conduct a survey	Prior to Building Permit	Building and Planning Divisions	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	of the project site to identify and assist with compliance with applicable state and federal rules and regulations governing PCB removal and disposal. *(Mitigation Measure 3.10.2a Hazards and Hazardous Materials)*			
35.	**NOI PDF-1** Prior to the issuance of building permits, the Project will demonstrate that building construction will achieve the minimum interior noise standard of 45 dBA CNEL for all residential units located along arterial roadways and/or adjacent to commercial uses, per the California Building Standards Code. The following noise control measures may be required for dwelling units located near adjacent roadways: • Install sound barriers (masonry walls or walls with earth berms) between residences and noise sources. • Install double-paned or upgraded STC sound rated windows. • Provide sound insulating exterior walls and roofing systems. • Locate and/or design attic vents to minimize sound propagation into each home. • Provide forced-air ventilation systems. • Provide the necessary setbacks for dwelling units fronting along major roadways. **NOI PDF-2** The Project will comply with California Title 24 building insulation requirements for exterior walls, roofs and common separating assemblies (e.g. floor/ceiling assemblies and demising walls). **NOI PDF-3** For proper acoustical performance, all exterior windows, doors, and sliding glass doors will have a positive seal and leaks/cracks must be kept to a	Prior to Building Permit	Building and Public Works Divisions	

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	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	minimum. **NOI PDF-4** The final building plans will ensure that HVAC units are not located within an area of the Project site that would contribute to a noise level exceedance at any adjacent property line, per the City of Eastvale Municipal Code requirements. To meet the City's noise standards the following measures should be followed: • All HVAC equipment shall be shielded or enclosed from the line of sight of adjacent residential uses. • The combined noise level of all units operating simultaneously shall not exceed the City of Eastvale daytime and nighttime exterior standards at the nearest surrounding property lines. **NOI PDF-5** Future residents, property management personnel, and commercial tenants will be required to comply with the City of Eastvale Municipal Code Noise Regulations, Chapter 8.52, which specify that no person shall create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness. To help ensure compliance with the City's Noise Regulations, the following recommendations are provided: • Deliveries, loading and unloading activities, and trash pick-up hours should be limited to daytime hours only (8 a.m. – 10 p.m.). • Limit engine idling time for all delivery vehicles and moving trucks to 5 minutes or less. **NOI PDF-6**			

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	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	The Project will prepare a construction management plan and obtain a construction work permit from the City of Eastvale prior to starting construction. The construction management plan will ensure all contractors implement construction best management practices to reduce construction noise levels. Examples of best management practices may include the following: • All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields). • Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible. • If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load. • Use electric air compressors and similar power tools rather than diesel equipment, where feasible. • Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible. • Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes. • Provide notifications and signage in readily visible locations along the perimeter of construction sites that indicate the dates and duration of construction activities, as well as provide a telephone number where neighbors can enquire about the construction process and register complaints to a designated construction noise disturbance coordinator. • Construction activities shall not take place between the hours of 6:00 p.m.			

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	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	and 6:00 a.m. during the months of June through September and 6:00 p.m. to 7:00 a.m. during the months of October through May. **NOI PDF-7** The Project will not include pile driving or blasting activities during construction. If impact pile driving or blasting is required, a follow-up noise and vibration impact assessment will be conducted prior to start of any activity.			
36.	The Developer shall connect to the JCSD sewer system and apply for a sewer connection account with JCSD	Prior to Building permit issuance	Public Works Department	
37.	Submit a California registered Civil Engineer prepared earthwork cut and fill certification letter to the Engineering Division for review. The applicant is required to pull an NPDES/Public Works permit prior to issuance of a Building Permit for record purposes.	Prior to Building Permit	Public Works Department	
38.	All construction shall comply with the most recently adopted City and State building codes: • 2022 California Building Code • 2022 California Residential Code • 2022 California Electrical Code • 2022 California Mechanical Code • 2022 California Plumbing Code • 2022 California Fire Code 2022 California Green Code	Prior to building permit issuance	Building Division	

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	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
39.	Special Inspections – As indicated by California Building Code Section 1704, the owner shall employ one or more special inspectors who shall provide special inspections when required by CBC section 1704. Please contact the Building Division at the time of plan submittal to obtain an application for special inspections.	Prior to building permit issuance	Building Division	
40.	The Title Sheet of the plans shall include: • Occupancy Group • Occupant Load • Description of use • Type of Construction • Height of Building • Floor area of building(s) and/or occupancy group(s)	Prior to building permit issuance	Building Division	
41.	School impact fees shall be paid prior to building permit issuance.	Prior to building permit issuance	Building Division	
42.	Dimensioned building setbacks and property lines, street centerlines, and between buildings or other structures shall be dimensioned on the plot plan.	Prior to building permit issuance	Building Division	
43.	All property lines and easements must be shown on the plot plan. A statement that such lines and easements are shown is required.	Prior to building permit issuance	Building Division	
44.	The project design will conform with energy conservation measures articulated in Title 24 of the California Code of Regulations and address measures to reduce energy consumption such as flow restrictors for toilets, low consumptions light fixtures, and insulation, and shall use to the extent feasible drought landscaping.	Prior to building permit issuance	Building Division	
45.	A design professional will be required at the time of construction drawings, to prepare plans for proposed improvements per the Business and Professions Code.	Prior to building permit issuance	Building Division	

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Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
46.	Public and private site improvements shall be designed in accordance with the Americans with Disabilities Act and Chapter 11 of the California Building Code. The site plan shall include a site accessibility plan identifying exterior routes of travel and detailing running slope, cross slope, width, pedestrian ramp, curb ramps, handrails, signage, and truncated domes. Path of travel shall be provided from the public right of way and accessible parking to the building. The design professional shall ensure that the site accessibility plan is in compliance with the latest Federal and State regulations.	Prior to building permit issuance	Building Division	
47.	The developer shall prepare an address blocking exhibit with the proposed addressing and street names for review and approval by the Planning Division. This plan, including updates to the plan, shall include addressing for buildings (primary address and units) and utilities such as but not limited to electrical/water/single/dual irrigation meter pedestal(s) or temporary power poles.	Prior to building permit issuance	Planning and Building Division.	
48.	The MDR has approved the overall architectural styles and enhanced elevations at specific locations as identified on the site plan. During plan check, the City may request minor adjustments/enhancements to limited aspects of the architectural details, without wholesale change to the architectural style.	Prior to building permit issuance	Planning Division	
49.	Construction and architectural detailing shall be in substantial conformance with the approved plans, including but not necessarily limited to elevation drawings and material/colors sample board submitted as a part of this application and as approved by the Planning Commission, except that any modification shall be subject to the discretion of the Community Development Director upon finding that any changes are comparable in substance and quality to the original approval.	Prior to building permit issuance	Planning Division	
50.	Any future modification to the building colors and materials approved by the Planning Commission shall be subject to review and approval by the Community Development Director. At the Community Development Director's discretion, proposed color and material modification may be referred to the Planning Commission for Major Development Plan review.	Prior to building permit issuance	Planning Division	

Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
51.	AC units shall be screened to the extent feasible with a healthy and thriving hedge at all times. Where room limitations exist, the applicant shall provide a decorative screen panel to screen AC units from the public right-of-way to the extent feasible to the satisfaction of the Community Development Director.	Prior to building permit issuance	Planning Division	
52.	Additional AC condenser screening may be required and shall be addressed based on final utility locations during the review of construction documents. Any locations that do not have the required room for multiple levels of plant screening shall require screening via the proposed green screens.	Prior to building permit issuance	Planning Division	
53.	Proposed AC screening once detailed may require to be altered in material or design based on review of construction documents.	Prior to building permit issuance	Planning Division	
54.	Sectional garage doors with automatic openers shall be required where face of garage is less than eighteen feet (18') from back of sidewalk or back of curb when sidewalks are not provided.	Prior to building permit issuance	Planning Division	
55.	Any future monumentation into the development shall be subject to review and approval by the Community Development Director and City Engineer.	Prior to building permit issuance	Planning & Public Works Divisions	
56.	All signs and entry monumentation shall be illuminated and setback a minimum of five feet from the property line.	Prior to building permit issuance	Planning Division	
57.	All required parking area spaces shall meet the minimum dimensions of the Zoning Code Section 120.05.060, as existing prior to May 11, 2022.	Prior to building permit issuance	Planning Division	
58.	The master conceptual wall and fence plans approved by the Planning Commission as part of **PLN24-20035** shall serve as the master plan of development for community walls and fences within PA-4. The final design and location of project walls and fences shall be subject to review and approval of the Community Development Director.	Prior to building permit issuance	Planning Division	
59.	The southern boundary of the site shall be fully enclosed with a six foot (6') high split face block wall consistent with the fencing conditions found along Hamner Avenue in order to screen the project site from Lot 36.	Prior to building permit issuance	Planning Division	

Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
60.	All stairwells shall be illuminated with LED lighting.	Prior to building permit issuance	Planning Division and Riverside County Sheriff's Department	
61.	Landscape construction plans shall be submitted to the Planning Division for final review and approval. The plans shall be consistent with the Conceptual Landscape Plan approved by the Planning Commission on **May 21**, **2025**. The plan shall be certified by a licensed landscape architect as required, taking into account approved preliminary landscape plan (if any), adopted plant palette guides, applicable scenic and master/specific plan requirements, and water conservation measures. This submittal shall be made to the Planning Division with the appropriate application and fee.	Prior to building permit issuance	Planning Division	
62.	Additional vertical planting may be required for screening and shade requirements during the review of construction documents once all utilities are finalized. This shall include increasing the size, spacing, and or adding plant species to meet the final conditions.	Prior to building permit issuance	Planning Division	
63.	Applicant shall provide concrete mow curbs or other approved separations for areas of landscape where separations or changes in maintenance responsibility exist. These shall clearly define and separate the areas.	Prior to building permit issuance	Planning Division	
64.	All DG or aggregate based ground cover treatments shall be edged with a permanent edging such as concrete mow curbs.	Prior to building permit issuance	Planning Division	
65.	All landscape and irrigation plans shall be consistent with the current Eastvale Municipal Code chapter 14.24, Water Conservation for Landscaping, chapter 120.05.040, Landscape Requirements.	Prior to building permit issuance	Planning Division	
66.	Landscaping and planting areas shall be used to screen and buffer edge areas and parking areas from public view. All parking areas shall be screened by	Prior to building permit issuance	Planning Division	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	earth mounding (30") and or screening shrubs to screen the parked cars from public view from right of ways.			
67.	Applicant shall include a mix of larger tree sizes with the minimum size being 24" box for 50% of total trees provided, 36" box for 30% of total, and 48" box for 20% of total. Applicant shall include an overall chart breaking down quantities of trees versus sizes for verification.	Prior to building permit issuance	Planning Division	
68.	Final planting design shall offer horizontal and vertical variation in form, texture, and scale and shall include multiple species to prevent against loss of a monoculture of a single species from species specific pest or other cause.	Prior to building permit issuance	Planning Division	
69.	Canopy shade trees fully surrounded by hardscape shall based on the direction of the City Landscape Architect be required to have special planting techniques including, specialized soil mixes, geotechnical support structures, or other instruments for maintaining uncompacted and healthy soil root zones for the trees needs based on species or size required and site-specific characteristics.	Prior to building permit issuance	Planning Division	
70.	All trees shall be double staked with vinyl type ties nailed to the lodge pole stakes in at least two vertical locations. Trees in high wind corridors or trees requiring special support measures shall require additional staking and or specialized staking material as needed.	Prior to building permit issuance	Planning Division	
71.	Root barriers shall be installed for all trees planted within 5 feet of hardscape, paving, or walls/ structures. All trees requiring root barriers shall extend 10' from the center of the trunk in either direction and be a minimum of 24" deep.	Prior to building permit issuance	Planning Division	
72.	A water conservation statement shall be included in the landscape documentation package as well as Irrigation schedules for both establishment and maintenance, maintenance schedule, soil management plan (Soil test and recommendations) and the requirement for a third-party water audit of the installed irrigation system prior to final sign off.	Prior to building permit issuance	Planning Division	

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Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
73.	To the extent feasible, utility and trash enclosure walls shall be appropriately screened within planting areas at least 5 feet wide with shrubs and/or vines that mitigate the view of the walls and the equipment within the enclosure.	Prior to building permit issuance	Planning Division	
74.	Site lighting and or utility design shall not prevent tree placement as shown for shading nor reduce overall site landscape coverage of trees in either counts or shade provision. Any conflicts will result in trees being required to be relocated to other acceptable areas.	Prior to building permit issuance	Planning Division	
75.	The above-described plans shall be in substantial conformance with the adopted city ordinances and or requirements as approved by the City Landscape Architect, City Planning Staff, Planning Commission and/or City Council. Notes, details, and specifications shall be included.	Prior to building permit issuance	Planning Division	
76.	Provide pad elevation certifications for all building pads in conformance with the approved Precise Grading Plan to the Public Works Division prior to construction of any building foundation.	Prior to building permit issuance	Public Works Department	
77.	The applicant shall pay to the City any applicable Development Impact Fees as required by the terms of the Development Agreement 003 and between the City of Eastvale and the New Home Company Southern California LLC dated May 11, 2022	Prior to building permit issuance	Building, Planning, and Public Works Divisions	
78.	The applicant shall pay to the City any applicable park improvement and park dedication fees (if fees are required after dedication, improvement, and receipt of associated credits) as required by the terms of the Development Agreement 003 by and between the City of Eastvale and the New Home Company Southern California LLC dated May 11, 2022.	Prior to building permit issuance	Planning Division	
General **Prior/During Ground Disturbance and Construction**				

Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
79.	The City Landscape Architect shall be contacted to meet with the job site superintendent and the landscape contractor for a pre-job meeting. A copy of the soil fertility recommendations utilizing humate, mycorrhizae, and organic fertilizer shall be presented prior to the meeting. No landscaping shall occur prior to the meeting.	Prior to initiation of landscape construction	Planning Division	
Prior to Issuance of Final Certificate of Occupancy				
80.	The development shall be designed to include pet and animal waste receptacles along pedestrian pathways. Final design shall be approved by the Community Development Director.	Prior to Certificate of Occupancy	Planning Division	
81.	Mailboxes shall be designed, installed and located by the developer to the satisfaction of the Community Development Director.	Prior to Certificate of Occupancy	Planning Division	
82.	A WQMP and Storm Water BMP Transfer, Access and Maintenance Agreement shall be required, obligating the property owner(s) to appropriate operation and maintenance obligations of on-site BMPs constructed pursuant to the approved WQMP. The WQMP and Storm Water BMP Transfer, Access and Maintenance Agreement shall be approved prior to issuance of a building permit and shall be Public Works Staff recorded at the Riverside County Recorder's Office prior to issuance of a Certificate of Occupancy.	Prior to Certificate of Occupancy	Public Works Department	
83.	The Applicant shall submit a set of development plans, including a lighting plan, to the Eastvale Police Department for review and approval for appropriate safety measures including, but not limited to, the following: PROPERTY GATES AND KNOX BOX ENTRY a. The installation of the Knox Rapid Entry System if property gates are installed. This system permits law enforcement, fire, and first responders to obtain independent access to the property in the event of an emergency. The necessary order forms for the Knox Company may be obtained by contacting the Jurupa Valley Sheriff's Station Crime Prevention Programs Coordinator at (951) 955-9225.	Prior to Certificate of Occupancy	Planning Division	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	ADDRESS NUMBERING: b. Prominently displayed address numbering in size and contrasting in color from the building façade or on a fixed sign near the street/main entrances. The numbers need to be visible from the street and interior property sides for any approaching emergency vehicles. No obstructions should limit their visibility (i.e., landscaping). SECURITY AND LIGHTING PLAN c. Adequate crime prevention measures to assist with identifying any suspect(s) of any potential future vandalism or theft attempts. Due to the high possibility of theft/vandalism attempts during construction, additional security measures should be added during that time frame of proposed construction. All exterior access points should be properly illuminated to make clearly visible any person on or about the premises during the hours of darkness. d. Residential units shall be equipped with solid core doors and quality dead bolt locking devices at entry points.			
84.	The applicant shall install No Trespassing (6002 PC) signage to all entrance and exit points to the complex. Additionally, a trespassing letter shall be on file with Riverside County Sheriff's Department and renewed annually.	Prior to Issuance of Certificate of Occupancy	Riverside County Sheriff's Department	
85.	The applicant shall install license plate reader (LPR) cameras at each of the two (2) vehicular ingress/egress points and provide Riverside County Sherrif's Department access to footage.	Prior to Issuance of Certificate of Occupancy	Riverside County Sherriff's Department	
86.	A minimum of ten percent (10%) of the parking area shall be landscaped. One tree shall be planted for every five (5) parking spaces within the parking area. Fifty percent of the trees shall be a minimum size of fifteen (15) gallons and	Prior to Issuance of Certificate of Occupancy	Planning Division	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	fifty percent of the trees shall be a minimum size of twenty-four (24) inch box, or as specified in the Master Plan.			
87.	The property management shall prohibit the use of dedicated covered resident parking for personal storage or any use other than for the parking of operable motor vehicles at all times to the satisfaction of the City Attorney and Community Development Director.	Prior to Issuance of Certificate of Occupancy	Planning Division	
88.	Prior to issuance of a Certificate of Occupancy or final City approvals, demonstrate that all structural BMP's have been constructed and installed in conformance with approved plans and specifications, and as identified in the approved WQMP.	Prior to Issuance of Certificate of Occupancy	Public Works Department	
89.	Prior to the request for final inspection the Applicant shall have completed the installation of all landscape items, passed all construction sequence inspections in addition to having a completed 3rd party water audit with report, as built documents, controller charts submitted and approved prior by the City Landscape Architect. Failure to do so will result in delays for final inspection and or sign off.	Prior to Issuance of Certificate of Occupancy	Public Works Division	
90.	All parkway landscaping shall be guaranteed for a period of one (1) year from the date of the City Engineer acceptance. Any landscaping that fails during the one (1) year landscape maintenance period shall be replaced with similar plant material to the satisfaction of the City Engineer, and shall be subject to a subsequent one (1) year landscape maintenance period.	Prior to Issuance of Certificate of Occupancy	Public Works Department	
91.	The development shall be annexed into all applicable CFD and/or LMD for traffic signals, street lights, full capture systems for all storm drains and landscape maintenance of raised landscpae median and public parkways, to the satisfaction of the City Engineer or otherwise form a district where one is not currently in place.	Prior to Issuance of Certificate of Occupancy	Public Works Department	
92.	Upon City Engineer approval of any improvement plan, the improvement plan shall be provided to the City in digital format, consisting of a DWG (AutoCAD drawing file), DXF (AutoCAD ASCII drawing exchange file), and PDF (Adobe Acrobat) formats. Variation of the type and format of the digital data to be submitted to the City may be authorized, upon prior City Engineer	Prior to Issuance of Certificate of Occupancy	Public Works Department	

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	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	approval.			
93.	RBBD, TUMF, ADP fee and any development impact fees that are in effect at that time shall be paid prior to issuance of certificate of occupancy.	Prior to Issuance of Certificate of Occupancy	Public Works Department	
94.	Provide certification from JCSD to demonstrate that all water and/or wastewater service accounts have been documented.	Prior to Issuance of Certificate of Occupancy	Public Works Department	
95.	All damaged, destroyed, or modified pavement legends, traffic control devices, signing, striping, and street lights, associated with he proposed development shall be replaced.	Prior to Issuance of Certificate of Occupancy	Public Works Department	
96.	Construct a curb ramp meeting current California State Accessibility standards along both sides of the commercial driveway approach. The developer shall ensure that an appropriate path of travel, meeting ADA guidelines, is provided across the driveway, and shall adjust the location of the access ramps, if necessary, to meet ADA guidelines, subject to the approval of the City Engineer. If necessary, additional pedestrian and sidewalk easements shall be provided on-site to construct a path of travel meeting ADA guidelines.	Prior to Issuance of Certificate of Occupancy	Public Works Department	
Ongoing				
97.	To reduce fugitive dust emissions, the contractor shall provide the City with sufficient proof of compliance with Rule 403 and other dust control measures including but not limited to: • Watering active sites three times daily. • Requiring the replacement of ground cover or the application of non-toxic soil stabilizers according to manufacturer specifications to unpaved roads and all inactive construction areas (previously graded areas inactive for 10 days or more, assuming no rain). • Requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered. • Suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour.	Ongoing (during project construction)	Building and Public Works Division	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	• Posting contact information outside the property for the public to call if specific air quality issues arise; the individual charged with receipt of these calls shall respond to the caller within 24 hours and resolution of the air quality issue(s), if valid, or implementation of corrective action(s) will occur within 48 to 72 hours of the time that the issue first arose. • Sweeping of streets using SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks (utilizing recycled water if it becomes available) at the end of the day if visible soil material is carried over to adjacent streets. • Posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved roads. • Installing wheel washers or gravel pads at construction entrances where vehicles enter and exit unpaved roads onto paved roads,or wash off trucks and any equipment leaving the site each trip to prevent track-out. Paving of all roadways, driveways, sidewalks, etc., shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless soil stabilizers are used.			
98.	All landscaping shall be perpetually maintained and be in a healthy and thriving manner consistent with the approved construction landscape plans. Any changes and modifications made to the approved landscape design and ground coverage shall be required to be reviewed and approved by the Community Development Director.	Ongoing	Planning& Code Enforcement Divisions	
99.	All amenities (such as, but not limited to mailboxes, trashcans, pools, barbeques, table games, landscape, lighting, signage etc.) shall be continually maintained and operational in a manner consistent with the approved plans to the satisfaction of the Community Development Director.	Ongoing	Planning & Code Enforcement Safety Divisions	
100.	Adequate exterior night lighting shall be provided adjacent to doors and windows to the satisfaction of the Community Development Director.	Ongoing	Planning Division	

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Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
101.	At all times light shall not trespass beyond the property lines. Should light spill beyond the boundaries of the site, lighting shall be modified to include but not limited to a light shield.	Ongoing	Planning Division & Riverside County Sherriff's Department	
102.	All signs shall be in conformance Section 120.05.070 Signs of the Eastvale Zoning Code and Chapter 4.4 Signage of the Leal Master Plan, as existing prior to May 11, 2022.	Ongoing	Planning Division	
103.	Remove all graffiti within 24 hours pre-construction, during construction, and after a Certificate of Occupancy is issued.	Ongoing	Public Works Division	
104.	Provide street sweeping services for onsite and offsite within project frontages weekly.	Ongoing	Public Works Division	
105.	A City of Eastvale Encroachment Permit is required for any improvements within the public right-of-way.	Ongoing	Public Works Division	
106.	All street cuts for utilities shall be repaired in accordance with City Standard or as recommended; and any interim trench repairs shall consist of compacted backfill to the bottom of the pavement structural section followed by placement of standard base course material in accord by the City Engineer and with the Standard Specifications for Public Work Construction ("Greenbook"). The base course material shall be placed the full height of the structural section to be flush with the existing pavement surface and provide a smooth pavement surface until permanent cap paving occurs using an acceptable surface course material.	Ongoing	Public Works Division	
107.	In accordance with City's Moratorium policy to preserve newly paved streets, any and all street and/or trench cuts in newly paved streets will be prohibited or be subject to moratorium street repair standards as reference in Section 12.08.260 of the Eastvale Municipal Code.	Ongoing	Public Works Division	
108.	Any and all utility trenches or other excavations within existing asphalt concrete pavement of off-site streets resulting from the proposed development shall be backfilled and repaired in accordance with City of Eastvale Standard	Ongoing	Public Works Division	

Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	Drawings. The developer shall be responsible for removing, grinding, paving and/or overlaying existing asphalt concrete pavement of off-site streets including pavement repairs in addition to pavement repairs made by utility companies for utilities installed for the benefit of the proposed development (i.e. Jurupa Community Services District, Southern California Edison, Southern California Gas Company, Time Warner, Verizon, etc.). Multiple excavations, trenches, and other street cuts within existing asphalt concrete pavement of off-site streets resulting from the proposed development may require complete grinding and asphalt concrete overlay of the affected off-site streets, at the discretion of the City Engineer. The pavement condition of the existing off-site streets shall be returned to a condition equal to or better than what existed prior to construction of the proposed development.			
109.	Construction signing, lighting, and barricading shall be provided during all phases of construction in accordance with City Standards and the direction of the City Engineer. As a minimum, all construction signing, lighting and barricading shall be in accordance with Part 6 "Temporary Traffic Control" of the latest California Manual on Uniform Traffic Control Devices ("CA MUTCD"), or subsequent editions in effect at the time of construction.	Ongoing	Public Works Division	
110.	Utility locations (on or off-site) shall not obstruct multipurpose/pedestrian walks, trails, and paths.	Ongoing	Planning and Public Works Division	
111.	The applicant shall provide, and future property manager shall enforce a parking management plan consistent with the Parking Management Plan section of the memorandum prepared by Kimley Horn dated July 22, 2024 for review and approval by the Community Development Director.	Ongoing	Planning Division	
112.	Should a parking-related issue arise, based on the Community Development Director's determination, the applicant shall work with staff to effectively resolve the issue.	Ongoing	Planning Division	
Riverside County Fire Department				

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Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
113.	A water system (hydrants- commercial with one 4" outlet and two 2-1/2" outlets) capable of delivering the required fire flow shall be provided in accordance with Appendix B and C of the California Fire Code shall be provided. A reduction of 50% is permitted in buildings equipped with fire sprinklers in accordance with City Municipal Code. On-site water supply must be available before any combustible material is placed on the construction site. No portion of a building can be more than 400 feet from a hydrant.	Prior to Building Permit Issuance	Fire Department	
114.	Prior to building plan approval and construction, applicant/developer shall route a copy of the Water Improvement Plans (offsite) to the Fire Department for review of hydrant placement only. Water Improvement Plans (offsite) will not be reviewed or approved for the installation of onsite Prive Fire Service Mains, private hydrants, or fire sprinkler system supplies. The installing contractor shall submit a separate set of working plans designed in accordance with NFPA 13 and NFPA 24 to the Fire Department for a permit to install private water mains. BUILDING PERMITS SHALL NOT BE RELEASED PRIOR TO THE APPROVAL OF THE OFFSITE (JCSD WATER PLANS) AND ONSITE FIRE WATER (PRIVATE FIRE SERVICE MAINS) IMPROVEMENT PLANS. IN ADDITION, AN APPROVED FIRE WATER SOURCE AND APPROVED FIRE APPARATUS ACCESS SHALL BE REQUIRED PRIOR TO BUILDING PERMIT ISSUANCE.	Prior to Building Permit Issuance	Fire Department	
115.	The applicant must provide a fire hydrant system capable of delivering fire flow as required by California Fire Code and Fire Department standards. Fire hydrants shall be spaced in accordance with the California Fire Code. Submit plans to the water district for review and approval prior to building permit issuance.	Prior to Building Permit Issuance	Fire Department	
116.	Fire apparatus access roads shall be at least 24 feet wide and comply with Riverside County Fire Department Guideline OFM-01A. Access roads shall be located outside of truck docks and between 15 and 40 feet from the building. Access roads shall not have a grade more than 16% and shall have an unobstructed vertical clearance not less than 13 feet and 6 inches. Access laned will be designed to withstand the weight of 80,000 thousand pounds. Apparatus weight is distributed as 55,000 pounds on tandem rear axles and	Prior to Building Permit Issuance	Fire Department	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
	25,000 pounds on the front axle. Fire apparatus access roads shall have a turning radius capable of accommodating fire apparatus.			
117.	The surface shall be designed, constructed, and maintained to provide all-weather driving capabilities. A letter or statement, wet-stamped and signed by a registered engineer, shall be provided on the plans certifying that any new roads meets this 80,000, all-weather requirement. Road base without an appropriate topping or binding material does not satisfy the all-weather requirement.	Prior to Building Permit Issuance	Fire Department	
118.	Parking is not permitted on fire apparatus access roads that are less than 32 feet in width. Parking on one side is permitted on a road that is at least 32 feet but less than 40 feet in width. Parking on two sides is permitted on a road that is 40 feet or more in width.	Prior to Building Permit Issuance	Fire Department	
119.	Dead-end fire apparatus access roads more than 150 feet in length shall be provided with an approved area for turning around fire apparatus. Reference CFC 5031.1, 503.2.1 as amended by the County of Riverside and Riverside County Office of the Fire Marshal Guideline OFM-01A.	Prior to Building Permit Issuance	Fire Department	
120.	Inside and Outside Turning Radii- The minimum inside turning radius for an access road shall be 24 feet. The minimum outside turning radius shall be 45 feet. As fire apparatus are unable to negotiate tight “S” curves, a 60-foot straight leg must be provided between these types of compound-turns or the radii and/or road width must be increased accordingly.	Prior to Building Permit Issuance	Fire Department	
121.	Traffic Calming Devices are prohibited. Requests for installation of traffic calming design/devices on fire apparatus access roads shall be submitted and approved by the Office of the Fire Marshal. Reference CFC 503.4.1	Prior to Building Permit Issuance	Fire Department	
122.	Fire Department Building Construction Permit Review- Submittal of construction plans to the Fire Department will be required. Final fire and life safety conditions will be addressed when the Fire Department reviews these plans. These conditions will be based on California Fire Code, California Building Code (CBC), and related codes/standards adopted at the time of construction plan submittal. Reference CFC 105.1	Prior to Building Permit Issuance	Fire Department	

Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
123.	Driveway loops, fire apparatus access lanes and entrance curb radius should be designed to adequately allow access of emergency fire vehicles. The applicant or developer shall include in the building plans the required fire lanes and include the appropriate lane printing and/or signs.	Prior to Building Permit Issuance	Fire Department	
124.	Gate Access: All electronically operated gates shall be provided with Know key switches and automatic sensors for access. These gates shall be provided with access to gate equipment or another method to open the gate if there is a power failure. A pedestrian gate, if used to provide access, shall be a minimum 3 feet wide and provided with a Knox Box/Padlock if locked. Reference CFC 506.1.	Prior to Building Permit Issuance	Fire Department	
125.	Phase construction fire access shall comply with Riverside County Office of the Fire Marshal Guideline OFM-01A. Construction Phasing Plan shall be submitted and reviewed prior to building permit release for each phase of construction.	Prior to Building Permit Issuance	Fire Department	
126.	Buildings more than 3,600 square feet shall be equipped with a fire sprinkler system. The PIV and FDC shall be located to the front, within 100 feet of a hydrant. FDC shall be located so that fire apparatus and hose connected to supply the system will not obstruct roadway access for other fire apparatus. FDCs are not allowed in the rear of any building. See Riverside County Fire Department Guideline OFM-01B and OFM-02.	Prior to Building Permit Issuance	Fire Department	
127.	Access to the fire sprinkler system riser shall be accessible to responding fire personnel from the exterior.	Prior to Building Permit Issuance	Fire Department	
128.	A fire sprinkler monitoring system is required in all sprinklered buildings.	Prior to Building Permit Issuance	Fire Department	
129.	Fire Alarm and Detection System- A water flow monitoring system and/or fire alarm system may be required as determined at time of building construction plan review. Reference CFC 903.4 and CFC 907.2.	Prior to Building Permit Issuance	Fire Department	
130.	A manual and automatic fire alarm system may be required, depending on the use and/or occupant load of the building.	Prior to Building Permit Issuance	Fire Department	

Conditions of Approval		Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
131.	An approved Fire Department access key lock box (minimum Knox 3200 series) shall be installed at the main entrance to any sprinklered building. Gate switches or padlocks shall be installed at each automatic or manual gate. Locations shall be shown on plans submitted for a building permit.	Prior to Building Permit Issuance	Fire Department	
132.	New motorized gates shall be provided with means to be automatically opened remotely by emergency vehicles I accordance with Riverside County standards and policies. The system shall be compatible, but not limited to the detection of the following manufacturers of emergency vehicle preemption: Federal Signal, Whelen, and Tomar. Upon installation of the system, compliance testing shall be complete by the Riverside County Fire Department. (RVC Amendment to CFC 503.6.1)	Prior to Building Permit Issuance	Fire Department	
133.	The location of address numbers shall be indicated on the building plans. Street numbers shall be displayed in a prominent location on the street of fire apparatus access side of buildings. Numbers and letters shall be a minimum of 12” in height with a minimum stroke of .05 inch. Where access is by means of a private road and the building cannot be viewed from a public way, a monument, pole, or other sign shall be used to identify the structure in accordance with Riverside County Fire Department Guideline OFM-01A. Address must be legible, of a contrasting color, and illuminated either internally or externally to be visible from the street at all hours.	Prior to Building Permit Issuance	Fire Department	
134.	No hazardous materials shall be stored and/or used within the building which exceeds quantities listed in the California Fire Code, without first obtaining a permit.	Prior to Building Permit Issuance	Fire Department	
135.	Exit signs, door hardware, and exit path marking shall be as required by the California Building Code.	Prior to Building Permit Issuance	Fire Department	
136.	Fire sprinkler riser door shall be posted “FIRE RISER” on the outside of the door.	Prior to Building Permit Issuance	Fire Department	
137.	Electrical room door shall be posted “ELECTRICAL ROOM” on the outside of the door.	Prior to Building Permit Issuance	Fire Department	
138.	Fire alarm control panel door shall be posted “FACP” on the outside of the door.	Prior to Building Permit Issuance	Fire Department	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
139.	Provide specific fire department conditions on plans for building permit submittal.	Prior to Building Permit Issuance	Fire Department	
140.	The following alternative protection measures are proposed for the deficient 150-foot path of travel "hose-pull" distance around the perimeter of the following Buildings: 99' at Building 2, 162' at Building 3, 89' at Building 4, 179' at Building 10, 147' at Building 9, and 15' at Building 8 as shown on the exhibit. A. Wet-standpipes: A wet standpipe shall be provided on the side of the building at or near the end of the 150' hose pull as indicated on the Fire Master Plan. The wet standpipe shall connect to the automatic fire sprinkler system, which shall be submitted to the Fire Department for review and approval as a deferred submittal. B. Buildings 1, 2, 3, 4,& 10 have been provided with an increase in Construction Type form Type V-A to Type III-A. C. Building 9 shall meet Type III-A construction requirements for Exterior Wall Assembly along the southern face only, as indicated on the Fire Master Plan Layout sheet.	Prior to Building Permit Issuance	Fire Department	
141.	The following alternative protection measures are proposed to provide an alternative to the "Aerial Ladder Access-Truck Deployment" requirements in Riverside County Fire Guideline OFM-01A Section 2.8.4 and Hose Pull requirements in riverside County Fire Guidelines OFM-01A Section 8.A: a. Increase Fire Sprinkler Protection. As indicated on the Fire Master Plan, Buildings 5, 6, 8 ,9 ,& 11 not meeting the minimum aerial truck laddering requirements, and Buildings 2, 3, 4, 8, 9, 10 shall be provided with an NFPA 13 Fire Sprinkler System with an increased sprinkler flow density of .10 to .15 with a 4-head calc. Additionally, the Code exception to not provide sprinkler coverage within all closets, small spaces and bathrooms shall not be taken. b. One (1) or (2) 2-hour related Fire Wall shall be provided for Buildings 5, 6, 7,8, 9,11, &12 as indicated on the plan. This shall be provided for buildings with hose pull and aerial truck laddering deficiencies only.	Prior to Building Permit Issuance	Fire Department	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
142.	The following alternative protection measure is proposed to provide an alternative to the "Aerial Ladder Access -Truck Deployment" requirements in Riverside County Fire Guidelines OFM-01A Section 2.8.4: a. Ground Ladder Roof Access: As indicated on the Fire Master Plan, Buildings 5, 6, 8, 9, & 11 not meeting the minimum aerial truck laddering requirements, shall be provided with two (2) areas, one on each side of the building), along the garage side where the eaves are less than 30-feet in height from the roadway to allow for use of ground ladders to access the contiguous.	Prior to Building Permit Issuance	Fire Department	
Jurupa Community Services District (JCSD)				
143.	This project will be subject to compliance with Jurupa Community Services District's (District) rules, regulations, conditions, requirements, and payment of applicable fees for the proposed project.	Prior to Building Permit Issuance	JCSD	
144.	The applicant is required to coordinate with Jurupa Community Services District during the entire development process for their project. The District provided a Board of Directors approved water and sewer availability letter dated 5/22/2023. The Developer is required to prepare the water, sewer, and recycled water improvement plans for the District's approval.	Prior to Building Permit Issuance	JCSD	
145.	The applicant is required to participate in the final adopted program to provide a recycled water supply source and related infrastructure improvements for parks and green belt areas.	Prior to Building Permit Issuance	JCSD	
Riverside County Flood Control				
146.	An encroachment permit shall be obtained for any construction related activities occurring within District right of way or facilities, namely, Eastvale Master Drainage Plan, Lines D-3 and D-5. If a proposed storm drain connection exceeds the hydraulic performance of the existing drainage facilities, mitigation will be required. For further information, contact the District's Encroachment Permit Section at 951.955.1266.	Prior to Encroachment Permit	Riverside County Flood Control	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Signature)
147.	This project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Clearance for grading, recordation, or other final approval should not be given until the City has determined that the project has been granted a permit or is shown to be exempt. If this project involves a Federal Emergency Management Agency (FEMA) mapped floodplain, then the City should require the applicant to provide all studies, calculations, plans, and other information required to meet FEMA requirements, and should further require that the applicant obtain a Conditional Letter of Map Revision (CLOMR) prior to grading, recordation, or other final approval of the project and a Letter of Map Revision (LOMR) prior to occupancy. The project proponent shall bear the responsibility for complying with all applicable mitigation measures defined in the California Environmental Quality Act (CEQA) document (i.e., Negative Declaration, Mitigated Negative Declaration, Environmental Impact Report) and/or Mitigation Monitoring and Reporting Program, if a CEQA document was prepared for the project. The project proponent shall also bear the responsibility for complying with all other federal, state, and local environmental rules and regulations that may apply. If a natural watercourse or mapped floodplain is impacted by this project, the City should require the applicant to obtain a Section 1602 Agreement from the California Department of Fish and Wildlife and a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers, or written correspondence from these agencies indicating the project is exempt from these requirements. A Clean Water Act Section 401 Water Quality Certification may be required from the local California Regional Water Quality Control Board prior to issuance of the Corps 404 permit.	Ongoing	Riverside County Flood Control	

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General Compliance Items/Requirements and Information

The following items are noted for the applicant's information. These items are required by the City, other local agencies, or state and federal agencies, and are not conditions of approval of the project.

1. The applicant shall obtain City approval for any modifications or revisions to the approval of this project. Deviations not identified on the plans may not be approved by the City, potentially resulting in the need for the project to be redesigned. Amended entitlement approvals may be necessary as a result.

2. Should this project lie within any assessment/benefit district, the project proponent shall, prior to acceptance of improvements, make application for and pay for their reapportionment of the assessments or pay the unit fees in the benefit district unless said fees are otherwise deferred.

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CITY OF EASTVALE
PLANNING COMMISSION NOTICE OF PUBLIC HEARING
FOR PROJECT NO. PLN24-20035 MAJOR DEVELOPMENT REVIEW FOR PLANNING AREA 4 (PA 4) OF THE LEAL MASTER PLAN (QUARTERRA PHASE B)

NOTICE IS HEREBY GIVEN that the City of Eastvale Planning Commission will hold a public hearing on **Wednesday, May 21, 2025**, at 6:00 p.m. at the Eastvale City Hall Council Chambers located at 12363 Limonite Avenue, Suite 910, Eastvale, CA 91752, to consider Project No. PLN23-20036 Quarterra.

PROJECT DESCRIPTION: Major Development Review for the master site planning and architecture of Planning Area 4 (PA 4) of the Leal Master Plan to accommodate a proposed 360-unit apartment community with associated pool/recreational facility, parking areas, landscaping and open space amenities.

PROJECT LOCATION: Assessor's Parcel Number: 164-030-044; Leal Master Plan (Planning Area 4) located north of Limonite Avenue, south of 58th Street, west of Hamner Avenue, and east of Scholar Avenue. The project site is not located on a hazardous materials site listed under Government Code Section 65962.5.

ENVIRONMENTAL: Up to 2,500 residential units and 595,000 square feet of commercial space including a hotel, a civic center (i.e., City Hall, Library, Police Station) and Fire Station were contemplated in the Leal Master Plan Amendment and fully evaluated in the Addendum to the Leal Master Plan PEIR (SCH# 2015031028) certified by the City Council via Resolution No-22-25 on May 11, 2022. Staff has reviewed the environmental analysis in the Addendum to the Leal Master Plan PEIR and believes that it remains valid for the proposed project. The proposed project would not exceed the previously analyzed development in terms of size or intensity of use. Development of the proposed project would remain consistent with the analysis of the Addendum to the Leal Master Plan PEIR and would not require a change to the site's land use designation or zoning. Therefore, staff has determined the project is within the scope of the Leal Master Plan PEIR and Addendum pursuant to CEQA Guidelines Section 15168 and no additional environmental analysis is necessary. Applicable mitigation measures included in the Addendum to the Leal Master Plan PEIR would be required for the development of the proposed project, however a Notice of Determination shall be filed following any action taken on the project.

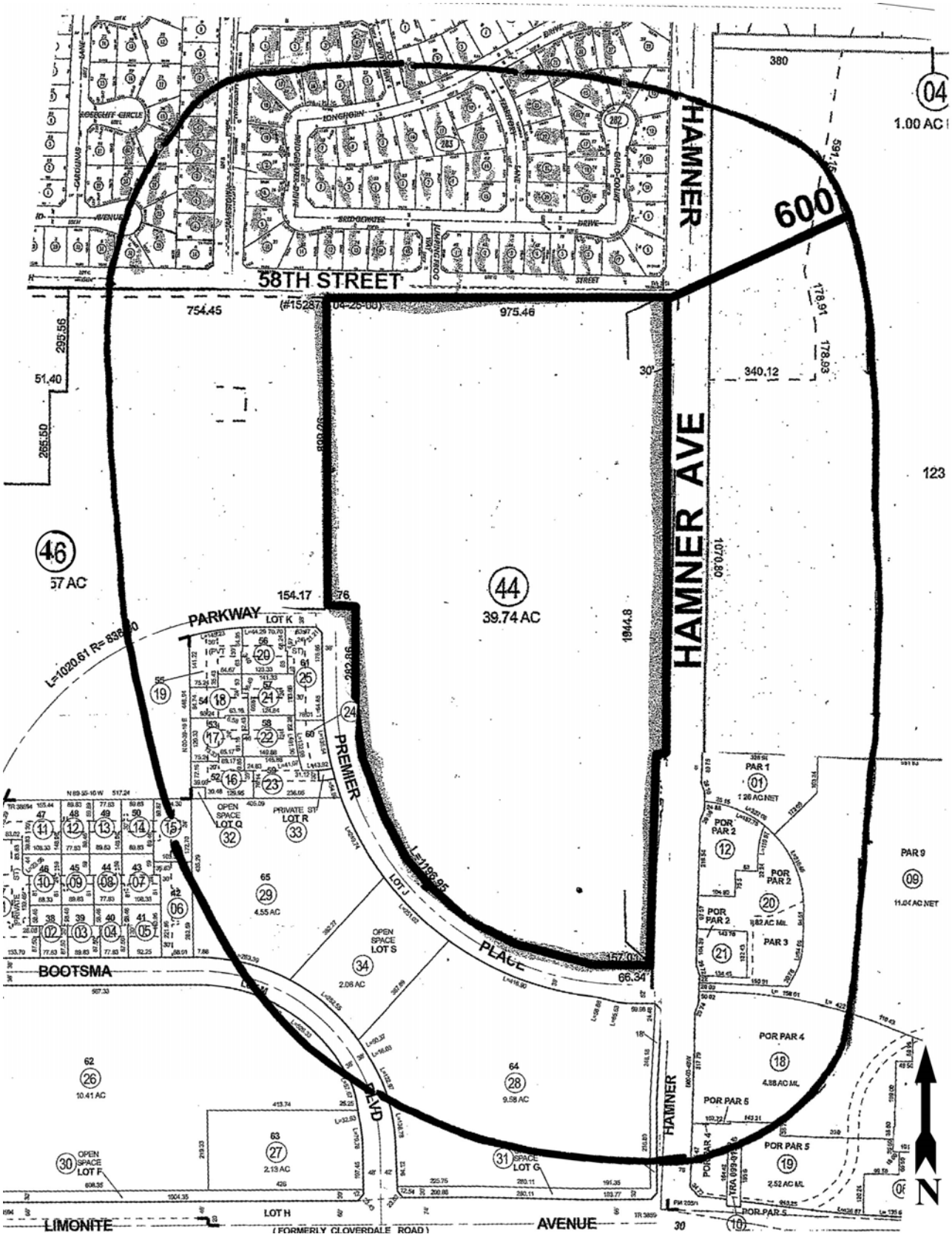
Any person may submit written comments prior to the public hearing or may appear in person before the Planning Commission to be heard. Written comments may be mailed to the City of Eastvale Planning Division located at 12363 Limonite Avenue, Suite 910, Eastvale, CA 91752 or via email to Jamie K. Cerda, at jcerda@eastvaleca.gov. **For the comments to be presented to the Planning Commission at the meeting, all comments made in writing or via e-mail prior to the public hearing must be received by the City of Eastvale Planning Division no later than Wednesday, May 21, 2025, at 5:00 p.m.** Oral and written comments may be submitted directly to the Planning Commission at the public hearing. If you challenge the project in court, you may be limited to raising only those issues you raised at the public hearing as described in this notice or in written correspondence delivered to the Eastvale Planning Commission prior to or at the public hearing. If you have any questions on the project, contact Jamie K. Cerda at (951) 703-4432 or jcerda@eastvaleca.gov.

Project Vicinity Map



Advanced Listing Services Inc
Ownership Listings & Radius Maps
P.O. Box 2593 • Dana Point, CA • 92624
Office: (949) 361-3921 • Cell: (949) 310-6869
www.Advancedlisting.com denise@advancedlisting.com

Subject APN:	**164-030-044**	**Address:**	**58TH ST & HAMNER AVE**
600' RADIUS			**EASTVALE CA 92880**



CITY OF EASTVALE

AGENDA STAFF REPORT

Planning Commission Meeting
COMMISSION BUSINESS
Agenda Item No. 9.1
May 21, 2025

2025 First Quarter Economic Development Updates

Prepared By:

Alexander Fung, Economic Development Manager

Recommended Action(s)

Staff recommends that the Planning Commission receive and file the report.

Summary

Based on the goals and priorities set by the City Council in the City's Strategic Plan, the City's Economic Development Division aims to develop, support, and implement programs directed at improving the business climate through efforts in business retention and expansion, small business development, neighborhood development, business finance, marketing, and technology transfer. The Division also leads special projects and programs that address the City's emerging challenges, promotes economic growth, and collaborates with other departments to support programs and initiatives that fund infrastructure and services.

Staff desires to provide the Planning Commission with updates regarding the City's economic development efforts in the past several months.

Background

The 2023 Eastvale Strategic Plan has outlined specific actions for the City's Economic Development Team to support the City Council's goals. These actions include:

- Utilize software and technology to help attract and retain businesses (Level 1);
- Conduct monthly minitours in partnership with the Eastvale Chamber of Commerce (Level 1);
- Utilize business incentive programs to attract restaurants and businesses that align with community needs (Level 1);
- Connect with businesses and inform of resources and opportunities for growth and expansion

(Level 1);
- Enhance business attraction and retention by building and maintaining relationships with brokers, developers, and commercial property managers (Level 1);
- Develop campaigns targeting quality and unique businesses (Level 1);
- Update Zoning Code to support entitlement of high-quality businesses (Level 1);
- Create incentives for businesses and developers to create and display art within or outside their businesses (Level 2);
- Identify and utilize data analytics software to attract and retain businesses (Level 3); and
- Market Eastvale to attract businesses that generate sales tax at ICSC and other regional trade shows (Level 3).

In addition to the specific actions that were listed, the 2023 Eastvale Strategic Plan directs the Economic Development Team to implement programs and initiatives that support the following goals (Target B):

- Goal A: Attract and retain businesses that align with diverse community needs and provide choices;
- Goal B: Create "Destination Eastvale" with high-quality and unique businesses;
- Goal C: Develop branding and identity for Eastvale;
- Goal D: Develop strategies for business retention, business support, and business reward;
- Goal E: Diversify the housing stock with more options;
- Goal F: Implement strategies to retain local talent, such as increasing the number of local jobs and matching talent to businesses;
- Goal G: Reinvest in and revitalize existing shopping centers; and
- Goal H: Streamline the development process.

A copy of the 2023 Eastvale Strategic Plan can be found in **Attachment 1**.

Analysis

This section summarizes major updates regarding the City's Economic Development programs and initiatives for the past several months.

Awards and Recognition

This month, the City's Economic Development Team was proud to be recognized by the California Association for Local Economic Development (CALED) and received two merit awards from the organization. The 2025 CALED Awards recognized the City's Business First Walks, formerly known as the Monthly Business Walks, and the City's Staybridge Suites Project under the "Programs and Promotions" category. Both projects were successful examples that demonstrated the City's effective and efficient manners of carrying out economic development activities.

Business Attraction Analysis

With a limited amount of land and sites available, the Economic Development Team is exploring innovative ways to attract desirable businesses and high sales tax generating businesses for the City. Staff is currently performing a Business Attraction Analysis in partnership with HdL Companies to identify top sales tax generating businesses that are currently expanding in Southern California. The results of this study will guide the City's business attraction efforts for the next few years.

Business First Initiative

Staff will soon unveil several resources to enhance the City's efficiency, effectiveness, and service delivery for Eastvale's businesses as part of the Business First Initiative. The Economic Development Team is currently developing checklists, flowcharts, and short videos for businesses to further understand the City's inspection, plan checks, and submission processes. Additionally, a formal Concierge Program will be established to support businesses while their plans and documents are being reviewed by the City. These resources are scheduled to be unveiled by the end of June 2025. The Business First Initiative aims to further promote Eastvale as a genuine business-friendly city.

Business First Walks

Originally launched by the City's Economic Development Division, the Eastvale Business First Walks has since evolved to incorporate elected officials, Riverside County Workforce Development Board, Riverside County Sheriff's Department, Eastvale Chamber of Commerce, and Eastvale's Community Enhancement Volunteers. The program now features three distinct initiatives:

- Council Business Walks allow city staff to partner with the Eastvale Chamber of Commerce and Eastvale's City Council to visit the three most frequented businesses in each of Eastvale's shopping centers. The group also began visiting the "Legacy" and "Newest" businesses in each shopping center to further recognize local businesses for their accomplishments.
- Public Safety Walks involve city staff partnering with the Riverside County Sheriff's Department to share public safety enhancement recommendations with local businesses.
- Staff Business Walks offer an opportunity for City and County staff members to engage directly with the business community to strengthen connections and share important resources. Staff Business Walks include visitations to each and every business in Eastvale's shopping centers.

While these walks take place at various times in different shopping centers each month, they collectively make up Eastvale's Business First Walk program, emphasizing the importance of interagency and departmental collaboration.

Business Incentive Updates

The City currently operates two business incentive programs to support local businesses, which are the Business Incentive Loan Program and the Shopping Center License Plate Reader (LPR) Camera Grant Program. Information regarding both programs can be found on the City's website at https://www.eastvaleca.gov/business/resources. On March 12, 2025, the City Council awarded up to $3,200 to support Lewis Retail Centers to install a total of four Flock Safety Cameras in Eastvale Gateway South, Hamner Place, and Marketplace at the Enclave. Additionally, the Economic Development Team is partnering with stakeholders to further highlight the City's Business Incentive Loan Program as a tool to attract additional upscale, high-end, or premium casual dining restaurants.

Community Development Block Grant

The City's Economic Development Team operates and manages the City's Community Development Block Grant (CDBG). According to federal law, CDBG funds are allocated by the U.S. Department of Housing and Urban Development for state and local governments to develop programs that improve economic development activities, revitalize neighborhoods, and improve community facilities. On November 8, 2023, the City Council voted to allocate $15,000 of the City's FY 2024-2025 CDBG funds to the Corona-Norco Family YMCA. As of this month, the Corona-Norco Family YMCA had successfully utilized its awarded funds.

Community Outreach and Engagement
The Economic Development Division actively partners with the Communications Division to ensure that important information is shared with local residents and businesses via the City's website, social media platforms, newsletters, and podcast episodes. The City's Economic Development Webpage, which can be accessed via https://www.eastvaleca.gov/business, includes various resources for businesses and individuals who are interested in starting businesses in Eastvale.

The City celebrated the 2025 Economic Development Week earlier last week and featured various social media contents regarding the City's business attraction activities. Residents and stakeholders who are interested in learning more can visit the City's website at https://www.eastvaleca.gov/business/resources/how-the-city-attracts-businesses-what-it-means-for-the-community#!/.

The Economic Development Team also fosters and maintains a close partnership with neighboring cities' economic development teams, key community organizations such as the Eastvale Chamber of Commerce, and federal, state, and county economic development organizations and alliances. These relationships allow the City to expand its networks and inform partners of available retail and development opportunities in Eastvale.

Furthermore, the Economic Development Team strives to increase its presence in major city events, with the goal of educating residents, businesses, and visitors about Eastvale's economic development programs and available development opportunities. Staff recently participated in the 2025 Eastvale Lantern Festival in February 2025 and the Boots in the Park Country Festival in March 2025 to speak with participating business vendors at the event to build relationships.

Educational Institution Partnerships
As Eastvale continues to grow and develop, higher education institutions began to be interested in exploring the possibility of establishing remote campuses in the community. Higher education institutions bring in students and attract employers that value an educated workforce, resulting in an increase in the number of jobs available in the community. The Economic Development Team is supportive of collaborating with interested universities and businesses to drive innovation and workforce development, and is in the process of meeting with representatives from interested universities.

Grants and Earmark Requests
The Economic Development Division leads the City's efforts to obtain federal funds via the Congressional Community Project Funding (CPF)/Congressional Directed Spending (CDS) Programs, formerly known as the Congressional Earmark Requests. This year, staff submitted the following funding requests to Congress in hopes of securing federal funds to support the City's efforts:

- $8,500,000 request for the United States Postal Service (USPS) to establish a post office in Eastvale;
- $6,000,000 request to support the construction of the new Eastvale Library;
- $6,000,000 request to support the construction of the new Eastvale Police Station; and
- $2,350,820 request to support the removal of hazardous fire fuels in the Santa Ana Riverbed.

Congress will review submitted requests from state and local government agencies, nonprofits, and other organizations over the next several months. If awarded, the City has the option to accept or

deny the awarded funds.

I-15 Economic Development Collaborative: Preparing for the 2028 Los Angeles Summer Olympics
The City of Eastvale led the formation of the I-15 Economic Development Collaborative in Fall 2024 with the Cities of Corona, Eastvale, Fontana, Jurupa Valley, Norco, Ontario, and Rancho Cucamonga. The Collaborative identified an opportunity for Economic Development Teams across these cities to leverage resources in preparation for the 2028 Summer Olympics. After sending a letter to the LA28 Olympics Hosting Committee, the Collaborative successfully engaged with LA28 representatives and began developing work plans for community engagement and economic development projects in preparation for the Olympics.

ICSC and Real Estate Conferences
The City's Economic Development Team continues to network with brokers, developers, and business representatives and share Eastvale's available retail, commercial, and industrial opportunities. For the month of May 2025, staff will be attending the International Council of Shopping Centers (ICSC) Las Vegas Conference between May 18, 2025 and May 20, 2025 and the Discover Inland Empire Conference on May 22, 2025. These conferences are excellent opportunities for City to meet with real estate representatives and understand their needs and perspectives with regards to business expansion.

Strategic Planning
The Economic Development Division conducts internal strategic planning activities annually to ensure that the Division's projects, programs, and initiatives effectively support the City Council's goals and objectives. On February 25, 2025, the Division held a workshop to evaluate existing projects and tasks and the internal goals that were previously established. Through thorough analyses and evaluations, staff identified sixteen additional projects that can elevate and enhance the City's economic development, workforce development, and community development activities. Five of the sixteen additional projects will be implemented this year, while the remaining projects will be planned for subsequent years:

1. Broker Engagement Enhancement Strategy;
2. Commercial Entertainment Attraction;
3. Economic Competitiveness Evaluation;
4. Grant Tracking Strategy; and
5. Industrial User Evaluation and Engagement

Work plans for these five new projects will be completed in Summer 2025, with implementation scheduled for Fall 2025.

Workforce Development: Job Fair
On April 15, 2025, the City's Economic Development Team partnered with the Riverside County Workforce Development Board to host the City's first job fair at the Staybridge Suites. Fifteen employers hosted recruitment booths and offered more than 700 employment opportunities. Due to venue constraints, job seekers were required to register for attendance ahead of time, with all 300 pre-registration tickets reserved prior to the start of the event. Witnessing the success of the event, staff will plan to host another job fair next year, in partnership with the Riverside County Workforce Development Board.

Environmental

Pursuant to Section 15378 of the California Environmental Quality Act (CEQA) Guidelines, organizational or administrative activities of governments that do not result in direct or indirect physical changes in the environment are not considered as CEQA projects.

Strategic Plan Action - Priority Level: 1 | Target #: B | Goal #: A

The City's Economic Development Team supports efforts to attract and retain businesses in Eastvale.

Fiscal Impact

Funds to implement the City's economic development initiatives are budgeted within the Economic Development Division in the General Fund. Staff actively continues to search for relatable grant funding to support additional economic development efforts.

Prior City Council/Commission Action

The City Council receives quarterly economic development updates during City Council meetings. The Planning Commission and the Public Safety Commission also receive periodic updates from the Economic Development Team. The previous update provided to the Planning Commission was on January 15, 2025.

Attachment(s)

Attachment 1 â€“ 2023 Eastvale Strategic Plan









CITY OF EASTVALE

STRATEGIC PLAN

2023 UPDATE



INTRODCUTION

On February 9, 2023 the City Council, staff, and residents participated in a Strategic Plan Workshop. During the workshop, the City Council engaged in a participatory process, in which they established expectations for the workshop and intended outcomes; identified the organizations strengths, weaknesses, opportunities, and threats; reaffirmed and reorganized the seven major targets; and, reaffirmed and reorganized the priority goals.

The City of Eastvale operates under a City Council/City Manager form of government. The City Council consists of five Council Members. The members of the City Council set policy and enact City laws. The City Manager is appointed by the members of the Eastvale City Council. One of the primary responsibilities of the City Manager is to implement the plan set forth by the City Council, utilizing the City Departments and Executive Team. The purpose of the workshop was to assist the City of Eastvale's Mayor, City Council, and City Manager in developing Eastvale's Strategic Plan including clearly defined targets and goals in order to provide staff with clear direction. A strong strategic plan is like a good roadmap—it identifies a destination and lays out a clear path to get there.

At the conclusion of the workshop, the Mayor and City Council had effectively established clear direction and focus for the Executive Team related to targets and goals. The City Council clearly communicated its desire and intent to blend this exercise with the results of the community survey in the future allocation of resources related to programs and services. It was further intended that this plan remain a fluid and evolving document to be re-visited at regular intervals for progress and re-shifting of priorities, as needed.

CITY COUNCIL MEMBERS IN ATTENDANCE:

TODD RIGBY
Mayor

CLINT LORIMORE
Councilmember

JOCELYN YOW
Councilmember

CHRISTIAN DINCO
Mayor Pro Tempore

MICHAEL MCMINN
Councilmember



STRATEGIC TARGETS

TARGET A
Public Safety

TARGET B
Economic Development

TARGET C
Financial Planning

TARGET D
Inclusion

TARGET E
Infrastructure

TARGET F
Innovation & Technology

TARGET G
Organizational Development



ACTION PLAN TARGETS

PRIORITY LEVEL 1 GOALS

- Develop and Construct Civic Center (Target E, Goal A)
- Attract and retain Business (Target B, Goal A)
- Conduct financial planning for newly proposed infrastructure (Target C, Goal A)
- Construct a Police Substation building (Target A, Goal A)
- Create “Destination Eastvale” (Target B, Goal B)
- Evaluate Parks & Recreation as a City Service (Target E, Goal B)

PRIORITY LEVEL 2 GOALS

- Develop branding and identity for Eastvale (Target B, Goal C)
- Improve traffic mobility and management throughout the city’s major corridors and around the schools (Target E, Goal F)

PRIORITY LEVEL 3 GOALS

- Collaborate to provide cultural and diverse events and celebration (Target D, Goal A)
- Develop and Implement a Smart City (Target F, Goal B)
- Develop City-wide WIFI (Target F, Goal C)
- Develop long-term financial model (Target C, Goal C)
- Ensure that City revenues align with expenditures (Target C, Goal H)



PUBLIC SAFETY



TARGET A
Public Safety

PRIORITY LEVEL	GOAL	GOAL
1	A	Construct a Police Substation
	B	Develop a public safety campaign/educational aspect using social media and door knocks
	C	Implement a K-9 program
	D	Increase community involvement with law enforcement
	E	Increase law enforcement involvement with community
	F	Maintain Fire response
	G	Neighborhood Watch and Volunteer program collaboration
	H	Use innovation and technology to enhance public safety with consideration and balance of privacy and public trust



ECONOMIC DEVELOPMENT



TARGET B
Economic Development

PRIORITY LEVEL	GOAL	GOAL
1	A	Attract and retain businesses that align with diverse community needs and provide choices
1	B	Create “Destination Eastvale” with high quality and unique businesses
2	C	Develop branding and identity for Eastvale
	D	Develop strategies for business retention, business support, and business reward
	E	Diversify the housing stock with more options
	F	Implement strategies to retain local talent e.g. increase local jobs and match talent to businesses
	G	Re-invest in and revitalize existing shopping centers
	H	Streamline the development process



FINANCIAL PLANNING



TARGET C
Financial Planning

PRIORITY LEVEL	GOAL	GOAL
1	A	Conduct financial planning for newly proposed infrastructure (e.g. Civic Center)
	B	Be intentional about how we spend our money – do it once, and do it right
3	C	Develop long-term financial model
	D	Develop ongoing strategies for investing
	E	Develop strategies to manage/control the public safety contract
	F	Ensure that businesses invest back in the City
	G	Ensure that City's infrastructure keeps pace with development and that developers pay their share
3	H	Ensure that City revenues align with expenditures
	I	Evaluate connection between economic development and financial planning
	J	Leverage grant funding



INCLUSION



TARGET D
Inclusion

PRIORITY LEVEL	GOAL	GOAL
3	A	Collaborate to provide cultural and diverse events and celebration
	B	Develop branding associated with events
	C	Develop strategies for the arts in public places
	D	Ensure that the City is inclusive of everyone; develop an inclusionary action plan and put policy to practice
	E	Evaluate feasibility of creating a position dedicated to cultural inclusion, or use of consultant services
	F	Expand modes of communication beyond social media
	G	Identify and/or develop venues for inclusion; including events and gathering places



INFRASTRCUTURE



TARGET E
Infrastructure

PRIORITY LEVEL	GOAL	GOAL
1	A	Develop and construct Civic Center (City Hall, Library, Police Substation, and 3rd Fire Station
1	B	Evaluate Parks & Recreation as a City service
	C	Plan for landscape, roads, and street maintenance
	D	Plan for synchronized traffic signals
	E	Improve connectivity through the trails system
2	F	Improve traffic mobility management around the schools



INNOVATION & TECHNOLOGY



TARGET F
Innovation & Technology

PRIORITY LEVEL	GOAL	GOAL
	A	Create a City application for use on smart phones
3	B	Develop City-wide WIFI
3	C	Develop and implement a Smart City
	D	Empower staff to innovate for efficiencies; create a culture of innovation
	E	Engage with developers to implement technology
	F	Explore and evaluate alternative modes of transportation technology
	G	Implement a global GIS component to digitize all City records and plans
	H	Invest internally in software/technology improvements to enhance customer service



ORGANIZATIONAL DEVELOPMENT



TARGET G
Organizational Development

PRIORITY LEVEL	GOAL	GOAL
	A	Developing talent
	B	Ensure that customer service levels are exceeding Eastvale's expectations everyday
	C	Identify and recommend tools necessary for optimal employee performance
	D	Implement strategies to remain competitive in attracting and retaining talent
	E	Right-size the organization and staffing consistent with City services, needs, expectations, and strategic plan priorities
	F	Transition Contract Services in house for compliance with CalPERS



PRIORITY LEVEL 1 GOALS



ACTION/SCHEDULE FOR PRIORTIY LEVEL 1 GOALS

Target E: Infrastructure

Goal A: Develop and construct Civic Center - City Hall, Public Library, Police Substation, and 3rd Fire Station		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Eastvale 2040	Planning	September 2023
Offsite improvement infrastructure cost estimate	Community Development and Engineering/Finance	Spring 2023



ACTION/SCHEDULE FOR PRIORTIY LEVEL 1 GOALS
Target B: Economic Development

Goal A: Attract and retain businesses that align with diverse community needs and provide choices

ACTIONS:	RESPONSIBLE:	TIME FRAME:
Utilize software and technology to help attract and retain businesses	Economic Development	Ongoing/Monthly
Conduct monthly minitours in partnership with the chamber	Economic Development	Ongoing/Monthly
Utilize business incentive programs to attract restaurants and businesses that align with community needs	Economic Development	Ongoing
Connect with businesses and inform of resources and opportunities for growth and expansion	Economic Development	Ongoing/Monthly
Support business attraction through expedited entitlement	Planning	Ongoing
Support business retention through community aesthetics	Community Enhancement	Ongoing
Enhance business attraction and retention by building and maintaining relationships with brokers, developers, and commercial property managers	Economic Development	Ongoing



ACTION/SCHEDULE FOR PRIORTIY LEVEL 1 GOALS

Target C: Financial Planning

Goal A: Conduct financial planning for newly proposed infrastructure - City Hall, Public Library, Police Substation, and 3rd Fire Station		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**

Once financial planning model is complete, conduct capital infrastructure financial planning workshop for:
• Evaluate capital funding options
  • Public private partnerships
  • Other financing methods
  • Assess committed reserve balances
• Evaluate general fund capacity to fund capital debt; or lease to own; or Public private partnership; debt position and affordability analysis
• Evaluate long term operational budget impacts
	Finance	July 2023

Obtain municipal financial advisor and bond counsel (if necessary)	Finance	MA contract awarded January 2023 Bond Counsel will be awarded in Spring 2023 if we select bond financing as funding mechanism



ACTION/SCHEDULE FOR PRIORTIY LEVEL 1 GOALS

Target C: Financial Planning

Goal A: Conduct financial planning for newly proposed infrastructure - City Hall, Public Library, Police Substation, and 3rd Fire Station		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Evaluate and update existing and/or create new policies in line with GFOA recommendations • Capital financing policies • Debt management policies (if necessary)	Finance	July 2023
Evaluate and update existing and/or create new policies in line with GFOA recommendations • Capital asset policies • Capital maintenance and replacement	Finance	July 2023
Offsite improvement cost estimate	Community Development	September 2023



ACTION/SCHEDULE FOR PRIORTIY LEVEL 1 GOALS

Target A: Public Safety

Goal A: Construct a Police Substation		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Eastvale 2040	Planning	September 2023
Offsite improvement infrastructure cost estimate	Community Development and Engineering	Spring 2023
Collaborate with contract partners to ensure facilities (PD substation and fire station) meet the needs of police and fire now and in the future	Community Enhancement and Safety	Ongoing



ACTION/SCHEDULE FOR PRIORTIY LEVEL 1 GOALS
Target B: Economic Development

Goal B: Create "Destination Eastvale" with high quality and unique businesses		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Develop Shop Eastvale Love Eastvale, Dine Eastvale and Play Eastvale campaign targeting quality and unique businesses	Economic Development	Ongoing/Monthly
Eastvale 2040 Land Use Element	Planning	September 2023
Zoning code update to support entitlement of high quality businesses	Planning and Economic Development	Ongoing



ACTION/SCHEDULE FOR PRIORTIY LEVEL 1 GOALS

Target E: Infrastructure

Goal B: Evaluate parks and recreation for possible internal control		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Joint Meeting with JSCD	Community Development	Ongoing/Quarterly
Develop a plan for services	Community Development	Concurrent with LAFCO Annexation application



PRIORITY LEVEL 2 GOALS



ACTION/SCHEDULE FOR PRIORTIY LEVEL 2 GOALS
Target B: Economic Development

Goal A: Develop branding and identity for Eastvale		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Citywide branding/monuments in medians	Engineering	Spring 2023-Spring 2026
Create a public art and art in public places policy	Planning	March 2024
Freeway interchange monument	Engineering	Spring 2023
Create incentives for businesses and developers to create display art within or outside their business	Economic Development	March 2024



ACTION/SCHEDULE FOR PRIORTIY LEVEL 2 GOALS

Target E: Infrastructure

Goal F: Improve traffic mobility and management throughout the city's major corridors around the schools

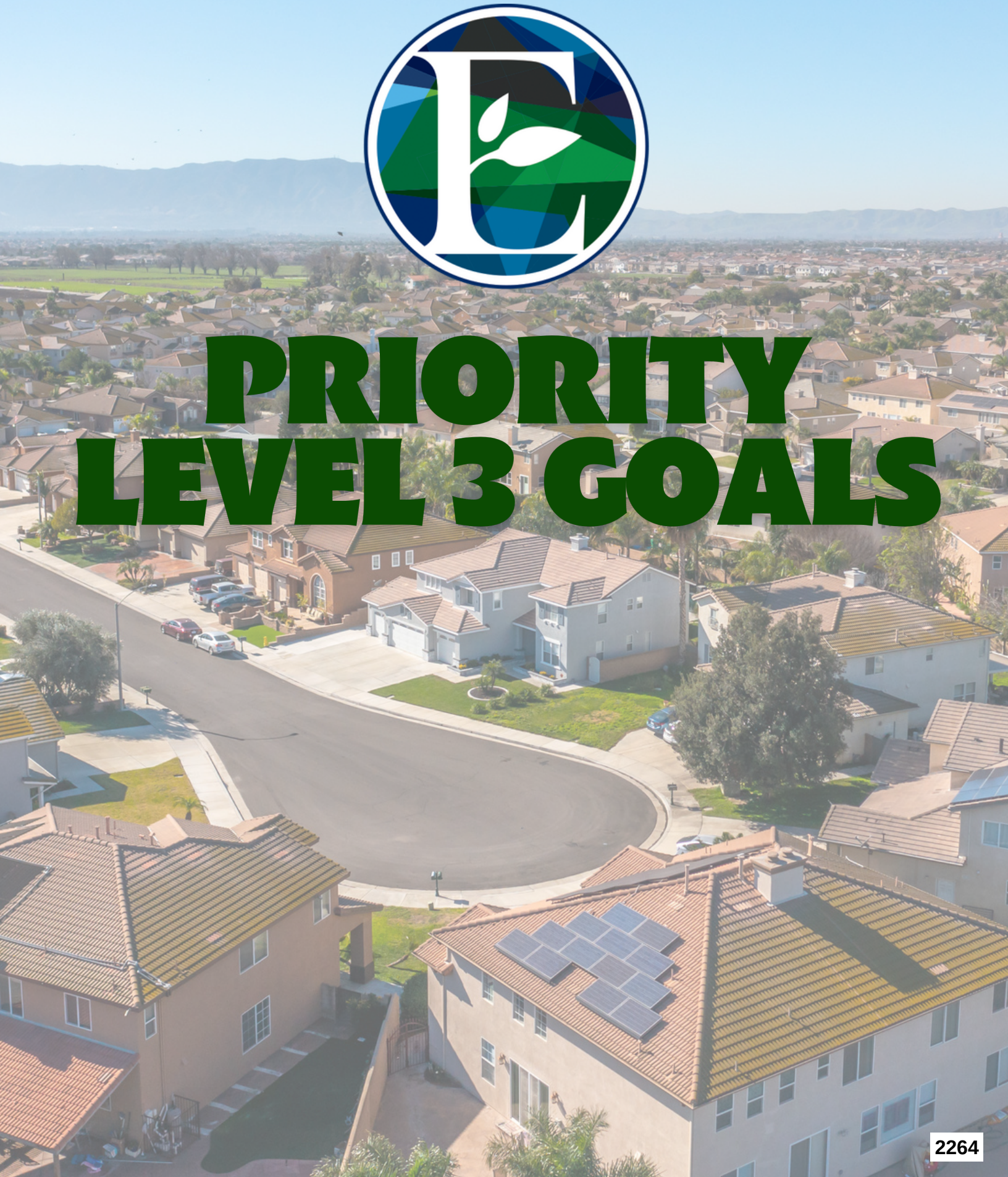
ACTIONS:	RESPONSIBLE:	TIME FRAME:
Scholar & Harrison ATP	Engineering	Construction is anticipated to start in Q1 2024
Schleisman Safe Route to School improvements	Engineering	Fall 2023
Signal Synchronization Program	Engineering	Fall 2023 - 2026
Create walkable spaces in private development	Planning	Spring 2023/Ongoing
Create a walkable community	Planning	Ongoing



ACTION/SCHEDULE FOR PRIORTIY LEVEL 2 GOALS

Target E: Infrastructure

Goal F: Improve traffic mobility and management throughout the city's major corridors around the schools		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Eastvale 2040 Circulation Element	Planning	September 2023
Implement Limonite Gap Closure Extension over Cucamonga Creek (West of Archibald)	Engineering	Construction is anticipated to start in Q3 2023
Implement Hamner Avenue Bridge Widening over Santa Ana River	Engineering	Winter 2023



PRIORITY LEVEL 3 GOALS



ACTION/SCHEDULE FOR PRIORTIY LEVEL 3 GOALS

Target D: Inclusion

Goal A: Collaborate to provide cultural and diverse events and celebration (include food)		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Support and encourage cultural and diverse events throughout the community	Community Services	Ongoing
Create site for community/public gatherings to host food, music, and cultural events	Community Services	Ongoing
Promote events held by cultural organizations	Community Services	Ongoing
Incorporate inclusionary/diversity into Eastvale 2040 in goals, policies objectives both integrated throughout the document and a stand alone chapter.	Community Development	September 2023
Include youth and adult groups in inclusionary conversations and programs	Community Services	Ongoing
Installation of grad banners	City Manager's Office	Annually



ACTION/SCHEDULE FOR PRIORTIY LEVEL 3 GOALS

Target F: Innovation and Technology

Goal C: Develop and Implement a Smart City		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Signal synchronization through CIP Program	Engineering	Fall 2023 - 2026
Fiber Installation on street improvement plans	Engineering	Ongoing
Public space WIFI requirement for new development	Planning	September 2023
Identify and utilize data analytics software to attract and retain businesses	Economic Development	Ongoing
Interconnect and synchronized traffic signals and camera technology with traffic management center	Engineering	Ongoing
Implementing internal smart city goals making services (i.e. permitting, inspection requests, virtual inspections, permit wizard) more digitally available to residents and businesses.	Community Enhancement and Safety	Ongoing



ACTION/SCHEDULE FOR PRIORTIY LEVEL 3 GOALS

Target F: Innovation and Technology

Goal B: Develop City-wide WIFI		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
City Wide Wi-Fi • Determine needs and feasibility of City-wide Wi-Fi vs. localized (or promoted) hot spots • Connect w/ local businesses to eliminate redundancy • Identify funding source to develop	Community Development/CM's Office	Ongoing
Smart City Element of Eastvale 2040	Planning	September 2023
Zoning code amendment to require WIFI	Planning	December 2023
Require conduit and fiber on Street Improvement plans	Engineering	Ongoing
Map existing fiber lines	Engineering	2023/2024
Identify broadband solutions	Engineering	Ongoing



ACTION/SCHEDULE FOR PRIORTIY LEVEL 3 GOALS

Target C: Financial Planning

Goal C: Develop long-term financial model		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**

Update financial plan model with each major budget review:
• Mid-Year review each winter
• Budget preparation each spring
• Include internal and external changes such as:
  • Public safety rate changes
  • Economic impacts (ex. COVID-19 pandemic, recession, etc.)
	Finance	Ongoing/Quarterly

Include long-term section in quarterly interim reports	Finance	Fall 2023
Resolve CalPERs audit from 2012-2018 for contract services	Human Resources and Risk Management	December 2023



ACTION/SCHEDULE FOR PRIORTIY LEVEL 3 GOALS

Target C: Financial Planning

Goal H: Ensure that City revenues align with expenditures		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
Ensure that the City adopts a balanced budget before July 1 each year • Quarterly interim financial reports to Council • Monthly budget performance reports to managers and department heads	Finance	Continuing – annual budget, reports Quarterly and Monthly
Continue to consolidate general ledger for ease of use	Finance	Ongoing
Cost Allocation Plan and User Fee Study:		

Firm completes comprehensive cost allocation plan in conjunction with staff:
• Identify cost of providing program services
• Identify appropriate special revenue administration costs, reimbursed back to general fund
• Identify internal service fund opportunities:
  • Fleet
  • ITS
  • Building maintenance
	Finance	June 2023



ACTION/SCHEDULE FOR PRIORTIY LEVEL 3 GOALS

Target C: Financial Planning

Goal H: Ensure that City revenues align with expenditures		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
• Risk Management • Present to Council		
Implement Cost Allocation Plan		
Firm completes comprehensive cost allocation plan in conjunction with staff: • Identify appropriate cost recovery level for city • Identify and recommend proper fee structure • Identify appropriate annual inflator • Draft fee schedules and provide draft fee study • Present to Council for adoption	Finance	June 2023
Implement user fee schedules 60 days after Council adoption	Finance	October 2023
Evaluate and update existing and/or create new policies in line with GFOA recommendations • Fund balance • Structurally balanced budget	Finance	September 2024



ACTION/SCHEDULE FOR PRIORTIY LEVEL 3 GOALS

Target C: Financial Planning

Goal H: Ensure that City revenues align with expenditures		
ACTIONS:	**RESPONSIBLE:**	**TIME FRAME:**
RFP Development Impact Fee Study	Finance	Fall 2023
Ensure that infrastructure keeps pace with development through site plan review	Community Development	Ongoing
Pavement Management	Engineering	Annually
Market Eastvale to attract businesses that generate sales tax at ICSC and other regional trade shows	Economic Development	Annually
Accela (streamline business development, and accounting	Community Enhancement and Safety	Annually