PALMDALE
a place to call home

CITY COUNCIL
CITY COUNCIL CHAMBER
38300 SIERRA HIGHWAY
SUITE B
PALMDALE, CA 93550
TUESDAY, MARCH 18, 2025
5:00 PM
www.cityofpalmdaleca.gov

WELCOME

Mayor Pro Tem Bettencourt will be participating via Zoom from Springmaid Mountain, Pond Side Cabin, 2171 Henredon Rd., Spruce Pine, NC 28777.

1. **CALL MEETING TO ORDER**

Note: All City Council memberships are reflected in their City Council titles.

2. **ROLL CALL**
   MAYOR LOA, MAYOR PRO TEM BETTENCOURT, COUNCILMEMBERS BISHOP, OHLSEN, ALARCÓN

3. **PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE**

4. **PRESENTATIONS**

   4.1 Presentation update from Parks and Recreation - Spring Program Highlights
   PPT P&R Update.pdf

PUBLIC COMMENT RULES

"(California Government Code Section 54954.3).
(a) Every agenda for regular meetings shall provide an opportunity for members of the public to directly address the legislative body on any item of interest to the public, before or during the legislative body's consideration of the item, that is within the subject matter jurisdiction of the legislative body, provided that no action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of

Section 54954.2 [section omitted].

(b) (1) The legislative body of a local agency may adopt reasonable regulations to ensure that the intent of the subdivision (a) is carried out, including, but not limited to, regulations limiting the total amount of time allocated for public testimony on particular issues and for each individual speaker.

(2) Notwithstanding paragraph (1), when the legislative body of a local agency limits time for public comment, the legislative body of a local agency shall provide at least twice the allotted time to a member of the public who utilizes a translator to ensure that non-English speakers receive the same opportunity to directly address the legislative body of a local agency."

In furtherance of Section 54954.3 of the Brown Act, the public is allotted to speak a total of two (2) minutes on the entirety of the Consent Calendar, Appointment(s), New Business and Closed Session, with two (2) minutes on each Public Hearing, and, if desired, an additional two (2) minutes on items not on the agenda that are within the subject matter jurisdiction of the City Council. As specified in the Brown Act, a speaker utilizing a translator will receive twice the amount of time specified.

5. **PUBLIC COMMENTS**

CONSENT CALENDAR, APPOINTMENT(S), NEW BUSINESS, AND CLOSED SESSION: Now is the time for public participation on items listed on the Consent Calendar, Appointment(s), New Business, and Closed Session. Each speaker is allotted two (2) minutes in total for the entirety of the above sections.

6. **CONSENT CALENDAR**

All matters listed under the Consent Calendar will be enacted by one motion unless an item(s) is pulled by Council, in which case the item(s) will be removed from the Consent Calendar and will be considered separately following this portion of the Agenda.

6.1 Waive full reading of the Resolution(s) and/or Ordinance(s) to be considered and voted on at this meeting. (This allows for reading the title only in lieu of reciting the entire text).

6.2 Receive the summary of the 2024 Annual Housing Element Progress Report.
SR 2024 Annual Housing Element Progress Report.docx
Rpt Housing Element Full Report 2024.pdf

6.3 Adopt Resolution No. CC 2025-019, a Resolution of the City Council of the City of Palmdale, recommending City Council approval modifying the Planning Commission meeting time from 7:00 P.M. to 5:00 P.M. beginning April 2025.
SR Reso. No. CC 2025-019.docx
Reso. No. CC 2025-019.docx

Reso. No. PC 2025-004.pdf
Reso. No. CC 2009-093.pdf

6.4 Award and Approve agreement with Mendoza Engineering Company, Inc., for construction services for PN 862, Marie Kerr Park Swim Deck Expansion Project for a total not to exceed amount of $340,736 for a term of 50 working days from the date of the Notice to Proceed.
SR Agrmt No. A-8679 with Mendoza Engineering Company, Inc.docx
Agrmt No. A-8679 with Mendoza Engineering Company, Inc.pdf

6.5 Approve the amended and restated Memorandum of Understanding (MOU) of the Antelope Valley Regional Water Management Group (RWMG) Integrated Regional Water Management Group (IRWMG) cost-sharing agreement for a not to exceed amount of $16,923 and extend the term of the Agreement through January 2027.
SR Agrmt No. A-6389 for MOU.docx
Agrmt No. A-6389 for MOU.pdf

6.6 Approve the first amendment to agreement with MNS Engineers, Inc. for project management services for PN 669, 10th Street West Widening Project, increasing the agreement by $227,000 for a total not to exceed amount of $418,800 with an extension of 22 months for a total term of 45 months.
SR Agrmt No. A-8233 First Amendment with MNS Engineers, Inc.docx
Agrmt No. A-8233 First Amendment with MNS Engineers, Inc.pdf
Agrmt No. A-8233 with MNS Engineers, Inc.pdf

6.7 Approve second amendment to the agreement with MNS Engineers, Inc. for construction management and inspection services for PN 795, Sam Yellen Park Phase 2 Project, increasing the agreement by $133,640 for the total not to exceed amount of $720,208 with an extension of six months for a total of 22 months.
SR Agrmt No. A-8470 Second Amendment with MNS Engineers, Inc.docx
Agrmt No. A-8470 Second Amendment with MNS Engineers, Inc.pdf
Agmt No. A-8470 First Amendment with MNS Engineers, Inc.pdf
Agrmt No. A-8470 with MNS Engineers, Inc.pdf

6.8 Approve expansion of the Power Choice Solar and Battery Program and approve the first amendment to the Power Choice Program Management Agreement.
SR Agrmt No. A-8538 First Amendment with Participate.Energy, LLC.docx
Agrmt No. A-8538 First Amendment with Participate.Energy, LLC.pdf
Agrmt No. A-8538 with Participate.Energy, LLC.pdf
Exh A Program Management Service Schedule.docx
Installer Framework Program Agrmt.docx

6.9 Adopt Resolution No. CC 2025-024, a Resolution of the City Council of the City of Palmdale granting authority to the City Manager to enter into certain contracts on

behalf of Energy for Palmdale's Independent Choice (EPIC) and rescinding and replacing Section 5 of Resolution No. CC 2019-042.
SR Reso. No. CC 2025-024.docx
Reso. No. CC 2025-024.docx

6.10 Approve first amendment to the agreement with Knorr Systems, Inc., for maintenance and repair services of aquatic facilities equipment, increasing the amount by $596,000 for a total not to exceed amount of $996,000 for a four (4) year and nine (9) month term through July 5, 2027.
SR Agrmt No. A-7748 First Amendment with Knorr Systems, Inc.docx
Agrmt No. A-7748 First Amendment with Knorr Systems, Inc.pdf
Agrmt No. A-7748 with Knorr Systems, Inc.pdf

6.11 Approve the minutes from the previous meeting.
Mins 03 04 2025.pdf

7. PUBLIC HEARING

7.1 Adopt Ordinance No. 1654, an Ordinance of the City Council of the City of Palmdale approving General Plan Amendment 23-0002, Zone Change 24-0003, Conditional Use Permit 24-0001, and Site Plan Review 24-0005; and Adopt Resolution No. CC 2025-020 approving General Plan Amendment 23-0002, Zone Change 24-0003, Conditional Use Permit 24-0001, and Site Plan Review 24-0005; a request to modify Policy PSFI-3 to allow the use of private sewage disposal systems on nonresidential Land Uses with domestic discharge only on property within the Neighborhood Commercial/Regional Commercial General Plan Land Use Designation on property located along Avenue S, Between State Route 14 and Tierra Subida Avenue; modify the Land Use Designation and Zone from Neighborhood Commercial to Regional Commercial; a Conditional Use Permit for the convenience store use; and a Site Plan Review to facilitate the construction of a fueling station that includes 24 Fuel Pumps and an approximately 5,600 square foot convenience store with on-site alternative wastewater treatment system located on the northwest corner of State Route14 and Avenue S and adopt the Mitigated Negative Declaration and Mitigation Monitoring Report prepared in conjunction of this project.
SR Ord. No. 1654 and Reso. No. CC 2025-020.docx
Ord. No. 1654.docx
Reso. No. CC 2025-020.docx
Exh. F Reso. No. CC 2025-020 MND.pdf
Reso. No.CC 2025-020 MND Appendices.pdf
Reso. No. CC 2025-020 MMRP.pdf

7.2 Adopt Resolution No. CC 2025-023, a Resolution of the City Council of the City of Palmdale ordering the vacation of portions of 8th Street East south of Rancho

Vista Boulevard, north of East Avenue P-8 and the reservation of utility easements therein.

SR Reso. No. CC 2025-023.docx
Reso. No. CC 2025-023.docx

8. **CITY MANAGER'S REPORT**

9. **SHERIFF'S REPORT**

10. **NON-AGENDA PUBLIC COMMENTS*:***
Now is the time for public participation on items not listed on the agenda. Each speaker is allotted two (2) minutes total.

11. **COUNCIL REPORTS, ANNOUNCEMENTS AND REQUESTS FOR FUTURE AGENDA ITEMS**

12. **PRESENTATION BY CITY ATTORNEY**

    12.1 CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION
    Los Angeles County Superior Court Case No. 22STCV01269
    This closed session is being held pursuant to the authority of California Government Code Section 54956.9(d)(1).

13. **ANNOUNCEMENT BY CITY ATTORNEY**

14. **ADJOURN** meeting to April 1, 2025, at 5:00 p.m. in the City Hall Council Chamber located at 38300 Sierra Highway, Suite B, Palmdale, California.

Americans with Disabilities Act (ADA) Accommodations
In accordance with the Americans with Disabilities Act of 1990, if you require a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (661) 267-5151 at least 48 hours prior to the meeting.

If you require oral translation, please contact the City Clerk's Office at (661) 267-5151 at least 48 hours prior to the meeting.

DEPARTMENT OF PARKS AND RECREATION

Spring Program Highlights

CITY COUNCIL MEETING

MARCH 18, 2025

Field of Honor

Date: May 21 - 26, 2025
Time: 6 am to 10 pm
Location: Pelona Vista Park

- Breathtaking tribute to the spirit of service and sacrifice, transforming the park into a sea of 1000 flags.
- Proceeds benefit local veteran charities.
- New this year:
  Thin Blue Line (law enforcement)
  Thin Red Line (fire department)
- Flags are available to honor first responders

Children’s Springfest & Egg Hunt

Date:	April 12, 2025
Time:	10 am to 1 pm
Location:	Palmdale Amphitheater

Kick-off Spring with this free, family-favorite event!

- 🚂 All Aboard the Blossom Express
- 🎪 Carnival Games and Inflatable Attractions
- 🎨 Crafts, Balloon Animals, and Face Painting
- 🥚 Egg Hunts
- 🐰 Bunny Photos
- 🍔 Tasty Treats

Play Ball!

TEAMWORK

SPORTSMANSHIP

LEADERSHIP

"Helped my daughter come out of her shell. She went in with no experience whatsoever and Coach helped her tremendously. Huge improvement by the end of the year!" -Jessica Rebolledo

"My kids loved it and enjoyed playing. I loved the support from the coach and how she made it fun. Looking forward to next season!" -Lonisha Washington

Meet Our Team

What makes you proud to work for the City of Palmdale?

"Knowing I am impacting my community in a positive way."

"We make the community stronger."

"I'm proud to play an active part in the community, informing patrons and getting the chance to participate in events that mean so much to the community."

"The fact that I get to work for the city I grew up in. I get to better my community."

Get Your Golden Ticket

First performance:

Date:	Friday, March 28, 2025
Time:	7 pm
Location:	Palmdale Playhouse

Only a lucky few will tour Willy Wonka's mysterious factory.

This vibrant and immersive musical pays tribute to this beloved 1971 classic film, bringing back to life unforgettable songs.

Join Us!

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT PLANNING DIVISION**

DISTRICT: **ALL**

SUBJECT: **RECEIVE THE SUMMARY OF THE 2024 ANNUAL HOUSING ELEMENT PROGRESS REPORT**

RECOMMENDATION

Staff recommends that the City Council:

1. Receive the summary of the 2024 Annual Housing Element Progress Report; and,

2. Direct staff to file the report with the California Department of Housing and Community Development (HCD).

BACKGROUND

Government Code Section 65400 requires that all California cities provide an Annual Housing Element Progress Report to the Governor's Office of Planning and Research (OPR) and the California Department of Housing and Community Development (HCD). The intent of the statute is to describe the City's progress in meeting its share of the Regional Housing Needs Assessment (RHNA). Also, by filing this report with OPR and HCD, the City may be eligible for future housing grants.

DISCUSSION

A total of 6,640 units were allocated to the City of Palmdale during the 6th cycle RHNA allocation plan, which covers the planning period October 2021 through October 2029. These units are distributed by affordability level, and the Housing Element of the General Plan must identify how the City plans to accommodate them. The City is required to designate land for housing to ensure that there is enough residentially designated land to meet its RHNA allocation. However, it is not required to ensure units are built. The City is required to report on the progress of housing development in the form of the Annual Housing Element Progress Report.

In April 2023, the City adopted Zoning Ordinance Amendment 21-007, updating Title 17 of the Palmdale Municipal Code to be consistent with Palmdale 2045, the City's adopted General Plan. This update included additional land use designations that allow flexibility in multi-family and mixed-use zones for residential development.

For the calendar year 2024, 151 housing units were issued a building permit. The table below provides a breakdown of housing units per year from 2021 to 2024.

Table 1: 6th Cycle RHNA Allocation with Annual Permits Issued

Income Level	RHNA Allocation	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	Total Remaining
Very Low	1,777			7	2						9	1,768
Low	935		91	205							296	639
Moderate	1,004	41									89	915
Above Moderate	2,924		116	100	149						365	2,559
Total	**6,640**	**41**	**207**	**312**	**151**						**759**	**5,881**

FISCAL IMPACT

$0; No fiscal impact.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

E. Transform housing inventory to meet the changing lifestyle and market demands.

Prepared by:	Megan Taggart, Interim Director of Economic and Community Development
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Rpt. Housing Element Full Report 2024

Jurisdiction	Palmdale	
Reporting Year	2024	(Jan. 1 - Dec. 31)
Housing Element Planning Period	6th Cycle	10/15/2021 - 10/15/2029

Building Permits Issued by Affordability Summary		
Income Level		**Current Year**
Very Low	Deed Restricted	2
	Non-Deed Restricted	0
Low	Deed Restricted	0
	Non-Deed Restricted	0
Moderate	Deed Restricted	0
	Non-Deed Restricted	0
Above Moderate		149
Total Units		**151**

Note: Units serving extremely low-income households are included in the very low-income

Units by Structure Type	**Entitled**	**Permitted**	**Completed**
Single-family Attached	80	0	0
Single-family Detached	321	62	74
2 to 4 units per structure	61	0	0
5+ units per structure	390	31	250
Accessory Dwelling Unit	194	58	43
Mobile/Manufactured Home	0	0	0
Total	**1046**	**151**	**367**

Infill Housing Developments and Infill Units Permitted	# of Projects	Units
Indicated as Infill	106	106
Not Indicated as Infill	15	45

Housing Applications Summary	
Total Housing Applications Submitted:	104
Number of Proposed Units in All Applications Received:	846
Total Housing Units Approved:	388
Total Housing Units Disapproved:	0

Use of SB 423 Streamlining Provisions - Applications	
Number of SB 423 Streamlining Applications	0
Number of SB 423 Streamlining Applications Approved	0

Units Constructed - SB 423 Streamlining Permits			
Income	**Rental**	**Ownership**	**Total**
Very Low	0	0	0
Low	0	0	0
Moderate	0	0	0
Above Moderate	0	0	0
Total	**0**	**0**	**0**

Streamlining Provisions Used - Permitted Units	# of Projects	Units
SB 9 (2021) - Duplex in SF Zone	0	0
SB 9 (2021) - Residential Lot Split	0	0
AB 2011 (2022)	0	0
SB 6 (2022)	0	0
SB 423 (2023)	0	0

Ministerial and Discretionary Applications	# of	Units
Ministerial	101	401
Discretionary	3	445

Density Bonus Applications and Units Permitted	
Number of Applications Submitted Requesting a Density Bonus	3
Number of Units in Applications Submitted Requesting a Density Bonus	191
Number of Projects Permitted with a Density Bonus	1
Number of Units in Projects Permitted with a Density Bonus	31

Housing Element Programs Implemented and Sites Rezoned	Count
Programs Implemented	20
Sites Rezoned to Accommodate the RHNA	0

Jurisdiction	Palmdale	
Reporting Year	2024	(Jan. 1 - Dec. 31)
Planning Period	6th Cycle	10/15/2021 - 10/15/2029

ANNUAL ELEMENT PROGRESS REPORT

Housing Element Implementation

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

Table A
Housing Development Applications Submitted

Project Identifier					Unit Types		Date Application Submitted	Proposed Units - Affordability by Household Incomes								Total Approved Units by Project	Total Disapproved Units by Project	Streamlining	Density Bo Applica
1					2	3	4	5							6	7	8	9	10
Prior APN+	**Current APN**	**Street Address**	**Project Name+**	**Local Jurisdiction Tracking ID**	**Unit Category** (SFA,SFD,2 to 4,5+,ADU,MH)	**Tenure** R=Renter O=Owner	**Date Application Submitted (see instructions)**	**Very Low-Income Deed Restricted**	**Very Low-Income Non Deed Restricted**	**Low-Income Deed Restricted**	**Low-Income Non Deed Restricted**	**Moderate-Income Deed Restricted**	**Moderate-Income Non Deed Restricted**	**Above Moderate-Income**	**Total PROPOSED Units by Project**	**Total APPROVED Units by project**	**Total DISAPPROVED Units by Project**	**Please select state streamlining provision/s the application was submitted pursuant to.**	**Did the housing development application seek incentives or concessions pursuant to Government Code section 65915?**
Summary Row: Start Data Entry Below								**101**	**0**	**0**	**191**	**0**	**0**	**554**	**846**	**388**	**0**		
	3005005036	N/A	The Landing Time Extension	SPR24-0029	5+	R	7/11/2024							308	308			NONE	No
	3005005036	N/A	The Landing Time Extension	SPR24-0029	2 to 4	R	7/11/2024							36	36			NONE	No
	3009005007	130 E Palmdale Boulevard	Knight's Inn	SPR24-0037	5+	R	7/31/2024	101							101			NONE	No
	3008014025	38502 LARKIN AVE	Z24-0651	Z24-0651	ADU	O	10/24/2024							1	1			NONE	No
	3020026040	37515 DAYBREAK ST	Z24-0685	Z24-0685	ADU	O	11/11/2024							1	1			NONE	No
	3021003040	38602 31ST ST E	Z24-0613	Z24-0613	ADU	O	10/3/2024							1	1			NONE	No
	3023062021	37914 WESLEY CT	Z24-0686	Z24-0686	ADU	O	11/12/2024							1	1			NONE	No
	3050006002	6023 E AVE T2	Z24-0708	Z24-0708	ADU	O	12/10/2024							1	1			NONE	No
	3204030181	N/A	Z24-0707	Z24-0707	SFD	O	12/10/2024							1	1			NONE	No
	3204030181	N/A	Z24-0707	Z24-0707	ADU	O	12/10/2024							1	1			NONE	No
	3003036041	1142 DIANRON RD	Z24-0676	Z24-0676	ADU	O	11/4/2024							1	1			NONE	No
	3052017009	N/A	Z24-0623	Z24-0623	SFD	O	10/10/2024							1	1			NONE	No
	3018018009	N/A	Z24-0158	Z24-0158	SFD	O	3/12/2024							1	1			NONE	No
	3015002005	38563 10TH Place East	Z24-0666	Z24-0666	ADU	O	10/29/2024							1	1			NONE	No
	3015002004	38557 10TH Place East	Z24-0665	Z24-0665	ADU	O	10/29/2024							1	1			NONE	No
	3050003016	N/A	Z24-0186	Z24-0186	SFD	O	3/25/2024							1	1			NONE	No
	3003104005	N/A	Joshua Landing / TR 60732 /	SDP24-0001	SFD	O	2/8/2024							28	28	28		NONE	No
	3023002186	N/A	Maison's Village II / TTM 83359	SDP24-0004	SFD	R	7/9/2024				79				79	79		NONE	Yes
	3023002186	N/A	Maison's Village II / TTM 83359	SDP24-0004	ADU	R	7/9/2024				64				64	64		NONE	Yes
	3023002186	N/A	Maison's Village II / TTM 83359	SDP24-0004	ADU	R	7/9/2024				48				48	48		NONE	Yes
	n/a	N/A	The Reserve / TR 81337	SDP24-0002	SFD	O	3/7/2024							86	86	86		NONE	No
	3001030024	40723 VIA HONRADO, PALMDALE, CA 93551	Z24-0152	B23-01028	ADU	O	4/16/2024							1	1	1		NONE	No
	3001068074	3211 REDBUD Lane, PALMDALE 93551	Z24-0327	RES24-00148	ADU	O	6/10/2024							1	1	1		NONE	No
	3001084078	4636 STARSTONE Court, PALMDALE 93551	Z24-0027	RES24-00142	ADU	O	1/25/2024							1	1	1		NONE	No
	3001144006	40824 LAS PIEDRAS Terrace	Z24-0584	RES24-00280	ADU	O	9/24/2024							1	1	1		NONE	No

Table A
Housing Development Applications Submitted

Project Identifier					Unit Types		Date Application Submitted	Proposed Units - Affordability by Household Incomes								Total Approved Units by Project	Total Disapproved Units by Project	Streamlining	Density Bo Applica
1					2	3	4	5							6	7	8	9	10
Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Date Application Submitted (see instructions)	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Total PROPOSED Units by Project	Total APPROVED Units by project	Total DISAPPROVED Units by Project	Please select state streamlining provision/s the application was submitted pursuant to.	Did the housing development application seek incentives or concessions pursuant to Government Code section 65915?
	3003027043	38955 DIANRON Road	Z24-0384	RES24-00269	ADU	O	6/10/2024							1	1	1		NONE	No
	3003045037	1108 WITHERILL Place	Z24-0542	RES24-00251	ADU	O	8/29/2024							1	1	1		NONE	No
	3003070048	39440 OBSIDIAN Court, PALMDALE 93551	Z24-0057	RES24-00055	ADU	O	2/2/2024							1	1	1		NONE	No
	3003087004	2734 BOUQUET Lane, PALMDALE 93551	Z24-0162	RES24-00173	ADU	O	4/1/2024							1	1	1		NONE	No

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier					Unit Types		Affordability by Household Incomes - Completed Entitlement								
1					2	3	4							5	6
Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
Summary Row: Start Data Entry Below							20	0	191	0	0	0	835		1046
N/A	3005-027-024	39763 Country Club Drive	B22-01604	Z22-344	ADU	O									0
N/A	3021-028-026	38543 Frontier Avenue	B22-01775	Z22-084	ADU	O									0
N/A	3015004022	38548 11th Street East	B22-01804	Z22-477	ADU	O									0
3050-005-009	3050-005-009	5910 East Avenue T	B22-02562	Z22-392	ADU	O									0
N/A	3021007002	38751 33rd Street East	B22-02934	Z22-462	ADU	O									0
N/A	3008-040-012	38225 9th Street East	9th Patriot / MSPR 22-002	B23-02320 thru B23-02323	5+	R									0
N/A	3206-064-044	39350 Stallion Drive	Joshua Ranch / TR 52200-2	B22-02271	SFD	O									0
N/A	3206-065-018	39313 Stallion Drive	Joshua Ranch / TR 52200-2	B22-02273	SFD	O									0
N/A	3206-065-019	39321 Stallion Drive	Joshua Ranch / TR 52200-2	B22-02292	SFD	O									0
N/A	3206-065-003	39330 Stallion Drive	Joshua Ranch / TR 52200-2	B22-02303	SFD	O									0
N/A	3206-065-020	39329 Stallion Drive	Joshua Ranch / TR 52200-2	B22-02305	SFD	O									0
	3023-067-031	38136 52nd St East		B22-02897	ADU	O									0
	3051-048-028	5219 Alyssa Ln		B23-00433	ADU	O									0
	3001-047-012	40327 Nido Ct		B21-01086	ADU	O									0
	n/a	5220 Lilac Dr	Ravello TTM 73068	B23-00907	SFD	R									0
	n/a	5220 Lilac Dr.	Ravello TTM 73068	B23-00908	ADU	R									0
N/A	N/A	38840 MALVA ROSA DR	Pacific Comm (TTM 54058-03)	SDP20-004/ B22-04109	SFD	O									0
N/A	N/A	2314 Century Plant St	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04110	SFD	O									0
	N/A	38848 Malva Rosa Dr	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04115	SFD	O									0
	N/A	2308 Century Plant St	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04116	SFD	O									0
	N/A	2237 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04117	SFD	O									0
	N/A	38856 MALVA ROSA DR	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04118	SFD	O									0
	N/A	2320 Century Plant St	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04119	SFD	O									0
	N/A	2236 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04120	SFD	O									0
	N/A	2303 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04121	SFD	O									0
	N/A	2315 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04122	SFD	O									0
	3012006006	37846 11TH Street	RES23-00083	Z23-0498	ADU	O									0
	3003-041-047	2003 SANDSTONE Court	RES23-00013	Z23-307	ADU	O									0
	N/A	38832 Malva Rosa Dr	Pacific Comm (TTM 54058-03)	SDP20-004 / B22-04114	SFD	O									0
	3015-020-009	1609 E Avenue Q6	B23-01473	Z22-605	ADU	R									0
	N/A	5414 YUCCA WY	Ravello TTM 73068	SDP23-001	SFD	R									0
	N/A	38173 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01904	SFD	R									0
	N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01905	SFD	R									0
	N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01911	ADU	R									0
	N/A	38181 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01906	SFD	R									0
	N/A	38181 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01909	ADU	R									0
	N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01907	SFD	R									0
	N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01910	ADU	R									0
	N/A	38173 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001	B23-01908	ADU	R									0
	3053047057	37022 LA CONTEMPO AV	Z22-556	B23-00119	ADU	O									0
	3003-065-017	38873 CALISTOGA ST	Z23-247	B23-01776	ADU	O									0
	N/A	38264 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02060	SFD	R									0
	N/A	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02054	SFD	R									0
	N/A	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02070	SFD	R									0
	N/A	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02061	SFD	R									0
	N/A	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02063	SFD	R									0
	N/A	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02058	SFD	R									0
	n/a	38264 EUCALYPTUS ST C	Ravello / TR 73068 / SDP23-001	B23-02053	ADU	R									0
	n/a	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02067	ADU	R									0
	n/a	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02062	ADU	R									0
	n/a	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02057	ADU	R									0
	n/a	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02055	ADU	R									0
	n/a	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02071	ADU	R									0
	N/A	38264 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02066	ADU	R									0
	N/A	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02056	ADU	R									0
	N/A	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02068	ADU	R									0
	N/A	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02069	ADU	R									0
	N/A	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02064	ADU	R									0
	N/A	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001	B23-02065	ADU	R									0
	3003102040	2402 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004	RES23-00017	SFD	O									0
	3003102056	2337 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004	RES23-00018	SFD	O									0

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier					Unit Types		Affordability by Household Incomes - Completed Entitlement								
1					2	3	4							5	6
Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
	N/A	39664 NICHOLAS CT	Joshua Ranch / TTM 52200-3	SDP18-004/B23-01392	SFD	O									0
	N/A	39636 NICHOLAS CT	Joshua Ranch / TTM 52200-3	SDP18-004/B23-01394	SFD	O									0
	N/A	39642 NICHOLAS CT	Joshua Ranch / TTM 52200-3	SDP18-004/B23-01396	SFD	O									0
	N/A	39641 NICHOLAS CT	Joshua Ranch / TTM 52200-3	SDP18-004/B23-01392	SFD	O									0
	N/A	39629 NICHOLAS CT	Joshua Ranch / TTM 52200-3	SDP18-004/B23-01392	SFD	O									0
	3001-074-009	40028 Palmetto Dr.	Z23-337	B23-02297	ADU	O									0
	3024-031-043	37456 Calle Mazatlan	Z23-065	B23-00052	ADU	O									0
	3051-035-050	36824 Royce Ct B	Z23-269	B23-01882	ADU	O									0
	3015-020-001	1659 E Ave Q-6		B23-00816	ADU	O									0
	3024-030-029	6333 Posada Ct	Z23-109	RES23-00031	ADU	O									0
	N/A	3704 Eliopulos Ranch Dr.	Joshua Ranch (TTM 52200-03)	SDP 18-004 / B23-01399	SFD	O									0
	N/A	38215 Vito Lane	Homes4Families	B23-01364	SFD	O									0
	N/A	38211 Vito Lane	Homes4Families	B23-01365	SFD	O									0
	N/A	162 Taintor Rd	Homes4Families	B23-01366	SFD	O									0
	N/A	166 Taintor Rd	Homes4Families	B23-01367	SFD	O									0
	N/A	38214 Vito Rd	Homes4Families	B23-01368	SFD	O									0
	N/A	38210 Vito Lane	Homes4Families	B23-01369	SFD	O									0
	3005-027-028	39730 Eadmer Ave	Z23-131	B23-00824	ADU	O									0
	3206071022	39626 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 /B23-01380	SFD	O									0
	N/A	39640 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01381	SFD	O									0
	3206072005	39650 Canter Ct	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01382	SFD	O									0
	N/A	39658 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01383	SFD	O									0
	N/A	39660 Nicholas Ct	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01384	SFD	O									0
	N/A	39634 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01385	SFD	O									0
	N/A	39641 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01387	SFD	O									0
	N/A	39633 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01388	SFD	O									0
	N/A	39625 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01389	SFD	O									0
	N/A	39648 Rula Dr	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01390	SFD	O									0
	N/A	39655 Canter Ct	Joshua Ranch / TTM 52200-3	SDP 18-004 / B23-01391	SFD	O									0
	3008038011, -012, -013, -037, -015, -034, -035, -036, -019	N/A	MSPR22-004	MSPR22-004	5+	R							50	9/18/2024	50
	3008039004, -005, -006	N/A	Dream Village	MSPR23-0004	5+	R	20							8/27/2024	20
	3052001071, -072	N/A	SPR18-005 Time Extension	SPR18-005T	SFA	R							80	6/18/2024	80
	3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO	SPR18-006T	5+	R							320	4/2/2024	320
	3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO	SPR18-006T	2 to 4	O							60	4/2/2024	60
	3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO	SPR18-006T	SFD	O							48	4/2/2024	48
	3024008021, -018	N/A	Pacific Poppy / TR 69651	SDP20-005	SFD	O							73	3/21/2024	73
	3003104005	1888 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00152	SFD	O							1	6/10/2024	1
	3003104027	1879 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00153	SFD	O							1	6/10/2024	1
	3003104006	1880 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00154	SFD	O							1	6/10/2024	1
	3003104026	1871 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00266	SFD	O							1	6/10/2024	1
	3003104007	1872 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00270	SFD	O							1	6/10/2024	1
	3003104008	1864 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00271	SFD	O							1	6/10/2024	1
	3003104024	1855 Vincent Drive, Palmdale, CA 93535	Joshua Landing / TR 60732 / SDP24-0001	RES24-002721	SFD	O							1	6/10/2024	1
	3003104025	1863 Vincent Drive, Palmdale, CA 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00273	SFD	O							1	6/10/2024	1
	3003104009	1856 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00312	SFD	O							1	6/10/2024	1
	3003104023	1847 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00313	SFD	O							1	6/10/2024	1
	3003104022	1839 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00314	SFD	O							1	6/10/2024	1
	3003104011	1840 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00315	SFD	O							1	6/10/2024	1
	3003104010	1848 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001	RES24-00316	SFD	O							1	6/10/2024	1
	3003104028	1887 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES25-0027	SFD	O							1	6/10/2024	1
	3003101004	39035 Calmview Circle	Joshua Landing / TR 60732 / SDP24-0001	RES25-00026	SFD	O							1	6/10/2024	1
	3003101003	39043 CALMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001	RES25-00025	SFD	O							1	6/10/2024	1

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Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
	3003104002	39051 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001	RES25-00024	SFD	O							1	6/10/2024	1
	3003104019	1815 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES25-00023	SFD	O							1	6/10/2024	1
	3003104018	1807 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES25-00022	SFD	O							1	6/10/2024	1
	3003101017	1788 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES25-00021	SFD	O							1	6/10/2024	1
	3003104016	1796 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES25-00020	SFD	O							1	6/10/2024	1
	3003104015	1804 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES25-00007	SFD	O							1	6/10/2024	1
	3003104021	1831 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES24-00323	SFD	O							1	6/10/2024	1
	3003101020	1823 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES24-00322	SFD	O							1	6/10/2024	1
	3003101014	1816 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES24-00321	SFD	O							1	6/10/2024	1
	3003104013	1824 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES24-00320	SFD	O							1	6/10/2024	1
	3003101012	1832 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001	RES24-00319	SFD	O							1	6/10/2024	1
	3003101001	39059 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001	RES24-00151	SFD	O							1	6/10/2024	1
	3001084078	4636 STARSTONE Court, PALMDALE 93551	Z24-0027	RES24-00142	ADU	O							1	3/11/2024	1
	3003087004	2734 BOUQUET Lane, PALMDALE 93551	Z24-0162	RES24-00173	ADU	O							1	4/2/2024	1
	3008016011	38502 SUMAC Avenue, PALMDALE 93550	Z24-0212	RES24-00124	ADU	O							1	4/29/2024	1
	3008038023	933 Q-5, PALMDALE 93550	Z24-0252	RES24-00174	ADU	O							1	4/25/2024	1
	3010031107	153 R-4, PALMDALE 93550	Z24-0438	RES24-00200	ADU	O							1	7/15/2024	1
	3014002012	38019 11TH Street, Unit B, PALMDALE 93550	Z24-0165	RES24-00083	ADU	O							1	4/1/2024	1
	3014023022	1855 Q-11, PALMDALE 93550	Z24-0465	RES24-00234	ADU	O							1	8/1/2024	1
	3015004005	38511 11TH Street, PALMDALE 93550	Z24-0173	RES24-00155	ADU	O							1	4/9/2024	1
	3015021014	1614 E Q-6 Avenue, PALMDALE 93550	Z23-0594	RES24-00227	ADU	O							1	1/3/2024	1
	3018023012	38524 28TH Street, PALMDALE 93550	Z24-0524	RES24-00096	SFD	O							1	11/14/2024	1
	3020007034	3223 E Avenue R 12, PALMDALE, CA	Z24-0416	RES24-00194	SFD	O							1	7/3/2024	1
	3021023001	38502 E 32ND Street, PALMDALE 93550	Z23-0585	RES24-00035	ADU	O							1	2/8/2024	1
	3022003043	1028 P-5, PALMDALE 93550	Z24-0004	RES24-00037	ADU	O							1	1/9/2024	1
	3023015024	37317 SABAL Avenue, PALMDALE 93552	Z24-0183	RES24-00149	ADU	O							1	5/23/2024	1
	3023028088	4202 E Q-12 Avenue, PALMDALE 93552	Z23-0613	RES23-00106	ADU	O							1	3/11/2024	1
	3023043002	37955 AMETHYST Street, PALMDALE 93552	Z24-0022	RES24-00169	SFD	O							1	3/26/2024	1
	3023078026	5033 MARSEILLES Court, PALMDALE 93552	Z24-0540	RES24-00293	ADU	O							1	10/21/2024	1
	3050004003	5821 PEARBLOSSOM Highway, PALMDALE, CA 93552	Z24-0008	RES24-00317	SFD	O							1	5/15/2024	1
	3050007001	6015 E T-4 Avenue, PALMDALE 93552	Z23-207	RES24-00022	SFD	O							1	11/4/2024	1
	3051032024	36903 GOLDENVIEW Way, PALMDALE 93552	Z24-0262	RES24-00102	ADU	O							1	5/6/2024	1
	3052008046	36824 37th Street, #B, PALMDALE, CA 93551	Z23-0464	RES24-00004	ADU	O							1	3/7/2024	1
	3206028100	2045 SLAYTON Street, PALMDALE 93551	Z24-0427	RES24-00210	ADU	O							1	8/6/2024	1
	3023002186	N/A	Maison's Village II / TTM 83359	SDP24-0004	SFD	R			79					10/8/2024	79

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Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
	3023002186	N/A	Maison's Village II / TTM 83359	SDP24-0004	ADU	R			64					10/8/2024	64
	3023002186	N/A	Maison's Village II / TTM 83359	SDP24-0004	ADU	R			48					10/8/2024	48
	3001030024	40723 VIA HONRADO, PALMDALE, CA 93551	Z24-0152	B23-01028	ADU	O							1	4/16/2024	1
	3001068074	3211 REDBUD Lane, PALMDALE 93551	Z24-0327	RES24-00148	ADU	O							1	6/17/2024	1
	3003070048	39440 OBSIDIAN Court, PALMDALE 93551	Z24-0057	RES24-00055	ADU	O							1	2/5/2024	1
	3003087021	2713 TRUDEAU Lane, PALMDALE 93551	Z24-0246	RES24-00030	ADU	O							1	6/3/2024	1
	3008004006	38714 GLENRAVEN Avenue, PALMDALE 93550	Z24-0049	RES24-00023	ADU	O							1	1/25/2024	1
	3008009004	38622 LARKIN Avenue, #UNITS, PALMDALE 93550	Z24-0211	RES24-00128	ADU	O							1	5/1/2024	1
	3009004027	38232 GUNTON Drive, PALMDALE 93550	Z24-0122	RES24-00062	ADU	O							1	2/28/2024	1
	3010013033	37435 SUMAC Avenue, #B, PALMDALE 93550	Z24-0157	RES24-00078	ADU	O							1	3/20/2024	1
	3010031085	155 E R-3 Avenue, Unit B, PALMDALE, CA 93550	Z24-0389	RES24-00215	ADU	O							1	8/1/2024	1
	3012002004	37924 PALM VISTA Avenue, #Unit B, PALMDALE 93550	Z24-0224	RES24-00110	ADU	O							1	4/23/2024	1
	3012014019	1215 R-4, #UNIT B, PALMDALE 93550	Z24-0607	RES24-00181	ADU	O							1	10/22/2024	1
	3012017008	37811 MELTON Avenue, PALMDALE 93550	Z23-0603	RES24-00036	ADU	O							1	7/15/2024	1
	3014028017	38225 12TH Street, #UNITS, PALMDALE 93550	Z24-0048	RES24-00032	ADU	O							1	1/29/2024	1
	3018006005	38628 21ST Street, #B, PALMDALE 93550	Z24-0225	RES24-00109	ADU	O							1	4/23/2024	1
	3019046020	2137 ESTRELLA Court, #B, PALMDALE 93550	Z24-0348	RES24-00208	ADU	O							1	6/4/2024	1
	3019049008	2413 EAST R-6, PALMDALE 93550	Z23-0473	RES24-00066	ADU	O							1	3/6/2024	1
	3020022055	37619 E 31ST Street, #UNIT B, PALMDALE 93550	Z24-0058	RES23-00113	ADU	O							1	2/5/2024	1
	3020025092	3555 STERLING Court, #B, PALMDALE 93550	Z24-0131	RES24-00054	ADU	O							1	3/11/2024	1
	3021019012	38551 35TH Street, PALMDALE 93550	Z24-0306	RES24-00039	ADU	O							1	5/9/2024	1
	3021035031	38625 SIENNA Court, PALMDALE 93550	Z24-0514	RES24-00247	ADU	O							1	8/28/2024	1
	3023014014	37334 POPULUS Avenue, #UNIT B, PALMDALE 93552	Z24-0280	RES24-00167	ADU	O							1	5/1/2024	1
	3023056016	5553 KATRINA Place, PALMDALE 93552	Z24-0464	RES24-00091	ADU	O							1	9/3/2024	1
	3023075004	5639 R-12, PALMDALE 93552	Z24-0234	RES24-00140	ADU	O							1	4/23/2024	1
	3023083052	5309 SAINT LAURENT Place, PALMDALE 93552	Z24-0018	RES24-00179	ADU	O							1	1/16/2024	1
	3023086063	37306 FESTIVAL Court, #UNIT B, PALMDALE 93552	Z24-0127	RES24-00076	ADU	O							1	10/24/2024	1
	3051029019	36926 HAMPTON Court, PALMDALE 93552	Z24-0350	RES24-00222	ADU	O							1	6/24/2024	1
	3051039081	36921 ROYCE Court, #UNIT B, PALMDALE 93552	Z24-0102	RES24-00094	ADU	O							1	2/21/2024	1
	3052040037	37068 KEITH Court, PALMDALE 93550	Z23-0600	RES24-00060	ADU	O							1	1/8/2024	1
	3052043025	3767 NOLL Drive, PALMDALE 93550	Z24-0019	RES24-00129	ADU	O							1	1/16/2024	1
	3052055020	3333 FAIRFIELD Avenue, #Unit B, PALMDALE 93550	Z24-0223	RES24-00101	ADU	O							1	4/16/2024	1
	3052057054	36852 JUSTIN Court, Unit B, PALMDALE 93550	Z24-0507	RES24-00199	ADU	O							1	9/12/2024	1

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier					Unit Types		Affordability by Household Incomes - Completed Entitlement								
1					2	3	4							5	6
Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
	3204054013	41829 PICO Way, PALMDALE 93551	Z24-0087	RES24-00034	ADU	O							1	2/21/2024	1
	3024037015	38117 CIMA MESA Drive	Z23-0457	Z23-0457	ADU	O							1	1/4/2024	1
	3014002040	38114 10TH Street	Z23-0592	Z23-0592	ADU	O							1	2/22/2024	1
	3050004014	N/A	Z23-228	Z23-228	SFD	O							1	8/26/2024	1
	3050004014	n/a	Z23-228	Z23-228	ADU	O							1	8/26/2024	1
	3004028005	338 MESA VERDE Avenue	Z24-0017	Z24-0017	ADU	O							1	1/16/2024	1
	3052072009	36624 45TH Street	Z24-0047	Z24-0047	SFD	O							1	5/20/2024	1
	3015012020	1320 East Ave Q-2 Unit C	Z24-0067	RES24-00157	ADU	O							1	4/30/2024	1
	3015012020	1320 East Ave Q-2 Unit D	Z24-0067	RES24-00157	ADU	O							1	4/30/2024	1
	3015012020	1320 E AVE Q-2, Unit A, B	Z24-0067	RES24-00156	2 to 4	O							1	4/30/2024	1
	3206065006	39310 STALLION Drive	Z24-0095	RES23-00118	ADU	O							1	2/13/2024	1
	3008017019	38564 3RD Street	Z24-0103	Z24-0103	ADU	O							1	9/26/2024	1
	3008017019	38564 3RD Street	Z24-0103	Z24-0103	ADU	O							1	9/26/2024	1
	3052005033	42nd St E / Ave S-12	Z24-0126	Z24-0126	SFD	O							1	7/16/2024	1
	3052053003	36535 SILVERSPUR LANE	Z24-0143	RES24-00077	ADU	O							1	3/7/2024	1
	3012002005	37918 Palm Vista Ave	Z24-0169	RES24-00119	ADU	O							1	4/11/2024	1
	3012002005	37918 Palm Vista Ave	Z24-0169	RES24-00106	SFD	O							1	4/11/2024	1
	3009008023	526 EAST Q-9	Z24-0175	RES24-00193	ADU	O							1	3/19/2024	1
	3015002034	1005 Q-5, #UNITS	Z24-0245	RES24-00205	ADU	O							1	5/28/2024	1
	3020020027	3410 SAN GABRIEL Court	Z24-0257	Z24-0257	ADU	O							1	4/23/2024	1
	3014012016	1512 EAST Q-11	Z24-0288	RES24-00212	ADU	O							1	4/30/2024	1
	3023037004	5025 CLIFF ROSE Drive	Z24-0314	Z24-0314	ADU	O							1	6/27/2024	1
	3023037004	5025 CLIFF ROSE Drive	Z24-0314	Z24-0314	ADU	O							1	6/27/2024	1
	3003027043	38955 DIANRON Road	Z24-0384	RES24-00269	ADU	O							1	6/10/2024	1
	3023085017	4760 MINSTREL Drive	Z24-0386	RES24-00207	ADU	O							1	7/22/2024	1
	3006017024	215 EAST P-5	Z24-0410	Z24-0410	ADU	O							1	7/23/2024	1
	3023054074	38144 RIVIERA Court	Z24-0425	RES24-00276	ADU	O							1	9/10/2024	1
	3020017042	3049 R-6	Z24-0428	RES24-00211	ADU	O							1	7/22/2024	1
	3008006025	38708 3RD Street	Z24-0446	RES24-00226	ADU	O							1	8/1/2024	1
	3019040010	2242 EAST R-12	Z24-0461	RES24-00277	ADU	O							1	7/22/2024	1
	3020010069	35th St E / Ave S	Z24-0471	Z24-0471	SFD	O							1	8/13/2024	1
	3003045037	1108 WITHERILL Place	Z24-0542	RES24-00251	ADU	O							1	9/11/2024	1
	3001144006	40824 LAS PIEDRAS Terrace	Z24-0584	RES24-00280	ADU	O							1	9/25/2024	1
	3008015014	38463 LARKIN Avenue, #UNITS	Z24-0598	RES24-00373	ADU	O							1	10/30/2024	1
	3005033044	39736 GOLFERS Drive	Z24-0600	RES24-00289	ADU	O							1	10/22/2024	1
	3020022012	3101 HEATHER Avenue	Z24-0654	RES24-00305	ADU	O							1	10/29/2024	1
	3024020058	37637 SIMI Street	Z24-0675	RES24-00309	ADU	O							1	12/3/2024	1
	3101036074	5900 ALLEPPO Lane	Z24-0696	RES24-00378	ADU	O							1	12/9/2024	1
	3014008034	1241 R, #UNITS	Z24-0700	RES24-00379	ADU	O							1	12/11/2024	1
	3014008034	1241 R, #UNITS	Z24-0700	RES24-00379	ADU	O							1	12/11/2024	1
3204025048	320402048	41863 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002	RES24-00071	SFD	O							1	8/21/2024	1
3204025048	3204025048	41851 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002	RES24-00073	SFD	O							1	8/21/2024	1
3204025048	n/a	6907 SOLERA DRIVE	The Reserve / TR 81337 / SDP24-0002	RES24-00241	SFD	O							1	8/21/2024	1
3204025048	n/a	6833 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002	RES24-00242	SFD	O							1	8/21/2024	1
3204025048	n/a	6821 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002	RES24-00243	SFD	O							1	8/21/2024	1
3204025048	n/a	6809 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002	RES24-00244	SFD	O							1	8/21/2024	1
3204025048	n/a	41846 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00245	SFD	O							1	8/21/2024	1
3204025048	n/a	41849 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00246	SFD	O							1	8/21/2024	1
3204025048	n/a	41834 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00252	SFD	O							1	8/21/2024	1
3204025048	n/a	41825 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00261	SFD	O							1	8/21/2024	1
3204025048	n/a	41837 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00262	SFD	O							1	8/21/2024	1
3204025048	n/a	41822 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00263	SFD	O							1	8/21/2024	1
3204025048	n/a	41810 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00264	SFD	O							1	8/21/2024	1
3204025048	n/a	41813 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002	RES24-00265	SFD	O							1	8/21/2024	1
3204025048	n/a	N/A	The Reserve / TR 81337 / SDP24-0002	SDP24-0002	SFD	O							69	8/21/2024	69
3003030025	3003102019	2412 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00229	SFD	O									0
3003030025	3003102006	38867 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00230	SFD	O									0
3003030025	3003102035	2333 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00231	SFD	O									0

Table A2															
Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units															
Project Identifier					Unit Types		Affordability by Household Incomes - Completed Entitlement								
1					2	3	4							5	6
Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
3003030025	3003102007	38859 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00232	SFD	O									0
3003030025	3003102020	2404 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00233	SFD	O									0
3003030025	3003102022	2332 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00339	SFD	O									0
3003030025	3003102034	2327 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00340	SFD	O									0
3003030025	3003102036	2339 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00341	SFD	O									0
3003030025	3003102021	2338 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00343	SFD	O									0
3003030025	3003102008	38851 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00347	SFD	O									0
3003030025	3003102009	38843 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00351	SFD	O									0
3003030025	3003102038	2411 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00356	SFD	O									0
3003030025	3003102023	2326 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00357	SFD	O									0
3003030025	3003102037	2403 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004	RES24-00358	SFD	O									0
	3003101018	2113 CORK OAK Street	Pacific Montera / TR 54058-04 / SDP20-004	RES24-00338	SFD	O									0
	3206076080	39419 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES23-00114	SFD	O									0
	3206076081	39411 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES23-00115	SFD	O									0
	3206076082	39403 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES23-00116	SFD	O									0
	3206076001	4032 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00040	SFD	O									0
	3206076002	4040 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00041	SFD	O									0
	3206076003	4048 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00042	SFD	O									0
	3206076004	4056 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00043	SFD	O									0
	3206076005	4064 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00044	SFD	O									0
	3206076014	4013 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00045	SFD	O									0
	3206076015	4019 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00048	SFD	O									0
	3206076016	4025 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00049	SFD	O									0
	3206076017	4033 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00050	SFD	O									0
	3206076018	4041 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00051	SFD	O									0
	3206076019	4049 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00052	SFD	O									0
	3206076020	4057 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001	RES24-00053	SFD	O									0
	3003053048	39355 FOSTORIA Court, PALMDALE 93551	Z23-0574	RES23-00126	ADU	O									0
	3003069076	39312 DUNBAR ST, PALMDALE, CA 93551	Z23-107	B23-00807	ADU	O									0
	3004027008	38212 SAN MATEO Avenue, PALMDALE 93551	Z22-101	RES24-00090	ADU	O									0
	3004036041	1371 LEOPARD CT, PALMDALE, CA 93551	Z23-041	B23-00322	SFD	O									0
	3008013029	509 E AVENUE Q 5, #B, PALMDALE, CA 93550	Z23-077	B23-01729	ADU	O									0
	3012019010	37910 MELTON AV, PALMDALE, CA 93550	Z23-038	B23-00504	ADU	O									0
	3012019011	37902 PRENTISS Avenue, #Unit B, PALMDALE 93550	Z23-0452	RES23-00110	ADU	O									0
	3012028054	37947 ROSEMARIE Street, PALMDALE 93550	Z23-0596	RES23-00130	ADU	O									0
	3012033026	37618 LASKER AV, PALMDALE, CA 93550	Z23-299	B23-02097	ADU	O									0
	3015010038	1204 E AVENUE Q 4, #B, PALMDALE, CA 93550	Z23-080	B23-00786	ADU	O									0
	3018021009	38635 27TH ST EAST, #UNIT B, PALMDALE, CA 93550	Z23-0384	B23-00459	ADU	O									0

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier					Unit Types		Affordability by Household Incomes - Completed Entitlement								
1					2	3	4							5	6
Prior APN+	Current APN	Street Address	Project Name+	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
	3019010036	2904 R-10, #B, PALMDALE 93550	Z23-0460	RES23-00086	ADU	O									0
	3020010075	3409 E AVENUE S, PALMDALE, CA	Z22-416	B23-02218	SFD	O									0
	3020018053	3653 E R-12 Avenue, PALMDALE 93550	Z23-0547	RES24-00003	ADU	O									0
	3020025103	3537 CRYSTAL Court, #B, PALMDALE 93550	Z23-0617	RES23-00128	ADU	O									0
	3020033008	37334 E 37TH Street, PALMDALE 93550	Z23-0539	RES23-00093	ADU	O									0
	3021007031	38702 POND Avenue, PALMDALE 93550	Z19-432	RES24-00145	ADU	O									0
	3023012034	37203 52ND Street, Unit B, PALMDALE 93552	Z23-051	RES24-00235	ADU	O									0
	3023019021	4702 E R-12 Avenue, PALMDALE 93552	Z23-0363	RES23-00092	ADU	O									0
	3024049001	37913 DE DIEGO, PALMDALE 93552	Z23-0526	RES23-00111	ADU	O									0
	3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320	B23-00422	SFD	O									0
	3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320	B23-00423	ADU	O									0
	3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320	B23-00424	ADU	O									0
	3052006029	36733 42ND ST EAST, PALMDALE, CA	Z23-220	B23-01474	SFD	O									0
	3052021009	3828 E AVENUE T 4, PALMDALE, CA	Z23-304	B23-01853	SFD	O									0
	3052041008	3019 E AVENUE S 1, PALMDALE, CA 93550	Z22-450	B22-03090	ADU	O									0
	3053043019	37132 KENDRICK Circle, PALMDALE 93550	Z23-108	RES23-00061	ADU	O									0
	3053045444	37032 COOPER Terrace, #UNIT B, PALMDALE 93550	Z24-0401	RES24-00209	ADU	O									0
	3206059001	2620 CHICORY Lane, #B, PALMDALE 93551	Z23-0355	RES23-00089	ADU	O									0
	3010030023	150 E AVENUE R, PALMDALE, CA	Juniper Grove / SPR19-004	B19-01618 / B19-01669/ B19-01670	5+	R									0
	3018027036	2650 E AVENUE Q 12, PALMDALE, CA 93550	Palmdale Terrace / SPR21-002	B21-02407	5+	R									0
	3023083014	5344 MONACO Lane, Unit B, PALMDALE 93552	Z23-0527	RES23-00105	ADU	O									0
	3052047020	35837 43RD ST EAST, PALMDALE, CA 93552	Z22-077	B22-01438	ADU	O									0
	3021008007	3339 E AVENUE Q 1, #UNIT B, PALMDALE, CA 93550	Z21-013	B21-00078	ADU	O									0
	3014020015	38351 ROSE MARIE, #B, PALMDALE, CA 93550	Z21-356	B21-01731	ADU	O									0
	3101037017	41456 MYRTLE ST, PALMDALE, CA 93551	Z21-496	B21-02076	SFD	O									0
	3021034002	38639 37TH ST EAST, PALMDALE, CA 93550	Z21-656	B21-03096	ADU	O									0
	3003102030	2203 CENTURY PLANT	Pacific Montera / TR 54058-03 / SDP20-004	B22-04121	SFD	O									0
	3003102042	2330 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004	B22-02219	SFD	O									0
	3003102055	2331 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004	B22-02221	SFD	O									0
	3003102058	2409 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004	B22-02224	SFD	O									0
	n/a	38902 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004	B22-02192	SFD	O									0
	3003102005	38905 CANDLENUT DR	Pacific Montera / TR 54058-03 / SDP20-004	B22-02217	SFD	O									0
	n/a	38924 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004	B22-02194	SFD	O									0
	n/a	38932 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004	B22-02195	SFD	O									0
	3206071031	3725 ELIOPULOS RANCH DR	Joshua Ranch	B22-00848	SFD	O									0
	3206066007	3912 SADDLE DR	Joshua Ranch	B19-02023	SFD	O									0
	3206065010	39222 STALLION DR	Joshua Ranch	B22-02288	SFD	O									0

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier					Unit Types		Affordability by Household Incomes - Completed Entitlement								
1					2	3	4							5	6
Prior APN*	Current APN	Street Address	Project Name*	Local Jurisdiction Tracking ID	Unit Category (SFA,SFD,2 to 4,5+,ADU,MH)	Tenure R=Renter O=Owner	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low- Income Deed Restricted	Low- Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Entitlement Date Approved	# of Units issued Entitlements
	3206065007	39274 STALLION DR	Joshua Ranch	B22-02296	SFD	O									0
	3206073023	3957 ELIOPULOS RANCH DR	Joshua Ranch	B21-02683	SFD	O									0
	3206072016	39645 NICHOLAS CT	Joshua Ranch	B20-02513	SFD	O									0
	3026072004	39648 CANTER Court	Joshua Ranch	B23-01390	SFD	O									0
	3206072015	39651 NICHOLAS CT	Joshua Ranch	B20-02512	SFD	O									0
	n/a	39655 CANTER CT	Joshua Ranch	B23-01391	SFD	O									0
	3206073024	3969 ELIOPULOS RANCH DR	Joshua Ranch	B21-02676	SFD	O									0
	3206073025	3981 ELIOPULOS RANCH DR	Joshua Ranch	B21-02684	SFD	O									0
	3206071038	3992 ELIOPULOS RANCH DR	Joshua Ranch	B21-02685	SFD	O									0
	3206073026	3993 ELIOPULOS RANCH DR	Joshua Ranch	B21-02696	SFD	O									0

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Building Permits								
			7							8	9
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Building Permits Date Issued	# of Units Issued Building Permits
			2	0	0	0	0	0	149		151
3005-027-024	39763 Country Club Drive	B22-01604									0
3021-028-026	38543 Frontier Avenue	B22-01775									0
3015004022	38548 11th Street East	B22-01804									0
3050-005-009	5910 East Avenue T	B22-02562									0
3021007002	38751 33rd Street East	B22-02934									0
3008-040-012	38225 9th Street East	9th Patriot / MSPR 22-002	2						29	9/23/2024	31
3206-064-044	39350 Stallion Drive	Joshua Ranch / TR 52200-2									0
3206-065-018	39313 Stallion Drive	Joshua Ranch / TR 52200-2									0
3206-065-019	39321 Stallion Drive	Joshua Ranch / TR 52200-2									0
3206-065-003	39330 Stallion Drive	Joshua Ranch / TR 52200-2									0
3206-065-020	39329 Stallion Drive	Joshua Ranch / TR 52200-2									0
3023-067-031	38136 52nd St East										0
3051-048-028	5219 Alyssa Ln										0
3001-047-012	40327 Nido Ct										0
n/a	5220 Lilac Dr	Ravello TTM 73068									0
n/a	5220 Lilac Dr.	Ravello TTM 73068									0
N/A	38840 MALVA ROSA DR	Pacific Comm (TTM 54058-03)									0
N/A	2314 Century Plant St	Pacific Comm (TTM 54058-03)									0
N/A	38848 Malva Rosa Dr	Pacific Comm (TTM 54058-03)									0
N/A	2308 Century Plant St	Pacific Comm (TTM 54058-03)									0
N/A	2237 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)									0
N/A	38856 MALVA ROSA DR	Pacific Comm (TTM 54058-03)									0
N/A	2320 Century Plant St	Pacific Comm (TTM 54058-03)									0
N/A	2236 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)									0
N/A	2303 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)									0
N/A	2315 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)									0
3012006006	37846 11TH Street	RES23-00083									0
3003-041-047	2003 SANDSTONE Court	RES23-00013									0
N/A	38832 Malva Rosa Dr	Pacific Comm (TTM 54058-03)									0
3015-020-009	1609 E Avenue Q6	B23-01473									0
N/A	5414 YUCCA WY	Ravello TTM 73068									0
N/A	38173 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
N/A	38181 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
N/A	38181 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
N/A	38173 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001									0
3053047057	37022 LA CONTEMPO AV	Z22-556									0
3003-065-017	38873 CALISTOGA ST	Z23-247							1	10/1/2024	1
N/A	38264 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0

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Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Building Permits Date Issued	# of Units Issued Building Permits
N/A	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
n/a	38264 EUCALYPTUS ST C	Ravello / TR 73068 / SDP23-001									0
n/a	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
n/a	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
n/a	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
n/a	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
n/a	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38264 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
N/A	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001									0
3003102040	2402 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102056	2337 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004									0
N/A	39664 NICHOLAS CT	Joshua Ranch / TTM 52200-3									0
N/A	39636 NICHOLAS CT	Joshua Ranch / TTM 52200-3									0
N/A	39642 NICHOLAS CT	Joshua Ranch / TTM 52200-3									0
N/A	39641 NICHOLAS CT	Joshua Ranch / TTM 52200-3									0
N/A	39629 NICHOLAS CT	Joshua Ranch / TTM 52200-3									0
3001-074-009	40028 Palmetto Dr.	Z23-337									0
3024-031-043	37456 Calle Mazatlan	Z23-065									0
3051-035-050	36824 Royce Ct B	Z23-269									0
3015-020-001	1659 E Ave Q-6										0
3024-030-029	6333 Posada Ct	Z23-109									0
N/A	3704 Eliopulos Ranch Dr.	Joshua Ranch (TTM 52200-03)									0
N/A	38215 Vito Lane	Homes4Families									0
N/A	38211 Vito Lane	Homes4Families									0
N/A	162 Taintor Rd	Homes4Families									0
N/A	166 Taintor Rd	Homes4Families									0
N/A	38214 Vito Rd	Homes4Families									0
N/A	38210 Vito Lane	Homes4Families									0
3005-027-028	39730 Eadmer Ave	Z23-131									0
3206071022	39626 Rula Dr	Joshua Ranch / TTM 52200-3									0
N/A	39640 Rula Dr	Joshua Ranch / TTM 52200-3									0
3206072005	39650 Canter Ct	Joshua Ranch / TTM 52200-3									0
N/A	39658 Rula Dr	Joshua Ranch / TTM 52200-3									0
N/A	39660 Nicholas Ct	Joshua Ranch / TTM 52200-3									0
N/A	39634 Rula Dr	Joshua Ranch / TTM 52200-3									0
N/A	39641 Rula Dr	Joshua Ranch / TTM 52200-3									0
N/A	39633 Rula Dr	Joshua Ranch / TTM 52200-3									0
N/A	39625 Rula Dr	Joshua Ranch / TTM 52200-3									0
N/A	39648 Rula Dr	Joshua Ranch / TTM 52200-3									0
N/A	39655 Canter Ct	Joshua Ranch / TTM 52200-3									0
3008038011, -012, -013, -037, -015, -034, -035, -036, -019	N/A	MSPR22-004									0
3008039004, -005, -006	N/A	Dream Village									0

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3052001071, -072	N/A	SPR18-005 Time Extension									0
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO									0
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO									0
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO									0
3024008021, -018	N/A	Pacific Poppy / TR 69651									0
3003104005	1888 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	10/2/2024	1
3003104027	1879 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	10/2/2024	1
3003104006	1880 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	10/2/2024	1
3003104026	1871 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	10/3/2024	1
3003104007	1872 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	10/22/2024	1
3003104008	1864 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	10/22/2024	1
3003104024	1855 Vincent Drive, Palmdale, CA 93535	Joshua Landing / TR 60732 / SDP24-0001							1	10/22/2024	1
3003104025	1863 Vincent Drive, Palmdale, CA 93551	Joshua Landing / TR 60732 / SDP24-0001							1	10/22/2024	1
3003104009	1856 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	12/17/2024	1
3003104023	1847 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	12/17/2024	1
3003104022	1839 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	12/17/2024	1
3003104011	1840 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	12/17/2024	1
3003104010	1848 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001							1	12/17/2024	1
3003104028	1887 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101004	39035 Calmview Circle	Joshua Landing / TR 60732 / SDP24-0001									0
3003101003	39043 CALMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104002	39051 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104019	1815 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104018	1807 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101017	1788 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104016	1796 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104015	1804 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104021	1831 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101020	1823 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0

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3003101014	1816 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104013	1824 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101012	1832 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101001	39059 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001									0
3001084078	4636 STARSTONE Court, PALMDALE 93551	Z24-0027									0
3003087004	2734 BOUQUET Lane, PALMDALE 93551	Z24-0162									0
3008016011	38502 SUMAC Avenue, PALMDALE 93550	Z24-0212									0
3008038023	933 Q-5, PALMDALE 93550	Z24-0252									0
3010031107	153 R-4, PALMDALE 93550	Z24-0438									0
3014002012	38019 11TH Street, Unit B, PALMDALE 93550	Z24-0165									0
3014023022	1855 Q-11, PALMDALE 93550	Z24-0465									0
3015004005	38511 11TH Street, PALMDALE 93550	Z24-0173									0
3015021014	1614 E Q-6 Avenue, PALMDALE 93550	Z23-0594									0
3018023012	38524 28TH Street, PALMDALE 93550	Z24-0524									0
3020007034	3223 E Avenue R 12, PALMDALE, CA	Z24-0416									0
3021023001	38502 E 32ND Street, PALMDALE 93550	Z23-0585									0
3022003043	1028 P-5, PALMDALE 93550	Z24-0004									0
3023015024	37317 SABAL Avenue, PALMDALE 93552	Z24-0183									0
3023028088	4202 E Q-12 Avenue, PALMDALE 93552	Z23-0613									0
3023043002	37955 AMETHYST Street, PALMDALE 93552	Z24-0022									0
3023078026	5033 MARSEILLES Court, PALMDALE 93552	Z24-0540									0
3050004003	5821 PEARBLOSSOM Highway, PALMDALE, CA 93552	Z24-0008									0
3050007001	6015 E T-4 Avenue, PALMDALE 93552	Z23-207									0

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3051032024	36903 GOLDENVIEW Way, PALMDALE 93552	Z24-0262									0
3052008046	36824 37th Street, #B, PALMDALE, CA 93551	Z23-0464									0
3206028100	2045 SLAYTON Street, PALMDALE 93551	Z24-0427									0
3023002186	N/A	Maison's Village II / TTM 83359									0
3023002186	N/A	Maison's Village II / TTM 83359									0
3023002186	N/A	Maison's Village II / TTM 83359									0
3001030024	40723 VIA HONRADO, PALMDALE, CA 93551	Z24-0152							1	4/24/2024	1
3001068074	3211 REDBUD Lane, PALMDALE 93551	Z24-0327							1	11/4/2024	1
3003070048	39440 OBSIDIAN Court, PALMDALE 93551	Z24-0057							1	11/12/2024	1
3003087021	2713 TRUDEAU Lane, PALMDALE 93551	Z24-0246							1	10/15/2024	1
3008004006	38714 GLENRAVEN Avenue, PALMDALE 93550	Z24-0049							1	3/28/2024	1
3008009004	38622 LARKIN Avenue, #UNITS, PALMDALE 93550	Z24-0211							1	10/21/2024	1
3009004027	38232 GUNTON Drive, PALMDALE 93550	Z24-0122							1	6/13/2024	1
3010013033	37435 SUMAC Avenue, #B, PALMDALE 93550	Z24-0157							1	6/10/2024	1
3010031085	155 E R-3 Avenue, Unit B, PALMDALE, CA 93550	Z24-0389							1	12/23/2024	1
3012002004	37924 PALM VISTA Avenue, #Unit B, PALMDALE 93550	Z24-0224							1	9/17/2024	1
3012014019	1215 R-4, #UNIT B, PALMDALE 93550	Z24-0607							1	11/6/2024	1
3012017008	37811 MELTON Avenue, PALMDALE 93550	Z23-0603							1	8/8/2024	1
3014028017	38225 12TH Street, #UNITS, PALMDALE 93550	Z24-0048							1	6/20/2024	1
3018006005	38628 21ST Street, #B, PALMDALE 93550	Z24-0225							1	9/9/2024	1
3019046020	2137 ESTRELLA Court, #B, PALMDALE 93550	Z24-0348							1	10/3/2024	1
3019049008	2413 EAST R-6, PALMDALE 93550	Z23-0473							1	6/6/2024	1
3020022055	37619 E 31ST Street, #UNIT B, PALMDALE 93550	Z24-0058							1	8/13/2024	1
3020025092	3555 STERLING Court, #B, PALMDALE 93550	Z24-0131							1	3/27/2024	1

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3021019012	38551 35TH Street, PALMDALE 93550	Z24-0306							1	9/5/2024	1
3021035031	38625 SIENNA Court, PALMDALE 93550	Z24-0514							1	11/12/2024	1
3023014014	37334 POPULUS Avenue, #UNIT B, PALMDALE 93552	Z24-0280							1	12/9/2024	1
3023056016	5553 KATRINA Place, PALMDALE 93552	Z24-0464							1	9/24/2024	1
3023075004	5639 R-12, PALMDALE 93552	Z24-0234							1	9/4/2024	1
3023083052	5309 SAINT LAURENT Place, PALMDALE 93552	Z24-0018							1	11/12/2024	1
3023086063	37306 FESTIVAL Court, #UNIT B, PALMDALE 93552	Z24-0127							1	10/28/2024	1
3051029019	36926 HAMPTON Court, PALMDALE 93552	Z24-0350							1	11/20/2024	1
3051039081	36921 ROYCE Court, #UNIT B, PALMDALE 93552	Z24-0102							1	10/17/2024	1
3052040037	37068 KEITH Court, PALMDALE 93550	Z23-0600							1	5/23/2024	1
3052043025	3767 NOLL Drive, PALMDALE 93550	Z24-0019							1	10/31/2024	1
3052055020	3333 FAIRFIELD Avenue, #Unit B, PALMDALE 93550	Z24-0223							1	8/29/2024	1
3052057054	36852 JUSTIN Court, Unit B, PALMDALE 93550	Z24-0507							1	10/3/2024	1
3204054013	41829 PICO Way, PALMDALE 93551	Z24-0087							1	6/20/2024	1
3024037015	38117 CIMA MESA Drive	Z23-0457									0
3014002040	38114 10TH Street	Z23-0592									0
3050004014	N/A	Z23-228									0
3050004014	n/a	Z23-228									0
3004028005	338 MESA VERDE Avenue	Z24-0017									0
3052072009	36624 45TH Street	Z24-0047									0
3015012020	1320 East Ave Q-2 Unit C	Z24-0067									0
3015012020	1320 East Ave Q-2 Unit D	Z24-0067									0
3015012020	1320 E AVE Q-2, Unit A, B	Z24-0067									0
3206065006	39310 STALLION Drive	Z24-0095							1	7/8/2024	1
3008017019	38564 3RD Street	Z24-0103									0
3008017019	38564 3RD Street	Z24-0103									0
3052005033	42nd St E / Ave S-12	Z24-0126									0
3052053003	36535 SILVERSPUR LANE	Z24-0143									0
3012002005	37918 Palm Vista Ave	Z24-0169									0
3012002005	37918 Palm Vista Ave	Z24-0169									0
3009008023	526 EAST Q-9	Z24-0175									0
3015002034	1005 Q-5, #UNITS	Z24-0245									0
3020020027	3410 SAN GABRIEL Court	Z24-0257									0
3014012016	1512 EAST Q-11	Z24-0288									0
3023037004	5025 CLIFF ROSE Drive	Z24-0314									0

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3023037004	5025 CLIFF ROSE Drive	Z24-0314									0
3003027043	38955 DIANRON Road	Z24-0384									0
3023085017	4760 MINSTREL Drive	Z24-0386									0
3006017024	215 EAST P-5	Z24-0410									0
3023054074	38144 RIVIERA Court	Z24-0425									0
3020017042	3049 R-6	Z24-0428									0
3008006025	38708 3RD Street	Z24-0446									0
3019040010	2242 EAST R-12	Z24-0461									0
3020010069	35th St E / Ave S	Z24-0471									0
3003045037	1108 WITHERILL Place	Z24-0542									0
3001144006	40824 LAS PIEDRAS Terrace	Z24-0584									0
3008015014	38463 LARKIN Avenue, #UNITS	Z24-0598									0
3005033044	39736 GOLFERS Drive	Z24-0600									0
3020022012	3101 HEATHER Avenue	Z24-0654									0
3024020058	37637 SIMI Street	Z24-0675									0
3101036074	5900 ALLEPPO Lane	Z24-0696									0
3014008034	1241 R, #UNITS	Z24-0700									0
3014008034	1241 R, #UNITS	Z24-0700									0
320402048	41863 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002							1	9/5/2024	1
3204025048	41851 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002							1	9/5/2024	1
n/a	6907 SOLERA DRIVE	The Reserve / TR 81337 / SDP24-0002							1	9/9/2024	1
n/a	6833 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002							1	9/9/2024	1
n/a	6821 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002							1	9/9/2024	1
n/a	6809 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002							1	9/9/2024	1
n/a	41846 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	9/9/2024	1
n/a	41849 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	9/9/2024	1
n/a	41834 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	10/17/2024	1
n/a	41825 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	10/17/2024	1
n/a	41837 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	10/17/2024	1
n/a	41822 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	10/17/2024	1
n/a	41810 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	10/17/2024	1
n/a	41813 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002							1	10/21/2024	1
n/a	N/A	The Reserve / TR 81337 / SDP24-0002									0
3003102019	2412 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102006	38867 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102035	2333 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102007	38859 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102020	2404 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1

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3003102022	2332 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102034	2327 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102036	2339 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102021	2338 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102008	38851 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102009	38843 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102038	2411 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102023	2326 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003102037	2403 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004							1	12/19/2024	1
3003101018	2113 CORK OAK Street	Pacific Montera / TR 54058-04 / SDP20-004							1	12/19/2024	1
3206076080	39419 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076081	39411 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076082	39403 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076001	4032 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/5/2024	1
3206076002	4040 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/5/2024	1
3206076003	4048 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076004	4056 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076005	4064 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076014	4013 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/5/2024	1
3206076015	4019 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/5/2024	1
3206076016	4025 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/5/2024	1
3206076017	4033 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/5/2024	1
3206076018	4041 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076019	4049 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3206076020	4057 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001							1	12/17/2024	1
3003053048	39355 FOSTORIA Court, PALMDALE 93551	Z23-0574							1	7/15/2024	1
3003069076	39312 DUNBAR ST, PALMDALE, CA 93551	Z23-107							1	2/12/2024	1
3004027008	38212 SAN MATEO Avenue, PALMDALE 93551	Z22-101							1	8/8/2024	1
3004036041	1371 LEOPARD CT, PALMDALE, CA 93551	Z23-041							1	6/20/2024	1

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Building Permits								
			7							8	9
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Building Permits Date Issued	# of Units Issued Building Permits
3008013029	509 E AVENUE Q 5, #B, PALMDALE, CA 93550	Z23-077							1	4/1/2024	1
3012019010	37910 MELTON AV, PALMDALE, CA 93550	Z23-038							1	5/16/2024	1
3012019011	37902 PRENTISS Avenue, #Unit B, PALMDALE 93550	Z23-0452							1	3/25/2024	1
3012028054	37947 ROSEMARIE Street, PALMDALE 93550	Z23-0596							1	9/17/2024	1
3012033026	37618 LASKER AV, PALMDALE, CA 93550	Z23-299							1	6/26/2024	1
3015010038	1204 E AVENUE Q 4, #B, PALMDALE, CA 93550	Z23-080							1	1/24/2024	1
3018021009	38635 27TH ST EAST, #UNIT B, PALMDALE, CA 93550	Z23-0384							1	4/16/2024	1
3019010036	2904 R-10, #B, PALMDALE 93550	Z23-0460							1	3/13/2024	1
3020010075	3409 E AVENUE S, PALMDALE, CA	Z22-416							1	6/11/2024	1
3020018053	3653 E R-12 Avenue, PALMDALE 93550	Z23-0547							1	7/11/2024	1
3020025103	3537 CRYSTAL Court, #B, PALMDALE 93550	Z23-0617							1	5/2/2024	1
3020033008	37334 E 37TH Street, PALMDALE 93550	Z23-0539							1	2/1/2024	1
3021007031	38702 POND Avenue, PALMDALE 93550	Z19-432							1	5/20/2024	1
3023012034	37203 52ND Street, Unit B, PALMDALE 93552	Z23-051							1	12/9/2024	1
3023019021	4702 E R-12 Avenue, PALMDALE 93552	Z23-0363							1	7/3/2024	1
3024049001	37913 DE DIEGO, PALMDALE 93552	Z23-0526							1	10/3/2024	1
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320							1	10/10/2024	1
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320							1	10/10/2024	1
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320							1	10/10/2024	1
3052006029	36733 42ND ST EAST, PALMDALE, CA	Z23-220							1	4/8/2024	1
3052021009	3828 E AVENUE T 4, PALMDALE, CA	Z23-304							1	12/11/2024	1
3052041008	3019 E AVENUE S 1, PALMDALE, CA 93550	Z22-450							1	5/23/2024	1
3053043019	37132 KENDRICK Circle, PALMDALE 93550	Z23-108							1	6/3/2024	1
3053045444	37032 COOPER Terrace, #UNIT B, PALMDALE 93550	Z24-0401							1	12/19/2024	1

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Project Identifier			Affordability by Household Incomes - Building Permits								
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Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Building Permits Date Issued	# of Units Issued Building Permits
3206059001	2620 CHICORY Lane, #B, PALMDALE 93551	Z23-0355							1	3/27/2024	1
3010030023	150 E AVENUE R, PALMDALE, CA	Juniper Grove / SPR19-004									0
3018027036	2650 E AVENUE Q 12, PALMDALE, CA 93550	Palmdale Terrace / SPR21-002									0
3023083014	5344 MONACO Lane, Unit B, PALMDALE 93552	Z23-0527									0
3052047020	35837 43RD ST EAST, PALMDALE, CA 93552	Z22-077									0
3021008007	3339 E AVENUE Q 1, #UNIT B, PALMDALE, CA 93550	Z21-013									0
3014020015	38351 ROSE MARIE, #B, PALMDALE, CA 93550	Z21-356									0
3101037017	41456 MYRTLE ST, PALMDALE, CA 93551	Z21-496									0
3021034002	38639 37TH ST EAST, PALMDALE, CA 93550	Z21-656									0
3003102030	2203 CENTURY PLANT	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102042	2330 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102055	2331 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102058	2409 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004									0
n/a	38902 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102005	38905 CANDLENUT DR	Pacific Montera / TR 54058-03 / SDP20-004									0
n/a	38924 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004									0
n/a	38932 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004									0
3206071031	3725 ELIOPULOS RANCH DR	Joshua Ranch									0
3206066007	3912 SADDLE DR	Joshua Ranch									0
3206065010	39222 STALLION DR	Joshua Ranch									0
3206065007	39274 STALLION DR	Joshua Ranch									0
3206073023	3957 ELIOPULOS RANCH DR	Joshua Ranch									0
3206072016	39645 NICHOLAS CT	Joshua Ranch									0
3026072004	39648 CANTER Court	Joshua Ranch									0
3206072015	39651 NICHOLAS CT	Joshua Ranch									0
n/a	39655 CANTER CT	Joshua Ranch									0
3206073024	3969 ELIOPULOS RANCH DR	Joshua Ranch									0
3206073025	3981 ELIOPULOS RANCH DR	Joshua Ranch									0
3206071038	3992 ELIOPULOS RANCH DR	Joshua Ranch									0
3206073026	3993 ELIOPULOS RANCH DR	Joshua Ranch									0
											0
											0
											0
											0
											0

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
			4	0	281	0	0	0	83		367
3005-027-024	39763 Country Club Drive	B22-01604							1	12/2/2024	1
3021-028-026	38543 Frontier Avenue	B22-01775							1	11/7/2024	1
3015004022	38548 11th Street East	B22-01804							1	10/3/2024	1
3050-005-009	5910 East Avenue T	B22-02562							1	6/17/2024	1
3021007002	38751 33rd Street East	B22-02934							1	3/14/2024	1
3008-040-012	38225 9th Street East	9th Patriot / MSPR 22-002									0
3206-064-044	39350 Stallion Drive	Joshua Ranch / TR 52200-2							1	3/12/2024	1
3206-065-018	39313 Stallion Drive	Joshua Ranch / TR 52200-2							1	5/1/2024	1
3206-065-019	39321 Stallion Drive	Joshua Ranch / TR 52200-2							1	5/29/2024	1
3206-065-003	39330 Stallion Drive	Joshua Ranch / TR 52200-2							1	7/17/2024	1
3206-065-020	39329 Stallion Drive	Joshua Ranch / TR 52200-2							1	10/23/2024	1
3023-067-031	38136 52nd St East								1	3/13/2024	1
3051-048-028	5219 Alyssa Ln								1	1/30/2024	1
3001-047-012	40327 Nido Ct								1	4/4/2024	1
n/a	5220 Lilac Dr	Ravello TTM 73068			1					3/29/2024	1
n/a	5220 Lilac Dr.	Ravello TTM 73068			1					3/29/2024	1
N/A	38840 MALVA ROSA DR	Pacific Comm (TTM 54058-03)							1	11/27/2024	1
N/A	2314 Century Plant St	Pacific Comm (TTM 54058-03)							1	12/16/2024	1
N/A	38848 Malva Rosa Dr	Pacific Comm (TTM 54058-03)							1	11/27/2024	1
N/A	2308 Century Plant St	Pacific Comm (TTM 54058-03)							1	11/27/2024	1
N/A	2237 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)							1	12/3/2024	1
N/A	38856 MALVA ROSA DR	Pacific Comm (TTM 54058-03)							1	11/27/2024	1
N/A	2320 Century Plant St	Pacific Comm (TTM 54058-03)							1	12/3/2024	1
N/A	2236 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)							1	11/27/2024	1
N/A	2303 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)							1	12/10/2024	1
N/A	2315 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)							1	12/3/2024	1
3012006006	37846 11TH Street	RES23-00083							1	7/1/2024	1
3003-041-047	2003 SANDSTONE Court	RES23-00013							1	3/21/2024	1
N/A	38832 Malva Rosa Dr	Pacific Comm (TTM 54058-03)							1	11/27/2024	1
3015-020-009	1609 E Avenue Q6	B23-01473							1	11/14/2024	1
N/A	5414 YUCCA WY	Ravello TTM 73068			1					2/8/2024	1
N/A	38173 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
N/A	38181 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
N/A	38181 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
N/A	38173 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001			1					3/29/2024	1
3053047057	37022 LA CONTEMPO AV	Z22-556							1	4/9/2024	1
3003-065-017	38873 CALISTOGA ST	Z23-247									0
N/A	38264 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
N/A	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
n/a	38264 EUCALYPTUS ST C	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
n/a	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
n/a	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
n/a	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
n/a	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
n/a	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38264 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38272 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
N/A	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001			1					3/29/2024	1
3003102040	2402 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004							1	5/6/2024	1
3003102056	2337 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004							1	9/30/2024	1
N/A	39664 NICHOLAS CT	Joshua Ranch / TTM 52200-3							1	6/13/2024	1
N/A	39636 NICHOLAS CT	Joshua Ranch / TTM 52200-3							1	10/22/2024	0
N/A	39642 NICHOLAS CT	Joshua Ranch / TTM 52200-3							1	10/21/2024	1
N/A	39641 NICHOLAS CT	Joshua Ranch / TTM 52200-3							1	6/13/2024	1
N/A	39629 NICHOLAS CT	Joshua Ranch / TTM 52200-3							1	9/26/2024	1
3001-074-009	40028 Palmetto Dr.	Z23-337							1	10/9/2024	1
3024-031-043	37456 Calle Mazatlan	Z23-065							1	11/7/2024	1
3051-035-050	36824 Royce Ct B	Z23-269							1	4/18/2024	1
3015-020-001	1659 E Ave Q-6								1	5/20/2024	1
3024-030-029	6333 Posada Ct	Z23-109							1	10/10/2024	1
N/A	3704 Eliopulos Ranch Dr.	Joshua Ranch (TTM 52200-03)							1	11/12/2024	1
N/A	38215 Vito Lane	Homes4Families			1					8/6/2024	1
N/A	38211 Vito Lane	Homes4Families			1					8/6/2024	1
N/A	162 Taintor Rd	Homes4Families	1							8/6/2024	1
N/A	166 Taintor Rd	Homes4Families	1							8/6/2024	1
N/A	38214 Vito Rd	Homes4Families	1							8/6/2024	1
N/A	38210 Vito Lane	Homes4Families	1							8/6/2024	1
3005-027-028	39730 Eadmer Ave	Z23-131							1	10/14/2024	1
3206071022	39626 Rula Dr	Joshua Ranch / TTM 52200-3							1	11/22/2024	1
N/A	39640 Rula Dr	Joshua Ranch / TTM 52200-3							1	12/17/2024	1
3206072005	39650 Canter Ct	Joshua Ranch / TTM 52200-3							1	11/12/2024	1
N/A	39658 Rula Dr	Joshua Ranch / TTM 52200-3							1	9/4/2024	1
N/A	39660 Nicholas Ct	Joshua Ranch / TTM 52200-3							1	12/13/2024	1
N/A	39634 Rula Dr	Joshua Ranch / TTM 52200-3							1	6/13/2024	1
N/A	39641 Rula Dr	Joshua Ranch / TTM 52200-3							1	6/18/2024	1
N/A	39633 Rula Dr	Joshua Ranch / TTM 52200-3							1	7/30/2024	1
N/A	39625 Rula Dr	Joshua Ranch / TTM 52200-3							1	11/27/2024	1
N/A	39648 Rula Dr	Joshua Ranch / TTM 52200-3							1	12/13/2024	1
N/A	39655 Canter Ct	Joshua Ranch / TTM 52200-3							1	9/3/2024	1

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3008038011, -012, -013, -037, -015, -034, -035, -036, -019	N/A	MSPR22-004									0
3008039004, -005, -006	N/A	Dream Village									0
3052001071, -072	N/A	SPR18-005 Time Extension									0
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO									0
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO									0
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO									0
3024008021, -018	N/A	Pacific Poppy / TR 69651									0
3003104005	1888 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104027	1879 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104006	1880 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104026	1871 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104007	1872 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104008	1864 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104024	1855 Vincent Drive, Palmdale, CA 93535	Joshua Landing / TR 60732 / SDP24-0001									0
3003104025	1863 Vincent Drive, Palmdale, CA 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104009	1856 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104023	1847 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104022	1839 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104011	1840 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104010	1848 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001									0
3003104028	1887 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101004	39035 Calmview Circle	Joshua Landing / TR 60732 / SDP24-0001									0
3003101003	39043 CALMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104002	39051 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104019	1815 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104018	1807 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101017	1788 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104016	1796 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0

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			10							11	12
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3003104015	1804 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104021	1831 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101020	1823 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101014	1816 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003104013	1824 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101012	1832 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001									0
3003101001	39059 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001									0
3001084078	4636 STARSTONE Court, PALMDALE 93551	Z24-0027									0
3003087004	2734 BOUQUET Lane, PALMDALE 93551	Z24-0162									0
3008016011	38502 SUMAC Avenue, PALMDALE 93550	Z24-0212									0
3008038023	933 Q-5, PALMDALE 93550	Z24-0252									0
3010031107	153 R-4, PALMDALE 93550	Z24-0438									0
3014002012	38019 11TH Street, Unit B, PALMDALE 93550	Z24-0165									0
3014023022	1855 Q-11, PALMDALE 93550	Z24-0465									0
3015004005	38511 11TH Street, PALMDALE 93550	Z24-0173									0
3015021014	1614 E Q-6 Avenue, PALMDALE 93550	Z23-0594									0
3018023012	38524 28TH Street, PALMDALE 93550	Z24-0524									0
3020007034	3223 E Avenue R 12, PALMDALE, CA	Z24-0416									0
3021023001	38502 E 32ND Street, PALMDALE 93550	Z23-0585									0
3022003043	1028 P-5, PALMDALE 93550	Z24-0004									0
3023015024	37317 SABAL Avenue, PALMDALE 93552	Z24-0183									0
3023028088	4202 E Q-12 Avenue, PALMDALE 93552	Z23-0613									0
3023043002	37955 AMETHYST Street, PALMDALE 93552	Z24-0022									0
3023078026	5033 MARSEILLES Court, PALMDALE 93552	Z24-0540									0

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
3050004003	5821 PEARBLOSSOM Highway, PALMDALE, CA 93552	Z24-0008									0
3050007001	6015 E T-4 Avenue, PALMDALE 93552	Z23-207									0
3051032024	36903 GOLDENVIEW Way, PALMDALE 93552	Z24-0262									0
3052008046	36824 37th Street, #B, PALMDALE, CA 93551	Z23-0464									0
3206028100	2045 SLAYTON Street, PALMDALE 93551	Z24-0427									0
3023002186	N/A	Maison's Village II / TTM 83359									0
3023002186	N/A	Maison's Village II / TTM 83359									0
3023002186	N/A	Maison's Village II / TTM 83359									0
3001030024	40723 VIA HONRADO, PALMDALE, CA 93551	Z24-0152									0
3001068074	3211 REDBUD Lane, PALMDALE 93551	Z24-0327									0
3003070048	39440 OBSIDIAN Court, PALMDALE 93551	Z24-0057									0
3003087021	2713 TRUDEAU Lane, PALMDALE 93551	Z24-0246									0
3008004006	38714 GLENRAVEN Avenue, PALMDALE 93550	Z24-0049							1	12/9/2024	1
3008009004	38622 LARKIN Avenue, #UNITS, PALMDALE 93550	Z24-0211									0
3009004027	38232 GUNTON Drive, PALMDALE 93550	Z24-0122									0
3010013033	37435 SUMAC Avenue, #B, PALMDALE 93550	Z24-0157									0
3010031085	155 E R-3 Avenue, Unit B, PALMDALE, CA 93550	Z24-0389									0
3012002004	37924 PALM VISTA Avenue, #Unit B, PALMDALE 93550	Z24-0224									0
3012014019	1215 R-4, #UNIT B, PALMDALE 93550	Z24-0607									0
3012017008	37811 MELTON Avenue, PALMDALE 93550	Z23-0603									0
3014028017	38225 12TH Street, #UNITS, PALMDALE 93550	Z24-0048									0
3018006005	38628 21ST Street, #B, PALMDALE 93550	Z24-0225									0
3019046020	2137 ESTRELLA Court, #B, PALMDALE 93550	Z24-0348									0
3019049008	2413 EAST R-6, PALMDALE 93550	Z23-0473									0

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
3020022055	37619 E 31ST Street, #UNIT B, PALMDALE 93550	Z24-0058									0
3020025092	3555 STERLING Court, #B, PALMDALE 93550	Z24-0131							1	8/20/2024	1
3021019012	38551 35TH Street, PALMDALE 93550	Z24-0306									0
3021035031	38625 SIENNA Court, PALMDALE 93550	Z24-0514									0
3023014014	37334 POPULUS Avenue, #UNIT B, PALMDALE 93552	Z24-0280									0
3023056016	5553 KATRINA Place, PALMDALE 93552	Z24-0464									0
3023075004	5639 R-12, PALMDALE 93552	Z24-0234									0
3023083052	5309 SAINT LAURENT Place, PALMDALE 93552	Z24-0018									0
3023086063	37306 FESTIVAL Court, #UNIT B, PALMDALE 93552	Z24-0127									0
3051029019	36926 HAMPTON Court, PALMDALE 93552	Z24-0350									0
3051039081	36921 ROYCE Court, #UNIT B, PALMDALE 93552	Z24-0102									0
3052040037	37068 KEITH Court, PALMDALE 93550	Z23-0600									0
3052043025	3767 NOLL Drive, PALMDALE 93550	Z24-0019									0
3052055020	3333 FAIRFIELD Avenue, #Unit B, PALMDALE 93550	Z24-0223							1	11/5/2024	1
3052057054	36852 JUSTIN Court, Unit B, PALMDALE 93550	Z24-0507									0
3204054013	41829 PICO Way, PALMDALE 93551	Z24-0087									0
3024037015	38117 CIMA MESA Drive	Z23-0457									0
3014002040	38114 10TH Street	Z23-0592									0
3050004014	N/A	Z23-228									0
3050004014	n/a	Z23-228									0
3004028005	338 MESA VERDE Avenue	Z24-0017									0
3052072009	36624 45TH Street	Z24-0047									0
3015012020	1320 East Ave Q-2 Unit C	Z24-0067									0
3015012020	1320 East Ave Q-2 Unit D	Z24-0067									0
3015012020	1320 E AVE Q-2, Unit A, B	Z24-0067									0
3206065006	39310 STALLION Drive	Z24-0095									0
3008017019	38564 3RD Street	Z24-0103									0
3008017019	38564 3RD Street	Z24-0103									0
3052005033	42nd St E / Ave S-12	Z24-0126									0
3052053003	36535 SILVERSPUR LANE	Z24-0143									0
3012002005	37918 Palm Vista Ave	Z24-0169									0

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
3012002005	37918 Palm Vista Ave	Z24-0169									0
3009008023	526 EAST Q-9	Z24-0175									0
3015002034	1005 Q-5, #UNITS	Z24-0245									0
3020020027	3410 SAN GABRIEL Court	Z24-0257									0
3014012016	1512 EAST Q-11	Z24-0288									0
3023037004	5025 CLIFF ROSE Drive	Z24-0314									0
3023037004	5025 CLIFF ROSE Drive	Z24-0314									0
3003027043	38955 DIANRON Road	Z24-0384									0
3023085017	4760 MINSTREL Drive	Z24-0386									0
3006017024	215 EAST P-5	Z24-0410									0
3023054074	38144 RIVIERA Court	Z24-0425									0
3020017042	3049 R-6	Z24-0428									0
3008006025	38708 3RD Street	Z24-0446									0
3019040010	2242 EAST R-12	Z24-0461									0
3020010069	35th St E / Ave S	Z24-0471									0
3003045037	1108 WITHERILL Place	Z24-0542									0
3001144006	40824 LAS PIEDRAS Terrace	Z24-0584									0
3008015014	38463 LARKIN Avenue, #UNITS	Z24-0598									0
3005033044	39736 GOLFERS Drive	Z24-0600									0
3020022012	3101 HEATHER Avenue	Z24-0654									0
3024020058	37637 SIMI Street	Z24-0675									0
3101036074	5900 ALLEPPO Lane	Z24-0696									0
3014008034	1241 R, #UNITS	Z24-0700									0
3014008034	1241 R, #UNITS	Z24-0700									0
320402048	41863 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002									0
3204025048	41851 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002									0
n/a	6907 SOLERA DRIVE	The Reserve / TR 81337 / SDP24-0002									0
n/a	6833 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002									0
n/a	6821 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002									0
n/a	6809 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002									0
n/a	41846 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	41849 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	41834 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	41825 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	41837 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	41822 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	41810 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	41813 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002									0
n/a	N/A	The Reserve / TR 81337 / SDP24-0002									0
3003102019	2412 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0

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Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
3003102006	38867 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102035	2333 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102007	38859 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102020	2404 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102022	2332 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102034	2327 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102036	2339 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102021	2338 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102008	38851 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102009	38843 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102038	2411 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102023	2326 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003102037	2403 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004									0
3003101018	2113 CORK OAK Street	Pacific Montera / TR 54058-04 / SDP20-004									0
3206076080	39419 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076081	39411 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076082	39403 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076001	4032 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076002	4040 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076003	4048 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076004	4056 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076005	4064 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076014	4013 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076015	4019 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076016	4025 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076017	4033 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076018	4041 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076019	4049 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0
3206076020	4057 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001									0

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
3003053048	39355 FOSTORIA Court, PALMDALE 93551	Z23-0574									0
3003069076	39312 DUNBAR ST, PALMDALE, CA 93551	Z23-107									0
3004027008	38212 SAN MATEO Avenue, PALMDALE 93551	Z22-101									0
3004036041	1371 LEOPARD CT, PALMDALE, CA 93551	Z23-041									0
3008013029	509 E AVENUE Q 5, #B, PALMDALE, CA 93550	Z23-077									0
3012019010	37910 MELTON AV, PALMDALE, CA 93550	Z23-038									0
3012019011	37902 PRENTISS Avenue, #Unit B, PALMDALE 93550	Z23-0452									0
3012028054	37947 ROSEMARIE Street, PALMDALE 93550	Z23-0596									0
3012033026	37618 LASKER AV, PALMDALE, CA 93550	Z23-299									0
3015010038	1204 E AVENUE Q 4, #B, PALMDALE, CA 93550	Z23-080									0
3018021009	38635 27TH ST EAST, #UNIT B, PALMDALE, CA 93550	Z23-0384									0
3019010036	2904 R-10, #B, PALMDALE 93550	Z23-0460									0
3020010075	3409 E AVENUE S, PALMDALE, CA	Z22-416									0
3020018053	3653 E R-12 Avenue, PALMDALE 93550	Z23-0547									0
3020025103	3537 CRYSTAL Court, #B, PALMDALE 93550	Z23-0617									0
3020033008	37334 E 37TH Street, PALMDALE 93550	Z23-0539									0
3021007031	38702 POND Avenue, PALMDALE 93550	Z19-432									0
3023012034	37203 52ND Street, Unit B, PALMDALE 93552	Z23-051									0
3023019021	4702 E R-12 Avenue, PALMDALE 93552	Z23-0363									0
3024049001	37913 DE DIEGO, PALMDALE 93552	Z23-0526									0
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320									0
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320									0
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320									0
3052006029	36733 42ND ST EAST, PALMDALE, CA	Z23-220									0

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Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier			Affordability by Household Incomes - Certificates of Occupancy								
			10							11	12
Current APN	Street Address	Project Name+	Very Low-Income Deed Restricted	Very Low-Income Non Deed Restricted	Low-Income Deed Restricted	Low-Income Non Deed Restricted	Moderate-Income Deed Restricted	Moderate-Income Non Deed Restricted	Above Moderate-Income	Certificates of Occupancy or other forms of readiness (see instructions) Date Issued	# of Units issued Certificates of Occupancy or other forms of readiness
3052021009	3828 E AVENUE T 4, PALMDALE, CA	Z23-304									0
3052041008	3019 E AVENUE S 1, PALMDALE, CA 93550	Z22-450									0
3053043019	37132 KENDRICK Circle, PALMDALE 93550	Z23-108									0
3053045444	37032 COOPER Terrace, #UNIT B, PALMDALE 93550	Z24-0401									0
3206059001	2620 CHICORY Lane, #B, PALMDALE 93551	Z23-0355									0
3010030023	150 E AVENUE R, PALMDALE, CA	Juniper Grove / SPR19-004			101					3/14/2024	101
3018027036	2650 E AVENUE Q 12, PALMDALE, CA 93550	Palmdale Terrace / SPR21-002			149					7/31/2024	149
3023083014	5344 MONACO Lane, Unit B, PALMDALE 93552	Z23-0527							1	7/31/2024	1
3052047020	35837 43RD ST EAST, PALMDALE, CA 93552	Z22-077							1	6/13/2024	1
3021008007	3339 E AVENUE Q 1, #UNIT B, PALMDALE, CA 93550	Z21-013							1	12/5/2024	1
3014020015	38351 ROSE MARIE, #B, PALMDALE, CA 93550	Z21-356							1	4/1/2024	1
3101037017	41456 MYRTLE ST, PALMDALE, CA 93551	Z21-496							1	6/26/2024	1
3021034002	38639 37TH ST EAST, PALMDALE, CA 93550	Z21-656							1	11/13/2024	1
3003102030	2203 CENTURY PLANT	Pacific Montera / TR 54058-03 / SDP20-004							1	12/10/2024	1
3003102042	2330 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004							1	5/6/2024	1
3003102055	2331 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004							1	11/25/2024	1
3003102058	2409 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004							1	6/12/2024	1
n/a	38902 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004							1	3/18/2024	1
3003102005	38905 CANDLENUT DR	Pacific Montera / TR 54058-03 / SDP20-004							1	6/12/2024	1
n/a	38924 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004							1	1/9/2024	1
n/a	38932 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004							1	3/18/2024	1
3206071031	3725 ELIOPULOS RANCH DR	Joshua Ranch							1	5/16/2024	1
3206066007	3912 SADDLE DR	Joshua Ranch							1	5/13/2024	1
3206065010	39222 STALLION DR	Joshua Ranch							1	1/3/2024	1
3206065007	39274 STALLION DR	Joshua Ranch							1	6/3/2024	1
3206073023	3957 ELIOPULOS RANCH DR	Joshua Ranch							1	5/16/2024	1
3206072016	39645 NICHOLAS CT	Joshua Ranch							1	5/16/2024	1
3026072004	39648 CANTER Court	Joshua Ranch							1	12/13/2024	1
3206072015	39651 NICHOLAS CT	Joshua Ranch							1	5/16/2024	1

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Project Identifier				Streamlining	Infill	Housing with Financial Assistance and/or Deed Restrictions		Housing without Financial Assistance or Deed Restrictions	Term of Affordability or Deed Restriction	Demolished/Destroyed Units			Density Bonus			
			13	14	15	16	17	18	19	20			21	22	23	24
Current APN	Street Address	Project Name*	How many of the units were Extremely Low Income?	Please select the state streamlining provision the project was APPROVED pursuant to. (may select multiple)	Infill Units? Y/N*	Assistance Programs for Each Development (may select multiple - see instructions)	Deed Restriction Type (may select multiple - see instructions)	For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions)	Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)*	Number of Demolished/Destroyed Units	Demolished or Destroyed Units	Demolished/ Destroyed Units Owner or Renter	Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area)	Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions)	List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications)	Did the project receive a reduction or waiver of parking standards? (Y/N)
			0							0						
3005-027-024	39763 Country Club Drive	B22-01604	0	NONE	Y											
3021-028-026	38543 Frontier Avenue	B22-01775	0	NONE	Y											
3015004022	38548 11th Street East	B22-01804	0	NONE	Y											
3050-005-009	5910 East Avenue S	B22-02562	0	NONE	N											
3021007002	38751 33rd Street East	B22-02934	0	NONE	Y											
3008-040-012	38225 9th Street East	9th Patriot / MSPR 22-002	0	NONE	N	Other	DB		55				5.0%	1	Other	Yes
3206-064-044	39350 Stallion Drive	Joshua Ranch / TR 52200-2	0	NONE	N											
3206-065-018	39313 Stallion Drive	Joshua Ranch / TR 52200-2	0	NONE	N											
3206-065-019	39321 Stallion Drive	Joshua Ranch / TR 52200-2	0	NONE	N											
3206-065-003	39330 Stallion Drive	Joshua Ranch / TR 52200-2	0	NONE	N											
3206-065-020	39329 Stallion Drive	Joshua Ranch / TR 52200-2	0	NONE	N											
3023-067-031	38136 52nd St East			NONE	Y											
3051-048-028	5219 Alyssa Ln			NONE	Y											
3001-047-012	40327 Nido Ct		0	NONE	Y											
n/a	5220 Lilac Dr	Ravello TTM 73068	0	NONE	N	LIHTC	Other		55							
n/a	5220 Lilac Dr.	Ravello TTM 73068	0	NONE	N	LIHTC	Other		55							
N/A	38840 MALVA ROSA DR	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	2314 Century Plant St	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	38848 Malva Rosa Dr	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	2308 Century Plant St	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	2237 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	38856 MALVA ROSA DR	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	2320 Century Plant St	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	2236 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	2303 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)		NONE	Y											
N/A	2315 CENTURY PLANT ST	Pacific Comm (TTM 54058-03)		NONE	Y											
3012006006	37846 11TH Street	RES23-00083		NONE	Y											
3003-041-047	2003 SANDSTONE Court	RES23-00013		NONE	Y											
N/A	38832 Malva Rosa Dr	Pacific Comm (TTM 54058-03)		NONE	Y											
3015-020-009	1609 E Avenue Q6	B23-01473		NONE	Y											
N/A	5414 YUCCA WY	Ravello TTM 73068		NONE	N	LIHTC	Other		55							
N/A	38173 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38253 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38181 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38181 EUCALYPTUS ST.	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38189 EUCALYPTUS ST	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38173 EUCALYPTUS ST.	Ravello TTM 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
3053047057	37022 LA CONTEMPO AV	Z22-556		NONE	N											
3003-065-017	38873 CALISTOGA ST	Z23-247		NONE	N											
N/A	38264 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38280 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38296 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38272 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38288 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38310 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
n/a	38264 EUCALYPTUS ST C	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
n/a	38272 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
n/a	38280 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
n/a	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
n/a	38296 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
n/a	38310 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38264 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38272 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38280 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38288 EUCALYPTUS ST	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38296 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
N/A	38310 EUCALYPTUS ST.	Ravello / TR 73068 / SDP23-001		NONE	N	LIHTC	Other		55							
3003102040	2402 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102056	2337 Desert Agave Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
N/A	39664 NICHOLAS CT	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39636 NICHOLAS CT	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39642 NICHOLAS CT	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39641 NICHOLAS CT	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39629 NICHOLAS CT	Joshua Ranch / TTM 52200-3		NONE	N											
3001-074-009	40028 Palmetto Dr.	Z23-337		NONE	Y											
3024-031-043	37456 Calle Mazatlan	Z23-065		NONE	Y											
3051-035-050	36824 Royce Ct B	Z23-269		NONE	Y											
3015-020-001	1659 E Ave Q-6			NONE	Y											
3024-030-029	6333 Posada Ct	Z23-109		NONE	Y											
N/A	3704 Ellopulos Ranch Dr.	Joshua Ranch (TTM 52200-03)		NONE	N											
N/A	38215 Vito Lane	Homes4Families	0	NONE	N	Other	DB	Affordability based on current new home sales price being within moderate income range					100.0%	1	Development Standards Modification	Yes
N/A	38211 Vito Lane	Homes4Families	0	NONE	N	Other	DB	Affordability based on current new home sales price being within moderate income range					100.0%	1	Development Standards Modification	Yes
N/A	162 Taintor Rd	Homes4Families	0	NONE	N	Other	DB	Affordability based on current new home sales price being within moderate income range					100.0%	1	Development Standards Modification	Yes
N/A	166 Taintor Rd	Homes4Families	0	NONE	N	Other	DB	Affordability based on current new home sales price being within moderate income range					100.0%	1	Development Standards Modification	Yes
N/A	38214 Vito Rd	Homes4Families	0	NONE	N	Other	DB	Affordability based on current new home sales price being within moderate income range					100.0%	1	Development Standards Modification	Yes
N/A	38210 Vito Lane	Homes4Families	0	NONE	N	Other	DB	Affordability based on current new home sales price being within moderate income range					100.0%	1	Development Standards Modification	Yes
3005-027-028	39730 Eadmer Ave	Z23-131		NONE	Y											
3206071022	39626 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39640 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											
3206072005	39650 Canter Ct	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39658 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39660 Nicholas Ct	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39634 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier				Streamlining	Infill	Housing with Financial Assistance and/or Deed Restrictions		Housing without Financial Assistance or Deed Restrictions	Term of Affordability or Deed Restriction	Demolished/Destroyed Units			Density Bonus			
			13	14	15	16	17	18	19	20			21	22	23	24
Current APN	Street Address	Project Name*	How many of the units were Extremely Low Income?	Please select the state streamlining provision the project was APPROVED pursuant to. (may select multiple)	Infill Units? Y/N*	Assistance Programs for Each Development (may select multiple - see instructions)	Deed Restriction Type (may select multiple - see instructions)	For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions)	Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)*	Number of Demolished/Destroyed Units	Demolished or Destroyed Units	Demolished/ Destroyed Units Owner or Renter	Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area)	Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions)	List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications)	Did the project receive a reduction or waiver of parking standards? (Y/N)
N/A	39641 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39633 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39625 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39648 Rula Dr	Joshua Ranch / TTM 52200-3		NONE	N											
N/A	39655 Canter Ct	Joshua Ranch / TTM 52200-3		NONE	N											
3008038011, -012, -013, -037, -015, -034, -035, -036, -019	N/A	MSPR22-004		NONE	Y											
3008039004, -005, -006	N/A	Dream Village		NONE	N	Other	Other		10							
3052001071, -072	N/A	SPR18-005 Time Extension		NONE	N											
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO		NONE	Y											
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO		NONE	Y											
3005-005-014, -014, -024, -025	Rancho Vista Boulevard and 20th Street West	AERO		NONE	Y											
3024008021, -018	N/A	Pacific Poppy / TR 69651		NONE	Y											
3003104005	1888 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104027	1879 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104006	1880 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104026	1871 VINCENT DRIVE, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104007	1872 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104008	1864 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104024	1855 Vincent Drive, Palmdale, CA 93535	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104025	1863 Vincent Drive, Palmdale, CA 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104009	1856 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104023	1847 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104022	1839 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104011	1840 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104010	1848 VINCENT Drive, PALMDALE 93551	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104028	1887 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003101004	39035 Calmview Circle	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003101003	39043 CALMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104002	39051 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104019	1815 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104018	1807 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003101017	1788 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104016	1796 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104015	1804 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104021	1831 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003101020	1823 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003101014	1816 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003104013	1824 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003101012	1832 VINCENT DR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3003101001	39059 CLAMVIEW CIR	Joshua Landing / TR 60732 / SDP24-0001		NONE	N											
3001084078	4636 STARSTONE Court, PALMDALE 93551	Z24-0027		NONE	Y											
3003087004	2734 BOUQUET Lane, PALMDALE 93551	Z24-0162		NONE	Y											
3008016011	38502 SUMAC Avenue, PALMDALE 93550	Z24-0212		NONE	Y											
3008038023	933 Q-5, PALMDALE 93550	Z24-0252		NONE	Y											
3010031107	153 R-4, PALMDALE 93550	Z24-0438		NONE	Y											
3014002012	38019 11TH Street, Unit B, PALMDALE 93550	Z24-0165		NONE	Y											
3014023022	1855 Q-11, PALMDALE 93550	Z24-0465		NONE	Y											
3015004005	38511 11TH Street, PALMDALE 93550	Z24-0173		NONE	Y											
3015021014	1614 E Q-6 Avenue, PALMDALE 93550	Z23-0594		NONE	Y											
3018023012	38524 28TH Street, PALMDALE 93550	Z24-0524		NONE	Y											
3020007034	3223 E Avenue R 12, PALMDALE, CA	Z24-0416		NONE	Y											
3021023001	38502 E 32ND Street, PALMDALE 93550	Z23-0585		NONE	Y											
3022003043	1028 P-5, PALMDALE 93550	Z24-0004		NONE	Y											
3023015024	37317 SABAL Avenue, PALMDALE 93552	Z24-0183		NONE	Y											
3023028088	4202 E Q-12 Avenue, PALMDALE 93552	Z23-0613		NONE	Y											

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier				Streamlining	Infill	Housing with Financial Assistance and/or Deed Restrictions		Housing without Financial Assistance or Deed Restrictions	Term of Affordability or Deed Restriction	Demolished/Destroyed Units			Density Bonus			
			13	14	15	16	17	18	19	20			21	22	23	24
Current APN	Street Address	Project Name*	How many of the units were Extremely Low Income?	Please select the state streamlining provision the project was APPROVED pursuant to. (may select multiple)	Infill Units? Y/N*	Assistance Programs for Each Development (may select multiple - see instructions)	Deed Restriction Type (may select multiple - see instructions)	For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions)	Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)*	Number of Demolished/Destroyed Units	Demolished or Destroyed Units	Demolished/ Destroyed Units Owner or Renter	Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area)	Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions)	List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications)	Did the project receive a reduction or waiver of parking standards? (Y/N)
3023043002	37955 AMETHYST Street, PALMDALE 93552	Z24-0022		NONE	Y											
3023078026	5033 MARSEILLES Court, PALMDALE 93552	Z24-0540		NONE	Y											
3050004003	5821 PEARBLOSSOM Highway, PALMDALE, CA 93552	Z24-0008		NONE	Y											
3050007001	6015 E T-4 Avenue, PALMDALE 93552	Z23-207		NONE	Y											
3051032024	36903 GOLDENVIEW Way, PALMDALE 93552	Z24-0262		NONE	Y											
3052008046	36824 37th Street, #B, PALMDALE, CA 93551	Z23-0464		NONE	Y											
3206028100	2045 SLAYTON Street, PALMDALE 93551	Z24-0427		NONE	Y											
3023002186	N/A	Maison's Village II / TTM 83359		NONE	N	Other	DB						20.0%	2	On-Site Improvements	No
3023002186	N/A	Maison's Village II / TTM 83359		NONE	N	Other	DB						20.0%	2	On-Site Improvements	No
3023002186	N/A	Maison's Village II / TTM 83359		NONE	N	Other	DB						20.0%	2	On-Site Improvements	No
3001030024	40723 VIA HONRADO, PALMDALE, CA 93551	Z24-0152		NONE	Y											
3001068074	3211 REDBUD Lane, PALMDALE 93551	Z24-0327		NONE	Y											
3003070048	39440 OBSIDIAN Court, PALMDALE 93551	Z24-0057		NONE	Y											
3003087021	2713 TRUDEAU Lane, PALMDALE 93551	Z24-0246		NONE	Y											
3008004006	38714 GLENRAVEN Avenue, PALMDALE 93550	Z24-0049		NONE	Y											
3008009004	38622 LARKIN Avenue, #UNITS, PALMDALE 93550	Z24-0211		NONE	Y											
3009004027	38232 GUNTON Drive, PALMDALE 93550	Z24-0122		NONE	Y											
3010013033	37435 SUMAC Avenue, #B, PALMDALE 93550	Z24-0157		NONE	Y											
3010031085	155 E R-3 Avenue, Unit B, PALMDALE, CA 93550	Z24-0389		NONE	Y											
3012002004	37924 PALM VISTA Avenue, #Unit B, PALMDALE 93550	Z24-0224		NONE	Y											
3012014019	1215 R-4, #UNIT B, PALMDALE 93550	Z24-0607		NONE	Y											
3012017008	37811 MELTON Avenue, PALMDALE 93550	Z23-0603		NONE	Y											
3014028017	38225 12TH Street, #UNITS, PALMDALE 93550	Z24-0048		NONE	Y											
3018006005	38628 21ST Street, #B, PALMDALE 93550	Z24-0225		NONE	Y											
3019046020	2137 ESTRELLA Court, #B, PALMDALE 93550	Z24-0348		NONE	Y											
3019049008	2413 EAST R-6, PALMDALE 93550	Z23-0473		NONE	Y											
3020022055	37619 E 31ST Street, #UNIT B, PALMDALE 93550	Z24-0058		NONE	Y											
3020025092	3555 STERLING Court, #B, PALMDALE 93550	Z24-0131		NONE	Y											
3021019012	38551 35TH Street, PALMDALE 93550	Z24-0306		NONE	Y											
3021035031	38625 SIENNA Court, PALMDALE 93550	Z24-0514		NONE	Y											
3023014014	37334 POPULUS Avenue, #UNIT B, PALMDALE 93552	Z24-0280		NONE	Y											
3023056016	5553 KATRINA Place, PALMDALE 93552	Z24-0464		NONE	Y											
3023075004	5639 R-12, PALMDALE 93552	Z24-0234		NONE	Y											
3023083052	5309 SAINT LAURENT Place, PALMDALE 93552	Z24-0018		NONE	Y											
3023086063	37306 FESTIVAL Court, #UNIT B, PALMDALE 93552	Z24-0127		NONE	Y											
3051029019	36926 HAMPTON Court, PALMDALE 93552	Z24-0350		NONE	Y											
3051039081	36921 ROYCE Court, #UNIT B, PALMDALE 93552	Z24-0102		NONE	Y											
3052040037	37068 KEITH Court, PALMDALE 93550	Z23-0600		NONE	Y											
3052043025	3767 NOLL Drive, PALMDALE 93550	Z24-0019		NONE	Y											
3052055020	3333 FAIRFIELD Avenue, #Unit B, PALMDALE 93550	Z24-0223		NONE	Y											
3052057054	36852 JUSTIN Court, Unit B, PALMDALE 93550	Z24-0507		NONE	Y											
3204054013	41829 PICO Way, PALMDALE 93551	Z24-0087		NONE	Y											
3024037015	38117 CIMA MESA Drive	Z23-0457		NONE	Y											
3014002040	38114 10TH Street	Z23-0592		NONE	Y											
3050004014	N/A	Z23-228		NONE	Y											
3050004014	n/a	Z23-228		NONE	Y											
3004028005	338 MESA VERDE Avenue	Z24-0017		NONE	Y											
3052072009	36624 45TH Street	Z24-0047		NONE	Y											
3015012020	1320 East Ave Q-2 Unit C	Z24-0067		NONE	Y											
3015012020	1320 East Ave Q-2 Unit D	Z24-0067		NONE	Y											
3015012020	1320 E AVE Q-2, Unit A, B	Z24-0067		NONE	Y											

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier				Streamlining	Infill	Housing with Financial Assistance and/or Deed Restrictions		Housing without Financial Assistance or Deed Restrictions	Term of Affordability or Deed Restriction	Demolished/Destroyed Units			Density Bonus			
			13	14	15	16	17	18	19	20			21	22	23	24
Current APN	Street Address	Project Name*	How many of the units were Extremely Low Income?	Please select the state streamlining provision the project was APPROVED pursuant to. (may select multiple)	Infill Units? Y/N*	Assistance Programs for Each Development (may select multiple - see instructions)	Deed Restriction Type (may select multiple - see instructions)	For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions)	Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)*	Number of Demolished/Destroyed Units	Demolished or Destroyed Units	Demolished/ Destroyed Units Owner or Renter	Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area)	Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions)	List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications)	Did the project receive a reduction or waiver of parking standards? (Y/N)
3206065006	39310 STALLION Drive	Z24-0095		NONE	Y											
3008017019	38564 3RD Street	Z24-0103		NONE	Y											
3008017019	38564 3RD Street	Z24-0103		NONE	Y											
3052005033	42nd St E / Ave S-12	Z24-0126		NONE	Y											
3052053003	36535 SILVERSPUR LANE	Z24-0143		NONE	Y											
3012002005	37918 Palm Vista Ave	Z24-0169		NONE	Y											
3012002005	37918 Palm Vista Ave	Z24-0169		NONE	Y											
3009008023	526 EAST Q-9	Z24-0175		NONE	Y											
3015002034	1005 Q-5, #UNITS	Z24-0245		NONE	Y											
3020020027	3410 SAN GABRIEL Court	Z24-0257		NONE	Y											
3014012016	1512 EAST Q-11	Z24-0288		NONE	Y											
3023037004	5025 CLIFF ROSE Drive	Z24-0314		NONE	Y											
3023037004	5025 CLIFF ROSE Drive	Z24-0314		NONE	Y											
3003027043	38955 DIANRON Road	Z24-0384		NONE	Y											
3023085017	4760 MINSTREL Drive	Z24-0386		NONE	Y											
3006017024	215 EAST P-5	Z24-0410		NONE	Y											
3023054074	38144 RIVIERA Court	Z24-0425		NONE	Y											
3020017042	3049 R-6	Z24-0428		NONE	Y											
3008006025	38708 3RD Street	Z24-0446		NONE	Y											
3019040010	2242 EAST R-12	Z24-0461		NONE	Y											
3020010069	35th St E / Ave S	Z24-0471		NONE	Y											
3003045037	1108 WITHERILL Place	Z24-0542		NONE	Y											
3001144006	40824 LAS PIEDRAS Terrace	Z24-0584		NONE	Y											
3008015014	38463 LARKIN Avenue, #UNITS	Z24-0598		NONE	Y											
3005033044	39736 GOLFERS Drive	Z24-0600		NONE	Y											
3020022012	3101 HEATHER Avenue	Z24-0654		NONE	Y											
3024020058	37637 SIMI Street	Z24-0675		NONE	Y											
3101036074	5900 ALLEPPO Lane	Z24-0696		NONE	Y											
3014008034	1241 R, #UNITS	Z24-0700		NONE	Y											
3014008034	1241 R, #UNITS	Z24-0700		NONE	Y											
320402048	41863 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
3204025048	41851 BONITA DRIVE	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	6907 SOLERA DRIVE	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	6833 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	6821 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	6809 SOLERA Drive	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41846 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41849 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41834 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41825 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41837 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41822 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41810 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	41813 CASTELLO Lane	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
n/a	N/A	The Reserve / TR 81337 / SDP24-0002		NONE	Y											
3003102019	2412 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102006	38867 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102035	2333 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102007	38859 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102020	2404 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102022	2332 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102034	2327 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102036	2339 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102021	2338 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102008	38851 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102009	38843 CANDLENUT Drive	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102038	2411 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102023	2326 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102037	2403 CENTURY PLANT Street	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003101018	2113 CORK OAK Street	Pacific Montera / TR 54058-04 / SDP20-004		NONE	Y											
3206076080	39419 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076081	39411 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076082	39403 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076001	4032 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076002	4040 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076003	4048 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076004	4056 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076005	4064 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076014	4013 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076015	4019 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076016	4025 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier				Streamlining	Infill	Housing with Financial Assistance and/or Deed Restrictions		Housing without Financial Assistance or Deed Restrictions	Term of Affordability or Deed Restriction	Demolished/Destroyed Units			Density Bonus			
			13	14	15	16	17	18	19	20			21	22	23	24
Current APN	Street Address	Project Name*	How many of the units were Extremely Low Income?	Please select the state streamlining provision the project was APPROVED pursuant to. (may select multiple)	Infill Units? Y/N*	Assistance Programs for Each Development (may select multiple - see instructions)	Deed Restriction Type (may select multiple - see instructions)	For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions)	Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)*	Number of Demolished/Destroyed Units	Demolished or Destroyed Units	Demolished/ Destroyed Units Owner or Renter	Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area)	Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions)	List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications)	Did the project receive a reduction or waiver of parking standards? (Y/N)
3206076017	4033 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076018	4041 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076019	4049 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3206076020	4057 SADDLE Drive	Joshua Ranch / TR 52200-4 / SDP23-0001		NONE	Y											
3003053048	39355 FOSTORIA Court, PALMDALE 93551	Z23-0574		NONE	Y											
3003069076	39312 DUNBAR ST, PALMDALE, CA 93551	Z23-107		NONE	Y											
3004027008	38212 SAN MATEO Avenue, PALMDALE 93551	Z22-101		NONE	Y											
3004036041	1371 LEOPARD CT, PALMDALE, CA 93551	Z23-041		NONE	Y											
3008013029	509 E AVENUE Q 5, #B, PALMDALE, CA 93550	Z23-077		NONE	Y											
3012019010	37910 MELTON AV, PALMDALE, CA 93550	Z23-038		NONE	Y											
3012019011	37902 PRENTISS Avenue, #Unit B, PALMDALE 93550	Z23-0452		NONE	Y											
3012028054	37947 ROSEMARIE Street, PALMDALE 93550	Z23-0596		NONE	Y											
3012033026	37618 LASKER AV, PALMDALE, CA 93550	Z23-299		NONE	Y											
3015010038	1204 E AVENUE Q 4, #B, PALMDALE, CA 93550	Z23-080		NONE	Y											
3018021009	38635 27TH ST EAST, #UNIT B, PALMDALE, CA 93550	Z23-0384		NONE	Y											
3019010036	2904 R-10, #B, PALMDALE 93550	Z23-0460		NONE	Y											
3020010075	3409 E AVENUE S, PALMDALE, CA	Z22-416		NONE	Y											
3020018053	3653 E R-12 Avenue, PALMDALE 93550	Z23-0547		NONE	Y											
3020025103	3537 CRYSTAL Court, #B, PALMDALE 93550	Z23-0617		NONE	Y											
3020033008	37334 E 37TH Street, PALMDALE 93550	Z23-0539		NONE	Y											
3021007031	38702 POND Avenue, PALMDALE 93550	Z19-432		NONE	Y											
3023012034	37203 52ND Street, Unit B, PALMDALE 93552	Z23-051		NONE	Y											
3023019021	4702 E R-12 Avenue, PALMDALE 93552	Z23-0363		NONE	Y											
3024049001	37913 DE DIEGO, PALMDALE 93552	Z23-0526		NONE	Y											
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320		NONE	Y											
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320		NONE	Y											
3052002025	4680 EAST AVENUE S 8, PALMDALE, CA	Z23-320		NONE	Y											
3052006029	36733 42ND ST EAST, PALMDALE, CA	Z23-220		NONE	Y											
3052021009	3828 E AVENUE T 4, PALMDALE, CA	Z23-304		NONE	Y											
3052041008	3019 E AVENUE S 1, PALMDALE, CA 93550	Z22-450		NONE	Y											
3053043019	37132 KENDRICK Circle, PALMDALE 93550	Z23-108		NONE	Y											
3053045444	37032 COOPER Terrace, #UNIT B, PALMDALE 93550	Z24-0401		NONE	Y											
3206059001	2620 CHICORY Lane, #B, PALMDALE 93551	Z23-0355		NONE	Y											
3010030023	150 E AVENUE R, PALMDALE, CA	Juniper Grove / SPR19-004		NONE	N	CDBG	Other, DB						20.0%	3	On-Site Improvements	No
3018027036	2650 E AVENUE Q 12, PALMDALE, CA 93550	Palmdale Terrace / SPR21-002		NONE	Y	LIHTC	DB						20.0%	3	On-Site Improvements	No
3023083014	5344 MONACO Lane, Unit B, PALMDALE 93552	Z23-0527		NONE	Y											
3052047020	35837 43RD ST EAST, PALMDALE, CA 93552	Z22-077		NONE	Y											
3021008007	3339 E AVENUE Q 1, #UNIT B, PALMDALE, CA 93550	Z21-013		NONE	Y											
3014020015	38351 ROSE MARIE, #B, PALMDALE, CA 93550	Z21-356		NONE	Y											
3101037017	41456 MYRTLE ST, PALMDALE, CA 93551	Z21-496		NONE	Y											
3021034002	38639 37TH ST EAST, PALMDALE, CA 93550	Z21-656		NONE	Y											
3003102030	2203 CENTURY PLANT	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102042	2330 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102055	2331 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102058	2409 DESERT AGAVE ST	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
n/a	38902 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3003102005	38905 CANDLENUT DR	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
n/a	38924 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
n/a	38932 MALVA ROSA DR	Pacific Montera / TR 54058-03 / SDP20-004		NONE	Y											
3206071031	3725 ELIOPULOS RANCH DR	Joshua Ranch		NONE	N											
3206066007	3912 SADDLE DR	Joshua Ranch		NONE	N											

Table A2

Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units

Project Identifier				Streamlining	Infill	Housing with Financial Assistance and/or Deed Restrictions		Housing without Financial Assistance or Deed Restrictions	Term of Affordability or Deed Restriction	Demolished/Destroyed Units			Density Bonus			
			13	14	15	16	17	18	19	20			21	22	23	24
Current APN	Street Address	Project Name*	How many of the units were Extremely Low Income?	Please select the state streamlining provision the project was APPROVED pursuant to. (may select multiple)	Infill Units? Y/N*	Assistance Programs for Each Development (may select multiple - see instructions)	Deed Restriction Type (may select multiple - see instructions)	For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions)	Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)*	Number of Demolished/Destroyed Units	Demolished or Destroyed Units	Demolished/ Destroyed Units Owner or Renter	Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area)	Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions)	List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications)	Did the project receive a reduction or waiver of parking standards? (Y/N)
3206065010	39222 STALLION DR	Joshua Ranch		NONE	N											
3206065007	39274 STALLION DR	Joshua Ranch		NONE	N											
3206073023	3957 ELIOPULOS RANCH DR	Joshua Ranch		NONE	N											
3206072016	39645 NICHOLAS CT	Joshua Ranch		NONE	N											
3026072004	39648 CANTER Court	Joshua Ranch		NONE	N											
3206072015	39651 NICHOLAS CT	Joshua Ranch		NONE	N											
n/a	39655 CANTER CT	Joshua Ranch		NONE	N											
3206073024	3969 ELIOPULOS RANCH DR	Joshua Ranch		NONE	N											
3206073025	3981 ELIOPULOS RANCH DR	Joshua Ranch		NONE	N											
3206071038	3992 ELIOPULOS RANCH DR	Joshua Ranch		NONE	N											
3206073026	3993 ELIOPULOS RANCH DR	Joshua Ranch		NONE	N											

Jurisdiction	Palmdale	
Reporting Year	2024	(Jan. 1 - Dec. 31)
Planning Period	6th Cycle	10/15/2021 - 10/15/2029

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This table is auto-populated once you enter your jurisdiction name and current year data. Past year information comes from previous APRs.

Please contact HCD if your data is different than the material supplied here

Table B
Regional Housing Needs Allocation Progress
Permitted Units Issued by Affordability

Income Level		1 RHNA Allocation by Income Level	Projection Period Projection Period - 06/30/2021-10/14/2021	2 2021	2022	2023	2024	2025	2026	2027	2028	2029	3 Total Units to Date (all years)	4 Total Remaining RHNA by Income Level
Very Low	Deed Restricted	1,777	-	-	-	7	2	-	-	-	-	-	9	**1,768**
	Non-Deed Restricted		-	-	-	-	-	-	-	-	-	-		
Low	Deed Restricted	935	-	-	91	205	-	-	-	-	-	-	296	**639**
	Non-Deed Restricted		-	-	-	-	-	-	-	-	-	-		
Moderate	Deed Restricted	1,004	-	-	-	-	-	-	-	-	-	-	89	**915**
	Non-Deed Restricted		48	41	-	-	-	-	-	-	-	-		
Above Moderate		2,924	-	-	116	100	149	-	-	-	-	-	365	**2,559**
Total RHNA		**6,640**												
Total Units			**48**	**41**	**207**	**312**	**151**	**-**	**-**	**-**	**-**	**-**	**759**	**5,881**

Progress toward extremely low-income housing need, as determined pursuant to Government Code 65583(a)(1).

	5 Extremely low-Income Need		2021	2022	2023	2024	2025	2026	2027	2028	2029	6 Total Units to Date	7 Total Units Remaining
Extremely Low-Income Units*	889		-	-	5	-	-	-	-	-	-	**5**	**884**

*Extremely low-income housing need determined pursuant to Government Code 65583(a)(1). Value in Section 5 is default value, assumed to be half of the very low-income RHNA. May be overwritten.

Please Note: Table B does not currently contain data from Table F or Table F2 for prior years. You may login to the APR system to see Table B that contains this data.

Note: units serving extremely low-income households are included in the very low-income RHNA progress and must be reported as very low-income units in section 7 of Table A2. They must also be reported in the extremely low-income category (section 13) in Table A2 to be counted as progress toward meeting the extremely low-income housing need determined pursuant to Government Code 65583(a)(1).

Please note: For the last year of the 5th cycle, Table B will only include units that were permitted during the portion of the year that was in the 5th cycle. For the first year of the 6th cycle, Table B will only include units that were permitted since the start of the planning period. Projection Period units are in a separate column.

Please note: The APR form can only display data for one planning period. To view progress for a different planning period, you may login to HCD's online APR system, or contact HCD staff at apr@hcd.ca.gov.

VLI Deed Restricted
VLI Non Deed Restricted

Jurisdiction	Palmdale	
Reporting Year	2024	(Jan. 1 - Dec. 31)
Planning Period	6th Cycle	10/15/2021 - 10/15/2029

ANNUAL ELEMENT PROGRESS REPORT

Housing Element Implementation

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

Table C

Sites Identified or Rezoned to Accommodate Shortfall Housing Need and No Net-Loss Law

Project Identifier				Date of Rezone	RHNA Shortfall by Household Income Category				Rezone Type	Sites Description							
1				2	3				4	5	6	7	8		9	10	11
APN	Street Address	Project Name+	Local Jurisdiction Tracking ID+	Date of Rezone	Very Low-Income	Low-Income	Moderate-Income	Above Moderate-Income	Rezone Type	Parcel Size (Acres)	General Plan Designation	Zoning	Minimum Density Allowed	Maximum Density Allowed	Realistic Capacity	Vacant/Nonvacant	Description of Existing Uses
Summary Row: Start Data Entry Below																	

Table D			
Program Implementation Status pursuant to GC Section 65583			
Housing Programs Progress Report Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.			
1	**2**	**3**	**4**
Name of Program	**Objective**	**Timeframe in H.E**	**Status of Program Implementation**
Adequate Sites for RHNA and Monitoring of No Net Loss	**Adopt the Preferred Land Use Plan as part of the General Plan update that provides increased residential development capacity by Spring 2022, ensuring that the updated General Plan offer adequate capacity for the City's remaining RHNA of 3,660 units (1,758 very low income, 899 low income, and 1,003 moderate income units). Specifically, the Residential Neighborhood 3 proposed for meeting the City's remaining lower and moderate income RHNA will meet the following conditions: o Allows residential development up to 30 units per acre with a minimum density of 20 units per acre; o Each site can accommodate at least 16 units (a site can comprise of multiple parcels); and, o Allows multi-family ownership and rental housing by right if 20 percent of the units are set aside as housing affordable to lower income households (see Program 2 below). • Develop a procedure in 2022 to monitor the development of sites in the sites inventory and ensure adequate sites are available to meet the remaining RHNA by income category.**	**2021-2029**	**The General Plan was adopted in September of 2022 and the Development Code Update was adopted in March of 2023. On-going program.**

Table D			
Program Implementation Status pursuant to GC Section 65583			
Housing Programs Progress Report Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.			
1	**2**	**3**	**4**
Name of Program	**Objective**	**Timeframe in H.E**	**Status of Program Implementation**
By Right Approval of Projects with 20 Percent Affordable Units	**• Amend the Development Code to provide by-right approval pursuant to AB 1397 by Summer of 2022. • Utilize the Multi-Family Residential Guidelines to process by-right applications to implement the General Plan Update and the Development Code Update.**	**2021-2029**	**The Multi-Family and Mixed-Use Design Guidleines were adopted August 2022 and the Development Code Update was adopted in March of 2023**
Accessory Dwelling Units (ADU's)	**Develop incentives and tools to facilitate ADU construction by the end of 2022. Incentives and tools may include pre-approved plans, expedited reviews, and referral to available resources. • Promote ADU construction by providing resources on the City's website and at public counters. • Monitor the ADU construction trend annually and adjust incentives and tools as necessary.**	**2021-2029**	**In 2023 the City of Palmdale began offering Standard Accessory Dwelling Units (ADU) Plans to provide residents with a simplified permitting process for the design and construction of ADUs. Plans provided by the City for Accessory Dwelling Units (ADUs) are conceptual renderings approved and offered to applicants for review and use. We also have approved construction plans available for use where residents are referred directy to the architect for use. These plans are available on the City's website. https://www.cityofpalmdaleca.gov/1351/Standard-ADU-Plans. The City also offers a resource brochure covering this program at our public counters.**
Small Lot Consolidation Program	**City to play an active role in facilitaing lot consolidations and offer identified incentives.**	**2021-2029**	**On-going program.**
Large Site Development Program	**City to play an active role in facilitating land divisions and lot line adjustments to assist housing development for lower income households.**	**2021-2029**	**On-going program.**

Table D			
Program Implementation Status pursuant to GC Section 65583			
Housing Programs Progress Report Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.			
1	**2**	**3**	**4**
Name of Program	**Objective**	**Timeframe in H.E**	**Status of Program Implementation**
Affordable Housing Land Bank	**Acquire and assemble parcels for new construction of affordable single and multi-family units using Housing Asset Funds as other funds.**	**2021-2029**	**On-going program. No new parcels acquired in 2024.**
Affordable Housing Development	**Provide funding in he form of land and/or low-interest, deferred interest or residual receipt loans to nonprofit affordable housing organizations to construct new affordable units.**	**2021-2029**	**Ongoing program. No new actions were taken in 2024.**
Zoning Amendments	**Amend the Development Code to address the requirements outlined in this program by the end of 2022.**	**2021-2029**	**The Development Code was updated and adopted in March 2024.**
Homeownership Assistance Programs	**Provide assistance to qualified first-time homebuyers**	**2021-2029**	**On-going program. In 2024 six (6) first-time homebuyers approved for assistance.**
Housing Rehabilitation Assistance	**Assistance to rental properties and owners of single family residences and multi-family rental units.**	**2021-2029**	**On-going program. No new actions taken in 2024.**
Rental Housing Inspection Program	**Building and Safety inspection of all residential rental properties on a regular schedule**	**2021-2029**	**On-going program**
Vacant and Abandoned Property Registration Program	**Abandoned and vacant property registration program to protect neighborhoods and commercial areas from becoming blighted**	**2021-2029**	**On-going program. In 2024 41 vacant properties were registered and inspected. (Code Enforcement)**
Mobile Home Space Rent Control	**Regulates increases in month to month rent costs for mobile home park spaces to ensure affordability**	**2021-2029**	**On-going program**
Conversion of At-Risk Units	**Steps to be taken to ensure 126 at-risk units in 3 projects are not lost through conversion to market rate units**	**2021-2029**	**On-going program. No new actions taken in 2024.**

Table D			
Program Implementation Status pursuant to GC Section 65583			
Housing Programs Progress Report Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.			
1	**2**	**3**	**4**
Name of Program	**Objective**	**Timeframe in H.E**	**Status of Program Implementation**
Senior Housing	**Develop househing options suitable for seniors with different needs**	**2021-2029**	**On-going program. No new actions taken in 2024.**
Housing for the Developmentally Disabled	**Work with North Los Angeles Regional Center to implement outreach program**	**2021-2029**	**On-going program**
South Antelope Valley Emergency Services (SAVES)	**Provide administrative funding to SAVES which provides services, referarals, motel vouchers, emergency food and clothing to homeless and very low-income individuals and families**	**2021-2029**	**Funding for program is on-going**
Place Based Neighborhood Improvement Program	**Improve the quality of selected low and moderate income single family neighborhoods by enforcing compliance with building, safety, health, fire, and other applicable regulations**	**2021-2029**	**On-going program**
Partners Against Crime	**Coordinates activities of Code Enforcement, Housing, Public Safety, and Building and Safety to proactively address issues such as crime, maintenance and encourage effetive property management in the City's multi-family housing**	**2021-2029**	**On-going program. One (1) Partners Against Crime workshops, nine (9) Partners Against Crime Neighborhood Watch meetings, and five (5) District Neighborhood Watch events with approximately 525 attendees were held in 2024.**
Fair Housing Services	**City contracts with Housing Rights Center or other provider to provide monthly housing clinic, intake and investigation of housing discrimination complaints and referrals, provide information**	**2021-2029**	**On-going program. In 2024, 270 households were assisted. Virtual clinics and assistance by phone were held monthly to provide assistance to residents.**

Jurisdiction	Palmdale	
Reporting Period	2024	(Jan. 1 - Dec. 31)
Planning	6th Cycle	10/15/2021 - 10/15/2029

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(CCR Title 25 §6202)

Note: "+" indicates an optional field
Cells in grey contain auto-calculation formulas

Table E

Commercial Development Bonus Approved pursuant to GC Section 65915.7

Project Identifier				Units Constructed as Part of Agreement				Description of Commercial Development Bonus	Commercial Development Bonus Date Approved
1				2				3	4
APN	**Street Address**	**Project Name+**	**Local Jurisdiction Tracking ID+**	**Very Low Income**	**Low Income**	**Moderate Income**	**Above Moderate Income**	**Description of Commercial Development Bonus**	**Commercial Development Bonus Date Approved**
Summary Row: Start Data Entry Below									

Jurisdiction	Palmdale	
Reporting Period	2024	31)
Planning Period	6th Cycle	10/15/2021 - 10/15/2029

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Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

Table F
Units Rehabilitated, Preserved and Acquired for Alternative Adequate Sites pursuant to Government Code section 65583.1(c)

Please note this table is optional: The jurisdiction can use this table to report units that have been substantially rehabilitated, converted from non-affordable to affordable by acquisition, and preserved, including mobilehome park preservation, consistent with the standards set forth in Government Code section 65583.1, subdivision (c). Please note, motel, hotel, hostel rooms or other structures that are converted from non-residential to residential units pursuant to Government Code section 65583.1(c)(1)(D) are considered net-new housing units and must be reported in Table A2 and not reported in Table F.

Activity Type	Units that Do Not Count Towards RHNA+ Listed for Informational Purposes Only				Units that Count Towards RHNA + Note - Because the statutory requirements severely limit what can be counted, please contact HCD at apr@hcd.ca.gov and we will unlock the form which enable you to populate these fields.				The description should adequately document how each unit complies with subsection (c) of Government Code Section 65583.1+. For detailed reporting requirements, see the chcklist here:
	Extremely Low-Income+	Very Low-Income+	Low-Income+	TOTAL UNITS+	Extremely Low-Income+	Very Low-Income+	Low-Income+	TOTAL UNITS+	https://www.hcd.ca.gov/community-development/docs/adequate-sites-checklist.pdf
Rehabilitation Activity									
Preservation of Units At-Risk									
Acquisition of Units									
Mobilehome Park Preservation									
Total Units by Income									

Jurisdiction	Palmdale	
Reporting Period	2024	(Jan. 1 - Dec. 31)
Planning Period	6th Cycle	10/15/2021 - 10/15/2029

ANNUAL ELEMENT PROGRESS REPORT

Housing Element Implementation

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

Table F2

Above Moderate Income Units Converted to Moderate Income Pursuant to Government Code section 65400.2

For up to 25 percent of a jurisdiction's moderate-income regional housing need allocation, the planning agency may include the number of units in an existing multifamily building that were converted to deed-restricted rental housing for moderate-income households by the imposition of affordability covenants and restrictions for the unit. Before adding information to this table, please ensure housing developments meet the requirements described in Government Code 65400.2(b).

Project Identifier					Unit Types		Affordability by Household Incomes After Conversion							Units credited toward Moderate Income RHNA		Notes
1					2	3	4							5		6
Prior APN+	**Current APN**	**Street Address**	**Project Name+**	**Local Jurisdiction Tracking ID**	**Unit Category** (2 to 4,5+)	**Tenure** R=Renter	**Very Low-Income Deed Restricted**	**Very Low-Income Non Deed Restricted**	**Low- Income Deed Restricted**	**Low- Income Non Deed Restricted**	**Moderate-Income Deed Restricted**	**Moderate-Income Non Deed Restricted**	**Above Moderate-Income**	**Total Moderate Income Units Converted from Above Moderate**	**Date Converted**	**Notes**
Summary Row: Start Data Entry Below							0	0	0	0	0	0	0	0		

Jurisdiction	Palmdale	
Reporting Period	2024	(Jan. 1 - Dec. 31)
Period	6th Cycle	10/15/2021 - 10/15/2029

NOTE: This table must only be filled out if the housing element sites inventory contains a site which is or was owned by the reporting jurisdiction, and has been sold, leased, or otherwise disposed of during the reporting

ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

Table G

Locally Owned Lands Included in the Housing Element Sites Inventory that have been sold, leased, or otherwise disposed of

Project Identifier						
1				**2**	**3**	**4**
APN	**Street Address**	**Project Name+**	**Local Jurisdiction Tracking ID+**	**Realistic Capacity Identified in the Housing Element**	**Entity to whom the site transferred**	**Intended Use for Site**
Summary Row: Start Data Entry Below						

Jurisdiction	Palmdale	
Reporting Period	2024	(Jan. 1 - Dec. 31)

NOTE: This table must contain an invenory of ALL surplus/excess lands the reporting jurisdiction owns

Note: "+" indicates an optional field
Cells in grey contain auto-calculation formulas

ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation

For Los Angeles County jurisdictions, please format the APN's as follows:9999-999-999

Table H
Locally Owned Surplus Sites

Parcel Identifier				Designation	Size	Notes
1	2	3	4	5	6	7
APN	**Street Address/Intersection**	**Existing Use**	**Number of Units**	**Surplus Designation**	**Parcel Size (in acres)**	**Notes**
Summary Row: Start Data Entry Below						
3008+041-002	AVE Q / Division	Vacant		Surplus Land	3.2	
3008-041-001	AVE Q / Division	Vacant		Surplus Land	0.4	
3008-041-003	AVE Q / Division	Vacant		Surplus Land	4.61	
3008-041-004	AVE Q-3 / Division	Vacant		Surplus Land	41.77	
3008-041-005	AVE Q-3 / Division	Vacant		Surplus Land	2.26	
3008-041-010	AVE Q-7 / Division	Vacant		Surplus Land	3.33	
3008-041-008	Palmdale Blvd / Division	Vacant		Surplus Land	0.67	
3008-041-009	Palmdale Blvd / Division	Vacant		Surplus Land	0.47	
3008-041-007	Palmdale Blvd / Division	Vacant		Surplus Land	0.57	
3128-015-903	AVE M /10th St W	Vacant		Surplus Land	8.39	

Jurisdiction	Palmdale	
Reporting Period	2024	(Jan. 1 - Dec. 31)
Planning Period	6th Cycle	10/15/2021 - 10/15/2029

NOTE: STUDENT HOUSING WITH DENSITY BONUS ONLY. This table only needs to be completed if there were student housing projects WITH a density bonus approved pursuant to Government Code65915(b)(1)(F)

ANNUAL ELEMENT PROGRESS REPORT

Housing Element Implementation

Note:

Cells in gre

Table J

Student housing development for lower income students for which was granted a density bonus pursuant to subparagraph (F) of paragraph (1) of subdivision (b) of Se

Project Identifier				Project Type	Date	Units (Beds/Student Capacity) Approved						
1				2	3	4						
APN	**Street Address**	**Project Name+**	**Local Jurisdiction Tracking ID+**	**Unit Category** (SH - Student Housing)	**Date**	**Very Low-Income Deed Restricted**	**Very Low-Income Non Deed Restricted**	**Low- Income Deed Restricted**	**Low- Income Non Deed Restricted**	**Moderate-Income Deed Restricted**	**Moderate-Income Non Deed Restricted**	**Above Moderate-Income**
Summary Row: Start Data Entry Below												

Jurisdiction	Palmdale	
Reporting Period	2024	(Jan. 1 - Dec. 31)
Planning Period	6th Cycle	10/15/2021 - 10/15/2029

ANNUAL ELEMENT PROGRESS REPORT

Table K
Tenant Preference Policy

Local governments are required to inform HCD about any local tenant preference ordinance the local government maintains when the jurisdiction submits their annual progress report on housing approvals and production, per Government Code 7061 (SB 649, 2022, Cortese). Effective January 1, 2023, local governments adopting a tenant preference are required to create a webpage on their internet website containing authorizing local ordinance and supporting materials, no more than 90 days after the ordinance becomes operational.

Does the Jurisdiction have a local tenant preference policy?	No
If the jurisdiction has a local tenant preference policy, provide a link to the jurisdiction's webpage containing authorizing local ordinance and supporting materials.	
Notes	

Jurisdiction	Palmdale	
Reporting Year	2024	(Jan. 1 - Dec. 31)

ANNUAL ELEMENT PROGRESS REPORT
Local Early Action Planning (LEAP) Reporting
(CCR Title 25 §6202)

Please update the status of the proposed uses listed in the entity's application for funding and the corresponding impact on housing within the region or jurisdiction, as applicable, categorized based on the eligible uses specified in Section 50515.02 or 50515.03, as applicable.

Total Award Amount	$ 500,000.00	*Total award amount is auto-populated based on amounts entered in rows 15-26.*

Task	$ Amount Awarded	$ Cumulative Reimbursement Requested	Task Status	Other Funding	Notes
Draft Ordinance Update	$450,000.00	$34,542.75	Completed	Local General Fund	Closed out grant in October 2024
Public Outreach	$50,000.00	$13,659.81	Completed	Local General Fund	Closed out grant in October 2024

Summary of entitlements, building permits, and certificates of occupancy (auto-populated from Table A2)

Completed Entitlement Issued by Affordability Summary		
Income Level		**Current Year**
Very Low	Deed Restricted	20
	Non-Deed Restricted	0
Low	Deed Restricted	191
	Non-Deed Restricted	0
Moderate	Deed Restricted	0
	Non-Deed Restricted	0
Above Moderate		835
Total Units		**1046**

Building Permits Issued by Affordability Summary		
Income Level		**Current Year**
Very Low	Deed Restricted	2
	Non-Deed Restricted	0
Low	Deed Restricted	0
	Non-Deed Restricted	0
Moderate	Deed Restricted	0
	Non-Deed Restricted	0
Above Moderate		149
Total Units		**151**

Certificate of Occupancy Issued by Affordability Summary		
Income Level		**Current Year**
Very Low	Deed Restricted	4
	Non-Deed Restricted	0
Low	Deed Restricted	281
	Non-Deed Restricted	0
Moderate	Deed Restricted	0
	Non-Deed Restricted	0
Above Moderate		83
Total Units		**368**

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT PLANNING DIVISION**

DISTRICT **ALL**

SUBJECT: **ADOPT RESOLUTION NO. CC 2025-019, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE, APPROVING A MODIFICATION OF THE PLANNING COMMISSION MEETING TIME FROM 7:00 PM TO 5:00 PM BEGINNING AT THE APRIL 10, 2025**

RECOMMENDATION

Staff recommend that the City Council:

Adopt Resolution No. CC 2025-019, approving a modification of the Planning Commission meeting time from 7:00 pm to 5:00 pm beginning at the April 10, 2025, meeting.

BACKGROUND

Palmdale Municipal Code (PMC) Section 2.46.070 states that "meetings of the Planning Commission shall be held on such days and at such time and location as may be established by the Commission for the conduct of its business and ratified by the City Council." On June 3, 2009, the City Council adopted Resolution No. CC 2009-093 to modify the Planning Commission meetings from two meetings per month on the second and fourth Thursday to one meeting per month, held on the second Thursday of the month. The Planning Commission of the City of Palmdale currently convenes on the second Thursday of each month at 7:00 pm in the Council Chamber of the City of Palmdale located at 38300 North Sierra Highway, Suite B.

On February 13, 2025, the Planning Commission adopted Resolution No. PC-2025-004 recommending City Council approval to modify the Planning Commission meeting time from 7:00 pm to 5:00 pm (see attached Resolution).

DISCUSSION

Planning Commission meetings are a platform to conduct the City's corporate business affairs with various businesses and the development community. To be consistent with the City Council meeting time, staff recommends modifying the Planning Commission meeting time from 7:00 pm to 5:00 pm.

Modifying the time allows the Planning Commission to conduct City business during hours that align with the corporate, development, legislative, and business community. This will allow the Commission, staff, businesses, and community to conduct business during standard working hours instead of late into the evening, which can negatively affect health and wellbeing and lead to decisions being compromised due to fatigue.

FISCAL IMPACT

$0; There is no fiscal impact associated with this action.

STRATEGIC PLAN

Goal II: Ensure long-term fiscal health of the City and maintain funding for services.

A. Involve and expand engagement to enhance public oversight and transparency.

Prepared by:	Megan Taggart, Interim Director of Economic and Community Development
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Reso. No. CC 2025-019
Reso. No. PC-2025-004
Reso. No. CC 2009-093

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2025-019

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE, CALIFORNIA, APPROVING THE MODIFICATION OF THE PLANNING COMMISSION MEETING TIME FROM 7:00 P.M. TO 5:00 P.M. BEGINNING AT THE APRIL 10, 2025, MEETING

WHEREAS, Palmdale Municipal Code Section 2.46.070 states that "meetings of the Planning Commission shall be held on such days and at such time and location as may be established by the Commission for conduct of its business and ratified by the City Council."

WHEREAS*,* on June 3, 2009, the City Council adopted Resolution No. CC 2009-093 to modify the dates of the Planning Commission meetings from two meetings per month on the second and fourth Thursday to one meeting per month, held on the second Thursday of the month.

WHEREAS*,* the proposal is a request for the City Council approval of setting the meeting time of the Commission at 5:00 P.M. beginning at the April 10, 2025, meeting.

WHEREAS, the proposal does not include changes to the meeting date and location, which will remain on the second Thursday of the month in the Council Chamber of the City of Palmdale, located at 38300 Sierra Highway, Suite B.

WHEREAS, the Planning Commission adopted Resolution No. PC-2025-004 recommending that the City Council approve the modification of the Planning Commission meeting time from 7:00 p.m. to 5:00 p.m. beginning in April 2025.

WHEREAS, All legal prerequisites to the adoption of this Resolution have occurred.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

SECTION 1. The City Council hereby specifically finds that all of the facts set forth in the Recitals are true and correct.

SECTION 2. The City Council ratifies the meeting time of the Planning Commission of the City of Palmdale to 5:00 p.m. beginning at the April 10, 2025, meeting.

SECTION 3. The City Clerk shall certify to the adoption of this Resolution.

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

_____
Richard J. Loa, Mayor

Approved as to form:

ATTEST:

_____
William P. Curley, III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 18th day of March 2025, by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ABSENT: _____

Date: _____ _____
Rochelle Scott, City Clerk

PLANNING COMMISSION
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. PC-2025-004

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALMDALE, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF MODIFYING THE PLANNING COMMISSION MEETING TIME FROM 7:00 P.M. TO 5:00 P.M. BEGINNING APRIL 2025

WHEREAS, Palmdale Municipal Code Section 2.46.070 states that "meetings of the Planning Commission shall be held on such days and at such time and location as may be established by the Commission for conduct of its business and ratified by the City Council."

WHEREAS, on June 3, 2009, the City Council adopted Resolution No. CC 2009-093 to modify the dates of the Planning Commission meetings from two meetings per month on the second and fourth Thursday to one meeting per month, held on the second Thursday of the month.

WHEREAS, the proposal is a request for the Planning Commission of the City of Palmdale to recommend City Council approval of setting the meeting time of the Commission at 5:00 P.M. beginning April 2025.

WHEREAS, the proposal does not include changes to the meeting date and location, which will remain on the second Thursday of the month at the Council Chamber of the City of Palmdale, located at 38300 Sierra Highway, Suite B.

WHEREAS, All legal prerequisites to the adoption of this Resolution have occurred.

NOW THEREFORE, BE IT RESOLVED, THE PLANNING COMMISSION OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

SECTION 1. The Planning Commission hereby specifically finds that all of the facts set forth in the Recitals are true and correct.

SECTION 2. The Planning Commission recommends that the City Council ratifies the meeting time of the Planning Commission of the City of Palmdale to 5:00 p.m. beginning April 2025.

SECTION 3. The Deputized Clerk shall certify to the adoption of this Resolution.

PASSED, APPROVED and **ADOPTED** this 13th day of February, 2025.

Dean Henderson
Chair, Planning Commission

ATTEST:

Sylvia Magallanes, Deputized Clerk

I, Sylvia Magallanes, Deputized Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly approved, and adopted by the Planning Commission of the City of Palmdale at a regular meeting of said Commission held on the 13th day of February, 2025, by the following roll call vote:

AYES: (3) Chair Henderson, Commissioner Lujan, Olivarez

NOES: (1) Commissioner Jones

ABSTAIN: (1) Commissioner Elize ABSENT: (0)

Date: 2/24/2025

Sylvia Magallanes, Deputized Clerk

CITY OF PALMDALE
LOS ANGELES COUNTY, CALIFORNIA
RESOLUTION NO. CC 2009-093

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE, CALIFORNIA, RATIFYING THE MEETING DATE OF THE PLANNING COMMISSION OF THE CITY OF PALMDALE

A. RECITALS

(i) Section 2.46.070, Meetings – Time and place of the Municipal Code states that "meetings of the Planning Commission shall be held on such days and such time and location as may be established by the Commission for conduct of its business and ratified by the City Council."

(ii) The Planning Commission of the City of Palmdale adopted Resolution No. PC-2009-018 on May 7, 2009 setting the meeting date of the Commission as second Thursday of the month beginning June 2009.

(iii) The meeting time and place stays the same as 7:00 p.m. and at the Council Chamber of the City of Palmdale located at 38300 Sierra Highway, Suite B.

B. RESOLUTION

NOW THEREFORE, it is hereby found, determined, and resolved by the City Council of the City of Palmdale, as follows:

1. The City Council hereby specifically finds that all of the facts set forth in the Recitals, Part A of this Resolution, are true and correct.

2. The City Council hereby ratifies the meeting date of the Planning Commission of the City of Palmdale to the second Thursday of every month beginning June 2009.

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

PASSED, APPROVED and ADOPTED this 3rd day of June, 2009, by the following vote:

AYES: Ledford, Lackey, Dispenza, and Hofbauer

NOES: None

ABSTAIN: None ABSENT: None

James C. Ledford, Jr., Mayor

ATTEST:

Victoria L. Hancock, CMC
City Clerk

APPROVED AS TO FORM:

City Attorney

ATTACHMENT 1

CITY OF PALMDALE
LOS ANGELES COUNTY, CALIFORNIA
RESOLUTION NO. PC-2009-018

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALMDALE, CALIFORNIA, ESTABLISHING SECOND THURSDAY OF EACH MONTH AS ITS MEETING DATE COMMENCING WITH JUNE 2009

B. RECITALS

(vi) Section 2.46.070, Meetings – Time and place of the Municipal Code states that "meetings of the Planning Commission shall be held on such days and such time and location as may be established by the Commission for conduct of its business and ratified by the City Council."

(vii) The Planning Commission of the City of Palmdale currently convene on first and third Thursday of each month at 7:00 p.m. at the Council Chamber of the City of Palmdale located at 38300 North Sierra Highway, Suite B.

(viii) Due to the overall economic downturn the City is experiencing a substantial decrease in entitlement applications and development activities at this time.

(ix) The City is also experiencing financial difficulties due to the overall downturn of the economy and implementing ways to reduce its financial burden. Conducting two Planning Commission meetings a month is associated with a substantial financial cost to the City.

(x) All legal prerequisites to the adoption of this Resolution have occurred.

RESOLUTION

NOW THEREFORE, it is hereby found, determined, and resolved by the Planning Commission of the City of Palmdale, as follows:

3. The Planning Commission hereby specifically finds that all of the facts set forth in the Recitals, Part A of this Resolution, are true and correct.

4. Based upon the above mentioned facts, the Planning Commission hereby declare that commencing with June 2009, the Planning Commission of the City of Palmdale will convene on second Thursday of each month at 7:00

p.m. at the Council Chamber located at 38300 North Sierra Highway, Suite B, Palmdale, California.

4. The Deputy City Clerk shall certify to the adoption of this Resolution.

ADOPTED AND APPROVED this 7th day of May, 2009.

AYES: 5 (Berg, Dino, Henderson, MacLaren, Thompson)

NOES: 0

ABSTAIN: 0 ABSENT: 0

Spencer Berg, Chairman
Planning Commission

ATTEST:

Kathy Inman, Deputy City Clerk

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
CAPITAL IMPROVEMENT PROGRAM DIVISION

DISTRICT: **2**

SUBJECT: **AWARD AND APPROVE AGREEMENT WITH MENDOZA ENGINEERING COMPANY, INC., FOR CONSTRUCTION SERVICES FOR PN 862, MARIE KERR PARK SWIM DECK EXPANSION PROJECT FOR A TOTAL NOT TO EXCEED AMOUNT OF $340,736 FOR A TERM OF 50 WORKING DAYS FROM THE DATE OF THE NOTICE TO PROCEED**

RECOMMENDATION

Staff recommend that the City Council:

1. Award and Approve Agreement No. A-8679 with Mendoza Engineering Company, Inc., for construction services for PN 862, Marie Kerr Swim Deck Expansion Project for a not to exceed amount of $340,736, which includes a contract amount of $309,760 plus a 10% contingency amount of $30,976 for a term of 50 working days from the date of the Notice to Proceed; and,

2. Authorize the City Manager or her designee to execute the Agreement No. A-8679 with Mendoza Engineering Company, Inc., including minimal and/or non-substantial changes.

BACKGROUND

Project No. 862 will expand the Marie Kerr Pool facility deck to increase capacity and expand operations. The project will move existing fencing and install new fencing, including a new extended patio deck to improve ingress/egress routes. The added deck space will allow for expanded swim team operations, additional space for family members to watch, and a handicapped-accessible walk path and entry connecting to the adjacent recreation center. The project will also include modification of drainage infrastructure, new landscaping and irrigation, installation of facility and path lighting, and resurfacing of the existing pool deck surfaces. The City was awarded a grant for the

construction of the pool deck by the Los Angeles County Regional Park and Open Space District (RPOSD) in June 2023.

The project was delayed due to the Los Angeles County Health Department plan review process. After the plans were approved, the City finalized the design with JT Engineering and prepared construction bid documents.

DISCUSSION

On August 21, 2024, the project was advertised for construction bids electronically through Planet Bids with five (5) vendors registered as prime contractors. On September 25, 2024, two (2) bids for this project were received, summarized, and listed below:

Bidder	Location	Amount
1. Mendoza Engineering Company, Inc.	Fontana, CA	$309,760
2. All American Building Services	Santa Clarita, CA	$392,450

Mendoza Engineering Company, Inc. was found to be the lowest responsible and responsive bidder.

FISCAL IMPACT

$340,736; This project is funded using Los Angeles County Regional Park and Open Space District (RPOSD) Measure A grant funds. The $340,736 cost includes a 10% contingency of $30,976.

STRATEGIC PLAN

Goal IV: Maintain a desirable community where everyone wants to live, work, and play.

> B: Provide inclusive access to a variety of supportive services that build a resilient and healthy community.

Prepared by:	Leonardo Torress, P.E. Director of Public Works
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Agrmt No. A-8679 with Mendoza Engineering Company, Inc.

AGREEMENT NO. A- 8679
CONSTRUCTION CONTRACT
BETWEEN THE CITY OF PALMDALE AND MENDOZA ENGINEERING COMPANY, INC

THIS CONTRACT (“Contract”) is made and entered into by and between City of Palmdale, a public entity ("City"), and MENDOZA ENGINEERING COMPANY, INC, a CORPORATION ("Contractor"). Contractor and City are collectively referred to herein as the “parties.” This Contract shall become effective on the date of the last signatory.

1 Scope of Work

Contractor shall complete the Project in accordance with this Contract. Contractor shall furnish all materials and perform all work required for the completion of the following Project:

Expansion of the concrete pool deck, including modification to the drainage infrastructure, the addition of landscaping features, pool deck resurfacing, a new ADA path of travel for access, and the modification and expansion of the permitter fencing and entry gates.

2 Standard Specifications

Standard Specifications for City projects are those contained in the 2021 Greenbook edition of the "Standard Specifications for Public Works Construction" (the "Greenbook"). Except as otherwise expressly provided herein, the Standard Specifications shall control the general provisions, construction materials, and construction methods for this Contract (except as amended by the Plans for the Project), the General Specifications for the Project, the Special Provisions for the Project, any technical specifications for the Project, and any other contract documents.

3 Compensation

City shall pay Contractor the total, all-inclusive, NOT-TO-EXCEED amount of three hundred nine thousand seven hundred sixty Dollars ($309760) for the construction of the Project. This amount shall cover all expenses for labor, materials, and any and all other costs incurred by Contractor to satisfactorily construct the Project. Unless otherwise provided in the bid documents or agreed upon by the parties, Contractor shall submit detailed, monthly invoices for work actually performed.

4 Completion Date

The construction of the Project shall commence upon Contractor being given a written notice to proceed, and shall be completed within 50 working days of said

notice.

5 Payment and Performance Bonds; Guaranty

Unless otherwise expressly provided in the bid documents, prior to commencing work, Contractor shall provide a payment bond and performance bond, each in an amount equal to 100% of the Contract price. The bond forms required to be executed are attached hereto and incorporated by reference herein. Pursuant to the bid documents for this Project, the Contractor is required to provide a written guaranty of Contractor's work. In furtherance thereof, Contractor shall execute the written form of Guaranty attached hereto and incorporated by reference herein.

6 Licenses

At all times during the term of this Contract, Contractor shall possess a valid and current Class C53 Contractor's License to perform the required work ("Work"). Contractor's DIR registration number is 2000004055. Contractor hereby certifies that it holds the required license(s).

7 Subcontracting

Subject to any self-performance requirements herein, Contractor may subcontract any portion of the work required by this Contract to other persons or firms, and Contractor submitted with its bid a list of those subcontractors who will perform work in an amount in excess of one-half of one percent (1%) of the Contractor's total bid, in compliance with the Subletting and Subcontracting Fair Practices Act, California Public Contract Code § 4100, et seq. Only such listed subcontractors may perform on this Project.

8 Non-Assignability

Neither this Contract nor any rights, title, interest, duties or obligations under this Contract may be assigned, transferred, conveyed or otherwise disposed of by Contractor without the prior written consent of City.

9 Administration

This Contract will be administered by the Public Works Department of the City. The Director of Public Works or his or her designee shall be considered the Project Administrator and shall have the authority to act for the City under this Contract.

10 Indemnification

To the maximum extent permitted by law, Contractor shall indemnify, protect, defend and hold harmless the City, its Board of Director, the City's officers, employees, agents, volunteers, and representatives (“Indemnitees”) with respect to any and all claims, suits, actions, stop notices, liabilities and/or damages, including related expenses, attorney's fees and costs, based on, arising out of, or in any way related to the work undertaken by Contractor pursuant to this Contract, and in connection with the Project.

11 Liability Insurance

11.1 Without limiting Contractor's indemnification of City, as described in paragraph 10, and unless modified by City, Contractor shall obtain, provide and maintain, at its own expense, during the term of this Contract, a policy or policies of insurance, satisfactory to the City, from insurance carriers admitted to do business in the State of California and rated in A.M. Best’s Insurance Guide with a rating of A:VII or better, which contain the coverage described below.

11.1.1 <u>Commercial General Liability</u>
- $2,000,000.00 limit on a per occurrence basis
- $5,000,000.00 general aggregate limit

11.1.2 <u>Commercial Automobile Liability</u>
- $2,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

11.1.3 <u>Workers’ Compensation and Employer’s Liability</u>
- Workers’ Compensation -- coverage as required by the State of California
- Employer’s Liability -- $1,000,000.00 each accident
  $1,000,000.00 policy limit bodily injury
  $1,000,000.00 each employee bodily injury by disease

11.1.4 Pollution/Environmental Liability*
- $2,000,000.00 limit on a per occurrence basis

11.2 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The certificates shall state: “The City of Palmdale, Successor Agency to the Community Redevelopment Agency of the City of Palmdale, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insured”.

B. “Severability of Interest” Clause.

11.3 Promptly upon execution of this Contract, and prior to commencement of any work, CONTRACTOR shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that CONTRACTOR has the required coverage and showing the required named insured. Within five (5) days of written request from CITY, CONTRACTOR shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

11.4 Said Certificates of Insurance shall provide that thirty (30) days’ prior written notice of cancellation shall be given to the City in the event of cancellation and/or reduction in coverage of any nature.

11.5 The required policies of insurance shall be endorsed to waive all rights of subrogation. Contractors waives all rights of subrogation.

11.6 Acceptable Proof of Insurance:

A. ACORD Certificate of Insurance listing all coverage, limits, deductibles and insured; and endorsements for all applicable coverage if agent has authority to issue it; or additional insured Form CG20100704 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

B. Binders of insurance for all coverage. Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements and a corresponding Certificate of Insurance listing all insurers and coverage must be submitted to the City Attorney.

C. *When pollution/environmental liability coverage is provided on a “claims made basis”, CONTRACTOR will continue to renew the insurance for a period of five (5) years after this Agreement expires or is terminated. Such insurance will have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover CONTRACTOR, or its officers, employees, or agents during the time this Agreement was in effect.

11.7 The requirements as to the types and limits of insurance to be maintained by CONTRACTOR are not intended to and shall not in any manner limit or qualify CONTRACTOR’s liabilities and obligations under this Contract.

11.8 Any policy or policies of insurance that CONTRACTOR elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer’s right of subrogation against CITY.

11.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time CONTRACTOR fails to maintain the required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

11.10 CONTRACTOR shall require any and all subcontractors working on its behalf to provide insurance coverages and limits that are based on the scope of work and nature of risk being performed by the subcontractor. Any and all subcontractors working on behalf of CONTRACTOR shall be subject to all other insurance requirements that are stated herein.

Any deviation in this requirement will be CONTRACTOR's sole risk. CONTRACTOR's insurance requirements in Section 11 will not be impacted and/or limited by such deviation.

12 State Labor Code

12.1 This Contract calls for work to be performed constituting public works. Contractor and all subcontractors shall pay the general prevailing rate of per diem wages as determined and as published by the State Director of the Department of Industrial Relations pursuant to Article 2 of Chapter 1 of Part 7, of Division 2 of the State Labor Code, including, but not limited to, Sections 1770, 1771, 1773, 1773.2 and 1774.

12.2 This is a public work and requires the payment of prevailing wages for the work or craft in which the worker is employed for any public work done under the contract by Contractor or by any subcontractor pursuant to Section 1771 of the Labor Code. Pursuant to the provisions of Section 1773 of the Labor Code of the State of California, the City has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in this locality for each craft, classification, or type of workman needed to execute this contract from the Director of the Department of Industrial Relations. These rates are on file with the City or may be obtained at http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm.

Contractor shall post a copy of such wage rates at the job site and shall pay the adopted prevailing wage rates as a minimum. Contractor shall comply with the provisions of Sections 1775, 1776, 1777.5, 1777.6, and 1813 of the Labor Code. Pursuant to the provisions of 1775 of the Labor Code, Contractor shall forfeit to the City, as a penalty, not more than $200.00 for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the stipulated prevailing rates for any work done under this Contract, by him or by any subcontractor under him, in violation of the provisions of this Agreement.

12.3 Contractors and subcontractors who are ineligible to bid for work on, or be awarded, a public works project pursuant to Labor Code Sections 1777.1 and 1777.7

are prohibited from bidding on, being awarded, or performing work as a subcontractor, on this Project pursuant to Public Contract Code Section 6109.

12.4 Contractor's attention is directed to the provisions in Sections 1774, 1775, 1776, 1777.5 and 1777.6 of the Labor Code. Contractor shall comply with the provisions in these Sections. The statutory provisions for penalties for failure to comply with the State's wage and hours laws will be enforced. Pursuant to Section 1775 of the Labor Code, the Contractor and any subcontractors, shall, as a penalty to the City forfeit the prescribed amounts per calendar day, or portion thereof, for each worker paid less than the prevailing wage rates.

12.5 Pursuant to Labor Code Section 1771.4, the Project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations.

12.6 Each Contractor and subcontractor shall furnish the records specified in Labor Code Section 1776 directly to the State Labor Commissioner at least monthly in the format prescribed by the State Labor Commissioner.

12.7 Sections 1774 and 1775 require the Contractor and all subcontractors to pay not less than the prevailing wage rates to all workmen employed in the execution of the Contract and specify forfeitures and penalties for failure to do so. The minimum wages to be paid are those determined by the State Director of the Department of Industrial Relations. Section 1776 requires the Contractor and all subcontractors to keep accurate payroll records, specifies the contents thereof, their inspection and duplication procedures and certain notices required of the Contractor pertaining to their location.

12.8 Section 1777.5 of the Labor Code requires Contractor or subcontractor employing workers in any apprenticeable occupation to apply to the Joint Apprenticeship Committee nearest the site of the public works project, which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen to be used in the performance of the Contract. The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade and if other contractors on the public works site are making such contributions. Information relative to apprenticeship standards, contributions, wage schedules and other requirements may be obtained from the State Director of Industrial Relations or from the Division of Apprenticeship Standards. Section 1777.6 of the Labor Code provides that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age.

12.9 Eight hours labor constitutes a legal day's work, as set forth in Labor Code

Section 1810. The statutory provisions for penalties for failure to comply with the State's wage and hour laws will be enforced as set forth in Labor Code Section 1813.

13 Antitrust Claims

In entering into this Agreement, Contractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the California Business and Professions Code) arising from purchases of goods, services, or materials pursuant to the Agreement. This assignment shall be made and become effective at the time the City tenders final payment to Contractor without further acknowledgment by the parties.

14 Trenching and Excavations

Pursuant to Public Contract Code Section 7104, if the Project involves trenching more than four (4) feet deep, Contractor shall promptly and before the following conditions are disturbed notify the City in writing of any:

14.1 Material that Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code Section 25117, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; and/or

14.2 Subsurface or latent physical conditions at the site differing from those indicated; and/or

14.3 Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

14.4 As required by Labor Code Section 6705 and in addition thereto, whenever work under the Contract that involves an estimated expenditure in excess of twenty-five thousand dollars ($25,000) for the excavation of any trench or trenches five (5) feet or more in depth, Contractor shall submit for acceptance by City in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation, of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by Contractor, and all costs therefor shall be included in the price of the Contract. Nothing in this provision shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this provision shall be construed to impose tort liability on the City or on any City officer, agent, consultant, representative, or

employee. All plans, processing and shoring costs are Contractor's responsibility and must be included in Contractor's bid.

15 Location of Existing Elements

Pursuant to Government Code Sections 4216 to 4216.9, the methods used and costs involved to locate existing elements, points of connection and all construction methods are Contractor's sole responsibility. Accuracy of information furnished, as to existing conditions, is not guaranteed. Contractor, at its sole expense, must make all investigations necessary to determine locations of existing elements, which may include, without limitation, contacting U.S.A. alert and other private underground locating firm(s), and/or utilizing potholes, specialized locating equipment and/or hand trenching.

16 Third Party Claims

Pursuant to Public Contract Code Section 9201, the City has full authority to compromise or otherwise settle any claim relating to this Contract at any time. The City shall timely notify Contractor of the receipt of any third-party claim relating to the Contract. The City shall be entitled to recover its reasonable costs incurred in providing the notification required by Public Contract Code Section 9201(b).

17 Non-Collusion

Contractor hereby certifies that this bid is genuine and not a sham or collusive, or made in the interest or on behalf of any person or business not herein named. Contractor further certifies that Contractor has not directly or indirectly induced or solicited any other bidder to furnish a sham bid, or any other person or business to refrain from bidding, and Contractor has not in any manner sought by collusion to secure itself an advantage over any other bidder. Contractor also affirms that it has signed and submitted with its bid to the City a Non-collusion Declaration as required by Public Contract Code Section 7106.

18 Conflicts of Interest

Contractor agrees not to accept any employment or representation during the term of this Contract or within twelve (12) months after completion of the work under this Contract which is or may likely make Contractor "financially interested," as provided in Government Code Section 1090 and 87100, in any decisions made by City on any matter in connection with which Contractor has been retained pursuant to this Contract.

19 Audit

The City or its representative shall have the option of inspecting and/or auditing all records and other written materials used by Contractor in preparing its billings to the City as a condition precedent to any payment to Contractor. Contractor will promptly

furnish documents requested by the City. Additionally, pursuant to Government Code Section 8546.7, if this Contract involves the expenditure of public funds in excess of ten thousand dollars ($10,000), Contractor shall be subject to State Auditor examination and audit at the request of the City or as part of any audit of the City, for a period of three (3) years after final payment under this Contract.

20 Substitute Security

Pursuant to Public Contract Code Section 22300, the substitution of securities for any moneys withheld by the City to ensure performance under a contract is permitted, except where financing will be provided by the Farmers Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 U.S.C. Sec. 1921 *et seq*.) or where federal regulations or policies, or both, do not allow the substitution of securities. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City, or with a state or federally chartered bank in the State of California as the escrow agent, that shall then pay those moneys to Contractor. Upon satisfactory completion of the Contract, the securities shall be returned to Contractor.

Alternatively, Contractor may request and the City shall make payment of retentions earned directly to the escrow agent at the expense of Contractor. At the expense of Contractor, Contractor may direct the investment of the payments into securities, and Contractor shall receive the interest earned on the investments upon the same terms provided for securities deposited by Contractor. Upon satisfactory completion of the Contract, Contractor shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from the City, pursuant to the terms of this section.

Securities eligible for investment shall include those listed in California Government Code Section 16430, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security to which Contractor and the City agree in writing. Contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

If Contractor elects to receive interest on moneys withheld in retention by the City, it shall, at the request of any subcontractor performing more than five percent (5%) of Contractor's total bid, make that option available to the subcontractor regarding any moneys withheld in retention by Contractor from the subcontractor. If Contractor elects to receive interest on any moneys withheld in retention by the City, then the subcontractor shall receive the identical rate of interest received by Contractor on any retention moneys withheld from the subcontractor by Contractor, less any actual pro rata costs associated with administering and calculating that interest. In the event that the interest rate is a fluctuating rate, the rate for the subcontractor shall be determined by calculating the interest rate paid during the time that retentions were withheld from the subcontractor. If Contractor elects to substitute securities in lieu of

retention, then, by mutual consent of Contractor and its subcontractor, the subcontractor may substitute securities in exchange for the release of moneys held in retention by Contractor. No Contractor shall require any subcontractor to waive any provision of this paragraph.

The escrow agreement for security deposits in lieu of retention shall be substantially similar to the form provided in Public Contract Code Section 22300(f).

21 Claims Dispute Resolution

In the event of any dispute or controversy with the City over any matter whatsoever, the Contractor shall not cause any delay or cessation in or of Work, but shall proceed with the performance of the Work in dispute. The Contractor shall retain any and all rights provided that pertain to the resolution of disputes and protests between the parties. The Disputed Work will be categorized as an “unresolved dispute” and payment, if any, shall be as later determined by mutual agreement or a court of law. The Contractor shall keep accurate, detailed records of all Disputed Work, claims and other disputed matters.

All claims arising out of or related to the Contract documents or this Project, and the consideration and payment of such claims, are subject to the Government Claims Act (Government Code Section 810 et seq.) with regard to filing claims. All such claims are also subject to Public Contract Code Section 9204 and Public Contract Code Section 20104 et seq. (Article 1.5), where applicable. This Contract hereby incorporates those provisions as though fully set forth herein. Thus, the Contractor or any Subcontractor must file a claim in accordance with the Government Claims Act as a prerequisite to filing a construction claim in compliance with Section 9204 and Article 1.5 (if applicable), and must then adhere to Section 9204 and Article 1.5 (as applicable), pursuant to the definition of “claim” as individually defined therein.

22 Non-discrimination and Equal Employment Opportunity

22.1 In performance of this Contract, CONTRACTOR shall not discriminate against any employee, subcontractor, or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sexual orientation, age, gender, gender identity, gender expression, genetic information, or military and veteran status. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their sex, color, race, religion, ancestry, national origin, disability, medical condition including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sexual orientation, age, gender, gender identity, gender expression, genetic information, or military and veteran status . Affirmative action relating to employment shall include, but not be limited to the following:

employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

22.2 The provisions of subsection 16.1 above shall be included in all solicitations or advertisements placed by or on behalf of CONTRACTOR for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of CONTRACTOR and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

23 Integration

This Contract supersedes any and all agreements, either oral or written, between the parties hereto with respect to the construction of the Project by Contractor for City and contains all of the covenants and agreements between the parties with respect to the construction of the Project. Each party to this Contract acknowledges that no representations, inducements, promises, or agreements, orally or otherwise, have been made with regard to the construction of the Project by any party, or anyone acting on behalf of any party, which are not embodied herein, and that no other agreement, statement, or promise regarding work not contained in this Contract shall be valid or binding. Any modification or amendment of this Contract will be effective only if it is in writing and signed by the parties to this Contract. Any changes to the work required by this Contract will be by change order signed by the parties.

24 Governing Law

This Contract will be governed by and construed in accordance with the laws of the State of California without reference to change of venue laws. Any legal action in which enforcement of the terms and conditions of this Contract is requested, or in which it is alleged that a breach of this Contract has taken place, shall be filed and prosecuted in the County of Los Angeles, California.

25 Successors and Assigns

The terms and conditions of this Contract shall be binding on the successors and assigns of the parties to this Contract.

26 Exhibits

The exhibits and attachments referenced in this Contract are attached hereto and incorporated herein by this reference as though set forth in full in the Contract.

27 Authority to Sign

The person or persons executing this Contract on behalf of the Contractor warrant and represent that they have the authority to execute this Contract on behalf of the Contractor and have the authority to bind Contractor to the construction of the Project.

28 Time is of the Essence

Time is of the essence in every provision of this Agreement in which time to perform is a factor.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE

SIGNATURE AREA

Ronda Perez Date
City Manager

SIGNATURE AREA

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38250
Palmdale, CA 93550

APPROVE AS TO FORM:

SIGNATURE AREA

William P. Curley, III
City Attorney

ATTEST:

SIGNATURE AREA

Roxanne Faber
City Clerk

MENDOZA ENGINEERING COMPANY, INC

SIGNATURE AREA

Eduardo Mendoza Date
President

ADDRESS FOR NOTICE:
MENDOZA ENGINEERING COMPANY, INC
8368 Cottonwood Ave.
Fontana, CA 92335

ATTEST: If Corporation

SIGNATURE AREA

Secretary

[Signatures of contractor on bond(s) must be notarized. Obtain two corporate signatures if contractor is a corporation.]

---------- INTERNAL USE ONLY ----------

□Certificate(s) and Endorsement(s) attached
□Confirmed business name on contract with certificate(s)
□Attached notarized bond(s), Worker's Compensation Certificate, and Guaranty
□Attached Agreement Checklist and met all requirements

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
CAPITAL IMPROVEMENT PROGRAM DIVISION

DISTRICT: **ALL**

SUBJECT: **APPROVE THE AMENDED AND RESTATED MEMORANDUM OF UNDERSTANDING (MOU) OF THE ANTELOPE VALLEY REGIONAL WATER MANAGEMENT GROUP (RWMG) INTEGRATED REGIONAL WATER MANAGEMENT PLAN (IRWMP) COST-SHARING AGREEMENT FOR A NOT TO EXCEED AMOUNT OF $16,923 AND EXTEND THE TERM OF THE AGREEMENT THROUGH JANUARY 2027**

RECOMMENDATION

Staff recommend that the City Council:

1. Approve the Amended and Restated Memorandum of Understanding (MOU) of the Antelope Valley RWMG IRWMP cost-sharing Agreement No. A- 6389, for a not to exceed amount of $16,923 and extend the term of the agreement through January 2027; and,

2. Authorize the City Manager or her designee to execute the Amended and Restated MOU of the Antelope Valley RWMG IRWMG cost-sharing Agreement No. A- 6389.

BACKGROUND

The City became involved in the RWMG in 2007 to pursue grant funding and facilitate the implementation of the IRWMP, which was adopted by the City in 2008. An update of the IRWMP is needed to identify Antelope Valley region water management issues, update current supply and demand projections, and comply with the Department of Water Resources guidelines for grant eligibility. The amended and restated MOU sets forth the funding to be provided by each of the eleven (11) parties of the RWMG.

The Antelope Valley RWMG is composed of Antelope Valley-East Kern Water Agency, Palmdale Water District, Quartz Hill Water District, Littlerock Creek Irrigation District, Antelope Valley State Contractors Association, City of Palmdale, City of Lancaster, County Sanitation District No. 14 of Los Angeles County, County Sanitation District No.

20 of Los Angeles County, Rosamond Community Services District, and Los Angeles County Waterworks District No. 40, Antelope Valley.

DISCUSSION

The Amended and Restated MOU of the Antelope Valley RWMG cost sharing Agreement No. A-6389 is to conform to the requirements of the adopted IRWMP. The funding shall be used to cover costs incurred by the RWMG for ongoing regional stakeholder meetings, IRWMP project updates, and grant support. Additionally, the MOU confirms the intent of the parties to continue to fund twenty-five percent (25%) of the United States Geological Survey Groundwater Monitoring Program (USGS Program) through September 2026.

Several agencies already have stormwater-related projects in mind, including the City's Avenue R regional basin project, the City of Lancaster storm drain infrastructure project, and Los Angeles County's Avenue P-8 project conceptual plan (in IRWMP project list). Los Angeles County Public Works, the City of Lancaster, and the City agreed to meet to move the preparation of a potential Storm Water Resource Plan (SWRP) forward.

Woodard & Curran presented the agencies with SWRP requirements. The agencies need to decide whether to develop a SWRP in the region, who will lead the development, how to fund a plan, and when to start.

Failure of an agency to conform to the MOU's requirements or not to adopt the IRWMP may subject the agency to removal from the Group, with the subsequent loss of benefits, including substantial funding opportunities for projects through State funding sources.

FISCAL IMPACT

$16,923; The City's participation percentage share is 15.3846% per the MOU agreement and is funded through Contract Services – Special Projects account. Sufficient funds are budgeted and available in FY 2024-25.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

> C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

Prepared by:	Leonardo Torres, P.E., Director of PW
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Agrmt No. A-6389

AMENDED AND RESTATED
MEMORANDUM OF UNDERSTANDING
(Antelope Valley Regional Water Management Group IRWMP Cost Sharing)

This Amended and Restated Memorandum of Understanding ("**Amended and Restated MOU**") is entered into as of March 18, 2025 (the "**Effective Date**") and is between the following parties:

Antelope Valley-East Kern Water Agency;
Palmdale Water District;
Quartz Hill Water District;
Littlerock Creek Irrigation District;
Antelope Valley State Water Contractors Association (the "**Association**");
City of Palmdale;
City of Lancaster;
County Sanitation District No. 14 of Los Angeles County;
County Sanitation District No. 20 of Los Angeles County;
Rosamond Community Services District; and
Los Angeles County Waterworks District No. 40, Antelope Valley ("**Waterworks District 40**").

Each of these parties is referred to individually as "**Party**" and together as the "**Parties**."

A. The *Integrated Regional Water Management Planning Act of 2002 (*the "**Act**"), California Water Code section 10530 and 10531, et seq., establishes the State of California's policy to encourage local agencies to work cooperatively to manage their available local and imported water supplies to improve the quality, quantity, and reliability of those supplies.

B. On or about January 9, 2007, the Parties entered into a *Memorandum of Understanding* ("**2007 MOU**") to provide for the preparation of an Integrated Regional Water Management Plan ("**IRWMP**" or "**Plan**") pursuant to the Act.

C. On or about April 7, 2009, the Parties entered an *Agreement on the Implementation of the Integrated Regional Water Management Plan* ("**RWMG Agreement**") and established a new Regional Water Management Group ("**RWMG**") under the Act for the Antelope Valley Region ("**Region**"), to pursue grant funding and facilitate implementation of the IRWMP for the Region. The RWMG Agreement formally established the relationship between the Parties in order to qualify the Region to apply for state grant funds under the Department of Water Resources ("**DWR**") California State Integrated Regional Water Management Grant Program ("**Grant Program**").

D. The 2007 MOU by its own terms may be amended with the approval of all Parties to continue to update the IRWMP through January 8, 2027.

E. The DWR amended the Grant Program Guidelines in 2016 ("**2016 Guidelines**"). In order to be eligible for the first round of 2018 Proposition 1 funding, the RWMG must update the Plan to comply with the 2016 Guidelines. The City of Palmdale has, on behalf of the RWMG, retained a consultant to prepare a "**Mini Update**" of the Plan to comply with the 2016 Guidelines.

F. The RWMG also intends to prepare a full update to the IRWMP (the "**Full Update**"). The Full Update will identify Antelope Valley Region water management issues and bring current supply and demand projections, and otherwise comply with DWR guidelines for grant eligibility. The Association has offered to retain a consultant to prepare the Full Update on behalf of the RWMG.

G. This Amended and Restated MOU is intended to set forth the amount of new funding to be provided by each Party for the updates to the Plan. Each Party's contribution is based on its share of expenses under the 2007 MOU. Each Party's contribution is set forth in Exhibit 1, which is attached hereto and incorporated herein as though set forth in its entirety.

H. The Parties also intend by this Amended and Restated MOU to provide for the City of Palmdale to pay the initial consultant costs (subject to reimbursement by the other Parties as accounted for by the Association) for the Mini Update; to substitute the Association for Waterworks District 40 with regards to the hiring of a consultant to prepare the Full Update, and to set out the expectations of each of the Parties with respect to information submittal and document review in support of the IRWMP updates.

The Parties therefore agree as follows:

1. **Administration of Plan Updates**. Except for the Mini Update payments described in Section 2, the Association shall have primary responsibility for coordinating RWMG Plan updates and managing funds under this MOU, including:

1. Administering a consultant contract for the Full Update. This will include preparing a request for proposals, evaluating consultant proposals, awarding a consultant contract, and overseeing the consultant's services. The Association shall retain the consultant under a Professional Services Agreement substantially similar to Exhibit 3, which is attached hereto and incorporated herein as though set forth in its entirety.

2. For both the Mini Update and the Full Update, providing each Party with copies of the draft and final versions of technical reports and the draft Plan within seven calendar days after the date of receipt of those documents from the consultant. The Association shall transmit comments to the consultant within seven calendar days after the date of receipt of comments from each Party.

3. After a consultant incorporates comments from the Parties into the Draft Plan, making the Draft Plan available for public review, as required by law.

4. Preparing a final accounting (the "**Accounting**") of all final actual consultant costs upon completion of the Mini Plan or the adopted Full Plan for review by all other Parties.

5. Refunding excess funds to the Parties within 60 days after completion of the Plan if the funds deposited with the Association exceed the consultant's costs, based upon the Accounting. The excess funds will be refunded to the Parties in proportion to their contribution towards the consultant costs in Exhibit 1, which is attached hereto and incorporated herein as though set forth in its entirety.

2. **Mini Update**. The Association is primarily responsible for managing funds under this MOU, but the City of Palmdale shall be initially responsible for paying the consultant's costs associated with the Mini Update, with the understanding that the costs incurred will be reimbursed, less the City of

Palmdale's share, by the Association within 90 days of signing this Amended and Restated MOU. The Association will reimburse costs to the City of Palmdale with the funds contributed by the Parties as set forth in Section 3.D and 3.E. Each Party's contribution is set forth in Exhibit 1.

3. **Joint Duties of the Parties**. Each of the Parties shall perform the duties set forth in this Section 3.

A. Information Sharing: Each Party will make reasonable efforts to provide and share all necessary and relevant information, data, studies, and/or documentation for the Plan in that Party's possession as may be requested by the consultant within 30 calendar days after the consultant's request. The Parties acknowledge that if the information, data, studies, and/or documentation is not provided within 30 days after the consultant's request, then it may not be incorporated in the Plan due to time constraints.

B. Comments on Reports and Plan: Each Party shall review and comment on the draft and final versions of technical reports and the draft Plan ("Final Review Documents") within 21 calendar days after the date of their receipt of the Final Review Documents from the Association. The Parties acknowledge that if their comments are not provided within 21 calendar days of their receipt of the Final Review Documents, then the comments may not be incorporated into the Full Update due to time constraints.

C. Presentation to Governing Body: Each Party will present the Full Update to its governing body for consideration and adoption within 45 calendar days (or 90 calendar days for Waterworks District 40) after the date of receipt of the Full Update from the Association. Any approval will be done by way of resolution in a form substantially similar to Exhibit 2, which is attached hereto and incorporated herein as though set forth in its entirety.

D. Cost Contribution: Each Party shall pay to the Association the amount set forth in Exhibit 1 for the consultant costs, subject to the provisions of Section 5.B. below.

E. Payment: Each Party shall deposit with the Association its contribution in the amount set forth in Exhibit 1 within 30 calendar days after execution of this Amended and Restated MOU.

F. Grant Applications: The Parties will prepare and review future grant applications for implementation of the Full Update.

4. **Waterworks District 40's Additional Duties**. Waterworks District 40 shall facilitate stakeholder meetings.

5. **Full Update Implementation.**

A. Plan Adoption: If the governing body of each Party does not adopt the Full Update within 45 calendar days (or 90 days for Waterworks District 40) after the date of receipt of the Full Update, then that action or inaction will constitute withdrawal from the RWMG. A Party that withdraws from the RWMG may be reinstated if and when the Party adopts the Full Update and agrees to any further additions and/or amendments to the Amended and Restated MOU.

B. Additional Costs: If the consultant costs exceed the funds deposited with the Association, then the Parties will supplement this Amended and Restated MOU to fund the additional portion of the consultant costs in excess of the funds deposited with the Association in proportion to the Parties' original contributions towards the consultant costs.

6. **General Provisions**

A. Supersession. This Amended and Restated MOU supersedes and replaces the 2007 MOU. This Amended and Restated MOU is intended to be read in conjunction with the RWMG Agreement, but to the extent of any conflict with the RWMG Agreement, this Amended and Restated MOU will govern.

B. MOU Amendments: This Amended and Restated MOU may be amended or modified only by mutual written consent of all Parties.

C. Expiration: This MOU is effective until January 8, 2027, unless otherwise amended or modified as set forth in Section 6. B.

D. Severability: If any provision of this Amended and Restated MOU is held, determined or adjudicated to be illegal, void, or unenforceable by a court of competent jurisdiction, the remainder of this Amended and Restated MOU shall be given effect to the fullest extent possible.

E. Notice:

1. Any correspondence, communication, or contact concerning this Amended and Restated MOU shall be directed to the contacts attached in Exhibit 4, which is attached hereto and incorporated herein as though set forth in its entirety.

2. Any Party may change its contact information by providing notice, in the manner set forth in Section 6.E.3, to all other Parties.

3. Notice will be deemed given upon personal delivery, five days after deposit in U.S. Mail (first class postage prepaid), or on the day of overnight delivery by a nationally recognized carrier.

F. Authorized Agents: Each person signing this Amended and Restated MOU represents to have the necessary power and authority to bind the entity on behalf of which said person is signing and each of the other Parties can rely on that representation.

G. Execution: This Amended and Restated MOU may be executed in counterparts, each counterpart being an integral part of this Amended and Restated MOU.

The Parties are each signing this Amended and Restated MOU as of the date set forth opposite the signature below.

CITY:
CITY OF PALMDALE

By: _____
Richard J. Loa, Date
Title: MAYOR

APPROVED AS TO FORM:

By: _____
William P. Curley, III
City Attorney

ATTEST:

_____
Roxanne Faber
City Clerk

AVSWCA
Antelope Valley State Water Contractors Association

www.avswca.org

COMMISSIONERS

KATHY MAC LAREN-GOMEZ, Chair
ROBERT PARRIS, Vice Chair
LEO THIBAULT, Treasurer-Auditor
DON WILSON, Secretary
KEITH DYAS, Commissioner
BARBARA HOGAN, Commissioner

OFFICERS

PETER THOMPSON II, General Manager
DENNIS HOFFMEYER, Controller

INVOICE NUMBER:	24-012		
ACCOUNT NUMBER	**BILL DATE**	**DUE DATE**	**PAY THIS AMOUNT**
COP001	06/14/2024	07/22/2024	$16,923.00

CONTRIBUTING AGENCY:

City of Palmdale 38250
Sierra Highway
Palmdale, CA 93550
ATTN: Lee Torres, P.E.

DESCRIPTION	AMOUNT
Percentage Share of 15.3846% based on 2024 MOU	$16,923.00
Amended and Restated Memorandum of Understanding (MOU) – Antelope Valley Regional Water Management Group IRWMP $110,000.00 Cost Sharing.	
TOTAL DUE	$16,923.00

REMIT TO:

Antelope Valley State Water
Contractors Association
6500 West Avenue N
Palmdale, CA 93551
Attn: Angel Fitzpatrick

If you should have any questions please contact Dennis Hoffmeyer at (661) 456-1021.

EXHIBIT 1

Integrated Regional Water Management Group Cost Allocation

Party	Percent Share by Party from the 2007 MOU	Contribution for IRWMP Updates
		Total
Antelope Valley-East Kern Water Agency	15.3846%	$16,923
Palmdale Water District	18.4615%	$20,308
Quartz Hill Water District	1.5385%	$1,692
Littlerock Creek Irrigation District	1.5385%	$1,692
Antelope Valley State Water Contractors Association*		$0
City of Palmdale	15.3846%	$16,923
City of Lancaster	13.8461%	$15,231
County Sanitation District No. 14 of LA County	6.9231%	$7,615
County Sanitation District No. 20 of LA County	6.9231%	$7,615
Rosamond Community Services District	1.5385%	$1,692
LA County Waterworks District No. 40	18.4615%	$20,308
TOTAL	**100%**	**$110,000 ****

* The Antelope Valley State Water Contractor's Association is a joint powers authority comprised of Antelope Valley-East Kern Water Agency, Littlerock Creek Irrigation District, and Palmdale Water District. Because the Association's members are also members of the RWMG, the Association will contribute $0, and will have no share of any overage costs.

**This is a not to exceed total. Should the total contribution prove insufficient for the consultant work and or the USGS program funding, then a revised cost allocation will be developed and submitted to the parties for review and approval.

EXHIBIT 2
Integrated Regional Water Management Group Contacts

1) ANTELOPE VALLEY-EAST KERN WATER AGENCY:

Mr. Matthew Knudson
General Manager
6500 West Avenue N
Palmdale, CA 93551
mkundson@avek.org

2) PALMDALE WATER DISTRICT:

Mr. Dennis LaMoreaux
General Manager
2029 East Avenue Q
Palmdale, CA 93550
dlamoreaux@palmdalewater.org

3) QUARTZ HILL WATER DISTRICT:

Mr. Brent Byrne
General Manager
5034 W. Ave L
Quartz Hill, CA 93536
brentb@qhwd.org

4) LITTLEROCK CREEK IRRIGATION DISTRICT:

Mr. James Chaisson
General Manager
35141 North 87th Street East
Littlerock, CA 93543
jchaisson@lrcid.com

5) ANTELOPE VALLEY STATE WATER CONTRACTORS ASSOCIATION:

Mr. Robert Parris, Chairperson
c/o Antelope Valley-East Kern Water Agency
6500 West Avenue N
Palmdale, CA 93551
rparris@avek.org

6) CITY OF PALMDALE:

Mr. Lee Torres, P.E.
Public Works Director
38250 Sierra Highway
Palmdale, CA 93550
ltorres@cityofpalmdaleca.gov

Exhibit 2

7) CITY OF LANCASTER:

Ms. Marissa Diaz
Director of Public Works
44933 Fern Avenue
Lancaster, CA 93534
mdiaz@cityoflancasterca.gov

8) COUNTY SANITATION DISTRICT NO. 14 OF LOS ANGELES COUNTY:

Mr. Robert C. Ferrante
Chief Engineer and General Manager
County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601
rferrante@lacsd.org

9) COUNTY SANITATION DISTRICT NO. 20 OF LOS ANGELES COUNTY:

Mr. Robert C. Ferrante
Chief Engineer and General Manager
County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601
rferrante@lacsd.org

10) ROSAMOND COMMUNITY SERVICES DISTRICT:

Mr. Kim Domingo
General Manager
3179 35th Street
Rosamond, CA 93560
kdomingo@rosamondcsd.com

11) WATERWORKS DISTRICT 40:

Mr. Adam Ariki
Deputy Director
County of Los Angeles - Department of Public Works
Waterworks Division
P.O. Box 1460
Alhambra, CA 91802-1460
aariki@dpw.lacounty.gov

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
CAPITAL IMPROVEMENT PROGRAM DIVISION

DISTRICT: **1**

SUBJECT: **APPROVE THE FIRST AMENDMENT TO AGREEMENT WITH MNS ENGINEERS, INC., FOR PROJECT MANAGEMENT SERVICES FOR PN 669, 10TH STREET WEST WIDENING PROJECT, INCREASING THE AGREEMENT BY $227,000 FOR A TOTAL NOT TO EXCEED AMOUNT OF $418,800 WITH AN EXTENSION OF 22 MONTHS FOR A TOTAL TERM OF 45 MONTHS**

RECOMMENDATION

Staff recommend that the City Council:

1. Approve the First Amendment to Agreement No. A-8233, with MNS Engineers, Inc. (MNS) for project management services for PN 669, 10th Street West Widening, increasing the agreement by $227,000 for a total not to exceed amount of $418,000 with an extension of 22 months for a total term of 45 months; and,

2. Authorize the City Manager or her designee to execute the First Amendment to Agreement No. A-8233 with MNS Engineers, Inc., including minimal and/or non-substantial changes.

BACKGROUND

On March 1, 2023, the City Council approved Agreement No. A-8233 with MNS, for project management services for PN 669, 10th Street West Widening Project at SR14. 10th Street West is a major north-south corridor in the City, providing access to the adjacent businesses including the Antelope Valley Mall. The project is currently in the final design stage with substantial work completed by AECOM. The outstanding work includes final design drawings and specifications, permitting, constructability review, funding partners approvals, Caltrans permitting, and right-of-way acquisition. This project will improve the level of service by increasing capacity, reducing congestion, and improving overall operations and safety along 10th Street West, including its access to the Antelope Valley Mall and the Sierra Commons Shopping Area.

DISCUSSION

The proposed First Amendment to Agreement No. A-8233 extends MNS' project management services for the 10th Street West Widening Project, ensuring the timely delivery of the project through the bidding phase and addressing outstanding design and permitting requirements.

MNS will continue to act as the City's representative for this project, providing the following key services:

- **Project Management:** Oversee the finalization of design and bidding documents to ensure compliance with City standards, funding guidelines, and permitting requirements. The consultant will coordinate with City staff, review the bid package prepared by AECOM, and facilitate communication between the City and regulatory agencies such as Caltrans.
- **Right-of-Way (R/W) Documentation:** Document existing private property conditions affected by R/W acquisitions using drone video footage. This documentation will establish a clear pre-construction record to mitigate disputes or claims related to property damage.

The proposed amendment is needed to help complete the final design, permits, and bidding for the 10th Street West Widening project. Although progress has been made, there are still tasks to finish, such as finalizing design drawings, working with SCE on facility relocations, obtaining approvals, completing right-of-way acquisitions, and addressing challenges with utility relocations. Extending MNS' contract will ensure continued project management and help complete these tasks efficiently while meeting City standards and funding requirements. This amendment will provide the resources needed to keep the project moving forward and smoothly into the construction phase.

FISCAL IMPACT

$227,000; The SR138 (SR14) and 10th West Widening project is funded through Measure R grants. Sufficient funds are budgeted and available in FY 2024-25.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

> C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

Prepared by:	Leonardo Torres, P.E., Director of Public Works
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Agrmt No. A-8233 First Amendment with MNS Engineers, Inc.
Agrmt No. A-8233 with MNS Engineers, Inc.

FIRST AMENDMENT TO AGREEMENT A- 8233
BETWEEN THE CITY OF PALMDALE AND MNS ENGINEERS, INC.

This FIRST Amendment to Agreement No. A-8233 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and MNS ENGINEERS, INC. (hereinafter called "CONSULTANT"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on March 8, 2023 ("Original Agreement") the CITY and CONSULTANT entered into an agreement to provide:

Project Management Services for PN 669 10th Street West Widening Project.

WHEREAS, the parties desire to amend the Original Agreement to:

Increase SECTION 1 Description of Work.

PROJECT MANAGEMENT SERVICES

Task 1.1 Project Management Services extend an additional 22 months (January 2025 through December 2026);

Task 1.2 Constructability Review Project Staging for Southern California Edison (SCE) Relocation;

Task 1.3 Document Existing Private Property Conditions via Drone Video;

Task 2 Construction Management Services Proposal

Increase SECTION 9 Compensation an additional $227,000 for a new not to exceed contract total amount of $ 418,800.

CONSULTANT's detailed Proposal attached as Exhibit "A".

NOW THEREFORE, the parties agree as follows:

SECTION 1 Description of Work

Task 1.1 Project Management Services

CONSULTANT will provide part-time Project Management services, January 2025 through December 2026.

Task 1.2 Constructability Review Project Staging for SCE Relocation

CONSULTANT will perform a focused review of the proposed project plans and specifications related to the planned SCE relocations, provide a report to CITY, and discuss findings with the CITY Project Team.

Task 1.3 Document Existing Private Property Conditions via Drone Video

CONSULTANT will document the existing conditions of private properties affected by right-of-way (R/W) acquisitions for CITY PN 669.

Task 2 Construction Management Services

CONSULTANT will submit a proposal for construction management support services Scope of Work and Compensation amount when the project enters the construction phase.

SECTION 4 Commencement and Completion of Work

CONSULTANT shall complete all work described in SECTION 1 Description of Work and submit final deliverables by December 31, 2026.

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

SIGNATURE AREA

Ronda Perez
City Manager

SIGNATURE AREA

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38250 Sierra Highway
Palmdale, CA 93550

APPROVE AS TO FORM:

SIGNATURE AREA

William P. Curley, III
City Attorney

ATTEST:

SIGNATURE AREA

Roxanne Faber
City Clerk

MNS ENGINEERS, INC.:

SIGNATURE AREA

Jeff Edwards
Vice President

ADDRESS FOR NOTICE:
MNS ENGINEERS, INC.
201 N. Calle Cesar Chavez, Suite 300
Santa Barbara, CA 93103

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
□Attached Agreement Checklist and met all requirements

AGREEMENT NO. A-8233
CONTRACT FOR DESIGN PROFESSIONAL SERVICES
BETWEEN THE CITY OF PALMDALE AND MNS Engineers, Inc.

THIS CONTRACT FOR DESIGN PROFESSIONAL SERVICES ("Contract" herein) is made and entered into by and between the City of Palmdale a public body corporate and politic, (hereinafter called "CITY") and MNS Engineers, Inc. (hereinafter called "PROJECT DESIGNER"). This Contract shall become effective on the date of the last signatory.

RECITALS

WHEREAS**,** City desires to engage PROJECT DESIGNER to perform certain technical and professional services, as provided herein, in connection with that certain project identified as PN 669 SR138 (SR14) & 10th Street West Widening.

WHEREAS, PROJECT DESIGNER represents that PROJECT DESIGNER has the expertise and is qualified to perform the services described in this Contract and is duly registered under the laws of the State of California.

WHEREAS, PROJECT DESIGNER desires to accept such engagement.

NOW, THEREFORE, the parties agree as follows:

1 DESCRIPTION OF WORK

1.1 The City hereby engages PROJECT DESIGNER, and PROJECT DESIGNER accepts such engagement, to perform the following design professional services in a manner satisfactory to CITY:

PROJECT DESIGNER shall act as the CITY's representative for City Project No. 669; SR-14 and 10th Street West Widening Project.

The following scope of work provides a brief description of tasks and responsibilities that PROJECT DESIGNER shall provide to the CITY:

1. Project Management Services
PROJECT DESIGNER shall provide Project Management Services to the CITY to oversee the timely delivery of the above referenced project through the bidding phase. PROJECT DESIGNER shall provide services necessary to verify the project meets CITY standards and expectations. The PROJECT DESIGNER shall:
- Serve as the CITY's Project Manager for project delivery through the Bidding Phase
- Oversee completion of the Bid Package by CITY consultants
- Coordinate and communicate with the CITY
- Oversee the implementation of the project environmental into the plans, specifications, and estimates (PS&E)
- Ensure the project PS&E documents conform with project funding guidelines

- Manage CITY consultants through R/W acquisition phase
- Conduct project funding review and alternative funding strategies
- Conduct overall program management of the project

2. Constructability Review
PROJECT DESIGNER shall perform a Constructability Review of the project plans and specifications and provide comments and recommendations based upon construction experience and project understanding. The review shall include review of the supporting documents and construction estimate. During the constructability review, PROJECT DESIGNER shall identify missing details, time considerations, deficiencies, and potential coordination issues. The PROJET DESIGNER shall:
- Verify the PS&E are unambiguous, comprehensive, consistent, and buildable
- Verify items of work have adequately defined scope and pay mechanisms.
- Review permit, utility, and geotechnical provisions
- Review project working days and staging
PROJECT DESIGNER shall provide a constructability report to and discuss findings with CITY. This report shall include a listing of specification review comments referenced by specification section and page number and a listing of plan review comments referenced by sheet numbers and appropriate detail references.

1.2 Project deliverables shall be reviewed and approved by CITY to determine acceptable completion. CITY shall have the right to review and inspect the work during the course of its performance at such times as may be specified by CITY.

1.3 PROJECT DESIGNER shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

1.4 CITY shall provide to PROJECT DESIGNER, without charge, all data, program information, including reports, records, maps, and other information, now in CITY's possession, which may facilitate the timely performance of the work.

2 CITY PROJECT MANAGER

To provide the design professional services required by this Contract, PROJECT DESIGNER shall act under the authority and approval of a Project Manager appointed by the Director of Public Works/designee. The City Project Manager will oversee the work under this Contract, assist PROJECT DESIGNER with any necessary information, audit billings, and approve payments. PROJECT DESIGNER shall channel reports, deliverables and special requests through the City Project Manager.

3 PROJECT DESIGNER'S KEY PERSONNEL

PROJECT DESIGNER's Team and Key Personnel are as follows:

Jeff Edwards.....Vice President/Government Services
Robert Newman
Senior Project Manager
Principal Engineer
Senior Project Engineer
Construction Manager
Stormwater Lead
Environmental Technician
Supervising Project Surveyor

This Design Professional Services Contract has been awarded to PROJECT DESIGNER based on its representation that those personnel and subcontractors listed above will perform the portions of the work listed above. PROJECT DESIGNER shall not deviate nor substitute any of these team members without prior written approval by CITY.

4 COMMENCEMENT AND COMPLETION OF WORK

The services for the Project shall commence when CITY, acting by and through its Project Manager, issues a written authorization to proceed. PROJECT DESIGNER shall complete all work described in the Description of Work and submit final deliverables within five hundred (500) calendar days of said authorization. PROJECT DESIGNER shall have no claim for compensation for any services or work, which has not been authorized by CITY's authorization to proceed.

5 TAXES

5.1 PROJECT DESIGNER shall pay all sales, consumer, use, and other similar taxes required to be paid by PROJECT DESIGNER in accordance with state and local laws.

5.2 PROJECT DESIGNER is an independent contractor and shall have no power or authority to incur any debt, obligation, or liability on behalf of CITY. No person employed by PROJECT DESIGNER or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

5.3 PROJECT DESIGNER shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

6 PATENT FEES AND ROYALTIES

PROJECT DESIGNER shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the work or the incorporation in the work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified by CITY for use in the performance of the work and if, to the actual

knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by CITY in the contract documents. PROJECT DESIGNER shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, product or device not specified by CITY, and shall defend all such claims in connection with any alleged infringement of such rights.

7 STANDARDS OF PERFORMANCE

7.1 PROJECT DESIGNER shall be responsible for the completeness and accuracy of its services and work and documents resulting there from, and CITY shall not be responsible for discovering deficiencies therein. PROJECT DESIGNER shall correct any such deficiencies or errors without additional compensation and without cost to CITY, except to the extent any such deficiency is directly attributable to deficiencies in CITY-furnished information.

7.2 PROJECT DESIGNER shall be familiar with CITY’s Standard Details and Specifications and other relevant CITY regulations. PROJECT DESIGNER shall ensure there are no conflicts among the Contract Documents including, but not limited to, the CITY’s Standard Specifications and Special Provisions for Construction Contracts, the plans and specifications prepared by PROJECT DESIGNER, any standard details or specifications incorporated therein by reference, and the Construction Contract.

8 PROJECT DESIGNER’S PERSONNEL

8.1 All services required under this Contract shall be performed by PROJECT DESIGNER, or under PROJECT DESIGNER’s direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

8.2 PROJECT DESIGNER shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

8.3 PROJECT DESIGNER shall be responsible for payment of all PROJECT DESIGNER’s employees’ and subcontractor’s wages and benefits and shall comply with all requirements pertaining to the employer’s liability, workers’ compensation, unemployment insurance, and Social Security.

8.4 PROJECT DESIGNER shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from PROJECT DESIGNER’s acts or omissions with

respect to any liability, damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

8.5 PROJECT DESIGNER shall pay, if required by applicable law, not less than the general prevailing hourly wage rates, as determined by the Director of the Department of Industrial Relations pursuant to the California Labor Code, for each craft, classification, or type of worker needed to perform the Contract. Copies of the prevailing rate of per diem wages are on file in the office of the Director of Public Works.

9 COMPENSATION

9.1 For all of work and services including the various phases of tasks as described in Section 1, Scope of Services, CITY shall pay to PROJECT DESIGNER an amount not to exceed the sum of One hundred ninety one thousand eight hundred dollars ($191800), as follows:

Task 1
Project Initiation.....$10,000
Project Management Services.....$120,000
Task 2
Construction Engineering Support.....$61,800

TOTAL.....$191,800

PROJECT DESIGNER shall perform no work in excess of the total contract price without prior approval of CITY. Total contract price includes expenses related to travel to and from CITY to meet with City and to appear before City Council or any other board or commission of CITY.

9.2 An application and certification for payment form must be submitted to CITY which shall include the following: a clear, detailed invoice reflecting hours being billed for, a summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within the project; any/all backup documentation supporting the above items. Work schedule updates must also be included in the monthly progress payment requests.

9.3 PROJECT DESIGNER shall maintain adequate records and shall permit inspection and audit by CITY of PROJECT DESIGNER's charges under this Contract. PROJECT DESIGNER shall make such records available to CITY during normal business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available only to CITY and any specified public agencies. Such records shall be maintained by PROJECT DESIGNER for one (1) year following completion of the work under this Contract unless a longer period of time is required by state or federal law, in which event PROJECT DESIGNER shall retain its records for the time required by such laws.

9.4 No payment made hereunder by CITY to PROJECT DESIGNER, shall be construed as an acceptance by CITY of any work or materials, nor as evidence of satisfactory performance by PROJECT DESIGNER of its obligations under this Contract.

10 INDEMNIFICATION

To the fullest extent of the law, and consistent with Civil Code section 2782.8, PROJECT DESIGNER agrees to defend, indemnify, hold free and harmless the CITY, its elected and appointed officials, officers, agents and employees, at PROJECT DESIGNER's sole expense, from and against any and all claims, demands, actions, suits or other legal proceedings brought against CITY, its elected and appointed officials, officers, agents, and employees to the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the PROJECT DESIGNER, its employees, and/or authorized subcontractors, in performing design professional services pursuant to this Agreement. The defense obligation provided for hereunder shall apply without any advance showing of negligence, recklessness or willful misconduct of the PROJECT DESIGNER, its employees, and/or authorized subcontractors, but shall be required whenever any claim, action, complaint, or suit asserts as its basis the negligence, recklessness, or willful misconduct of PROJECT DESIGNER, its employees, and/or authorized subcontractors, and/or whenever any claim, action, complaint or suit asserts liability against the CITY, its elected and appointed officials, officers, agents, and employees based upon such negligence, recklessness, or willful misconduct, whether or not the PROJECT DESIGNER, its employees, and/or authorized subcontractors are specifically named or otherwise asserted to be liable. Notwithstanding the foregoing, the PROJECT DESIGNER shall not be liable for the defense or indemnification of the CITY for claims, actions, complaints or suits arising out of the sole or active negligence or willful misconduct of the CITY. Further, in no event shall the cost to defend charged to the design professional exceed the design professional's proportionate percentage of fault, unless otherwise specified in Civil Code section 2782.8. This provision shall supersede and replace all other indemnity provisions contained either in the CITY's specifications or PROJECT DESIGNER's Proposal, which shall be of no force and effect.

11 INSURANCE

11.1 PROJECT DESIGNER, at its expense, shall maintain in effect at all times during the performance of work under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 11.8, must be reviewed, and accepted by the City Attorney**.

11.1.1 <u>Workers' Compensation and Employer's Liability</u>

- Workers' Compensation -- coverage as required by the State of California

- Employer's Liability -- $1,000,000.00 each accident
  $1,000,000.00 policy limit bodily injury
  $1,000,000.00 each employee bodily injury by disease

11.1.2 Professional Liability (Errors & Omissions) Insurance*
- $1,000,000 limit on a per occurrence basis

11.1.3 Commercial General Liability
- $1,000,000.00 limit on per occurrence basis
- $2,000,000.00 general aggregate limit

11.1.4 Commercial Automobile Liability
- $1,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

11.2 All of PROJECT DESIGNER's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty (30) calendar days prior to termination, cancellation or reduction of coverage in the policy.

11.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, in the same manner as the named insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The Certificate and endorsements shall state that: "The City of Palmdale, City of Palmdale in its capacity as the Successor Agency to the CRA, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insured".

B. "Severability of Interest" clause.

11.4 Promptly on execution of this Contract, and prior to commencement of any work, PROJECT DESIGNER shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that PROJECT DESIGNER has the required coverage and showing the required named insureds. Within five (5) days of written request from CITY, PROJECT DESIGNER shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

11.5 The requirements as to the types and limits of insurance to be maintained by PROJECT DESIGNER are not intended to and shall not in any manner limit or qualify PROJECT DESIGNER's liabilities and obligations under this Contract.

11.6 Any policy or policies of insurance that PROJECT DESIGNER elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

11.7 All insurance coverages must be maintained throughout the duration of this Contract.

11.8 Acceptable Proof of Insurance:

11.8.1 ACORD Certificate of Insurance listing all coverages, limits, deductibles and insureds; and endorsements for all applicable coverages if agent has authority to issue it; Additional insured Form CG20101185 or CG20100707 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

11.8.2 Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements listing all insurers must be submitted to the City Attorney.

11.8.3 *When professional (E&O) liability coverage is provided on a "claims made basis", PROJECT DESIGNER will continue to renew the insurance for a period of five (5) years after this Agreement expires or is terminated. Such insurance will have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover PROJECT DESIGNER, or its officers, employees, or agents during the time this Agreement was in effect.

11.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time PROJECT DESIGNER fails to maintain the required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

11.10 PROJECT DESIGNER shall require any and all subcontractor's working on its behalf to provide insurance coverages and limits that are based on the scope of work and nature of risk being performed by the subcontractor. Any and all subcontractors working on behalf of PROJECT DESIGNER shall be subject to all other insurance requirements that are stated herein.

Any deviation in this requirement will be PROJECT DESIGNER's sole risk. PROJECT DESIGNER's insurance requirements in Section 11 will not be impacted and/or limited by such deviation.

12 TERMINATION WITHOUT CAUSE

City reserves the right to terminate this Contract or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, PROJECT DESIGNER shall immediately stop all work hereunder, and shall

immediately cause any of its suppliers and sub-consultants to cease such work. PROJECT DESIGNER shall also surrender to CITY all finished or unfinished documents or programs and other materials, which shall be City's property. As compensation in full for services performed to the date of such termination, the PROJECT DESIGNER shall receive an amount equal to the value of the work completed as of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

13 TERMINATION FOR CAUSE

13.1 If the City determines that the PROJECT DESIGNER has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, the City shall give written notice to the PROJECT DESIGNER specifying all defaults to be remedied within thirty (30) days. Such notice shall set forth the basis for the City's dissatisfaction and suggest corrective measures. If, after thirty days, the PROJECT DESIGNER has failed to implement the corrective measures, the City may elect to terminate this Contract, in whole or in part.

13.2 In the event the City terminates this Contract in whole or in part as provided herein above, the City may procure, upon such terms and in such manner, as it may deem appropriate, services similar to those terminated.

13.3 If this Contract is terminated as provided above, the City may require the PROJECT DESIGNER to provide all finished or unfinished documents, data, studies, software, drawings, maps, photographs, reports, etc., prepared by the PROJECT DESIGNER. Upon such termination, the PROJECT DESIGNER shall be paid an amount equal to the value of the services provided and work performed as of the date of termination. Such payment by the City may take into consideration the costs associated with hiring another PROJECT DESIGNER to complete the services. In the event no new PROJECT DESIGNER is employed, the PROJECT DESIGNER shall be paid an amount equal to the value of the work performed. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents when such are delivered to CITY, and to authorized reimbursement expenses.

The above is in addition to any other remedies available by law or equity to the City.

13.4 If, after notice of termination of the Contract under the provisions of this Section 13, it is determined, for any reason, that the PROJECT DESIGNER was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 12.

14 DISPUTE RESOLUTION

All claims, disputes, and other matters in question between CITY and PROJECT DESIGNER arising out of, or relating to this Contract, or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

15 OWNERSHIP OF DOCUMENTS

All documents, including, but not limited to, tracings, drawings, plans, specifications, original mylars, estimates, field notes, investigations, design analysis and studies which are prepared in the performance of this Contract are to be, and remain the property of, CITY. PROJECT DESIGNER shall furnish CITY, upon its request, originals or reproducible or electronic copies of technical specifications and of all other documents listed above. PROJECT DESIGNER shall endorse, by his professional seal, all plans and data furnished by him.

16 RE-USE OF DOCUMENTS

The parties agree the documents, drawings, specifications, and designs, although the property of CITY, are prepared for a specific project and are not intended nor represented by PROJECT DESIGNER to be suitable for re-use for any other project. Any reuse without written verification or adaptation by PROJECT DESIGNER for the specific purpose intended will be at CITY's sole risk and without liability or legal exposure to PROJECT DESIGNER.

17 SUBCONTRACTING, DELEGATION AND ASSIGNMENT

17.1 PROJECT DESIGNER shall not delegate, subcontract or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to PROJECT DESIGNER from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval. Any proposed delegation, assignment or subcontract shall provide a description of the services covered, identification of the proposed assignee, delegee or subcontractor, and an explanation of why and how the same was selected, including the degree of competition involved. Any proposed agreement with an assignee, delegee or subcontractor shall include the following:

A. The amount involved, together with PROJECT DESIGNER's analysis of such cost or price; and

B. A provision requiring that any subsequent modification or amendment shall be subject to the prior written consent of CITY.

C. The requirement to hire only those persons authorized by federal law to work in the United States.

17.2 Any assignment, delegation or subcontract shall be made in the name of PROJECT DESIGNER and shall not bind or purport to bind CITY and shall not release PROJECT DESIGNER from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees, assignees, delegees and subcontractors. No such assignment, delegation or subcontract shall result in any increase in the amount of total compensation payable to PROJECT DESIGNER under this Contract.

18 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

18.1 In performance of this Contract, PROJECT DESIGNER shall not discriminate against any employee, subcontractor, or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation, or age. PROJECT DESIGNER will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, ancestry, sex, national origin, handicap, or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

18.2 The provisions of subsection 18.1 above shall be included in all solicitations or advertisements placed by or on behalf of PROJECT DESIGNER for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of PROJECT DESIGNER and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk’s Office.

19 FINANCIAL INTEREST CERTIFICATION

19.1 PROJECT DESIGNER warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in PROJECT DESIGNER’s firm.

19.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

20 CONFLICT OF INTEREST

20.1 PROJECT DESIGNER stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause PROJECT DESIGNER to be “financial interested” (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

20.2 PROJECT DESIGNER shall not employ any City official or employee to perform any work required pursuant to this Contract.

20.3 If PROJECT DESIGNER is a registered professional engineer or licensed land surveyor and the scope of work requires PROJECT DESIGNER’s recommendation of the actual formula to spread the costs of an assessment district’s improvements, then PROJECT DESIGNER shall not participate in making that recommendation if the additional elements set forth in Government Code section 87100.1(c) apply. Those additional elements are: (1) PROJECT DESIGNER has received income of $250 or more for professional services in connection with any parcel included in the benefit assessment district within 12 months prior to the creation of the district; and (2) the district includes other parcels in addition to those parcels for which PROJECT DESIGNER received the income. In the event a conflict of interest does arise in that context, City shall select a different PROJECT DESIGNER to recommend the actual formula to spread the costs of the assessment district’s improvements and the costs of such services shall be deducted from the compensation to be paid to PROJECT DESIGNER.

20.4 To the extent required by the City Manager/designee, PROJECT DESIGNER shall complete and file with the City Clerk a Form 700 Statement of Economic Interests disclosing any reportable property interests, income, gifts, investments, or business positions.

21 COMPLIANCE WITH LAW

21.1 PROJECT DESIGNER shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If PROJECT DESIGNER uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by PROJECT DESIGNER.

21.2 The law of the state of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

22 NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by

registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

23 ENTIRE CONTRACT AND AMENDMENTS

23.1 This Contract is the complete agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

23.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the work to be performed by PROJECT DESIGNER hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

23.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

24 ATTORNEY'S FEES

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez
Signed: 3/6/2023

Ronda Perez
City Manager

LG
Signed: 2/13/2023

MNS Engineers, Inc.:

Jeff Edwards
Signed: 2/13/2023

Jeff Edwards
Vice President

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38300 Sierra Highway
Palmdale, CA 93550

ADDRESS FOR NOTICE:
MNS Engineers, Inc.
100 E. Thousand Oaks, CA 91360

APPROVE AS TO FORM:

William Patrick Curley III
Signed: 3/2/2023

William P. Curley, III
Interim City Attorney

ATTEST:

Roxanne Faber
Signed: 3/8/2023

Roxanne Faber
Acting City Clerk

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Attached Agreement Checklist and met all requirements

Record of Signing

For
Name
Title

LG

Signed on 2023-02-13 22:38:30 GMT

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DocumentID: ZDUzYjk3ZDQtZj
SigningID: ZWYyMzBiOTctYT
Signing date: 2/13/2023
IP Address: 206.171.111.149
Email: lglidden@cityofpalmdale.org

For
Name
Title

Jeff Edwards

Signed on 2023-02-13 23:10:03 GMT

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DocumentID: ZDUzYjk3ZDQtZj
SigningID: Yjk3MGI5YWItOT
Signing date: 2/13/2023
IP Address: 98.45.248.29
Email: jedwards@mnsengineers.com

For
Name
Title

William Patrick Curley III

Signed on 2023-03-02 18:04:53 GMT

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DocumentID: ZDUzYjk3ZDQtZj
SigningID: MzU0YjY3MzMtNm
Signing date: 3/2/2023
IP Address: 107.131.11.226
Email: wcurley@harperburns.com

For
Name
Title

Ronda Perez

Signed on 2023-03-06 20:14:03 GMT

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DocumentID: ZDUzYjk3ZDQtZj
SigningID: OTliYzU2MDEtZm
Signing date: 3/6/2023
IP Address: 206.171.111.149
Email: rperez@cityofpalmdale.org

For
Name
Title

Roxanne Faber

Signed on 2023-03-08 18:31:09 GMT

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DocumentID: ZDUzYjk3ZDQtZj
SigningID: NTlkZTk2MTktNm
Signing date: 3/8/2023
IP Address: 206.171.111.149
Email: rfaber@cityofpalmdale.org

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City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
CAPITAL IMPROVEMENT PROGRAM DIVISION

DISTRICT: **4**

SUBJECT: **APPROVE SECOND AMENDMENT TO THE AGREEMENT WITH MNS ENGINEERS, INC. FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES FOR PN 795, SAM YELLEN PARK PHASE 2 PROJECT, INCREASING THE AGREEMENT BY $133,640 FOR THE TOTAL NOT TO EXCEED AMOUNT OF $720,208 WITH AN EXTENSION OF SIX MONTHS FOR A TOTAL OF 22 MONTHS**

RECOMMENDATION

Staff recommend that the City Council:

1. Approve Second Amendment to Agreement No. A-8470 with MNS Engineers, Inc. (MNS), for construction management and inspection services for PN 795, Sam Yellen Park Phase 2 project, increasing the agreement by $133,640, for the total not to exceed amount of $720,208 with an extension of six months for a total of 22 months; and,

2. Authorize the City Manager or her designee to execute the Second Amendment to Agreement No. A-8470 with MNS, including minimal and/or non-substantive changes.

BACKGROUND

On August 22, 2023, the City Council awarded and approved Agreement No. A-8470 with MNS for professional services for the Sam Yellen Park Phase 2 project for $535,568 for 16 months. The First Amendment was executed on February 7, 2025, with additional services, extending the contract term 6 months, and increasing the contract price by $51,000 for a revised contract amount not to exceed $586,568. Due to the project work size, existing site condition, and additional work, an outside consultant firm was required. The scope of work includes construction management, quality control, and project inspection.

DISCUSSION

MNS will provide construction inspection services to the City to monitor the contractor's ongoing work. The inspector will prepare punch lists, oversee the work, and ensure quality control.

MNS will also offer construction support, including meetings with the contractor as needed, handling project close-out, managing contractors' claims, and overseeing day-to-day project management activities.

Because of current staff limitations in providing full-time inspection across multiple trades, MNS was selected to assist with these construction inspection services.

FISCAL IMPACT

$133,640; The project is funded through the Measure AV fund. Sufficient funds are budgeted and available in FY 2024-25.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active funds for everyone.

Prepared by:	Leonardo Torres, P.E., Director of Public Works
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Agrmt No. A-8470 Second Amendment with MNS Engineers, Inc.
Agrmt No. A-8470 First Amendment with MNS Engineers, Inc.
Agrmt No. A-8470 with MNS Engineers, Inc.

2ND AMENDMENT TO AGREEMENT A- 8470
BETWEEN THE CITY OF PALMDALE AND MNS ENGINEERS, INC

This 2ND Amendment to Agreement No. A-8470 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and MNS ENGINEERS, INC (hereinafter called "CONSULTANT"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on August 22, 2023 ("Original Agreement") the CITY and CONSULTANT entered into an agreement to provide:

Professional construction support services to PN 795 Yellen Park Phase 2. All work will be performed on a time and material basis. The detailed scope of services is outlined in the attached MNS Engineers proposal - Exhibit "A."

WHEREAS, the parties desire to amend the Original Agreement to:

Task 1 - Public Works Inspection Services
MNS Engineers Inc. will provide part-time public works inspection services to the City to observe the contractor's ongoing construction operation. The inspector will be onsite during construction activities to inspect and verify that the work is constructed in accordance with the City-approved plans and specifications. The inspector's responsibility included uploading daily reports and photos in VPM, punch list oversight, and quality control.
Task 2 - Construction Management Services
MNS will manage project construction. MNS will provide quality control oversight, respond to Requests for Information, review and process Submittals, and support City staff with invoice validation. Assist the City with Change Order Requests for City consideration. Assisting City with Project Close Out, Assisting City with Review of Contractor Claims and day-to-day project management activities. Closeout of project. MNS Engineers will provide guidance regarding their expectations and process preferences when performing these tasks.

Detailed scope is outlined in the attached MNS Engineers proposal, Exhibit "A"

NOW THEREFORE, the parties agree as follows:

Article 1 - Description of Work: The construction inspector shall be at the jobsite 4 hours a day, 5 days a week with 400 hours, and the construction manager with 256 hours. The breakdown of hours is outlined in the attached MNS proposal Exhibit "A."

Article 9 - Compensation: Contract price will be amended to increase the total contract price by One Hundred Thirty-Three and Six Hundred Forty Dollars ($133,640)

Original Contract Amount $535,568
Amendment to Agreement #1 ..... $51,000
Amendment to Agreement #2 ..... $133,640

The revised contract amount is not to exceed Seven Hundred Twenty Thousand Two Hundred and Eight Dollars ($720,208)

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

SIGNATURE AREA

Ronda Perez
City Manager

SIGNATURE AREA

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38250 Sierra Highway
Palmdale, CA 93550

APPROVE AS TO FORM:

SIGNATURE AREA

William P. Curley, III
City Attorney

ATTEST:

SIGNATURE AREA

Roxanne Faber
City Clerk

MNS ENGINEERS, INC:

SIGNATURE AREA

Jeff Edwards
Vice President

ADDRESS FOR NOTICE:
MNS ENGINEERS, INC
4580 E Thousand Oaks Blvd Suite 101
Westlake Village, CA 91362

---------- INTERNAL USE ONLY ----------

- Certificate(s) and Endorsement(s) attached
- Confirmed business name on contract with certificate(s)
- Original contract and previous amendment(s) (if any) are attached
- Attached Agreement Checklist and met all requirements

1ST AMENDMENT TO AGREEMENT A- 8470
BETWEEN THE CITY OF PALMDALE AND MNS ENGINEERS, INC

This 1ST Amendment to Agreement No. A-8470 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and MNS ENGINEERS, INC (hereinafter called "CONSULTANT"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on August 22, 2023 ("Original Agreement") the CITY and CONSULTANT entered into an agreement to provide:

Professional inspection services to the City for Sam Yellen Park Phase 2 (City Project Number 795)

The construction inspector shall observe the Contractor's ongoing construction operations. The Construction Inspector will be onsite during the construction activities to inspect and verify if the work is constructed in accordance with the City approved plans and Specifications.

WHEREAS, the parties desire to amend the Original Agreement to:

1. Article 1, Description of Work: The construction inspector shall be at the jobsite for inspection 4 hours a day, 5 days a week, starting February 17, 2025.
2. Article 4, Contract Term: The term of the contract will be amended to extend up to June 30, 2025 (additional Six (6) months)
3. Article 9, Compensation: Contract price will be amended to increase the total contract price by Fifty-One Thousand Dollars ($51,000)

NOW THEREFORE, the parties agree as follows:

1. Article 1, Description of Work: The construction inspector shall be at the jobsite for inspection 4 hours a day, 5 day a week, starting February 17, 2025.

2. Article 4, Contract Term: The term of the contract will be amended, to extend up to June 30, 2025 (additional Six (6) months)

Original Contract Amount ..... $ 535,568
Amendment to Agreement #1 ..... $ 51,000

The revised contract amount is not to exceed (Five Hundred Eighty-Six Thousand, Five Hundred Sixty-Eight Dollars ($586,568).

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez

Signed: 2/6/2025

Ronda Perez
City Manager

Lee Torres

Signed: 2/6/2025

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38250 Sierra Highway
Palmdale, CA 93550

MNS ENGINEERS, INC:

jeff edwards

Signed: 2/6/2025

Jeff Edwards
Vice President

ADDRESS FOR NOTICE:
MNS ENGINEERS, INC
4580 E. Thousand Oaks Blvd,
Suite 101
Westlake Village, CA 91362

APPROVE AS TO FORM:

William Patrick Curley III

Signed: 2/6/2025

William P. Curley, III
City Attorney

ATTEST:

Roxanne Faber

Signed: 2/7/2025

Roxanne Faber
City Clerk

---------- INTERNAL USE ONLY ----------

- Certificate(s) and Endorsement(s) attached
- Confirmed business name on contract with certificate(s)
- Original contract and previous amendment(s) (if any) are attached
- Attached Agreement Checklist and met all requirements

Record of Signing

For
Name
Title

Lee Torres

Signed on 2025-02-06 01:35:49 GMT

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DocumentID: 02z0yPV7Dljswl0GVUXWvJ
SigningID: 02z0yPV71gJNgQyWGLPo5e
Signing date: 2/6/2025
IP Address: 206.171.111.149
Email: ltorres@cityofpalmdaleca.gov

For
Name
Title

jeff edwards

Signed on 2025-02-06 01:57:44 GMT

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SigningID: 02z0ywpsHiezMp9zKWnxBB
Signing date: 2/6/2025
IP Address: 98.45.248.29
Email: jedwards@mnsengineers.com

For
Name
Title

william Patrick Curley III

Signed on 2025-02-06 17:16:51 GMT

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SigningID: 02z1LVJcdtSJ8kmxMZu0JW
Signing date: 2/6/2025
IP Address: 107.131.11.226
Email: wcurley@harperburns.com

For
Name
Title

Ronda Perez

Signed on 2025-02-06 23:37:19 GMT

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DocumentID: 02z0yPV7Dljswl0GVUXWvJ
SigningID: 02z1UqDUQTGnAHbRamSVV0
Signing date: 2/6/2025
IP Address: 108.147.153.1
Email: rperez@cityofpalmdale.org

For
Name
Title

Roxanne Faber

Signed on 2025-02-07 22:04:55 GMT

Secured by Concord™
DocumentID: 02z0yPV7Dljswl0GVUXWvJ
SigningID: 02z21ue1ZpUnMcrjQ7Mnff
Signing date: 2/7/2025
IP Address: 104.32.101.219
Email: rfaber@cityofpalmdale.org

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AGREEMENT NO. A-8470
CONTRACT FOR CONSULTANT SERVICES
BETWEEN THE CITY OF PALMDALE AND MNS ENGINEERS, INC

THIS CONTRACT FOR CONSULTANT SERVICES ("Contract" herein) is made and entered into by and between the City of Palmdale a public body corporate and politic, (hereinafter called "CITY") and MNS ENGINEERS, INC (hereinafter called "CONSULTANT"). This Contract shall become effective on the date of the last signatory.

RECITALS

WHEREAS**,** City desires to engage CONSULTANT to provide certain consultant services; and

WHEREAS, CONSULTANT represents that CONSULTANT has the expertise and is qualified to perform the services described in this Contract. And, if required, is duly registered under the laws of the State of California; and

WHEREAS, CONSULTANT desires to accept such engagement.

NOW, THEREFORE, the parties agree as follows:

1 DESCRIPTION OF WORK

1.1 The City hereby engages CONSULTANT, and CONSULTANT accepts such engagement, to provide the following services:

MNS Engineers will provide professional Public Works inspection services to the City for Sam Yellen Park Phase 2 (City Project Number 795).

The Construction Inspector shall observe the ongoing construction operations of the Contractor. The Construction Inspector will be onsite during the construction activities to inspect and verify if the work is constructed in accordance with the City approved plans and specifications.

The Construction Inspector's responsibilities includes but not limited to:
1. Full Time inspection of contractor's work.
2. Inspection Reports
3. Verify materials incorporated into the project meet contract requirements.
4. Photo documentation
5. Punchlist oversight
6. Assist the City with Contractor's to process Invoices, Submittals, RFI's and Change Order Request
7. Assist the City with punch list and closeout process.

The CONSULTANT shall not accept any change of scope, or change in contract

provisions, unless issued in writing, as a Change Order, or amendment to this Agreement and signed by CITY.

CONSULTANT shall perform and complete all such work and services in a manner satisfactory to CITY.

1.2 Project deliverables shall be reviewed and approved by CITY to determine acceptable completion. CITY shall have the right to review and inspect the work during the course of its performance at such times as may be specified by CITY.

1.3 CONSULTANT shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

1.4 CITY shall provide to CONSULTANT, without charge, all data, program information, including reports, records, maps, and other information, now in CITY's possession, which may facilitate the timely performance of the work.

2 CITY PROJECT MANAGER

To provide the services required by this Contract, CONSULTANT shall act under the authority and approval of a Project Manager appointed by CITY. The City Project Manager will oversee the work under this Contract, assist CONSULTANT with any necessary information, audit billings, and approve payments. CONSULTANT shall channel reports, deliverables, and special requests through the City Project Manager.

3 CONSULTANT'S KEY PERSONNEL

CONSULTANT's Team and Key Personnel are as follows:

MNS Engineers shall use only those employees, and consultants listed below:
Chris Cox - Public Works Inspector

This Consultant Services Contract has been awarded to CONSULTANT based on its representation that those personnel and subcontractors listed above will perform the portions of the work listed herein. CONSULTANT shall not deviate nor substitute any of these team members without prior written approval by CITY.

4 CONTRACT TERM

The term of this contract is Sixteen (16) Months, commencing on the effective date.

5 TAXES

5.1 CONSULTANT shall pay all sales, consumer, use, and other similar taxes required to be paid by CONSULTANT in accordance with state and local laws.

5.2 CONSULTANT is an independent contractor and shall have no power or authority to incur any debt, obligation, or liability on behalf of CITY. No person employed by CONSULTANT or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

5.3 CONSULTANT shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

6 PATENT FEES AND ROYALTIES

CONSULTANT shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the work or the incorporation in the work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified by CITY for use in the performance of the work and if, to the actual knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by CITY in the contract documents. CONSULTANT shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, product or device not specified by CITY, and shall defend all such claims in connection with any alleged infringement of such rights.

7 STANDARDS OF PERFORMANCE

CONSULTANT shall be responsible for the completeness and accuracy of its services and work and documents resulting there from, and CITY shall not be responsible for discovering deficiencies therein. CONSULTANT shall correct any such deficiencies or errors without additional compensation and without cost to CITY, except to the extent any such deficiency is directly attributable to deficiencies in CITY -furnished information.

8 CONSULTANT’S PERSONNEL

8.1 All services required under this Contract shall be performed by CONSULTANT, or under CONSULTANT’S direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

8.2 CONSULTANT shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

8.3 CONSULTANT shall be responsible for payment of all CONSULTANT's employees' and subcontractor's wages and benefits and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

8.4 CONSULTANT shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from CONSULTANT's acts or omissions with respect to any liability, damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

9 COMPENSATION

9.1 For all of work and services including the various phases of tasks as described in Section 1, CITY shall pay to CONSULTANT an amount not to exceed the sum of Five Hundred Thirty Five Thousand Five Hundred Sixty Eighty dollars ($535568), payable as follows:

All work will be performed on a time-and-material basis to an approved budget limit as shown in Exhibit A. Approved budget will not be exceeded without City direction and approval. Actual costs shall be billed to the City on an actual time spent. City Staff will provide guidance regarding their expectation and process preferences in performing tasks.

The Contract Price is CONSULTANT'S estimate of its charges for all of the services, including all labor, equipment, material, subcontractor and reimbursable costs, to be provided under this Agreement. Progress payments shall be made on a time and material basis. Final payment shall be made upon completion of all services and City acceptance of all deliverables, not-to-exceed the Contract Price.

9.2 CONSULTANT shall perform no work in excess of the total contract price without prior written approval of CITY. Total contract price includes expenses related to travel to and from CITY to meet with City and to appear, if so required, before City Council or any other board or commission of CITY.

9.3 CONSULTANT shall maintain adequate records and shall permit inspection and audit by CITY of CONSULTANT's charges under this Contract. CONSULTANT shall make such records available to CITY during normal business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available only to CITY and any specified public agencies. Such records shall be maintained by CONSULTANT for one (1) year following completion of the work under this Contract unless a longer period of time is required by state or federal law, in which event CONSULTANT shall retain its records for the time required by such laws.

9.4 No payment made hereunder by CITY to CONSULTANT, shall be construed as an acceptance by CITY of any work or materials, nor as evidence of satisfactory performance by CONSULTANT of its obligations under this Contract.

10 INDEMNIFICATION

To the fullest extent permitted by law, CONSULTANT and any contractors or subcontractors working on its behalf agree to indemnify CITY, its officers, employees, agents and elected and appointed boards (hereinafter “Indemnified Parties”) for any loss, claim, demand, cause of action, cost, expense, damage, obligation or liability which arises out of or is in any way connected with the performance of any work under this agreement, including any acts or omissions, willful misconduct or negligent conduct, whether active or passive, on the part of CONSULTANT, its contractors or subcontractors, and regardless of any acts, omissions or negligence (whether active or passive) of any person or entity indemnified hereunder. At their own expense, CONSULTANT and, as applicable, any contractors or subcontractors working on its behalf, shall defend any suit, claim or action against the Indemnified Parties founded upon such loss, claim, demand, cause of action, cost, expense, damage, obligation or liability. CONSULTANT shall ensure that the contract of any contractor or subcontractor working under this agreement contain an indemnity agreement, requiring the contractor or subcontractor to indemnify and defend the Indemnified Parties pursuant the terms set forth above. CONSULTANT shall indemnify the Indemnified Parties, and save it harmless from any and all loss, damage, costs, expenses and attorney's fees suffered or incurred on account of any breach of the aforesaid obligations and covenants, and any other provision or covenant of this agreement.

11 INSURANCE

11.1 CONSULTANT, at its expense, shall maintain in effect at all times during the performance of work under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed “A” or better in the Best’s Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 11.8, must be reviewed and accepted by the City Attorney**.

11.1.1 <u>Workers’ Compensation and Employer’s Liability</u>

- Workers’ Compensation—coverage as required by the State of California
- Employer’s Liability:
  $1,000,000.00 each accident
  $1,000,000.00 policy limit bodily injury
  $1,000,000.00 each employee bodily injury by disease

11.1.2 <u>Professional Liability (Errors & Omissions) Insurance*</u>

- $1,000,000 limit on a per occurrence basis

11.1.3 Commercial General Liability

- $1,000,000.00 limit on a per occurrence basis
- $2,000,000.00 general aggregate limit

11.1.4 Commercial Automobile Liability

- $1,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

11.2 All of CONSULTANT's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty- (30) calendar days prior to termination, cancellation or reduction of coverage in the policy.

11.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, in the same manner as the named insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The certificate and endorsements shall state: "The City of Palmdale, the Successor Agency of the Community Redevelopment Agency of the City of Palmdale, Palmdale Civic Authority, Industrial Development Authority of the City of Palmdale, Palmdale Airport Authority, their officers, agents, employees and volunteers are named as additional insured's."

B. "Severability of Interest" clause.

11.4 Promptly on execution of this Contract, and prior to commencement of any work, CONSULTANT shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that CONSULTANT has the required coverage and showing the required named insureds. Within five (5) days of written request from CITY, CONSULTANT shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

11.5 The requirements as to the types and limits of insurance to be maintained by CONSULTANT are not intended to and shall not in any manner limit or qualify CONSULTANT's liabilities and obligations under this Contract.

11.6 Any policy or policies of insurance that CONSULTANT elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

11.7 All insurance coverage must be maintained throughout the duration of this Contract.

11.8 Acceptable Proof of Insurance:

11.8.1 ACORD Certificate of Insurance listing all coverages, limits, deductibles and insureds; and endorsements for all applicable coverages if agent has authority to issue it; Additional insured Form CG20101185 or CG20100707 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

11.8.2 Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements listing all insurers must be submitted to the City Attorney.

11.8.3 *When professional (E&O) liability coverage is provided on a “claims made basis”, CONSULTANT will continue to renew the insurance for a period of five (5) years after this Agreement expires or is terminated. Such insurance will have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover CONSULTANT, or its officers, employees, or agents during the time this Agreement was in effect.

11.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time CONSULTANT fails to maintain the required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

11.10 CONSULTANT shall require any and all subcontractor's working on its behalf to provide insurance coverages and limits that are based on the scope of work and nature of risk being performed by the subcontractor. Any and all subcontractors working on behalf of CONSULTANT shall be subject to all other insurance requirements that are stated herein.

Any deviation in this requirement will be CONSULTANT's sole risk. CONSULTANT's insurance requirements in Section 11 will not be impacted and/or limited by such deviation.

12 TERMINATION WITHOUT CAUSE

CITY reserves the right to terminate this Contract or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, CONSULTANT shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and sub-consultants to cease such work. CONSULTANT shall also surrender to CITY all finished or unfinished documents or programs and other materials, which shall be City’s property. As compensation in full for services performed to the date of such termination, the CONSULTANT shall receive an amount equal to the value of the work completed as of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event

shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

13 TERMINATION FOR CAUSE

13.1 If the City determines that the CONSULTANT has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, the City shall give written notice to the CONSULTANT specifying all defaults to be remedied within thirty (30) days. Such notice shall set forth the basis for the City's dissatisfaction and suggest corrective measures. If, after thirty days, the CONSULTANT has failed to implement the corrective measures, the City may elect to terminate this Contract, in whole or in part.

13.2 In the event the City terminates this Contract in whole or in part as provided herein above, the City may procure, upon such terms and in such manner, as it may deem appropriate, services similar to those terminated.

13.3 If this Contract is terminated as provided above, the City may require the CONSULTANT to provide all finished or unfinished documents, data, studies, software, drawings, maps, photographs, reports, etc., prepared by the CONSULTANT. Upon such termination, the CONSULTANT shall be paid an amount equal to the value of the services provided and work performed as of the date of termination. Such payment by the City may take into consideration the costs associated with hiring another CONSULTANT to complete the services. In the event no new CONSULTANT is employed, the CONSULTANT shall be paid an amount equal to the value of the work performed. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to both completed work and work in progress, to complete and incomplete documents when such are delivered to CITY, and to authorized reimbursement expenses.

The above is in addition to any other remedies available by law or equity to the City.

13.4 If, after notice of termination of the Contract under the provisions of this Section 13, it is determined, for any reason, that CONSULTANT was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 12.

14 DISPUTE RESOLUTION

All claims, disputes, and other matters in question between CITY and CONSULTANT arising out of, or relating to this Contract, or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

15 OWNERSHIP OF DOCUMENTS

All documents, including, but not limited to, research, field notes, investigations, analysis, and studies which are prepared in the performance of this Contract are to

be, and remain the property of CITY. CONSULTANT shall furnish CITY, upon its request, originals or reproducible or electronic copies of reports, studies and of all other documents listed above.

16 SUBCONTRACTING, DELEGATION AND ASSIGNMENT

16.1 CONSULTANT shall not delegate, subcontract or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to CONSULTANT from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval. Any proposed delegation, assignment or subcontract shall provide a description of the services covered, identification of the proposed assignee, delegates or subcontractor, and an explanation of why and how the same was selected, including the degree of competition involved. Any proposed agreement with an assignee, delegates or subcontractor shall include the following:

A. The amount involved, together with CONSULTANT's analysis of such cost or price; and

B. A provision requiring that any subsequent modification or amendment shall be subject to the prior written consent of CITY.

C. The requirement to hire only those persons authorized by federal law to work in the United States.

16.2 Any assignment, delegation or subcontract shall be made in the name of CONSULTANT and shall not bind or purport to bind CITY and shall not release CONSULTANT from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees, assignees, delegates and subcontractors. No such assignment, delegation or subcontract shall result in any increase in the amount of total compensation payable to CONSULTANT under this Contract.

17 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

17.1 In performance of this Contract, CONSULTANT shall not discriminate against any employee, subcontractor, or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation, or age. CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

17.2 The provisions of subsection 17.1 above shall be included in all solicitations or advertisements placed by or on behalf of CONSULTANT for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of CONSULTANT and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

18 FINANCIAL INTEREST CERTIFICATION

18.1 CONSULTANT warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in CONSULTANT's firm.

18.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

19 CONFLICT OF INTEREST

19.1 CONSULTANT stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause CONSULTANT to be "financial interested" (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

19.2 CONSULTANT shall not employ any City official or employee to perform any work required pursuant to this Contract.

19.3 If CONSULTANT is a registered professional engineer or licensed land surveyor and the scope of work requires CONSULTANT'S recommendation of the actual formula to spread the costs of an assessment district's improvements, then CONSULTANT shall not participate in making that recommendation if the additional elements set forth in Government Code section 87100.1(c) apply. Those additional elements are: (1) CONSULTANT has received income of $250 or more for professional services in connection with any parcel included in the benefit assessment district within 12 months prior to the creation of the district; and (2) the district includes other parcels in addition to those parcels for which CONSULTANT received the income. In the event a conflict of interest does arise in that context, City shall select a different CONSULTANT to recommend the actual formula to spread the

costs of the assessment district's improvements and the costs of such services shall be deducted from the compensation to be paid to CONSULTANT.

19.4 To the extent required by the City Manager/designee, CONSULTANT shall complete and file with the City Clerk a Form 700 Statement of Economic Interests disclosing any reportable property interests, income, gifts, investments, or business positions.

20 COMPLIANCE WITH LAW

20.1 CONSULTANT shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If CONSULTANT uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by CONSULTANT.

20.2 The law of the state of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

21 NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

22 ENTIRE CONTRACT AND AMENDMENTS

22.1 This Contract is the complete agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

22.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the work to be performed by CONSULTANT hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

22.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

23 ATTORNEY'S FEES

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez

Signed: 8/21/2023

Ronda Perez.
City Manager

LG

Signed: 8/15/2023

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38250 Sierra Highway
Palmdale, CA 93550

MNS ENGINEERS, INC:

Jeff Edwards

Signed: 8/16/2023

Jeff Edwards
Vice President

ADDRESS FOR NOTICE:
MNS ENGINEERS, INC
4580 E. Thousand Oaks Blvd., Ste 101
Westlake Village, CA 91362

APPROVE AS TO FORM:

William Patrick Curley III

Signed: 8/16/2023

William P. Curley, III
Interim City Attorney

ATTEST:

Roxanne Faber

Signed: 8/22/2023

Roxanne Faber
Acting City Clerk

Exhibit A

MNS

Committed to improving people's lives every day

July 5, 2023

Hamed Hashemian, PE
Deputy Director of Public Works
City of Palmdale
38250 Sierra Highway
Palmdale, CA 93550

SUBJECT: Public Works Inspection Services
Phase II Sam Yellen Park Construction – Project No. 795

Dear Hamed:

Thank you for the opportunity to submit a proposal for construction support services of Phase II of Yellen Park. We, at MNS Engineers, are excited to be considered for this project and are committed to providing our expertise and services to support the City's vision.

Based on our discussions with City Staff, we have developed a comprehensive proposal outlining our approach, methodology, and the services we will provide throughout the construction process. Our proposal focuses on delivering a high-quality park that meets the community's needs and aligns with the City's goals.

Our team of experienced professionals will work closely with the City to ensure the successful completion of Phase II. We will collaborate closely with City Staff, adhering to project schedule and budgetary constraints. Our commitment to clear and open communication will enable us to address any challenges effectively and ensure a smooth construction process.

Project Understanding

The Sam Yellen Park Phase II Project (Phase II Project), consisting of the 12 acres of the existing undeveloped Park site, was awarded to RC Becker on February 15, 2023, for just over $17.5 million dollars. We understand that construction is still in the early stages and that the Contractor has raised concerns regarding differing site conditions. Addressing differing site conditions is a common challenge in construction projects, and it requires careful evaluation and problem-solving. As an experienced construction management team of professionals, we have dealt with similar issues in the past and are equipped to assist in finding effective solutions.

The Phase II Project, includes the build out of the park site with various amenities that include a central plaza with a 1,888 SF community center/ restroom buildings, a separate prefabricated restroom building, shaded and unshaded picnic areas with tables, futsal courts, fitness stations, a large playground area, illuminated pedestrian walkways, water-efficient plantings, drought-tolerant groundcovers, preserved Joshua trees to match the local desert climate and habitat, and natural grass and artificial turf areas with topographic relief.

Access and infrastructure improvements include a modified roundabout entry accessible from Avenue S that connects to the existing parking lot and provides convenient drop-off zone, a new 84-space parking lot accessible from Hillcrest Drive, a detention basin, a new water service, sewer, and storm drain improvements, as well as irrigation and land scape improvements to the original park site.

100 E. Thousand Oaks Boulevard | Suite 105
Thousand Oaks, CA 91360
Main: 805 648 4840
WWW.MNSENGINEERS.COM

› CIVIL ENGINEERING
› CONSTRUCTION MANAGEMENT
› LAND SURVEYING

All work will be performed on a time-and-materials basis to an approved budget limit. Approved budgets will not be exceeded without City direction and approval. City Staff will provide guidance regarding their expectations and process preferences in performing these tasks. For all TASKS, MNS will provide required tools, templates, and summary documents for the City.

MNS will perform the following tasks:

Task 1 - Public Works Inspection

MNS will provide public works inspection services to the City to observe the ongoing construction operations of the Contractor. The Inspector will be onsite during construction activities to inspect and verify the work is constructed in accordance with the City approved plans and specifications. The Construction Inspector, in addition to performing inspection duties, will perform the Project Management Services listed in Task 1b. The Construction Inspector's responsibilities will include:

- Full Time inspection of contractor's work.
- Inspection reports.
- Verify materials incorporated into the project meet contract requirements.
- Photo documentation
- Punchlist oversight.
- Assist City with Contractor submittals, RFI's, Change Order Requests for City consideration.

Fee Compensation

MNS proposes to provide Public Works Inspection as outlined in the Scope of Work on a time and materials not-to-exceed basis. The estimated cost of services is shown in the attached Staffing Plan in accordance with the approved plans, standard specifications, and construction schedule. Actual costs billed to the City will be on actual time spent; the budget will require prior written approval from the City if it exceeds the approved budget total. Based upon our project understanding and estimated number of support hours needed to ensure a quality project, we initiate the work in an expeditious manner, working within the remaining contract authority MNS has with the City totaling $58k.

Based upon the staffing plan MNS estimates the initial fee of $58k will take the work through approximately August 18, 2023, with a total fee through the current contractor's schedule project completion for the work which is expected to end in November 2024 to be $535,568.

Conclusion

We look forward to working with the City of Palmdale to complete this project. Please feel free to contact Robert Newman with any questions you may have about our proposal at 661-510-0111 or RNewman@mnsengineers.com or Jeff Edwards at (805)697-1401 or JEdwards@mnsengineers.com.

Sincerely,
MNS Engineers, Inc.

Jeff Edwards Vice President
Government Services Division

100 E. Thousand Oaks Boulevard | Suite 105
Thousand Oaks, CA 91360
Main: 805 648 4840
WWW.MNSENGINEERS.COM

› CIVIL ENGINEERING
› CONSTRUCTION MANAGEMENT
› LAND SURVEYING

Yellen Park - Project Management / Public Works Inspection

Cost Proposal

	Monthy Staffing Hours					Project Completion Total Cost (17 months)
	Principal in Charge	Senior Project Manager	Senior Public Works Inspector	MNS Resource Hours	MNS Resource Costs	Total Costs
Task Descriptions	$310	$250	$177			
Task 1a. Public Works Inspection						
Public Works Inspection (40 hrs week - 17 months)			172	172	$30,444	$517,548
PWI Oversight / Supprot PWI (4 hours mnth - 17 mnths)	1	3		4	$1,060	$18,020
Total Monthly Staff Hours	1	3	172	176 Hours	$31,504	$535,568
Subtotal Monthly Staff Costs	$310	$750	$30,444			
						$535,568

---------- INTERNAL USE ONLY ----------

- Certificate(s) and Endorsement(s) attached
- Confirmed business name on contract with certificate(s)
- Attached Agreement Checklist and met all requirements

Record of Signing

For
Name
Title

LG

Signed on 2023-08-15 23:53:00 GMT

Secured by Concord™
DocumentID: YzhjZTZlM2QtMT
SigningID: ZTdiOTBlMGQtMz
Signing date: 8/15/2023
IP Address: 206.171.111.149
Email: lglidden@cityofpalmdale.org

For
Name
Title

Jeff Edwards

Signed on 2023-08-16 00:53:48 GMT

Secured by Concord™
DocumentID: YzhjZTZlM2QtMT
SigningID: ZTljNzYyYTktMD
Signing date: 8/16/2023
IP Address: 98.45.248.29
Email: jedwards@mnsengineers.com

For
Name
Title

William Patrick Curley III

Signed on 2023-08-16 15:34:33 GMT

Secured by Concord™
DocumentID: YzhjZTZlM2QtMT
SigningID: NGVkMGFkM2EtYj
Signing date: 8/16/2023
IP Address: 107.131.11.226
Email: wcurley@harperburns.com

For
Name
Title

Ronda Perez

Signed on 2023-08-21 22:55:32 GMT

Secured by Concord™
DocumentID: YzhjZTZlM2QtMT
SigningID: MjczNmJhMjMtZW
Signing date: 8/21/2023
IP Address: 166.199.151.74
Email: rperez@cityofpalmdale.org

For
Name
Title

Roxanne Faber

Signed on 2023-08-22 16:37:41 GMT

Secured by Concord™
DocumentID: YzhjZTZlM2QtMT
SigningID: ZjViZjUzZjYtOW
Signing date: 8/22/2023
IP Address: 206.171.111.149
Email: rfaber@cityofpalmdale.org

concord™
Where agreements happen.

Signed with www.concordnow.com

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 7/31/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Risk Strategies Company
2040 Main Street, Suite 450
Irvine, CA 92614

www.risk-strategies.com CA DOI License No. 0F06675

CONTACT NAME: Risk Strategies Company
PHONE (A/C, No, Ext): 949-242-9240 **FAX (A/C, No):**
E-MAIL ADDRESS: syoung@risk-strategies.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Sentinel Insurance Company, Ltd.	11000
INSURER B : Hartford Fire Insurance Company	19682
INSURER C : Travelers Casualty and Surety Co of America	31194
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
MNS Engineers, Inc.
201 N. Calle Cesar Chavez, Suite 300
Santa Barbara CA 93103

COVERAGES **CERTIFICATE NUMBER:** 75544602 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	✓ **COMMERCIAL GENERAL LIABILITY** ☐ CLAIMS-MADE ✓ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ✓ PRO-JECT ☐ LOC ☐ OTHER:	✓		72SBWBG3262	6/14/2023	6/14/2024	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
B	**AUTOMOBILE LIABILITY** ✓ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ✓ HIRED AUTOS ONLY ✓ NON-OWNED AUTOS ONLY	✓		72UEGCK5894	6/14/2023	6/14/2024	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
A	✓ **UMBRELLA LIAB** ✓ OCCUR **EXCESS LIAB** ☐ CLAIMS-MADE ☐ DED ✓ RETENTION $ 10,000			72SBWBG3262	6/14/2023	6/14/2024	EACH OCCURRENCE	$ 10,000,000
							AGGREGATE	$ 10,000,000
								$
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N ☐ **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		72WEGAX1RMA	6/14/2023	6/14/2024	✓ PER STATUTE ☐ OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
C	Professional Liability			107272696	6/14/2023	6/14/2024	Per Claim: $5,000,000 Aggregate: $5,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Projects as on file with the insured including but not limited to Engineering Services.
The City of Palmdale, Successor Agency to the Community Redevelopment Agency of the City of Palmdale, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, and Airport Authority, their officers, agents, employees and volunteers are named as additional insureds and primary/non-contributory clause applies to the general and auto liability policies. Umbrella Liability follows form to the general, auto & employer's liability policies. The above policies contain a 30-day notice provision for non-renewal and cancellation, 10-day notice for non-payment of premium.

CERTIFICATE HOLDER

City of Palmdale
Dept of Public Works
Attn: Lynn Glidden, Director of Public Works
38250 Sierra Hwy.
Palmdale CA 93550

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
RSC Insurance Brokerage

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DESIGN PROFESSIONAL BLANKET ADDITIONAL INSURED NOTICE - BUSINESS LIABILITY COVERAGE FORM

Thank you for being a customer of The Hartford.

This Notice is being provided to highlight the following important provisions included in your Business Liability Coverage Form, SS 00 08 04 05.

I. ADDITIONAL INSUREDS WHEN REQUIRED BY WRITTEN CONTRACT, WRITTEN AGREEMENT OR PERMIT

Please be advised that your Business Liability Coverage Form, SS 00 08 04 05 contains the following provisions in Section **C. WHO IS AN INSURED**:

6. Additional Insureds When Required By Written Contract, Written Agreement Or Permit

The person(s) or organization(s) identified in Paragraphs **a**. through **f**. below are additional insureds when you have agreed, in a written contract, written agreement or because of a permit issued by a state or political subdivision, that such person or organization be added as an additional insured on your policy, provided the injury or damage occurs subsequent to the execution of the contract or agreement, or the issuance of the permit.

A person or organization is an additional insured under this provision only for that period of time required by the contract, agreement or permit.

However, no such person or organization is an additional insured under this provision if such person or organization is included as an additional insured by an endorsement issued by us and made a part of this Coverage Part, including all persons or organizations added as additional insureds under the specific additional insured coverage grants in Section **F**. - Optional Additional Insured Coverages.

. . .

d. Architects, Engineers Or Surveyors

(1) Any architect, engineer, or surveyor, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

(a) In connection with your premises; or

(b) In the performance of your ongoing operations performed by you or on your behalf.

(2) With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or the failure to render any professional services by or for you, including:

(a) The preparing, approving, or failure to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, designs or drawings and specifications; or

(b) Supervisory, inspection, architectural or engineering activities.

. . .

f. Any Other Party

(1) Any other person or organization who is not an insured under Paragraphs **a**. through **e**. above, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

(a) In the performance of your ongoing operations;

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(b) In connection with your premises owned by or rented to you; or

(c) In connection with "your work" and included within the "products-completed operations hazard", but only if:

(i) The written contract or written agreement requires you to provide such coverage to such additional insured; and

(ii) This Coverage Part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".

(2) With respect to the insurance afforded to these additional insureds, this insurance does not apply to:

"Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

(a) The preparing, approving, or failure to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, designs or drawings and specifications; or

(b) Supervisory, inspection, architectural or engineering activities.

Please be advised that if SS 51 13 Exclusion - Engineers, Architects Or Surveyors Professional Liability - California and SS 51 14 Additional Insured Provisions - California are on the Policy, the above-referenced Subparagraph **(2)** of Paragraph **d. Architects, Engineers Or Surveyors** and Subparagraph **(2)** of Paragraph **f. Any Other Party** which contains professional liability exclusionary language has been amended. Please see SS 51 13 and SS 51 14 for details.

II. OTHER INSURANCE - PRIMARY AND NON-CONTRIBUTORY TO OTHER INSURANCE WHEN REQUIRED BY CONTRACT

Please be advised that your Business Liability Coverage Form, SS 00 08 04 05 contains the following condition in Section **E. LIABILITY AND MEDICAL EXPENSES GENERAL CONDITIONS**:

7. Other Insurance

If other valid and collectible insurance is available for a loss we cover under this Coverage Part, our obligations are limited as follows:

a. Primary Insurance

This insurance is primary except when **b.** below applies. If other insurance is also primary, we will share with all that other insurance by the method described in **c.** below.

b. Excess Insurance

This insurance is excess over any of the other insurance, whether primary, excess, contingent or on any other basis:

. . .

(6) When You Are Added As An Additional Insured To Other Insurance

That is other insurance available to you covering liability for damages arising out of the premises or operations, or products and completed operations, for which you have been added as an additional insured by that insurance; or

(7) When You Add Others As An Additional Insured To This Insurance

That is other insurance available to an additional insured.

However, the following provisions apply to other insurance available to any person or organization who is an additional insured under this Coverage Part:

(a) Primary Insurance When Required By Contract

This insurance is primary if you have agreed in a written contract, written agreement or permit that this insurance be primary. If other insurance is also primary, we will share with all that other insurance by the method described in **c.** below.

(b) Primary And Non-Contributory To Other Insurance When Required By Contract

If you have agreed in a written contract, written agreement or permit that this insurance is primary and non-contributory with the additional insured's own insurance, this insurance is primary and we will not seek contribution from that other insurance.

Paragraphs **(a)** and **(b)** do not apply to other insurance to which the additional insured has been added as an additional insured.

III. TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

Please be advised that your Business Liability Coverage Form, SS 00 08 04 05 contains the following condition in Section **E. LIABILITY AND MEDICAL EXPENSES GENERAL CONDITIONS:**

8. Transfer Of Rights Of Recovery Against Others To Us

a. Transfer Of Rights Of Recovery

If the insured has rights to recover all or part of any payment, including Supplementary Payments, we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them. This condition does not apply to Medical Expenses Coverage.

b. Waiver Of Rights Of Recovery (Waiver Of Subrogation)

If the insured has waived any rights of recovery against any person or organization for all or part of any payment, including Supplementary Payments, we have made under this Coverage Part, we also waive that right, provided the insured waived their rights of recovery against such person or organization in a contract, agreement or permit that was executed prior to the injury or damage.

Please be advised that this Notice is not a Policy form and does not grant or alter coverage, or change any terms or conditions of the Policy. Please be sure to read your Policy carefully including all endorsements attached to your Policy. If there is any conflict between this Notice and the Policy, the provisions of the Policy will apply.

Should you have any questions, please contact your insurance agent, broker or you may contact us directly.

We appreciate your business and look forward to being of continued service to you.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

COMMERCIAL AUTOMOBILE BROAD FORM ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

To the extent that the provisions of this endorsement provide broader benefits to the "insured" than other provisions of the Coverage Form, the provisions of this endorsement apply.

1. BROAD FORM INSURED

Paragraph .1. - WHO IS AN INSURED - of Section II - Liability Coverage is amended to add the following:

d. Subsidiaries and Newly Acquired or Formed Organizations

The Named Insured shown in the Declarations is amended to include:

(1) Any legal business entity other than a partnership or joint venture, formed as a subsidiary in which you have an ownership interest of more than 50% on the effective date of the Coverage Form. However, the Named Insured does not include any subsidiary that is an "insured" under any other automobile policy or would be an "insured" under such a policy but for its termination or the exhaustion of its Limit of Insurance.

(2) Any organization that is acquired or formed by you and over which you maintain majority ownership. However, the Named Insured does not include any newly formed or acquired organization:

(a) That is a partnership or joint venture,

(b) That is an "insured" under any other policy,

(c) That has exhausted its Limit of Insurance under any other policy, or

(d) 180 days or more after its acquisition or formation by you, unless you have given us notice of the acquisition or formation.

Coverage does not apply to "bodily injury" or "property damage" that results from an "accident" that occurred before you formed or acquired the organization.

e. Employees as Insureds

(1). Any "employee" of yours while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

f. Lessors as Insureds

(1). The lessor of a covered "auto" while the "auto" is leased to you under a written agreement if:

(a) The agreement requires you to provide direct primary insurance for the lessor and

(b) The "auto" is leased without a driver.

Such a leased "auto" will be considered a covered "auto" you own and not a covered "auto" you hire.

g. Additional Insured if Required by Contract

(1) When you have agreed, in a written contract or written agreement, that a person or organization be added as an additional insured on your business auto policy, such person or organization is an "insured", but only to the extent such person or organization is liable for "bodily injury" or "property damage" caused by the conduct of an "insured" under paragraphs a. or b. of Who Is An Insured with regard to the ownership, maintenance or use of a covered "auto."

The insurance afforded to any such additional insured applies only if the "bodily injury" or "property damage" occurs:

(a) During the policy period, and

(b) Subsequent to the execution of such written contract, and

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75544602 | 23-24 GL-AL-UL-WC-PL | Sherry Young | 7/31/2023 8:02:04 AM (PST) | Page 5 of 9

(c) Prior to the expiration of the period of time that the written contract requires such insurance be provided to the additional insured.

(2) How Limits Apply

If you have agreed in a written contract or written agreement that another person or organization be added as an additional insured on your policy, the most we will pay on behalf of such additional insured is the lesser of:

(a) The limits of insurance specified in the written contract or written agreement; or

(b) The Limits of Insurance shown in the Declarations.

Such amount shall be a part of and not in addition to Limits of Insurance shown in the Declarations and described in this Section.

(3) Additional Insureds Other Insurance

If we cover a claim or "suit" under this Coverage Part that may also be covered by other insurance available to an additional insured, such additional insured must submit such claim or "suit" to the other insurer for defense and indemnity.

However, this provision does not apply to the extent that you have agreed in a written contract or written agreement that this insurance is primary and non-contributory with the additional insured's own insurance.

(4) Duties in The Event Of Accident, Claim, Suit or Loss

If you have agreed in a written contract or written agreement that another person or organization be added as an additional insured on your policy, the additional insured shall be required to comply with the provisions in LOSS CONDITIONS 2. - DUTIES IN THE EVENT OF ACCIDENT, CLAIM , SUIT OR LOSS – OF SECTION IV – BUSINESS AUTO CONDITIONS, in the same manner as the Named Insured.

2. Primary and Non-Contributory if Required by Contract

Only with respect to insurance provided to an additional insured in A.1.g. - Additional Insured If Required by Contract, the following provisions apply:

(1) Primary Insurance When Required By Contract

This insurance is primary if you have agreed in a written contract or written agreement that this insurance be primary. If other insurance is also primary, we will share with all that other insurance by the method described in Other Insurance 5.d.

(2) Primary And Non-Contributory To Other Insurance When Required By Contract

If you have agreed in a written contract or written agreement that this insurance is primary and non-contributory with the additional insured's own insurance, this insurance is primary and we will not seek contribution from that other insurance.

Paragraphs **(1)** and **(2)** do not apply to other insurance to which the additional insured has been added as an additional insured.

When this insurance is excess, we will have no duty to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

(1) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and

(2) The total of all deductible and self-insured amounts under all that other insurance.

We will share the remaining loss, if any, by the method described in SECTION IV- Business Auto Conditions, B. General Conditions, Other Insurance 5.d.

3. AUTOS RENTED BY EMPLOYEES

Any "auto" hired or rented by your "employee" on your behalf and at your direction will be considered an "auto" you hire.

The SECTION IV- Business Auto Conditions, B. General Conditions, 5. OTHER INSURANCE Condition is amended by adding the following:

e. If an "employee's" personal insurance also applies on an excess basis to a covered "auto" hired or rented by your "employee" on your behalf and at your direction, this insurance will be primary to the "employee's" personal insurance.

4. AMENDED FELLOW EMPLOYEE EXCLUSION

EXCLUSION 5. - FELLOW EMPLOYEE - of SECTION II - LIABILITY COVERAGE does not apply if you have workers' compensation insurance in-force covering all of your "employees".

Coverage is excess over any other collectible insurance.

5. HIRED AUTO PHYSICAL DAMAGE COVERAGE

If hired "autos" are covered "autos" for Liability Coverage and if Comprehensive, Specified Causes of Loss, or Collision coverages are provided under this Coverage Form for any "auto" you own, then the Physical Damage Coverages provided are extended to "autos" you hire or borrow, subject to the following limit.

The most we will pay for "loss" to any hired "auto" is:

(1) $100,000;

(2) The actual cash value of the damaged or stolen property at the time of the "loss"; or

(3) The cost of repairing or replacing the damaged or stolen property,

whichever is smallest, minus a deductible. The deductible will be equal to the largest deductible applicable to any owned "auto" for that coverage. No deductible applies to "loss" caused by fire or lightning. Hired Auto Physical Damage coverage is excess over any other collectible insurance. Subject to the above limit, deductible and excess provisions, we will provide coverage equal to the broadest coverage applicable to any covered "auto" you own.

We will also cover loss of use of the hired "auto" if it results from an "accident", you are legally liable and the lessor incurs an actual financial loss, subject to a maximum of $1000 per "accident".

This extension of coverage does not apply to any "auto" you hire or borrow from any of your "employees", partners (if you are a partnership), members (if you are a limited liability company), or members of their households.

6. PHYSICAL DAMAGE - ADDITIONAL TEMPORARY TRANSPORTATION EXPENSE COVERAGE

Paragraph A.4.a. of SECTION III - PHYSICAL DAMAGE COVERAGE is amended to provide a limit of $50 per day and a maximum limit of $1,000.

7. LOAN/LEASE GAP COVERAGE

Under SECTION III - PHYSICAL DAMAGE COVERAGE, in the event of a total "loss" to a covered "auto", we will pay your additional legal obligation for any difference between the actual cash value of the "auto" at the time of the "loss" and the "outstanding balance" of the loan/lease.

"Outstanding balance" means the amount you owe on the loan/lease at the time of "loss" less any amounts representing taxes; overdue payments; penalties, interest or charges resulting from overdue payments; additional mileage charges; excess wear and tear charges; lease termination fees; security deposits not returned by the lessor; costs for extended warranties, credit life Insurance, health, accident or disability insurance purchased with the loan or lease; and carry-over balances from previous loans or leases.

8. AIRBAG COVERAGE

Under Paragraph B. EXCLUSIONS - of SECTION III - PHYSICAL DAMAGE COVERAGE, the following is added:

The exclusion relating to mechanical breakdown does not apply to the accidental discharge of an airbag.

9. ELECTRONIC EQUIPMENT - BROADENED COVERAGE

a. The exceptions to Paragraphs B.4 - EXCLUSIONS - of SECTION III - PHYSICAL DAMAGE COVERAGE are replaced by the following:

Exclusions **4.c.** and **4.d.** do not apply to equipment designed to be operated solely by use of the power from the "auto's" electrical system that, at the time of "loss", is:

(1) Permanently installed in or upon the covered "auto";

(2) Removable from a housing unit which is permanently installed in or upon the covered "auto";

(3) An integral part of the same unit housing any electronic equipment described in Paragraphs (1) and (2) above; or

(4) Necessary for the normal operation of the covered "auto" or the monitoring of the covered "auto's" operating system.

b. Section III, Physical Damage Coverage, Limit of Insurance, Paragraph C.2. is amended to add the following:

$1,500 is the most we will pay for "loss" in any one "accident" to all electronic equipment (other than equipment designed solely for the reproduction of sound, and accessories used with such equipment) that reproduces, receives or transmits audio, visual or data signals which, at the time of "loss", is:

(1) Permanently installed in or upon the covered "auto" in a housing, opening or other location that is not normally used by the "auto" manufacturer for the installation of such equipment;

(2) Removable from a permanently installed housing unit as described in Paragraph 2.a. above or is an integral part of that equipment; or

(3) An integral part of such equipment.

c. For each covered "auto", should loss be limited to electronic equipment only, our obligation to pay for, repair, return or replace damaged or stolen electronic equipment will be reduced by the applicable deductible shown in the Declarations, or $250, whichever deductible is less.

10. EXTRA EXPENSE - BROADENED COVERAGE

Under Paragraph A. - COVERAGE - of SECTION III - PHYSICAL DAMAGE COVERAGE, we will pay for the expense of returning a stolen covered "auto" to you.

11. GLASS REPAIR - WAIVER OF DEDUCTIBLE

Under Paragraph D. - DEDUCTIBLE - of SECTION III - PHYSICAL DAMAGE COVERAGE, the following is added:

No deductible applies to glass damage if the glass is repaired rather than replaced.

12. TWO OR MORE DEDUCTIBLES

Under Paragraph D. - DEDUCTIBLE - of SECTION III - PHYSICAL DAMAGE COVERAGE, the following is added:

If another Hartford Financial Services Group, Inc. company policy or coverage form that is not an automobile policy or coverage form applies to the same "accident", the following applies:

(1) If the deductible under this Business Auto Coverage Form is the smaller (or smallest) deductible, it will be waived;

(2) If the deductible under this Business Auto Coverage Form is not the smaller (or smallest) deductible, it will be reduced by the amount of the smaller (or smallest) deductible.

13. AMENDED DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT OR LOSS

The requirement in LOSS CONDITIONS 2.a. - DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT OR LOSS - of SECTION IV - BUSINESS AUTO CONDITIONS that you must notify us of an "accident" applies only when the "accident" is known to:

(1) You, if you are an individual;

(2) A partner, if you are a partnership;

(3) A member, if you are a limited liability company; or

(4) An executive officer or insurance manager, if you are a corporation.

14. UNINTENTIONAL FAILURE TO DISCLOSE HAZARDS

If you unintentionally fail to disclose any hazards existing at the inception date of your policy, we will not deny coverage under this Coverage Form because of such failure.

15. HIRED AUTO - COVERAGE TERRITORY

SECTION IV, BUSINESS AUTO CONDITIONS, PARAGRAPH B. GENERAL CONDITIONS, 7. - POLICY PERIOD, COVERAGE TERRITORY - is added to include the following:

(6) For short-term hired "autos", the coverage territory with respect to Liability Coverage is anywhere in the world provided that if the "insured's" responsibility to pay damages for "bodily injury" or "property damage" is determined in a "suit," the "suit" is brought in the United States of America, the territories and possessions of the United States of America, Puerto Rico or Canada or in a settlement we agree to.

16. WAIVER OF SUBROGATION

Paragraph 5. TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US - of SECTION IV - BUSINESS AUTO CONDITIONS A. Loss Conditions is amended by adding the following:

We waive any right of recovery we may have against any person or organization with whom you have a written contract that requires such waiver because of payments we make for damages under this Coverage Form.

17. RESULTANT MENTAL ANGUISH COVERAGE

The definition of "bodily injury" in SECTION V- DEFINITIONS, C. is replaced by the following:

"Bodily injury" means bodily injury, sickness or disease sustained by any person, including mental anguish or death resulting from any of these.

18. EXTENDED CANCELLATION CONDITION

Paragraph 2. of the COMMON POLICY CONDITIONS - CANCELLATION - applies except as follows:

If we cancel for any reason other than nonpayment of premium, we will mail or deliver to the first Named Insured written notice of cancellation at least 60 days before the effective date of cancellation.

19. HYBRID, ELECTRIC, OR NATURAL GAS VEHICLE PAYMENT COVERAGE

In the event of a total loss to a "non-hybrid" auto for which Comprehensive, Specified Causes of Loss, or Collision coverages are provided under this Coverage Form, then such Physical Damage Coverages are amended as follows:

a. If the auto is replaced with a "hybrid" auto or an auto powered solely by electricity or natural gas, we will pay an additional 10%, to a maximum of $2,500, of the "non-hybrid" auto's actual cash value or replacement cost, whichever is less,

b. The auto must be replaced and a copy of a bill of sale or new lease agreement received by us within 60 calendar days of the date of "loss,"

c. Regardless of the number of autos deemed a total loss, the most we will pay under this Hybrid, Electric, or Natural Gas Vehicle Payment Coverage provision for any one "loss" is $10,000.

For the purposes of the coverage provision,

a. A "non-hybrid" auto is defined as an auto that uses only an internal combustion engine to move the auto but does not include autos powered solely by electricity or natural gas.

b. A "hybrid" auto is defined as an auto with an internal combustion engine and one or more electric motors; and that uses the internal combustion engine and one or more electric motors to move the auto, or the internal combustion engine to charge one or more electric motors, which move the auto.

20. VEHICLE WRAP COVERAGE

In the event of a total loss to an "auto" for which Comprehensive, Specified Causes of Loss, or Collision coverages are provided under this Coverage Form, then such Physical Damage Coverages are amended to add the following:

In addition to the actual cash value of the "auto", we will pay up to $1,000 for vinyl vehicle wraps which are displayed on the covered "auto" at the time of total loss. Regardless of the number of autos deemed a total loss, the most we will pay under this Vehicle Wrap Coverage provision for any one "loss" is $5,000. For purposes of this coverage provision, signs or other graphics painted or magnetically affixed to the vehicle are not considered vehicle wraps.

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
INNOVATION AND ENVIRONMENTAL DIVISION

DISTRICT: **ALL**

SUBJECT: **APPROVE EXPANSION OF THE POWER CHOICE SOLAR AND BATTERY PROGRAM AND THE FIRST AMENDMENT TO THE POWER CHOICE PROGRAM MANAGEMENT AGREEMENT**

RECOMMENDATION

Staff recommend that the City Council:

1. Approve expansion of the Power Choice Solar and Battery Program;

2. Approve the First Amendment to the Power Choice Program Management Agreement No. A-8538; and,

3. Authorize the City Manager or her designee to execute the First Amendment to the Power Choice Program Management Agreement No. A-8538.

BACKGROUND

The City's Community Choice Aggregation (CCA) Program, Energy for Palmdale's Independent Choice (EPIC), was established by the City Council through the adoption of Resolution No. CC 2018-087, approving the submittal of an Implementation Plan (Plan) in accordance with Public Utilities Code Section 366.2(c) on December 4, 2018. The Plan was certified by the Energy Division on February 28, 2019, and EPIC successfully began serving customers on October 1, 2022.

In addition to providing our customers with renewable energy at competitive prices, EPIC intends to offer customer programs to support the state's renewable energy goals by leveraging innovation and cutting-edge technologies, enhancing grid stability, and

creating new meaningful benefits for our residents. The actions before the City Council support this effort.

On November 11, 2023, CalChoice and Participate.Energy, LLC, introduced the EPIC Power Choice Program to the City Council, a collaborative initiative with Tesla designed to offer Palmdale's EPIC customers a residential solar and battery storage solution. The City Council formally adopted this program through a series of agreements, establishing an accessible path for the community to acquire solar panels and battery storage without upfront costs or credit checks.

The EPIC Power Choice Program empowers residents with the benefits of solar energy, including lower energy costs, backup power, and the opportunity to participate in grid services, making clean energy more equitable and accessible for all. The program officially launched to all residential customers on May 16, 2024.

DISCUSSION

The Power Choice Program promotes solar market accessibility by eliminating credit checks, requiring no upfront costs, and offering low energy rates. In the past, similar programs were limited to individuals with high credit scores, restricting solar benefits to those who could afford the systems. Initially available only to residential customers, there is a proposal to expand the program to include all commercial and industrial customers. Given the program's significant benefits, staff recommend increasing marketing efforts to ensure that all Palmdale residents and businesses know and can take advantage of this valuable opportunity through EPIC, improving access to energy savings and resilience for the entire community.

EPIC Power Choice for Commercial and Industrial Customers

Due to the success of the residential program, City staff are requesting the City Council's approval to create a similar model for commercial and industrial customers. This new program will help remove financial barriers to installing solar for businesses, providing them with an additional option to access the benefits of solar and battery storage. The commercial and industrial parts of the EPIC Power Choice program will be designed like the residential program, offering no upfront costs and fully financed systems for 25 years. Each system will be custom-designed to maximize energy and cost savings for local businesses.

EPIC Power Choice Marketing Efforts Expansion

Since launching the EPIC Power Choice Program, staff have conducted various marketing activities to boost participation. These efforts include a targeted social media campaign across the City's platforms to raise awareness, promoting the program through City and EPIC newsletters, and attending public events to encourage participation among EPIC customers.

Expanding the program to include Channel Partners offers an opportunity to enhance its impact by increasing marketing efforts. This will involve a dedicated sales force to promote the program more strategically. Staff and Participate.Energy LLC, propose engaging Channel Partners to raise program awareness, provide customers with more options, and increase participation by encouraging competition among installers. With this approach, Palmdale residents and businesses can choose from local and regional installers offering consistent solar and battery specifications. Since all Channel Partners will follow the same program policies and pricing, customers can easily compare offers and select the best option.

The existing EPIC Power Choice program will remain available to customers who wish to participate directly with Tesla through the EPIC or Tesla website. Adding Channel Partners will help increase marketing and outreach efforts while offering the City's residents more choices.

The Power Choice Program involves several agreements between the program partners (i.e., the City and Participate.Energy, LLC) and the program participants (i.e., EPIC customers). These agreements define the roles, responsibilities, costs, and the operation and maintenance of the program, including the following:

Program Management Agreement (PMA)

The PMA includes a scope of services generally provided by the City. These services include marketing and outreach to customers in the EPIC service territory to promote the program and encourage program participation. The PMA Amendment modifies the existing scope of services to add services to be performed by Participate.Energy, LLC strengthens and augments the marketing and outreach services provided by City staff.

These additional services will be conducted under the guidance and direction of City staff.

Per the Amendment, compensation for these services will be based on a minimal "per watt" installed for each system that has reached operational status. This fee will be subtracted from the current PMA fee per watt installed that reached completion and operation status. The average fee for a residential system is $380 per home.

The Framework Agreement

The Framework Agreement, which also includes the Channel Partner Agreements, details the structure of the agreement between the City and Participate.Energy LLC, and describes each partner's responsibilities.

Under the proposed program, the different partners would hold the following responsibilities:

- Participate.Energy LLC, is the financier responsible for funding, procuring, and managing the Power Choice Program, including ongoing operations.
- The City, through EPIC, will lend its creditworthiness to pursue an equitable process by ensuring that program participation is not subject to individual credit approvals. Additionally, EPIC will purchase the energy generated from solar and battery equipment and sell said energy to the program participants at a competitive rate. Finally, EPIC will support the program partners by marketing the Power Choice Program to Palmdale residents.

FISCAL IMPACT

$0; This action has no fiscal impact on the General Fund. The current program design calls for the City to collect a fee of $0.40 per watt during the construction phase in connection with the required development services. However, with Participate.Energy, LLC, added efforts to boost participation through the Channel Partners program, this fee will be adjusted to $0.35 per watt. Additionally, the City will continue to receive the agreed revenue streams, including a service fee of $0.02 per kilowatt-hour (kWh) generated and a monthly fee of $15.00 for each installed Powerwall sustained throughout the program's duration.

STRATEGIC PLAN

Goal II: Ensure long-term health of the City and maintain funding for services.

A. Manage resources, costs, and liabilities to ensure the City's long-term fiscal health

Goal III: Invest in infrastructure to improve community livability.

A. Seek innovative, cost effective, customer focused methods of service delivery

B. Implement and administer environmentally sustainable programs

Prepared by:	Leonardo Torres, P.E. Director of Public Works
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Agrmt No. A-8538 First Amendment with Participate.Energy, LLC
Agrmt No. A-8538 with Participate.Energy, LLC
Exh A Program Management Schedule
Installer Framework Agreement

FIRST AMENDMENT TO AGREEMENT NO. A-8538 FOR PROGRAM MANAGEMENT BY AND BETWEEN THE CITY OF PALMDALE AND PARTICIPATE ENERGY, LLC

This First Amendment is hereby entered into and is effective as of March 18, 2025, by and between the City of Palmdale, a California municipal corporation, D/B/A Energy for Palmdale's Independent Choice ("Program Manager") and Participate Energy, LLC, a Delaware limited liability company ("Owner") (collectively, sometimes herein referred to as the "parties") and relates to that certain Agreement No. A-8538 for Program Management between the Parties dated November 15, 2023 ("Agreement").

The Parties agree as follows:

1. Exhibit A is hereby amended to add additional services and fees as shown.

2. All other terms and provisions of the Agreement are hereby reaffirmed.

In witness whereof the Parties have executed the Amendment of the date set forth below:

City of Palmdale	Participate Energy, LLC
_____	_____
Ronda Perez, City Manager	Ethan Friedman, Executive Managing Director

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PROGRAM MANAGEMENT AGREEMENT

This Program Management Agreement (this "***Agreement***") dated effective as of January 29, 2024, (the *"**Effective Date**"*) is by and between **CITY OF PALMDALE, A CALIFORNIA MUNICIPAL CORPORATION, D/B/A ENERGY FOR PALMDALE'S INDEPENDENT CHOICE** ("***Program Manager***"), and **Participate.Energy LLC**, a Delaware limited liability company (the "***Owner***"). The parties hereto are sometimes herein referred to individually as a "***Party***" and collectively as the "***Parties***".

RECITALS

A. Program Manager, Owner and Tesla, Inc. (***"Installer"***) have entered into certain agreements for the creation of a distributed solar and energy storage program for residential electricity customers in Program Manager's service territory (the ***"Program"***). Under the terms of the Program, Owner will develop, finance, and own residential solar and energy storage systems to be located at private residences within Program Manager's service territory (each a ***"System"*** or, collectively, the ***"Systems"***), Installer will install the Systems under an installation contract between Installer and Owner (***"Installation Contract"***), and Program Manager will buy from Owner the energy and certain energy attributes and benefits generated by each System under the terms of a certain power purchase agreement between the Parties of even date herewith (the ***"Power Purchase Agreement"***).

B. Owner does not independently maintain the internal capability to perform the Program Management Services (as defined below) that Owner requires in connection with the installation of the Systems, and Program Manager's capabilities are expected to provide significant benefits to Owner. Therefore, Owner desires to engage Program Manager to manage certain aspects of the System permit management, Installer communication, and origination of potential customers in Program Manager's service territory, all as further set forth herein (the ***"Program Management Services"***).

C. In consideration of the mutual covenants and agreements herein contained, and for other good and valuable consideration, the sufficiency and adequacy of which are hereby acknowledged, the Parties agree to the following:

AGREEMENT

In consideration of the above recitals, the premises and mutual covenants set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. **Appointment and Term; Assumption of Development Responsibilities; Standard of Performance**. Owner hereby appoints Program Manager to render the Program Management Services as further described in the *Schedule of Program Management Services* attached hereto as Exhibit A. Program Manager hereby accepts such appointment. The term of this Agreement shall be co-terminus with the term of the Power Purchase Agreement (***"Term"***). Program Manager shall use such diligence, care and prudence in the performance of its obligations

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hereunder as are commercially reasonable, and shall devote such time, effort and skills of its personnel as a reasonable service Program Manager in like position would do in like circumstances.

2. **Limitations and Restrictions**. Notwithstanding any provisions of this Agreement, Program Manager shall not take any action, expend any sum, make any decision, give any consent, approval or authorization, or incur any obligation with respect to any of the following matters unless and until the same has been approved by Owner:

(a) alteration of any System contemplated by the Installation Contract, except for such matters as may be expressly delegated in writing to Program Manager by Owner;

(b) any proposed change in the installation of a System, or in the plans and specifications therefor as previously approved by Owner, that increases the cost thereof, or any other change that would affect the design, cost, value or quality of any of a System, except for such matters as may be expressly delegated in writing to Program Manager by Owner.

3. **Standard of Conduct.**

a) Program Manager shall provide the Program Management Services, perform its other obligations and exercise its rights or powers under this Agreement in a prudent manner, with the degree of skill and judgment normally exercised by Program Managers performing Program Management Services for the permitting of systems of a similar nature, and in accordance with: (i) any applicable laws and regulations; and (ii) any agreement, instrument or other document to which Owner is a party, and that Owner has delivered to Program Manager, that relates to a System or any component thereof (***"Project Documents"***), except to the extent Owner provides Program Manager with written instructions not to do so in the event Owner is contesting in good faith the validity or application of any such applicable laws and regulations or such term and condition of a System Document, in any reasonable manner.

b) Program Manager may, at any time, if it reasonably considers it to be necessary or appropriate, request written instruction from Owner with respect to any matter contemplated by this Agreement and may defer action thereon pending the receipt of such written instructions.

c) Program Manager shall advise Owner promptly, if it becomes aware of any material inconsistency between any of the following:

(i) Owner's instructions given in accordance with this Agreement from time to time;

(ii) any System Document;

(iii) Required insurance (if any); and

(iv) any applicable laws and regulations or Permit.

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d) Any action taken by Program Manager in accordance with the written instructions of Owner, or failure to act pending the receipt of such written instructions, shall be deemed to be within the scope of Program Manager's authority and in accordance with its obligations under this Agreement and, without limitation, shall not constitute gross negligence or willful misconduct as referred in Section 10(b).

4. **Accounts and Records**.

(a) Program Manager, shall keep such books of account and other records relating to each System as may be required by applicable laws and regulations or as reasonably requested by Owner in writing. All accounts and records relating to a System, including all correspondence, shall be surrendered to Owner upon demand without charge therefor.

(b) All books and records prepared or maintained by Program Manager shall be kept and maintained at all times at secure locations accessible to Owner for audit, inspection and copying by Owner or any representative or auditor therefor or supervisory or regulatory authority upon reasonable written request.

(c) During the Term, Program Manager shall keep Owner reasonably informed as to the status of the Program Management Services provided by Program Manager. Program Manager shall notify Owner in writing of any material event related to the Program Management Services provided by Program Manager hereunder.

5. **Accrual Schedule**. The Program Management Agreement Fee (as defined below) shall be earned in full for a System when a System is placed in service for purposes of Sections 48 and 168 of the Internal Revenue Code, as amended, and shall be paid promptly when a System has reached final completion under the terms of the respective Installation Contract (collectively, ***"Final Completion"***).

6. **Compensation**. As consideration for Program Manager's Program Management Services to be performed under this Agreement, Owner will pay Program Manager a fee (the ***"Program Management Agreement Fee"***) equal to Forty U.S. Cents ($0.40) multiplied by each Watt/dc of solar generating capacity for each System that has reached Final Completion and for which Program Manager has confirmed in a legally binding manner that such System will be covered under the Power Purchase Agreement for the term thereof.

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7. **Default and Remedies**. If Program Manager defaults in the performance of any of its material covenants or obligations under this Agreement and such default continues unremedied for a period of 30 days after written notice thereof from Owner to Program Manager, Owner shall have the right, at its election, to exercise one or more of the following rights and remedies; *provided, however,* if the default is of such a nature that it cannot be cured within the 30-day period, and Program Manager has begun to cure each default within the 30-day period, Program Manager shall have an additional 60 days in which to cure said default provided it acts in good faith and with due diligence to cure the same (all of which shall be cumulative); *provided, further, however,* that a default under any agreement with a contractor, subcontractor, engineer or equipment Program Manager for a System, or a delay due to action or inaction by the utility shall not be deemed a default under the Agreement:

(a) terminate this Agreement; and

(b) enforce the provisions of this Agreement by legal proceedings for the specific performance of any covenant or agreement contained herein or for the enforcement of any other appropriate legal or equitable remedy and recover damages caused by any breach by Program Manager of the provisions of this Agreement, including court costs, reasonable attorneys' fees and other expenses incurred in the enforcement of the obligations of Program Manager hereunder; and

(c) exercise any and all rights and remedies that Owner (or its Members) may have under applicable laws and regulations; and

(d) in addition to any rights now or hereafter granted under applicable laws and regulations and not by way of limitation of any such rights, upon the occurrence of any event of default hereunder that is not cured within the time period specified in this Section 7, Owner is authorized to set off and to apply any amounts payable to Program Manager hereunder against and on account of the obligations of Program Manager to Owner hereunder.

8. **Indemnity and Liability**

(a) Limitation of Liability.

(i) Notwithstanding any provision in this Agreement to the contrary, neither Party, nor their respective Affiliates, nor any of their respective officers, directors, employees, agents, contractors, subcontractors, vendors, shareholders, members, partners or representatives, shall be liable hereunder for any consequential or indirect loss or damage, including loss of profit, cost of capital, loss of goodwill or any other special or incidental damages, it being understood that the Parties' indemnification obligations under this Section 8 are not and shall not be deemed to be consequential or indirect loss or damage under this Section 8.

(ii) Except as provided in this Section 8, Program Manager shall have no liability hereunder to Owner for damages or other amounts in connection with a breach by Program Manager of this Agreement or a failure by Program Manager to perform the Program Management Services in accordance with the terms and conditions hereof or otherwise as a result of the Program Management Services performed by Program Manager pursuant to this Agreement.

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(iii) The Parties further agree that the waivers and disclaimers of liability, indemnities, releases from liability, and limitations on liability expressed in this Agreement shall survive termination or expiration of this Agreement, and shall apply at all times, whether in contract, equity, tort or otherwise, even in the event of the fault, negligence, including sole negligence, strict liability, or breach of the Party indemnified, released or whose liabilities are limited, and shall extend to the partners, members, principals, shareholders, directors, officers, employees and agents of each Party and its Affiliates.

(b) Indemnity. To the extent it may lawfully do so, each of Program Manager and Owner hereby indemnify, defend (with counsel of its choosing), and hold harmless the other party and its directors, agents, officers, members, employees and volunteers from and against any and all liability or claim of liability, loss or expense, including defense costs and legal fees and claims for damages of whatsoever character, nature and kind, whether directly or indirectly arising from or connected to: bodily injury, death, personal injury, or property damage caused by negligence, creation or maintenance of a dangerous condition of property, or intentional infliction of harm, including any workers' compensation suits, liability, or expense, arising from or connected with Program Management Services performed by on behalf of the indemnifying party by any person pursuant to this Agreement; nonpayment for labor, materials, appliances, teams, or power, performed on, or furnished or contributed to the Site. Notwithstanding the above, neither Program Manager nor Owner shall be required to defend, indemnify and hold harmless the other for such other party's negligent acts and omissions or willful misconduct. It is the intent of the Parties that where negligence is determined to have been joint or contributory, principles of comparative negligence will be followed, and each Party shall bear the proportionate cost of any loss damage, expense or liability attributable to that Party's negligence.

9. **Notices.** Any notice, request, demand or other communication which is required or permitted under this Agreement shall be in writing and shall be deemed to have been duly given: (i) on the date of receipt by the applicable Party if personally delivered; (ii) when transmitted by the applicable Party if transmitted by telecopy, electronic mail, or other digital transmission method, subject to the sender's facsimile machine receiving the correct answerback of the addressee and confirmation of uninterrupted transmission by a transmission report or the recipient confirming by telephone to sender that he has received the facsimile or electronic mail message; and (iii) when received by the applicable Party, if sent for next day delivery to a domestic address by recognized overnight delivery service or, if sent by certified or registered mail, return receipt requested.

Notices shall be given:

If to Owner, to:

Participate.Energy LLC
2093 Philadelphia Pike #3125,
Claymont, DE 19703.
Attn: Ethan Friedman
Phone: 917-301-2621
Email: ethan@partcipate.energy

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If to Program Manager, to:

Energy for Palmdale's Independent Choice
38300 Sierra Highway
Palmdale, CA 93550
Attn: Contract Administration
Email: rperez@cityofpalmdale.org

10. **General Provisions**.

(a) No Agency Relationship. This Agreement does not create an agency relationship between the Parties and does not establish a joint venture or partnership between the parties. Except as expressly set forth herein, neither party has the authority to bind the other party or represent to any person that the party is an agent of the other party.

(b) Agreement. This Agreement consists of the terms and conditions set forth herein, as well as the appendices hereto, which are incorporated by reference herein and made part hereof. In the event of a conflict, variation or inconsistency between the appendices hereto and the terms and conditions contained in the body of this Agreement, the latter shall control and be given priority.

(c) Relationship of the Parties.

(i) Program Manager has been retained by Owner as an independent contractor to solely perform the Program Management Services on behalf of Owner.

(ii) Without limiting the relationship of any Party under any other agreement, nothing contained or implied in this Agreement shall constitute or be deemed to constitute any Party as the partner of any other Party for any purpose whatsoever; or create, or be deemed to create, any partnership between any Party and the any other Party.

(iii) No Party shall by virtue of this Agreement have the power or authority to enter into any agreement or undertaking for or to act on behalf of or otherwise to bind the any other Party as to any matter or thing to be done in relation to a System or to the provision of the Program Management Services save as may be expressly authorized in this Agreement or agreed in writing between the Parties from time to time.

(d) Entire Agreement. This Agreement, the Schedules and Exhibits attached hereto contains the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior negotiations, undertakings and agreements. Neither Party will be bound by or deemed to have made in connection herewith any representations, warranties, commitments or undertakings, except those contained herein.

(e) Captions; Exhibits. Titles or captions of sections contained in this Agreement are inserted only as a matter of convenience and for reference, and in no way define, limit, extend, describe or otherwise affect the scope or meaning of this Agreement or the intent of any provision

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hereof. All exhibits and appendices attached hereto shall be considered a part hereof as though fully set forth herein.

(f) Amendment. This Agreement may not be amended or modified in any way unless such amendment or modification is in writing signed by duly authorized representatives of each Party.

(g) No Waivers. It is understood and agreed that any delay, waiver or omission by Owner or Program Manager to exercise any right or power arising from any breach or default by Owner or Program Manager with respect to any of the terms, provisions, or covenants of this Agreement shall not be construed to be a waiver by Owner or Program Manager of any subsequent breach or default of the same or other terms, provisions or covenants on the part of Owner or Program Manager. No waiver of any right or power by any Party under this Agreement shall be deemed effective unless in writing and signed by the waiving Party.

(h) Changed Conditions; Invalidity. If there is an occurrence of an event of Force Majeure, there is a material change in market conditions affecting the prices of goods and Program Management Services constituting Development Costs, there is a change in any Project Document or financing document or Owner enters into a new Project Document or financing document affecting performance of the Program Management Services hereunder, or there is a change in any applicable Law, and any such performance or occurrence results in increased or decreased costs to Program Manager, or Owner, as the case may be, shall be entitled to an equitable budget adjustment reflecting the reasonable value of any such increased or decreased costs from such performance or occurrence, and the Parties hereby agree to adjust equitably such other provisions of this Agreement that are directly affected by such performance or occurrence; provided, however, that such adjustments must be consistent with the economic expectations and the intent of the Parties. The invalidity or unenforceability for public policy or other equitable grounds of any provision of this Agreement shall be determined only by a court of competent jurisdiction, and the Parties hereby agree to negotiate an equitable adjustment to the invalid or unenforceable provisions with a view toward affecting the purposes of this Agreement. The validity or enforceability of the remaining provisions or portions or applications hereof shall not be affected thereby.

(i) Representations and Warranties.

(i) Each Party represents and warrants to the other that:

(A) it is duly formed and validly existing under the laws of its jurisdiction of formation;

(B) it has the legal right and full power and authority to execute and deliver, and to exercise its rights and perform its obligations under, this Agreement;

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(C) all corporate or company action required by it validly and duly to authorize the execution and delivery of, and to exercise its rights and perform its obligations under, this Agreement has been duly taken; and

(D) this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms.

(ii) Except as expressly provided in this Agreement or as required by law, no Party makes any warranties or guarantees to the other, either express or implied, with respect to the Facility, the Program Management Services or any other subject matter of this Agreement, and, to the extent permitted by law, each Party disclaims and waives any implied warranties or warranties imposed by law.

(j) Counterparts. The Parties may execute this Agreement in two or more counterparts, which shall, in the aggregate, be signed by the Parties and each counterpart shall be deemed an original instrument as against any Party who has signed it.

(k) Facsimile or Electronic Delivery. This Agreement may be duly executed and delivered by a Party by execution and facsimile or electronic format (including portable document format (.pdf)) delivery of the signature page of a counterpart to the other Party, and, if delivery is made by facsimile or other electronic format, the executing Party shall promptly deliver, via overnight delivery, a complete original counterpart that it has executed to the other Party, but this Agreement shall be binding on and enforceable against the executing Party whether or not it delivers such original counterpart.

(l) Dispute Resolution. In the event a dispute arises between the Parties regarding the application or interpretation of this Agreement, the aggrieved Party shall promptly notify the other Party of its intent to invoke this dispute resolution procedure within ten (10) Business Days after such dispute arises. If the Parties shall fail to resolve the dispute within ten (10) Business Days after delivery of such notice, each Party shall, within five (5) Business Days thereafter, nominate a senior officer of its management to meet at the Facility, or at any other mutually agreed location, to resolve the dispute. If the dispute remains unresolved within ten (10) Business Days after such a meeting has commenced, each Party, without further delay, shall have the right to pursue any and all remedies available at law or in equity. The pendency of any dispute under this Agreement shall not of itself relieve any Party of any duty to perform under this Agreement.

(m) Non-Recourse. Notwithstanding anything to the contrary provided in this Agreement, it is specifically understood and agreed that there shall be absolutely no personal liability on the part of any of the partners, members, shareholders, or affiliates of the Parties, or any of their respective directors, officers, employees, agents or representatives, (each, a ***"Protected Person"***) for the payment of any amounts due or the performance of any other obligation of any Party under this Agreement. Each Party shall look solely to the assets of the other Parties for the satisfaction of each and every right or remedy under or in connection with this Agreement. In furtherance of the foregoing, Owner and Program Manager each agrees that it shall neither seek or obtain, nor be entitled to seek or obtain, any deficiency or other judgment against any Protected Person for any action or inaction under or in connection with this Agreement, and Owner and

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Program Manager each releases all such Protected Persons from any such claims by Program Manager or Owner, as the case may be.

[Signature Page Follows]

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IN WITNESS WHEREOF, the parties have executed this Program Management Services Agreement as of the date first written above.

PROGRAM MANAGER:

City of Palmdale,
a California municipal corporation,
d/b/a Energy for Palmdale's Independent Choice

DocuSigned by:
By: Ronda Perez
CD5B20C24BEB4C6...
Name: Ronda Perez
Title: City Manager

OWNER:

Participate.Energy LLC
a Delaware limited liability company

DocuSigned by:
By: _____
057B254AC1B742D...
Name: Ethan Friedman
Title: Managing Director

[Signature Page to Program Management Agreement]

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EXHIBIT A

PROGRAM MANAGEMENT SERVICES SCHEDULE

Program Management Services generally include all activities necessary or helpful to

(a) monitor and support and all permitting activities for any System;

(b) prepare materials and conduct communications and outreach to residential electric power customer in its service territory to promote the Program and to encourage the installation of Systems by its customers.

(c) create a streamlined and integrated System permitting process allowing for faster System permitting;

(d) effectively communicate with and guide Installer through the System permitting process to ensure shorter permitting timelines and to avoid any permitting delays;

(e) Effectively coordinate the System permitting process with all other governmental agencies involved;

(f) To the extent legally permissible and reasonable, expedite permitting for any System

EXHIBIT A

PROGRAM MANAGEMENT SERVICES SCHEDULE

Program Management Services generally include all activities necessary or helpful to:

(a) Monitor and support and all permitting activities for any System.

(b) Prepare materials and conduct communications and outreach to residential electric power customers in its service territory to promote the Program and encourage the installation of Systems.

(c) Create a streamlined and integrated System permitting process, allowing for faster System permitting.

(d) Effectively communicate with and guide the Installer through the System permitting process to ensure shorter permitting timelines and to avoid any permitting delays;

(e) Effectively coordinate the System permitting process with all other governmental agencies involved.

(f) To the extent legally permissible and reasonable, expedite permitting for any System.

(g) At the Program Manager's discretion, Owner, acting as consultant, shall provide general marketing and sales support as outlined below:

	Program Manager Scope	Consultant Scope	Deliverable
Targeted outbound outreach	Provide a list of active customers (including but not limited to CARE/FERA) enrolled or qualified customers with name(s), physical address, email address(es), phone number(s), current tariff, annual load, and/or average monthly bill.	Email and/or call customers to inform them of various offers from Pico Rivera Innovative Municipal Energy. Under the Program Manager's guidance and instruction, provide outbound sales support to interested customers using marketing materials jointly developed.	1. Sales and marketing support 2. Activity report
Local marketing support	Collaborate on local, in-person marketing opportunities	Provide staff to attend and support customer sales activities during events	Same as Targeted outbound outreach
Sales	Integrate various options into the Program Manager's marketing and communication platforms so that interested customers can reach consultant resources and staff for sales support.	Provide inbound sales support to potential customers through call, email, or chat. If possible, provide Spanish-speaking support.	1. Activity report 2. Closed-won orders

1. Fees earned by the Owner related to the scope of work outlined above are deemed earned by the Owner for each new System where the initial order was placed during the term of this scope of work upon achieving Final Completion as described in the Agreement.

2. Payment of fees shall be Five Cents ($0.05) for each Watt/dc of solar generating capacity for each System that has reached Final Completion. All fees earned by the Owner shall be subtracted from the Program Management Agreement Fee on a per System basis at the time of payment. Additional consulting services, terms and fees under this Agreement may be approved in writing by mutual consent of Program Manager and Owner on a case-by-case basis.

3. Payment of fees shall comply with the Compensation provision of this Agreement.

4. The Term for the consulting scope shall begin upon written approval from the Program Manager and continue until such time that either Party provides written notification of termination to the other Party, in which case, the scope of services shall terminate five (5) business after written notice is delivered.

5. If a System achieves Final Completion subsequent to termination of this scope of services under this Agreement, fees will be deemed earned if the System was ordered while the scope of services was active.

Installer Framework Program Agreement

This Installer Framework Program Agreement (this "Agreement") is entered into as of [_____, 2024] (the "Effective Date"), among the parties listed below (each, a "Party" and together the "Parties"). This Agreement comprises, and the term "Agreement" shall include (i) the Key Terms set out below (the "Key Terms"), (ii) the Program Terms and Conditions set out in Schedule 1, and (iii) any and all agreements, guidelines, or policies currently in the private, secure, web-accessible portal that can be accessed at https://participate.energy (collectively, the "Portal" or "Portal Documents").

NOTE: The Key Terms, Program Terms and Conditions, and Portal Documents are incorporated by reference into one another and intended to be considered together. In the event of any conflict in terms, the order of precedence shall be (1) Key Terms, (2) Program Terms and Conditions, and (3) the Policies in the Portal Documents.

Key Terms	
This Agreement sets out the terms and conditions on which the Installer listed below shall (i) sell to potential, qualified customers ("Customers") solar PV systems or battery energy storage products ("System"), (ii) provide product and product installation support for the System, and (iii) sell finished Systems to Participate.Energy, LLC ("The Program Fund Manager") for The Program Fund Manager's sale of energy from the Systems.	
Parties:	
Installer:	[VARIABLE]
The Program Fund Manager:	Participate.Energy, LLC, a Delaware limited liability company [or such special purpose entity as may be formed]
Approved Members:	
Member:	[MEMBER NAME]
Framework Agreement Term:	
Term:	The period commencing on the Effective Date and ending on the second (2nd) anniversary of the Effective Date (the "Term"), which shall automatically be extended for additional, one-year periods upon the expiration of the then-current Term unless terminated early in accordance with this Agreement.
Notices:	
Installer Notice Address:	[Installer notice address]
Installer Address for submission of Purchase Orders:	orders@participate.energy
The Program Fund Manager Notice Address:	Participate.Energy, LLC Attn: Ethan Friedman c/o Virtual Post Solutions, Inc. 2093 Philadelphia Pike #3125 Claymont, DE 19703 notices@participate.energy

NDA:	
NDAs:	The non-disclosure agreement dated [MMM DD, YYYY] between Installer and The Program Fund Manager.
Attachments:	
Schedule 1:	Program Terms and Conditions

[signatures on following page]

IMPORTANT NOTICES

Each Party to this Agreement affirms and acknowledges by its signature hereto that (i) it has reviewed the Portal Documents as of the Effective Date, and (ii) the Party expressly acknowledges and agrees to each and every term in the Portal Documents.

Each Party to this Agreement further affirms and acknowledges its agreement to receive, during the Term and after the Effective Date, any and all amendments, notifications, notices, and the like (collectively, the "Portal Updates") by and through the Portal, and that the Party's acceptance of same shall be established through its electronic assent (including by email if needed) and acknowledgment of the Portal Updates.

EXECUTED by the Parties on the Effective Date.

[INSTALLER]	PARTICIPATE.ENERGY, LLC
_____	_____
(SIGNATURE)	(SIGNATURE)
_____	_____
(PRINT NAME)	(PRINT NAME)
_____	_____
(PRINT TITLE)	(PRINT TITLE)

Schedule 1
Program Terms and Conditions for Installer

1. Definitions. In addition to those terms already defined in the Key Terms, the following definitions apply:

   (a) "Final Completion Turnover Package" shall mean and refer to that certain "Final Completion Turnover Package" located on the Portal.

   (b) "Installer Insurance Requirements" shall mean and refer to those certain "Installer Insurance Requirements" as updated, modified, and/or amended from time to time, either as a form template or for each Customer, all as located on the Portal.

   (c) "Installer Products" means a traditional solar system and/or a battery energy storage product as described in detail in each Order. A traditional solar system means and refers to a solar photovoltaic generating system comprising of solar modules, an inverter and various balance of system components. A battery energy storage product means and refers to an energy storage system approved by The Program Fund Manager to be installed as part of the System. The current list of approved Installer Products is available in the Portal.

   (d) "Order(s)" shall mean and refer to that certain fully and accurately executed "Installation Order and Program Terms" and that certain "Solar Power Purchase & Energy Storage Services Agreement," all as updated, modified, and/or amended from time to time, either as a form template or for each Customer, all as located on the Portal.

   (e) "Work Standards" shall mean and refer to those certain "Work Standards" as updated, modified, and/or amended from time to time, as located on the Portal.

2. The Program. The objective of the "Program" is to deploy eligible Systems with a target of 500 MW of direct current capacity on commercial and industrial properties throughout the territorial boundaries of Member and the Community Choice Aggregation ("CCA") service territories managed by Member or its CCA partners (the "Territory"). Installer's obligations with regard to the Program and System are set forth in this Agreement.

3. Orders.

   (a) For each Order, Installer shall design, procure, deliver, install and commission the System at the "Site" identified in each Order in accordance therewith and the Work Standards. The Program Fund Manager will not purchase and has no obligation to purchase Systems that do not comply with all requirements outlined in this Agreement and within the Portal.

   (b) Installer shall review each submitted Order to ensure that it tracks the Program criteria. Each Order must also meet the "Site Eligibility" criteria set forth and made available in the Portal. If Installer reasonably believes that the Order does not track the Program criteria, it will immediately notify The Program Fund Manager. Installer may, in its discretion, subcontract with engineering, procurement, construction, and installation or "EPC" contractors, but Installer acknowledges that doing so shall not limit its obligations under this Agreement.

   (c) Installer shall assess and determine Customer eligibility for the Program. To be eligible for participation in the Program, a Customer must: (i) own an existing property or have written consent from the property owner to enter the Program per a "Lease Rider" on the Portal, (ii) be an existing participant, or agree to become a participant, in the Program with the Member utility, (iii) agree to host a System installed on the property and to provide The Program Fund Manager, as System owner, and its agents with a non-exclusive license for access to the Site for the entire term of the Customer's participation in the Program for the purposes operating and maintaining the System; (iv) Installer, System and Customer are in compliance with all applicable Policies in the Portal; and (v) fully and accurately executed the most current and approved form of "Solar Power Purchase & Energy Storage Services Agreement", "Installation Order and Program Terms".

(d) Customers may, depending upon initial and ongoing eligibility, qualify for incentives and/or discounts by and through the Customer's or System's eligibility and qualification for participation in those incentives (each, an "Incentive" and collectively, the "Incentives" or "Incentive Programs"). Additional obligations of the Customer or Installer for these Incentive Programs are set forth in the applicable Solar Power Purchase & Energy Storage Services Agreement and Incentive Pricing Addendum on the Portal, provided that the Installer shall be responsible for ensuring Customer eligibility under the Incentive Programs in Installer's installation of the qualifying Customer's System. Installer is also responsible for securing, managing, processing and executing on all tasks and requirements for the Incentive to be fully-earned and received by either The Program Fund Manager or Customer, as directed by The Program Fund Manager. For the avoidance of doubt, the Installer is responsible for all elements of the Incentive until the Incentive is realized and received by its intended recipient unless otherwise approved by The Program Fund Manager. Orders for which Customers fail to qualify for Incentives required to receive special rates shall automatically be terminated at no cost to Customer or The Program Fund Manager.

(e) Installer shall install Systems subject to this Agreement using equipment approved by The Program Fund Manager in the approved vendor list policy available on the Portal. Installer shall and provide or cause the original equipment manufacturer to provide, Member and The Program Fund Manager with a complete software integration, permissions and access (at no cost) to allow all Systems to be monitored and controlled remotely and in an aggregated fashion or as independent distributed energy resources ("DER Assets"). For clarity, Installer shall not charge any fees or require any other form of compensation to provide The Program Fund Manager complete control and benefit from monetizing DER Assets covered under this Agreement.

4. Pricing; Order Payment.

(a) Pricing. System pricing is set forth in each Order. System size or design may be adjusted by Installer, with The Program Fund Manager's written approval, based on a variety of factors, including installation complexity or product availability, provided that the pricing remains at or below the pricing set in each Order. To the extent that Installer is affected by any force majeure circumstances set forth in Section 12 herein, Installer shall provide to The Program Fund Manager a change order detailing the adjustment it believes is warranted. If such change order is rejected, Installer has the right to terminate the Order with no penalty to the Installer.

(b) Order Payment. The price for the work performed by Installer under each Order shall be identified in that Order. Installer shall invoice The Program Fund Manager according to any terms and conditions, including without limitation any milestone schedule(s), set forth in each Order. The Program Fund Manager shall pay 85% of the contract price for each Order (plus applicable taxes) upon (i) completed inspection of the work performed, with such inspection determined and carried out to the sole satisfaction of The Program Fund Manager, and (ii) the receipt of The Program Fund Manager of any and all supporting documentation requested of the Installer. Installer shall pay any balance due and owing on the Order within thirty (30) days of The Program Fund Manager's acceptance of "Final Completion" (which as used herein means the Installer's completion of all work, issuance of all final permits for the System, and the System's receipt of Permission to Operate or "PTO") and the existence of a Final Completion Turnover Package approved by The Program Fund Manager.

5. Title; Risk of Loss; System Purchase by Fund. Title to and risk of loss for any final, built System shall pass from Installer to The Program Fund Manager upon (i) The Program Fund Manager's acceptance of Final Completion (as defined above) and the existence of a Final Completion Turnover Package approved by The Program Fund Manager, and (ii) receipt of payment by The Program Fund Manager in accordance with the Order. To facilitate title transfer, Installer agrees to execute any documents required by The Program Fund Manager, including without limitation any bill of sale.

6. Permits. Installer shall bear the obligation and cost to obtain and maintain all permits required for Installer to install each System (the "Permits").

7. Installation.

(a) Work Standards. Installer, or its subcontractors, shall perform the Work according to the stricter of prevailing industry standards and the Work Standards, exercising the reasonable skill and care of an installation contractor and in accordance with all applicable laws, regulations and permits applicable to the work.

(b) Subcontractors. Installer shall be responsible for all work performed by, and acts or omissions of, each subcontractor and shall ensure that all subcontractors are licensed as required by applicable law.

(c) Safety. Installer shall ensure that all Installer employees and subcontractors comply with Installer and Customer's safety procedures and requirements while on Sites during performance of the work.

(d) Liens. To the extent permissible by law, Installer shall save and protect each Site from and against the imposition of any mechanics', materialmen's or other lien(s) against such Site, arising out of or pertaining to the subject of this Agreement, and will cause each such lien to be fully discharged and released at the time the performance of any obligation secured by any such lien matures or becomes due.

8. Failure to Perform; Termination.

(a) If any Party believes that any other Party is not satisfying its obligations under this Agreement or with respect to an Order, such Party shall promptly notify the other Party in a writing which specifies the deficiency ("Notice of Default"). The Party receiving the Notice of Default shall have thirty (30) days from the date of the Notice of Default to correct the deficienc(ies) identified therein. If the Party receiving the Notice of Default fails to timely cure the deficienc(ies), the notifying Party may, in its sole discretion, terminate this Agreement in accordance with this Section 8.

(b) If a Customer terminates an Order for Installer's failure to perform before installation of the System for that Order has commenced, Installer shall return any payment(s) made toward the Order price.

(c) If any Party terminates an Order for the other Party's failure to perform, except as specified in the next sentence, Installer may take back all components Installer delivered but that have not yet been installed for that Order and shall not have any further obligation to perform pursuant to this Agreement or that Order. In addition, if an Order is terminated pursuant to this Section, Installer shall complete the installation of System where installation is partially complete, unless otherwise requested by The Program Fund Manager (in which case, Installer will deinstall and remove the products from the Site and return the jobsite to its original condition, at no cost).

(d) Each Party may pursue all rights and remedies available at law or in equity with respect to the failure to perform, except as otherwise provided herein. Breaches of one or more Orders will not constitute breaches under any other Orders or under this Agreement, and breaches of this Agreement independent of any Orders shall not constitute breaches of any Orders.

(e) Except as otherwise set forth in this Agreement, the expiration or termination of this Agreement will not affect any rights or obligations of the Parties that were incurred or that accrued prior to such expiration or termination. Termination shall not be deemed an election of remedies, and the non-defaulting party shall have all rights and remedies available under applicable law in connection with and following such termination.

(f) The Program Fund Manager may terminate this Agreement as to the Member in the sole discretion of The Program Fund Manager. In the case of such a termination, the requirements and other terms of this Section 8 shall not apply. The only requirement in this case for The Program Fund

Manager is to provide contemporaneous written notice to the Parties of the Member's termination.

9. Warranties.

(a) Starting on the date of installation, Installer warrants to The Program Fund Manager and Customer that all materials, equipment and work furnished by Installer as part of an Order will be:

(i) of good quality, free from fault and defects, and

(ii) performed in a good and workmanlike manner, in accordance with all applicable laws, building codes and ordinances, and in strict conformity with the Order.

Installer shall, at its sole expense, immediately correct or replace any Work that is defective or determined to be not in accordance with the requirements of the above warranties within ten (10) year after the date of Final Completion.

(b) System equipment warranties are covered by manufacturer's warranty and are assigned to The Program Fund Manager upon title transfer consistent with Section 5. Installer shall perform operations, repair and maintenance work on the System and manage the entire warranty claims process required by each respective manufacturer. All work covered by Installer warranties shall be at no cost. If Installer fails to perform operations, repair and maintenance work in a timely manner (as reasonably determined by The Program Fund Manager) and according to industry standard practices, The Program Fund Manager shall perform the required operations, repair and maintenance work at its sole discretion with no impact to or waiver of the Installer's obligations under this Agreement.

(c) Installer warrants that it will repair or replace any work on the System that it does not perform in a good workmanlike manner according to the standards of care and diligence generally practiced by solar engineering, construction, installation, and roofing companies when installing commercial photovoltaic solar power with optional incorporated energy storage systems. This provision includes roof penetrations and other roof work related to the installation of the System.

(d) Installer's warranties under this Agreement shall in all cases survive termination of this Agreement and the transfer of title of the System to The Program Fund Manager.

(e) The warranties provided herein do not limit Installer's indemnification obligations to The Program Fund Manager and other Parties as set forth in Section 10.

10. Indemnification.

(a) For purposes of this Agreement and each Order, "Indemnified Parties" means for each identified entity, (i) the Party and any person providing financing to the Party with respect to the System, (ii) any affiliate of the persons set forth in clause (i), and (iii) any director, officer, partner, member, manager, agent or employee of a person described in clause (i) or (ii); and, "Indemnifying Party" means each other Party, as the context requires.

(b) Installer's Indemnities. Installer shall indemnify, defend and hold harmless The Program Fund Manager, Member and/or Customer, as well as their respective Indemnified Parties from any claim, action, suit, proceeding, investigation, losses, damages, liabilities, deficiencies, actions, judgments, interest, awards, penalties, fines, costs or expenses, including reasonable legal fees ("Losses") arising out of any allegations made or brought by any third party ("Claims") in connection with the design, construction, installation, warranty service, workmanship, materials or functionality of any materials, equipment and/or element of the work furnished by Installer, except with respect to any modification by any Party other than Installer (directly or indirectly) or use or reuse of Installer Products that are the subject of an Order other than as permitted under this Agreement or their warranties.

(c) Survival. The provisions of this Section 10 shall survive any expiration of termination of this Agreement.

11. Limitation of Liability. Except for indemnification obligations (Section 10), breach of confidentiality (Section 13), or any gross negligence or willful misconduct, each Party's total liability for all damages of any kind arising out this Agreement will not exceed the amount of the System pricing set forth in each Order. No Party will have to pay any other Party for any indirect, special or consequential damages.

12. Force Majeure. Each Party shall be excused from performance and shall not be considered to be in breach with respect to any obligation hereunder other than any obligation to pay money due and owing, if and to the extent that such Party's failure of, or delay in, performance is caused by or results from acts or circumstances beyond the reasonable control of such Party (a "Force Majeure Event"); provided:

(a) such Party gives the other Parties notice describing the particulars of the Force Majeure Event as soon as is reasonably practicable and in any event within ten (10) business days after the discovery of the Force Majeure Event and its impact on such Party's performance;

(b) the suspension of performance is of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event;

(c) the Party uses reasonable endeavors to:

(i) overcome or mitigate the effects of such occurrence, and

(ii) minimize costs and expenses attendant to or arising from such occurrence; and

(d) when the Party is able to resume performance of the affected obligations, such Party shall so notify the other Party and promptly resume performance.

13. Confidentiality; Publicity.

(a) Each Party will keep any disclosures, as well as the terms of this Agreement, confidential in accordance with the non-disclosure agreements between them (the "NDAs") and agree that this Agreement is confidential information of each of them for purposes of the NDAs. (Even though the NDAs are separate documents, they are considered part of this Agreement.)

(b) Neither Party will advertise or issue any public announcement about this Agreement, or use the other Party's mark, name or logo in any marketing literature, web sites, articles, press releases (including interviews with representatives of media organizations of any form), or any other document or electronic communication, without the other Party's written consent.

(c) Nothing in this Agreement, the NDAs, or any other agreement between the Parties limits or prohibits any announcement, disclosure, or other act that is required by law, including, but not limited to, the California Public Records Act and the Ralph M. Brown Act. The Parties expressly acknowledge and agree that this Agreement will be appended to one or more publicly posted agendas of Member.

(d) Installer must comply with the privacy policy available in the footer of The Program Fund Manager's website located at www.participate.energy as of the date hereof.

14. Governing Law; Disputes.

(a) The Parties agree to comply with all applicable laws and regulations in connection with this Agreement. This Agreement is governed by the laws of the State of California.

(b) The Parties are not bound by any terms relating to Installer Products or other matters covered by this Agreement or any Order that are not contained in this Agreement or the affected Order.

(c) Each of the Parties also agree to promptly notify the other's senior level management if there is any dispute relating to this Agreement or any Orders and to try to resolve the dispute in good faith. If the Parties are unable to resolve a dispute within twenty (20) days after that notice is given, then

either Party can take the dispute to arbitration through Judicial Arbitration and Mediation Services ("JAMS") according to JAMS Streamlined Arbitration Rules. The existence, content and result of the arbitration will be confidential. The arbitration will be conducted by a single arbitrator in English and in the County of [CITY], California, unless otherwise agreed by the Parties. Each Party will bear its own expenses in the arbitration and will share equally the costs of the arbitration unless the arbitrator assigns costs to one of us. Judgment upon the award rendered in the arbitration may be entered in any court of competent jurisdiction.

15. Miscellaneous.

(a) Representations. Each Party represents and warrants to the other Parties that (i) it is a legal entity, duly organized, validly existing and in good standing under the laws of jurisdiction of incorporation; (ii) this Agreement constitutes a legal, valid and binding obligation of such Party enforceable in accordance with its terms; and (iii) the execution, delivery and performance of this Agreement (A) is within its powers, (B) has been duly authorized by all requisite action and (C) will not violate any agreement, commitment, certificate or other document to which it is a party or by which any of its assets may be bound or affected.

(b) Compliance with Law. Each Party will comply with all applicable laws and regulations in connection with its performance under Agreement.

(c) Notices. All notices under this Agreement must be in writing and must be sent via email, or express and/or certified mail, to the contacts identified in the Key Terms.

(d) Assignment. Installer or The Program Fund Manager may assign this Agreement and each Accepted Order (i) to an affiliate of Installer or The Program Fund Manager, respectively, and (ii) as collateral in connection with its financing activities, in either case without the need for consent from any other Party.

(e) Insurance. Installer shall carry and maintain in force, with reputable insurance companies authorized to do business in the jurisdictions where the portion of the Member Territory is located, the insurance in the Installer Insurance Requirements. In addition, Installer shall maintain all insurance that Installer is required by law to maintain in connection with the Work pursuant to each Order.

(f) Cumulative and Certain Exclusive Remedies. Except as otherwise specifically set forth in this agreement, all rights and remedies provided under this Agreement are cumulative and not exclusive, and the exercise by either Party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any other agreement between the Parties or otherwise.

(g) Entire Agreement; Severability. This Agreement constitutes the entire agreement between the Parties regarding the subject matter hereof and supersedes all prior agreements, representations and understandings, oral or written, between the Parties regarding the subject matter hereof. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, such term shall be severable from the remainder of this Agreement and the remainder of this Agreement or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by the law.

(h) Amendment and Modification. No amendment or modification of this Agreement is effective unless it is in writing and signed by each Party.

(i) Waiver. No waiver by either Party of any provision of this Agreement is effective unless explicitly set forth in writing and signed by such Party. No failure to exercise, or delay in exercising, any right or remedy arising from this Agreement operates or may be construed as a waiver thereof. No single or partial exercise of any right or remedy hereunder precludes any other or further exercise thereof or the exercise of any other right or remedy.

(j) Relationship of the Parties. The relationship between the Parties is that of independent contractors. Nothing contained in this Agreement shall be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the Parties, and neither Party shall have authority to contract for or bind the other Party in any manner whatsoever.

(k) No Third-Party Beneficiaries. This Agreement is for the sole benefit of the Parties hereto and their respective successors and permitted assigns and nothing herein is intended to or shall confer upon any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

(l) Survival. Provisions of this Agreement which by their nature contemplate or govern performance or observance subsequent to the termination or expiration of this Agreement shall survive such termination or expiration.

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
INNOVATION AND ENVIRONMENTAL DIVISION

DISTRICT: **ALL**

SUBJECT: **ADOPT RESOLUTION NO. CC 2025-024, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE GRANTING AUTHORITY TO THE CITY MANAGER TO ENTER INTO CERTAIN CONTRACTS ON BEHALF OF ENERGY FOR PALMDALE'S INDEPENDENT CHOICE (EPIC) AND RESCINDING AND REPLACING SECTION 5 OF RESOLUTION NO. CC 2019-042**

RECOMMENDATION

Staff recommend that the City Council:

Adopt Resolution No. CC 2025-024, a Resolution of the City Council of the City of Palmdale granting authority to the City Manager to enter into certain contracts on behalf of EPIC and rescinding and replacing Section 5 of Resolution No. CC 2019-042.

BACKGROUND

The City's Community Choice Aggregation (CCA) Program, EPIC, was established by the City Council by adopting Resolution No. CC 2018-087, approving the submittal of an Implementation Plan (Plan), in accordance with Public Utilities Code Section 366.2(c), on December 4, 2018.

The Plan was certified by the Energy Division on February 28, 2019, and EPIC successfully began serving customers on October 1, 2022. The actions before the City Council are in support of this effort.

On April 2, 2019, the City Council adopted Resolution No. 2019-042, authorizing the City to become a party to the California Choice Energy Authority (CalChoice) Joint Exercise Powers of Authority. It authorized the execution of an Administrative Services Agreement with CalChoice. CalChoice provides a suite of services, including energy portfolio management and the negotiation of energy supply agreements on behalf of EPIC,

including those contracts that ensure EPIC meets its various state-mandated procurement obligations.

DISCUSSION

Because timely action is essential in certain energy contracting situations, Resolution No. 2019-042 granted procurement authority to the City Manager for specific contracts. Staff now recommend that the City Council expand this authority to include certain procurements required by the CPUC that are unlikely to raise policy concerns and do not need City Council approval before execution.

CCA programs allow residents and businesses to purchase electricity from local government agencies and give local governments the authority to manage energy resources on behalf of their communities and customers. CCAs can provide their communities with many environmental, social, and economic benefits. Central to the concept of CCA is local choice. It allows communities to decide about their energy resources and investments within their area and beyond. It also will enable communities to reinvest locally in programs that support economic, social, and environmental justice goals. Over 200 towns, cities, and counties serve over eleven million customers through community choice energy programs.

EPIC energy agreements and contracting are often time-sensitive, requiring swift execution. Therefore, it is appropriate for EPIC executive management to have the discretion to execute certain power supply contracts. City Council adopted Resolution No. 2019-042, which, grants certain procurement authority to the City Manager.

The City Council seeks to modify and expand the granted authority to include CPUC-mandated procurements unlikely to raise policy concerns requiring prior approval.

FISCAL IMPACT

Based on the proposed rate schedule, anticipated revenues generated will be sufficient to cover EPIC's costs of the program.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

A. Seek innovative, cost effective, customer focused methods of service delivery.
B. Implement and administer environmentally sustainable programs.

Prepared by:	Leonardo Torres, P.E. Director of Public Works
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Reso. No. CC 2025-024

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2025-024

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE GRANTING AUTHORITY TO THE CITY MANAGER TO ENTER INTO CERTAIN CONTRACTS ON BEHALF OF ENERGY FOR PALMDALE INDEPENDENT CHOICE AND RESCINDING AND REPLACING SECTION 5 OF RESOLUTION NO. CC 2019-042

WHEREAS, the City Council ("City Council") of the City of Palmdale ("City") adopted Ordinance No. 1524 declaring its intent to establish Energy for Palmdale's Independent Choice ("EPIC") pursuant to the community choice aggregation ("CCA") provisions of California law; and

WHEREAS, Energy for Palmdale's Independent Choice("EPIC"), the City's community choice aggregation, has been formed by the City for the purposes of serving the retail electric service customers residing and doing business in the City of Palmdale; and

WHEREAS, the City Council of the City of Palmdale (the "City Council") is the local authority with jurisdiction over EPIC and acts as the governing body of EPIC (the "EPIC Board"); and

WHEREAS, the City Council, acting as the EPIC Board finds and declares that for shorter-term transactions involving energy, resource adequacy capacity, and/or renewable energy certificates, and for longer-term transactions that are entered into for the purpose of fulfilling state-mandated compliance obligations, it is appropriate for EPIC management to have discretion in contracting, consistent with its responsibilities and expertise in efficiently operating the EPIC program; and

WHEREAS, the City Council, acting as the EPIC Board, finds and declares that time is often of the essence in such transactions and that such transactions are unlikely to raise policy considerations that require EPIC Board input; and

WHEREAS, the City Council, acting as the EPIC Board, finds and declares that for longer-term commitments, such as those that are not entered into for the purpose of fulfilling state-mandated compliance obligations, it is appropriate for the EPIC Board to exercise a greater degree of oversight; and

WHEREAS, the City Council, acting as the EPIC Board, wishes to grant the City Manager of the City of Palmdale authority to execute certain shorter-term EPIC contracts that are consistent with EPIC's forecasted energy consumption and longer-term contracts that are for the purpose of fulfilling state-mandated compliance obligations; and

WHEREAS, the City Council, acting as the EPIC Board, finds and declares that EPIC management may from time to time procure in excess of its requirements for energy, resource adequacy capacity, and/or renewable energy certificates, and to sell any such excess products.

WHEREAS, the City Council, acting as the EPIC Board, authorized the City to become a party to the California Choice Energy Authority ("Authority") Joint Exercise of Powers Agreement, as more particularly described in Resolution No. 2019-042 adopted by the City on April 2, 2019.

WHEREAS, the City Council, acting as the EPIC Board, adopted Resolution No 2019-042 on April 2, 2019. Section 5 of Resolution No. 2019-042 granting certain procurement authority to the City Manager and California Choice Energy acting on behalf of EPIC; the City Council now wishes to revise those granted authorities.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF PALMDALE ACTING AS THE GOVERNING BODY OF PALMDALE CHOICE ENERGY, DOES HEREBY RESOLVE, DETERMINE AND ORDER, AS FOLLOWS:

Section 1. The foregoing recitals are true and correct.

Section 2. Section 5 of Resolution No. 2019-042 is hereby rescinded in its entirety and replaced with the following:

"**Section 5.** Procurement Authority

1. Direct Procurements. The City Manager of the City of Palmdale, or his or her designee, (collectively, the "City Manager") is hereby authorized to enter into contracts for the purpose of directly procuring energy products, including from time to time the procurement of excess energy products, and/or the sale of such excess energy products subject to the Procurement Limitations set forth in Paragraph 3, below.

2. Indirect Procurements. The City Council further authorizes the Authority to negotiate, from time to time, the Authority's entry into purchase contracts on behalf of the City for the purchase of energy and renewable energy, and related products, and for which contracts the City shall be solely responsible for payment through the Security Agreements (each, an "Energy Contract"), which Energy Contract shall be substantially similar to the form attached to the Services Agreement as Exhibit "A"; provided that the term of any such Energy Contract shall not exceed the Procurement Limitations set forth in Paragraph C, below. The Authority shall provide the proposed Energy Contract to the City Manager, or his/her authorized designee, who is hereby authorized and directed to review the proposed Energy Contract and, in the exercise of his/her reasonable discretion, provide the Authority with his/her written approval thereof. The Authority shall have, and the City Manager may not withhold, the authority to grant a seller under the Energy Contract a first priority security

interest in the collateral (i.e., the lock box account) secured by the Security Agreements.

3. Procurement Limitations. The City Manager and Authority's authorization to enter into contracts for the purpose of procuring energy products, including from time to time the procurement of excess energy products, and/or the sale of such excess energy products, shall be subject to the following limitations:

   a. **Short-Term Agreements**: The Authority and/or City Manager may enter into Power Purchase Agreements ("PPAs") (energy, resource adequacy capacity and/or renewable energy certificates) with terms of twelve (12) months or fewer. The City Manager shall report all such agreements to the EPIC board monthly.

   b. **Medium-Term Agreements**: The Authority and/or City Manager acting in conjunction with the City Attorney, may enter into PPAs (energy, resource adequacy capacity, and/or renewable energy certificates) with terms of greater than twelve (12) months but not more than five (5) years. Notwithstanding the foregoing, the Authority and/or City Manager acting in conjunction with the City Attorney may enter into PPAs (energy, resource adequacy capacity, and/or renewable energy certificates) for the fulfillment of state-mandated compliance obligations with terms of greater than twelve (12) months but not more than twenty (20) years. The City Manager shall report all such agreements to the EPIC Board monthly.

   c. **Long-Term Agreements**: Approval by the EPIC Board is required before the Authority or City Manager may enter into PPAs, such as those that are not entered into to fulfil state-mandated compliance obligations, with terms of greater than twenty (20) years."

Section 3. This resolution shall take effect immediately upon its adoption and applies to the agreements executed beginning April 2025.

Section 4. The City Clerk shall certify to the adoption of this resolution.

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

Approved as to form:

_____
Richard Loa, Mayor

ATTEST:

_____
William P. Curley, III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 18th day of March, 2025 by the following roll call vote:

AYES: _____

NOES:_____

ABSTAIN:_____ABSENT:_____

Date: _____ _____
Rochelle Scott, City Clerk

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PARKS AND RECREATION DEPARTMENT**

DISTRICT: **ALL**

SUBJECT: **APPROVE FIRST AMENDMENT TO THE AGREEMENT WITH KNORR SYSTEMS, INC., FOR MAINTENANCE AND REPAIR SERVICES OF AQUATIC FACILITIES EQUIPMENT, INCREASING THE AGREEMENT BY $596,000 FOR A TOTAL NOT TO EXCEED THE AMOUNT OF $996,000 FOR A FOUR YEAR AND NINE MONTH TERM THROUGH JULY 5, 2027**

RECOMMENDATION

Staff recommend that the City Council:

1. Approve First Amendment to Agreement No. A-7748 with Knorr Systems, Inc., (Knorr) for maintenance and repair services of aquatic facilities equipment, increasing the agreement by $596,000 for a total not to exceed amount of $996,000 for a four year and nine month term through July 5, 2027; and,

2. Authorize the City Manager or her designee to execute First Amendment to Agreement No. A-7748 with Knorr, including minimal and/or non-substantial changes.

BACKGROUND

In August 2021, the City Council adopted Resolution No. CC 2021-071, designating Knorr, as a sole source provider for aquatic facility equipment and services. Knorr is an authorized service provider recognized by our equipment manufacturers and is well known for providing industry-leading service, equipment, and support.

On October 5, 2022, the City entered into an agreement with Knorr to provide all aquatic mechanical system inspections, maintenance, and repair for pools at McAdam, Oasis, Marie Kerr, Courson, and DryTown Water Park.

DISCUSSION

Maintaining the aquatic infrastructure is crucial to ensuring the safe and uninterrupted operation of City pools and DryTown Waterpark. Delays in inspections, preventive maintenance, or repairs could disrupt operations, negatively affect the guest experience, and increase the likelihood of costly emergency repairs.

Additional funds are required to fulfill the remainder of the contract term, as all allocated funds have already been expended. Repair services must proceed without interruption to meet existing repair needs and maintain the ongoing functionality of the aquatic mechanical systems. Preventive maintenance schedules, past wear patterns, and projected future repairs have been used to estimate the funds required to complete the contract term.

FISCAL IMPACT

$596,000; Funds are budgeted in Contract Services, Maintenance, and Repair accounts in Facilities Maintenance and DryTown Water Park divisions. Sufficient funds were adopted for Fiscal Year 24/25. Future funding will be proposed and approved through the annual budget process.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

Prepared by:	Keri Smith, Director of Parks and Recreation
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley III, City Attorney

ATTACHMENTS

Agrmt No. A-7748 First Amendment with Knorr Systems, Inc.
Agrmt No. A-7748 with Knorr Systems, Inc.

1st AMENDMENT TO AGREEMENT A- 7748
BETWEEN THE CITY OF PALMDALE AND KNORR SYSTEMS, INC.

This 1st Amendment to Agreement No. A-7748 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and KNORR SYSTEMS, INC. (hereinafter called "CONTRACTOR"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on October 5, 2022 ("Original Agreement") the CITY and CONTRACTOR entered into an agreement to provide:

CONTRACTOR shall provide pool equipment maintenance, service, and/or repair at City pool and aquatic facilities. Service and/or repair will be performed on an as needed basis.

WHEREAS, the parties desire to amend the Original Agreement to:

Amend contract to increase contract price.

NOW THEREFORE, the parties agree as follows:

1. Section 5 of the Agreement, PRICE, is hereby increased by an additional Five Hundred Ninety-Six Thousand dollars ($596,000.00) bringing the total amount of the contract to Nine Hundred Ninety-Six Thousand dollars ($996,000.00).

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

SIGNATURE AREA

Ronda Perez
City Manager

SIGNATURE AREA

ADDRESS FOR NOTICE:
CITY OF PALMDALE
827 East Avenue Q-9
Palmdale, CA 93550

APPROVE AS TO FORM:

SIGNATURE AREA

William P. Curley, III
City Attorney

ATTEST:

SIGNATURE AREA

Roxanne Faber
City Clerk

KNORR SYSTEMS, INC.:

SIGNATURE AREA

Tiadra Carter
Project Administrator

ADDRESS FOR NOTICE:
KNORR SYSTEMS, INC.
2221 Standard Avenue
Santa Ana, CA 92707

---------- INTERNAL USE ONLY ----------

□Certificate(s) and Endorsement(s) attached
□Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
□Attached Agreement Checklist and met all requirements

ORIGINAL

AGREEMENT NO. A-7748
CONTRACT FOR SERVICES
BETWEEN THE CITY OF PALMDALE AND KNORR SYSTEMS, INC.

This CONTRACT for services ("Contract" herein) is made and entered into this 5th day of October, 2022, by and between the City of Palmdale, a public body corporate and politic, (hereinafter called "CITY"), and KNORR SYSTEMS, INC., a California Corporation,(hereinafter called "CONTRACTOR"). The term of this Contract is Four (4) Years and Nine (9) Months,commencing on October 05, 2022, with CITY reserving the option to extend the agreement for 0 additional terms of one year each.

RECITALS

WHEREAS, CONTRACTOR represents that CONTRACTOR has the expertise and is qualified to perform the services described in this Contract.

NOW THEREFORE, CITY and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

1 CITY PROJECT MANAGER

To provide the services required by this Contract, CONTRACTOR shall act under the authority and approval of Public Works Director/designee, who shall oversee this Contract, the work performed by CONTRACTOR, assist CONTRACTOR with any necessary information, audit billings, and approve payments. The CONTRACTOR shall channel all contacts and requests through the City project manager.

2 DESCRIPTION OF WORK

2.1 CONTRACTOR shall provide the following services in a manner satisfactory to CITY:

CONTRACTOR shall provide pool equipment maintenance, service, and/or repair at City pool and aquatic facilities. Service and/or repair will be performed on an as needed basis.

Service and repair requests are separate from scheduled annual preventative maintenance visits. CONTRACTOR shall provide parts for annual preventative maintenance, replacement and/or repair for all components worn due to normal wear. CONTRACTOR shall provide new original equipment manufacturer (OEM) and parts. If it is necessary for the CONTRACTOR to replace any materials, parts or components, the CITY will be responsible for reimbursing the cost to the CONTRACTOR. Any non-warrantied work must be approved by the CITY. CONTRACTOR shall first submit a quote to the CITY for approval. The quote shall outline parts needed and estimated labor charge.

CONTRACTOR shall provide annual preventative maintenance and inspections on all

pool equipment listed below. The annual preventative maintenance and inspections shall be completed during the month of October through May. CONTRACTOR shall perform all annual preventative maintenance and inspection during City business hours, 6:30 a.m. to 4:00 p.m. Monday through Friday, excluding Holidays.

Upon final completion of any work performed under this agreement, CONTRACTOR shall schedule with CITY authorized representative a final inspection.

Safety Requirements
CONTRACTOR shall develop and maintain a safety program in compliance with Public Law 91-596 Occupational Safety and Health ACT (OSHA) Series 1910 Contractor personnel shall work in a safe manner and comply with all applicable safety requirements. CONTRACTOR shall be subject to safety inspections of all work performed under this agreement. CONTRACTOR shall make available, upon request by authorized CITY representative, all safety records applicable to this agreement. All unsafe incidents shall be immediately reported to CITY. A copy of CONTRACTOR safety program implemented for this agreement shall be provided to CITY for review and concurrence.

• Accident Reporting: CONTRACTOR shall maintain an accurate record of, and shall report to the CITY, exposure data, and all accidents resulting in death, traumatic injury, or occupational disease, incidental to work performed under this agreement.

• Damage Reporting: CONTRACTOR shall maintain an accurate record of, and shall report to CITY, damage to property, materials, supplies, and equipment incidental to work performed under this agreement. Damage resulting from CONTRACTOR negligence, as determined by CITY, shall be responsibility of CONTRACTOR.

• Environmental Protection: Compliance with all environmental Laws and Regulations. CONTRACTOR shall be knowledgeable of and comply with all applicable interstate, federal, state, and local laws, regulations, and requirements regarding environmental protection.

CONTRACTOR is solely responsible for any and all liability regarding release of any and all substances.

CONTRACTOR's business hours are 7:30 a.m. to 5:00 p.m. Monday through Friday. CONTRACTOR shall typically respond to emergency service requests within 24 hours.

Licenses
At all times during the term of this Contract, CONTRACTOR shall possess a valid and current Class C-61 / D-35 Pool and Spa Maintenance Specialty Contractor's License with the Contractors State License Board (CSLB) to perform the required work.

CONTRACTOR's CSLB license number is 562312. CONTRACTOR's DIR registration number is 1000878960. Contractor hereby certifies that it holds the required license(s).

Payment Bonds
Unless otherwise expressly provided in the bid documents, if any individual project performed under the Contract exceeds $25,000, Contractor shall provide a payment bond in the full amount of the project. Such bond is requested by the CITY before work is to be performed on the specified project.

Prevailing Wage
This Contract calls for work to be performed constituting public works. All labor is to be paid at prevailing wage rates. CONTRACTOR to determine proper wage classification. CONTRACTOR and all subcontractors must be registered with the State of CA Department of Industrial Relations (DIR) as a public works contractor for the duration of the agreement and is responsible for any and all registration and/or renewal fees. CITY may request certified payroll records for any work performed under the term of the agreement. CONTRACTOR acknowledges and understands it must comply with the prevailing wage requirements as set for in Exhibit A.

POOL LOCATIONS / SITES

	LOCATION/SITE NAME	ADDRESS	ZIP CODE	SITE ABBR.
1	DryTown Water Park / Palmdale Oasis Pool	3850 E Avenue S	93550	DT/POP
2	Marie Kerr Park Pool	2723 Rancho Vista Blvd	93551	MKP
3	McAdam Park Pool	38115 30th Street East	93550	MP
4	Courson Park Pool	38224 10th Street East	93550	CP

POOL EQUIPMENT BY LOCATION / SITE

1 **DryTown Water Park / Palmdale Oasis Pool (DT/POP)**

EQUIPMENT NAME	SYSTEM TYPE	QTY
Lochinvar Swimming Pool Heating System	CPN2072	6
Lochinvar Swimming Pool Heating System	CPN1261	1
ETS UV System	ECF-215-6	1
BECS Chemical Control System	BECSys7	5
LMI Chemical Feed System	C771-26S	9
LMI Chemical Feed System	C121-362S1	10
Pulsar Chlorination System	P-IV	2
Eko3 pH-MTS System	CO2 Feed System	1
Eko3 High-Rate Filtration System	EKO-42210-T-3 (3-Tank System)	1
Eko3 High-Rate Filtration System	EKO-34193-T-5 (5-Tank System)	1
Eko3 High-Rate Filtration System	EKO-34153-T-3 (3-Tank System)	2
H2O Tech Circulation Pump Control System	SPCS	1

2 **Marie Kerr Park Pool (MKP)**

EQUIPMENT NAME	SYSTEM TYPE	QTY
Lochinvar Swimming Pool Heating System	CPN2072	2

BECS Chemical Control System	BECSys7	1
LMI Chemical Feed System	C771-26S	2
LMI Chemical Feed System	C121-362SI	2
US Filter High-Rate Filtration System	USF43-20-3 (3-Tank System)	1

3 McAdam Park Pool (MP)

EQUIPMENT NAME	SYSTEM TYPE	QTY
Lochinvar Swimming Pool Heating System	CPN2072	1
BECS Chemical Control System	BECSys7	1
Pulsar Chlorination System	P-IV	2
Eko3 Systems pH-MTS System	CO2 Systems	1

4 Courson Park Pool (CP)

EQUIPMENT NAME	SYSTEM TYPE	QTY
Lochinvar Crest Boiler Heating System	APO1500N	1
Lochinvar Splash Pad Heating System	ERN302-A	1
BECS Chemical Control System	BECSys7	1
BECS Chemical Control System	BECSys5	1
Sentry UV Light System	SAG 240-A	1
LMI Chemical Feed System	C771-26S	2
LMI Chemical Feed System	B121-392S1	2
Eko3 High-Rate Filtration System	EKO-42210-T-2 (2-tank system)	1
Pentair Triton High-Rate Sand Filter	TR140C-3	2
Vortex Wet Play System Controller	Command Center	1
Handicap Lift Spectrum Aquatics	Splash/PAL	1
H2O Tech Circulation Pump Control System	SPCS	2
Baldor Pool Circulation Pump Motor: 15 HP	EJMM2333T	1
Pentair Wet Play Booster Pump 3HP	WFK-12	1
Pentair Wet Play Booster Pump 2HP	XFK-8	1

POOL EQUIPMENT BY TYPE

	EQUIPMENT NAME	SYSTEM TYPE	SITE QTY	TOTAL QTY
1	Lochinvar Swimming Pool Heating System	CPN2072	DT/POP (6); MKP (2); MP (1)	9
	Lochinvar Swimming Pool Heating System	CPN1262	DT/POP	1
2	Lochinvar Swimming Pool Heating System	APO1500N	CP	1
3	Lochinvar Splash Pad Heating System	ERN302-A	CP	1
4	ETS UV Disinfection System	ECF-215-6	DT/POP	1
5	Sentry UV Light System	SAG 240-A	CP	1
6	BECS Chemical Control System	BECSys7	DT/POP (5); MKP (1); MP (1); CP (1)	8
	BECS Chemical Control System	BECSys5	CP	1

7	LMI Chemical Feed System	C771-26S	DT/POP (9); MKP (2); CP (2)	13
	LMI Chemical Feed System	C121-362S1	DT/POP (10); MKP (2)	12
	LMI Chemical Feed System	B121-392S1	CP (2)	2
8	Pulsar Chlorination System	P-IV	DT/POP (2); MP (2)	4
9	Eko3 pH-MTS System	CO2 Systems	DT/POP (1); MP (1)	2
10	Eko3 High-Rate Filtration System	EKO-42210-T-3	DT/POP	1
	Eko3 High-Rate Filtration System	EKO-42210-T-2	CP	1
	Eko3 High-Rate Filtration System	EKO-34193-T-5	DT/POP	1
	Eko3 High-Rate Filtration System	EKO-34153-T-3	DT/POP (2)	2
11	US Filter High-Rate Filtration System	USF43-20-3	MKP	1
12	Pentair Triton High-Rate Sand Filter	TR-140C-3	CP (2)	2
13	Vortex Wet Play System Controller	Command Center	CP	1
14	Spectrum Aquatics Handicap/Access Lift	Splash/PAL	CP	1
15	H2O Technologies Circulation Pump Control System/VFD	SPCS	DT/POP (1); CP (2)	3
16	Baldor Pool Circulation Pump Motor: 15 HP	EJMM2333T	CP	1
17	Pentair Wet Play Booster Pump: 3HP	WFK-12	CP	1
	Pentair Wet Play Booster Pump: 2HP	XFK-8	CP	1

Preventative maintenance and other as-needed services and repairs on pool equipment includes, but is not limited to, the following requirements:

1. Lochinvar Swimming Pool Heating Systems - CPN1262 and CPN2072

a. Log heater inlet, outlet, and delta temperature
b. Inspect flame condition and heat exchanger appearance
c. Disassemble heater, inspect, and clean gas manifolds, upper cabinet, and fans
d. De-soot and/or clean heat exchanger and inspect for irregularities
Equipment Maintenance Services Cost:
e. Clean and inspect the combustion chamber
f. Inspect refractory materials for cracks or irregularities
g. Clean burners and reinstall with new gaskets
h. Seal combustion chamber door with new gaskets
i. Install new hot surface ignitors and startup heater
j. Test and set gas manifold pressures and combustion chamber air pressure

k. Perform combustion analysis to verify and adjust CO2, NO, NOX emissions
l. Confirm seal on all internal gas manifold connections with leak detector
m. Inspect flame condition following maintenance service
n. Verify inlet, outlet, and delta temperatures
o. Inspect boost pump, bearing assembly, and 3-way valve operation
p. Inspect heater sub-loop piping

2. Lochinvar Swimming Pool Heating Systems – APO1500N

a. Monitor and log heater inlet, outlet, and delta temperature
b. Monitor and log primary loop pressure
c. Test relief valves and expansion tank for proper operation
d. Inspect primary loop piping for any leaks present
e. Inspect condensate neutralization trap
f. Verify boost pump operation and programming
g. Remove front panels for inspection and cleaning
h. Remove and clean heater blower with compressed air
i. Remove burner and disassemble combustion chamber
j. Clean and inspection burners
k. De-soot and/or clean heat exchanger and inspect for irregularities
l. Rinse and drain combustion chamber
m. Reassemble heater with new insulation burner plate, door gaskets and burner gaskets
n. Install new ignitors and flame rods and startup heater
o. Perform combustion analysis to verify and adjust CO2, NO, NOX emissions
p. Confirm seal on all internal gas manifold connections with leak detector
q. Inspect flame condition following maintenance service

3. Lochinvar Wet Play Heating System – ERN302-A

a. Log heater inlet, outlet, and delta temperature
b. Inspect flame condition and heat exchanger appearance
c. Disassemble heater, inspect, and clean gas manifolds, upper cabinet and fans
d. De-soot and/or clean heat exchanger and inspect for irregularities
e. Clean and inspect the combustion chamber
f. Inspect refractory materials for cracks or irregularities
g. Clean burners and reinstall with new gaskets
h. Seal combustion chamber door with new gaskets
i. Install new ignitor and flame rod and startup heater
j. Test and set gas manifold pressures and combustion chamber air pressure
k. Perform combustion analysis to verify and adjust CO2, NO, NOX emissions
l. Confirm seal on all internal gas manifold connections with leak detector
m. Inspect flame condition following maintenance service
n. Inspect bypass loop piping

4. ETS UV System - ECF-215-6

a. Log system flow rate, influent pressure, and effluent pressure
b. Clean and inspect sight glass and wiper system
c. Run quartz wiper to clean sleeves and verify proper operation

d. Replace the wiper carriage assembly lead screw nut and bushing
e. Inspect and clean dust filters in cabinet
f. Shut down system and isolate chamber for service
g. Clean UV sensor quartz window
h. Remove and clean/replace UV lamps at first/second service
i. Remove and clean/replace quartz thimble/sleeves at first/second service
j. Clean chamber and replace quad ring seal at each service
k. Test and set power levels and UV intensity
l. Inspect anodes and replace annually

5. Sentry SAG 240-A UV System

a. Log system flow rate, influent pressure, and effluent pressure
b. Clean and inspect sight glass and wiper system
c. Run quartz wiper to clean sleeves and verify proper operation
d. Replace the wiper carriage assembly lead screw nut and bushing
e. Inspect and clean dust filters in cabinet
f. Shut down system and isolate chamber for service
g. Clean UV sensor quartz window
h. Remove and clean/replace UV lamps at first/second service
i. Remove and clean/replace quartz thimble/sleeves at first/second service
j. Clean chamber and replace quad ring seal at each service
k. Test and set power levels and UV intensity
l. Inspect anodes and replace annually

6. BECSys7 and BECSys5 Chemical Control Systems

a. Test operation of the safety flow switch
b. Clean sensors
c. Calibrate controller
d. Complete chemical evaluation to confirm proper water balance utilizing both Saturation Index and Ryznar Index
e. Provide recommendations to make chemical corrections

7. LMI C771-26S, C121-362S1 and B121-392S1 Chemical Feed Pumps

a. Remove and clean chlorine injector to remove any calcification or buildup
b. Fine-tune chemical output to maintain chemical balance
c. Inspect suction and discharge tubing for wear
d. Disassemble pump wet end for cleaning and overhaul with factory overhaul kit
e. Replace chemical suction and discharge tubing and connection kit

8. Pulsar P-IV Chlorination Systems

a. Disassemble and inspect Pulsar chlorinator for proper wear
b. Remove and clean injector
c. Check chemical discharge tubing for wear
d. Replace Pulsar solenoid (24 volt) valve
e. Replace chemical discharge tubing

9. Eko3 Systems pH-MTS CO2 Feed Systems

a. Replace pH-MTS solenoid with new OEM solenoid
b. Calibrate chemical output to maintain chemical balance
c. Replace chemical discharge tubing and connection kits

10. Eko3 Systems High-Rate Filtration Systems (EKO42210, EKO34193, EKO34153)

a. Drain filter tanks and remove manway covers to inspect tank. internal components
b. Inspect media throughout the filters for proper consistency, contamination and flatness
c. Install cleaned manway covers, fill tanks and bleed air from the system
d. Disassemble and inspect backwash valve assemblies for overhaul
e. Clean, rebuild and lubricate backwash valves (recommended every 3 years)
f. Restart system and review for proper operation

11. USFilter High-Rate Filtration System (USF43-20)

a. Drain filter tanks and remove manway covers to inspect tank. internal components
b. Inspect media throughout the filters for proper consistency, contamination and flatness
c. Install cleaned manway covers, fill tanks and bleed air from the system
d. Disassemble and inspect backwash valve assemblies for overhaul
e. Clean, rebuild and lubricate backwash valves as necessary
f. Restart system and review for proper operation

12. Pentair Triton TR140C-3 Sand Filtration Tanks

a. Drain filter tanks and remove manway covers to inspect tank internal components
b. Inspect media throughout the filters for proper consistency, contamination and flatness
c. Install cleaned manway covers, fill tanks and bleed air from the system
d. Inspect condition of backwash valves
e. Restart system and review for proper operation

13. Vortex Wet Play System – Command Center

a. Test operation of the safety flow switch
b. Program accordingly
c. Calibrate water flow
d. Assure water is flowing properly to each feature

14. Spectrum XRC500 Access Lift

a. Remove any discoloration on stainless steel components with 3M scratch pad
b. Check all electrical connections for wear and or breakage
c. Check all mechanical connections on moving parts for tightness
d. Check battery for charging capabilities, report if replacement is required
e. Check lift for proper operation

15. H20 Technologies Circulation Pump Variable Frequency Drive - SPCS

a. Torque terminal connections to manufacturer recommendations
b. Inspect and clean air intake element
c. Perform operational test and verify proper system operation
d. Wipe down cabinet and remove any loose materials

16. Baldor Pool Circulation Pump Motor – EJMM2333T

a. Lubricate motor
b. Replace lip seals as necessary
c. Replace bearings as necessary
d. Check shaft for runout at sleeve area
e. Clean components
f. Reassemble
g. Restart pump and review for proper operation

17. Pentair Wet Play Booster Pumps – WFK-12 and XFK-8

a. Turn off motor, relieve pressure in system
b. Remove debris basket, empty, clean and replace
c. Clean lid, locking O-ring and sealing surface of pump strainer
d. Reprime pump, startup system and review for proper operation

2.2 CONTRACTOR shall have no claim for compensation for any services or work, which has not been authorized by CITY's Authorization to Proceed.

2.3 CONTRACTOR shall not accept any change of scope, or change in contract provisions, to this Contract unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

2.4 CONTRACTOR shall maintain in current status all Federal, State, and local licenses and permits required for the operation of the business conducted by the CONTRACTOR as applicable to this contract.

2.5 All work supplied under this Contract shall be fully guaranteed by CONTRACTOR for a minimum period of 60 days from the date of acceptance by CITY. Any defects of design, workmanship, or materials that would result in non-compliance with the Contract specifications shall be fully corrected by CONTRACTOR (including parts and labor) without cost to CITY. The written warranty shall be included with the delivered products to the using Department.

2.6 CITY shall provide to CONTRACTOR, without charge, all data, program information, including reports, records, maps, and other information, now in CITY's possession, which may facilitate the timely performance of the work.

3 CONTRACTOR'S KEY PERSONNEL

3.1 **Key Staff.** CITY reserves the right to review and approve CONTRACTOR'S staff including all subcontractors to be assigned to any project by CONTRACTOR during the term of this Contract.

This Contract has been awarded to CONTRACTOR based partially on the key personnel proposed to perform the services required herein. CONTRACTOR shall not change nor substitute any of these key staff for work on this Contract without prior written approval by CITY.

CONTRACTOR's Team and Key Personnel are as follows:

Not Applicable

This Services Contract has been awarded to CONTRACTOR based on its representation that those personnel and subcontractors submitted as part of its bid and listed above will perform the portions of the work listed above.

CONTRACTOR shall not deviate nor substitute any of these team members without prior written approval by CITY.

3.2 **Subcontractors.** During the performance of the Agreement, CONTRACTOR may engage such additional SUBCONTRACTORS as may be required for the timely completion of this Agreement. In the event of subcontracting, the sole responsibility for fulfillment of all terms and conditions of this Agreement rests with CONTRACTOR.

CONTRACTOR shall not enter into any Subcontract under this Contract for the performance of this Contract without the advance written approval of CITY. The subcontract shall incorporate by reference the terms and conditions of this Contract.

3.3 **Direct Responsibility.** All services required under this Contract shall be performed by CONTRACTOR, or under CONTRACTOR's direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

3.3.1 CONTRACTOR shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

3.3.2 CONTRACTOR shall be responsible for payment of all CONTRACTOR's employees' and subcontractor's wages and benefits and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

3.3.3 CONTRACTOR shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from CONTRACTOR's acts or omissions with respect to any liability,

damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

4 ACCEPTANCE AND DOCUMENTATION

Each task shall be reviewed and approved by the Contract Project Manager to determine acceptable completion.

4.1 **Records**. The CONTRACTOR shall retain and shall contractually require each SUBCONTRACTOR to retain all data and other "records" relating to the acquisition and performance of the Contract for a period of five years after the completion of the Contract.

4.2 **Property of CITY.** All materials, including reports, computer programs and other deliverables, supplied or created under this Contract are the sole property of CITY. CONTRACTOR is not entitled to a patent or copyright on those materials and may not transfer the patent or copyright to anyone else. CONTRACTOR shall not use or release these materials without the prior written consent of CITY.

4.3 **Products.** All equipment, materials, parts, and other components incorporated in the work or services performed pursuant to this Contract shall be new, or the latest model and of the most suitable grade for the purpose intended. All work shall be performed in a skilled and workmanlike manner.

5 PRICE

CITY shall pay to CONTRACTOR an amount not to exceed Four Hundred Thousand dollars ($400000.00) for the completion of all the work and services described in Section 2, which sum shall include all costs or expenses incurred by CONTRACTOR, payable as follows:

Fiscal Year 2022/2023

ANNUAL PREVENTATIVE MAINTENANCE SERVICES:			
Equipment/System	**Type**	**FY 22/23**	**UOM**
Lochnivar Swimming Pool Heating System	CPN2072	$1,470.00	per system
Lochnivar Swimming Pool Heating System	CPN1262	$1,390.00	per system
Lochnivar Swimming Pool Heating System	APO1500N	$1,690.00	per system
Lochnivar Wet Play Heating System	ERN302-A	$1,125.00	per system
Sentry UV Light System	SAG 240-A	$2,490.00	per system
ETS UV System	ECF-215-6	$6,470.00	per system

SUBJECT TO BE ADDED FOR PREVENTATIVE MAINTENANCE DURING CONTRACT TERM:			
Equipment/System	**Type**	**FY 22/23**	**UOM**
BECS Chemical Control System	Controller	$1,113.00	per system
LMI Chemical Feed System	C771-26S	$1,242.00	per system
LMI Chemical Feed System	C121-362SI	$1,242.00	per system
LMI Chemical Feed System	B121-392S1	$1,242.00	per system
Pulsar Chlorination System	P-IV	$3,870.00	per system
Eko3 CO2 Feed System	pH-MTS	$1,310.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-3	$3,186.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-2	$2,315.00	per system
Eko3 High Rate Filtration System	EKO-34193-T-5	$5,524.00	per system
Eko3 High Rate Filtration System	EKO-34153-T-3	$3,186.00	per system
USFilter High Rate Filtration System	USF 43-20-3	$3,186.00	per system
H2O Technologies Circulation Pump Control System	SPCS	$677.00	per system
Pentair Triton High-Rate Sand Filters	TR140C-3	$1,015.00	per system
Vortex Wet Play System Controller	Command Center	$1,678.00	per system
Spectrum Aquatics Handicap Access Lift	Splash/PAL	$1,094.00	per system
Baldor Circulation Pump Motor: 15 HP	EJMM2333T	$1,925.00	per system
Pentair Wet play booster pump: 3HP	WFK-12	$756.00	per system
Pentair Wet play booster pump: 2HP	XFK-8	$756.00	per system

LABOR RATES & OTHER FEES (FOR AS NEEDED SERVICES AND REPAIRS)		
Item	**FY 22/23**	**UOM**
Standard Labor Rate	$190.00	per hour
Overtime Labor Rate (non-holiday)	$288.00	per hour
Holiday/Sunday Labor Rate	$288.00	per hour
Emergency Labor Rate	$288.00	per hour
Travel Rate (portal to portal)	$125.00	per hour
After-Hours/Holiday Travel Rate (portal to portal)	$170.00	per hour
Emergency Service Call Fee	$167.00	per job
Material/Parts Mark-Up**	30%	

Fiscal Year 2023/2024

ANNUAL PREVENTATIVE MAINTENANCE SERVICES:			
Equipment/System	**Type**	**FY 23/24**	**UOM**
Lochnivar Swimming Pool Heating System	CPN2072	$1,635.00	per system
Lochnivar Swimming Pool Heating System	CPN1262	$1,540.00	per system
Lochnivar Swimming Pool Heating System	APO1500N	$1,880.00	per system
Lochnivar Wet Play Heating System	ERN302-A	$1,250.00	per system
Sentry UV Light System	SAG 240-A	$2,770.00	per system
ETS UV System	ECF-215-6	$7,190.00	per system

SUBJECT TO BE ADDED FOR PREVENTATIVE MAINTENANCE DURING CONTRACT TERM:

Equipment/System	Type	FY 23/24	UOM
BECS Chemical Control System	Controller	$1,238.00	per system
LMI Chemical Feed System	C771-26S	$1,380.00	per system
LMI Chemical Feed System	C121-362SI	$1,380.00	per system
LMI Chemical Feed System	B121-392S1	$1,380.00	per system
Pulsar Chlorination System	P-IV	$4,300.00	per system
Eko3 CO2 Feed System	pH-MTS	$1,460.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-3	$3,540.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-2	$2,575.00	per system
Eko3 High Rate Filtration System	EKO-34193-T-5	$6,138.00	per system
Eko3 High Rate Filtration System	EKO-34153-T-3	$3,540.00	per system
USFilter High Rate Filtration System	USF 43-20-3	$3,540.00	per system
H2O Technologies Circulation Pump Control System	SPCS	$754.00	per system
Pentair Triton High-Rate Sand Filters	TR140C-3	$1,128.00	per system
Vortex Wet Play System Controller	Command Center	$1,864.00	per system
Spectrum Aquatics Handicap Access Lift	Splash/PAL	$1,216.00	per system
Baldor Circulation Pump Motor: 15 HP	EJMM2333T	$2,135.00	per system
Pentair Wet play booster pump: 3HP	WFK-12	$839.00	per system
Pentair Wet play booster pump: 2HP	XFK-8	$839.00	per system

LABOR RATES & OTHER FEES (FOR AS NEEDED SERVICES AND REPAIRS)

Item	FY 23/24	UOM
Standard Labor Rate	$215.00	per hour
Overtime Labor Rate (non-holiday)	$315.00	per hour
Holiday/Sunday Labor Rate	$315.00	per hour
Emergency Labor Rate	$315.00	per hour
Travel Rate (portal to portal)	$135.00	per hour
After-Hours/Holiday Travel Rate (portal to portal)	$189.00	per hour
Emergency Service Call Fee	$185.00	per job
Material/Parts Mark-Up**	30%	

Fiscal Year 2024/2025

ANNUAL PREVENTATIVE MAINTENANCE SERVICES:

Equipment/System	Type	FY 24/25	UOM
Lochnivar Swimming Pool Heating System	CPN2072	$1,815.00	per system
Lochnivar Swimming Pool Heating System	CPN1262	$1,715.00	per system
Lochnivar Swimming Pool Heating System	APO1500N	$2,085.00	per system
Lochnivar Wet Play Heating System	ERN302-A	$1,390.00	per system
Sentry UV Light System	SAG 240-A	$3,075.00	per system
ETS UV System	ECF-215-6	$7,995.00	per system

SUBJECT TO BE ADDED FOR PREVENTATIVE MAINTENANCE DURING CONTRACT TERM:

Equipment/System	Type	FY 24/25	UOM
BECS Chemical Control System	Controller	$1,375.00	per system
LMI Chemical Feed System	C771-26S	$1,530.00	per system
LMI Chemical Feed System	C121-362SI	$1,530.00	per system
LMI Chemical Feed System	B121-392S1	$1,530.00	per system
Pulsar Chlorination System	P-IV	$4,770.00	per system
Eko3 CO2 Feed System	pH-MTS	$1,619.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-3	$3,934.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-2	$2,860.00	per system
Eko3 High Rate Filtration System	EKO-34193-T-5	$6,820.00	per system
Eko3 High Rate Filtration System	EKO-34153-T-3	$3,934.00	per system
USFilter High Rate Filtration System	USF 43-20-3	$3,934.00	per system
H2O Technologies Circulation Pump Control System	SPCS	$837.00	per system
Pentair Triton High-Rate Sand Filters	TR140C-3	$1,253.00	per system
Vortex Wet Play System Controller	Command Center	$2,071.00	per system
Spectrum Aquatics Handicap Access Lift	Splash/PAL	$1,351.00	per system
Baldor Circulation Pump Motor: 15 HP	EJMM2333T	$2,375.00	per system
Pentair Wet play booster pump: 3HP	WFK-12	$932.00	per system
Pentair Wet play booster pump: 2HP	XFK-8	$932.00	per system

LABOR RATES & OTHER FEES (FOR AS NEEDED SERVICES AND REPAIRS)

Item	FY 24/25	UOM
Standard Labor Rate	$235.00	per hour
Overtime Labor Rate (non-holiday)	$348.00	per hour
Holiday/Sunday Labor Rate	$348.00	per hour
Emergency Labor Rate	$348.00	per hour
Travel Rate (portal to portal)	$149.00	per hour
After-Hours/Holiday Travel Rate (portal to portal)	$210.00	per hour
Emergency Service Call Fee	$200.00	per job
Material/Parts Mark-Up**	30%	

Fiscal Year 2025/2026

ANNUAL PREVENTATIVE MAINTENANCE SERVICES:

Equipment/System	Type	FY 25/26	UOM
Lochnivar Swimming Pool Heating System	CPN2072	$2,015.00	per system
Lochnivar Swimming Pool Heating System	CPN1262	$1,910.00	per system
Lochnivar Swimming Pool Heating System	APO1500N	$2,320.00	per system
Lochnivar Wet Play Heating System	ERN302-A	$1,542.00	per system
Sentry UV Light System	SAG 240-A	$3,422.00	per system
ETS UV System	ECF-215-6	$8,883.00	per system

SUBJECT TO BE ADDED FOR PREVENTATIVE MAINTENANCE DURING CONTRACT TERM:

Equipment/System	Type	FY 25/26	UOM

BECS Chemical Control System	Controller	$1,527.00	per system
LMI Chemical Feed System	C771-26S	$1,702.00	per system
LMI Chemical Feed System	C121-362SI	$1,702.00	per system
LMI Chemical Feed System	B121-392S1	$1,702.00	per system
Pulsar Chlorination System	P-IV	$5,308.00	per system
Eko3 CO2 Feed System	pH-MTS	$1,800.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-3	$4,370.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-2	$3,177.00	per system
Eko3 High Rate Filtration System	EKO-34193-T-5	$7,570.00	per system
Eko3 High Rate Filtration System	EKO-34153-T-3	$4,370.00	per system
USFilter High Rate Filtration System	USF 43-20-3	$4,370.00	per system
H2O Technologies Circulation Pump Control System	SPCS	$929.00	per system
Pentair Triton High-Rate Sand Filters	TR140C-3	$1,394.00	per system
Vortex Wet Play System Controller	Command Center	$2,301.00	per system
Spectrum Aquatics Handicap Access Lift	Splash/PAL	$1,501.00	per system
Baldor Circulation Pump Motor: 15 HP	EJMM2333T	$2,650.00	per system
Pentair Wet play booster pump: 3HP	WFK-12	$1,036.00	per system
Pentair Wet play booster pump: 2HP	XFK-8	$1,036.00	per system

LABOR RATES & OTHER FEES (FOR AS NEEDED SERVICES AND REPAIRS)

Item	FY 25/26	UOM
Standard Labor Rate	$265.00	per hour
Overtime Labor Rate (non-holiday)	$385.00	per hour
Holiday/Sunday Labor Rate	$385.00	per hour
Emergency Labor Rate	$385.00	per hour
Travel Rate (portal to portal)	$165.00	per hour
After-Hours/Holiday Travel Rate (portal to portal)	$230.00	per hour
Emergency Service Call Fee	$210.00	per job
Material/Parts Mark-Up**	30%	

Fiscal Year 2026/2027

ANNUAL PREVENTATIVE MAINTENANCE SERVICES:

Equipment/System	Type	FY 26/27	UOM
Lochnivar Swimming Pool Heating System	CPN2072	$2,240.00	per system
Lochnivar Swimming Pool Heating System	CPN1262	$2,125.00	per system
Lochnivar Swimming Pool Heating System	APO1500N	$2,585.00	per system
Lochnivar Wet Play Heating System	ERN302-A	$1,715.00	per system
Sentry UV Light System	SAG 240-A	$3,800.00	per system
ETS UV System	ECF-215-6	$9,874.00	per system

SUBJECT TO BE ADDED FOR PREVENTATIVE MAINTENANCE DURING CONTRACT TERM:

Equipment/System	Type	FY 26/27	UOM
BECS Chemical Control System	Controller	$1,695.00	per system

LMI Chemical Feed System	C771-26S	$1,891.00	per system
LMI Chemical Feed System	C121-362SI	$1,891.00	per system
LMI Chemical Feed System	B121-392S1	$1,891.00	per system
Pulsar Chlorination System	P-IV	$5,898.00	per system
Eko3 CO2 Feed System	pH-MTS	$2,001.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-3	$4,856.00	per system
Eko3 High Rate Filtration System	EKO-42210-T-2	$3,530.00	per system
Eko3 High Rate Filtration System	EKO-34193-T-5	$8,415.00	per system
Eko3 High Rate Filtration System	EKO-34153-T-3	$4,856.00	per system
USFilter High Rate Filtration System	USF 43-20-3	$4,856.00	per system
H2O Technologies Circulation Pump Control System	SPCS	$1,035.00	per system
Pentair Triton High-Rate Sand Filters	TR140C-3	$1,547.00	per system
Vortex Wet Play System Controller	Command Center	$2,556.00	per system
Spectrum Aquatics Handicap Access Lift	Splash/PAL	$1,668.00	per system
Baldor Circulation Pump Motor: 15 HP	EJMM2333T	$3,011.00	per system
Pentair Wet play booster pump: 3HP	WFK-12	$1,150.00	per system
Pentair Wet play booster pump: 2HP	XFK-8	$1,150.00	per system

LABOR RATES & OTHER FEES (FOR AS NEEDED SERVICES AND REPAIRS)

Item	FY 26/27	UOM
Standard Labor Rate	$290.00	per hour
Overtime Labor Rate (non-holiday)	$424.00	per hour
Holiday/Sunday Labor Rate	$424.00	per hour
Emergency Labor Rate	$424.00	per hour
Travel Rate (portal to portal)	$180.00	per hour
After-Hours/Holiday Travel Rate (portal to portal)	$250.00	per hour
Emergency Service Call Fee	$220.00	per job
Material/Parts Mark-Up**	30%	

**Material Mark Up
If it is necessary for the CONTRACTOR to replace any materials, parts or components, the CITY will be responsible for reimbursing the cost to the CONTRACTOR. Any non-warrantied work must be approved by the CITY. The CONTRACTOR shall first submit a quote to the CITY for approval. The quote shall outline parts needed and estimated labor charge. Vendor invoice must be submitted for proof of cost with CITY invoice for reimbursement.

Pricing shall be firm fixed pricing for stated term and shall include all costs in accordance with all contract requirements, including but not limited to fully burdened labor, payroll and other taxes, fringes, license and permits, insurance, workforce productivity, coordination, transportation, field overhead, general and administrative

overhead, and profit. Payment shall be based on actual quantities and there is no guarantee the CITY shall require any certain quantity.

5.1 An application for payment form must be submitted to CITY which shall include the following: a clear, detailed invoice reflecting work being billed for, a summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within a project; any/all backup documentation supporting the above items. Work schedule updates must also be included with the payment requests.

5.2 CONTRACTOR shall maintain adequate records and shall permit inspection and audit by CITY of CONTRACTOR's charges under this Contract. CONTRACTOR shall make such records available to CITY during normal business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available only to CITY and any specified public agencies. Such records shall be maintained by CONTRACTOR for one (1) year following completion of the work under this Contract unless a longer period of time is required by state or federal law, in which event CONTRACTOR shall retain its records for the time required by such laws.

5.3 **Payment.** A separate invoice shall be issued for each shipment of material or service performed, and no payment will be issued prior to receipt of material and/or completion of specified services and receipt of a correct invoice.

6 TAXES

6.1 CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with state and local laws.

6.2 CONTRACTOR is an independent contractor and shall have no power or authority to incur any debt, obligation, or liability on behalf of CITY. No person employed by CONTRACTOR or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

6.3 CONTRACTOR shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

6.4 When equipment, materials or supplies generally taxable to CONTRACTOR are eligible for a tax exemption due to the nature of the work, CONTRACTOR shall assist the City in applying for and obtaining such tax credits and exemptions, which shall be paid or credited to the City.

7 PATENT FEES AND ROYALTIES

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the work or the incorporation in the work of any invention, design, process, program, product or device which is the subject of patent

rights or copyrights held by others. If a particular invention, design, process, program, product or device is specified in the contract documents for use in the performance of the work and if, to the actual knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by CITY in the contract documents. CONTRACTOR shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, program, product or device not specified in the contract documents, and shall defend all such claims in connection with any alleged infringement of such rights.

8 INDEMNIFICATION

To the fullest extent permitted by law, CONTRACTOR and any subcontractors working on its behalf agree to indemnify CITY, its officers, employees, agents and elected and appointed boards (hereinafter "Indemnified Parties") for any loss, claim, demand, cause of action, cost, expense, damage, obligation or liability which arises out of or is in any way connected with the performance of any work under this agreement, including any acts or omissions, willful misconduct or negligent conduct, whether active or passive, on the part of CONTRACTOR, or its subcontractors, and regardless of any acts, omissions or negligence (whether active or passive) of any person or entity indemnified hereunder. At their own expense, CONTRACTOR and, as applicable, any subcontractors working on its behalf, shall defend any suit, claim or action against the Indemnified Parties founded upon such loss, claim, demand, cause of action, cost, expense, damage, obligation or liability. CONTRACTOR shall ensure that the contract of any subcontractor working under this agreement contain an indemnity agreement, requiring the subcontractor to indemnify and defend the Indemnified Parties pursuant the terms set forth above. CONTRACTOR shall indemnify the Indemnified Parties, and save it harmless from any and all loss, damage, costs, expenses and attorney's fees suffered or incurred on account of any breach of the aforesaid obligations and covenants, and any other provision or covenant of this agreement.

9 INSURANCE

9.1 CONTRACTOR, at its expense, shall maintain in effect at all times during the performance of work under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 9.8, must be reviewed and accepted by the City Attorney**.

9.1.1 <u>Workers' Compensation and Employer's Liability</u>

- Workers' Compensation -- coverage as required by the State of California

- Employer's Liability -- $1,000,000.00 each accident
  $1,000,000.00 policy limit bodily injury
  $1,000,000.00 each employee bodily injury by disease

9.1.2 Commercial General Liability
- $2,000,000.00 limit on a per occurrence basis
- $4,000,000.00 general aggregate limit

9.1.3 Commercial Automobile Liability
- $2,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

9.1.4 Pollution/Enviornmental Liability*
- $2,000,000 limit on a per occurrence basis

9.1.5 Professional (Errors & Omissions)*
- $2,000,000 limit on a per occurrence basis

9.2 All of CONTRACTOR's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty (30) calendar days prior to termination, cancellation, or reduction of coverage in the policy.

9.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The certificates shall state: "The City of Palmdale, Successor Agency to the Community Redevelopment Agency of the City of Palmdale, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insured".

B. "Severability of Interest" Clause.

9.4 Promptly upon execution of this Contract, and prior to commencement of any work, CONTRACTOR shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that CONTRACTOR has the required coverage and showing the required named insured. Within five (5) days of written request from CITY, CONTRACTOR shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

9.5 The requirements as to the types and limits of insurance to be maintained by CONTRACTOR are not intended to and shall not in any manner limit or qualify CONTRACTOR's liabilities and obligations under this Contract.

9.6 Any policy or policies of insurance that CONTRACTOR elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

9.7 All insurance coverage must be maintained throughout the duration of this Contract.

9.8 Acceptable Proof of Insurance:

9.8.1 ACORD Certificate of Insurance listing all coverage, limits, deductibles and insured; and endorsements for all applicable coverage if agent has authority to issue it; or additional insured Form CG20100704 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

9.8.2 Binders of insurance for all coverage. Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements and a corresponding Certificate of Insurance listing all insurers and coverage must be submitted to the City Attorney.

9.8.3 When pollution/environmental and/or professional (errors & omissions) liability is provided on a claims-made basis, CONTRACTOR will continue to renew the insurance for a period of five (5) years after this Agreement expires is terminated. Such insurance will have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover CONTRACTOR, or its officers, employees or agents during the time this Agreement was in effect.

9.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time CONTRACTOR fails to maintain the required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

10 TERMINATION WITHOUT CAUSE

City reserves the right to terminate this Contract or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, CONTRACTOR shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and subcontractors to cease such work. CONTRACTOR shall also surrender to CITY all finished or unfinished documents, processes, programs and other supplies and materials, which shall be City's property. As compensation in full for services performed to the date of such termination, the CONTRACTOR shall receive an amount equal to the value of the work completed as

of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

11 TERMINATION FOR CAUSE

If CITY determines that CONTRACTOR has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, CITY shall give written notice to CONTRACTOR specifying all defaults to be remedied within thirty (30) days. Such notice shall set forth the basis for CITY's dissatisfaction and suggest corrective measures. If, after thirty days, CONTRACTOR has failed to implement appropriate corrective measures, CITY may elect to terminate this Contract in whole or in part.

11.1 In the event CITY terminates this Contract, in whole or in part, for cause, CITY may procure, upon such terms and in such manner, as it may deem appropriate, services similar to those terminated.

11.2 CONTRACTOR shall provide all finished or unfinished documents, data, studies, software, drawings, programs, processes, maps, photographs, reports, etc., prepared by CONTRACTOR within fifteen (15) working days after notice of termination. Upon such termination, CONTRACTOR shall be paid an amount equal to the value of the services provided and work performed as of the date of termination, taking into consideration the costs associated with hiring another CONTRACTOR to complete the services. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to both completed work and work in progress, to complete and incomplete documents when such are delivered to CITY, and to authorized reimbursement expenses. The above is in addition to any other remedies available by law or equity to CITY.

11.3 If, after notice of termination of the Contract under the provisions of this Section 11, it is determined, for any reason, that CONTRACTOR was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 10.

12 DISPUTE RESOLUTION

All claims, disputes, and other matters in question between CITY and CONTRACTOR arising out of or relating to this Contract or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

13 OWNERSHIP OF PRODUCT

All product, data, documents, programs and software including, but not limited to, research, field notes, investigations, analysis, studies, processes, software, instructions for use and other manuals, whether complete or incomplete, which are prepared or produced in the performance of this Contract are to be, and remain the

property of CITY and shall be delivered to or left with CITY upon the completion or termination of this Agreement. CONTRACTOR shall furnish CITY, upon its request, originals and reproducible and electronic copies of product, data reports, studies and of all other documents listed above. Electronic copies shall be provided in an unprotected format which allows CITY to copy, reproduce and makes changes as CITY deems necessary.

14 DELEGATION AND ASSIGNMENT

14.1 CONTRACTOR shall not delegate or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to CONTRACTOR from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval.

14.2 Any assignment, delegation or subcontract shall be made in the name of CONTRACTOR and shall not bind or purport to bind CITY and shall not release CONTRACTOR from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees, assignees, delegates and subcontractors. No such assignment, delegation or subcontract shall result in any increase in the amount of total compensation payable to CONTRACTOR under this Contract.

15 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

15.1 In performance of this Contract, CONTRACTOR shall not discriminate against any employee, subcontractor, or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation, or age. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

15.2 The provisions of subsection 15.1 above shall be included in all solicitations or advertisements placed by or on behalf of CONTRACTOR for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of CONTRACTOR and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

16 FINANCIAL INTEREST CERTIFICATION

16.1 CONTRACTOR warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in CONTRACTOR's firm.

16.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

17 CONFLICT OF INTEREST

17.1 CONTRACTOR stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause CONTRACTOR to be "financial interested" (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

17.2 CONTRACTOR shall not employ any City official or employee to perform any work required pursuant to this Contract.

17.3 To the extent required by the City Manager or his designee, CONTRACTOR shall complete and file with the City Clerk a Form 700 Statement of Economic Interests disclosing any reportable property interests, income, gifts, investments, or business positions.

18 COMPLIANCE WITH LAW

18.1 CONTRACTOR shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If CONTRACTOR uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by CONTRACTOR.

18.2 The law of the state of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

19 NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

20 ENTIRE AGREEMENT AND AMENDMENTS

20.1 This Contract is the complete Agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

20.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the work to be performed by CONTRACTOR hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

20.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

21 ATTORNEY'S FEES

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

10-24-22

Steven D. Hofbauer Date
Mayor

ADDRESS FOR NOTICE:
CITY OF PALMDALE
39110 3rd Street East
Palmdale, Ca 93550

KNORR SYSTEMS, INC.:

Tiadra Carter

Digitally signed by Tiadra Carter
DN: cn=Tiadra Carter, o, ou, email=tiadrac@knorrsystems.com, c=US
Date: 2022.09.02 08:29:46 -07'00'

Tiadra Carter Date
Project Administrator

ADDRESS FOR NOTICE:
KNORR SYSTEMS, INC.
2221 Standard Avenue
Santa Ana, CA 92707

APPROVE AS TO FORM:

Scott Porter

Scott E. Porter
Acting City Attorney

ATTEST:

Roxanne Faber

~~Shanae S. Smith~~ Roxanne Faber
Acting City Clerk

ATTEST: If Corporation

Secretary

EXHIBIT A

Prevailing Wage Requirements

1. This Contract calls for work to be performed constituting public works. Contractor and all subcontractors shall pay the general prevailing rate of per diem wages as determined and as published by the State Director of the Department of Industrial Relations pursuant to Article 2 of Chapter 1 of Part 7, of Division 2 of the State Labor Code, including, but not limited to, Sections 1770, 1771, 1773, 1773.2 and 1774.

2. This is a public work and requires the payment of prevailing wages for the work or craft in which the worker is employed for any public work done under the contract by Contractor or by any subcontractor pursuant to Section 1771 of the Labor Code. Pursuant to the provisions of Section 1773 of the Labor Code of the State of California, the City has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in this locality for each craft, classification, or type of workman needed to execute this contract from the Director of the Department of Industrial Relations. These rates are on file with the City or may be obtained at http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm.

Contractor shall post a copy of such wage rates at the job site and shall pay the adopted prevailing wage rates as a minimum. Contractor shall comply with the provisions of Sections 1775, 1776, 1777.5, 1777.6, and 1813 of the Labor Code. Pursuant to the provisions of 1775 of the Labor Code, Contractor shall forfeit to the City, as a penalty, not more than $200.00 for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the stipulated prevailing rates for any work done under this Contract, by him or by any subcontractor under him, in violation of the provisions of this Agreement.

3. Contractors and subcontractors who are ineligible to bid for work on, or be awarded, a public works project pursuant to Labor Code Sections 1777.1 and 1777.7 are prohibited from bidding on, being awarded, or performing work as a subcontractor, on this Project pursuant to Public Contract Code Section 6109.

4. Contractor's attention is directed to the provisions in Sections 1774, 1775, 1776, 1777.5 and 1777.6 of the Labor Code. Contractor shall comply with the provisions in these Sections. The statutory provisions for penalties for failure to comply with the State's wage and hours laws will be enforced. Pursuant to Section 1775 of the Labor Code, the Contractor and any subcontractors, shall, as a penalty to the City forfeit the prescribed amounts per calendar day, or portion thereof, for each worker paid less than the prevailing wage rates.

5. Pursuant to Labor Code Section 1771.4, the Project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations.

6. Each Contractor and subcontractor shall furnish the records specified in Labor Code Section 1776 directly to the State Labor Commissioner at least monthly in the format prescribed by the State Labor Commissioner.

7. Sections 1774 and 1775 require the Contractor and all subcontractors to pay not less than the prevailing wage rates to all workmen employed in the execution of the Contract and specify forfeitures and penalties for failure to do so. The minimum wages to be paid are those determined by the State Director of the Department of Industrial Relations. Section 1776 requires the Contractor and all subcontractors to keep accurate payroll records, specifies the contents thereof, their inspection and duplication procedures and certain notices required of the Contractor pertaining to their location.

8. Section 1777.5 of the Labor Code requires Contractor or subcontractor employing workers in any apprenticeable occupation to apply to the Joint Apprenticeship Committee nearest the site of the public works project, which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen to be used in the performance of the Contract. The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade and if other contractors on the public works site are making such contributions. Information relative to apprenticeship standards, contributions, wage schedules and other requirements may be obtained from the State Director of Industrial Relations or from the Division of Apprenticeship Standards. Section 1777.6 of the Labor Code provides that it shall be unlawful to refuse to accept otherwise qualified employees as registered apprentices solely on the grounds of race, religious creed, color, national origin, ancestry, sex, or age.

9. Eight hours labor constitutes a legal day's work, as set forth in Labor Code Section 1810. The statutory provisions for penalties for failure to comply with the State's wage and hour laws will be enforced as set forth in Labor Code Section 1813.

WORKERS' COMPENSATION INSURANCE CERTIFICATE

Pursuant to Section 1861 of the State Labor Code, and all amendments thereto, each contractor to whom a public works contract has been awarded shall sign the following certificate and shall submit same to the City of Palmdale prior to performing any work on the contract:

> "I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of work of this contract."

NAME OF CONTRACTOR
Contractor

By Tiadra Carter
Print Name

Tiadra Carter Digitally signed by Tiadra Carter DN: cn=Tiadra Carter, o, ou, email=tiadrac@xnorinsystems.com, c=US Date: 2022.09.02 08:31:36 -07'00'

Signature

Project Administrator
Title

09/02/2022
Date

Section 3700 of the State Labor Code reads as follows:

> "Every employer except the State shall secure the payment of compensation in one or more of the following ways:
>
> (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.
>
> (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employee."

MINUTES
CITY COUNCIL/SA
CITY HALL COUNCIL CHAMBER
38300 SIERRA HIGHWAY, SUITE B
PALMDALE, CALIFORNIA
MARCH 4, 2025

www.cityofpalmdale.org

1) CALL MEETING TO ORDER

Mayor Loa called the meeting to order at 5:00 pm.

Note: All City Council memberships are reflected in their City Council titles.

2) ROLL CALL MAYOR LOA, MAYOR PRO TEM BETTENCOURT, COUNCILMEMBERS BISHOP, OHLSEN, ALARCÓN

PRESENT: Richard J. Loa, Austin Bishop, Eric Ohlsen.
ABSENT: Laura Bettencourt, Andrea Alarcón.

Councilmember Alarcón arrived at 5:02 pm and was able to participate in the remainder of the meeting.

3) PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE

Councilmember Bishop led the pledge of allegiance.

4) PRESENTATIONS

4.1) Recognition of Palmdale High School Varsity Football Team for winning the CIF Southern Section Division 12 title and Highland High School Varsity Football Team for winning the CIF Southern Section Division 9 title.

Mayor Loa announced the presentation would be held in Poncitlán Square.

Certificates of Recognition were presented to the varsity football teams of Palmdale High School and Highland High School for winning the CIF Section title.

The presentation was held from 5:03 pm - 5:46 pm.

Mayor Pro Tem Bettencourt arrived at 5:41 pm and was able to participate in the remainder of the meeting.

4.2) Public Works Department Update.

Director of Public Works Torres provided highlights and updates on projects from the following divisions: Engineering, Traffic, Innovation and Environmental, and Capital Improvement.

The Council expressed their gratitude to the Public Works team.

5) PUBLIC COMMENTS

CONSENT CALENDAR, APPOINTMENT(S), NEW BUSINESS, AND CLOSED SESSION:

There were no public comments.

6) CONSENT CALENDAR

6.1) Waive full reading of the Resolution(s) and/or Ordinance(s) to be considered and voted on at this meeting. (This allows for reading the title only in lieu of reciting the entire text).

6.2) Receive and file the Monthly Investment Activity Reports for January 2025.

6.3) Approve Second Amendment to Agreement with KJI Plumbing, Inc. for plumbing services increasing the agreement by $181,584, for a total not to exceed amount of $276,584 for a five-year term through June 30, 2026.

6.4) Approve the First Amendment to the agreement with MNS Engineers, Inc. for PN 869, Arterial Road Rehabilitation Project, increasing the agreement by $270,831 for a total not to exceed amount of $1,095,746 with an extension of 65 working days for a total of 175 working days.

6.5) Adopt Resolution No. CC 2025-032, A Resolution of the City Council of the City of Palmdale for the submittal, acceptance, and execution of related documents for the purpose of obtaining federal financial assistance under Public Law 93-288 as amended by Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or State financial assistance under the California Disaster Assistance Act.

6.6) Approve the minutes from the previous meeting.

Motion: Approve all items listed under the Consent Calendar.
Moved by Austin Bishop, seconded by Eric Ohlsen.

Vote: Motion carried (5-0)
Yes: Richard J. Loa, Laura Bettencourt, Austin Bishop, Eric Ohlsen, Andrea Alarcón.

7) PUBLIC HEARING

7.1) Adopt Ordinance No. 1652 approving Zone Change 23-0003 and Adopt Resolution No. CC 2025-011 approving General Plan Amendment 23-0003, Tentative Parcel Map 84001, Conditional Use Permit 22-006, and Site Plan Review 22-007 and adopting the Mitigated Negative Declaration (SCH NO. 2024100683) and Mitigation Monitoring and Reporting Program (MMRP) prepared for the project.

Mayor Loa opened the Public Hearing.

City Clerk Scott read the titles of Ordinance No. 1652 and Resolution No. CC 2025-011.

A motion was made and passed to introduce Ordinance No. 1652.

Planning Manager Magana presented the staff report.

Public Testimony: Aubrey and Mabel Flowers spoke in opposition of the project location.

Mayor Loa closed the Public Hearing.

Mr. Michael Ramirez, applicant, spoke about the project.

Mayor Loa asked City Attorney Curley if there were any known conflicts of interest among Councilmembers.

City Attorney Curley stated all Councilmembers confirmed there were no conflicts of interest.

Councilmember Alarcón confirmed that she had no financial interest.

Councilmember Bishop discussed the project location and expressed his support for development and infrastructure.

Councilmember Alarcón discussed her support of the project, studies and reports that were completed, safety, Beyond Foods partnering with cities, hydrogen infrastructure, alternative fuel, and increased setback requirements.

Councilmember Ohlsen discussed the concessions made by the applicant to move the project forward. He also asked if the initial project included hydrogen from the start. Mr. Ramirez explained the concessions made and discussed the costs and benefits of including hydrogen pumps in the project.

Mayor Loa stated that Council decisions are based on facts from reports created by staff and contractors. He also expressed hope that Beyond Foods would participate and invest in the community.

Mayor Pro Tem Bettencourt stated that she prioritizes kids and reiterated that her position against the project has not changed.

Motion: Adopt Ordinance No. 1652 and Resolution No. CC 2025-011.
Moved by Andrea Alarcón, seconded by Austin Bishop.

Vote: Motion carried (4-1)
Yes: Richard J. Loa, Austin Bishop, Eric Ohlsen, Andrea Alarcón.
No: Laura Bettencourt.

8) CITY MANAGER'S REPORT

City Manager Perez shared details about the Season of Service desert clean-up event at Barrel Springs on February 22. She also announced an upcoming Season of Service event on March 15 at Courson Park, the Slice House grand opening on March 7, and mentioned that it was Employee Appreciation Week. Lastly, she invited staff to come up to the podium to present awards to the Council.

Parks and Recreation Director Smith mentioned that the City received a $2M grant to acquire more land around the Barrel Springs trail. The Council thanked everyone involved in securing the grant and discussed the Barrel Springs clean-up project.

Public Works Director Torres announced that the City received the APWA Best Improvement Award for the Avenue R Complete Street Project, which was funded by a $13M grant. The Council congratulated the Public Works team on their accomplishments.

City Manager Perez announced the Pothole Super Bowl was held February 10 - February 24, seven hundred public requests were received, and nine hundred potholes were filled.

9) NON-AGENDA PUBLIC COMMENTS:

The following individuals provided public comments: Eric Rapko discussed the topic of sanctuary city status; James Johnson, Michelle, Ian Strandberg expressed concerns about the exclusion of art from the Inkwell Program; Roger Soderstedt expressed concerns about the Sheriff's Department not cooperating with federal agents on immigration enforcement and the potential impact this could have on the ability to secure federal government grants.

Mayor Loa pointed out that the City has not defunded the Sheriff's Department.

10) COUNCIL REPORTS, ANNOUNCEMENTS AND REQUESTS FOR FUTURE AGENDA ITEMS

Councilmember Bishop reported attending Assemblyman Lackey's Caltrans meeting, where they discussed progress on the 14 Freeway project. He also mentioned attending the Palmdale School District Foundation Gala, the AV Air Quality Management District meeting, and the desert clean-up event at Barrel Springs.

Councilmember Alarcón requested a future agenda item to recognize some of the first-place readers and the City team that volunteered and participated in the Read Across America event. She also reported issues with receiving emails.

Councilmember Ohlsen discussed the Metrolink meeting he attended, and the travel

time and homeless situation in Los Angeles. He also reported issues with receiving emails.

Mayor Pro Tem Bettencourt discussed her commute to Los Angeles for work and expressed concern about the lighting on the 14 Freeway. She also shared that she attended several events: the Sickle Cell Awareness Family Day 5K event, the Season of Service event, and the Sheriff's Department Contract Cities Council Academy.

Mayor Loa reported on several events, including Assemblyman Lackey's Caltrans meeting, the Palmdale School District Foundation Gala, the AV Alta scrimmage game at Yellen Park, the Executive Committee on Regional Homeless Alignment briefing, and the HeartSounds Annual Charity Gala.

11) ADJOURNMENT

Mayor Loa adjourned the meeting at 7:16 pm to March 18, 2025, at 5:00 pm in the City Hall Council Chamber located at 38300 Sierra Highway, Suite B, Palmdale, California.

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

_____
Richard J. Loa, Mayor

ATTEST:

_____
Rochelle Scott, City Clerk

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT PLANNING DIVISION**

DISTRICT: **1**

SUBJECT: **ADOPT ORDINANCE NO. 1654 APPROVING ZONE CHANGE 23-0002 AND ADOPT RESOLUTION NO. CC 2025-020 APPROVING GENERAL PLAN AMENDMENT 23-00023, CONDITIONAL USE PERMIT 24-0001, AND SITE PLAN REVIEW 24-0005 AND ADOPTING THE MITIGATED NEGATIVE DECLARATION (SCH NO. 2024101037) AND MITIGATION MONITORING AND REPORTING PROGRAM PREPARED FOR THE PROJECT**

RECOMMENDATION

Staff recommend that the City Council:

1. Adopt Ordinance No. 1654, an Ordinance of the City Council of the City of Palmdale approving Zone Change (ZC) 23-0002; a request to modify the zone from Neighborhood Commercial (NC) to Regional Commercial (RC); and,

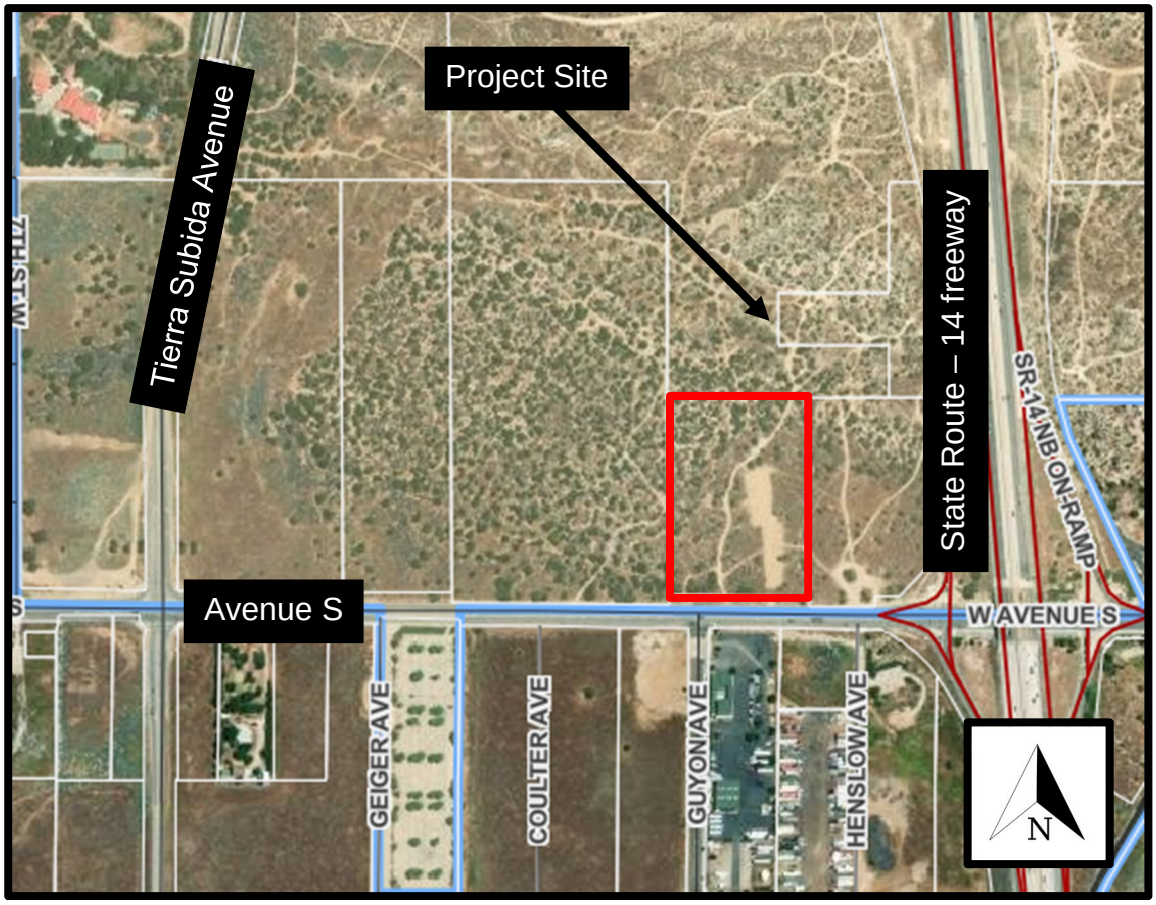
2. Adopt Resolution No. CC 2025-020, a Resolution of the City Council of the City of Palmdale approving General Plan Amendment (GPA) 23-0003, a request to modify policy PSFI-3 to also allow the use of private sewage disposal systems on nonresidential land uses with only domestic discharge on property within the NC/RC General Plan Land Use designation and modify the land use designation from NC to RC; Conditional Use Permit (CUP) 24-0001, and Site Plan Review (SPR) 24-0005; a request to facilitate the construction of a ten-island fueling station (20 fuel pumps), and a 5,600-square-foot convenience market, and adopting the Mitigated Negative Declaration (MND) (SCH No. 2024101037) and Mitigation Monitoring and Reporting Program (MMRP) prepared for the project.

BACKGROUND

On February 13, 2025, the Planning Commission reviewed the proposed project and adopted Resolution No. PC-2025-003, recommending that the City Council approve the project.

The proposed project includes a GPA to modify General Plan Policy PSFI-3 to allow the use of private sewage disposal systems on nonresidential land uses with only domestic discharge on property within the NC and RC General Plan Land Use designation and a GPA and ZC to modify the land use designation and zone from NC to RC to facilitate the development of a convenience store and fueling station (Maverik). The project is significant for Palmdale as it will bring infrastructure and development to an area of the City that has been historically undeveloped because the nearest sewer connection is approximately half of a mile away from the project site. The convenience store will offer pre-packaged foods or snacks, as defined by the Palmdale Municipal Code (PMC), and it will not sell alcohol or tobacco products. Additionally, the project benefits the City because it will provide goods and services currently lacking along Avenue S, west of State Route 14.

FIGURE 1 - AERIAL MAP



DISCUSSION

TABLE 1 - EXISTING LAND USE / ZONING / GENERAL PLAN

	Land Use	Zoning	General Plan
Subject Site	Vacant land	Neighborhood Commercial (NC)	Neighborhood Commercial (NC)
North	Vacant land	Neighborhood Commercial (NC)	Neighborhood Commercial (NC)
South	Commercial development, across Avenue S	Unincorporated Los Angeles County	Unincorporated Los Angeles County
East	Vacant land	Neighborhood Commercial (NC)	Neighborhood Commercial (NC)
West	Vacant land	Neighborhood Commercial (NC)	Neighborhood Commercial (NC)

TABLE 2 - GENERAL PLAN CONSISTENCY

Element	Goal, Objective, or Policy	Standard Met?	Justification*
Public Facilities, Services and Infrastructure	PFSI-3.9 Renewable Energy and Industrial Project Disposal Systems. Allow the use of private sewage disposal systems on nonresidential renewable energy and industrial projects with only domestic discharge on property with an IND (Industrial) General Plan Land Use designation located between Avenue L and M between 40th Street East and 120th Street East, and on property with an IND (Industrial) General Plan Land Use designation on property located south of Avenue M, north of Avenue P-8, between 90th Street East and 120th Street East. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a maximum discharge of 5,000 gallons per day.	Yes	The proposed project includes amending this policy to also allow the use of private sewage systems on nonresidential land uses with only domestic discharge on property within the Neighborhood Commercial/Regional Commercial General Plan land use designation on property located along Avenue S, between SR- 14, and Tierra Subida Avenue. If approved, this policy will be amended, and the proposed project will comply.

TABLE 2 - GENERAL PLAN CONSISTENCY (CONTINUED)

Element	Goal, Objective, or Policy	Standard Met?	Justification*
Land Use and Community Design	LUD-1.1 Balanced Land Uses. Maintain a balanced land use pattern to support a broad range of housing choices, retail businesses, employment opportunities, educational and cultural institutions, entertainment spaces, and other supportive uses within long-established Palmdale neighborhoods and new growth areas.	Yes	The proposed fueling station and convenience store will provide essential goods and services to an area of the City that currently lacks these facilities along Avenue S, west of SR-14. Notably, unlike most projects of this scale, the convenience store will not sell alcohol or tobacco products. Instead, it will offer pre-packaged food and snacks as defined by the PMC. The convenience store will create employment opportunities for local residents in Palmdale by hiring 17-20 employees.

**Justification is based on a review of the plans date stamped 'Received September 4, 2024'.*

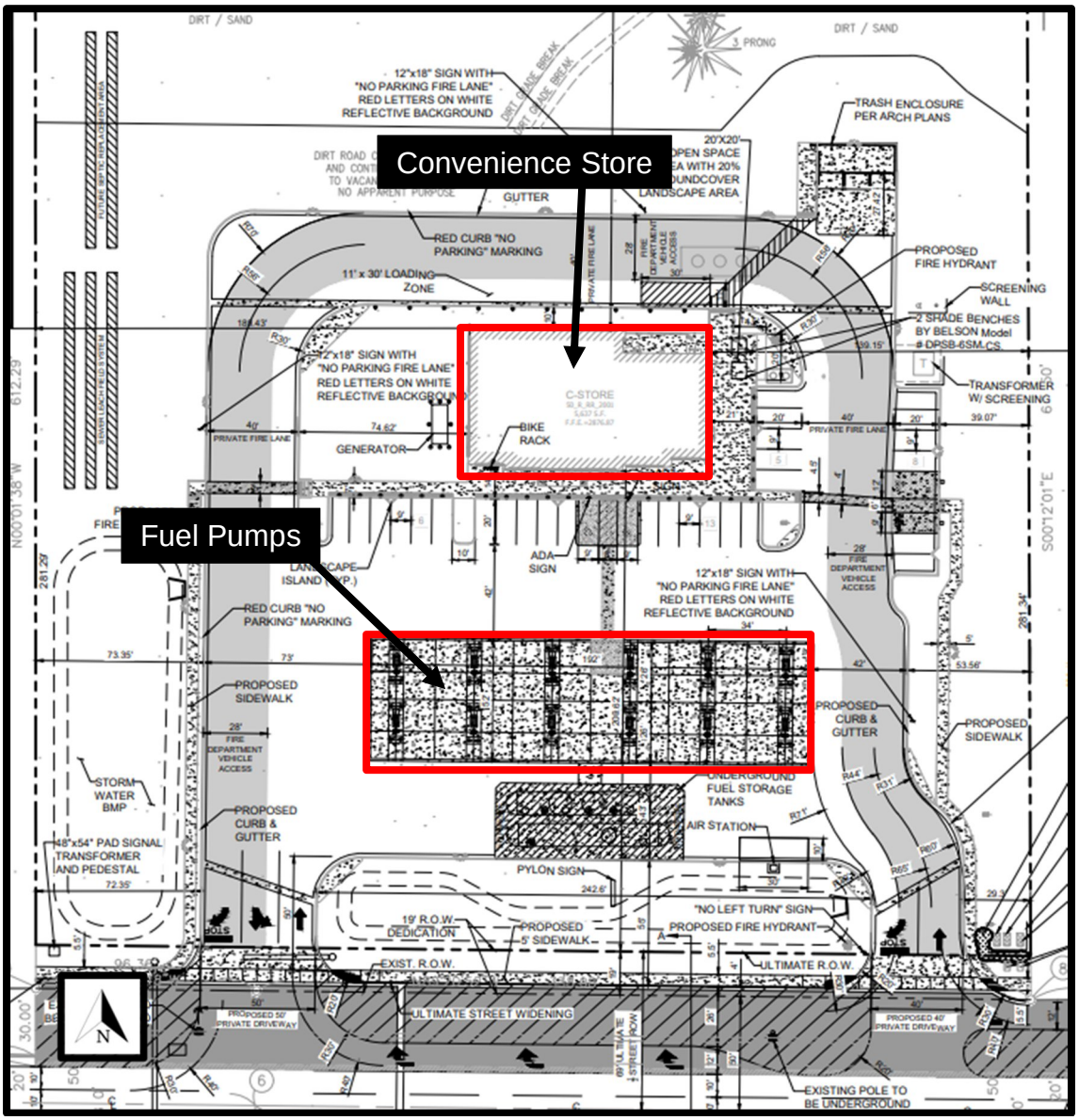
TABLE 3 - PALMDALE MUNICIPAL CODE STANDARDS

	Standard	Standard Met?	Justification*
Setbacks	Front: 10 feet Rear: 10; 25 feet abutting residential Interior side: zero; 25 abutting residential Street side: 10 feet (PMC Table 17.48.010-1. Development Standards - Commercial/Office Zones)	Yes	Front: 98 feet Rear: 322 feet Interior side (east): 95 feet Interior side (west): 146 feet
Building Height	Maximum building height: 55 feet (PMC Table 17.48.010-1. Development Standards - Commercial/Office Zones)	Yes	Convenience store: 19 feet Fuel canopy: 16 feet
Landscaping	Landscaping shall meet all of the water efficient requirements and native vegetation shall be preserved where possible. (PMC Chapter 14.05, and PMC Section 17.86.010)	Yes	As specified within the draft Conditions of Approval, all landscaping will be installed in compliance with the PMC and native vegetation will be managed in compliance with the preservation plan required for the project.
Parking	Convenience store: four spaces for every 1,000 square feet Fueling station: one space for every employee (PMC Section 17.87.060)	Yes	Convenience store: 23 are required Fueling station: seven are required 30 spaces are required and provided

**Justification is based on a review of the plans date stamped 'Received September 4, 2024'.*

Site Layout

FIGURE 2 - SITE PLAN



Access/Circulation

Street improvements will be constructed along the project frontage on Avenue S and provide two access points to the site. The City Engineer and the Los Angeles County Fire Department have reviewed the project and confirmed that it is designed to provide safe vehicular access and flow.

Operations

The fueling station and grocery store will operate 24 hours a day and have between three and five employees for each eight-hour shift. Security cameras will be installed, and access will be shared with the Palmdale Sheriff's Station.

ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), an Initial Study was prepared to determine whether the project would have a significant effect on the environment. The Initial Study analyzed the potential for environmental impacts, and all topics were found to have either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Mitigation measures for biological resources, cultural resources, geology/soils, noise, and tribal cultural resources were included to reduce impacts to a less than significant level. As such, an MND and MMRP were prepared and circulated in accordance with CEQA Guidelines.

FISCAL IMPACT

$26,063.11; Revenues in the amount of $26,063.11 reflect the fees paid by the applicant associated with applying. Approval of the proposed project facilitates future construction of a convenience store and fueling station on a vacant parcel which will increase revenue from property tax and sales tax once construction is complete.

STRATEGIC PLAN

Goal IV: Maintain a desirable community where everyone wants to live, work, and play.

A. Provide inclusive access to a variety of supportive services that build a resilient and healthy community.

Prepared by:	Megan Taggart, Interim Director of Economic and Community Development
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Ord. No. 1654
Reso. No. CC 2025-020

CITY OF PALMDALE, A CHARTER CITY,
COUNTY OF LOS ANGELES, CALIFORNIA
ORDINANCE NO. 1654

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE, CALIFORNIA, APPROVING ZONE CHANGE 24-0003; A REQUEST TO MODIFY THE ZONE FROM NEIGHBORHOOD COMMERCIAL TO REGIONAL COMMERCIAL FOR ONE PARCEL TOTALING APPROXIMATELY 6.08 ACRES LOCATED NORTH OF AVENUE S, APPROXIMATELY 400 FEET WEST OF STATE ROUTE 14 (APN: 3004-016-032)

A. INTENT OF THE CITY COUNCIL:

1. Catherine Otis of Site Design Collaborative, has filed an application requesting approval of Zone Change (ZC) 24-0003 to modify the zone of one parcel from Neighborhood Commercial (NC) to Regional Commercial (RC) (hereinafter referred to as "Application"); and,

2. The Application applies to 6.08 acres located north of Avenue S and 400 feet west of State Route 14 (SR-14), indicated on the Los Angeles County Assessor roll as Assessor's Parcel Number: 3004-016-032 as legally described in Exhibit A hereto and shown on the map attached hereto as Exhibit B; and

3. On February 13, 2025, the Planning Commission of the City of Palmdale adopted Resolution No. PC-2025-003 recommending City Council approval of the Application; and,

4. On March 18, 2025, the City Council of the City of Palmdale conducted a duly noticed public hearing.

B. ORDINANCE

THE CITY COUNCIL OF THE CITY OF PALMDALE DOES ORDAIN AS FOLLOWS:

SECTION 1. The City Council hereby specifically finds that all the facts set forth in the Recitals, part A of this Ordinance, are true and correct.

SECTION 2. The City Council hereby finds as follows with respect to the environmental document:

A Pursuant to the California Environmental Quality Act (CEQA), an Initial Study was prepared to determine whether the project would have a significant effect on the environment. The Initial Study analyzed the

potential for environmental impacts, and all topics were found to have either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Mitigation measures for biological resources, cultural resources, geology/soils, noise, and tribal cultural resources were included to reduce impacts to a less than significant level. As such, a Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) were prepared and circulated in accordance with CEQA Guidelines.

B The custodian of records for the Initial Study, MND, MMRP, and all other materials that constitute the record of proceedings upon which the City Council decision is based is the Planning Manager of the City of Palmdale. These documents are available for public review in the Planning Division of the City of Palmdale located at 38250 Sierra Highway, Palmdale, California 93550, telephone (661) 267-5200.

SECTION 3. Based upon substantial evidence presented to the City Council during the above-referenced March 18, 2025, public hearing, including public testimony, and written and oral staff reports, this Council specifically finds as follows:

A The proposed Zoning Ordinance Amendment conforms with the goals, objectives, and policies of the General Plan. (ZC)

B The proposed Zoning Ordinance Amendment is necessary to implement the General Plan and to provide for public safety, convenience, and/or general welfare. (ZC)

The proposed project includes a ZC to modify the zone of a 6.08-acre vacant parcel located north of Avenue S and 400 feet west of SR-14 from NC to RC to facilitate the development of a convenience store and fueling station (Maverik). The project is significant for the City of Palmdale as it will bring infrastructure and development to an area of the City that has been historically undeveloped because the nearest sewer connection is approximately half of a mile away from the project site. With approval of the associated General Plan Amendment (Resolution No. CC 2025-020), the proposed project will comply with the City's General Plan as outlined in Exhibit C and is necessary because it will provide goods and services that are currently lacking along Avenue S, west of SR-14.

SECTION 4. Based on the findings and conclusions set forth in Sections 1, 2, and 3 above, the City Council hereby approves ZC 24-0003 and finds that the project is consistent with the MND.

SECTION 5. Severability. If any section, subsection, subdivision, paragraph, sentence, clause, or phrase in this Ordinance or any part thereof is for any reason held to be unconstitutional, invalid, or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Ordinance or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause, or phrase thereof, irrespective of the fact that any one or more subsections, subdivisions, paragraphs, sentences, clauses, or phrases be declared unconstitutional, or invalid, or ineffective, provided the basic purposes of this Ordinance and the benefits to the City and the public are not substantially impaired.

SECTION 6. All legal prerequisites and pre-conditions to introducing, enacting, and adopting this Ordinance have occurred as required by law and policy.

SECTION 7. The City Clerk shall certify the adoption of this ordinance and shall cause this ordinance to be published or posted as required by law.

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

_____
Richard J. Loa, Mayor

Approved as to form:

ATTEST:

_____
William P. Curley, III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing Ordinance was duly introduced, passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 18th day of March, 2025, effective on the 17th day of April, 2025, by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ABSENT: _____

Date: _____ _____
Rochelle Scott, City Clerk

EXHIBIT A

LEGAL DESCRIPTION FOR ZC 24-0003

REAL PROPERTY IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 12 WEST SAN BERNARDINO MERIDIAN, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

EXCEPT THE SOUTH 20 FEET THEREOF.

ALSO EXCEPT FROM THE REMAINDER THEREOF THAT PORTION LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF SAID REMAINING LAND DISTANT WESTERLY THEREON 200.00 FEET FROM THAT CERTAIN COURSE IN THE WESTERLY BOUNDARY OF THE LAND DESCRIBED AS PARCEL 1 IN THE DEED TO THE STATE OF CALIFORNIA RECORDED ON DECEMBER 13, 1962 AS INSTRUMENT NO. 1606, IN BOOK D1853 Page 840, OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY DESCRIBED THEREIN AS HAVING A BEARING OF SOUTH 0° 25’ 42” WEST AND A LENGTH OF 50.00 FEET; THENCE NORTHERLY PARALLEL WITH THE WESTERLY LINE OF SAID SOUTHWEST QUARTER OF SECTION 34, TO THE NORTHERLY LINE OF SAID LAND.

ALSO EXCEPT THEREFROM THE NORTHERLY 30.00 FET OF THE SOUTHERLY 50.00 FEET OF SAID SOUTHWEST QUARTER, AS GRANTED TO THE CITY OF PALMDALE, A MUNICIPAL CORPORATION, IN DEED RECORDED JULY 23, 2004 AS INSTRUMENT NO. 04-1887611.

APN: 3004-016-032

EXHIBIT B

AERIAL MAP FOR ZC 24-0003

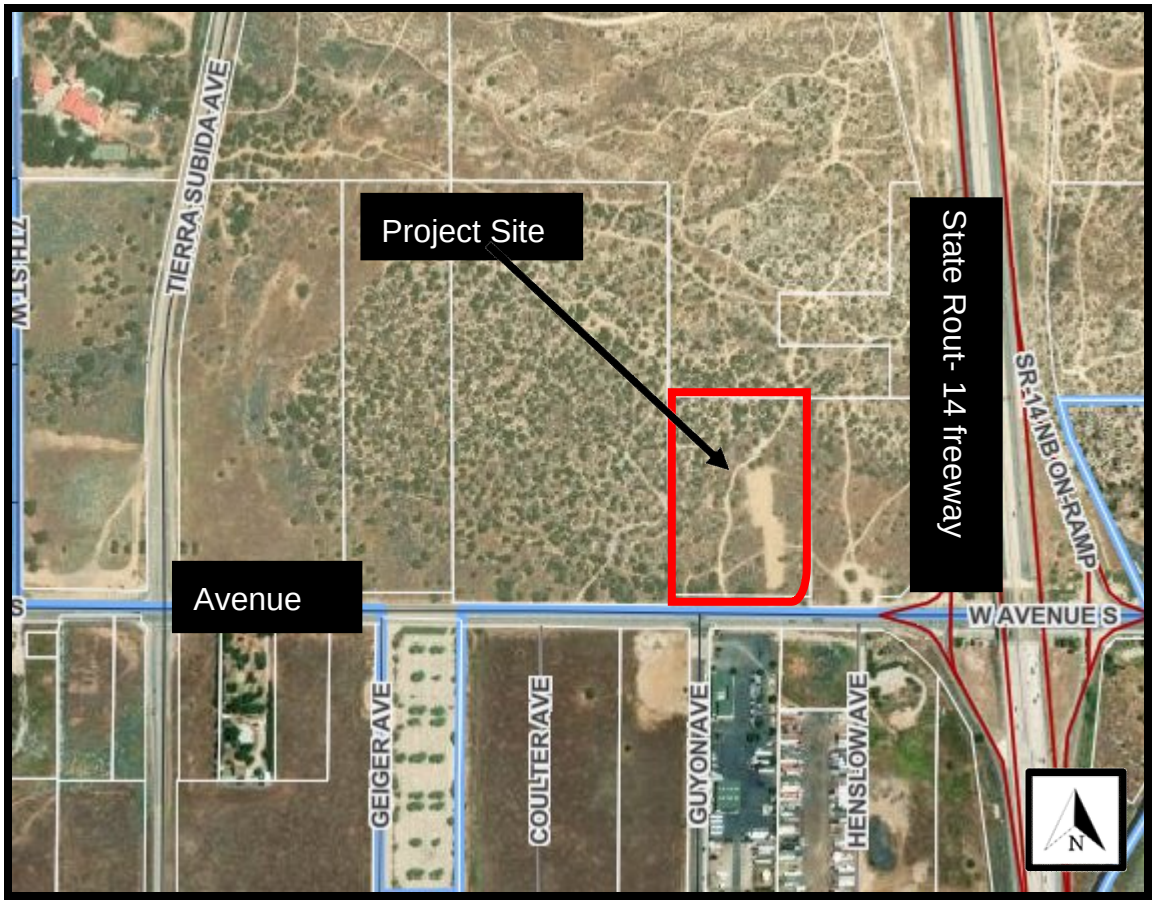


EXHIBIT C

GENERAL PLAN CONSISTENCY

Element	Goal, Objective, or Policy	Standard Met?	Justification*
Public Facilities, Services and Infrastructure	PFSI-3.9 Renewable Energy and Industrial Project Disposal Systems. Allow the use of private sewage disposal systems on nonresidential renewable energy and industrial projects with only domestic discharge on property with an IND (Industrial) General Plan Land Use designation located between Avenue L and M between 40th Street East and 120th Street East, and on property with an IND (Industrial) General Plan Land Use designation on property located south of Avenue M, north of Avenue P-8, between 90th Street East and 120th Street East. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a maximum discharge of 5,000 gallons per day.	Yes	The proposed project includes amending this policy to also allow the use of private sewage systems on nonresidential land uses with only domestic discharge on property within the Neighborhood Commercial/Regional Commercial General Plan land use designation on property located along Avenue S, between SR-14 and Tierra Subida Avenue. If approved, this policy will be amended, and the proposed project will comply.

GENERAL PLAN CONSISTENCY (CONTINUED)

Element	Goal, Objective, or Policy	Standard Met?	Justification*
Land Use and Community Design	LUD-1.1 Balanced Land Uses. Maintain a balanced land use pattern to support a broad range of housing choices, retail businesses, employment opportunities, educational and cultural institutions, entertainment spaces, and other supportive uses within long-established Palmdale neighborhoods and new growth areas.	Yes	The proposed fueling station and convenience store will provide essential goods and services to an area of the City that currently lacks these facilities along Avenue S, west of SR-14. Notably, unlike most projects of this scale, the convenience store will not sell alcohol or tobacco products. Instead, it will offer pre-packaged food and snacks as defined by the PMC. The convenience store will create employment opportunities for local residents in Palmdale by hiring 17-20 employees.

**Justification is based on a review of the plans date stamped 'Received September 4, 2024'.*

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2025-020

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE, CALIFORNIA, APPROVING GENERAL PLAN AMENDMENT 23-0002, CONDITIONAL USE PERMIT 24-0001, AND SITE PLAN REVIEW 24-0005; A REQUEST TO MODIFY POLICY PSFI-3 TO ALSO ALLOW THE USE OF PRIVATE SEWAGE DISPOSAL SYSTEMS ON NONRESIDENTIAL LAND USES WITH ONLY DOMESTIC DISCHARGE ON PROPERTY WITHIN THE NEIGHBORHOOD COMMERCIAL/REGIONAL COMMERCIAL GENERAL PLAN LAND USE DESIGNATION ON PROPERTY LOCATED ALONG AVENUE S, BETWEEN STATE ROUTE 14 AND TIERRA SUBIDA AVENUE; AND MODIFY THE LAND USE DESIGNATION FROM NEIGHBORHOOD COMMERCIAL TO REGIONAL COMMERCIAL TO FACILITATE THE CONSTRUCTION OF A FUELING STATION THAT INCLUDES 24 FUEL PUMPS AND AN APPROXIMATELY 5,600 SQUARE FOOT CONVENIENCE STORE WITH AN ON-SITE ALTERNATIVE WASTEWATER TREATMENT SYSTEM LOCATED NORTH OF AVENUE S, APPROXIMATELY 400 FEET WEST OF STATE ROUTE 14 AND ADOPT THE MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM PREPARED FOR THE PROJECT (APN: 3004-016-032)

WHEREAS, Catherine Otis of Site Design Collaborative, has filed an application requesting approval of General Plan Amendment (GPA) 23-0002, Conditional Use Permit (CUP) 24-0001 and Site Plan Review (SPR) 24-0005 (hereinafter referred to as “Application”); and,

WHEREAS*,* the Application applies to 6.08 acres located north of Avenue S, approximately 400 feet west of State Route 14 (SR-14), indicated on the Los Angeles County Assessor roll as Assessor Parcel Number 3004-016-032 legally described in Exhibit A hereto and shown on the map attached hereto as Exhibit B; and,

WHEREAS, on February 13, 2025, the Planning Commission of the City of Palmdale conducted a duly noticed public hearing on the Application and concluded said hearing on that date; and,

WHEREAS, on March 18, 2025, the City Council of the City of Palmdale conducted a duly noticed public hearing on the Application and concluded said hearing on that date.

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE, AND ORDER AS FOLLOWS:

SECTION 1. The City Council hereby specifically finds that all the facts set forth in the Recitals of this Resolution are true and correct.

SECTION 2. The City Council hereby finds as follows with respect to the environmental document:

A. Pursuant to the California Environmental Quality Act (CEQA), an Initial Study was prepared to determine whether the project would have a significant effect on the environment. The Initial Study analyzed the potential for environmental impacts, and all topics were found to have either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Mitigation measures for biological resources, cultural resources, geology/soils, noise, and tribal cultural resources were included to reduce impacts to a less than significant level. As such, a Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) as provided within Exhibit F were prepared and circulated in accordance with CEQA Guidelines.

B. The custodian of records for the Initial Study, MND, MMRP, and all other materials that constitute the record of proceedings upon which the Planning Commission's decision is based is the Planning Manager of the City of Palmdale. These documents are available for public review in the Planning Division of the City of Palmdale located at 38250 Sierra Highway, Palmdale, California 93550, telephone (661) 267-5200.

SECTION 3. Based upon substantial evidence presented to the City Council during the above-referenced March 18, 2025, public hearing, including public testimony, and written and oral staff report, this Commission specifically finds as follows:

A. The proposed change in land use is consistent with State law. (GPA)

B. The amendment is reasonable and beneficial. (GPA)

C. The proposed use is consistent with the goals, policies, and objectives of the General Plan. (CUP)

D. The proposed use is beneficial and desirous to the community and is consistent with the purpose, intent, and standards of this Title and other applicable ordinances and codes adopted by the City. (CUP)

E. No application for site plan review shall be approved by the Review Authority unless the design and layout of the proposed project or structures, in its final submitted form, or as conditioned, meets all of the following criteria, and the development is consistent with: (SPR)

1. The City's General Plan and any applicable Specific Plan;

2. The development standards set forth in this Title; and

3. Any applicable design guidelines.

The proposed project includes a GPA to modify General Plan Policy PSFI-3 to allow the use of private sewage disposal systems on nonresidential land uses with domestic discharge on property within the NC and RC General Plan Land Use designation and a GPA to modify the Land Use designation from NC to RC to facilitate the development of a convenience store and fueling station (Maverik). The project is significant for the City of Palmdale as it will bring infrastructure and development to an area of the City that has been historically undeveloped because the nearest sewer connection is approximately half of a mile away from the project site. The proposed amendment is consistent with State law because each City is allowed four GPAs per year and if approved, this will be the third of the four allowed this year.

The project includes a CUP for the fueling station and convenience store use, and an SPR for the development of the site. The project has been designed to comply with the City's General Plan and the development standards within the Zoning Ordinance as described in Exhibits C and D. The project is desirous for the Palmdale community because, unlike most projects of this scope, the convenience store will offer pre-packaged foods or snacks, as defined by the Palmdale Municipal Code (PMC), and it will not sell alcohol or tobacco products. The project is beneficial for the City because it will provide goods and services that are currently lacking along Avenue S, west of SR-14.

F. The proposed use and the ongoing operation of the use will not have a substantial adverse effect on abutting property or the allowed use thereof and will not generate excessive noise, vibration, traffic, or other disturbances, nuisances, or hazards. (CUP)

G. The site for the proposed use has adequate pedestrian and vehicular access. (CUP)

Curb, gutter, and sidewalk improvements will be installed on Avenue S along the project frontage. The draft Conditions of Approval for the project require the construction of sidewalk improvements, submission of a Stormwater Pollution Prevention Plan, and adequate sanitary disposal facilities on-site during all phases of construction. Also, the discharge of waste from the proposed development into an existing community sewer system will not result in violation of existing requirements prescribed by the California Regional Water Quality Control Board because the applicant is required to comply with all Conditions of Approval, which requires a public sanitary sewer system as the only method of sewage disposal. The proposed project consists of a fueling station and convenience store and clear signage directing vehicles and pedestrians through the project site for safety and optimal circulation. Additionally, the applicant will be required to comply with all Conditions of Approval and all applicable local, State, and Federal laws. Also, Conditions of Approval have been included within the draft Resolution to ensure the avoidance of nuisances, such as loitering and removal of litter daily. Therefore, the proposed project is not expected to adversely affect nearby property.

SECTION 4. Based on the findings and conclusions set forth in Sections 1, 2, and 3 above, this City Council approves of GPA 23-0002, CUP 24-0001, and SPR 24-0005, subject to the Conditions of Approval within Exhibit E.

SECTION 5. The City Clerk shall certify the adoption of this Resolution.

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

Approved as to form:

_____
Richard J. Loa, Mayor

ATTEST:

_____
William P. Curley, III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 18th day of March 2025, by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ABSENT: _____

Date: _____ _____
Rochelle Scott, City Clerk

EXHIBIT A

LEGAL DESCRIPTION FOR GPA 23-0002, CUP 24-0001, AND SPR 24-0005

REAL PROPERTY IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 12 WEST SAN BERNARDINO MERIDIAN, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

EXCEPT THE SOUTH 20 FEET THEREOF.

ALSO EXCEPT FROM THE REMAINDER THEREOF THAT PORTION LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF SAID REMAINING LAND DISTANT WESTERLY THEREON 200.00 FEET FROM THAT CERTAIN COURSE IN THE WESTERLY BOUNDARY OF THE LAND DESCRIBED AS PARCEL 1 IN THE DEED TO THE STATE OF CALIFORNIA RECORDED ON DECEMBER 13, 1962 AS INSTRUMENT NO. 1606, IN BOOK D1853 Page 840, OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY DESCRIBED THEREIN AS HAVING A BEARING OF SOUTH 0° 25’ 42” WEST AND A LENGTH OF 50.00 FEET; THENCE NORTHERLY PARALLEL WITH THE WESTERLY LINE OF SAID SOUTHWEST QUARTER OF SECTION 34, TO THE NORTHERLY LINE OF SAID LAND.

ALSO EXCEPT THEREFROM THE NORTHERLY 30.00 FET OF THE SOUTHERLY 50.00 FEET OF SAID SOUTHWEST QUARTER, AS GRANTED TO THE CITY OF PALMDALE, A MUNICIPAL CORPORATION, IN DEED RECORDED JULY 23, 2004 AS INSTRUMENT NO. 04-1887611.

APN: 3004-016-032

EXHIBIT B

AERIAL MAP FOR
GPA 23-0002, CUP 24-0001, AND SPR 24-0005

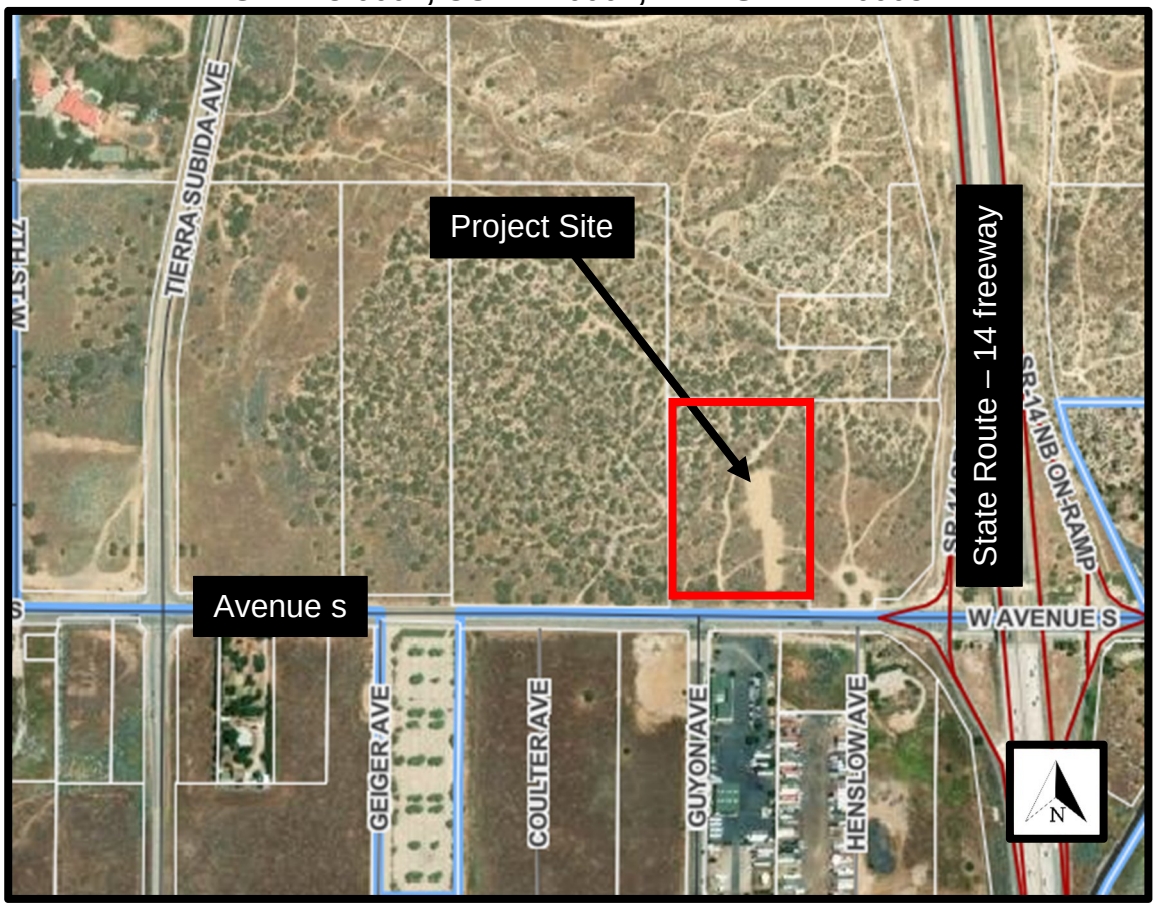


EXHIBIT C

GENERAL PLAN CONSISTENCY TABLE

Element	Goal, Objective, or Policy	Standard Met?	Justification*
Public Facilities, Services and Infrastructure	PFSI-3.9 Renewable Energy and Industrial Project Disposal Systems. Allow the use of private sewage disposal systems on nonresidential renewable energy and industrial projects with only domestic discharge on property with an IND (Industrial) General Plan Land Use designation located between Avenue L and M between 40th Street East and 120th Street East, and on property with an IND (Industrial) General Plan Land Use designation on property located south of Avenue M, north of Avenue P-8, between 90th Street East and 120th Street East. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a maximum discharge of 5,000 gallons per day.	Yes	The proposed project includes amending this policy to also allow the use of private sewage systems on nonresidential land uses with only domestic discharge on property within the Neighborhood Commercial/Regional Commercial General Plan land use designation on property located along Avenue S, between SR-14 and Tierra Subida Avenue. If approved, this policy will be amended, and the proposed project will comply.

EXHIBIT C

GENERAL PLAN CONSISTENCY TABLE (CONTINUED)

Element	Goal, Objective, or Policy	Standard Met?	Justification*
Land Use and Community Design	LUD-1.1 Balanced Land Uses. Maintain a balanced land use pattern to support a broad range of housing choices, retail businesses, employment opportunities, educational and cultural institutions, entertainment spaces, and other supportive uses within long-established Palmdale neighborhoods and new growth areas.	Yes	The proposed fueling station and convenience store will provide essential goods and services to an area of the City that currently lacks these facilities along Avenue S, west of SR-14. Notably, unlike most projects of this scale, the convenience store will not sell alcohol or tobacco products. Instead, it will offer pre-packaged food and snacks as defined by the PMC. The convenience store will create employment opportunities for local residents in Palmdale by hiring 17-20 employees.

**Justification is based on a review of the plans date stamped 'Received September 4, 2024'.*

EXHIBIT D

PALMDALE MUNICIPAL CODE STANDARDS

	Standard	Standard Met?	Justification*
Setbacks	Front: 10 feet Rear: 10; 25 feet abutting residential Interior side: zero; 25 abutting residential Street side: 10 feet (PMC Table 17.48.010-1. Development Standards - Commercial/Office Zones)	Yes	Front: 98 feet Rear: 322 feet Interior side (east): 95 feet Interior side (west): 146 feet
Building Height	Maximum building height: 55 feet (PMC Table 17.48.010-1. Development Standards - Commercial/Office Zones)		Convenience store: 19 feet Fuel canopy: 16 feet
Landscaping	Landscaping shall meet all of the water efficient requirements and native vegetation shall be preserved where possible. (PMC Chapter 14.05, and PMC Section 17.86.010)	Yes	As specified within the draft Conditions of Approval, all landscaping will be installed in compliance with the PMC and native vegetation will be managed in compliance with the preservation plan required for the project.
Parking	Convenience store: four spaces for every 1,000 square feet Fueling station: one space for every employee (PMC Section 17.87.060)	Yes	Grocery store: 23 are required Fueling station: seven are required 30 spaces are required and provided

**Justification is based on a review of the plans date stamped 'Received September 4, 2024'.*

EXHIBIT E

DRAFT

CONDITIONS OF APPROVAL FOR
CONDITIONAL USE PERMIT 24-0001
SITE PLAN REVIEW 24-0005

APPROVAL DATE: MARCH18, 2025
EFFECTIVE DATE: MARCH 18, 2025
EXPIRATION DATE: MARCH 18, 2028

These Conditions of Approval apply to General Plan Amendment (GPA) 23-0002, Conditional Use Permit (CUP) 24-0001, and Site Plan Review (SPR) 24-0005; a request to modify policy PSFI-3 to also allow the use of private sewage disposal systems on nonresidential land uses with only domestic discharge on property within the Neighborhood Commercial/Regional Commercial General Plan land use designation, modify the land use designation from Neighborhood Commercial to Regional Commercial; and facilitate the construction of a fueling station that includes 24 fuel pumps and an approximately 5,600 square foot convenience store with an on-site alternative wastewater treatment system located north of Avenue S approximately 400 feet west of State Route 14. (APN: 3004-016-032). Any proposed change of use or expansion of the area or modification to the site plan or structures shall be submitted to the Planning Division, along with the required application and fee, for review. For the purpose of these conditions, the term “applicant” shall also mean the developer, the owner, or any successor(s) in the interest of the terms of this approval. For the purpose of these conditions, an * indicates that the condition is a mitigation measure.

GENERAL CONDITIONS:

1 CUP 24-0001 and SPR 24-0005 shall be inaugurated within three years or it shall automatically expire on TBD. This approval is based on the plans date stamped, ‘Received September 4, 2024’. The project shall be considered inaugurated if applicable grading and/or building permits have been issued, construction is initiated and on-going. Cessation of construction activity for over 180 days will result in lapse of this approval. (P)

2 The project shall be subject to the provisions of Palmdale Municipal Code (PMC) Chapter 12.04 (Underground Utilities) pertaining to underground utilities and encroachment into public right-of-way. (P)(E)

3 This approval shall not become effective for any purposes until any appeal period has passed and the applicant has filed at the office of the Planning Division their notarized affidavit stating that they agree to and accept all of the Conditions of Approval as approved by the Reviewing Authority as set forth in Resolution No. CC 2025-020 (P)

4 Immediately upon approval of this project by the Review Authority, the applicant shall submit to the City a cashier's check or check, payable to the Los Angeles County Clerk in the amount of $3,043.75 for the environmental filing fee in compliance with the California Environmental Quality Act (CEQA) Guidelines. Furthermore, if the California Department of Fish and Wildlife (CDFW) determines that this project is not exempt from a filing fee imposed pursuant to Fish and Wildlife Code Section 711.4 because the project has more than a de Minimis impact on fish and wildlife, then the applicant shall also pay to CDFW any fee and any fine which the Department determines to be owed. (P)

5 The applicant shall comply with all requirements of the PMC, all requirements of the City ordinances, resolutions, and all applicable standards and policies that are in effect at the time that building permits are issued for the development. (P)(E)

6 The applicant shall defend, indemnify, and hold harmless the City its elected and appointed officials, officers, employees, and agents from and against any claim, action, or proceeding against the City, its elected and appointed officials, officers, employees, or agents to attack, set aside, void, or annul any approval or condition of approval of the City concerning this project, including but not limited to any approval or condition of approval of the Review Authority. The City shall promptly notify the applicant of any claim, action, or proceeding concerning the project and the City shall cooperate fully in the defense of the matter. The City reserves the right, at its own option, to choose its own attorney to represent the City, its elected and appointed officials, officers, employees, and agents in the defense of the matter. (P)

7 Pursuant to Government Code Section 66020(a), any party may protest the imposition of any fees, dedications, reservations, or other exactions imposed on this development project. Required fees must be paid in full or arrangements must be made to pay the fee when due. Written notice of payment under protest must be filed with the City at the time of approval or conditional approval of this project or within 90 days after the date of the imposition of the fees, dedications, reservations, or other exactions imposed on this project. (P)

8 The applicant shall be responsible for informing all subcontractors, consultants, engineers, or other business entities providing services related to the project of their responsibilities to comply with all pertinent requirements in the PMC, including the requirement that a business license be obtained by all entities doing business in the City. (P)

9 The use shall meet the standards and shall be developed within the limits established by the PMC as related to emissions of noise, odor, dust, vibration, wastes, fumes, or any public nuisances arising or occurring incidental to the establishment or operation. (P)

10 The applicant shall be responsible for the on-going maintenance and upkeep of undeveloped portions of the site, in accordance with the property maintenance requirements as set forth in the PMC Chapter 8.36 (Regulation of Property Maintenance). (P)

11 When exhibits and written Conditions of Approval are inconsistent, the written conditions shall prevail. (P)(E)

12 Off-site public improvements (streets, drainage, sewers, etc.) may be necessary to adequately serve this subdivision/development. If off-site public improvements are required, said improvements shall be located within public easements. This project approval is subject to the applicant's acceptance of the City requirements for the acquisition of said public easements, at the sole cost and expense of the applicant. The City Engineer shall have the authority to withhold approval of any affected improvement plans for failure to satisfy this Condition. (E)

13 The applicant shall participate in such on-site and off-site water service improvements or wells as may be required by the serving water purveyor/master. (E)

14 Coordination with utility companies by the applicant's engineer during design shall be required to ensure that required public improvements are not in conflict with existing or proposed utilities. (E)

15 Transmission or distribution lines less than 50kV and all other utility lines, existing and proposed, shall be installed underground in accordance with the PMC Chapter 12.04 (Underground Utilities). (E)

16 All plans, specifications, studies, reports, calculations, maps, notes, legal documents, and designs, shall be prepared, signed, and stamped (when required) only by those individuals legally authorized to do so. Development plans must be prepared, signed, and stamped by a California Registered Civil Engineer. (E)

17 Sign approval for the project is a separate process requiring the issuance of a sign permit and building permits and shall be subject to review and approval by the Planning Division and Building and Safety Division. (P)(B&S)

18 Left-turn ingress and/or egress at all access locations shall be subject to approval of the City Engineer and may be restricted in the future due to traffic operational or safety concerns. Alternatives to such restrictions may be considered. (TE)

19 Intersection sight distance and stopping sight distance shall be shown to meet the required standards both horizontally and vertically at all vehicular ingress/egress locations including consideration for walls, landscaping, grading, vegetation, and any other items that would block the required sight for safe travel. (TE)

20 The applicant shall provide a complete set of street improvement plans for review and comment to utility providers including but not limited to the following: (E)

20.1 Water District

20.2 Southern California Edison

20.3 Southern California Gas Company

20.4 AT&T

20.5 Cable TV

21 The applicant shall provide standard street improvements for Regional/Crosstown-Specific roadway classification streets, along the northern half of Avenue S across the project frontage. The design shall be based on a 114-foot right-of-way on an acceptable centerline profile extending a minimum of 300 feet beyond the project where applicable. Improvements listed below shall be constructed and operational prior to occupancy release. These improvements shall consist of: (E)

21.1 Curb and gutter,

21.2 Sidewalk (width = eight feet),

21.3 Roadway grading and paving, overlay and/or match-up, as directed by City Engineer,

21.4 Traffic control signs and devices as required by the City Engineer,

21.5 Pavement transition from the project boundaries to the satisfaction of the City Engineer,

21.6 Wheelchair ramp(s) at all walk returns,

21.7 Roadway drainage device(s),

21.8 Streetlights,

21.9 Dedicate an additional seven feet of right-of-way and construct improvements as required by Traffic Division,

21.10 Dedicate and construct a four-foot-wide minimum Americans with Disabilities Act (ADA) by-pass at all proposed driveway approaches, and,

21.11 Provide a minimum four-foot sidewalk clearance around any object.

22 The applicant will be responsible for the submittal of all necessary plans and reports to the Los Angeles County Environmental Health Department (and/or the Regional Water Quality Control Board) for the review and approval of an onsite wastewater treatment system (OWTS). If said approval cannot be obtained, a public sewer mainline will be required for this project. (E)

23 Appropriate right-of-way for right-turn lane(s) shall be provided at each of the project driveways. Design shall be subject to the approval of the City Engineer. (TE)

24 A striping and signing plan shall be provided for all roadway improvements and shall be subject to the approval of the City Engineer as part of the approval of the street improvement plans. (TE)

25 Design and construction of the eastern most project driveway shall include a “pork-chop island” in the middle of the driveway to enforce that this driveway only provides right turn movements in and out of the site. The design of the driveway shall be approved by the City Engineer. (TE)

26 *The Project shall signalize the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S to the satisfaction of the City Engineer. (TE)

27 *The Project shall construct required improvements along the property frontage including curb, gutter, sidewalk and exclusive right turn lane at Guyon Avenue/Project Driveway 1 and W Avenue S to the satisfaction of the City Engineer. (E)(TE)

28 *The Project shall construct a raised median along the property frontage including an eastbound left turn lane at the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S with a recommended length of 100 feet minimum with the appropriate transition to the satisfaction of the City Engineer. (E)(TE)

29 *The Project applicant shall be responsible for filing and completing a General Plan Amendment to allow for the use of a private sewage disposal system until public sanitary sewer is available within 200 feet of the private system. Upon availability of a private system within 200 feet the Project owner shall be required to connect to the public sanitary sewer system. The Project shall also comply with the City of Palmdale plumbing code, Local Agency Management Plan, Lahontan Regional Water Quality Control Board, and Los Angeles County Department of Public Health policies and requirements related to the design, operation and maintenance of Onsite Wastewater Treatment Systems (OWTS) within the City. (E)(P)

THE FOLLOWING CONDITIONS SHALL BE ADDRESSED WITH THE SUBMITTAL OF GRADING PLANS OR PRIOR TO ISSUANCE OF A GRADING PERMIT:

30 The applicant shall submit the final site plan, floor plans, architectural elevation(s), and photometric lighting plans to the Planning Division for review and approval along with required fee(s) for plan check review through the Accela Citizen Access portal. Such plans shall be fully dimensioned and in substantial conformance with those approved by the Review Authority. Plans shall address the following: (P)(TE)(BS)(PS)

<u>Screening</u>

30.1 Utility and transformer boxes, backflow devices, and other similar equipment facilities shall be placed underground, unless otherwise specified and approved. Screening shall be compatible with main structures and include landscaping where appropriate. All electrical switchgear shall be located within an electrical or utility room within the building which may be accessible from an exterior door or doors. Exterior surface mounted switchgear shall be prohibited.

30.2 The location of all devices required by the water district shall be shown on the site plan. All such devices shall be screened with a low-profile wall to match the building, or other method as approved by the Planning Manager.

30.3 The location and method of screening for all roof-mounted equipment shall be demonstrated, including but not limited to air conditioning and heating

units, plumbing flues and vents. All equipment shall be screened from public view. All roof-mounted equipment shall be screened from view by parapet walls or other architectural means. The applicant shall demonstrate to the satisfaction of the Planning Manager that no roof-mounted equipment will be visible from the public right-of-way. A line-of-sight drawing showing full screening of the roof-mounted equipment by the building parapets shall be submitted to the satisfaction of the Planning Manager.

30.4 Exterior ladders providing roof access and exterior downspouts shall be prohibited. Access to the roof and all gutters/downspouts shall be concealed within buildings.

30.5 Any proposed bollards shall include a decorative cover consistent with the architectural style of the associated building. Safety Yellow colored pipe style bollards shall only be permitted in areas hidden from the public right-of-way.

30.6 The location and enclosure details of refuse containment areas are to be in compliance with PMC Chapter 17.85.020 (Refuse and Recycling). Refuse and recycling enclosures shall be screened by a six-foot decorative masonry block wall/material compatible with the main structure(s). A self-closing gate constructed of solid metal material painted to match the enclosure and a solid decorative roof treatment shall be provided. Refuse enclosures shall be designed to meet or exceed the minimum capacity requirements of the development as determined by PMC Chapter 15.30 (CALGreen Recycling Requirements), PMC Chapter 17.85 (Utilities and Services), and waste hauler. Enclosures shall be located to provide unobstructed 24-hour access to refuse collection vehicles.

<u>Lighting</u>

30.7 The photometric lighting plan for parking areas shall comply with applicable standards contained in the PMC Section 17.86.030 (Outdoor Lighting).

30.8 All exterior lighting shall be decorative and appropriate for the architecture of the associated building. Light fixtures shall comply with PMC Section 17.86.030 (Outdoor Lighting) and shall not project above the fascia or roof line of the building.

30.9 Buildings shall have decorative exterior security lighting fixtures installed that are protected by a weather and vandal-resistant covering. Security

lighting must follow the specifications of the PMC Section 17.86.030 (Outdoor Lighting).

30.10 Parking lot lighting shall comply with applicable standards contained in the PMC and shall not be obstructed by trees or other landscaping.

30.11 Pedestrian walkways shall have sufficient decorative pathway lighting.

30.12 Exterior door, perimeter, canopy, and parking area lights shall be controlled by photocell and shall be left on during hours of darkness or diminished lighting.

30.13 Each entry, patio, balcony and pedestrian garage shall be equipped with its own light source.

30.14 All parking lots, aisles, and grounds contiguous to buildings shall be provided with sufficient lighting to provide adequate illumination for the safety and security of vehicles and pedestrians using the site during the hours of darkness or diminished lighting. Such lighting shall be equipped with vandal and weather resistant covers/lenses and comply with specifications of the PMC.

Architectural Design

30.15 Architectural elevations shall note proposed materials, colors, height, dimensions, window, roof, and treatments for all four sides of proposed structure(s).

30.16 If glass skylights are installed on the roof, they shall be provided with rated burglary resistant glass or glass like acrylic material. Iron bars of at least one-half inch round or by one-fourth inch flat steel material spaced no more than five inches apart or a steel grill of at least one-eighth inch material or two-inch mesh, shall be securely fastened over the skylight to prevent entry.

30.17 Iron bars or steel grills, with the same specifications as for skylights, shall be used on air ducts or air vent openings exceeding eight inches by 12 inches located on the roof or exterior walls to prohibit access by unauthorized persons.

Circulation/Parking Safety and Loading Areas

30.18 The site plan shall identify the interior traffic flow pattern.

30.19 Driveways shall have a minimum radius of 15 feet.

30.20 The site plan shall identify all pedestrian access ways and traffic crossings. Crossings shall be clearly marked, lighted, and identified throughout the interior of the project. Design of these areas shall be reviewed and approved by the applicable City departments and shall comply with Title 24 Accessibility Standards and current City Building Codes.

30.21 The site plan shall indicate the alignment of all adjacent streets, turn lanes, medians, bus turnouts, the location of project entrance(s), drive aisles, traffic control devices, sidewalks, landscape setbacks, and the location of other infrastructure.

30.22 All walkways perpendicular to parking stalls shall be a minimum of seven feet in width.

30.23 Site plan shall clearly indicate no parking areas and fire lanes and indicate how such areas will be designated on the site.

Use Related

30.24 The site plan shall provide a Building Code Analysis showing the occupancy of each building, the allowable area of the buildings, and the proposed areas of the building. (Adopted codes are the California Building Codes with Palmdale amendments.)

Development Landscaping Requirements

31 The landscape plans shall comply with all provisions of PMC Chapter 14.05 (Water Efficient Landscape and City Landscaping Standards). (E)

32 The applicant shall submit landscape and irrigation plans for all project landscaping improvements to the Engineering Division for review and approval, through the Accela Citizen Access Portal. The applicant is responsible to pay all plan review fees for the improvements reflected on the landscape plans prior to the plans being reviewed. All landscape permit and inspection fees shall be paid prior to the issuance of a landscape permit. These plans shall include, but not be limited to, the following items: (P)(E)(PS)

32.1 Trees in the parkways shall not exceed a spacing approved by the City Engineer for the species proposed.

32.2 Where trees are incorporated into the landscape design of common or open areas, all trees shall be a minimum one-inch caliper in a 15-gallon or larger container size. Fifty percent of the trees shall be a minimum two-inch caliper in a 24-inch box size or larger container. Twenty percent of the trees shall be a minimum two-and-a-half-inch caliper in a 36-inch box size or larger container. The trunk caliper shall be measured four and a half feet above the root crown. Any Washingtonia spp. or similar palm trees proposed shall have a minimum of 12 feet of brown trunk height.

32.3 All shrubs shall be a minimum five-gallon size. If one-gallon plants are proposed to be used as a ground cover (i.e., with drip irrigation), such planting shall be supplemented with an additional five-gallon plant material to provide variation in texture and height.

32.4 All plant material shall be indicated on the landscape plans with symbols that are 75 percent of the diameter of the mature size of the plant. When determining mature plant size, the lower end of the size range shall be used (for example, if a plant is indicated to have a mature size of six to -ten feet, a six-foot diameter shall be used when graphically indicating the plant material on the plan).

32.5 All landscape areas shall be enclosed by a six-inch raised concrete curb. Differences in planting areas or landscaping ground cover materials shall be separated by approved landscape edging or concrete mow strips.

32.6 All slopes steeper than 3:1 shall be landscaped for erosion control per the Engineering Design Standards.

32.7 Backflow devices shall be screened with a solid Le Meur cover or equivalent and landscaping.

32.8 All plant material sizes and calipers shall conform to the American Standard for Nursery Stock, ANSI (Z60.1) 2014.

32.9 Landscaping shall be provided within parking areas so that at least 15 percent of the surface area of the parking lot is landscaped (excluding perimeter and front setback landscaping). Landscaping shall be dispersed throughout the parking lot to provide shade throughout the lot.

32.10 A minimum of one canopy tree for every four parking stalls (or eight parking stalls when two rows of four share a common frontage) shall be provided.

32.11 A minimum of 50 percent of the parking lot trees shall be a minimum 24-inch box size and with a minimum two-inch caliper. Twenty percent of the trees shall be a minimum two-and-a-half-inch caliper in a 36-inch box size or larger container.

32.12 Landscape planters shall be a minimum of six feet in width (inside dimension), except that tree wells located between parking rows and spaces may be a minimum of four feet in width (inside dimension). All landscaping and planting within paved areas shall be contained within raised planters surrounded by six-inch concrete curbs. Tree areas shall be planted a minimum of five feet from walls, walkways, or buildings. To protect the hardscape and encourage deep root development, root barriers shall be installed during planting operations.

32.13 Wheel stops or curbs shall be placed a minimum of 30 inches away from the trunk of any tree.

32.14 Landscape islands, a minimum 10 feet in width with minimum aisle turning radii of 10 feet shall be provided at the end of all parking rows, except where parking rows directly abut buildings, sidewalks, wall, or similar features.

32.15 Parking rows containing 15 or more spaces shall contain one landscape island within the interior of the parking row for each 15 parking spaces in addition to the required row end landscape islands.

32.16 Landscape islands shall not extend closer than three feet from the aisle end of the adjacent parking space(s).

32.17 Landscape islands shall be designed with a six-inch curb and a minimum one-foot paved area where abutting the side of parking stalls. Paved areas of landscape islands shall not be counted toward fulfilling landscape requirements.

32.18 All landscape islands, which are located at the front of head-in parking spaces, shall be designed with a minimum two-and-a-half-foot area free from vegetation where the front of a vehicle may overhang the island. The overhang area shall be surfaced with non-living landscape material such as gravel or rock. Two and a half feet of the overhang area may be counted as part of the overall parking space length.

32.19 Landscaping along the east property lines property lines shall be defined by use of a six-inch concrete curb or a block wall or six-inch concrete mowing strip or a combination thereof.

32.20 Landscaping located within the vehicle sight distance triangle shall be designed and maintained in a manner that does not block the view at driveways and adjacent intersections. Landscaping shall not exceed three feet in height within the sight distance triangle.

32.21 On-site landscaping should not provide hiding places. Limit surrounding landscaping to low-growth plants no higher than two feet.

32.22 Trees that will not block area surveillance or light distribution shall be utilized. Tree canopies shall be no lower than six feet.

32.23 Landscaping located beneath a window shall be no taller than the windowsill and maintained at this standard. Barrier plants shall be used below and to the sides of windows, when feasible.

33 Slope erosion control and street trees shall be installed to the satisfaction of the City Engineer. (E)

<u>Project Grading/Wall/Fences Requirements</u>

34 The applicant shall submit a current Title Report for the subject property, dated within six months of the date for civil plan submittal. This submittal shall include a declaration of all easement of record and copies of all easements/declaration instruments referenced within the report. (E)

35 Grading and wall plans shall be submitted for review and approval to the Engineering Division, through the Accela Citizen Access Portal. Approval by both the City Engineer and Planning Manager shall be obtained prior to the issuance of a Grading Permit. Final grading and wall concepts shall be in substantial conformance with those shown on the approved site plan, conceptual grading plan, and in accordance with the following: (P)(E)(B&S)

35.1 Northerly Boundary - The applicant shall provide a six-foot-high decorative wall constructed of concrete masonry unit (CMU).

35.2 Easterly Boundary - The applicant shall provide a six-foot-high decorative wall constructed of CMU.

35.3 Westerly Boundary - The applicant shall provide a six-foot high decorative wall constructed of CMU.

35.4 If a wall is not proposed, where commercial or industrial property share a property line with a commercially or industrially designated property, a minimum of a six-inch wide concrete mow strip shall be provided.

35.5 All interior property line walls, if proposed, shall be constructed of masonry, wrought iron, durable vinyl, or other similar durable materials as approved by the Planning Manager.

35.6 Proposed retaining walls or engineered free-standing walls shall be submitted to the Building and Safety Division for review and approval. Said wall types shall require a building permit prior to construction.

36 In all cases where a required wall is to be located adjacent to the top of a 2:1 or greater slope the wall shall be set back a minimum two and a half feet from the crest of that slope on the level side. All slope and wall configurations shall meet the setback requirements of the City Building Code. (P)(E)(B&S)

37 The exterior face and footings of all project perimeter walls shall be located no more than two inches from the property line on the subject property except where appropriate off-site easements have been obtained. (P)(E)

38 Double boundary walls between developments shall be prohibited except as approved by the Planning Manager and City Engineer. (P)(E)

39 Fencing shall allow for access control without eliminating the opportunity for natural surveillance. Open-view fencing, such as wrought iron, is recommended wherever possible. (PS)

40 The final grading plan shall indicate that all rear and interior side yard slopes are up slopes to property lines as indicated on the tentative map. (P)(E)

41 The applicant shall incorporate into the project design all existing easements within the project boundaries or obtain abandonment of said easements from the affected easement holder(s). If this requirement cannot be accomplished, the project shall be redesigned accordingly to the satisfaction of the Planning Manager, City Engineer, or the Review Authority. (P)(E)

42 The applicant shall obtain off-site easements from the affected property owner(s) for all proposed off-site improvements (i.e., slopes and related grading activities, street improvements, walls drainage, etc.). If said easements cannot be obtained, the project shall be redesigned to incorporate these improvements entirely within the project boundary to the satisfaction of the Planning Manager or the Review Authority. The City Engineer shall have the right to withhold approval of the affected improvement plans for failure to satisfy this condition. (P)(E)

43 All manufactured slopes on or adjacent to project boundaries shall meet the setback requirements of the current City Building Code. A recorded off-site Slope Acceptance Letter from all affected property owners shall be submitted to the City Engineer prior to approval of grading plans for any off-site slope not meeting these requirements. In addition, all slopes are required to meet City Standards with respect to erosion control. (E)

44 The applicant shall submit a temporary erosion control and sedimentation plan for approval by the City Engineer prior to grading plan approval and grading permit issuance when grading activity will occur between October 1st and April 15th. Said erosion control plan shall provide appropriate dust control measures per City and Antelope Valley Air Quality Management District (AVAQMD) Standards to minimize nuisance from dust at all times. (E)

44.1 The applicant shall submit a dust control plan to AVAQMD for review and shall obtain clearance from the said agency prior to issuance of a City grading permit. The applicant shall provide proof of compliance with all AVAQMD requirements and applicable fees.

45 From the beginning of the first ground disturbing activity until the use has been released for occupancy, the following are required of the applicant: 1) have erosion control measures, per an approved Erosion Control and Sedimentation Plan, in place during the rainy season (October 15 - April 15); 2) provide appropriate dust control measures, per City and AVAQMD Standards, to minimize nuisance from dust at all times. (E)(B&S)

46 This project shall be designed and constructed in accordance with the stormwater pollution control requirements of the Lahontan Region of the California Regional Water Quality Control Board. Prior to the issuance of a grading permit, the applicant shall file a Notice of Intent with the Lahontan Region of the California Regional Water Quality Control Board to comply with the applicable National Pollution Discharge Elimination System (NPDES) requirements. The applicant

shall submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the City Engineer. (E)

47 A drainage acceptance letter from each affected property owner shall be submitted to the City Engineer when the pre-developed storm runoff onto any adjacent property is increased, concentrated, diverted, or changed in any form as required by State law. (E)

48 A final hydrology study and hydraulics report shall be prepared for this project and approved by the City Engineer. The hydrology study and hydraulics report shall address on-site and off-site conditions and impacts, based on the City of Palmdale adopted Storm Water Management Policy. (E)

49 Based on the findings of the final hydrology and hydraulics report, the applicant shall be responsible, at their own expense, for any and all improvements imposed on the project by the Engineering Department to the satisfaction of the City Engineer. (E)

50 All nuisance water generated from this development shall be mitigated on-site in accordance with City's Design Standards requirements. (E)

51 An on-site/off-site storm drainage basin (detention) shall be required for this development. Such basin(s) shall be granted in easement to the City (for emergency maintenance only), but regular maintenance shall be the responsibility of the applicant, or their City approved designee. (E)

52 This development shall be designed in accordance with the City's Floodplain Management Ordinance, Master Plan of Drainage, and related criteria within the Engineering Design Standards. (E)

53 Dry wells shall be required for this project to dispose of on-site nuisance water in accordance with the approved drainage plan. No nuisance water generated from this development shall be allowed outside the boundaries of this development unless authorized by the City Engineer. Appropriate measures shall be taken to protect dry wells and basins from silt during grading operations and any off-site flow from undeveloped areas designed to flow through subdivision. (E)

54 The applicant shall submit geotechnical reports, prepared in accordance with the City's Engineering Design Standards, to the City Engineer for review and approval prior to the approval of a grading permit. (E)

55 The applicant shall enter into a Development Improvement Agreement and post securities for grading operations with the City and pay all applicable fees. Grading activities extending beyond phase boundaries shall require approval of the City Engineer and Planning Manager. Such grading activity shall be reflected in the Subdivision/Development Improvement Agreement of the phase which request such grading. (E)

56 Grading shall be designated “Engineering Grading” per City Building Code and shall be done in accordance with an approved grading plan. All grading work shall be performed in one continuous operation, or in phases as approved by the Planning Manager and the City Engineer. (E)

57 A traffic signal shall be designed and constructed at the Guymon Avenue/Project Driveway 1 and Avenue S intersection. Plans shall be subject to the approval of the City Engineer. (TE)

58 This property lies within a mapped seismic hazard and earthquake fault zone. The applicant shall be required to submit a fault rupture/hazard study for review and approval prior to the issuance of a grading permit. The cost of the review and approval of the study/report(s) shall be borne by the applicant. (E)

59 The applicant shall be required to mitigate the existing western Joshua trees within the development boundaries in accordance with the California Department of Fish and Wildlife Endangered Species Act and the City’s Joshua Tree and Native Vegetation Preservation Ordinance. All mitigation requirements shall be met prior to the issuance of the grading permit. If western Joshua trees (*Yucca Brevifolia*) are present on the site and impacted by the proposed project, the applicant shall comply with all Joshua Tree requirements as required by the California Department of Fish and Wildlife. (P) (E)

60 *Prior to issuance of permits, the Project proponent shall obtain take authorization from CDFW through either a CESA Incidental Take Permit (ITP) or Western Joshua Tree Conservation Act (WJTCA) ITP. The Project proponent shall be required to adhere to all measures and conditions set forth within the CESA ITP or WJTCA ITP. The Project proponent shall provide compensatory mitigation outlined in the CESA ITP or WJTCA ITP. Options for mitigation will include but are not limited to purchase of credits at a CDFW approved mitigation bank (e.g., Antelope Valley Conservation Bank), or; Payment into the western Joshua Tree Conservation Fund in accordance with the mitigation fee schedule presented in the WJTCA, or, Preservation in perpetuity of onsite or offsite Joshua Tree

Woodland habitat with long-term protection (e.g., Conservation Easement) and a funding mechanism (i.e., endowment). (P)

61 *A desert vegetation preservation plan be prepared and submitted to the City of Palmdale by the Project Applicant as part of the proposed Project development application in order to maximize the amount of native desert vegetation that can be preserved throughout development. This plan shall include: (E)(P)

61.1 A written report and site plan which depicts the location of each California juniper, discusses their age and health, and identifies and locates all trees and shrubs which can be saved in place or located;

61.2 A site landscaping plan showing the proposed locations of all Joshua trees, California junipers, and any other native desert vegetation that will remain on-site;

61.3 A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee, in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured;

61.4 Such other and further information as the Director of Planning may deem necessary to fulfill the purposes and intent of this chapter in a particular case.

62 *Impacts to western Joshua trees shall be avoided to the extent feasible. Prior to any site disturbance activities, a buffer shall be placed around each western Joshua tree that can be preserved at a minimum distance of five feet beyond the tree's drip line. Temporary fencing, signage, and flagging shall be erected to prevent impacts to the tree and buffered area for the duration of construction activities. In the event that western Joshua trees cannot be preserved during Project construction or operation, an Incidental Take Permit for the removal of western Joshua trees shall be obtained from CDFW prior to the removal of western Joshua trees and the issuance of any grading or construction permit. In addition, all applicable fees as established in the western Joshua Tree Conservation Act shall be paid by the Project developer prior to the removal of any western Joshua trees. (P)(E)

63 *A minimum standard of preservation for California juniper shall be met by the Project Applicant in accordance with Section 14.04.070 of the City of Palmdale municipal code. If this standard cannot be met, the developer shall pay all associated in-lieu fees as required by the City. (E)(P)

64 *No more than 30 days prior to the commencement of construction activities, a qualified biologist shall survey the Project site to determine whether burrowing owl occur on the site. If burrowing owl is found to be present on the Project site, CDFW shall be consulted, and all applicable protocols, as established by CDFW, shall be adhered to prior the commencement of construction activities. (P)(E)

65 *To the extent feasible, construction-related activities shall be conducted outside of the nesting bird season (February 1 through August 31). If construction must occur during the nesting bird season, a qualified biologist shall conduct a nesting bird survey of the Project site no more than 72 hours prior to the commencement of vegetation removal activities. If no active nests or breeding activities are found, construction activities may begin. If an active nest and/or breeding activities are determined to be present, the nest site/breeding habitat shall be delineated by a biological monitor, and a buffer of no less than 300 feet (500 feet for raptors) shall be established in which no construction activities are permitted until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the Project. (P)(E)

66 *Prior to the commencement of construction activities, a floristic survey shall be conducted for short-joint beavertail. If detected, each individual shall be flagged or fenced for avoidance prior to the commencement of construction activities. If avoidance is not feasible, a qualified biologist shall develop a short-join beavertail removal and reintroduction plan for any impacted plants. This plan must be approved by CDFW prior to the issuance of grading permits. (P)(E)

67 *Prior to the commencement of construction activities, a qualified biologist shall conduct clearance surveys for desert tortoises on the Project site. Clearance surveys shall follow the USFWS Clearance Survey Protocol for the Mojave Desert Tortoise (May 2019). If desert tortoise is determined to be present on the Project site, the Project developer shall develop and implement a mitigation and monitoring plan in consultation with USFWS and CDFW. (P)(E)

68 *Prior to the commencement of construction activities, a qualified biologist shall conduct a survey for Crotch’s bumblebee during the species’ active period (March to July). This survey shall include a search for Crotch’s bumblebee activity and the

presence of ground nests. If a ground nest is observed, the nest shall remain in place until it is determined to be no longer active by a qualified biologist. If Crotch's bumblebee is present on the Project site and may occur during Project activities, the Project Applicant shall consult with CDFW regarding the implementation of avoidance measures, or the issuance of an Incidental Take Permit. (P)(E)

69 *Prior to the commencement of construction activities, a qualified biologist shall conduct surveys for Mohave ground squirrel in accordance with the California Department of Fish and Game Mohave Ground Squirrel Survey Guidelines (January 2003). Surveys for Mohave ground squirrels are performed between March 15 and July 15 using standard live trapping techniques. A total of three rounds of trapping are required during this time, although trapping shall cease once a Mohave ground squirrel is captured or observed. If these surveys obtain positive results for Mohave ground squirrel, or if Mohave ground squirrel presence is assumed within the Project site, the Project developer shall obtain incidental take authorization from CDFW prior to the commencement of construction activities. (P)(E)

70 *No more than 72 hours prior to the commencement of construction activities, a qualified biologist shall conduct a survey for California glossy snake, coast horned lizard, and Northern California legless lizard. If any of these species are found to be present on the Project site, no construction activities shall commence until the individuals have left the area or have been relocated by a qualified biologist in accordance with CDFW protocols. (P)(E)

71 *Prior to the fill, alteration, or other impacts to the bed or bank of the existing onsite ephemeral drainage, a jurisdictional delineation of this drainage shall be carried out to determine which jurisdiction(s) this drainage falls under. Dependent upon the results of the jurisdictional delineation a CDFW Notification of Streambed Alteration or Water Discharge Requirement pursuant to the Porter-Cologne Water Quality Act may be required. The applicable permit shall be obtained prior to the fill, alteration, or other impacts to the bed or bank of this ephemeral drainage. (P)(E)

72 *In the event that any archaeological materials are encountered during development related pregrading and construction activities, all activities shall be suspended in the vicinity of the find until the deposits are recorded and evaluated by a qualified archaeologist. (P)(E)

73 *In the event that significant subsurface prehistoric resources are encountered Native American Tribes with historic and cultural ties to the area shall be contacted.

All subsequent pre-grading and construction activities shall be undertaken in coordination with oversight from applicable Native American Tribes. (P)(E)

74 *All soil excavations shall be conducted under the Occupation Safety and Hazard Administration (OSHA)'s safety guideline and shall be inspected by a qualified geologist. If any signs of instability or excessive sloughing are noted, immediate remedial action shall be initiated by the geologist or geotechnical engineer on site. (P)(E)

75 *All site grading fill material shall be approved by a geotechnical engineer prior to soil placement. (P)(E)

76 *In the event that significant subsurface prehistoric resources are encountered Native American Tribes with historic and cultural ties to the area shall be contacted. All subsequent pre-grading and construction activities shall be undertaken in coordination with oversight from applicable Native American Tribes. (P)(E)

77 The applicant shall provide written evidence to the Planning and Engineering Divisions that approval has been obtained from the Los Angeles County Fire Department. (F)(P)(E)

THE FOLLOWING CONDITIONS SHALL BE COMPLETED PRIOR TO OR IN CONJUNCTION WITH ISSUANCE OF BUILDING PERMITS:

78 The applicant shall pay all fees at the time fees are determined payable and comply with all requirements of the applicable Federal, State, and local agencies including, but not limited to, the following: (P)(E)(F)(B&S)

Antelope Valley Air Quality Management District
Antelope Valley Union High School District
Los Angeles County Consolidated Fire District
Los Angeles County Department of Health Services
Los Angeles County Sanitation District
Los Angeles County Waterworks
Palmdale School District
Palmdale Water District
Westside Union School District
Regional Water Resources Control Board

The duty of inquiry as to such requirements shall be upon the applicant. Receipt and proof of payment shall be provided to the Building and Safety Division prior to issuance of any building permits.

79 The applicant shall comply with all applicable development regulations and requirements prior to the issuance of any buildings permits on the subject property. (P)(E)(B&S)

80 The applicant shall submit detailed plans for all building construction and obtain plan approval from all agencies/departments as required. (B&S)(F)(P)

81 All agency approvals for permit issuance shall be on file with the Building and Safety Division. (B&S)(F)

82 The applicant shall provide a striping and signing plan for all roadway improvements, subject to the approval of the City Engineer as part of the approval of the street improvement plans. (TE)

83 Water mains shall be designed to meet or exceed the total flow requirements determined from domestic flow and fire flow for this development. Required domestic flow shall be calculated by the applicant's engineer. Fire flow shall be determined by the Los Angeles County Fire Department. (E)

84 The plans and specifications for the water delivery system shall be submitted for approval to the responsible water purveyor prior to final approval of this development by the City Engineer. In all cases where water system facilities have not been installed prior to filing this development with the City Engineer for final approval, the applicant shall submit a Labor and Materials bond in addition to one of the following: (E)

84.1 An Agreement and Faithful Performance bond in the amount approved by the City Engineer to be sufficient to guarantee installation of the improvements; or

84.2 An Agreement and evidence satisfactory to the City Engineer showing that the applicant has entered into a contract with the serving water utility for establishing a security guaranteeing payment for the installation of the improvements.

85 Street lighting plans shall be reviewed and approved separate of the approval of the street improvement plans. Street lighting plans and electrical plans shall be

submitted to the City Engineer for review and approval and to Southern California Edison (SCE) for reference. Electrical plans shall be prepared by a Registered California Electrical Engineer. (E)

86 The applicant shall petition the City to form a Streetlight Benefit Assessment District for the ownership and maintenance of streetlights and appurtenant facilities. Such annexation shall be formed concurrently with, or prior to, recordation of the final map at the sole cost and expense of the applicant, and the applicant's deposit of the estimated costs thereof shall be required prior to such actions by the City. If the City is unsuccessful in the annexation to the Streetlight Benefit Assessment District, the applicant shall propose an alternative maintenance entity and shall be responsible for the maintenance of the streetlights and appurtenant facilities until such time that an alternative maintenance entity assumes the maintenance. All costs associated with the annexation of an alternative maintenance entity shall be paid by the applicant. (E)

87 Easements for all on-site utilities, public and private, shall be granted and recorded for maintenance and upkeep. Such easements may include, but are not limited to, sewer, water, electric, gas, telephone, storm drains, detention basins, and landscaping. (E)

88 At completion of rough grading, the applicant shall submit appropriate reports and statements (Certifications) to the City Engineer, for review and approval, prior to release of rough grading. The City of Palmdale Building Code requires these reports from the field or supervising grading engineer, the soils engineer, the geologist, and the grading contractor. (E)(B&S)

89 The applicant shall obtain addresses established by the Building and Safety Division upon application for a building permit. (E)(B&S)

<u>Impact Fees</u>

90 In accordance with the PMC Section 15.01.020 (Public Art in Private and Municipal Development Project Contribution Requirements) for projects with a building permit valuation of $500,000 or more, the applicant shall devote an amount not less than one-half percent for the acquisition and installation of public art on the development site. This amount shall be the program allocation with a cap of $250,000 allocated for single construction projects. This contribution requirement shall apply to mixed-use and residential projects that create five or more units. All nonprofit and affordable housing developments and structures shall be exempt from this requirement. In lieu of public art on the development site, the applicant

may place a public art in-lieu contribution in an amount equal to the program allocation prior to the issuance of a building permit for the project on the development site. (PA)

91 The public art that may be used to satisfy the requirements shall comply with applicable standards contained in PMC Section 15.01.040 (Public Art in Private and Municipal Development Project Compliance Standards). (PA)

92 The applicant shall have the option of proposing public art incorporating on-site artwork into the development or may elect to deposit the full amount in the public art fund as required under PMC Section 15.01.020 (Public Art in Private and Municipal Development Project Contribution Requirements). In any event, ten percent of the amount required under PMC Section 15.01.20 (Public Art in Private and Municipal Development Project Contribution Requirements) shall be deposited into the public art fund. (PA)

93 In conjunction with an application for a building permit, the applicant shall submit to the City a concept public art project plan for on-site artwork and follow the specifications of PMC Section 15.01.080 (Application and Approval Procedures for Public Art). The City's Public Art Guidelines for Developers will be furnished upon request. (PA)

94 This development is located within the Anaverde Natural Drainage Area/Basin as defined by the City's Master Drainage Plan and approved by Resolution 89-75. The applicant shall comply with the provisions of PMC Chapter 3.38 (Drainage Fee Requirements). The applicant shall pay the applicable drainage fees to the Engineering Division in the amount that is in effect at the time such fees are to be collected. Payment of drainage fees for all areas within the map boundaries which are disturbed by grading are due upon submittal of rough grade certification, prior to building permit issuance. (E)

95 The applicant shall comply with the provisions of PMC Chapter 3.45 (Public Facility Development Impact Fee Requirements). The applicant shall pay the applicable public facility impact fees to the Building and Safety Division in the amount that is in effect at the time such fees are to be collected. (B&S)

96 The applicant shall be required to comply with the findings of and pay any applicable fees associated with the use of on-site wastewater treatment systems in lieu of constructing public sewer to service this project. (E)

THE FOLLOWING CONDITIONS SHALL BE MET WHILE CONSTRUCTION ACTIVITIES ARE ON-GOING:

97 Adequate sanitary disposal facilities shall be required on-site during all phases of construction. (E)(B&S)

98 Grading shall be done in accordance with a grading plan prepared by the applicant's Registered Civil Engineer. All grading work shall be performed in one continuous operation or in phases as approved by the Planning Manager and the City Engineer. (P)(E)

99 In the event of an unforeseen encounter of subsurface materials suspected to be of an archaeological or paleontological nature, all grading or excavation shall cease in the immediate area, and the find left untouched until a qualified professional archaeologist or paleontologist, whichever is appropriate, is contacted and called in to evaluate the find and make recommendations as to disposition, mitigation, and/or salvage. The applicant shall be liable for costs associated with the professional investigation. (P)

100 All existing utilities interfering with the new construction shall be relocated at the developer's expense. (E)

101 The applicant shall comply with all City and State guidelines and requirements for traffic control during construction and prior to final project acceptance. (TE)

102 A signing and striping plan shall be provided for all roadway improvements. (TE)

103 The applicant shall comply with all City and State guidelines and requirements for traffic control during construction and prior to final project acceptance. (TE)

104 Additional pavement shall be constructed in order to provide for striped right turn lanes at the two project driveways. (TE)

105 A traffic signal shall be designed and constructed at the Guymon Avenue/Project Driveway 1 and Avenue S intersection. Plans shall be subject to the approval of the City Engineer. (TE)

106 *If human remains of any kind are found during construction, all construction activities shall ease immediately, and the Los Angeles County Coroner and a qualified archaeologist shall be notified. The Coroner will examine the remains and determine the next appropriate action based on his or her findings. If the coroner

determines the remains to be of Native American origin, he or she will notify the NAHC. The NAHC will then identify the most likely descendants (MLD) to be consulted regarding treatment and/or reburial of the remains. If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to the remains, the property owner shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. (P)(E)

THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO OCCUPANCY OF THIS PROJECT:

107 The applicant shall contact the Planning Division a minimum of two weeks prior to final inspection by the Building and Safety Division to make arrangements for a final walk-through inspection by the Planning Division. (P)

108 All public improvements must be completed and accepted by the City. (E)

109 At completion of final grading, the applicant shall submit appropriate statements (Certifications) to the City Engineer prior to release of final grading. The City requires that these be submitted by the field or supervising grading engineer, and/or the landscape architect. (E)

110 Any broken, damaged or non-compliance curb, gutter, sidewalk, and pavement on streets within or along the frontage of the development shall be repaired. Any existing driveways that are not to be used shall be replaced with standard curb, gutter, and sidewalk. (E)

111 The applicant shall improve any private street(s) or access drives for this project according to the plans approved by the City Engineer. (E)

112 The project shall be constructed in accordance with all the approved plans, including but not limited to site plans, grading plans, wall plans, landscape/irrigation plans, lighting plans, and elevations. (P)(E)

113 The applicant shall comply with the provisions of PMC Chapter 3.40 (Traffic Impact Fee Requirements). The applicant shall pay the applicable traffic impact fees to the Building and Safety Division in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of PMC Chapter 3.40. (TE)

114 Access at the projects eastern most driveway shall be limited to right-turn in and right-turn out movements: The right-turn only sign for driveway exiting vehicles

shall be installed and maintained by the property owner and comply with State standards. (TE)

115 Street name signs shall be purchased and installed in accordance with City of Palmdale standards. The number and location of signs will be as directed by the City Engineer. (TE)(E)

116 Payment of the public art in-lieu contribution or installation of the public art in accordance with the final public art project plan submitted shall be demonstrated by the applicant in compliance with the PMC Section 15.01.090 (Public Art in Private Development). (PA)

THE FOLLOWING CONDITIONS SHALL BE MET AS AN ON-GOING ELEMENT OF THE PROJECT:

117 A valid business license obtained from HdL Business Support Center shall be maintained while the use is in operation. (P)

118 The operation of the business shall comply fully with all the rules and regulations of the PMC. Failure to comply with the PMC shall be subject to PMC Section 1.12.010 (Misdemeanors – Infractions – Administrative Citations), which specifies the violation is a misdemeanor, and subject to penalties specified in PMC Section 1.12.020 (Punishment). (P)

119 If problems arise as a result of business practices or operations that are detrimental to public health, safety, or welfare, the Review Authority may review the CUP and, if after review, the Review Authority deems that there is sufficient evidence that the business practices or operations are detrimental to public health, safety, or welfare then the Review Authority, subsequent to a public hearing, may revoke the CUP pursuant to PMC Section 17.22.070 (Post Decision Procedures). (P)

120 Pursuant to PMC Section 17.22.050 (Approval Requirements and Conditions), the project approval shall apply only to the property for which the application was made and shall apply to that property as long as the use for which approval was granted is in effect, regardless of changes in ownership. (P)

121 A major revision or modification to an approved project such as, but not limited to, expansions or intensification of the use, may be requested by the applicant. Such request shall be processed through application of a major modification or new approval, as determined by the Planning Manager. (P)

122 All parking facilities shall be maintained in good condition in accordance with the provisions of PMC Chapter 17.87 (Off-Street Parking and Loading). The maintenance thereof may include, but shall not be limited to, the repaving, oiling, and striping of a parking area and the repair, restoration and/or replacement of any parking area design features when deemed necessary by the Planning Manager to insure the health, safety, and welfare of the general public. (P)(E)

123 The applicant shall be responsible for establishment, maintenance, and upkeep of the landscape area and all landscape vegetation. All landscape vegetation shall be maintained in a manner to ensure proper growth. Trees and other landscape vegetation shall be pruned as needed to ensure proper growth and give a maintained appearance. Trees shall not be “topped” or pruned excessively. (P)

124 All owners, future owners, heirs, or assigns of the property shall be required to maintain all private drainage facilities in good working condition, as determined by the City Engineer, and shall be responsible for any damages associated with the private drainage facilities and for any costs incurred by the City for emergency maintenance, repairs, and any other efforts to keep the private drainage facilities in good working condition and/or to insure the health, safety, and welfare of the general public. The developer shall record a covenant upon the property regarding said maintenance. (E)

125 The applicant shall fully cooperate with any adjacent property development to provide improved site access in the future including, but not limited to, the closure, removal, sharing, or relocation of project parking, landscaping, driveways, and drive-aisles. (TE)

126 The installation of speed bumps or humps as a means to control speed on the site shall be prohibited as required by PMC Section 10.04.100 (Regulation of Speed Bumps on Private Streets, Easements and Fire Lanes). If any of these devices are installed while this ordinance is in effect, the owner shall be required to remove these devices at their own expense. (TE)

127 All agency approvals for permit issuance shall be on file with the Building and Safety Division. (B&S)(F)

128 The premises, while open or closed for business after dark, shall be sufficiently lighted by use of interior night lights. (PS)

129 The business shall place alarm buttons or other activation devices at the check stand, in the administration office, and in any other locations deemed appropriate by the City. (PS)

130 Storage rooms, including food, alcohol, roof access doors, maintenance, mechanical, electrical, and other room doors that contain property that may be susceptible to theft, shall be covered by a silent intrusion alarm system. These systems may terminate at the front desk. (PS)

131 This establishment shall be required to register in the City of Palmdale Business Watch Program and receive training through the Public Safety Office. (PS)

132 Window signage shall be limited to no more than 25 percent coverage of window area provided visibility into the building is maintained as stated in PMC Section 17.88.070 (Exemptions to Sign Permit Requirements). (PS)

133 Signage shall be posted on the property, including the parking areas, to discourage loitering and alcohol consumption in the parking lot. Letters shall be a minimum of two inches high and shall include the following wording: (PS)

NO LOITERING – P.M.C. 9.44.050 and P.C 602.1
NO DRINKING IN PUBLIC – P.M.C. 9.12.020
Palmdale Sheriff's Station 661-272-2400

134 The premises shall always be properly maintained and kept in a neat and orderly condition. This includes, but is not limited to, building and parking lot lighting and trash and debris removal. (PS)

135 Graffiti shall be removed by the owner within 72 hours of discovery as specified within PMC Section 9.30.080 (Graffiti Removal from Private Property by Owner). Consider graffiti mitigation measures such as vining/climbing and barrier plants along block walls. (PS)

136 Trash enclosures shall be kept locked when not in use to discourage illegal dumping and other improper uses. (PS)

137 Outside electrical outlets and water spigots/hose bibs shall be secured to prevent unauthorized use. (PS)

138 Outside hinges on all exterior doors shall be provided with non-removable pins when pin-type hinges are used or shall be provided with hinge studs, to prevent removal of door. (PS)

139 Roll-up doors and individual storage space doors shall be equipped with locking hardware including metal flanges on the lock bolts to protect the padlock shackle from being cut. (PS)

140 Overhead roll-up doors shall be so secured on the inside that the lock cannot be defeated from the outside and shall also be secured with a cylinder lock or padlock from the inside. (PS)

141 All exterior doors shall be provided with their own light source and shall be adequately illuminated at all hours to make clearly visible premises and provide adequate illumination for persons exiting the building. (PS)

142 Primary building address numbers shall be located on the building side where the main entrance is located. The development shall display an additional set of numbers on the secondary frontage (street side) when the building does not front on the street of address. Numbers shall be no less than eight inches in height if located less than 100 feet from the centerline of the addressed street or 12 inches in height if placed further than 100 feet from the centerline of the addressed street. Numbers shall be of a color contrasting to the background to which they are affixed. (PS)

143 All entrances to the parking area shall be posted with appropriate signs per California Vehicle Code Section 22658(a) to assist in removing vehicles at the property. (PS)

Key to Departmental Conditions:

(B&S) Building and Safety Division (661-267-5353)
(E) Engineering Division (661-267-5272)
(F) Los Angeles County Fire Department (661-949-6319)
(Pk) Parks and Recreation Department (661-267-5611)
(P) Planning Division (661-267-5200)
(PA) Public Art (661-267-5686)
(PS) Public Safety Division (661-267-5170)
(SCE) Southern California Edison (661-726-5617)
(TE) Traffic Engineering (661-267-5300)

EXHIBIT F

Maverik Fuel Station

Draft Initial Study Mitigated Negative Decleration

APN: 3004-016-032

MAVERIK

185 S. State Street
Salt Lake City, Utah 84111

TheAltumGroup
Strive Higher

www.thealtumgroup.com

Maverik Fueling Station Palmdale

General Plan 23-0002, Conditional Use Permit 24-0001, Zone Change 24-0003, Site Plan Review 24-0005, Development Agreement 24-0007

Draft Initial Study/Mitigated Negative Declaration

Lead Agency:

City of Palmdale
Department of Economic and Community Development
38250 Sierra Highway
Palmdale, CA 93550

Prepared by:

The Altum Group
44-600 Village Court, Suite 100
Palm Desert, CA 92260

Project Applicant:

Farman Shir, PE., QSD
Site Design Collaborative
245 East Third St.
Long Beach, CA 90802

October 2024

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Acronyms

ADT	Average Daily Traffic
AES	Aesthetics
APN	Accessor Parcel Number
ARB	Air Resource Board
AVACMD	Antelope Valley Air Quality Management District
BIO	Biology
BLM	Bureau of Land Management
BMPs	Best Management Practices
BSA	Biological Study Area
CADOC	California Department of Conservation
CASMGB	California State Mining and Geology Board
Cal Fire	California Department of Forestry and Fire Protection
Calgreen	California Green
Cal Trans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Code
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CDFW	California Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHSC	California Health and Safety Code
CNDDB	California Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CRHR	California Register of Historical Resources
CRNA	California Resources Natural Agency
CUL	Cultural
CUP	Conditional Use Permit
dB	Decibels
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report
DOC	Department of Conservation

DTSC	Department of Toxic Substances
EES	Endemic Environmental Services
EIR	Environmental Impact Review
ESA	Environmental Site Assessment
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FRA	Federal Responsibility Area
FTA	Federal Transit Administration
GEO	Geology
GPU	General Plan Update
Hp-hr gal	Horsepower hours a gallon
Hz	Hertz
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act
ISMND	Initial Study Mitigated Negative Declaration
kWh	Killo watts per hour
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sheriff's Department
LDA	Light Duty Autos
LDR	Low Density Residential
LEQ	Equivalent Sound Level
LID	Low Impact Development
L(n)	Precent Noise Levels
LOS	Level Of Service
Lp	Level Pressure
LRA	Local Responsibility Area
LRWQCB	Lahontan Regional Water Quality Control Board
MLD	Most Likely Descendants
MM	Mitigation Monitoring
MND	Mitigated Negative Declaration
MMRP	Mitigation Monitor Reporting Program
MRZs	Mineral Resource Zones
NAHC	Native American Heritage Commission
NC	Neighborhood Commercial
ND	Negative Declaration
NIMS	National Incident Management System
N/m2	Newton per square inch meter
NO2	Nitrogen Dioxide

NOD	Notice of Determination
NOI	Notice of Intent
NPEDS	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
OSHA	Occupation Safety and Hazard Administration
PM2.5	Particulate Matter with Diameter of 2.5 micrometers
PM10	Particulate Matter with Diameter of 10 micrometers
PPV	Peak Particle Velocity
PRC	Public Resource Code
PUSD	Palmdale Unified School District
PWD	Palmdale Water District
RMS	Root Mean Squared
P-Waves	Compression Waves
RWQCB	Regional Water Control Board
SCAG	Southern California Association of Governments
SCAQMD	Southcoast Air quality Management District
SCE	Southern California Edison
SEMS	Standardized Emergency Management System
SENEL	Single Event Noise Exposure Level
sf	Square Foot
SMARA	Surface Mining and Reclamation Act
SO2	Sulfur Dioxide
SoCal Gas	Southern California Gas Company
SPL	Sound Pressure Level
SPR	Site Plan Review
SRA	State Responsibility Area
SR	State Route
S-Waves	Shear Waves
SWPPP	Storm Water Pollution Prevention Plan
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
VdB	Vibration level
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
WQMP	Water Quality Management Plan
ZC	Zone Change
µPa	Micro-Pascal

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Chapter 1 Introduction

1.1 Preface

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to evaluate potential environmental effects resulting from the proposed Maverik Fueling Station Project located north of Avenue S and approximately 180 feet west of SR-14, in the city of Palmdale, County of Los Angeles. California. The proposed Project is located on Assessor Parcel Number (APN) 3004-016-032.

As established in State of California Environmental Quality Act (CEQA) Guidelines Section §15063(c), the purposes of an IS/MND are to:

- Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND);
- Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for an ND or MND;
- Assist in the preparation of an EIR, if one is required;
- Facilitate environmental assessment early in the design of a project;
- Provide a factual basis for finding in an ND or MND that a project will not have a significant effect on the environment;
- Eliminate unnecessary EIRs; and,
- Determine whether a previously prepared EIR could be used with the project.

This Initial Study/Mitigated Negative Declaration (IS/MND) has evaluated each of the issue areas contained in the CEQA Checklist, as provided in Section 3.0 of this document. The objective of this environmental document is to inform the City decision-makers, representatives of other affected/responsible agencies, and other interested parties of the potential environmental effects that may be associated with the proposed Project.

This IS/MND therefore serves as the environmental review of the proposed Project, as required pursuant to Title 14, Division 6, Chapter 3 of the State of California Code of Regulations for implementation of CEQA and the Public Resources Code (PRC) §21000, et seq.

1.2 Regulatory Guidance

An IS/MND is prepared by a lead agency to determine if a project may have a significant effect on the environment. In accordance with the CEQA Guidelines, Section §15064, an EIR must be prepared if the Initial Study (IS) indicates that the proposed project under review may have a potentially significant impact on the environment. A negative declaration may be prepared instead, if the lead agency prepares a written statement describing the reasons why a proposed Project would not have a significant effect on the environment, and, therefore, why it does not require the preparation of an EIR (CEQA Guidelines Section §15371). According to CEQA Guidelines Section §15070, a Negative

Declaration/Mitigated Negative Declaration shall be prepared for a project subject to CEQA when either:

(a) The Initial Study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or

(b) The Initial Study identified potentially significant effects, but:

(1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and,

2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment. If revisions are adopted into the proposed project in accordance with the CEQA Guidelines Section 15070(b), a Mitigated Negative Declaration is prepared.

1.3 Lead Agency

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies are to be involved with a project, State CEQA Guidelines Section §15051 provides criteria for identifying the lead agency. Specifically, State CEQA Guidelines §15051(b) states:

(b) If the project is to be carried out by a nongovernmental person or entity, the lead agency shall be the public agency with the greatest responsibility for supervising or approving the project as a whole.

(1) The lead agency will normally be the agency with the general governmental powers, such as a city of county, rather than an agency with a single or limited purpose such as an air pollution control district or a district which will provide public serve or public utility to the project.

Since the proposed project is located in the City of Palmdale, County of Los Angeles, pursuant to PRC Code Section §21067, and State CEQA Guidelines §15367, The City of Palmdale is the Lead Agency for this proposed project. As the Lead Agency, therefore, the City is responsible for the review and approval of the proposed project. Based on the findings of the IS for the project, The City of Palmdale has determined that a MND is the appropriate environmental document to prepare in compliance with CEQA (California PRC Section §21000 et seq.). As stated under CEQA Section §21064.5, an MND may be prepared for a project subject to CEQA when an IS has identified no potentially significant effects on the environment. The purpose of the MND and the IS checklist is to determine any potentially significant impacts associated with the proposed project and to incorporate mitigation measures into the project design as necessary to reduce or eliminate the significant or potentially significant effects of the project.

This IS/MND has been prepared for the proposed Project and complies with Section §15070(a) of the CEQA Guidelines (14 California Code of Regulations [CCR] §15000 et seq.).

1.4 Purpose of this Document

This document, therefore, is a MND and incorporates all of the elements of an IS. This IS/MND has been prepared in accordance with all criteria, standards, and procedures of CEQA (California PRC §21000 et seq.) and the CEQA Guidelines, §15070-§15075. This is an informational document intended for use by The City of Palmdale, Trustee and Responsible agencies, and members of the general public in evaluating the physical environmental effects resulting from planning, constructing, and operating the proposed Project. CEQA requires that a proposed project be reviewed to determine the environmental effects that would result if the project is approved and implemented. The Lead Agency therefore has the responsibility for preparing the associated environmental document prior to consideration of the approval of the proposed project and has the authority to make decisions regarding discretionary actions relating to implementation of the project. Appropriate mitigation measures that minimize or avoid the proposed project impacts to the natural and built environment, are also included in the analysis under this IS/MND.

The purpose of this IS/MND is to evaluate the potential environmental impacts of the proposed Project. As described in the environmental checklist (Chapter 3), the Project would not result in any unmitigated significant environmental impacts. Therefore, an IS/MND is the appropriate document for compliance with the requirements of CEQA. This IS/MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section §15070-§15075.

This IS/MND has been prepared in accordance with the relevant provisions of CEQA (California PRC Section §21000 et seq. Upon completion of the IS/MND, it was determined that mitigation would reduce project environmental impacts to levels below significance thresholds; therefore, an Environmental Impact Report would not be required and a MND would be the appropriate level of CEQA document.

1.5 CEQA Process

The City of Palmdale has determined that this IS and its supporting reference material provide substantial evidence that an IS/MND is the appropriate environmental document for the proposed project. Therefore, a good-faith effort has been made during the preparation of this IS/MND to contact affected agencies, organizations, and persons who may have an interest in this project. In reviewing the IS/MND, public agencies and the interested public should focus on the sufficiency of the document in identifying and analyzing the project's possible impacts on the environment. A Notice of Intent (NOI) to adopt the IS/MND will be distributed for public review with the IS/MND. The NOI identifies the location(s) where the IS/MND, the Mitigation, Monitoring and Reporting Program (MMRP), and the associated Technical Appendices that support the IS/MND, are available for public review. Following the public review period, the City will review any comment letters received and determine whether any substantive comments (as defined by CEQA Guideline §15073.5(b)) were provided that may warrant revisions to the CEQA document. If no substantial revisions are necessary, then the IS/MND will be reviewed by the City decision-maker(s) to adopt this IS/MND. Following approval, a Notice of Determination (NOD) for the IS/MND will be filed with the Los Angeles County Clerk.

Comments or questions concerning this IS/MND may be submitted in writing by mail or email to City of Palmdale Planning Department at:

Brenda Magaña, Planning Manager, City of Palmdale
38250 Sierra Highway
Palmdale, CA 93550
Email: bmagana@cityofpalmdale.org
Phone: 661-267-5200

Comments on the IS/MND may be made in writing before the end of the public review period. A 45-day review and comment period from October 28, 2024 through November 26, 2024 has been established in accordance with Section §15072(a) of the CEQA Guidelines. Following the close of the public comment period, the City Council will consider this IS/MND and comments in determining whether to approve/deny the proposed Project.

1.6 Summary of Findings

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the project. Based on the issues evaluated in that chapter, it was determined that the project would have either no impact or a less than significant impact related to most of the issue areas identified in the Environmental Checklist, included as Appendix G of the State CEQA Guidelines. These include the following issue areas:

- Agricultural Resources
- Air Quality
- Energy
- Greenhouse Gas Emission
- Hazards and Hazardous Materials
- Hydrology
- Land Use
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Utilities/Service Systems
- Wildfire

Potentially significant impacts were identified for Aesthetics, Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources; however, mitigation measures included in the IS/MND would reduce all impacts to a less than significant level.

1.7 Organization of the Document

This document is divided into the following sections:

1.0 Introduction - Provides an introduction and describes the purpose and organization of this document.

2.0 Project Description - Provides a detailed description of the proposed project.

3.0 Project Checklist - Provides the environmental determination for the proposed Project based on each of the 20 issue areas.

4.0 Environmental Determination - Describes the environmental setting for each of the environmental subject areas (as described in Appendix G of the State CEQA Guidelines), evaluates a range of impacts classified as no impact, less than significant, or less than significant with mitigation incorporated in response to the environmental checklist, and provides mitigation measures, where appropriate, to mitigate potentially significant impacts to a less than significant level.

5.0 Report Preparers - Identifies staff and consultants responsible for the preparation of this document.

6.0 References - Provides a list of references used to prepare the IS/MND.

7.0 Response to Comments – Provides responses to comments submitted during the 45-day public comment period on the ISMND.

Chapter 2 Project Description

This section of the IS/MND describes the proposed Project and provides a description of the proposed Project's location, objectives, and required approvals. The purpose of the proposed Project is to provide additional fuel service and commercial (gas station associated commercial uses) within the city of Palmdale.

2.1 Project Location

Regional Setting

The approximately six (6.09) acres site (Assessor's Parcel Numbers [APN] 3004-016-032) is located in the City of Palmdale, Palmdale, California. The Angeles National Forest, Mt. San Antonio, Mt Gleason, Pacifico Mountain over five miles south of the Project site. Palmdale Lake is located half a mile to the east of the site, while the Pacific Ocean is over 60 miles west of the Project site. As shown on Exhibit 1 through Exhibit 4, Regional Map and Location Map, regional access to the proposed Project site is provided by SR-14, also known as the Antelope Valley freeway, which is less than approximately one and a fourth miles to the east of the site, SR-138 is approximately one and a half miles north of the proposed Project site. The Palmdale Regional Airport is approximately over five miles to the northeast. The City of Lancaster is to the north of the Project site, and the City of Santa Clarita to the southwest of the Project site. Cities to the east of the site are Adelanto, Victorville and Hesperia.

Surrounding Land Uses and Zoning Designations

Project located north of Avenue S and approximately 180 feet west of SR- 14, in the city of Palmdale, County of Los Angeles. California. Land uses to the north, east, south, and west of the east consist primarily of vacant land, hiking trail and recreational uses and some small commercial uses in the form of a small market and a park and ride.

Current Land Use and Zoning Designations

According to the City's General Plan Land Use Map (City of Palmdale, Land Use Map 2022) the site area is designated as Neighborhood Commercial. According to the City's Zoning Map, the site is zoned Neighborhood Commercial (NC), however the applicant is requesting a change of zone to Regional Commercial (RC). (City of Palmdale, Land Use Map 2022).

Table 1 General Plan Land Use Designation and Zoning

Direction	General Plan Designation	Zoning	Existing Land Use
North	Low Density Residential (LDR)	LDR	Vacant
South	Los Angeles County Jurisdiction Light Industrial, across Avenue S	Los Angeles County Jurisdiction	Vacant Land and Existing Commercial
East	Neighborhood Commercial (NC)	NC	Vacant land and SR 14
West	Neighborhood Commercial (NC)	NC	Vacant land

Existing Project Site

As illustrated by Exhibit 3, Project Site, the proposed Project site is currently vacant land surrounded by vacant land to the north and west. The site is adjacent to SR-14 to the east and Avenue S to the south.

The proposed 5,637 square-foot fueling station with a convenience store would be located on an approximate six (6.09) acre site in the City of Palmdale.

The Project site is located within the southern portion of the Mojave Geomorphic Province, with the San Andreas Fault Zone passing though the northeast corner of the site (City of Palmdale General Plan Update EIR; 2022). The San Andreas Fault is an active fault and is expected to be the source of major earthquakes within the next 30 years with a Richter magnitude exceeding 8. The site is within a seismic hazard liquefaction zone (City of Palmdale General Plan Update EIR; 2022).

The Project site is in the Antelope Valley Watershed of the Antelope Valley Groundwater Basin (City of Palmdale General Plan Update EIR; 2022).

The proposed Project site is located in the Antelope Valley Air Pollution Control District. The AVAPCD covers a portion of the Mojave Desert Air Basin, which includes the northeast portion of Los Angeles County where the proposed Project site is located. (California Air Resources Board; 2023).

Proposed Project Characteristics

The proposed Project would include the construction of 24 fuel pumps, air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with operational characteristics, hours of operation are 24 hrs. seven days a week, storage generators, on-site alternative waste water treatment system, and a covered trash enclosure (see Exhibit 4 Conceptual Site Plan). Building heights would vary from 29 feet at the highest

point of the convenience store structure and up to 19 feet, three inches for the gas canopy. Signage at the site would be limited to one free standing sign at the site's entrance and one sign for the Project name on the building that would house the convenience store. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated as ADA parking, one of which is van accessible. Access to the site would be provided along Avenue S (see Exhibit 4 Conceptual Site Plan).

The applicant has applied for a General Plan Amendment to allow for the use of a on-site alternative wastewater treatment system until public sanitary sewer is available within 200 feet of the Project site.

Landscaping, Lighting, and Signage

The proposed Project would provide landscaped areas around the site perimeter. Landscaped areas would consist of native trees and flowering shrubs and comply with Title 14 and 17 of the City of Palmdale Municipal Code (PMC)

Lighting on the Project site would be provided along the eastern and southern boundaries of the site, as well as on the exterior of the convenience store building. Standalone light poles as well as exterior lights would be provided in the parking areas, fuel stations and fuel pump canopy. Lighting for the Project will comply with PMC section 17.86.040.

While the proposed fuel station and convenience store would have exterior signage on the building, a free-standing sign would be located along Avenue S between the site's access driveways. Signage cannot exceed 30 feet per the PMC Chapter 17.88 or exceed 100 square feet of sign area.

Circulation

Regional and local traffic to the site is primarily provided via SR-14 which traverses the City in a north-south direction. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site. The City's General Plan classifies SR-14 as a regional roadway, Avenue S as a Crosstown roadway, and the other surrounding streets as Neighborhood roadways (City of Palmdale 2045 General Plan Update; 2022). Located to the west of the SR-14 off-ramp and to the north of Avenue S, the proposed Project site would be accessed through two access driveways along Avenue S. Internal site circulation would be provided with an internal circulation system between the proposed convenience store and restaurant as well as the fuel pumping stations. 35 parking spaces and four handicap accessible parking areas would be provided along the convenience store of the Project site.

Water, Sewer and Storm Drainage

The proposed Project would connect to existing an existing water tank on El Camino Drive. Water lines will be laid from the project site and will run south on Guyon Avenue to El Camino Drive well as access

storm drainages pipes and lines for this portion of the city. The following utilities would serve the site (City of Palmdale 2045 General Plan Update DEIR; 2022):

- **Water:** Palmdale Water District
- **Sewer and Wastewater:** The applicant has applied for a General Plan Amendment to allow for the installation of a alternative on-site wastewater treatment system until public sanitary sewer is available within 200 feet of the private system.
- **Solid Waste collection:** City of Palmdale Waste Management
- **Electricity:** Southern California Edison (SCE)
- **Natural Gas:** Southern California Gas Company (SoCal Gas)
- **Telecommunications:** AT&T, CenturyLink, Direct TV, Dish Network, Exceed Satellite Internet, Frontier Communications, HughesNet, Sprint, Time Warner, Verizon, and Via Satellite.

Public Services

The following public services serve this portion of the city and would serve the proposed Project site (City of Palmdale 2045 General Plan Update; 2022).

- **Fire:** Los Angeles County Fire Department LACFD
- **Police:** Los Angeles County Sheriff's Department LACSD
- **Schools:** City of Palmdale School District
- **Parks:** City of Palmdale
- **Library:** Palmdale City Library

Construction Schedule

The proposed Project is anticipated to take approximately ninemonths of construction time.

Employment

The proposed Project is expected to employ an approximate total of 15 full-time employees, working in hour shifts.

Discretionary Actions and Approvals

The following discretionary actions and other non-discretionary approvals are required to implement the proposed Project:

- General Plan Amendment (GPA23-0002)
- Conditional Use Permit (CUP24-0001)
- Zone Change from Neighborhood Commercial to Regional Commercial (ZC 24-0003)
- Site Plan Review (SPR 24-0005)
- Development Agreement (AGR 24-0007)

- IS/MND
- Mitigation Monitoring and Reporting Program (MMRP)
- Grading Permit
- Building Permits
- Final Water Quality Management Plan (WQMP) and Stormwater Pollution Prevention Plan (SWPPP).

This MND/IS may be used by responsible agencies and trustee agencies that may have some approval authority over the proposed Project (i.e., to issue a permit). The Project applicant would obtain all permits, as required by law. The following agencies have been identified as having potential discretionary authority over approval of certain Project elements, or alternatively, may serve in a ministerial capacity:

Other Governmental agencies that may be required to issue permits or approve certain aspects of the Project included but not limited to:

Responsible Agencies:

- Palmdale Water District
- California Department of Transportation
- California Native American Heritage Commission
- Los Angeles County Fire Department
- Los Angeles County Sheriff's Department
- Los Angeles County Water District
- Southern California Edison
- Regional Water Quality Control Board
- Los Angeles County Department of Environmental Health

Trustee Agencies:

- Antelope Valley Air Quality Management District
- California Air Resources Board
- California Department of Conservation
- California Department of Fish and Wildlife
- California Department of Forestry and Fire Protection
- California Natural Resources Conservation Service

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Regional Location

Maverik Palmdale Fueling Station

Exhibit

1

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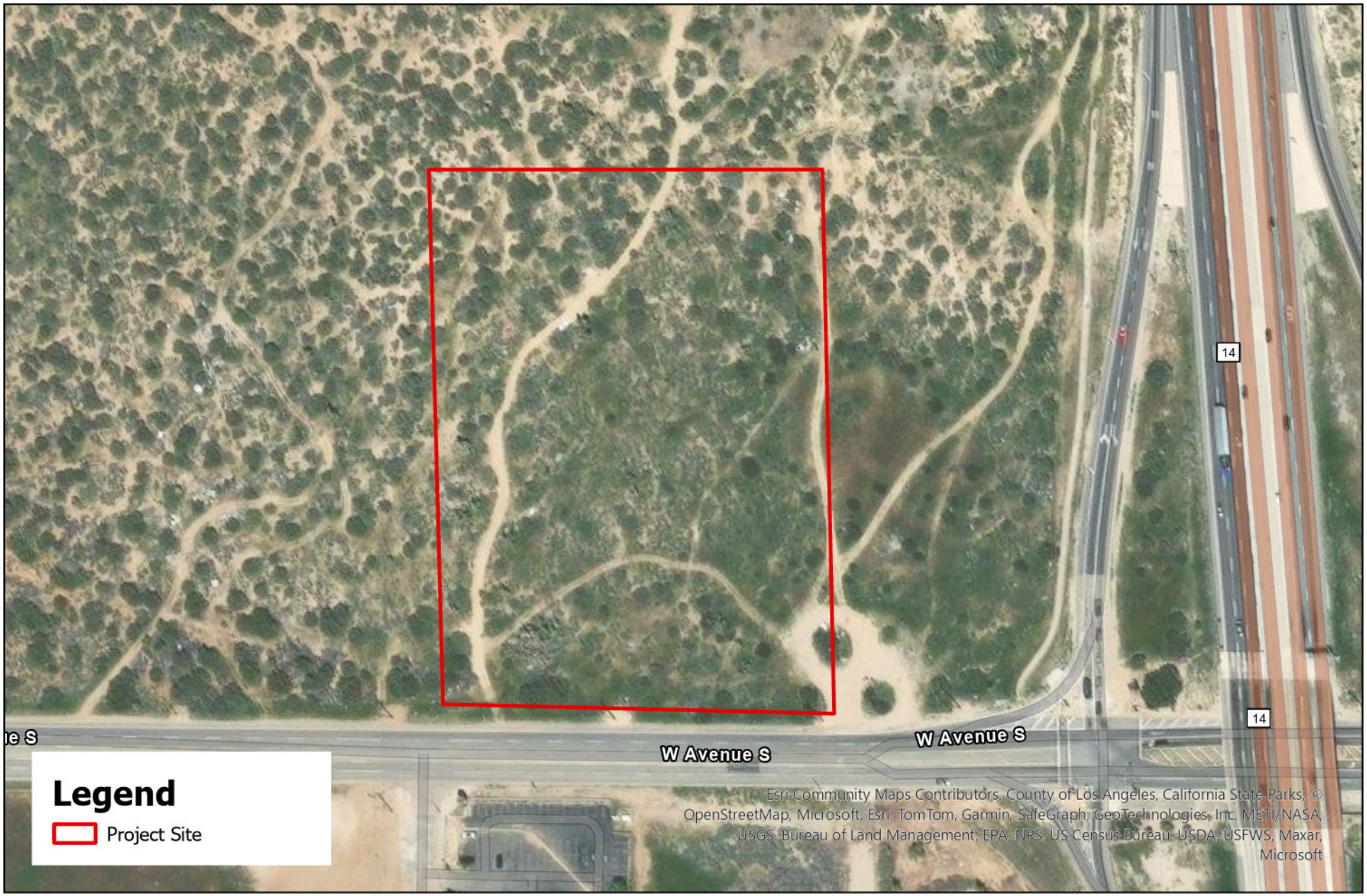
Project Location

Maverik Palmdale Fueling Station

Exhibit

2



The Altum Group

Project Site Area

Maverik Palmdale Fueling Station

Exhibit

3

SITE DATA SUMMARY TABLE

SITE ACREAGE:	6.1 ACRES (265,697 S.F.)
EXISTING ZONING:	NEIGHBORHOOD COMMERCIAL (NC)
PROPOSED ZONING:	NEIGHBORHOOD COMMERCIAL (NC)
ASSESSOR PARCEL NUMBER (APN):	3004-016-032
EXISTING USE:	VACANT
PROPOSED USE:	C-STORE
BUILDING AREA:	5,637 S.F.
BUILDING CONSTRUCTION:	V-B
BUILDING OCCUPANCY:	M
NUMBER OF STORIES:	1
NUMBER OF EMPLOYEES:	7 PER SHIFT
TYPE OF GOODS SOLD:	FUEL, BEVERAGES, SNACKS, MILK READY-MADE FOOD , FRUIT, CAR OIL
HOURS OF OPERATION:	24 HOURS
BUILDING HEIGHT:	19'-0"
BUILDING COVERAGE:	2%
FLOOR AREA RATIO:	0.02
IMPERVIOUS AREA:	74,672 S.F. (28.1%)
LANDSCAPE AREA REQUIRED:	265,697 x .15 = 39,854 S.F.
PERVIOUS/LANDSCAPE AREA PROVIDED:	191,025 S.F. (71.9%)
15% OF OPEN PARKING LOT AREA:	7,426 S.F. x 15%=1,114 S.F.
PARKING LOT LANDSCAPE AREA PROVIDED:	1,250 S.F. (16.8%)
REGULAR PARKING REQUIRED: 4 SP PER 1,000 S.F. & 1 PER EMPLOYEE	23 SPACES (4 SP PER 1,000 S.F.) 7 SPACES (1 PER EMPLOYEE)
REGULAR PARKING PROVIDED:	30 SPACES
HANDICAP PARKING REQUIRED:	2 SPACES (1 VAN ACCESSIBLE)
HANDICAP PARKING PROVIDED:	2 SPACES (1 VAN ACCESSIBLE)
TOTAL PARKING PROVIDED:	32 SPACES
EV PARKING REQUIRED:	2 SPACES (1 VAN ACCESSIBLE)
EV PARKING PROVIDED:	2 SPACES (1 VAN ACCESSIBLE)
BICYCLE PARKING REQUIRED: 10% OF REQUIRED VEHICLE PARKING	3 REQUIRED @ 10% OF 30 REQUIRED PARKING SPACES
OPEN SPACE REQUIRED:	5,637 x .03 = 169 S.F.
OPEN SPACE PROVIDED:	20' x 20' = 400 S.F.
OPEN SPACE LANDSCAPE REQUIRED:	400 x 20 = 80
OPEN SPACE LANDSCAPE PROVIDED:	80 S.F.

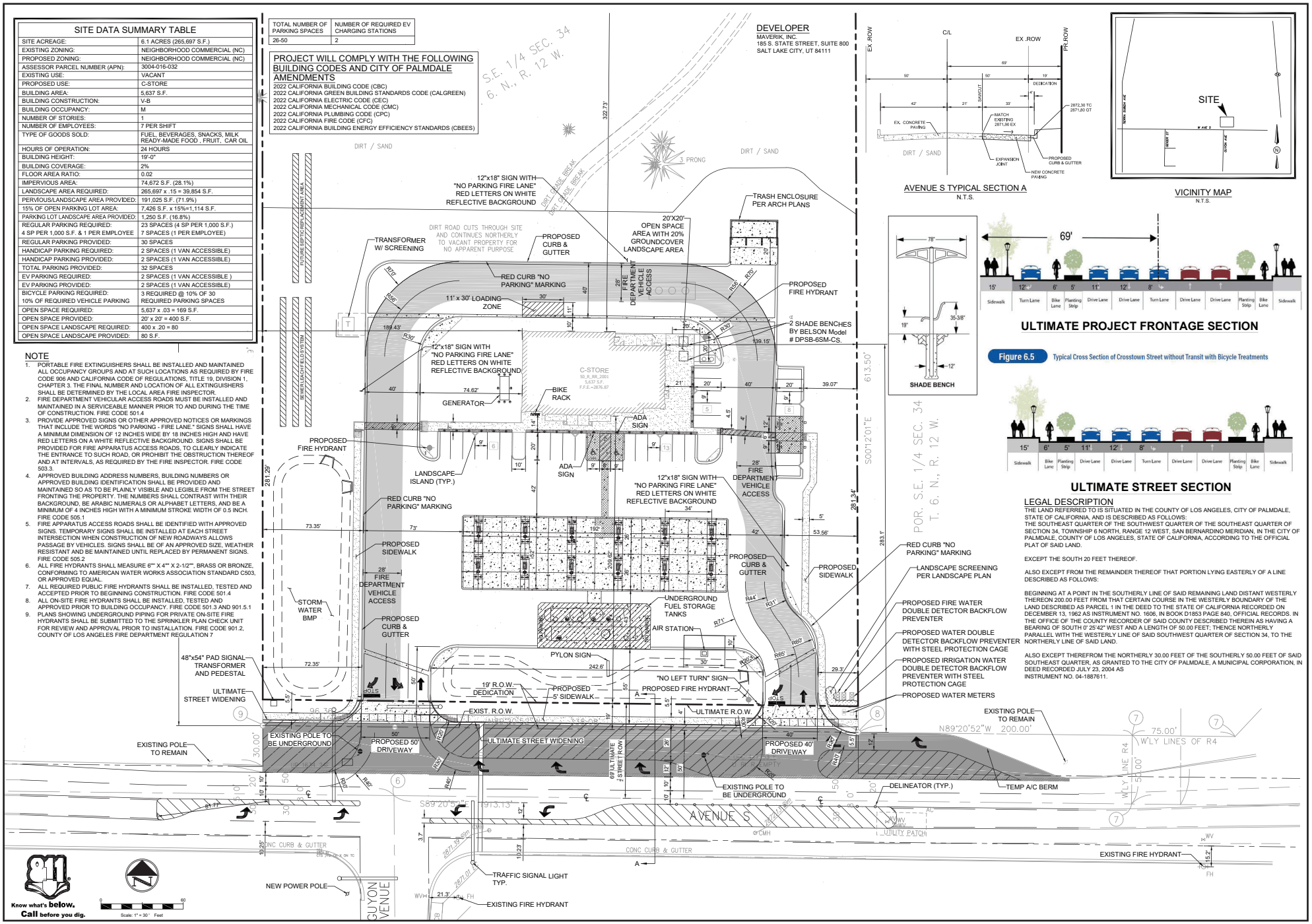
TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV CHARGING STATIONS
26-50	2

PROJECT WILL COMPLY WITH THE FOLLOWING BUILDING CODES AND CITY OF PALMDALE AMENDMENTS

2022 CALIFORNIA BUILDING CODE (CBC)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)
2022 CALIFORNIA ELECTRIC CODE (CEC)
2022 CALIFORNIA MECHANICAL CODE (CMC)
2022 CALIFORNIA PLUMBING CODE (CPC)
2022 CALIFORNIA FIRE CODE (CFC)
2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS (CBEES)

NOTE

1. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED AND MAINTAINED ALL OCCUPANCY GROUPS AND AT SUCH LOCATIONS AS REQUIRED BY FIRE CODE 906 AND CALIFORNIA CODE OF REGULATIONS, TITLE 19, DIVISION 1, CHAPTER 3. THE FINAL NUMBER AND LOCATION OF ALL EXTINGUISHERS SHALL BE DETERMINED BY THE LOCAL AREA FIRE INSPECTOR.
2. FIRE DEPARTMENT VEHICULAR ACCESS ROADS MUST BE INSTALLED AND MAINTAINED IN A SERVICEABLE MANNER PRIOR TO AND DURING THE TIME OF CONSTRUCTION. FIRE CODE 501.4
3. PROVIDE APPROVED SIGNS OR OTHER APPROVED NOTICES OR MARKINGS THAT INCLUDE THE WORDS "NO PARKING - FIRE LANE." SIGNS SHALL HAVE A MINIMUM DIMENSION OF 12 INCHES WIDE BY 18 INCHES HIGH AND HAVE RED LETTERS ON A WHITE REFLECTIVE BACKGROUND. SIGNS SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS, TO CLEARLY INDICATE THE ENTRANCE TO SUCH ROAD, OR PROHIBIT THE OBSTRUCTION THEREOF AND AT INTERVALS, AS REQUIRED BY THE FIRE INSPECTOR. FIRE CODE 503.3.
4. APPROVED BUILDING ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND, BE ARABIC NUMERALS OR ALPHABET LETTERS, AND BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCH. FIRE CODE 505.1
5. FIRE APPARATUS ACCESS ROADS SHALL BE IDENTIFIED WITH APPROVED SIGNS. TEMPORARY SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES. SIGNS SHALL BE OF AN APPROVED SIZE, WEATHER RESISTANT AND BE MAINTAINED UNTIL REPLACED BY PERMANENT SIGNS. FIRE CODE 505.2
6. ALL FIRE HYDRANTS SHALL MEASURE 6"" X 4"" X 2-1/2"", BRASS OR BRONZE, CONFORMING TO AMERICAN WATER WORKS ASSOCIATION STANDARD C503, OR APPROVED EQUAL.
7. ALL REQUIRED PUBLIC FIRE HYDRANTS SHALL BE INSTALLED, TESTED AND ACCEPTED PRIOR TO BEGINNING CONSTRUCTION. FIRE CODE 501.4
8. ALL ON-SITE FIRE HYDRANTS SHALL BE INSTALLED, TESTED AND APPROVED PRIOR TO BUILDING OCCUPANCY. FIRE CODE 501.3 AND 901.5.1
9. PLANS SHOWING UNDERGROUND PIPING FOR PRIVATE ON-SITE FIRE HYDRANTS SHALL BE SUBMITTED TO THE SPRINKLER PLAN CHECK UNIT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. FIRE CODE 901.2, COUNTY OF LOS ANGELES FIRE DEPARTMENT REGULATION 7



AVENUE S TYPICAL SECTION A
N.T.S.

VICINITY MAP
N.T.S.

ULTIMATE PROJECT FRONTAGE SECTION

Figure 6.5 Typical Cross Section of Crosstown Street without Transit with Bicycle Treatments

ULTIMATE STREET SECTION

LEGAL DESCRIPTION

THE LAND REFERRED TO IS SITUATED IN THE COUNTY OF LOS ANGELES, CITY OF PALMDALE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:
THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 6 NORTH, RANGE 12 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND.

EXCEPT THE SOUTH 20 FEET THEREOF.

ALSO EXCEPT FROM THE REMAINDER THEREOF THAT PORTION LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTHERLY LINE OF SAID REMAINING LAND DISTANT WESTERLY THEREON 200.00 FEET FROM THAT CERTAIN COURSE IN THE WESTERLY BOUNDARY OF THE LAND DESCRIBED AS PARCEL 1 IN THE DEED TO THE STATE OF CALIFORNIA RECORDED ON DECEMBER 13, 1962 AS INSTRUMENT NO. 1606, IN BOOK D1853 PAGE 840, OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY DESCRIBED THEREIN AS HAVING A BEARING OF SOUTH 0° 25'42" WEST AND A LENGTH OF 50.00 FEET; THENCE NORTHERLY PARALLEL WITH THE WESTERLY LINE OF SAID SOUTHWEST QUARTER OF SECTION 34, TO THE NORTHERLY LINE OF SAID LAND.

ALSO EXCEPT THEREFROM THE NORTHERLY 30.00 FEET OF THE SOUTHERLY 50.00 FEET OF SAID SOUTHEAST QUARTER, AS GRANTED TO THE CITY OF PALMDALE, A MUNICIPAL CORPORATION, IN DEED RECORDED JULY 23, 2004 AS INSTRUMENT NO. 04-1887611.

The Altum Group

Conceptual Site Plan

Maverik Palmdale Fueling Station

Exhibit

4

Chapter 3 Project Checklist

1. Project Title: Maverik Fueling Station (Case No. GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, AGR 24-0007

2. Lead Agency Name and Address: City of Palmdale 38250 Economic and Community Development Sierra Highway, Palmdale, CA 93550

3. Contact Person and Phone Number: Brenda Magaña, Planning Manager; (661) 267-5293

4. Project Location:
The proposed Project site is located on a 6.09-acre site APN: 3004-016-032 at the Project located north of Avenue S and approximately 180 feet west of SR-14, in the city of Palmdale, County of Los Angeles, California. The City is located in northern Los Angeles County, in the Antelope Valley region of southern California. The Angeles National Forest and the San Gabriel Mountain range are located to the south and southeast. The San Gabriel Mountain range is part of the Transverse Ranges and lies between the Los Angeles Basin and the Mojave Desert. The city of Los Angeles is located approximately 37 miles to the south and Lake Palmdale is approximately over 9,000 feet to the southeast of the site. Regional access to the Project site is from Interstate 5 (I-5) located over 22 miles to the southwest and I-15 is located over 44 miles to the east. Exhibit 2 shows the regional location of the proposed Project site.

5. General Plan Designation and Zone: The Project site has a General Plan Land Use Designation and Zone of Neighborhood Commercial (N-C). The applicant is requesting a change of land use designation and zone to Regional Commercial (RC).

7. Description of Project: The proposed Project would include the construction of 24 fuel pumps air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, on-site alternative waste water treatment system, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Access to the site would be provided along Avenue S.

Table 2 Proposed Building Area

Proposed Building Type	Square Footage (SF)	Proposed Building Height
Maverik Convenience Store	5,637 SF	29’

8. Surrounding Land Uses and Zoning: The Project site is primarily surrounded by vacant land, with SR-14 to the east, and Avenue S to the south. The land use designation and zoning of the Project site and surrounding areas are listed in Table 2 and shown in Exhibits 4 zoning and 5 General Plan Land Use.

9. Existing Site Characteristics: The Project site is currently vacant with shrubs, shrubs, loose rock and gravel as well as unpaved trails throughout the site. The Project site is 2,866 above mean sea level (msl) with a gentle slope to the southeast (Phase I ESA; 2022).

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- Los Angeles County Fire Department
- Los Angeles County Sheriff's Department
- Reginal Water Quality Control Board (RWQCB)
- Los Angeles County Water District (LACWD)
- Palmdale Water District (PWD)
- Southern California Edison (SCE)

10. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

A request for a search of the Native American Heritage Consultation (NAHC) Sacred Lands File (SLF) was made by ASM on June 8, 2023. The NAHC search revealed six Native American Tribes with potential jurisdiction over the Project area. The City of Palmdale will initiate consultation for AB 52 and SB 18 on September 10 to conclude on October 24. During AB 52 and SB 18 only the Yuhaaviatam of San Manuel Nati on (formerly the San Manuel Band of Mission Indians[YSMN]) participated in consultation providing updated mitigation measures to Section 4.5 Cultural and Section 4.18 Tribal Cultural Resources.

Chapter 4 Environmental Determination

CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE:

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to identify and assess the anticipated environmental impacts of the proposed Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) [Public Resources Code {PRC}, Section §21000 et seq.] and the State CEQA Guidelines (14 CCR §15000 et seq). CEQA serves as the main framework of environmental law and policy in California. CEQA emphasizes the need for public disclosure and identifying and preventing environmental damage associated with proposed projects. Unless a project is deemed categorically exempt, CEQA is applicable to any discretionary project that must be approved by a public agency in order to be processed and established. The proposed Project does not fall under any of the statutory or categorical exemptions listed in the 2023 CEQA Statute and Guidelines (California PRC, Section §21000 et seq.; 14 California Code of Regulations (CCR) §15000 et seq.), and, therefore, must meet existing CEQA requirements.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a Potentially Significant Impact, or Less Than Significant Impact with Mitigation Incorporated, as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☒ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a potentially significant impact or potentially significant unless mitigated impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as describe on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

This Initial Study was prepared by:

Madeline Luke
Assistant Environmental Planner

The Altum Group

_____ _____
Signature Dat

Brenda Magaña
Planning Manager
City of Palmdale

_____ _____
Signature Date

4.1 Aesthetics

Impacts

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
AESTHETICS – 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 nonurbanized 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?	☐	☐	☒	☐

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. A scenic vista is generally defined as the expansive or notable view of an area that is aesthetically pleasing to the general public from a generally accessible vantage point such as a roadway, existing structure or other open areas. Visual impacts to scenic vistas are typically evaluated on an area's scenic quality, sensitivity level, and access to the view. Important factors in determining whether a proposed Project would block scenic vistas include the Project's proposed height, mass, and location relative to surrounding land uses and view corridors.

The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Access to the site would be provided along Avenue S. The proposed Project site is currently vacant with rock outcropping, trees, shrubs and some grass ground cover. The proposed Project is a commercial use development along a major roadway.

The view from the site to the north is of vacant but vegetated land and small hilltops of the Pelona Vista Park; vacant land with some trees and shrub coverage and SR-14 to the east; Avenue S, other vacant parcels, some commercial uses, a park-and-ride facility, a large lot residence, and the ranges of the San Gabriel Mountains to the south; and vacant tree and shrub covered land, Tierra Subida Avenue and

residential development to the west. While the proposed Project would introduce new building mass and lighting to an undeveloped area, it would have to comply with applicable City General Plan policies and zoning regulations with regard to structure heights, signage and lighting. The proposed Project would not substantially, and impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact With Mitigation Incorporated. The site is not located near a visual corridor including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Although the proposed Project would result in site development on a portion of the overall property, it would still require the removal and relocation of some western Joshua trees on the site. However, removal and relocation of any western Joshua trees and any native desert vegetation will require take permit application from the California Department of Fish and Wildlife (CDFW) as western Joshua trees are listed under the Endangered Species Act of 1973 (16 U.S.C 1531 et seq.). The proposed Project will comply with the Department of Fish and Wildlife guidelines pertaining to the care and management of western Joshua trees, as well as complying with PMC Chapter 14.04 western Joshua Tree and Native Desert Vegetative Preservation. Therefore, the impacts shall be less than significant with mitigation measure AES-1.

c) In nonurbanized 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?

Less Than Significant Impact. The proposed Project will not substantially degrade the existing visual character or quality of public views of the site and its surroundings, nor will the Project conflict with applicable zoning and other regulations governing scenic quality. The proposed Project would be located in a nonurbanized area within the city of Palmdale. The site is currently a vacant lot to the north of Avenue S. Public views from the site include distant views of the Pelona Vista Park and distant mountain ranges to the north, northeast, and southwest. A large lot residential parcel, some commercial multi-unit building in the jurisdiction of Los Angeles County and a park and ride lot are located south of Avenue S .While the proposed Project construction would have the potential to disrupt the existing views of the mountains and surrounding open areas, construction activities would be short-term, and any public views would be temporarily impacted for the duration of Project construction. Although the proposed Project would add new structures and lighting to a flat terrain and therefore alter the existing visual character of an otherwise vacant site, the proposed Project would have to comply with applicable standards and regulations with regard to signage and lighting:

The proposed Project will also comply with the City of Palmdale development standards required for the Neighborhood Commercial (NC) zone, following all setbacks and development standards per PMC Sections 17.48.010 and 17.86.010. As well as landscape compliance with PMC Chapter 14.05 (Water Efficient Landscape). The proposed Project would not substantially degrade existing scenic vistas and impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed Project will create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Typically, the primary sources of light at any site include light coming from building interiors through windows, doors and other building features and light emanating from exterior sources such as passing vehicles, street lighting, parking lot lighting, exterior building illumination, security lighting, signage, and landscape lighting. The introduction of light sources in a rural or undeveloped area can be an annoyance by affecting adjacent uses and diminishing the night-time views of the sky. The proposed Project site is currently a vacant parcel surrounded by vacant land to the north, SR-14 and vacant parcels to the east, Avenue S roadway, vacant land and commercial uses within approximately 2,000 feet to the south, and Tierra Subida Avenue, vacant parcels and residential development at approximately 2000 feet to the west. Since the Project site is currently vacant, the construction and operation of a fueling station and convenience store, with associated infrastructure will introduce new sources of daytime glare or reflective light (from sunlight or artificial light reflecting from finished surfaces e.g. window glass) and other reflective materials. The proposed Project would also introduce new nighttime (or spillover) light sources from building interior, fuel pump area lighting, and light from vehicles accessing/departing the site. The spillover of light has the potential to interfere with certain activities, including vision, sleep, privacy, and general enjoyment of the natural nighttime conditions. Therefore, the proposed Project has the potential to result in significant impacts from new sources of substantial light or glare which would adversely affect day or nighttime views into, and from, a currently vacant site. However proposed construction and lighting associated with the Project would be required to conform to the California Building Code (CBC), as well as the City's design standards PMC Section 17.86.030 (Outdoor Lighting) by installing nuisance prevention lighting that will be directed downward to prevent excessive light spill over. Therefore, the impacts shall be less than significant.

Mitigation

AES-1: Prior to issuance of City permits, the Project proponent shall obtain take authorization from CDFW through either a CESA Incidental Take Permit (ITP) or Western Joshua Tree Conservation Act (WJTCA) ITP. The Project proponent shall be required to adhere to all measures and conditions set forth within the CESA ITP or WJTCA ITP. The Project proponent shall provide compensatory mitigation outlined in the CESA ITP or WJTCA ITP. Options for mitigation will include but are not limited to purchase of credits at a CDFW approved mitigation bank (e.g., Antelope Valley Conservation Bank), or; Payment into the western Joshua Tree Conservation Fund in accordance with the mitigation fee schedule presented in the WJTCA, or, Preservation in perpetuity of onsite or offsite Joshua Tree Woodland habitat with long-term protection (e.g., Conservation Easement) and a funding mechanism (i.e., endowment).

4.2 Agriculture and Forestry Resources

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No Impact
AGRICULTURAL AND FORESTRY 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?	☐	☐	☐	☒

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?

No Impact. The proposed Project will not be converting any Prime, Unique, or Farmlands of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use. The site is currently vacant with rock

outcroppings, western Joshua trees, shrubs and some grass ground cover. The proposed Project is a commercial use development along a major roadway. The City's 2045 General Plan Update (GPU) EIR concluded that there are no agricultural uses located on the proposed Project site (City of Palmdale 2045 General Plan Update EIR; 2020). The site does not have soils or the topography to support agricultural land and related uses. Since there are no prime or unique farmlands, or farmlands of statewide importance on the proposed Project site, there would be no conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses and therefore no impact to farmlands.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The proposed Project will not conflict with existing zoning for agricultural use, or Williamson Act contract, as the proposed Project site is not regulated under a Williamson Act Contract (California Department of Conservation's Williamson Act Enrollment Finder; 2022), There would be no impact.

c-e) 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))? Result in the loss of forest land or conversion of forest land to non-forest use? 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?

No Impact. The proposed Project will not conflict with existing zoning for, or cause rezoning of, forest land(as defined by 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)), nor will the Project result in the loss of forest land or conversion of forestland to non-forest land, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agriculture use or conversion of forest land to non-forest land. The Project site is zoned as Neighborhood Commercial (NC) zone and is currently vacant with trees, small shrubs bushes, and general rip rap dispersed intermittently throughout the site; there are no forest lands or timberlands on the site. The proposed Project would not therefore conflict with existing zoning for, or cause rezoning of, forest land or timberland. Nor would the proposed Project result in the loss or conversion of forest land. There would be no impact to forest land and timberland.

Mitigation

No mitigation is required.

4.3 Air Quality

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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?	☐	☐	☒	☐

The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site.

An Air Quality, Greenhouse Gas, Energy Impact Study was conducted by MD Acoustics LLC in November 2023 (Appendix A). According to the Air Quality Study, the Antelope Valley Air Quality Management District (AVAQMD) maintains an air-monitoring network that measures levels of several air pollutants throughout the air basin. The nearest air monitoring station to the proposed Project site is the Lancaster monitoring station located approximately 7.5 miles north of the site at 43301 Division Street, Lancaster. Table 3 presents the monitored pollutant levels within the vicinity. However, it should be noted that due to the air monitoring station distance from the project site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy, local air quality conditions at the proposed Project site.

Table 3 Local Area Air Quality Levels from Lancaster Air Monitoring Station 1

	Year		
Pollutant (Standard)2	2019	2020	2021
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.096	0.099	0.086
Days > CAAQS (0.09 ppm)	1	4	0
Maximum 8-Hour Concentration (ppm)	0.081	0.083	0.079
Days > NAAQS (0.07 ppm)	13	8	3
Days > CAAQS (0.070 ppm)	14	8	4
Carbon Monoxide:			
Maximum 1-Hour Concentration (ppm)	-	-	-
Days > NAAQS (20 ppm)	-	-	-
Maximum 8-Hour Concentration (ppm)	-	-	-
Days > NAAQS (9 ppm)	-	-	-
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.050	0.052	0.046
Days > NAAQS (0.25 ppm)	0	0	0
Sulfur Dioxide:3			
Maximum 1-Hour Concentration (ppm)	-	-	-
Days > CAAQS (0.25 ppm)	-	-	-
Inhalable Particulates (PM10):			
Maximum 24-Hour Concentration (ug/m3)	165.1	192.3	411.2
Days > NAAQS (150 ug/m3)	2	1	1
Days > CAAQS (50 ug/m3)	-	-	-
Annual Average (ug/m3)	22.5	30.6	29.6
Annual > NAAQS (50 ug/m3)	No	No	No
Annual > CAAQS (20 ug/m3)	Yes	Yes	Yes
Ultra-Fine Particulates (PM2.5):			
Maximum 24-Hour Concentration (ug/m3)	13.6	74.7	35.7
Days > NAAQS (35 ug/m3)	0	9	1
Annual Average (ug/m3)	6.1	9.2	8.1
Annual > NAAQS (15 ug/m3)	No	No	No
Annual > CAAQS (12 ug/m3)	No	No	No

1. Source: obtained from https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year and /or https://www.arb.ca.gov/adam/topfour/topfour1.php.
2 CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million
3 No data available.

The monitoring data presented in Table 3 above, shows that ozone is the air pollutant of primary concern in the Project area, which are detailed below.

Ozone

During the 2019 to 2021 monitoring period, the State one-hour concentration standard for ozone has been exceeded one day in 2019 and four days in 2020 at the Lancaster Station. The State eight-hour ozone standard has been exceeded between four and 14 days each year over the past three years at the Lancaster Station. The Federal eight-hour ozone standard has been exceeded between three and 13 days each year over the past three years at the Lancaster Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the AVAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide

CO is another important pollutant that is due mainly to motor vehicles. During the 2019 to 2021 monitoring period, the Federal one-hour and eight-hour concentration standards for CO were not exceeded.

Nitrogen Dioxide

During the 2019 to 2021 monitoring period, the Federal one-hour concentration standard for Nitrogen Dioxide has not been exceeded.

Sulfur Dioxide

The Lancaster Station did not have SO_2 data available for the last three years.

Particulate Matter

During the 2019 to 2021 monitoring period, the Federal 24-hour PM_{10} concentration standard was exceeded between one and two days per year at the Lancaster Station.

During the same period, the Federal 24-hour standard for $PM_{2.5}$ was exceeded nine days in 2020 and one day in 2021 the Lancaster Station.

According to the US Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing fine particulate matter (PM_{10} and $PM_{2.5}$). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5.}$ Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths during exercise.

The Project Area's Attainment Status

The US EPA and the California Air Resources Board (CARB) designate air basins where ambient air quality standards are exceeded as nonattainment areas. If standards are met, the area is designated as an attainment area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are 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 eight-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 eight-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. Table 4 lists the attainment status for the criteria pollutants in the AVAQMD.

Table 4 AVAQMD Attainment Status

Ambient Air Quality Standard	AVAQMD
One-hour Ozone (Federal) – standard has been revoked, this is historical information only	Proposed attainment in 2014; historical classification Severe-17
Eight-hour Ozone (Federal 84 ppb (1997))	Subpart 2 Nonattainment; classified Severe15
Eight-hour Ozone (Federal 75 ppb (2008))	Nonattainment, classified Severe-15
Eight-hour Ozone (Federal 70 ppb (2015))	Expected nonattainment; classification to be determined
Ozone (State)	Nonattainment; classified Extreme
PM10 24-hour (Federal)	Unclassifiable/attainment
PM2.5 Annual (Federal)	Unclassified/attainment
PM2.5 24-hour (Federal)	Unclassified/attainment
PM2.5 (State)	Unclassified
PM10 (State)	Nonattainment
Carbon Monoxide (State and Federal)	Attainment
Nitrogen Dioxide (State and Federal)	Attainment/unclassified
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Attainment
Particulate Sulfate (State)	Unclassified
Hydrogen Sulfide (State)	Unclassified
Visibility Reducing Particles (State)	Unclassified
1 Obtained from 2016 Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines	

Modeling Parameters and Assumptions

Construction

Typical emission rates from construction activities were obtained from CalEEMod Version 2022.1.1.20 CalEEMod is a computer model published by the SCAQMD for estimating air pollutant emissions. The CalEEMod program uses the EMFAC2017 computer program to calculate the emission rates specific for the Mojave Desert portion of Los Angeles County for construction-related employee vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy truck operations. EMFAC2017 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Using CalEEMod, the peak daily air pollutant emissions were calculated and presented below. These emissions represent the highest level of emissions for each of the construction phases in terms of air pollutant emissions.

The analysis assesses the emissions associated with the construction of the proposed Project. The Project

was analyzed to be operational in 2025; therefore, construction is estimated to start no sooner than the first quarter of 2025 and be completed by the end of 2024. The phases of the construction activities which have been analyzed below are:

1. site preparation
2. grading
3. building
4. paving
5. architectural coating

For details on construction modeling and construction equipment for each phase, please see Appendix A.

Operations

Operational or long-term emissions will occur over the life of the Project. Both mobile and area sources generate operational emissions. Area source emissions arise from consumer product usage, heaters that consume natural gas, gasoline-powered landscape equipment, and architectural coatings (painting). Mobile source emissions from motor vehicles are the largest single long-term source of air pollutants from the operation of the Project. Small amounts of emissions would also occur from area sources such as the consumption of natural gas for heating, hearths, from landscaping emissions, and consumer product usage. The operational emissions were estimated using the latest version of CalEEMod.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed Project. The vehicle trips associated with the proposed Project are based upon the trip generation rates given in the Traffic Scoping Agreement (Integrated Engineering Group, 2023) which uses the ITE 11th Trip Generation Manual.

The program then applies the emission factors for each trip which is provided by the EMFAC2017 model to determine the vehicular traffic pollutant emissions. The CalEEMod default trip lengths were used in this analysis. Please see CalEEMod output comments sections in Appendix A for details.

Area Sources

Area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment.

Per AVAQMD thresholds, architectural coatings will be limited to an average of 50 grams per liter or less for flat coatings and 100 grams per liter or less for non-flat coatings; however, no changes were made to the CalEEMod architectural coating default values.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The proposed Project will not conflict or obstruct implementation of the applicable air quality plan. CEQA requires a discussion of any inconsistencies between a proposed Project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). According to the AVAQMD, a Project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan.

Per the City's Land Use and Zoning map, the current land use and zoning is Neighborhood Commercial (NC). As shown by the results of this air analysis, the Project's emissions do not exceed any AVAQMD thresholds during either short-term construction or long-term operation of the proposed Project. The proposed Project is required to adhere to AVAQMD Rule 403 during construction to limit fugitive dust particles that may be created on-site during the construction phase, and compliance with Rule 1113 that limits volatile organic compound content in paints and paint solvents. Therefore, the proposed Project is not anticipated to exceed the Attainment Plan assumptions for the site. Nor would it conflict with implementation of the AVAQMD Attainment Plans, impacts are considered to be less than significant.

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?

Less Than Significant Impact. The proposed Project will not 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. In accordance with the AVAQMD methodology, Projects that do not exceed the AVAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact.

Construction Air Quality Emissions Impact

The latest version of CalEEMod was used to estimate the onsite and offsite construction emissions. The emissions incorporate Rule 402 and 403. Rule 402 and 403 (fugitive dust) are not considered mitigation measures as the Project by default is required to incorporate these rules during construction.

Regional Construction Emissions

The construction emissions for the Project would not exceed the AVAQMD's daily and annual emission thresholds at the regional level as demonstrated in Table 5, and therefore would be considered less than significant.

Table 5 Regional Significance – Unmitigated Construction Emissions (lbs/day)

Activity	Pollutant Emissions					
	VOC	NOx	CO	SO2	PM10	PM2.5
Daily Emissions (pounds/day)						
2024	6.50	30.82	19.59	0.12	12.10	5.41
Maximum	6.50	30.82	19.59	0.12	12.10	5.41
AVAQMD Daily Thresholds	137	137	548	137	82	65
Exceeds Thresholds	No	No	No	No	No	No
Annual Emissions (tons/year)						
2024	0.19	1.39	1.46	0.00	0.10	0.07
Total	0.19	1.39	1.46	0.00	0.10	0.07
AVAQMD Annual Thresholds	25	25	100	25	15	12
Exceeds Thresholds	No	No	No	No	No	No

Notes:

1 Source: CalEEMod Version 2022.1.1.20

2 On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM10 and PM2.5 emissions show mitigated values for fugitive dust for compliance with AVAQMD Rule 403.

3 Off-site emissions from equipment operated on public roads.

4 Construction, architectural coatings and paving phases may overlap.

Operational Air Quality Emissions Impact

Regional Operational Emissions

The operations-related criteria air quality impacts created by the proposed Project have been analyzed through the use of CalEEMod model. The operating emissions were based on the year 2025, which is the anticipated opening year for the Project per the Traffic Scoping Agreement (Integrated Engineering Group). The summer and winter emissions created by the proposed Project's long-term operations were calculated and the highest emissions from either summer or winter are summarized in Table 6.

Table 6 Regional Significance - Unmitigated Operational Emissions (lbs/day)

Activity	Pollutant Emissions1					
	VOC	NOx	CO	SO2	PM10	PM2.5
Daily Emissions (pounds/day)						
Area Sources2	0.19	0.00	0.25	0.00	0.00	0.00
Energy Usage3	0.00	0.03	0.02	0.00	0.00	0.00
Mobile Sources4	10.49	13.37	124.90	0.24	20.73	5.39
Total Emissions	10.67	13.39	125.17	0.24	20.74	5.39
AVAQMD Daily Thresholds	137	137	548	137	82	65
Exceeds Threshold?	No	No	No	No	No	No
Annual Emissions (tons/year)						
Area Sources2	0.03	0.00	0.02	0.00	0.00	0.00
Energy Usage3	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources4	1.37	1.18	8.98	0.02	1.52	0.40
Total Emissions	1.40	1.18	9.00	0.02	1.53	0.40
AVAQMD Annual Thresholds	25	25	100	25	15	12
Exceeds Threshold?	No	No	No	No	No	No

Notes:

1 Source: CalEEMod Version 2022.1.1.20

2 Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

3 Energy usage consists of emissions from on-site natural gas usage.

4 Mobile sources consist of emissions from vehicles and road dust.

Table 6 provides the proposed Project's unmitigated operational emissions and shows that the proposed Project does not exceed the AVAQMD daily emission threshold and regional operational emissions are considered to be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The proposed Project would not exceed construction or operational emissions thresholds set by the AVAQMD. Impacts shall be less than significant.

Operations-Related Human Health Impacts

As stated previously, regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant. Since regional emissions of criteria pollutants during operation of the proposed Project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, less than significant adverse acute health impacts as a result of proposed Project operation are anticipated.

CO Hot Spot Emissions

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality

impacts can be assessed by comparing future without and with proposed Project CO levels to the State and Federal CO standards.

To determine if the proposed Project could cause emission levels in excess of the CO standards, a sensitivity analysis is typically conducted to determine the potential for CO hot spots at a number of intersections in the general Project vicinity. Due to reduced speeds and vehicle queuing, hot spots potentially can occur at high traffic volume intersections with a Level of Service (LOS) E or worse.

Micro-scale air quality emissions have traditionally been analyzed in environmental documents where the air basin was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to EPA that there are no hot spots anywhere in the air basin, even at intersections with much higher volumes, much worse congestion, and much higher background CO levels than anywhere in Los Angeles County. If the worst-case intersections in the air basin have no hot spot potential, any local impacts will be below thresholds.

Traffic analysis from Integrated Engineering Group (2023) showed that the proposed Project would generate 1,543 average daily trips. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. The volume of traffic at Project buildout would be well below 100,000 vehicles and below the necessary volume to even get close to causing a violation of the CO standard. Therefore, no CO hot spot modeling was performed and less than significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed Project.

Cumulative Regional Air Quality Impacts

Cumulative Projects include local development as well as general growth within the proposed Project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local Projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for the proposed Project's air quality must be generic by nature.

The proposed Project area is out of attainment for both ozone and PM10 particulate matter. Construction and operation of cumulative Projects will further degrade the local air quality, as well as the air quality of the Mojave Desert Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these Projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the AVAQMD methodology, Projects that do not exceed the AVAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The proposed Project does not exceed any of the thresholds of significance and therefore is considered less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The proposed Project will not result in an excess of other emissions such as those leading to odors) adversely affecting a substantial number of people. Potential sources that may emit odors during proposed Project construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Diesel exhaust and VOCs would be emitted during construction of the proposed Project, which are objectionable to some; however, emissions would disperse rapidly from the proposed Project site and therefore should not reach an objectionable level at the nearest sensitive receptors. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed Project.

The AVAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the proposed Project would result in excessive nuisance odors, as defined under the California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality. Potential sources that may emit odors during the on-going operations of the proposed Project would include odor emissions from vehicle emissions as well as fueling activity. Due to the distance of the nearest receptors from the proposed Project site and through compliance with AVAQMD's Rule 402 less than significant impact related to odors would occur during the on-going operations of the proposed Project.

Mitigation

No mitigation is required.

4.4 Biological Resources

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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 Wildlife 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 Wildlife 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 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 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?	☐	☐	☒	☐

a-b) 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 Wildlife or U.S. Fish and Wildlife Service? 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 Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated. The proposed Project will have a less than significant impact with implemented mitigation to prevent 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 Wildlife or U.S. Fish and Wildlife Service.

The site is currently vacant with rock outcropping, trees, shrubs and some grass ground cover. The proposed Project is a commercial use development along a major roadway. A Biological Resources Assessment (BRA) was conducted by Endemic Environmental Services (EES) in August 2023 (Appendix B). The BRA included field surveys as well as desktop reviews of the California Department of Fish and Wildlife (CDFW)'s California Natural Diversity Database (CNDDB), the California Native Plant Society (CNPS), and the US Department of Agriculture (USDA)'s Natural Resources Conservation Service (NRCS) web soil surveys, among others (Appendix B). The field survey was conducted by Biologists Barry Nerhus and Armando Gonzalez on August 7, 2023. The study area included the Project site and its immediate surroundings. The biological field survey observed and recorded the existence of plant and wildlife species. Vegatative communities and land covers were identifies, aquatic resources were mapped, and general conditions of the site were documented.

Eight special-status plant species and 26 special-status wildlife species were listed to occur within the greater area on, and around the Project site. Of these, six of the special-status plant species and 14 of the special-status animal species were found to be potentially located in the general region of the proposed Project site. See below Table 7 animal species.

Table 7 Animal Species

Common Name	Scientific Name	Status	Habitat	Presence Determination
House Finch	Heamorhous mexicanus	Least Concern	Lowland landscapes, at elevations of less than 1,800 m (6,000 ft). Open grasslands, deserts, prairies, savannah and coniferous forests	Observed on site
Mourning Dove	Zenaida macroura	Least Concern	Temperate climates	Observed on site
Blue-gray Gnacather	Polioptila caerulea	Least Concern	Open woods	Observed on site
Desert Cottontail	Sylvilagus audubonii	Least Concern	Desert scrub, desert wash, and Joshua tree woodland	Observed on site
California Ground Squirrel	Otospermophilus beecheyi	Not Endangered	Desert scrub, desert wash, and Joshua tree woodland	Observed on site
Coyote	Canis latrans	Not Endangered	Desert scrub, desert wash, and Joshua tree woodland, urban areas	Observed on site
Mohave Ground Squirrel	Xerospermophilus mohavensis	Not Endangered	Desert scrub, desert wash, and Joshua tree woodland	High Potential

Common Name	Scientific Name	Status	Habitat	Presence Determination
Burrowing Owl	Athene cunicularia	Bird of Conservation Concern, Protected	Desert scrub, desert wash, and Joshua tree woodland	Observed on site
Desert Tortoise	Gopherus agassizii	Threatened	Desert scrub, desert wash, and Joshua tree woodland	Observed on site
Red Harvester Ants	Pogonomyrmex barbatus	Not Endangered	Desert scrub, desert wash, and Joshua tree woodland	Observed on site
Horned Lizard	Phrynosoma blainvillii	Not Endangered	Desert scrub, desert wash, and Joshua tree woodland	High potential
California Glossy Snake	Arizona elegans occidentalis	Species of special concern	Desert habitats, chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grasses	Moderate potential
Coast Horned lizard	Phyrnosoma blainvillii	California Species of Special Concern	Sage scrub, dunes, alluvial scrub, annual grassland, chaparral, oak woodland, riparian woodland, Joshua tree woodland, coniferous forest, and saltbush scrub	Potential to occur
Coastal Humming Bird	Calypte costae	Bird of conservation concern	Desert wash, edges of desert riparian and valley foothill riparian, coastal scrub, desert succulent scrub, lower-elevation chaparral, and palm oasis	Moderate potential
Northern California Legless Lizard	Anniella pulchra	Species of special concern	Coastal dunes, valley-foothill chaparral, desert scrub, sandy washes, and coastal scrub	Moderate potential
Cooper's Hawk	Accipiter cooperii	Watch list species	Dense stands of live oak, riparian deciduous, or other forest habitats near water	Moderate potential
Ferruginous Hawk	Buteo regalis	Watch list species	Open grasslands, sagebrush flats, low foothills, surrounding valleys, and fringes of pinyon-juniper habitats	Moderate potential
LeConte's Thrasher	Toxostoma lecontei	Special status species	Open desert wash, desert scrub, alkali desert scrub, Joshua	High potential

Common Name	Scientific Name	Status	Habitat	Presence Determination
			tree woodland, and desert succulent habitats	
Loggerhead Shrike	Lanius ludovicianus	Special status species	Open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats	High potential
Swainson's Hawk	Buteo Swainsoni	Threatened species	Nests in juniper-sage flats, riparian areas, and oak savanna. found in open desert, grassland, and cropland	High potential
Crotch's Bumblebee	Bombus crotchii	Candidate species	Open grasslands, shrublands, chaparral, desert margins, Joshua tree woodland, creosote scrub, and semi-urban settings	High potential

There were several protected plant species observed on site; western Joshua tree, California Juniper, Short Joint Beavertail, Mohave Yucca. There are currently 120 western Joshua trees and 112 California junipers on the proposed Project site. The CDFW requires Joshua trees to be preserved, if preservation on the site is not possible and Incidental Take Permit for removal of western Joshua trees shall be obtained from CDFW prior to removal and issuance of any grading or construction permit and all applicable fees as established in the western Joshua Tree Conservation Act shall be paid by the Project developer prior to the removal of any western Joshua trees.

Table 8 Plant Species

Common Name	Scientific Name	Status	Habitat	Presence Determination
western Joshua tree	Yucca brevifolia	Protected	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site 120 total
California juniper	Juniperus californica	Protected	Found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level.	Present on site 112 total
Chamise	Atriplex canescens	No status	Found in dry slopes and flats of the high	Present on site

Common Name	Scientific Name	Status	Habitat	Presence Determination
			desert at elevations between 122 – 11,105 feet above mean sea level.	
California buckwheat	Eriogonum fasciculatum	No status	Found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level.	Present on site
Creosote bush	Larrea tridentata	No status	Found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level.	Present on site
California ephedra	Ephedra californica	No status	Found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level.	Present on site
Bristly fiddleneck	Amsinckia tessellata	No status	Found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level.	Present on site
Desert woolly star	Eriastrum eremicum	No status	Found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level.	Present on site
Silver cholla	Cylindropuntia echinocarpa	No status	found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level.	Present on site
Cheatgrass	Bromus tectorum	Invasive		Present on site
Burro-weed	Ambrosia dumosa	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Cheesebush	Ambrosia salsola	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Sagebrush	Artemisia tridentata	Least concern	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site

Common Name	Scientific Name	Status	Habitat	Presence Determination
Yellow rabbitbrush	Chrysothamnus viscidiflorus	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Blackbrush	Artemisia tridentata	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Buckthorn cholla	Cylindropuntia acanthocarpa	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Nevada ephedra	Ephedra nevadensis	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Sticky snakeweed	Gutierrezia microcephala	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Winterfat	Krascheninnikovia lanata	No status	habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Creosote bush	Larrea tridentata	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Anderson thornbush	Lycium andersonii	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Banana yucca	Yucca baccata	Least concern	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Mojave yucca	Yucca schidigera	Protected	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Utah juniper	Juniperus osteosperma	Least concern	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Single-leaf pinyon	Pinus monophylla	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level	Present on site
Blue oak	Quercus douglasii	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level.	Present on site

Common Name	Scientific Name	Status	Habitat	Presence Determination
Short Joint Beavertail	Opuntia basilaris var. brachyclada	Protected	Habitats at elevations between 1,395 – 5,905 feet above mean sea level. Blooming for this species occurs between April and August	Moderate potential
Desert agave	Agave deserti	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level.	Present on site
Chaparral yucca	Hesperoyucca whipplei	Least concern	Habitats at elevations between 1,600 and 11,000 feet above mean sea level.	Present on site
Scale broom	Lepidospartum squamatum	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level.	Present on site
Parry's nolina	Nolina parryi	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level.	Present on site
Mexican cliffrose	Purshia mexicana	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level.	Present on site
Muller oak	Quercus cornelis-mulleri	No status	Habitats at elevations between 1,600 and 11,000 feet above mean sea level.	Present on site

Due to grading, site disturbance and construction activities, the proposed Project has the potential to disturb or remove some of this native desert plant vegetation and animal habitat that have been identified on the site. Therefore, proposed Project impacts could be considered to be potentially significant. Implementation of Mitigation Measures (MM) BIO-1 through BIO-11 would however reduce impacts to candidate, sensitive or special status species or natural communities to less than significant levels.

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?

No Impact. Subsequent to the original survey conducted by Endemic Environmental Services on August 2023 (Appendix B), a second field survey was conducted on July 1 2024 by Mark Hagan Wildlife Biologist (Appendix B.1). The focus of this updated survey was to verify the presence of ephemeral drainage. No features were observed to be a stream/wash regulated under Section 1602 which would require an LSA Agreement. Therefore, the proposed Project will have a no impact on existing ephemeral drainage systems during site clearance and Project construction.

d) 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 sites?

Less Than Significant Impact With Mitigation Incorporated. The proposed Project site does not have any water features that could support fish habitat. However, the biological fields surveys observed certain wildlife species using the site for habitat or foraging activities. Such wildlife species included the California ground squirrel (*Otospermophilus beecheyi*), and coyote (*Canis latrans*) and red harvester ant (*Pogonomyrmex barbatus*) colonies, a known prey species of the coast horned lizard (*Phrynosoma blainvillii*). Multiple burrows with the potential to support Mohave ground squirrel (*Xerospermophilus mohavensis*), burrowing owl (*Athene cunicularia*), Costa's Hummingbird (*Calypte costae*), Swainson's Hawk (*Buteo Swainsoni*), Loggerhead Shrike (*Lanius ludovicianus*), and desert tortoise (*Gopherus agassizii*) were observed on the site. The proposed Project could have the potential to significantly impact the movement of native resident wildlife species or the use of native wildlife nursery sites. However, with the incorporation of Mitigation Measures BIO-4 through BIO-11 impacts would be reduced to less than significant.

e-f) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? 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 Impact. The proposed Project site includes approximately 1.30 acres of Joshua Tree Woodland as well as approximately 1.53 acres of California Juniper Woodland as well as other special status plant and special-status animal species, as previously discussed under Section 4.4.1a). However, all proposed site clearance and construction activities would be required to comply with State, regional and local habitat conservation plans, particularly the State of California Wester Johsua Tree Conservation Act, as well as PMC Secctions 14.04.050 through 14.04.070 of the, as well as Goal ER2.1 of the City of Palmdale General Plan. Impacts would therefore be less than significant.

Mitigation

BIO-1: A desert vegetation preservation plan be prepared and submitted to the City of Palmdale by the Project Applicant as part of the proposed Project development application in order to maximize the amount of native desert vegetation that can be preserved throughout development. This plan shall include:

- A written report and site plan which depicts the location of each California juniper, discusses their age and health, and identifies and locates all trees and shrubs which can be saved in place or located;
- A site landscaping plan showing the proposed locations of all western Joshua trees, California junipers, and any other native desert vegetation that will remain on-site;
- A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in lieu thereof, the Director of Public Works'

designee, in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured;

- Such other and further information as the Director of Economic and Community Development may deem necessary to fulfill the purposes and intent of this chapter in a particular case.

BIO-2:, An Incidental Take Permit for the removal of western Joshua trees shall be obtained from CDFW in compliance with CDFW regulations and requirements prior to the removal of western Joshua trees and the issuance of any grading or construction permit. In addition, all applicable fees as established in the western Joshua Tree Conservation Act shall be paid by the Project developer prior to the removal of any western Joshua trees.

BIO-3: A minimum standard of preservation for California juniper shall be met by the Project Applicant in accordance with PMC Chapter 14.04of the City of Palmdale municipal code.

BIO-4: No more than 14 days prior to the commencement of ground disturbing activity, the Project proponent shall obtain a qualified biologist to conduct focused surveys for burrowing owls prior to Project activities. Focused surveys shall adhere to survey methods described in CDFW's March 7, 2012, Staff Report on Burrowing Owl Mitigation (CDFW 2012). The survey area should include the Project site and 150 meters from the Project site where suitable habitat is present. Survey protocol for breeding season owl surveys states to conduct four survey visits: 1) at least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. Findings from the focused surveys should be provided to the City and CDFW for review.

If an occupied burrow or burrowing owl is found within the development footprint, the biologist shall prepare an Impact Assessment and Burrowing Owl Mitigation Plan in accordance with the 2012 Staff Report on Burrowing Owl Mitigation. The Project proponent shall contact CDFW to develop appropriate mitigation/management procedures and a final Burrowing Owl Mitigation Plan shall be submitted to the City and CDFW for review and approval prior to Project activities. If avoidance cannot be achieved, the Project proponent shall offset impacts on habitat supporting an SSC at a minimum of 2:1 to ensure no net loss of burrowing owl habitat. The Project proponent shall set aside comparable replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity, which should include an appropriate endowment to provide for the long-term management of mitigation lands.

BIO-5: Project activities shall occur outside the nesting season for migratory birds and raptors (February 1 through September 15, as early as January 1 for some raptors). If Project activities occur during or close to the nesting season, a nesting bird and raptor survey shall be conducted by a qualified biologist within 7 days prior to the start of any Project activities. The qualified biologist shall survey the entire Project site and areas within a biologically defensible buffer zone surrounding the Project site. If Project activities are delayed or suspended for more than 7 days during the nesting season, the nesting bird and raptor survey shall be repeated. If an active bird nest is found, the species shall be identified, and a no disturbance buffer shall be established around the active nest. At a minimum, the buffer shall be at least 100 feet around migratory bird nests and 500 feet around raptor nests.

Personnel working on the Project, including all contractors working on-site, shall be instructed on the presence of nesting birds, restricted areas, and adherence to no disturbance buffers. The buffers shall

remain in place until young have fledged or a nest becomes inactive as determined by a qualified biologist. Once the young have fledged or the nest becomes inactive under natural conditions, Project activities within the no disturbance buffer shall occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.

BIO-6: Prior to the commencement of ground disturbing activities, a floristic survey shall be conducted for short-joint beavertail 14 days prior to the commencement of ground disturbing activities.. If detected, each individual shall be flagged or fenced for avoidance prior to the commencement of construction activities. If avoidance is not feasible, a qualified biologist shall develop a short-join beavertail removal and reintroduction plan for any impacted plants. This plan must be approved by CDFW and the City prior to the issuance of grading permits.

BIO-7: A qualified biologist shall conduct clearance surveys for desert tortoises on the Project site 14 days prior to the commencement of ground disturbing activities.

Clearance surveys shall follow the United States Fish and Wildlife Services (USFWS) Clearance Survey Protocol for the Mojave Desert Tortoise (May 2019). If desert tortoise is determined to be present on the Project site, the Project developer shall develop and implement a mitigation and monitoring plan in consultation with USFWS and CDFW and the City shall be notified.

BIO-8: Prior to the commencement of ground disturbing activities, a qualified biologist shall conduct a survey for Crotch's bumblebee during the species' active period (March to July) on the Project site 14 days prior to the commencement of ground disturbing activities. This survey shall include a search for Crotch's bumblebee activity and the presence of ground nests. If a ground nest is observed, the nest shall remain in place until it is determined to be no longer active by a qualified biologist. If Crotch's bumblebee is present on the Project site and may occur during Project activities, the Project Applicant shall consult with CDFW regarding the implementation of avoidance measures, or the issuance of an Incidental Take Permit.

BIO-9: To ensure acceptance by CDFW, please revise to the below.

A qualified biologist shall conduct surveys for Mohave ground squirrel throughout the Project site, 14 days prior to ground disturbance. Focused Mohave ground squirrel surveys shall adhere to California Department of Fish and Wildlife Mohave Ground Squirrel Survey Guidelines (CDFW 2023). If Mohave ground squirrel is observed on site or captured during any of the

trapping sessions, the Project proponent shall secure a CESA Incidental Take Permit (ITP) for Mohave ground squirrel before the issuance of City permits. The ITP shall specify avoidance, minimization, and mitigation conditions for temporary and/or permanent impacts to Mohave ground squirrel including habitat acquisition at a CDFW-approved location and mitigation ratio.

BIO-10: No more than 72 hours prior to the commencement of construction activities, a qualified biologist shall conduct a survey for California glossy snake, coast horned lizard, and Northern California legless lizard. If any of these species are found to be present on the Project site, no construction activities shall commence until the individuals have left the area or have been relocated by a qualified biologist in accordance with CDFW protocols.

BIO-11: Prior to the fill, alteration, or other impacts to the bed or bank of the existing onsite ephemeral drainage, a jurisdictional delineation of this drainage shall be carried out to determine which jurisdiction(s)

this drainage falls under. Dependent upon the results of the jurisdictional delineation a CDFW Notification of Streambed Alteration or Water Discharge Requirement pursuant to the Porter-Cologne Water Quality Act may be required. The applicable permit shall be obtained prior to the fill, alteration, or other impacts to the bed or bank of this ephemeral drainage.

4.5 Cultural Resources

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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 dedicated cemeteries?	☐	☒	☐	☐

a-c) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact With Mitigation Incorporated. A Cultural Resources Survey was conducted by ASM Affiliates in September 2023 (Appendix C: Cultural Resource Survey). This Cultural Resources Survey included records searches and a pedestrian survey of the proposed Project site. It is important to note that the Cultural Resource Assessment is confidential information.

For purposes of CEQA, a historic resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the California Register of Historical Resources (CRHR) (PRC §5024.1, Title 14 CCR, §4852). A resource is eligible for listing in the CRHR if it meets any of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important to prehistory or history.

Prehistoric archaeological sites are typically evaluated only under Criterion 4 for their potential to yield data important to understanding the prehistory of the area or region. Historical archaeological sites and architectural resources may be evaluated under any of the four criteria because their features, plus available historical documentation, may be used to inform our understanding of their association with

events, people, workmanship, or other important historical information. No prehistoric or historical artifacts or sites were identified during the current survey. As such, no historical resources as defined under CEQA that would require further consideration were identified within the Project area. Further, the results of the background research conducted for the study indicate a low archaeological sensitivity for the Project area. However, records searches did reveal 16 historic resources within a one (1) mile area around the Project site. Most of the surrounding parcels, particularly to the north and west of the proposed Project site have been vacant since the early 1900s.

A Sacred Lands file Search was conducted as part of the process of identifying Native American cultural resources within or near the proposed Project site. Based on a NAHC search, made by ASM on June 8, 2023, six Native American Tribes were identified with potential jurisdiction over the Project area. These tribes included:

- Fernandeno Tataviam Band of Mission Indians
- Morongo Band of Mission Indians
- Quechan Tribe of the Fort Yuma Reservation
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians
- Serrano Nation of Mission Indians

Of these, only one response was received; the response from the Quechan Indian Tribe of the Fort Yuma Reservation provided no comment, deferring to more local tribes.

The site is not listed on the California Register of Historical Resources (CRHR) or in any local register of historic or archaeological resources (Appendix C). No prehistoric or historical artifacts or sites were identified during the survey conducted by ASM in 2023. However, records searches did reveal 16 historic resources within a one-mile area around the Project site. However, the site and its vicinity have been identified as having the potential for historic resources which may include tribal cultural resources. Although the proposed Project site has not been previously disturbed or developed, the potential does exist for the site to have historic and archaeological resources or human remains on site. If human remains are found, the State of California 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 PRC Section 5097.98.

Incorporation of Mitigation Measures (MM) CUL-1 through CUL-3 during site development would ensure that impacts to cultural resources are less than significant.

Mitigation

CUL-1: In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her

initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-2: If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CUL-3: If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

4.6 Energy

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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?	☐	☐	☒	☐

The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site.

An Air Quality, Greenhouse Gas, Energy Impact Study was conducted by MD Acoustics LLC in November 2023 (Appendix A). Information from the CalEEMod 2022.1.1.20 Daily and Annual Outputs contained in the air quality and greenhouse gas analyses in this Draft ISMND were utilized for this Energy analysis. The CalEEMod outputs detail Project related construction equipment, transportation energy demands, and facility energy demands.

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact

Construction Energy Demand

Construction Equipment Electricity Usage Estimates

Electrical services to the proposed Project site will be provided by Southern California Edison (SCE). Based on the 2017 National Construction Estimator, Richard Pray (2017)[1], the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.32. The proposed Project plans to develop the site with an approximately 5,640 square feet of new development over the course of

[1] Pray, Richard. 2017 National Construction Estimator. Carlsbad: Craftsman Book Company, 2017.

approximately 12 months. Based on Table 9 below, the total power cost of the on-site electricity usage during the construction of the proposed Project is estimated to be approximately $153.93. As shown in Table 9, the total electricity usage from Project construction related activities is estimated to be approximately 1,047 kWh.[2]

Table 9 Total Electricity usage from Project

Power Cost (per 1,000 square foot of building per month of construction)	Total Project Size (1,000 Square Foot)1	Construction Duration (months)	Total Project Construction Power Cost
$2.32	5.64	12	$156.93
Cost per kWh		Total Project Construction Electricity Usage (kWh)	
$0.15		1,047	
** Assumes the project will be under the GS-1 General Service rate under SCE.*			

Construction Equipment Fuel Estimates

Using the CalEEMod data input, the proposed Project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. The California Air Resources Board (CARB)'s 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal.[3] As presented in Table 10 below, proposed Project construction activities would consume an estimated 23,644 gallons of diesel fuel.

2 LADWP's Small Commercial & Multi-Family Service (A-1) is approximately $0.06 per kWh of electricity Southern California Edison (SCE). Rates & Pricing Choices: General Service/Industrial Rates. https://library.sce.com/content/dam/sce-doclib/public/regulatory/historical/electric/2020/schedules/general-service-&-industrial-rates/ELECTRIC_SCHEDULES_GS-1_2020.pdf

3 Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/day (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).

Table 10 Construction Equipment Fuel Consumption Estimates

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	HP hrs/ day	Total Fuel Consumption (gal diesel fuel)1,2
Site Preparation	3	Graders	1	8	148	0.41	485	79
	3	Scrapers	1	8	423	0.48	1,624	263
	3	Tractors/Loaders/Backhoes	1	7	84	0.37	218	35
Grading	6	Graders	1	8	148	0.41	485	157
	6	Rubber Tired Dozers	1	8	367	0.4	1,174	381
	6	Tractors/Loaders/Backhoes	2	7	84	0.37	435	141
Building Construction	220	Cranes	1	8	367	0.29	851	10,125
	220	Forklifts	2	7	82	0.2	230	2,730
	220	Generator Sets	1	8	14	0.74	83	986
	220	Tractors/Loaders/Backhoes	1	6	84	0.37	186	2,218
	220	Welders	3	8	46	0.45	497	5,908
Paving	10	Cement and Mortar Mixers	1	8	10	0.56	45	24
	10	Pavers	1	8	81	0.42	272	147
	10	Paving Equipment	1	8	89	0.36	256	139
	10	Rollers	2	8	36	0.38	219	118
	10	Tractors/Loaders/Backhoes	1	8	84	0.37	249	134
Architectural Coating	10	Air Compressors	1	6	37	0.48	107	58
CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)								23,644

Notes: 1Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp.
(Source: *https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf*)
2Discrepancies are due to rounding.

Construction Worker Fuel Estimates

It is assumed that all construction worker trips would be from light duty autos (LDA) along area roadways. With respect to estimated vehicle miles travelled (VMT), the construction worker trips would generate an estimated 11,694 VMT. Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analysis using information generated using CARB's EMFAC model (see Appendix A for details). Table 11 shows that an estimated 378 gallons of fuel would be consumed for construction worker trips.

Table 11 Estimated Fuel Gallons

Phase	Number of Days	Worker Trips/Day	Trip Length (miles)[1]	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)[2]
Site Preparation	3	7.5	18.5	416	30.95	13
Grading	6	10	18.5	1,110	30.95	36
Building Construction	220	1.8	18.5	7,326	30.95	237
Paving	10	15	18.5	2,775	30.95	90
Architectural Coating	10	0.36	18.5	67	30.95	2
Total Construction Worker Fuel Consumption						378

Notes:

1Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.20 defaults.

2Discrepancies are due to rounding.

Construction Vendor/Hauling Fuel Estimates

Tables 12 and 13 below show the estimated fuel consumption (approximately 3,988 gallons) or vendor and hauling during proposed Project building, construction, and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 27,574 VMT. For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles.[4]

Table 12 Construction Vendor Fuel Consumption Estimates (MHD Trucks)1

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	3	0	10.2	0	9.22	0
Grading	6	0	10.2	0	9.22	0
Building Construction	220	0.92	10.2	2,064	9.22	224
Paving	10	5	10.2	510	9.22	55
Architectural Coating	10	0	10.2	0	9.22	0
Total Vendor Fuel Consumption						279

Notes:

1 Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.20 defaults.

4 Vendors delivering construction material or hauling debris from the site during grading would use medium to heavy duty vehicles with an average fuel consumption of 9.22 mpg for medium heavy-duty trucks and 6.74 mpg for heavy heavy-duty trucks (see Appendix D for details).

Table 13 Estimated Fuel Consumption

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	3	0	20	0	6.74	0
Grading	6	208.3	20	25,000	6.74	3,709
Building Construction	220	0	20	0	6.74	0
Paving	10	0	20	0	6.74	0
Architectural Coating	10	0	20	0	6.74	0
Total Construction Hauling Fuel Consumption						3,709

1Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.20 defaults.

Construction Energy Efficiency/Conservation Measures

Construction was estimated to take approximately nine months and the equipment used over the approximately nine month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. In addition, the CARB Airborne Toxic Control Measure limits idling times of construction vehicles to no more than five minutes, thereby minimizing unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Furthermore, the proposed Project would be designed in compliance with California's Energy Efficiency Standards and 2022 CALGreen Standards.

Construction of the proposed Project development would require the typical use of energy resources. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies).

Operational Energy Demand

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Fuel Consumption

The largest source of operational energy use would be vehicle operation of customers. The site is located in an urbanized area just in close proximity to transit stops. Using the CalEEMod output, it is assumed that an average trip for autos were assumed to be 16.6 miles, light trucks were assumed to travel an average of 6.9 miles, and three to four axle trucks were assumed to travel an average of 8.4 miles[5]. To show a worst-case analysis, as the proposed Project is a commercial Project, it was assumed that vehicles would operate 365 days per year. Table 14 shows the worst-case estimated annual fuel consumption for all

5 CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 16.6 miles; 6.9 miles for H-S (home-shop) or C-C (commercial-customer); and 8.4 miles for H-O (home-other) or C-O (commercial-other).

classes of vehicles from autos to heavy-heavy trucks[6] totally an estimated 686,434 gallons of fuel per year for the operation of the proposed Project.

Table 14 Worst-Case Estimated Annual Fuel Consumption

Vehicle Type	Vehicle Mix	Number of Vehicles	Average Trip (miles)[1]	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	852.2	16.6	14,146	31.82	444.56	162,264
Light Truck	Automobile	89.3	6.9	616	27.16	22.68	8,277
Light Truck	Automobile	275.1	6.9	1,898	25.6	74.14	27,060
Medium Truck	Automobile	224.7	6.9	1,550	20.81	74.49	27,190
Light Heavy Truck	2-Axle Truck	42.4	8.4	356	13.81	25.78	9,408
Light Heavy Truck 10,000 lbs +	2-Axle Truck	11.6	8.4	98	14.18	6.90	2,518
Medium Heavy Truck	3-Axle Truck	18.0	8.4	152	9.58	15.82	5,776
Heavy Heavy Truck	4-Axle Truck	29.8	8.4	250	7.14	35.04	12,789
Total		1,543	--	19,065	--	699.40	--
Total Annual Fuel Consumption							255,283

Notes:
[1]The trip generation assessment, the project is to generate 1,543 total new trips after reduction of existing uses. Default CalEEMod vehicle fleet mix utilized.
[1]Based on the size of the site and relative location, trips were assumed to be local rather than regional.

Trip generation generated by the proposed Project are consistent with other similar commercial uses of similar scale and configuration as reflected in the traffic analysis (Integrated Engineering Group, 2023). That is, the proposed Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips, nor associated excess and wasteful vehicle energy consumption. Therefore, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Facility Energy Demands (Electricity and Natural Gas)

The annual natural gas and electricity demands were provided per the CalEEMod output and are provided in Table 15.

6 Average fuel economy based on aggregate mileage calculated in EMFAC 2017 for opening year (2023). See Appendix D for EMFAC output.

Table 15 Project Unmitigated Annual Operational Energy Demand Summary[1]

Natural Gas Demand	kBTU/year
Convenience Market with Gas Pumps	94,968
Total	94,968
Electricity Demand	kWh/year
Convenience Market with Gas Pumps	183,158
Parking Lot	97,304
Total	280,462

Notes: Taken from the CalEEMod 2022.1.1.8 annual output.

As shown in Table 15, the estimated electricity demand for the proposed Project is approximately 280,462 kWh per year. In 2021, the nonresidential sector of the County of Los Angeles consumed approximately 44,438 million kWh of electricity.[7] In addition, the estimated natural gas consumption for the proposed Project is approximately 94,968 kBTU per year. In 2021, the nonresidential sector of the County of Los Angeles consumed approximately 1,743 million therms of gas.[8] Therefore, the increase in both electricity and natural gas demand from the proposed Project is low as compared to the County's 2021 demand.

Although the proposed Project would result in an increase in both electricity and natural gas, the proposed Project's energy demand would be low when compared to the County's 2021 demand. The proposed Project would be required to be consistent with all relevant renewable energy and energy efficiency plans and will therefore have a less than significant impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The proposed Project site is located in an already developed area. Access to/from the site would be from existing roads. Therefore, the proposed Project would not interfere with, nor otherwise obstruct intermodal transportation plans or Projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the proposed Project area.

Since the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

Under the State's Renewable Energy Portfolio Standards, the proposed Project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials..

As shown in Table 15 above, the estimated electricity demand for the proposed Project would be approximately 280,462 kWh per year. In 2021, the nonresidential sector of the County of Los Angeles consumed approximately 44,438 million kWh of electricity. In addition, the estimated natural gas

7 California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx

8 California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

consumption for the proposed Project is approximately 94,968 kBTU per year. In 2021, the nonresidential sector of the County of Los Angeles consumed approximately 1,743 million therms of gas.

Therefore, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would therefore have a less than significant impact.

Mitigation

No mitigation is required.

4.7 Geology and Soils

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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:				
a-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.	☐	☐	☒	☐
a-ii) Strong seismic ground shaking?	☐	☐	☒	☐
a-iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
a-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 direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater 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?	☐	☐	☒	☐

a.i -a.ii) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving; 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. Strong seismic ground shaking?

Less Than Significant Impact. The potential severity of ground shaking during an earthquake depends on a variety of factors and location of seismic zones. Seismic zones are used to describe an area where earthquakes tend to focus. The proposed Project site is within Seismic Zone 4, meaning that there is a one in 10 chance that an earthquake with an active peak acceleration level of 0.4g will occur within 50 years.

The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site.

A Geotechnical Engineering Study was completed by CMT Technical Services in September 2022 for the proposed Project site (Appendix D). Both the Geotechnical Study as well as the City of Palmdale 2045 General Plan Update EIR (City of Palmdale; 2022) identify the proposed Project site in the San Andreas Fault zone, which bisects the northwest corner of the site (Figure 4.7-3). The San Andreas Fault is expected to be the source of major earthquakes within the next 30 years with a Richter magnitude exceeding 8.0. Therefore, seismic ground shaking and surface ruptures, in the event of an earthquake, could be experienced on the proposed Project site due to seismic activity along the San Andreas Fault. The proposed Project would therefore be required to be designed and constructed in accordance with State and City of Palmdale building codes to reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible. The proposed Project would also be required to comply with the seismic safety requirements in the latest California Building Code (CBC) as well as the PMC. Compliance with such requirements would reduce seismic ground shaking and surface rupture impacts to a less than significant level.

The Geotechnical study also included design recommendations for the proposed Project:

Foundation Recommendations

- Footings may be designed using a net bearing pressure of 2,000 psf if bearing on scarified and re-compacted natural soils, and 2,500 psf if bearing on a minimum of 18 inches of structural fill placed upon scarified, re-compacted natural soils.
- Exterior footings subject to frost should be placed at least 18 inches below final grade, or per city standards if deeper.
- Interior footings not subject to frost should be placed at least 12 inches below grade.
- Continuous footing widths should be maintained at a minimum of 18 inches.
- Spot footings should be a minimum of 24 inches wide.

Installation

- foundations shall not be placed on undocumented fill, topsoil with organics, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.
- The minimum thickness of structural fill below footings should be equivalent to one-third the thickness of structural fill below any other portion of the foundations.

Floor Slabs

- Adequate reinforcement for the anticipated floor loads with the reinforcement continuous through interior floor joints;
- Frequent crack control joints; and
- Non-rigid attachment of the slabs to foundation walls and bearing slabs.

Drainage Recommendations

- All areas around the structures should be sloped to provide drainage away from the foundations. We recommend a minimum slope of four inches in the first 10 feet away from the structure. This slope should be maintained throughout the lifetime of the structure.
- All roof drainage should be collected in rain gutters with downspouts designed to discharge at least 10 feet from the foundation walls or well beyond the backfill limits, whichever is greater.
- Adequate compaction of the foundation backfill should be provided. We suggest a minimum of 90% of the maximum laboratory density as determined by ASTM D-698. Water consolidation methods should not be used under any circumstances.
- Landscape sprinklers should be aimed away from foundation walls. The sprinkling systems should be designed with proper drainage and be well-maintained. Over watering should be avoided.
- Other precautions that may become evident during construction.
- A Fault investigation was conducted on September 23, 2022, by Geo Soils Consultants Inc. (GSC). The purpose of the investigation was to observe the presence or absence of faulting within the Alquist-Priolo Earthquake Fault Zone of the San Andreas Fault. The scope of work conduct was as follows;Site observation and review of pertinent geotechnical and geologic data of the general study area, including published geologic maps, and previous consultant reports.
- Performance of a subsurface exploration program consisting of a seismic trench excavated at the approximate location shown on Plate 1, Seismic
- Trench Location Map. The trenches were logged by GSC and reviewed by the City of Palmdale.
- Observing, logging, and relative age dating of the soils onsite at two (2) locations performed by Soil Stratigrapher John Helms. The results are not included in this report as his report was not ready at the time this report was prepared. If requested, the report will be provided when it is ready.

The trench extended from the right of way of Avenue S to 60 feet north of the proposed convenience store. The trenches were excavated with a track mounted excavator with a four-foot-wide bucket. The maximum depth of the trenches was approximately 17 feet with benches for safety. The length of the trench was 340 deet with the deepest end of the trench at 330 feet and was benched out for the last 20 feet. The trench excavations exposed alluvial deposits consisting of interbedded slit and sand.

The relative age assessment by the John Helms, Soil Stratigrapher, concluded that the age of the alluvium for layer C on the Seismic Trench ST-1 log to be 12 o 16 ka found in Appendix D of this document. The soil deposits exposed in the trenches were continuous and faulting was not observed. It is the opinion of GSC that the soil layers at the base of the trench are older than Holocene.

Compliance with the above recommendations provided in Appendix D Geotechnical Study the construction of the Proposed Project will have a less than significant impact on geological resources.

a-iii) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction typically occurs when saturated, loose sandy soils lose their support capabilities due to pressure from a seismic event. Even clayey soils, if saturated, will generally not liquefy during a major seismic event. The Geotechnical Engineering Study by CMT Technical Services in September 2022 (Appendix D) undertaken for the proposed Project site, accounted for mainly slightly moist Sandy SILT (ML), Sandy SILTY CLAY (CL-ML) sand, slightly moist Silty SAND (SM) and some loose gravel. Although the City of Palmdale 2045 General Plan Update EIR (City of Palmdale; 2022) shows the site to be located within a liquefaction zone (Figure 4.7-5), the Geotechnical Engineering Study (Appendix D) does not report the presence of groundwater that would affect the sandy soils on the site. Therefore, there would be no impact from liquefaction.

a-iv) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving Landslides?

No Impact. The proposed Project site is relatively flat, with a gentle slope north to southwest. The San Gabriel Mountain ranges are located approximately one mile to the southwest and Lake Palmdale is approximate. The site is not located in any stream flooding, debris flow or rock fall hazard area. There would be no impact.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact With Mitigation Incorporated. The proposed Project site is relatively flat, with a slight (less than 0-5) slope to the southwest of the site. There are no hillside areas or slopes on the site. Site development associated with the proposed Project may include earthwork activities such excavation, grading, construction activities, and site preparation such as paving and other siter improvements that would add imperious surfaces to an existing vacant parcel. All of these activities have the potential to expose Project area soils to the effects of erosion or loss of topsoil from urban runoff. Once disturbed, soil, if not managed appropriately, are left exposed to the effects of wind and water. However, the proposed Project would be required to apply for a National Pollutant Discharge Elimination System (NPDES) permit. As a requirement under the NPDES permit, all development activities are required to follow best management practices that reduce soil erosion, loss of topsoil, and pollution of waterways. In addition, earthwork and ground disturbing activities typically require grading permits, compliance with which minimizes erosion. Once proposed Project construction has been completed and exposed areas are revegetated or covered by buildings, asphalt, or concrete, the erosion hazard would be substantially eliminated or reduced. In addition, the City of Palmdale follows the California Building Code and has also established the Palmdale Building Code that regulates the design, construction, quality of materials, use, occupancy, and maintenance of all buildings, structures, and grading. The Geotechnical Report (Appendix D) for the proposed Project identified actions that would reduce impacts related to soil erosion or loss of topsoil. Therefore, incorporation of mitigation measures GEO-1 through GEO-3 to less than significant with mitigation incorporated.

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?

No Impact. The Geotechnical Engineering Study (Appendix D) did not identify the site as being located within any known or mapped potential debris flow, stream flooding or rock fall hazard area. There are no landslide deposits or features located on or near the site. Therefore, there would be no impact on an unstable geologic unit or soil that would 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 direct or indirect risks to life or property?

Less Than Significant Impact. The proposed Project is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property The City's 2045 General Plan Update EIR (City of Palmdale; 2022) proposed Project site consists of soils that have little (less than 50percent) or no swelling potential. The proposed Project site is primarily made up of moist sandy silt and silty clay. Construction on such soils could be subject to damage as the underlying soil has the potential to shrink or swell. However, typically it is soils with high clay content have the highest potential for shrink-swell. Further the proposed Project would be required to comply with the California Building Code. This would reduce impacts related to expansive soils to a less than significant level.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

Less Than Significant Impact. The proposed Project site does not contain soils that will inhibit the use of the septic system proposed with the Project. Use of a septic system is not incompliance with City standards for sewer but will comply with septic regulations. Impacts shall be less than significant.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Please refer to Section 4.5: Cultural Resources and Section 4.17: Tribal Cultural Resources for a discussion and analysis of the proposed Project related to paleontological resources on unique geological features.

Mitigation

GEO-1: Prior to issuance of grading permit, the applicant shall confirm that grading and construction plans incorporate recommendations provided in the Geotechnic report the design recommendations shall address the earth work all vegetation, rocks, topsoil, loose and disturbed soils shall be stripped from the site during clearing and grubbing activities. Prior to site grading fill, a certified geologist shall be consulted to determine the depth and amount of topsoil that is to be removed.

GEO-2: All soil excavations shall be conducted under the Occupation Safety and Hazard Administration (OSHA)'s safety guideline and shall be inspected by a qualified geologist. If any signs of instability or excessive sloughing are noted, immediate remedial action shall be initiated by the geologist or geotechnical engineer on site.

GEO-3: All site grading fill material shall be approved by a geotechnical engineer prior to soil placement.

4.8 Greenhouse Gas Emissions

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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 emissions of greenhouse gases?	☐	☐	☒	☐

The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site.

An Air Quality, Greenhouse Gas, Energy Impact Study was conducted by MD Acoustics LLC in November 2023 (Appendix A). Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO2), methane (CH4), ozone, water vapor, nitrous oxide (N2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agricultural, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO2 and nitrous oxide (NO2) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO2, where CO2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. Table 16 Description of Greenhouse Gases provides a description of each of the greenhouse gases and their global warming potential.

Additional information is available: https://www.arb.ca.gov/cc/inventory/data/data.htm

Table 16 Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (N20),also known as laughing gas is a colorless gas. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N20.
Methane	Methane (CH4) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	A natural source of CH4 is from the decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle farming.
Carbon dioxide	Carbon dioxide (CO2) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). They are gases formed synthetically by replacing all hydrogen atoms in methane or methane with chlorine and/or fluorine atoms. Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone, therefore their production was stopped as required by the Montreal Protocol.
Hydrofluorocarbons	Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above the Earth's surface. They have a lifetime 10,000 to 50,000 years. They have a global warming potential range of 6,200 to 9,500.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF6) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Notes:

Sources: Intergovernmental Panel on Climate Change 2014a and Intergovernmental Panel on Climate Change 2014b.

https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact.

Construction Greenhouse Gas Emissions Impact

The greenhouse gas emissions from proposed Project construction equipment and worker vehicles are shown in Table 17 Construction Greenhouse Gas Emission, below. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at 9.52 metric tons of CO2e per year. Annual CalEEMod output calculations are provided in **Appendix A**.

Table 17 Construction Greenhouse Gas Emissions

Activity	Emissions (MTCO2e)1		
	Onsite	Offsite	Total
Site Preparation	3.71	0.14	3.85
Grading	6.70	40.43	47.13
Building Construction	220.41	5.40	225.81
Paving	5.66	2.38	8.04
Coating	0.61	0.02	0.63
Total	237.09	48.37	285.46
Averaged over 30 years2	7.90	1.61	9.52

Notes:

1. MTCO2e=metric tons of carbon dioxide equivalents (includes carbon dioxide, methane and nitrous oxide).

2. The emissions are averaged over 30 years because the average is added to the operational emissions, pursuant to AVAQMD.

** CalEEMod output (Appendix A of Air Quality, Greenhouse Gas, and Energy Impact Study from MD Acoustics)*

Operational Greenhouse Gas Emissions Impact

Operational emissions occur over the life of the proposed Project. The operational emissions for the Project are 1,883.88 metric tons of CO_2e per year (see Table 18: Opening Year Unmitigated Project Related Greenhouse Gas Emissions). Furthermore, as shown in Table 18, the proposed Project's total emissions (with incorporation of construction related GHG emissions) would be 1,893.4 metric tons of CO_2e per year or 26,882 pounds of CO_2e per day. These emissions do not exceed the AVAQMD annual threshold of 100,000 MTCO2e or the AVAQMD daily threshold of 548,000 pounds of CO2e. Therefore, the proposed Project's GHG emissions are considered to be less than significant.

Table 18 Opening Year Unmitigated Project-Related Greenhouse Gas Emissions

	Greenhouse Gas Emissions (Metric Tons/Year)1							(lbs/day)
Category	Bio-CO2	NonBio-CO2	CO2	CH4	N2O	R	CO2e	CO2e
Area Sources2	0.00	0.08	0.08	0.00	0.00	0.00	0.08	1.01
Energy Usage3	0.00	72.72	72.72	0.00	0.00	0.00	72.99	440.84
Mobile Sources4	0.00	1,584.40	1,584.40	0.10	0.09	3.17	1,615.40	25,260.00
Solid Waste5	0.45	0.00	0.45	0.05	0.00	0.00	1.59	9.59
Water6	0.04	0.17	0.21	0.00	0.00	0.00	0.35	2.09
Refrigerants	0.00	0.00	0.00	0.00	0.00	193.48	193.48	1,168.70
Total Emissions	0.49	1,657.37	1,657.87	0.15	0.09	196.65	1,883.88	26,882.23
Construction7	0.00	9.42	9.42	0.00	0.00	0.00	9.52	26,882.00
Combined Emissions	0.49	1,666.79	1,667.29	0.15	0.09	196.65	1,893.40	-
AVAQMD GHG Thresholds							100,000	548,000
Exceeds Threshold?							No	No

Notes:

1 Source: CalEEMod Version 2022.1.1.20

2 Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.

3 Energy usage consist of GHG emissions from electricity and natural gas usage.

4 Mobile sources consist of GHG emissions from vehicles.

5 Solid waste includes the CO2 and CH4 emissions created from the solid waste placed in landfills.

6 Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

7 Construction GHG emissions based on a 30-year amortization rate.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact.

California Air Resources Board (CARB) Scoping Plan Consistency

The CARB approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

This Scoping Plan calls for an ambitious but achievable reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020.

In May 2014, CARB released its First Update to the Climate Change Scoping Plan (CARB 2014). This Update identifies the next steps for California's leadership on climate change. While California continues on its path to meet the near-term 2020 greenhouse gas limit, it must also set a clear path toward long-term, deep GHG emission reductions. This report highlights California's success to date in reducing its GHG

emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.

In November 2017, CARB release the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

As the latest, 2017 Scoping Plan builds upon previous versions, proposed Project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in Table 18. As shown in Table 18: Project Consistency with CARB Scoping Plan Policies and Measures, the proposed Project would be consistent with the applicable strategies and would result in a less than significant impact.

Therefore, the proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the Project would also comply with applicable Green Building Standards and City of Palmdale's policies regarding sustainability (as dictated by the City's General Plan). With incorporation of regulatory compliance and credit for reductions due to CAPCOA location-based efficiency measures, impacts are considered to be less than significant, further analysis is not warranted. See table 19.

Table 19 Project Consistency with CARB Scoping Plan Policies and Measures[1]

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2022 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as the City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	**Project Compliance with Recommended Action**
Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	
Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	Consistent. The project will be compliant with the current Title 24 standards.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	Consistent. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.

Notes:

1 Source: CARB Scoping Plan (2008 and 2017)

Mitigation

No mitigation is required.

4.9 Hazards and Hazardous Materials

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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 reasonable foreseeable upset and accident condition 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 located 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 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?	☐	☐	☒	☐

a-b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident condition involving the release of hazardous materials into the environment?

Less Than Significant Impact. The proposed Project is a commercial use development along a major roadway. Since the proposed Project is a fueling station use with associated fuel tank storage, the gasoline and diesel fuel would need to be transported via truck. This transport and use of fuel at the site has the

potential to result in accidental release of hazardous materials through leaking storage tanks, spills during transport, inappropriate storage, inappropriate use, and/or natural disasters. These potential incidents could result in the release of toxic fumes, and contamination of soil, surface water, and groundwater. Depending on the nature and extent of the contamination, groundwater supplies could become unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects. The proposed Project site is located adjacent to a census tract that is threatened by groundwater contamination. The proposed Project site is located to the west of SR-14 and north of Palmdale Lake. Potential contamination to groundwater related to a fuel leak could increase the percentage of groundwater threats above 44% for this census tract (CalEnviroScreenmap). According to a previously approved jurisdictional determination form for the U.S Army Corps of Engineers the areas of Lake Palmdale and all water tributary to Lake Palmdale are determined to not be jurisdictional. The Geotechnical Study Appendix D states that groundwater was not encountered within the maximum depth explored of approximately 50 feet (pg. 2). Lake Palmdale lies between 2,818 and 2,830 feet above sea level and covers approximately 234 acres, with relatively few waters tributary in its small sub-watershed, including Palmdale Ditch. Lake Palmdale is a man-made lake originally constructed for water supply and storage, and currently also receives water inputs from the State Water Project (U.S Army Corps of Engineers, Accessed April 2024). The proposed Project would be subject to routine inspection by federal, state, and local regulatory agencies with jurisdiction over fuel dispensing facilities. Gasoline and diesel fuel would need to be transported via truck, a routine procedure that is not expected to impose excessive risk. The Project would be required to comply with all established regulations in the storage and transport of gasoline and diesel fuel.

An Environmental Site Assessment (ESA) was conducted on August 22, 2022. The study concluded that there were no site concerns, there were no hazardous substances or petroleum products observed on the subject property during the site assessment. Hazardous materials regulations, which are codified in Titles 8, 22, 26, and 49 of the California Code of Regulations (CCR) as well as in the California Health and Safety Code (CHSC), were established to ensure compliance with federal regulations and to reduce the risk to human health and the environment from the routine use of hazardous substances. Protection against accidental hazardous spills and releases includes physical and mechanical controls of fueling operations, including automatic shutoff valves; requirements that fueling operations are contained on impervious surface areas; oil/water separators or physical barriers in catch basins or storm drains; vapor emissions controls; leak detection systems; and regular testing and inspection (California Health and Safety Code [CHSC] 2014). In addition, the proposed Project would be required to comply with the California Vehicle Code Section, which requires that hazardous materials be transported using designated routes and with the lowest travel time between destinations.

During the construction phase of the Project, heavy machinery like dozers and excavators will be in operation within the designated area. These machines rely on petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid for fuel and maintenance. Handling these substances requires care as they are considered hazardous if not stored or handled properly. Additionally, typical building construction materials like paints, adhesives, solvents, and similar substances will be present at the construction site. Mishandling, improper storage, or transportation of these hazardous materials can lead to accidental releases or spills, potentially endangering the health of workers, the public, and the environment. However, it's worth emphasizing that this risk is standard across construction sites, and the Project doesn't pose any greater risk in terms of handling, transportation, or spills compared to similar

construction endeavors. Various federal and state agencies enforce regulations to ensure the safe transportation of hazardous materials. The United States Department of Transportation Office of Hazardous Materials Safety, in accordance with Title 49 of the Code of Federal Regulations, primarily governs hazardous material transport, storage, and response to incidents.

In California, similar regulations are codified across several titles of the California Code of Regulations (CCR), including Title 13 (Motor Vehicles), Title 8 (Cal/OSHA), Title 22 (Management of Hazardous Waste), and Title 26 (Toxics), as well as Chapter 6.95 of the Health and Safety Code, which specifically addresses Hazardous Materials Release Response Plans and Inventory. Construction contractors are obligated to adhere to all relevant regulations. Therefore, during the construction phase of the Project, the routine transport, use, or disposal of hazardous materials will be conducted in compliance with these regulations, ensuring that the Project construction does not pose significant hazards to the public or the environment.

According to the ESA there was no evidence of current or former aboveground storage tanks (ASTs) or underground storage tanks (USTs). The California Building Code (CBC) sets requirements that direct safe accommodations for materials with a moderate explosion hazard, high fire or physical hazard, or health hazards (California Building Standards Commission [CBSC] 2016a, Additional applicable standards include the California Environmental Protection Agency's Aboveground Petroleum Storage Act, U.S. Code Title 42 Chapter 82 Subchapter IX UST, Cal/OSHA operational requirements, California Health and Safety Code Section 25270 regarding aboveground storage tanks (CHSC 2014). Compliance with all applicable federal and state laws related to the storage of hazardous materials would be required to maximize containment and provide for prompt and effective cleanup, if an accidental release occurs. Therefore, impacts associated with handling, storing, and dispensing of hazardous materials would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. There are no schools within a one mile of the proposed Project site. Two schools, the Shepherd Cristian School and the Patterns in Excellence High School are located over two miles to the east of the site. Siters within a one radius of the proposed Project site are primarily vacant with no development proposed at the current time. Therefore, there would be no impact related to hazardous emission or the handling of hazardous materials or waste within one quarter of a 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?

No Impact. According to the California Department of Toxic Substances (DTSC)'s EnviroStor database, there are approximately 36 identified hazardous materials sites located within a five mile radius of the proposed Project site. One is in active use and it is not known if potential hazardous materials on site have been cleaned, one has been certified as a cleaned site, two are closed sites, in that all remediation actions have been satisfied per the United States Environmental Protection Agency (USEPA) requirements, 20 are inactive sites, four site are inactive but would need further environmental evaluation if these sites were to be redeveloped, and eight sites would require review by agencies other than the USEPA, should these site change use. Although two site are located within approximately one mile of the proposed Project site, both of these sites have been classified as inactive and require no further action. The USEPA has not

identified any previous contamination at the proposed Project site. Since the site is not included on a list of hazardous materials sites, there would be no impact to the public or the environment.

e) For a Project located 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 for people residing or working in the Project area?

No Impact. The Palmdale Regional Airport is located approximately four and a quarter of a mile to the northeast of the proposed Project site. Since the site is not located within two miles of a public airport or public use airport, the proposed Project would not create a safety hazard for people working on the Project site. There would be no impact.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The proposed Project would be located and developed with the City of Palmdale geographic and jurisdictional limit which has seven fire stations that serves areas within the city. Los Angeles County Fire Department stations 37 and 131 are located between two to four miles to the north of the Project site, while Los Angeles County Fire Department Station 131 is located approximately there miles to the east of the site. The proposed Project site is also located in the Los Angeles Operational Area, California Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS) areas. This Operational Area is responsible for coordinating information, resources and priorities among local governments, and using multi-agency or inter-agency coordination to conduct emergency response activities within the city as a whole (City of Palmdale; 2012). All development projects are required to be reviewed by the Los Angeles County Fire Department for adequate emergency access and evacuation routes, in addition the proposed Project will comply with implementation of the City's Envision 2045 General Plan Safety Policy goals and policies related to emergency response. Therefore, potential impacts to emergency response and evacuation would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. The proposed Project site is fairly flat with low tree and shrub coverage and is listed as a Very High Fire Hazard Severity Zone (VHSHSZ) within a State Responsibility Area (SRA) in the city of Palmdale (City of Palmdale 2045 General Plan Update DEIR; 2022). The proposed Project would require the installation and maintenance of associated infrastructure such as roads, water and sewer access, power lines and other utilities on a currently vacant parcel of land, however, all site development under the proposed Project would have to comply with not only the City's General Plan Safety Elements goals and policies pertaining to wildfire, the Cities Hazard Mitigation Plan and Emergency Operations Plan, but also with the Los Angeles County Fire Department as well as California Department of Forestry and Fire Protection (CAL FIRE)'s basic fire protection standards. Impacts from potential exposure of people or structures to the risk of wildfire would therefore be less than significant.

Mitigation

No mitigation is required.

4.10 Hydrology and Water Quality

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water 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:	☐	☐	☒	☐
c.i.) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
c.ii.) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
c.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	☐	☐	☒	☐
c.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?	☐	☐	☐	☒

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. The proposed Project area lies within the Antelope Valley Watershed and the Antelope Valley Groundwater Basin which provide groundwater to properties within the city. While construction of the proposed Project has the potential to result in soil erosion and thus degrade water quality, since the proposed Project site is more than one acre in size, it would be subject to National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge permit which would require the Project to adhere to erosion and sediment controls during construction, monitor runoff

water quality, waste disposal, and water management controls. The Project will provide an on-site storm drain system designed to capture the runoff generated from a 25-year, 24-hour design storm based on existing undeveloped conditions per the City of Palmdale drainage requirements. Two separate storm retention systems will be proposed to capture, store, and infiltrate the on-site runoff generated during the design storm event. Runoff from the convenience store rooftop and fueling station canopies will be captured and included in the runoff volume conveyed to the retention systems. However, no rainfall will be allowed to land on the portion of the fueling station island where there is a potential for pollutant spills and cleanup. These areas are protected from rainfall by the overhead canopies. Any Overflow of pollution elimination systems is generally directed sewer septic rather than infiltration type storm drain facilities in order to prevent potential for soil contamination by pollutants. Therefore, the proposed Project would not violate water quality standards or waste discharge requirements and impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. Project construction activities have the potential to encounter groundwater or interfere with existing groundwater recharge due to the new impervious surfaces in an otherwise vacant and undeveloped area. However, the proposed Project development would be required to adhere to the City's existing Low Impact Development (LID) policies under the City's General Plan, in addition to employing best management practices (BMPs) to minimized runoff and for onsite retention/detention during stormwater runoff erosion events. Although water demand on the site will increase and therefore have impacts on groundwater, the proposed Project would be required to submit a Storm Water Pollution Prevention Plan (SWPPP) to the California Environmental Protection Agency and would be also required to implement BMPs to prevent erosion and runoff. Impacts to groundwater recharge or groundwater supplies would therefore be less than significant.

ci-civ) 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; Result in substantial erosion or siltation on- or off-site; Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 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 Impede or redirect flood flows?

Less Than Significant Impact. proposed Project site is within the Federal Emergency Management Agency (FEMA) Zone X which is identified as an area with a one percent flood hazard risk (Appendix E). There are no waterways or water channels on the site. Therefore, the proposed Project would have minimal effects on flood flows. The proposed Project does have the potential to alter existing drainage patterns on the site due to changes in topography through grading, trenching and excavation activities. The proposed Project also has the potential for soil erosion and changes in existing surface permeability. However, as discussed previously, the proposed Project would be required to adhere to the City's existing LID policies, construction BMPs and all requirements under a NPDES permit. In addition, the Project applicant would be required to submit a grading plan for City approval such that natural drainage patterns are not disrupted, water runoff remains on the site, and no soil compaction occurs in landscaped areas. Therefore, impacts related to erosion, flooding, and stormwater drainage would be less than significant through compliance with LIDs, the NPDES, and all applicable City codes for construction activities.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?

Less Than Significant Impact. The proposed Project site is located in FEMA Flood Zone X, with minimal risks from flooding. There are no water bodies, rivers or water channels or seiche or tsunami zones on the site. Lake Palmdale is located approximately 2,660 feet to the southeast of the proposed Project site and a water channel is approximately 2,300 feet to the southwest of the site. SR 14 divides the site from the Lake and vacant lands and paved surfaces separate the site from the water channel to the southwest. The proposed Project site therefore has low risk of release of pollutants due to flooding and impacts would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The proposed Project site is located in the Antelope Valley Basin and under the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB). The LRWQCB governs water quality in the Antelope Valley Basin and sets water quality standards for the region under its jurisdiction. Development under the proposed Project would be required to comply with the water quality standards set under the LRWQCB Basin Plan. Therefore, the proposed Project would not conflict with or obstruct implementation of a water quality control plan and there would be no impact.

Mitigation

No mitigation is required.

4.11 Land Use and Planning

Impacts

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐

a) Physically divide an established community?

No impact. The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site. The proposed Project site is currently vacant and is not in a residential area, therefore the Project will not physically divide an established community. There will be no Impact.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact With Mitigation Incorporated. The proposed Project currently conflicts with the current General Plan Land Use and zoning of the site. The site is currently designated as Neighborhood Commercial (NC) zone. Maverik has filled for a General Plan Amendment and Zone Change (ZC 24-0003) to change the General Plan Designation and zoning to Regional Commercial (RC) as well as a General Plan Amendment to allow for the use of a alternative on-site wastewater system until public sanitary sewer is available within 200 feet of the private system. The Conditional Use Permit (24-0001) will allow the use of the fueling station convenience store in the RC zone. The impacts to the General Plan Land Use and Zoning Ordinance will be reduced to less than significant with mitigation incorporated with mitigation measure LU-1 The adoption of GPA 23-0002, 24-0003, and CUP 24-0001.

Mitigation

LU-1: Project is required to have approval of General Plan Amendment (23-0002), to allow for an on-site wastewater treatment system until public sanitary sewer is available within 200 feet of the private system. Upon availability of a public disposal system within 200 feet the Project owner will be required to tie into the public disposal system. General Plan Land Use designation and Zone Change (ZC 24-0003), and Conditional Use Permit (CUP 24-0001) from the City of Palmdale City Council to change from existing zoning of Neighborhood Commercial (NC) to Regional Commercial (RC) for approval of the use of a private septic system. The CUP will allow for the fueling station and convenience store within the RC zoning.

4.12 Mineral Resources

Impacts

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No 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?	☐	☐	☐	☒

a-b) 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? 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?

No Impact. Mineral resources are land areas or deposits deemed significant by the California Department of Conservation (CA DOC) (California Department of Conservation, 1975). Mineral resources include oil, natural gas, and metallic and nonmetallic deposits, including aggregate resources. The CA DOC Geological Survey, and the California State Mining and Geology Board (CA SMGB) are required by the Surface Mining and Reclamation Act of 1974 (SMARA) to categorize lands into four Aggregate and Mineral Resource Zones (MRZs), described below. These MRZs classify lands that contain significant statewide or regional mineral deposits based on a site's geologic factors without regard to existing land use and land ownership. SMARA has established MRZs using the following classifications (California Department of Conservation, 1975).

- ***MRZ-1***: Areas where adequate geologic information indicates no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
- ***MRZ-2a***: Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present.
- ***MRZ-2b***: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
- ***MRZ-3a***: Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories.
- ***MRZ-3b***: Areas that may have inferred mineral deposits which may qualify as mineral resources. Further exploration work could result in the reclassification of all or part of these areas into the MRZ-3a category or specific localities into the MRZ-2a or MRZ-2b categories.
- ***MRZ-4***: Areas where there is not enough geologic information available to determine the presence or absence of mineral resources.

Typically, land classified as MRZ-2 are of the greatest importance and are designated by the State Mining and Geology Board as being regionally significant. Such designation requires that a Lead Agency make land use decisions based upon its mineral resource management policies, and that the Lead Agency consider the importance of the mineral resource to the region or the State as a whole, and not just to the Lead Agency's jurisdiction or a proposed Project area.

According to the Los Angeles County General Plan Update EIR (County of Los Angeles General Plan Update; 2014), the proposed Project site is not located within a MRZ; there would be no impact.

Mitigation

No mitigation is required.

4.13 Noise

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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?	☐	☐	☐	☒

The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site. Access to the site would be provided along Avenue S. The proposed Project is a commercial use development along a major roadway. The site is currently vacant with rock outcropping, trees, shrubs and some grass ground cover.

A Noise Impact Study was completed by MD Acoustics in November 2023 (Appendix F) of this ISMND. Noise generated from a Project or activity related to the Project has certain characteristics as described below:

Fundamentals of Noise

Sound, Noise and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. 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.

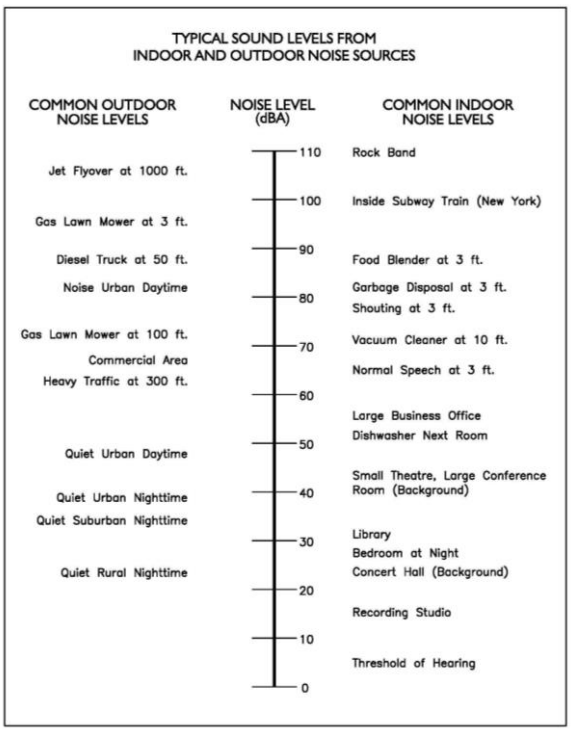
Frequency and Hertz

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 at 20 Hz to the high pitch of 20,000 Hz.

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 Lp) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels abbreviated dB. Table 20 Typical A-Weighted Noise Levels below illustrates references sound levels for different noise sources.

Table 20 Typical A-Weighted Noise Levels



Since decibels are typically on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two sounds or equal SPL are combined, they will produce an SPL three dB greater than the original single SPL. In other words, sound energy must be doubled to produce a three dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound.

Human Response to Changes in Noise Levels

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 weighting is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive a change in the noise level of three dB. A change in five 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 three 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.

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.

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.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of five decibels to sound levels in the evening from 7:00 PM to 10:00 PM and after the addition of 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 anexcessive undesirable sound.

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

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 dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

Traffic Noise Prediction

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2 axle), and heavy truck percentage (three axle and greater), and (4) sound propagation. The greater the volume of traffic, the higher speeds and truck percentages equate to a louder volume in noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately three dB; reasons for this are discussed in the sections above.

Sound Propagation

As sound propagates from a source it spreads geometrically. 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 six 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 three dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use 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 a 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 7.5 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 from a noise source. Wind, temperature, air humidity, and turbulence can further impact how far sound can travel.

Ground-Borne Vibration Fundamentals

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 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.

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. According to the FTA, fragile buildings can be exposed to ground-borne vibration levels of 0.3 inches per second without experiencing structural damage.

Vibration Perception

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 six 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.

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?

Less Than Significant Impact. Noise impacts under the proposed Project were analyzed for operational, transportation, as well as construction phases of the Project.

Operational Noise

Sensitive Receptors near Project site

The proposed Project is surrounded by vacant land to the north, east, and west with Avenue S to the south. There are no sensitive receptors surrounding the site. The vacant land surrounding the site is zoned commercial and has the potential to be affected by the Project's operational noise.

Project Site Noise Measurements

The noise monitoring location was selected to obtain a baseline of the existing noise environment. One short-term noise measurement was conducted at the proposed Project site.

One hour noise measurement was conducted at the Project site to document the existing noise environment. The measurements include the Leq, Lmin, Lmax, and other statistical data (e.g. L2, L8). The data presented in Table 21: Short-Term Noise Measurement Data for (LT1) (dBA) as well as the field notes provided in Appendix F of the Noise Study (*Appendix A)* indicate that ambient noise level in the Project vicinity is 61.5 dBA Leq. The field data indicates that traffic along Avenue South is the dominant noise source.

Table 21 Short-Term Noise Measurement Data for (LT1) (dBA)[1]

Date	Time	1-Hour dB(A)							
		L_{EQ}	L_{MAX}	L_{MIN}	L_2	L_8	L_{25}	L_{50}	L_{90}
6/1/2023	9:41AM-10:41 AM	61.5	72.0	46.1	68.0	65.9	63.0	59.1	49.8

Notes:

1. Short-term noise monitoring location (ST-1) is illustrated in Exhibit E

The existing environmental noise level at the proposed Project site is 61.5 dBA Leq.

Table 22: Allowable Exterior Noise Levels, shows the allowable exterior and interior noise levels that are included in the City's General Plan (Appendix A).

Table 22 Allowable Exterior Noise Level

Land Use	Exterior	Interior	Scale
Residential			
SFR	65	45	dBA, CNEL
MFR	65	45	dBA, CNEL
MHP	65	45	dBA, CNEL
Commercial including, but not limited to:	A noise level which does not jeopardize health, safety, and welfare of visitors.		
Retail		55	Leq(h)
Services		55	Leq(h)
Office		55	Leq(h)
Institutional including, but not limited to:	A noise level which does not jeopardize health, safety, and welfare of visitors.		
School		45	Leq(h)
Hospitals		45	Leq(h)
Nursing Homes		45	Leq(h)
Industrial including but not limited to:	A noise level which does not interfere with normal business activity.		
Industrial Park		65	Leq(h)
Business Park		65	Leq(h)
Quarry	Maximum 65 Leq(h) at the interface with residentially designated land.	n/a	n/a

Source: City of Palmdale General Plan Noise Element, 1993

Transportation Noise

The FHWA Traffic Noise Prediction Methodology (FHWA-RD-77-108) was utilized to model future traffic noise levels on the Project site and existing and existing plus Project traffic noise volumes along roadways affected by Project generated vehicle traffic. The FHWA model arrives at the predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL).

Project generated vehicle traffic, as indicated in Table 23 Roadway Parameters and Vehicle Distribution, will result in an incremental increase in ambient noise levels. To determine the Project's noise impact on the surrounding land uses, MD generated noise contours for existing ADT, and existing plus Project conditions.

Table 23 Roadway Parameters and Vehicle Distribution

Roadway/Type	Segment	Existing ADT1	Existing + Project ADT2	Speed (MPH)	Site Conditions
Avenue S	West of SR14 SB ramp	11,600	12,500	55	Hard
Motor-Vehicle Type3		Daytime % (7AM to 7 PM)	Evening % (7 PM to 10 PM)	Night % (10 PM to 7 AM)	Total % of Traffic Flow
Automobiles		75.5	14.0	10.4	92.0
Medium Trucks		48.0	2.0	50	3.0
Heavy Trucks		48.0	2.0	50	5.0

Notes:

1 See Appendix C for Traffic Volume Flow Map for the City of Lancaster.

2 Traffic – IEG Maverik Gas Station Transportation Impact Analysis. See Appendix C.

3 https://dot.ca.gov/programs/traffic-operations/census

The potential off-site noise impacts caused by the increase in vehicular traffic as a result of the proposed Project were calculated at a distance of 287 feet from affected road segments. The noise levels at 287 feet both with and without Project-generated vehicle traffic were compared and the increase was calculated.

Table 24 Existing Scenario - Noise Levels Along Roadways (dBA CNEL) Existing Without Project Exterior Noise Levels

Roadway	Segment	CNEL at 70 Ft (dBA)	Distance to Contour (Ft)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Avenue S	West. of SR14 SB ramp	58.1	46	100	215	462

Existing With Project Exterior Noise Levels

Roadway	Segment	CNEL at 70 Ft (dBA)	Distance to Contour (Ft)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Avenue S	West of SR14 SB ramp	58.4	49	105	226	486

Change in Existing Noise Levels as a Result of Project

Roadway1	Segment	CNEL at 70 Feet dBA2			
		Existing Without Project	Existing With Project	Change in Noise Level	Potential Significant Impact
Avenue S	West. of SR14 SB ramp	58.1	58.4	0.3	No

Notes:

1 Exterior noise levels calculated at 5 feet above ground level.

2 Noise levels calculated from centerline of subject roadway.

Transportation noise impacts would be considered significant if the existing plus Project levels are expected to increase by more than three dB. Compared to existing traffic noise levels, future traffic volumes are expected to increase 0.3 dBA CNEL at existing land uses. The impact is therefore less than significant.

Stationary Noise Sources

Stationary noise impacts would be considered significant if they result in exceedances of the maximum allowable interior commercial noise limit (Table 25). Implementation of the proposed Project may result in stationary noise related to parking/fueling stations. All equipment is required to meet the interior commercial noise limit of 55 dBA at the potential commercial receptors.

Table 25 Operational Noise Levels (dBA, Leq)

Receptor1	Existing Ambient Noise Level (dBA, Leq)2	Project Noise Level (dBA, Leq)3	Total Combined Noise Level (dBA, Leq)	Interior Noise Limit (dBA, Leq)	Interior noise level (dBA, Leq)
R1	62	56	66	55	46
R2		53	65		45
R3		55	66		46

Notes:

1. R1 to R3 represent potential commercial uses.
2. See Table 5 for measured ambient noise levels.
3. See Exhibit E for the operational noise level projections at said receptors.

Operational noise levels are expected to reach 53 to 56 dBA CNEL at the adjacent receptors. The Project-generated operational noise is expected to result in a interior noise level of 45 to 46 dBA at the adjacent commercial sites. This does not exceed the Interior Commercial noise limit of 55 dBA. Therefore, the impact is less than significant. Therefore, the impact would be less than significant.

Construction Noise

Section 8.28.030 of the City of Palmdale Municipal Code (PMC) states: Except as otherwise provided in this Chapter, no person shall perform any construction or repair work on any Sunday, or any other day after 8:00 p.m. or before 6:30 a.m., in any residential zone or within 500 feet of any residence, hotel, motel or recreational vehicle park. Construction and repair work typically includes work of any kind upon any building or structure, earth excavating, filling, or moving, and delivery, preparation or operation of construction equipment, materials or supplies where any of the foregoing entails the use of an air compressor, jack hammer, power-driven drill, riveting machine, excavator, semi-truck, diesel power truck, tractor, cement truck, or earth moving equipment, hand hammer, or other machine, tool, device or equipment which makes loud noise which disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness sleeping or residing in the area.

Construction noise associated with the proposed Project was calculated utilizing methodology presented in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2018) together with several key construction parameters including distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the Project site. Construction activities are anticipated to include five phase site preparation, grading, building construction, paving, and finishing.

Construction noise levels were calculated for each phase based on the CalEEMod Air Quality Model assumptions. All equipment was assumed to be situated at the center of the site. Construction noise would be significant if construction activities occur outside of the permitted construction hours specified in PMC Chapter 8.28 and PMC Chapter 9.18. Noise due to construction will result in short-term noise impacts associated with construction activities.

The site preparation and building phases of on-site construction activities under the proposed Project has the potential to generate the highest temporary noise levels. The loudest construction equipment on the site will be tractors, graders, scrapers, and dozers. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three or four minutes at lower power settings. The maximum Leq level for the loudest phase of construction is expected to be 63.1 dBA Leq and 67.3 dBA Lmax at the nearest existing adjacent commercial building. Therefore, the impact would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Ground borne noise impacts under the proposed Project were analyzed in relation to construction as well as operation of the Project.

Construction

Construction activities can produce vibration that may be felt by adjacent land uses. The construction of the proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer. A large bulldozer has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet which is perceptible but below any risk to architectural damage.

Construction vibration will be significant if vibration exceeds levels that would result in structural damage to existing buildings. Construction activity is not anticipated to occur within 50 feet of sensitive receptors. At a distance of 50 feet, at a distance of 212 feet, the nearest commercial building to the Project property line, a large bulldozer would yield a worst-case 0.008 PPV (in/sec) which is below the threshold of any risk of damage. The Project may result in temporary daytime residential annoyance. Construction activity is not expected to fall within the limits of structural damage, and therefore the impact would be less than significant.

Operation

The Project consists of fueling and general commercial uses. None of the proposed uses will create a significant source of vibration. Therefore, operational impacts from the proposed Project would be less than significant.

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?

No Impact. The nearest airport to the proposed Project site is the Palmdale Regional Airport, located approximately five miles to the southeast of the site. Therefore, the proposed Project would be located outside the noise contours of Palmdale Regional Airport; no substantial noise exposure from airport noise would occur and there would be no impact.

Mitigation

No mitigation is required.

4.14 Population and Housing

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No Impact
POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a-b) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site. Access to the site would be provided along Avenue S. The proposed Project is a commercial use development along a major roadway. The site is currently vacant with rock outcropping, trees, shrubs and some grass ground cover. The proposed Project is a commercial use development along a major roadway, with approximately 15 employees. The proposed Project does not include any residential components that may induce population growth. The site is currently vacant and therefore the proposed Project would not displace people or housing or necessitate the construction of replacement housing elsewhere; there would be no impact.

Mitigation

No mitigation is required.

4.15 Public Services

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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 of 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?	☐	☐	☐	☒

a.i) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new of 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 Fire Protection?

Less than Significant Impact. The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site. Access to the site would be provided along Avenue S. The proposed Project is a commercial use development along a major roadway. The site is currently vacant with rock outcropping, trees, shrubs and some grass ground cover.

The City of Palmdale contracts with the County of Los Angeles Fire Department (LACFD) for fire protection and emergency services. LACFD has six fire stations in the city, two of which are located within five miles of the proposed Project site. Fire Station 37 is located approximately a little over two miles to the northeast, and Fire Station 131 is located approximately three miles to the east of the site. Numerous emails and calls between July and September 2023 (07/11/23; 07/14/23; 08/01/23; 08/10/23; 08/28/23; and 09/01/23) have not resulted in direct communication from fire chiefs at either fire station. The City

of Palmdale 2045 General Plan (City of Palmdale; 2022) notes average response times for fire fighters to be between four and a half to below six minutes in case of fire or emergency services. The proposed Project therefore would not require the construction of a new fire station or additional firefighting staff. The proposed Project would be required to comply with all federal, State, and City rules and regulations related to site and fire access, fire flows, number and location of fire hydrants, fire resistant development standards and construction materials. Additionally, the proposed Project would be required to comply with the City's fire facility impact fees as specified in Chapter 3.42 to ensure that adequate fire protection services are available to service the site. Impacts would therefore be less than significant.

a.ii) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new of 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; Police Protection?

Less Than Significant Impact. The proposed Project will be required to comply with the PMC Chapter 3.45. The City of Palmdale contracts with the Los Angeles County Sheriff's Department (LACSD). Palmdale Sheriff's Station is located about two miles to the northeast of the Project site. Numerous emails and calls between July and August 2023 (07/05/23; 07/11/23; and 08/16/23) have not resulted in direct communication from staff at the police station. The City of Palmdale 2045 General Plan (City of Palmdale; 2022) notes average response times for police services an average of six minutes. The City's General Plan EIR (City of Palmdale; 2022) noted that future development within the city, would be sufficiently served by the existing police station and staff. Since future new development, such as the proposed Project, would not require the construction of new facilities or any increases in police department staff, impacts from the proposed Project on police services would be less than significant.

a.iii) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new of 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; Schools?

No Impact. The City of Palmdale is served by three school districts and 54 schools (from private and public preschools and colleges campuses). The proposed Project is a gas/fueling station. As such, the proposed Project does not include any residential uses that would require access to school facilities. Potential employees on site would be utilizing school facilities if needed, closer to their areas of residence. Therefore, the proposed Project would not require access or need new or physically altered school facilities and there would be no impact.

a.iv) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new of 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;

No Impact. All employees and site users would be able to access recreational facilities in their own residential neighborhoods. Therefore, the proposed Project would not increase the use of existing recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. There would be no impact.

a.v) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new of 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; Other Public Services?

No Impact. The Palmdale City Library is located over two and a half miles to the northeast of the proposed Project site and the Palmdale Regional Center hospital is located within there miles of the site. Therefore, the proposed Project would be adequately served by these facilities and would not require the construction of new or the alteration of existing public service facilities and there would be no impact.

Mitigation

No mitigation is required.

4.16 Recreation

Impacts

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
RECREATION				
a) Would the Project 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) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a-b) Would the Project 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? Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed Project would include the construction 24 fuel pumps and an air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. The proposed Project does not include any residential components that may require the use of recreational facilities. All employees and site users would be able to access recreational facilities in their own residential neighborhoods. Therefore, the proposed Project would not increase the use of existing recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. There would be no impact.

Mitigation

No mitigation is required.

4.17 Transportation and Traffic

Impacts

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No 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?	☐	☐	☒	☐

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact with Mitigation Incorporated. The proposed Project will not Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The Traffic study conducted by IEG in August 2023 was revised in September 2023 included as Appendix H of this ISMND, determined the following:

Access to the Project site will be provided via one proposed right-in/right-out only driveway along Avenue S that will be restricted by the construction of a raised median and one proposed driveway that would result as the north leg of the existing Avenue S and Guyon Avenue intersection.

EXISTING CONDITIONS (Year 2023)

ROADWAY NETWORK

Avenue S is an east-west four-lane two-lane collector roadway between Tierra Subida Avenue and SR-14 Southbound Ramps and transitions to a four-lane divided roadway from SR-14 Southbound Ramps to SR-14 Northbound Ramps, within the study area. The posted speed limit is 55 miles per hour. This roadway connects the Project to north-south corridors such as SR-14 and Tierra Subida Avenue. Per the City of Palmdale General Plan Circulation and Mobility Element, Avenue S is classified as a Crosstown Roadway Facility with a max 84 foot curb to curb distance within 114 footright-of way.

TRANSIT NETWORK

Antelope Valley Transit Authority (AVTA) services the Cities of Palmdale and Lancaster, and unincorporated portions of northern Los Angeles County. AVTA does not operate any routes within the vicinity of the Project. The nearest bus stop is 1.6 mi east for Route 3 to travel north to Antelope Valley Mall and east to South Valley Transit Center.

ACTIVE TRANSPORTATION NETWORK

There is an existing sidewalk along the south side of Avenue S east of SR-14 Southbound Ramps and no sidewalk on either side of Avenue S west of SR-14 Southbound Ramps from the Project site. Additionally, marked pedestrian crossings are provided at the signalized study intersections. There is an existing Class I bike path along the south side of Avenue S, beginning east of SR-14 Southbound Ramps. However, there are no existing bicycle facilities along Avenue S from the Project site to this bike path. The City of Palmdale General Plan Circulation and Mobility Element proposes Class II bike lanes along Avenue S.

TRAFFIC VOLUMES

The intersection turning movement counts were conducted during the weekday morning peak period from 7:00 AM to 9:00 AM and during the weekday evening peak period from 4:00 PM to 6:00 PM on Tuesday, July 18, 2023.

ANALYSIS RESULTS

Table 26 Existing Conditions (Year 2023) Intersection Operation Analysis

Intersection	Traffic Control	Existing Without Project	
		Delay (a)	LOS (b)
AM/PM Peak			
1. Tierra Subida Avenue and Avenue S	Signalized	12.4/14.5	B/B
2. Guyon Avenue and Avenue S	SSCC	14.3/18.8	B/C
3. SR-14 Southbound Ramps and Avenue S	Signalized	11.0/11.2	B/B
4. SR-14 Northbound Ramps and Avenue S	Signalized	7.3/7.5	A/A

Notes:

(a) Delay refers to the average control delay for the entire intersection and control delay for the worst movement for SSSC intersections, measured in seconds per vehicle.

(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 11

Per the analysis results shown in Table 26 all analyzed intersections are operating at an acceptable LOS under Existing Conditions.

OPENING YEAR 2024 CONDITIONS

The Opening Year without Project Conditions traffic volumes were developed by applying a 3 percent growth for one year to the Existing counts. Project traffic volumes are then added to the Opening Year without Project Conditions traffic volumes to develop Opening Year with Project Conditions traffic volumes. This section also documents potential cumulative Project impacts on the existing local and regional circulation networks. No network improvements are assumed under Opening Year Condition scenarios.

ANALYSIS RESULTS

Table 27 shows Opening Year 2024 Conditions intersection operation analysis results.

Table 27 Opening Year 2024 Conditions Intersection Operation Analysis

Intersection	Traffic Control	Opening Year Without Project		Opening Year With Project		Operational Deficiency?
		Delay (a)	LOS (b)	Delay (a)	LOS (b)	
AM/PM Peak Hour						
1. Tierra Subida Avenue and Avenue S	Signalized	12.6/14.7	B/B	12.7/14.8	B/B	N/N
2. Guyon Avenue/Project Driveway one and Avenue S	SSCC	14.7/19.6	B/C	92.1/352.8	**F/F**	**Y/Y**
3. SR-14 Southbound Ramps and Avenue S	Signalized	11.1/11.5	B/B	11.2/11.7	B/B	N/N
4. SR-14 Northbound Ramps and Avenue S	Signalized	7.4/7.7	A/A	8.0/8.0	A/A	N/N

Notes:
***Bold** indicates deficient LOS*
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 11

Per the analysis results shown in Table 27, all analyzed intersections are operating at an acceptable LOS under Opening Year Conditions.

DEFICIENT INTERSECTIONS AND RECOMMENDED IMPROVEMENTS

The Project would have a project related traffic operational deficiency under Opening Year 2024 with Project Conditions at the intersection of Guyon Avenue/Project Driveway one and Avenue S. Installation of a traffic signal would improve the deficient intersection to operate at an acceptable level of services, as shown in Table 28. The intersection warrants a signal under Opening Year 2024 With Project Conditions during the AM or PM peak hours.

Table 28 Opening Year 2024 With Project and Improvement Conditions Intersection Operation Analysis

Intersection	Traffic Control	Opening Year With Project		Opening Year With Project and Improvement		Operational Deficiency?
		Delay (a)	LOS (b)	Delay (a)	LOS (b)	
AM/PM Peak Hour						
2. Guyon Avenue/Project Driveway one and Avenue S	Signalized	92.1/352.8	**F/F**	9.8/36.6	A/D	N/N

Notes:
***Bold** indicates deficient LOS*
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 11

Table 29 shows Opening Year 2024 With Project and Improvement Conditions queue analysis results. As shown, the proposed 100 ft storage length for the eastbound left turn lane at the Guyon Avenue/Project

Driveway one and Avenue S intersection would accommodate the anticipated queue from the Project traffic.

Table 29 Opening Year 2024 With Project and Improvement Conditions Queue Analysis

Intersection	Movement	Storage Length (ft)	AM Peak		PM Peak	
			Queue (ft)	Excess (ft)	Queue (ft)	Excess (ft)
2. Guyon Avenue/Project Driveway one and Avenue S	EBL	100	83	-	86	-

The LTA evaluated the potential traffic deficiencies related to the Project in conformance with the analysis requirements per the City of Palmdale General Plan (effective October 22, 2022) and the Los Angeles County Public Works Transportation Impact Analysis Guidelines (Guidelines, July 23, 2020). An intersection operation analysis was conducted per the Guidelines at the study area intersections for Existing Year 2023 and Year 2024 without and with Project conditions. Based on the analysis, all study intersections operate at satisfactory LOS D or better during the weekday AM and PM peak hours under all conditions except during PM peak at the intersection of Guyon Avenue/Project Driveway one and Avenue S.

It was determined that the Project left turn out vehicular movement at the intersection of Guyon Avenue/Project Driveway one and Avenue S will experience delays once the project is constructed. The intersection warrants a signal under Opening Year 2024 With Project Conditions; therefore, the installation of a traffic signal would improve the deficient intersection to operate at an acceptable level of services. The Project will implement the following mitigation measures to reduce the impact level to less than significant with mitigation incorporated:

TRAN-1: Project will signalize the intersection of Guyon Avenue/Project Driveway one and Avenue S to the satisfaction of the City Engineer.

TRAN-2: Project will construct required improvements along the property frontage including curb, gutter, sidewalk and exclusive right turn lane at Guyon Avenue/Project Driveway one and Avenue S to the satisfaction of the City Engineer.

TRAN-3: Project will construct a raised median along the property frontage including an eastbound left turn lane at the intersection of Guyon Avenue/Project Driveway one and Avenue S with a recommended length of 100 feet minimum with the appropriate transition to the satisfaction of the City Engineer.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant Impact. The proposed Project will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). On September 27, 2013, SB 743 was signed into State law and started a process intended to fundamentally change transportation impact analysis as part of the CEQA compliance. The California Natural Resource Agency updated the CEQA transportation analysis guidelines in 2018. In this update automobile delay and LOS metrics are no longer to be used in determining transportation impacts. Instead VMT metrics will serve as the basis in determining impacts. Furthermore, the guidelines stated that after July 1, 2020, transportation analysis under CEQA must use VMT to determine impacts for land use projects.

The Project is located in the City of Palmdale and within the jurisdiction of Los Angeles County. The County has adopted guidance on evaluating VMT for transportation impacts under CEQA. For this Project the County of Los Angeles, Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report, June 2020, hereafter referred to as Guidelines.

ANALYSIS METHODOLGY

The Guidelines adopted by Los Angeles County require a 4-step process for implementing SB 743 and VMT analysis:

- Baseline VMT – Describes the process for determining the County Baseline VMT and describes the analysis methodology and VMT metrics for Los Angeles County.
- VMT Screening – Provides the options for project screening to determine if a VMT analysis is required and summarizes the VMT analysis process for projects that do not meet the screening criteria.
- VMT Impact Thresholds – Based on the required VMT Measure the Project will need to identify the appropriate VMT Measure threshold as required in the Guidelines.
- VMT Mitigation Strategies – If the Project would have a VMT impact under CEQA the Project would need to mitigate the impact to the extent feasible and disclose whether the Project would fully mitigate its impact or require additional analysis to reduce VMT and meet the County's thresholds are provided.

Los Angeles County Transportation Analysis Guidelines Screening Criteria

The Guidelines recognize that certain projects based on type, location, size and other contexts could lead to a presumption of less than significance (i.e. the project's VMT would not cause a transportation impact) and would not need additional VMT analysis. The Guidelines provide the following screening criteria:

1. Project Size: A project that generates 110 or fewer daily trips.
2. Locally Serving Retail: A project that has locally serving retail uses that are 50,000 square feet or less, including specialty retail, shopping center, grocery store, pharmacy, financial services/banks, fitness center or health club, restaurant, and café. If the project contains other land uses, those uses need to be considered under other applicable screening criteria.
3. Transit Proximity: A project that is located within a half mile of a major transit stop or within a ½ mile of a bus stop on a high-quality transit corridor (HQTC). A major transit stop is a rail station or a stop with two or more intersecting bus routes with service frequency of 15 minutes or less during commute periods. A HQTC is a corridor with fixed route bus service with frequency of 15 minutes or less during peak commute periods. In addition, the project should have the following characteristics:
    - A floor Area Ratio (FAR) of 0.75 or greater
    - Is consistent with the applicable SCAG Sustainable Communities Strategy (as determined by the County)
    - Does not provide more parking than required by the County
    - Does not replacing affordable housing units
4. Affordable Housing: A residential project that provides affordable housing units.
5. Transportation Facilities: Transportation projects that promote non-auto travel, improve safety, or improve traffic operations at current bottlenecks, such as transit, bicycle and pedestrian

facilities, intersection traffic control (e.g., traffic signals or roundabouts), or widening at intersections to provide new turn lanes.

VMT THRESHOLDS

Once a project identifies the appropriate VMT measures for the proposed land uses it would need to be compared to thresholds for those metrics to determine significance under CEQA. The County has chosen to base its thresholds on the county and county-wide averages.

The thresholds as defined by the Guidelines provides are as follows:

- Residential Project: Project exceeds 16.8percent below the North or South County Baseline VMT for home-based VMT per capita
- Employment (Commercial or Industrial) Project: Project exceeds 16.8 percent below the North or South County Baseline VMT for home-based work VMT per employee
- Regional Retail Project: Project results in a net increase in total VMT per service population in comparison to the North or South County Baseline VMT
- Mixed-Use Projects: Evaluate each project land use component separately using the criteria above
- Land Use Plans (Community Plan, Specific Plan): Total VMT per service population generated by the Plan exceeds 16.8% below the North or South County Baseline VMT
- Other land use types: Project exceeds 16.8 percent below the North or South County Baseline VMT. For land use types not listed above, the County can determine the appropriate VMT metric depending on the project characteristics. For projects that are generally producing job-related travel, the employment generating VMT (home-based work VMT per employee) can be compared to the applicable County baseline. For other projects, the total VMT per service population can be compared to the County baseline, or the net change in VMT can be compared within the study area.
- Transportation Projects or Plans: Project results in an increase in VMT in comparison to the baseline VMT in the study area.

SCREENING CRITERIA ASSESSMENT

Screening Criteria Locally Serving Retail

Based on the Guidelines, Retail buildings with area less than or equal to 50,000 square feet would be presumed to cause a less-than-significant impact, the Project would potentially have a total of 5,637 square feet of retail space. The Project's retail component does qualify Locally Serving Retail screening.

VMT Analysis

The Project's employment component would qualify for screening for being a Locally Serving Retail Project. For this reason, the Project's employment component would be presumed to be less than significant for VMT impacts. The proposed Project is presumed to be less than significant for VMT impacts due to all the proposed use meeting at least one of the County's screening criteria outlined above.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact With Mitigation Incorporated. The proposed Project will not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Primary access to the proposed Project site will be provided via one proposed right-in/right-out only driveway along Avenue S that will be restricted by the construction of a raised median and one proposed driveway that would result as the north leg of the existing Avenue S and Guyon Avenue intersection.

As discussed above the TIA and VMT found that the proposed Project does warrant the installation of a traffic signal , construction of curb, gutter, sidewalks, exclusive right turn lane at Guyon Avenue/Project Driveway one and Avenue S, construction of a raised median along the property frontage, and a left turn lane at the intersection of Guyon Avenue/Project Driveway one and Avenue S with a recommended length of 100 feet minimum with the appropriate transition of the satisfaction of the City Engineer. Therefore, the proposed Project will have a less than significant impact with mitigation measures TRAN-1 -TRAN-3.

b) Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project would require final review and approval by the City's Fire Chief related to adequate site circulation. As proposed, the Project's on-site circulation and off-site access at the site would be adequate for use by the City's emergency services. The proposed Project would obtain the necessary permits and comply with all permit requirements from Caltrans for the safe transport of construction equipment. Furthermore, construction of the proposed Project would not include any temporary lane closures on Guyon Avenue/Project Driveway one and Avenue S. Emergency vehicles would be able to access the Project site and the proposed Project would not substantially alter site access. Therefore, the proposed Project will have a less than significant impact.

Mitigation

TRAN-1: Project will signalize the intersection of Guyon Avenue/Project Driveway one and Avenue S to the satisfaction of the City Engineer.

TRAN-2: Project will construct required improvements along the property frontage including curb, gutter, sidewalk and exclusive right turn lane at Guyon Avenue/Project Driveway one and Avenue S to the satisfaction of the City Engineer.

TRAN-3: Project will construct a raised median along the property frontage including an eastbound left turn lane at the intersection of Guyon Avenue/Project Driveway one and Avenue S with a recommended length of 100 feet minimum with the appropriate transition to the satisfaction of the City Engineer.

4.18 Tribal Cultural Resources

Impacts

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
TRIBAL CULTURAL RESOURCES – Would the project:				
ai) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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:	☐	☒	☐	☐
aii)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	☐	☒	☐	☐
aiii)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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

ai-aiii) Because this project is a CEQA action, it requires an offer of tribal consultation under Assembly Bill AB 52 (Public Resources Code Section 21080.3.1). The Project also requires a General Plan Amendment and is therefore subject to the statutory requirements of Senate Bill 18 Tribal Consultation Guidelines (Government Code Section 65352.3) that were initiated on September 10 and ended October 24.

In compliance with AB 52 and SB 18 the City distributed letters notifying the Native American Tribes that requested to participate in AB 52 and SB 18 (Yuhaaviatam of San Manuel Nation (formerly the San Manuel Band of Mission Indians, [YSMN]), Fernandeno Tataviam Band of Mission Indians, San Fernando Band of Mission Indians, Gabrieleno Band of Mission Indians - Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Morongo Band of Mission Indians, Serrano Nation of Mission Indians. Of the seven Tribes who were contacted, only the YSMN participated in AB 52 and SB 18 consultation.

YSMN responded in an email dated October 16, 2024, stating that the proposed Project is within Serrano ancestral territory, however, due to the nature and location of the proposed Project and the Cultural Resource Department's (CRM) present state of knowledge, YSMN does not express concern for the

implementation of the proposed Project. No specific known tribal cultural resources were identified at the project site.

To avoid any impacts to tribal cultural resources that may be accidentally unearthed during project ground disturbing activities the below mitigation measures TRC-1 and TRC-2 should be implemented to reduce potentially significant impacts to tribal cultural resources to a less than significant level.

Mitigation

TCR-1: The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

TCR-2: Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

4.19 Utilities and Services

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No 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?	☐	☐	☐	☒

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?

Less Than Significant Impact. The proposed Project would include the construction of 24 fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site.

Southern California Edison (SCE), Frontier, AT&T, Spectrum, Direct TV, Dish Network, Sprint and Hughes currently provide services to all areas of the city, which would include the proposed Project site. The City's water, wastewater and sewer agencies, Waste Management Incorporated, and the Antelope Valley

Recycling and Disposal facility currently provide services to the City and would provide services to the site. According to the City general plan (City of Palmdale General Plan Update;2022), the services and facilities would have the capacity to serve the proposed Project. While the proposed Project would not require the establishment of new facilities, the Project would require extensions of necessary power lines and water lines.

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. The City of Palmdale is serviced by the Los Angeles County Water District No. 40, by the Palmdale Water District (PWD) and by the Palmdale Utilities Services Division (City of Palmdale 2045 General Plan Update; 2022). Both of the County's Water District No 40 and the City's Water District draw groundwater from the Antelope Valley Groundwater Basin and its associated aquifers. According to the City of Palmdale General Plan EIR, while the Basin and its two aquifers may not have sufficient capacity to meet all development projects within the city (City of Palmdale 2045 General Plan Update EIR; 2022). However, this could be the result of additional residential development within the city. The proposed Project is not a residential development and therefore would not require the same amount of water supply. In addition, all future development projects such as the proposed Project would be required to strictly adhere to the appropriate General Plan policies under the City of Palmdale 2045 General Plan Update and would be required to incorporate water reduction measures prior to Project approval. Therefore, the proposed Project would have less than significant impact on the city's water supply.

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?

Less Than Significant Impact with Mitigation Incorporated. Currently there is not a public sewer system within the vicinity of the proposed Project location. The current general plan policies do not allow for septic systems, therefore, Maverik has applied for a General Plan Amendment to allow for the use of an on-site alternative wastewater system until public sanitary sewer is available within 200 feet of the private system. The on-site alternative waste water system will comply with the requirements of the City of Palmdale Plumbing Code, the Los Angeles County Health Department, and Lahontan Regional Water Quality Control Board and any Memorandum of Understanding between these agencies concerning on-site alternative wastewater treatment systems. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a total maximum of 5,000 gallons per day.

The project will comply with the City of Palmdale plumbing code, Local Agency Management Plan, Lahontan Regional Water Quality Control Board, and LA County Department of Public Health policies and requirements related to the design, operation and maintenance of Onsite Wastewater Treatment Systems (OWTS) within the City. The proposed Project will be reduced to a less than significant impact on wastewater and sewer with mitigation measure UTL-1.

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?

Less Than Significant Impact. The City of Palmdale contracts with Waste Management Inc for trash and recycling services throughout the city. The proposed Project therefore would also be serviced by Waste Management Inc. According to the City's 2045 General Plan Update EIR (City of Palmdale; 2022), the eight landfills that service the city have the capacity to meet future solid waste and recycling needs such as those that would be generated by the proposed Project. Therefore, the solid waste and recycling generated by the proposed Project would continue to be serviced by Waste Management and the existing landfill sites; impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. As a condition of final Project approvals, the proposed Project would be required to show how the Project would meet compliance with all appropriate federal, State and City of Palmdale polices related to the management and reduction of solid waste. The proposed Project would also be required to adhere to federal, State and local regulations related to solid waste management. Therefore, there would be no impact.

Mitigation

UTL-1: The Project applicant is responsible for filing and completing a General Plan Amendment to allow for the use of a on-site alternative wastewater system until public sanitary sewer is available within 200 feet of the Project site. Apon availability of public sanitary sewer system within 200 feet of the Project site, the Project owner will be required to tie into the public sanitary sewer system. The Project is also required to comply with the City of Palmdale plumbing code, Local Agency Management Plan, Lahontan Regional Water Quality Control Board, and LA County Department of Public Health policies and requirements related to the design, operation and maintenance of Onsite Wastewater Treatment Systems (OWTS) within the City.

4.20 Wildfire

Impacts

	Potentially Significant Impact	Less than Significant Impacts with Mitigation Incorporated	Less than Significant Impact	No Impact
WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, 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?	☐	☐	☐	☒

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Fire prevention and suppression in California is typically shared by local, State and federal agencies. The California Natural Resources Agency (CNRA) designates three specific land use classifications to identify the agency with the responsibility of preventing and suppressing wildfires. These include: Federal Responsibility Area (FRA), State Responsibility Area (SRA) and Local Responsibility Area (LRA) (California Natural Resources Agency; May 2023). A FRA is primarily under the responsibility of a federal government agency, such as the US Forest Service (USFS) and Bureau of Land Management (BLM); a SRA falls under the primary responsibility of the California Department of Forestry and Fire Protection (CAL FIRE); and, a LRA is the primarily the responsibility of a local jurisdiction such as county or city fire departments. LRAs are typically incorporated areas and unincorporated lands where the local government is responsible for wildfire protection (Office of the State Fire Marshall; 2022). CAL FIRE provides emergency fire prevention and protection services to 36 of the State's 58 counties under SRA and LRA designations.

Under the California Public Resources Code 4201-4204, California Code of Regulations Title 14, Section 1280 and California Government Code 51175-89, the California State Fire Marshall is authorized to classify lands within SRAs into Fire Hazard Severity Zones (FHSZ) and Very High Fire Hazard Severity Zones

(VHFHSZ) for LRAs. VHFHSZ are located based on an area's anticipated fire behavior and expected burn probabilities over a 30–50-year period (CAL FIRE; 2023). FHSZ determines the appropriate application of various mitigation strategies to reduce risk associated with wildland fires, and these areas typically fall into Moderate, High or Very High fire hazard areas. FHSZ maps assess fire hazards and not fire risks Fire Hazard is based on the area or specific site's physical conditions that potentially create the likelihood of fire risks over a 30 to 50-year period; Fire Risk is the potential damage a fire can cause to the area under existing conditions, accounting for any modifications such as fuel reduction projects, defensible space, and ignition resistant building construction (Office of the State Fire Marshall; 2023). CAL FIRE is also responsible for the mapping of FHSZ and VHFHSZ areas.

The proposed Project would include the construction of 24 canopied gas fuel pumps and air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, and a covered trash enclosure. The proposed Project would also include 39 parking spaces, two of the 39 spaces are designated ADA parking, one of which is van accessible. Avenue S, Tierra Subida Avenue, and 7th St West are designated crosstown roadways that provide access to the site. The Project site is designated as a VHFHSZ located within a SRA (City of Palmdale 2045 General Plan Update DEIR; 2022) and therefore all site development under the proposed Project would have to comply with not only the City's Local Hazard Mitigation Plan and Emergency Operations Plan, but also with CAL FIRE's basic fire protection standards. The proposed Project would not therefore substantially impair adopted emergency response or emergency evacuation plans; impacts would be less than significant.

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?

Less Than Significant Impact. The Project site is fairly flat, with a zero-to-five-degree slope to the south-east. Currently vacant, with low tree and shrub coverage, the site is located in a VHFHSZ area within the city. Clearing and grubbing associated with the proposed Project would occur on the southern portion of the site leaving the remainder of the site under existing tree and shrub coverage. Although the proposed Project building and fuel station canopies would be constructed in adherence to CAL FIRE and City fire protection standards, the potential exists that proposed employees and customers could be exposed to pollutant concentration from a wildfire. Impacts would therefore be less than significant.

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?

Less Than Significant Impact. The proposed Project would require the installation and maintenance of associated infrastructure such as roads, water and sewer access, power lines and other utilities on a currently vacant parcel of land. However, since the proposed Project would be required to adhere to CAL FIRE and City of Palmdale standards and regulations for fire safety, impacts from fire risks would be less than significant.

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?

No Impact. The site is fairly flat with no rivers or water on or near the site. Therefore, the proposed Project would not 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. There would be no impact.

Mitigation

No mitigation is required.

4.21 Mandatory Findings of Significance

Impacts

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially 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 projects, 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) Does the project have the potential to substantially 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?

Less Than Significant With Mitigation Incorporated. According to the technical analysis undertaken for the proposed Maverik Fuel Station, the proposed Project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of wildlife species, 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. Potentially significant impacts to the environment resulting from the proposed Project have been identified for the areas of biological resources, cultural resources, geology and soils, land use, transportation/traffic, and tribal cultural resources. With implementation of mitigation measures AES-1,

BIO-1 through BIO-11, CUL-1 through CUL-3, GEO-1 through GEO-3, LU-1, TRAN-1 through TRAN-3, and UTL-1 impacts would be reduced to less than significant.

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 projects, and the effects of probable future projects.)

Less Than Significant Impact. Cumulative impacts are defined as two or more individual project effects that, when considered together or in concert with other projects, combine to result in a significant impact (CEQA Guidelines Section §15355). Implementation of the proposed Project, in conjunction with other approved or pending projects in the region, has the potential to result in cumulatively considerable impacts to the physical environment. However, proposed Project-related effects either would be avoided by incorporation of Project design measures, or mitigated to levels below significance, and no cumulatively considerable impacts would occur. Therefore, with implementation of mitigation measures proposed in the relevant subsections of this ISMND, these potential impacts would be reduced to a level that is considered less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation Incorporated. The proposed Project would be required to adhere to regulatory codes, ordinances, regulations, standards, and guidelines applicable to each of the environmental issue areas analyzed herein. Therefore, the Project is not expected to result in significant long-term or short-term impact or to result in substantial adverse effects, and direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this ISMND.

4.22 Inventory of Mitigation Measures

AESTHETICS

AES-1: Prior to issuance of City permits, the Project proponent shall obtain take authorization from CDFW through either a CESA Incidental Take Permit (ITP) or Western Joshua Tree Conservation Act (WJTCA) ITP. The Project proponent shall be required to adhere to all measures and conditions set forth within the CESA ITP or WJTCA ITP. The Project proponent shall provide compensatory mitigation outlined in the CESA ITP or WJTCA ITP. Options for mitigation will include but are not limited to purchase of credits at a CDFW approved mitigation bank (e.g., Antelope Valley Conservation Bank), or; Payment into the western Joshua Tree Conservation Fund in accordance with the mitigation fee schedule presented in the WJTCA, or, Preservation in perpetuity of onsite or offsite Joshua Tree Woodland habitat with long-term protection (e.g., Conservation Easement) and a funding mechanism (i.e., endowment).

BIOLOGICAL RESOURCES

BIO-1: A desert vegetation preservation plan be prepared and submitted to the City of Palmdale by the Project Applicant as part of the proposed Project development application in order to maximize the amount of native desert vegetation that can be preserved throughout development. This plan shall include:

- A written report and site plan which depicts the location of each California juniper, discusses their age and health, and identifies and locates all trees and shrubs which can be saved in place or located;
- A site landscaping plan showing the proposed locations of all Joshua trees, California junipers, and any other native desert vegetation that will remain on-site;
- A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee, in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured;
- Such other and further information as the Director of Planning may deem necessary to fulfill the purposes and intent of this chapter in a particular case.

BIO-2: Impacts to western Joshua trees shall be avoided to the extent feasible. Prior to any site disturbance activities, a buffer shall be placed around each western Joshua tree that can be preserved at a minimum distance of five feet beyond the tree's drip line. Temporary fencing, signage, and flagging shall be erected to prevent impacts to the tree and buffered area for the duration of construction activities. In the event that western Joshua trees cannot be preserved during Project construction or operation, an Incidental Take Permit for the removal of western Joshua trees shall be obtained from CDFW prior to the removal of western Joshua trees and the issuance of any grading or construction permit. In addition, all applicable fees as established in the western Joshua Tree Conservation Act shall be paid by the Project developer prior to the removal of any western Joshua trees.

BIO-3: A minimum standard of preservation for California juniper shall be met by the Project Applicant in accordance with Section 14.04.070 of the City of Palmdale municipal code. If this standard cannot be met, the developer shall pay all associated in-lieu fees as required by the City.

BIO-4: No more than 30 days prior to the commencement of construction activities, a qualified biologist shall survey the Project site to determine whether burrowing owl occur on the site. If burrowing owl is found to be present on the Project site, CDFW shall be consulted, and all applicable protocols, as established by CDFW, shall be adhered to prior the commencement of construction activities.

BIO-5: To the extent feasible, construction-related activities shall be conducted outside of the nesting bird season (February 1 through August 31). If construction must occur during the nesting bird season, a qualified biologist shall conduct a nesting bird survey of the Project site no more than 72 hours prior to the commencement of vegetation removal activities. If no active nests or breeding activities are found, construction activities may begin. If an active nest and/or breeding activities are determined to be present, the nest site/breeding habitat shall be delineated by a biological monitor, and a buffer of no less than 300 feet (500 feet for raptors) shall be established in which no construction activities are permitted until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the Project.

BIO-6: Prior to the commencement of construction activities, a floristic survey shall be conducted for short-joint beavertail. If detected, each individual shall be flagged or fenced for avoidance prior to the commencement of construction activities. If avoidance is not feasible, a qualified biologist shall develop a short-join beavertail removal and reintroduction plan for any impacted plants. This plan must be approved by CDFW prior to the issuance of grading permits.

BIO-7: Prior to the commencement of construction activities, a qualified biologist shall conduct clearance surveys for desert tortoises on the Project site. Clearance surveys shall follow the USFWS Clearance Survey Protocol for the Mojave Desert Tortoise (May 2019). If desert tortoise is determined to be present on the Project site, the Project developer shall develop and implement a mitigation and monitoring plan in consultation with USFWS and CDFW.

BIO-8: Prior to the commencement of construction activities, a qualified biologist shall conduct a survey for Crotch's bumblebee during the species' active period (March to July). This survey shall include a search for Crotch's bumblebee activity and the presence of ground nests. If a ground nest is observed, the nest shall remain in place until it is determined to be no longer active by a qualified biologist. If Crotch's bumblebee is present on the Project site and may occur during Project activities, the Project Applicant shall consult with CDFW regarding the implementation of avoidance measures, or the issuance of an Incidental Take Permit.

BIO-9: Prior to the commencement of construction activities, a qualified biologist shall conduct surveys for Mohave ground squirrel in accordance with the California Department of Fish and Game Mohave Ground Squirrel Survey Guidelines (January 2003). Surveys for Mohave ground squirrels are performed between March 15 and July 15 using standard live trapping techniques. A total of three rounds of trapping are required during this time, although trapping shall cease once a

Mohave ground squirrel is captured or observed. If these surveys obtain positive results for Mohave ground squirrel, or if Mohave ground squirrel presence is assumed within the Project site, the Project developer shall obtain incidental take authorization from CDFW prior to the commencement of construction activities.

BIO-10: No more than 72 hours prior to the commencement of construction activities, a qualified biologist shall conduct a survey for California glossy snake, coast horned lizard, and Northern California legless lizard. If any of these species are found to be present on the Project site, no construction activities shall commence until the individuals have left the area or have been relocated by a qualified biologist in accordance with CDFW protocols.

BIO-11: Prior to the fill, alteration, or other impacts to the bed or bank of the existing onsite ephemeral drainage, a jurisdictional delineation of this drainage shall be carried out to determine which jurisdiction(s) this drainage falls under. Dependent upon the results of the jurisdictional delineation a CDFW Notification of Streambed Alteration or Water Discharge Requirement pursuant to the Porter-Cologne Water Quality Act may be required. The applicable permit shall be obtained prior to the fill, alteration, or other impacts to the bed or bank of this ephemeral drainage.

CULTURAL RESOURCES

CUL-1: In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-2: If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CUL-3: If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

GEOLOGY AND SOILS

GEO-1: Prior to commencement of construction activities, all vegetation, rocks, topsoil, loose and disturbed soils shall be stripped from the site during clearing and grubbing activities. Prior to site grading fill, a certified geologist shall be consulted to determine the depth and amount of topsoil that is to be removed.

GEO-2: All soil excavations shall be conducted under the Occupation Safety and Hazard Administration (OSHA)'s safety guideline and shall be inspected by a qualified geologist. If any signs of instability or excessive sloughing are noted, immediate remedial action shall be initiated by the geologist or geotechnical engineer on site.

GEO-3: All site grading fill material shall be approved by a geotechnical engineer prior to soil placement.

LAND USE

LU-1: Project is required to have approval of General Plan Amendment (23-0002), to allow for the use of a on-site alternative wastewater treatment system until public sanitary sewer is available within 200 feet of the Project site. Upon availability of a public sanitary sewer system within 200 feet of the Project site, the Project owner will be required to tie into the public sanitary sewer system. Zone Change (ZC 24-0003), and Conditional Use Permit (CUP 24-0001) from the City of Palmdale City Council to change from existing zoning of Neighborhood Commercial (NC) to Regional Commercial (RC) zone for approval of the use of a private septic system. The CUP will allow for the fueling station and convenience store within the RC zoning.

TRANSPORTAION AND TRAFFIC

TRAN-1: Project will signalize the intersection of Guyon Avenue/Project Driveway one and Avenue S to the satisfaction of the City Engineer.

TRAN-2: Project will construct required improvements along the property frontage including curb, gutter, sidewalk and exclusive right turn lane at Guyon Avenue/Project Driveway one and Avenue S to the satisfaction of the City Engineer.

TRAN-3: Project will construct a raised median along the property frontage including an eastbound left turn lane at the intersection of Guyon Avenue/Project Driveway one and Avenue S with a recommended length of 100 feet minimum with the appropriate transition to the satisfaction of the City Engineer.

TRIBAL CULTURAL RESOURCES

TCR-1: The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

TCR-2: Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

UTILITIES AND SERVICES

UTL-1: The Project applicant is responsible for filing and completing a General Plan Amendment to allow for the use of a on-site alternative wastewater system until public sanitary sewer is available within 200 feet of the Project site. Apon availability of public sanitary sewer system within 200 feet of the Project site, the Project owner will be required to tie into the public sanitary sewer system. The Project is also required to comply with the City of Palmdale plumbing code, Local Agency Management Plan, Lahontan Regional Water Quality Control Board, and LA County Department of Public Health policies and requirements related to the design, operation and maintenance of Onsite Wastewater Treatment Systems (OWTS) within the City.

Chapter 5 Report Preparers

Lead Agency

Brenda Magaña, Planning Manager - City of Palmdale Department of Economic Development

Project Applicant

Melanie Ruff, Maverik Inc.

Rich Piggot, Maverik Inc.

Farman Shir, P.E., QSD, Principal – Site Design Collaborative (SDC)

Catherine Otis, Project Manager – Site Design Collaborative (SDC)

Consultant Team

The Altum Group

Anna Choudhuri, Environmental Manager

Madeline Luke, Assistant Environmental Planner

James R. Bazua, Principal Engineer PE.

Emily Roethler, Design Engineer

Sub-Consultants

Air Quality, Energy, Greenhouse Gas Emissions, Noise
Mike Dickerson, Principal – *MD Acoustics*

Biological Resources
Barry Nerhus, Principal Ecologist - *Endemic Environmental Services*

Geological Resources
Jefferey J. Egbert, P.E., LEED A.P., M. ASCE - *CMT Technical Services*

Traffic and Transportation
George Ghossain, Principal Engineer - *Integrated Engineering Group*

Cultural Resources, Tribal Resources
Sherri Andrews, M.A., RPA - ASM Affiliates

Chapter 6 References

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Persons Contacted

Los Angeles County Sheriff's Department, Sherrif's Information Bureau Operations Center; email received with staffing info on July 13 2023.

Los Angeles County Fire Department Contacted July 10 2023. Spoke to Ginna Cortez. Was sent to Christopher Snee. Emailed and left voicemail same day. Never received a response. Followed up July 11 2023, July 14, 2023.

Los Angeles County Fire Department Contacted Station 131 July 10 2023, July 11 2023, July 14 2023, July 25 2023, August 01 2023, August 10 2023, August 28 2023, September 01 2023. No response.

County of Los Angeles. Sent in information request per the link on the following dates: July 10 2023, July 11 2023, July 14 2023, July 25 2023, August 01 2023, August 10 2023, August 28 2023, September 01 2023. No response.

Chapter 7 Response to Comments

Attachment A

Antelope Valley Air Quality Management District

Outlook

FW: Maverik - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, and AGR 24-0007

From Brenda Magana <bmagana@cityofpalmdaleca.gov>
Date Mon 12/16/2024 3:27 PM
To Catherine Otis <cotis@sdcollaborative.net>
Cc Salvador Mendez <smendez@cityofpalmdale.org>

1 attachment (147 KB)

1124 149 Notice of Intent to Adopt a Mitigated Negative Declaration for GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, and DA 24-0007.pdf;

FYI

From: Sandra Sarabia <SSarabia@avaqmd.ca.gov>
Sent: Wednesday, November 6, 2024 2:01 PM
To: Brenda Magana <bmagana@cityofpalmdaleca.gov>
Cc: Barbara Lods <blods@avaqmd.ca.gov>
Subject: RE: Maverik - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, and AGR 24-0007

CAUTION: This email originated from outside of the organization.

Good Afternoon,

In response to your request for comment, please see the attached document(s).

If you need any further assistance or have any questions, please feel free to contact me.

Thank you,

Sandra Sarabia
Air Quality Specialist
Antelope Valley AQMD
(661) 723-8070 ext. 20
ssarabia@avaqmd.ca.gov | www.avaqmd.ca.gov

From: Kathy Inman <kinman@cityofpalmdale.org>
Sent: Monday, October 28, 2024 7:30 AM

Subject: Maverik - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, and AGR 24-0007

Attached, please find the Notice of Intent to Adopt a Mitigated Negative Declaration for the above-referenced applications. The review period is from October 28, 2024, through November 26, 2024. Please provide any written comments to Planning Manager Brenda Magaña at bmagana@cityofpalmdale.org. Below is the link to review the Mitigated Negative Declaration.

https://www.cityofpalmdaleca.gov/277/Environmental-Documents

Thank you,
--
Kathy Inman
Senior Administrative Assistant

CITY OF PALMDALE

Economic and Community Development | Planning
38250 Sierra Highway
Palmdale, CA 93550

(661)267-5229 Direct
(661)267-5200 Main

www.cityofpalmdale.org

Hours: Monday – Thursday, 7:30 am to 6:00 pm ~ closed Friday

Antelope Valley Air Quality Management District
2551 West Avenue H Lancaster, CA 93536
661-723-8070
www.avaqmd.ca.gov
Barbara Lods, Executive Director

November 6, 2024

In reply, please refer to AV1124/149

Brenda Magana
City of Palmdale
38300 Sierra Highway
Palmdale, CA 93550

Project: Notice of Intent to Adopt a Mitigated Negative Declaration for General Plan Amendment 23-0002, Zone Change 24-0003, Conditional Use Permit 24-0001, Site Plan Review 24-0005, and Development Agreement 24-0007

To Whom It May Concern:

The Antelope Valley Air Quality Management District (District) has received the request to comment on Project: General Plan Amendment 23-0002, Zone Change 24-0003, Conditional Use Permit 24-0001, Site Plan Review 24-0005, and Development Agreement 24-0007 requesting to construct 24 fuel pumps, an air pump station, two underground fuel storage tanks, a convenience store, a generator, an on-site alternative wastewater treatment system, and a covered trash enclosure. This project site is located on a 6.09-acre site north of Avenue S and approximately 180 feet west of SR-14 in the City of Palmdale, CA (APN: 3004-016-032).

Prior to initiating any grading or grubbing construction activity, the District requires submission of the required Construction Excavation Fee as well as compliance with all prerequisites outlined in District Rule 403, Fugitive Dust, including submission of payment, proposal, and approval of a Dust Control Plan, installation of signage and the completion of a successful on-site compliance inspection by an AVAQMD field inspector. During the construction phase, all disturbed areas should be stabilized so that no visible fugitive dust leaves the property line and does not impact traffic or neighboring residents. If an area of one-half acre or more of the Disturbed Surface Area remains unused for seven or more days, the area must comply with the conditions for a Stabilized Surface outlined in Rule 403. Upon completion of the project, all disturbed surface areas must meet the definition of a stabilized surface, as defined in Rule 403 and verified by District staff.

The proposed gasoline station identified in the IS/MND will require the applicant, ***prior to beginning construction***, to obtain a District Authority to Construct permit corresponding to the requirements defined in District Rule 461 - *Gasoline Transfer And Dispensing*. An element of the permitting process for gasoline dispensing stations is to perform a Health Risk Assessment based on the proposed annual gasoline throughput at the station. Due to the proximity of the proposed station to existing residences and businesses, the station operator will likely be required to perform a Public Notice for neighbors within ¼ mile of the proposed station. The Public Notice will provide information about the small quantities of some toxic compounds, mainly benzene that will be emitted from the facility. The AVAQMD will evaluate the short-term (acute) and long-term (chronic) health impacts associated with the potential emissions and ensure through permit restrictions that the surrounding public will not experience any adverse health impacts due to the toxic nature of these emissions.

The District requires applicable permit application(s) and fees be submitted for any equipment or process that may not be exempt under District Rule 219 and have the potential to emit or control air contaminants as a condition of approval, including, but not limited to, emergency generators rated at over 50 bhp. All construction equipment utilized on this project must comply with the Air Resources Board In-Use Off-Road Diesel Vehicle Regulation.

AV Air Quality Management District (AVAQMD) has grant funds available to assist with the construction and/or installation of electric vehicle charging at publicly accessible commercial/industrial developments. If you want to learn more about the program or apply for funds, don't hesitate to get in touch with the District for more information.

Prior to the issuance of any Permit by the City of Palmdale and the commencement of grading or construction activity, all projects must undergo clearance by the Antelope Valley Air Quality Management District (AVAQMD).

Thank you for the opportunity to review this planning document. If you have any questions regarding the information presented in this letter please contact me at (661) 723-8070 ext. 23 or blods@avaqmd.ca.gov.

Sincerely,

Barbara Lods

Barbara Lods
BJL/SS: Sent via Email

Antelope Valley Air Quality Management District
2551 W Avenue H, Suite 102
Lancaster, CA 93536
661.723.8070

City of Palmdale Clearance Checklist

Project Name: *GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, & DA 24-0007*

Location: *APN: 3004-016-032*

Avenue S & W of SR-14

Acres: *6.09-acres*

Planner: *Brenda Magana*

Chron #: *AV1124/149*

Prior to the issuance of any Permit by the City of Palmdale and the commencement of grading or construction activity, all projects must undergo clearance by the Antelope Valley Air Quality Management District (AVAQMD) for the following:

- [x] Rule 302-Construction Excavation Fee
- [x] Dust Control Plan (DCP) with Signage
- [ ] Dust Control Signage (Only)
  - [ ] Project Signage Information Form
- [x] Rule 219-Permitting: Gasoline
- [x] CARB Equipment
- [ ] Rule 1403-Asbestos
- [ ] Cannabis Odor Control Plan
- [ ] Other:

For Office Use Only

Date Received: _____

Authorized District Signature: _____

Additional Notes:

Date Approved (Stamp):

Response:

Thank you for your comments and for taking the time to review the environmental documents for the proposed project. We appreciate the Antelope Valley Air Quality Management District's involvement in the environmental review process and the valuable input provided. Below is a response addressing your concerns:

Construction Excavation Fee and Dust Control: The Project Applicant will submit the required Construction Excavation Fee and adhere to all conditions outlined in District Rule 403, including submission of the Dust Control Plan, payment, proposal, and approval.

Gasoline Station Permitting: Any potential impacts from toxic emissions, such as benzene, were evaluated by MD Acoustics and all findings were discussed in the Initial Study Mitigated Negative Declaration. It is understood that the proposed gasoline station will require an Authority to Construct permit in accordance with District Rule 461.

Permit Applications for Equipment: The Applicant will ensure that all necessary permit applications and fees are submitted for any equipment or processes that may not be exempt under District Rule 219. This includes emergency generators rated over 50 bhp and any other equipment with the potential to emit or control air contaminants.

Compliance with Off-Road Diesel Vehicle Regulations: All construction equipment used on the project will comply with the Air Resources Board's In-Use Off-Road Diesel Vehicle Regulation to minimize emissions during construction.

Thank you for your comment.

Attachment B

California Department of Fish and Wildlife Comment Letter and Response to Comments

Outlook

[EXTERNAL] MND Inquiries - Maverik Fueling Station Project - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, AGR 24-0007

From Portugal, Julisa@Wildlife <Julisa.Portugal@Wildlife.ca.gov>
Date Thu 11/14/2024 4:18 PM
To Brenda Magana <bmagana@cityofpalmdaleca.gov>

CAUTION: This email originated from outside of the organization.

Hi Brenda,

I hope your doing good. I am reviewing the MND for the Maverik Fueling Station Project - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, AGR 24-0007. I was wondering if you could clarify what the exact acreage is associated with this Project? In the documents for this Project there are two acreages (6.09 acres, 2.83 acres) that are used in the MND and BRA. Additionally, was there a preconsultation review by CDFW for this Project? I have a preconsultation letter with a similar Project description, so I was wondering if this is the same Project or different. Any clarification is appreciated, thanks!

Best,

Julisa Portugal
Environmental Scientist
South Coast Region-5
3030 Old Ranch Pkwy Suite 400
Seal Beach, CA 90740
Cell: (562) 330-7563
Email: Julisa.Portugal@wildlife.ca.gov

Response:

Thank you for your comments and for taking the time to review the environmental documents for the proposed project. We appreciate California Fish and Wildlife's involvement in the environmental review process and the valuable input provided. Below is a response addressing your concerns:

In response to the California Fish and Wildlife question, the total acreage of the proposed Maverik Fueling site is 6.09 acres.

Thank you for your comment.

Attachment C

Department of Transportation (DOT) Comment Letter and Response to Comments

Outlook

[EXTERNAL] SCH # 2024101037: GPA 23-0002, ZC 24-0003, CUP 24- 0001, SPR 24-0005, AGR 24-0007

From Oloresisimo, Jaden@DOT <Jaden.Oloresisimo@dot.ca.gov>
Date Tue 11/26/2024 1:32 PM
To Brenda Magana <bmagana@cityofpalmdaleca.gov>
Cc OPR State Clearinghouse <State.Clearinghouse@opr.ca.gov>

1 attachment (211 KB)
LA-2024-04664 GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, AGR 24-0007.pdf;

CAUTION: This email originated from outside of the organization.

Good afternoon Brenda,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for this MND (SCH # 2024101037). Attached is Caltrans' response letter.

If you have any questions, please feel free to contact me and refer to GTS # 07-LA-2024-04664.

Thank you,

Jaden Oloresisimo
Transportation Planner
Caltrans D7|Local Development Review
P: (213) 266-3562

DOTP
TRANSPORTATION PLANNING

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 266-3562
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life

November 26, 2024

Brenda Magaña, Planning Manager
City of Palmdale
Economic and Community Development Department
Planning Division
38250 Sierra Highway
Palmdale, CA 93550

RE: GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, AGR 24-0007: Mitigated Negative Declaration (MND)
GTS # 07-LA-2024-04664
SCH # 2024101037
Vic. SR 14 PM 58.206

Dear Brenda Magaña:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. The Project would include the construction of 24 fuel pumps, air pump station, two underground fuel storage tanks, an approximately 5,600 square foot convenience store with an outdoor patio space, a generator, on-site alternative waste water treatment system, and a covered trash enclosure. The proposed Project would also include 39 parking spaces; two of the 39 spaces are designated ADA parking, one of which is van-accessible. Access to the site would be provided along Avenue S. The City of Palmdale is the Lead Agency under the California Environmental Quality Act (CEQA).

The closest state facility is SR 14. After reviewing the project's documents, Caltrans has the following comments:

Caltrans strongly recommends that auto-oriented projects, like the one proposed, be required to contribute Complete Streets infrastructure as a condition of approval. Complete Streets incorporate high-quality infrastructure for pedestrians, bicyclists, and transit riders, prioritizing the needs of all users, regardless of age or ability. The most effective methods to reduce pedestrian and bicyclist exposure to vehicles is through physical design and geometrics. These methods include the construction of physically separated facilities such as Class IV bike lanes, wide sidewalks, pedestrian refuge islands, landscaping, street furniture, and reductions in crossing distances through

roadway narrowing. The implementation of Complete Streets leads to positive outcomes, including improved regional connectivity, enhanced air quality, reduced traffic congestion, better first/last-mile connections for transit users, and overall improved safety for all modes of transportation.

Additionally, Caltrans will require an Encroachment Permit for work conducted within the State Right-of-way. To minimize disruption, Caltrans recommends limiting large truck travel and construction traffic to off-peak commute hours. A permit for any heavy construction equipment and or materials that require the use of oversized transport vehicles on State highways. If construction traffic is expected to cause issues on any State facilities, please submit a construction traffic control plan detailing potential impacts for Caltrans for review.

If you have any questions, please feel free to contact Jaden Oloresisimo, the project coordinator, at Jaden.Oloresisimo@dot.ca.gov and refer to GTS # 07-LA-2024-04664.

Sincerely,

Anthony Higgins

Anthony Higgins
Acting LDR/CEQA Branch Chief

cc: State Clearinghouse

Response:

Thank you for your comments and for taking the time to review the environmental documents for the proposed project. We appreciate Caltrans' involvement in the environmental review process and the valuable input provided. Below is a response addressing your concerns:

Complete Streets Infrastructure: We understand and acknowledge Caltrans' recommendation for incorporating Complete Streets infrastructure into the proposed project. The Project has followed city instructions by providing street widening for future developments to further complete future road infrastructure.

State Right-of-Way and Encroachment Permit: The Project will comply with applicable regulations and obtain the necessary permits from the City of Palmdale.

Construction Traffic and Off-Peak Hours: The Project will comply with City regulations pertaining to traffic during construction hours.

Thank you for your comment.

Attachment D

Los Angeles County Waterworks District Comment Letter and Response to Comments

Outlook

FW: [EXTERNAL] Maverik - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, and AGR 24-0007

From Brenda Magana <bmagana@cityofpalmdaleca.gov>
Date Mon 12/16/2024 3:25 PM
To Catherine Otis <cotis@sdcollaborative.net>

FYI

From: Evelyn Ballesteros <eballesteros@dpw.lacounty.gov>
Sent: Thursday, November 21, 2024 11:45 AM
To: Brenda Magana <bmagana@cityofpalmdaleca.gov>
Cc: Aracely Jaramillo <AJaramillo@dpw.lacounty.gov>; Stacey Katsandonis <SKatsandonis@dpw.lacounty.gov>; Rasta Naderi <rnaderi@dpw.lacounty.gov>
Subject: [EXTERNAL] Maverik - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, and AGR 24-0007

CAUTION: This email originated from outside of the organization.

Good morning Brenda,

The Los Angeles County Waterworks Districts received a Notice of Intent to Adopt a Mitigated Negative Declaration and Initial Study for the subject project.

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY NOTICE OF INTENT TO ADOPT A DRAFT MITIGATED NEGATIVE DECLARATION FOR MAVERIK FUELING STATION - PALMDALE, APN 3004-016-032

Thank you for the opportunity to review the Mitigated Negative Declaration (MND)/Initial Study (IS) for Maverik Fueling Station - Palmdale, Assessor Parcel Number (APN) 3004-016-032. We have reviewed the document and offer the following comment:

This project is not located within the service area or sphere of influence of Los Angeles County Waterworks District No. 40, Antelope Valley. The report indicates the project intends to be served by Palmdale Water District. As such, we will not be the water purveyor for this development and have no further comments on water supply or infrastructure impacts.

If you have any questions, please contact me.

Thanks,
Evelyn Ballesteros, PE
Civil Engineer
Los Angeles County Public Works
(626)300-4681
Help us serve you better: Your feedback is important. To take our Development Services Satisfaction survey, please click here.

From: Kathy Inman <kinman@cityofpalmdale.org>
Sent: Monday, October 28, 2024 7:30 AM
Subject: Maverik - GPA 23-0002, ZC 24-0003, CUP 24-0001, SPR 24-0005, and AGR 24-0007

CAUTION: External Email. Proceed Responsibly.

Attached, please find the Notice of Intent to Adopt a Mitigated Negative Declaration for the above-referenced applications. The review period is from October 28, 2024, through November 26, 2024. Please provide any written comments to Planning Manager Brenda Magaña at bmagana@cityofpalmdale.org. Below is the link to review the Mitigated Negative Declaration.

https://www.cityofpalmdaleca.gov/277/Environmental-Documents

Thank you,
--
Kathy Inman
Senior Administrative Assistant

CITY OF PALMDALE

Economic and Community Development | Planning
38250 Sierra Highway
Palmdale, CA 93550

(661)267-5229 Direct
(661)267-5200 Main

www.cityofpalmdale.org

Hours: Monday – Thursday, 7:30 am to 6:00 pm ~ closed Friday

Response:

Thank you for your comments and for taking the time to review the environmental documents for the proposed project. We appreciate Los Angeles County Waterworks Districts involvement in the environmental review process and the valuable input provided. It is understood that the Project site is not within the jurisdiction of the Los Angeles County Waterworks Department.

Thank you for your confirmation and response.

Attachment E

Yuhaaviatam of San Manuel Nation Comment Letter and Response to Comments

Outlook

FW: AB52: GPA 23-002, ZC 24-003, CUP 24-001, SPR 24-0005 and DA 24-0007 (APN 3004-016-032), City of Palmdale [CIT-PALM-2024-8]

From Kristen Tuosto <Kristen.Tuosto@sanmanuel-nsn.gov>
Date Mon 12/16/2024 3:24 PM
To Brenda Magana <bmagana@cityofpalmdale.org>

Hello Brenda,

I just realized I put Victorville instead of Palmdale in the subject line.

This response is for Palmdale.

Best,
Kristen

From: Kristen Tuosto
Sent: Monday, September 16, 2024 2:27 PM
To: Brenda Magana <bmagana@cityofpalmdale.org>
Subject: AB52: GPA 23-002, ZC 24-003, CUP 24-001, SPR 24-0005 and DA 24-0007 (APN 3004-016-032), City of Victorville [CIT-PALM-2024-8]

Dear Brenda,

Thank
you for contacting the Yuhaaviatam of San Manuel Nation (formerly the San Manuel Band of Mission Indians) regarding the above referenced project. YSMN
appreciates the opportunity to review the project documentation, which was received by our Cultural Resources Management Department on September 13, 2024, pursuant to
CEQA (AB 52) and CA PRC 21080.3.1. The proposed project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. However, due to the nature and location of the proposed project, and given the
CRM Department's present state of knowledge, YSMN does not have any concerns with the project's implementation, as planned, at this time. As a result, YSMN requests that the following language be made a part of the project/permit/plan conditions:

CUL MMs

1. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot
buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may

continue during this assessment period. Additionally, the
Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find,
so as to provide Tribal input with regards to significance and treatment.

2.
If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist
shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

3.
If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within
a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

TCR MMs

1.
The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact
cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as
amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN
for the remainder of the project, should YSMN elect to place a monitor on-site.

2.
Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports,
etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

Note: Yuhaaviatam of San Manuel Nation realizes that there may be additional tribes claiming cultural affiliation to the area; however, Yuhaaviatam

of San Manuel Nation can only speak for itself. The Tribe has no objection if the agency, developer, and/or archaeologist wishes to consult with other tribes in addition to YSMN and if the Lead Agency wishes to revise the conditions to recognize additional tribes.

Please provide the final copy of the project/permit/plan conditions so that YSMN may review the included language. If you should have any further questions with regard to this matter, please do not hesitate to contact me at your convenience, as I will be your Point of Contact (POC) for YSMN with respect to this project.

Regards,
Kristen

Response:

Thank you for your comments and for taking the time to review the environmental documents for the proposed project. We appreciate Yuhaaviatam of San Manuel Nation (formerly the San Manuel Band of Mission Indians) involvement in the environmental review process and the valuable input provided. Below is a response addressing your concerns:

The Cultural Resources has been updated to include the Tribes recommended mitigation measures and Tribal Cultural Resources section has been updated to include the tribes response from the AB 52 and SB 18 consultation period. Mitigation measures and discussion in the Tribal Cultural section has been updated to include the results of consultation and tribal recommended mitigation measures as seen in the comment letter. See below mitigation measures:

CUL-1: In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-2: If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CUL-3: If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

TCR-1: The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

TCR-2: Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

Thank you for you comments.

Maverik Fueling Station – Palmdale

Appendices

Lead Agency:

City of Palmdale
38250 Sierra Highway
Palmdale, CA 93550

Prepared by:

The Altum Group
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Palm Desert, CA 92260

Project Applicant:

Farman Shir, PE., QSD
Site Design Collaborative
245 East Third St.
Long Beach, CA 90802

October 2024

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Appendix A

Air Quality, GHG, and Energy Study

Maverik Palmdale Fueling Station

Air Quality, Greenhouse Gas, and Energy Impact Study

City of Palmdale, CA

Prepared for:

Ms. Anna Choudhuri
The Altum Group
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Rancho Mirage, CA 92270

Prepared by:

MD Acoustics, LLC
Tyler Klassen, EIT
1197 Los Angeles Ave, Ste C-256
Simi Valley, CA 93065

Date: 9/27/2024

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GLOSSARY OF TERMS

AQMP	Air Quality Management Plan
AVAQMD	Antelope Valley Air Quality Management District
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CH_4	Methane
CNG	Compressed natural gas
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DPM	Diesel particulate matter
GHG	Greenhouse gas
HFCs	Hydrofluorocarbons
LST	Localized Significant Thresholds
MDAB	Mojave Desert Air Basin
$MTCO_2e$	Metric tons of carbon dioxide equivalent
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
NO_2	Nitrogen dioxide
N_2O	Nitrous oxide
O_3	Ozone
PFCs	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PMI	Point of maximum impact
PPM	Parts per million
PPB	Parts per billion
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
SCAQMD	South Coast Air Quality Management District
SF_6	Sulfur hexafluoride
SIP	State Implementation Plan
SOx	Sulfur Oxides
SRA	Source/Receptor Area
TAC	Toxic air contaminants
VOC	Volatile organic compounds
WRCC	Western Regional Climate Center

1.0 Introduction

1.1 Purpose of Analysis and Study Objectives

This air quality and greenhouse gas (GHG) analysis was prepared to evaluate whether the estimated criteria pollutants and GHG emissions generated from the project would cause a significant impact to the air resources in the project area. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The assessment is consistent with the methodology and emission factors endorsed by Antelope Valley Air Quality Management District (AVAQMD), California Air Resource Board (CARB), and the United States Environmental Protection Agency (US EPA).

1.2 Project Summary

1.2.1 Site Location

The project site is located near the northwest corner of West Avenue South and State Route 14 (APN: 3004-016-032), in the City of Palmdale, CA, as shown in Exhibit A. The site is currently zoned as Neighborhood Commercial (NC) by the City of Palmdale. The project is bordered by vacant land to the north, east, and west and West Avenue S to the south with commercial uses further.

1.2.2 Project Description

The project proposes the construction of a 5,637-square foot convenience market with 12 fuel pumps and 37 parking spaces on approximately 2.58 acres. Exhibit B demonstrates the site plan for the project.

Construction activities within the project area will consist of site preparation, grading, building, paving, and architectural coating. Table 1 summarizes the land use description for the project Site.

Table 1: Land Use Summary

Land Use	Unit Amount	Size Metric
Convenience Market with Gas Pumps	24	Pumps
Parking Lot	37	Spaces

1.2.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution than others due to their exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, a sensitive receptor would be a location where a sensitive individual could remain for 24-hours or longer, such as residences, hospitals, and schools (etc.).

The closest existing sensitive receptor (to the site area) is the single-family residence 1,400 feet to the southwest of the project boundary.

1.3 Executive Summary of Findings and Mitigation Measures

The following is a summary of the analysis results:

Construction-Source Emissions
Project construction-source emissions would not exceed regional thresholds of significance established by the AVAQMD for VOCs. For localized emissions, the project will not exceed applicable Localized Significance Thresholds (LSTs) established by the AVAQMD.

Project construction-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). As discussed herein, the project will comply with all applicable AVAQMD construction-source emission reduction rules and guidelines. Project construction source emissions would not cause or substantively contribute to violation of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS).

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts from the project are therefore considered less-than-significant.

Operational-Source Emissions
The project operational-sourced emissions would not exceed applicable regional thresholds of significance established by the AVAQMD. Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the Operations-Related Local Air Quality Impacts section of this report. Additionally, project-related traffic will not cause or result in CO concentrations exceeding applicable state and/or federal standards (CO “hotspots). Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the project.

Project operational-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). The project's emissions meet AVAQMD regional thresholds and will not result in a significant cumulative impact. The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential operational-source odor impacts are therefore considered less-than significant.

Project-related GHG emissions meet the AVAQMD thresholds and are also considered to be less than significant. The project also complies with the goals of the CARB Scoping Plan, AB-32, and SB-32**.**

Mitigation Measures

A. Construction Measures

Adherence to AVAQMD Rule 403 is required.

No construction mitigation required.

B. Operational Measures to Reduce Greenhouse Gas Emissions

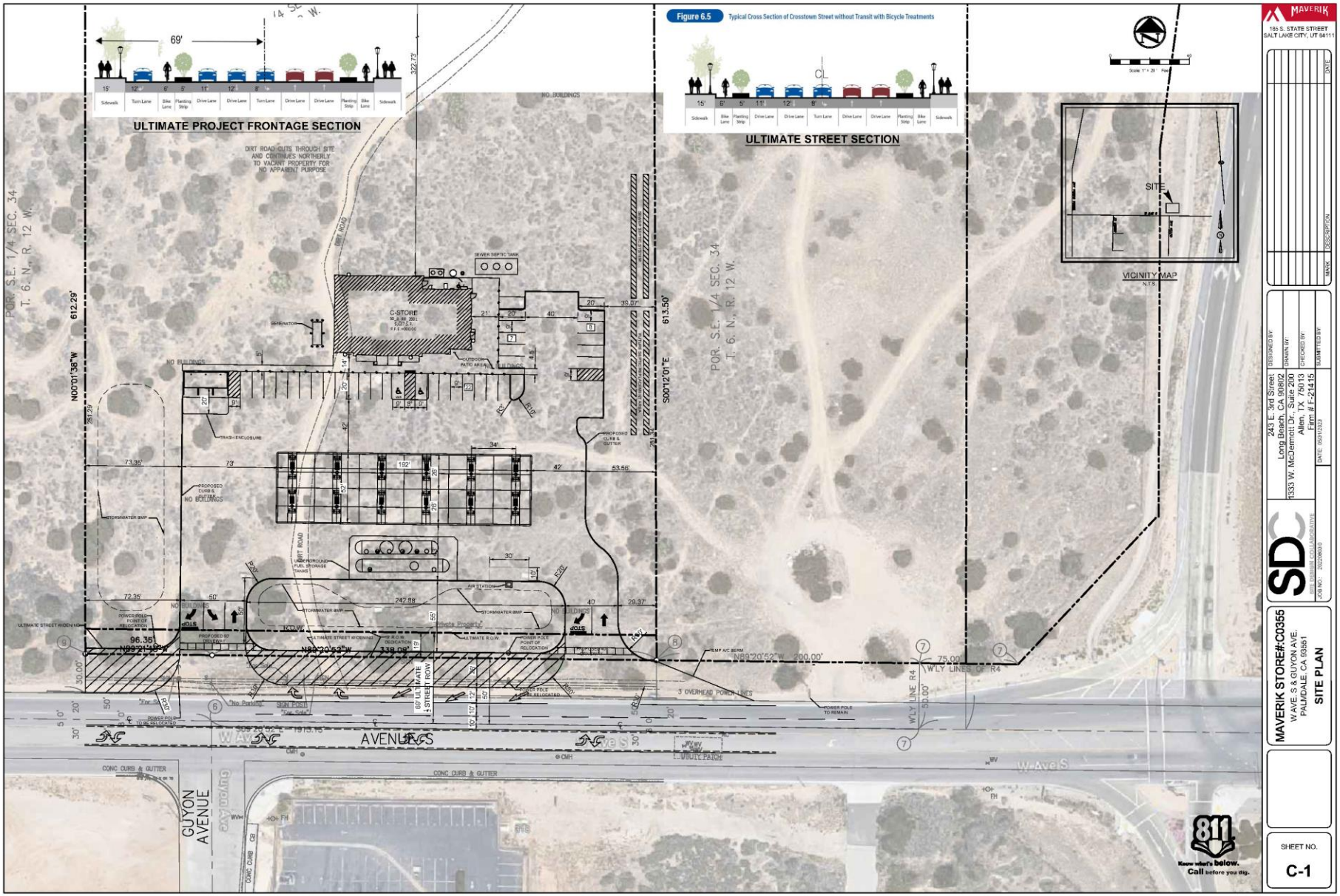
No operational mitigation required.

Exhibit A

Location Map

Exhibit B

Site Plan



2.0 Regulatory Framework and Background

2.1 Air Quality Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (ARB) regulates at the state level. The Antelope Valley Air Quality Management District (AVAQMD) regulates at the air basin level.

2.1.1 National and State

The EPA is responsible for global, international, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Air Quality Standards, also known as federal standards. There are six common air pollutants, called criteria pollutants, which were identified from the provisions of the Clean Air Act of 1970.

- Ozone
- Nitrogen Dioxide
- Lead
- Particulate Matter (PM10 and PM2.5)
- Carbon Monoxide
- Particulate Matter
- Sulfur Dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to project the public health.

A State Implementation Plan (SIP) is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The State Implementation Plan for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual federal attainment plans for regional air districts—air district prepares their federal attainment plan, which are sent to ARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. See http://www.arb.ca.gov/research/aaqs/aaqs.htm for additional information on criteria pollutants and air quality standards.

The federal and state ambient air quality standards are summarized in Table 2 and can also be found at http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

Table 2: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentrations[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O3)	1-Hour	0.09 ppm	Ultraviolet Photometry	- -	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm		0.070 ppm (147 µg/m³)		
Respirable Particulate Matter (PM10)[8]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µ/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		- -		
Fine Particulate Matter (PM2.5)[8]	24-Hour	- -	- -	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 µg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m³)	- -	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 µg/m³)		9 ppm (10 µg/m³)	- -	
	8-Hour (Lake Tahoe)	6 ppm (7 µg/m³)		- -	- -	
Nitrogen Dioxide (NO_2)[9]	1-Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	- -	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (357 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[10]	1-Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	- -	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	- -		- -	0.5 ppm (1300 mg/m³)	
	24-Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	- -	
	Annual Arithmetic Mean	- -		0.130ppm (for certain areas)[10]	- -	
Lead[11,12]	30 Day Average	1.5 µg/m³	Atomic Absorption	- -		
	Calendar Qrtr	- -		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	- -		0.15 µg/m³		
Visibility Reducing Particles[13]	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Notes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

10. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

11. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

13. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Several pollutants listed in Table 2 are not addressed in this analysis. Analysis of lead is not included in this report 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.

2.1.2 Antelope Valley Air Pollution Control District

The 1976 Lewis Air Quality Management Act established the AVAQMD and other air districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

The ARB is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

California is divided geographically into air basins for the purpose of managing the air resources of the State on a regional basis. An air basin generally has similar meteorological and geographic conditions throughout. The State is currently divided into 15 air basins. The proposed project site is located within

the Mojave Desert Air Basin (MDAB). The AVAQMD includes the desert portion of Los Angeles County. The AVAQMD is responsible for controlling emissions primarily from stationary sources within the AVAQMD and also maintains air quality monitoring stations to document historical and current levels of air quality within the District. The AVAQMD is also responsible for developing, updating, and implementing the Ozone Attainment Plan which establishes a plan to implement, maintain, and enforce a program of emission control measures to attain and maintain the federal ozone air quality standards. Attainment plans prepared by the various air pollution control districts throughout the state are used to develop the SIP for the State of California. The proposed project is located within the AVAQMD and, thus, is subject to the rules and regulations of the AVAQMD.

The AVAQMD and MDAB are responsible for formulating and implementing the air quality attainment plan (AQAP) for the Basin. Regional AQAPs were adopted in 1991, 1994, and 1997. The following SIP and AQAP are the currently approved plans for the Basin region:

- 1997 SIP for O_3, PM10, and NO_2
- 1995 Mojave Desert Planning Area Federal PM10 Attainment Plan; no formal action by the EPA

The AVAQMD completed the AVAQMD 2004 Ozone Attainment Plan (State and federal) in April 2004, which has been approved by the EPA.

The AVAQMD is downwind of the Los Angeles basin and the San Joaquin Valley. Prevailing winds transport ozone and ozone precursors from both regions into and through the MDAB during the summer ozone season. These transport couplings have been officially recognized by the CARB. Local AVAQMD emissions contribute to exceedances of both the NAAQS and CAAQS for ozone, but photochemical ozone modeling conducted by the AVAQMD and CARB indicates that the MDAB would be in attainment of both standards without the influence of this transported air pollution from upwind regions. Therefore, emissions reductions in the upwind area are critical to the attainment demonstration.

The following includes, but is not limited to, the AVAQMD rules that are applicable to the proposed project:

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.

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.

Rule 403 requires that fugitive dust be 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, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable suppression techniques are indicated below and include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas in active for 10 days or more).
- Water active sites at least three times daily.
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave construction access roads at least 100 feet onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets.

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.

Idling Diesel Vehicle Trucks – Idling for more than 5 minutes in any one location is prohibited within California borders.

2.1.3 Local

Local jurisdictions, such as the City of Palmdale, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. It is the responsibility of the City of Palmdale to monitor pollutant levels and regulate air pollution sources.

City of Palmdale 2045 General Plan

The City of Palmdale updated their General Plan in October 2022. The 2045 General Plan Environmental Impact Report contains the following measures aimed at reducing air pollution:

AQ-1: Minimize local air pollution caused by motor vehicles.

AQ-1-1 *Reduced work-related trips.* Reduce the number and length of work-related trips through such means as providing a balance of jobs and housing in the community, promoting alternate work schedules, telecommuting, teleconferencing, company-sponsored ride-share and alternative fuel vehicle programs, use of commuter trains and other alternative modes of transportation to the workplace, creation of additional park and ride facilities, and improving the fiber optic network and connectivity.

AQ 1-2 *Reduced Non-Work Trips.* Reduce motor vehicle non-work trips through such means as location of residences in proximity to shopping and recreation/entertainment destinations, transit system improvements, and promoting merchant transportation incentives, and distance learning.

AQ 1-3 *Improve Traffic Flow.* Reduce vehicle emissions by maintaining and improving traffic flow per the Mobility Element.

AQ 1-4 *High Occupancy Vehicle Lanes.* Coordinate with Caltrans to promote high occupancy vehicle lanes on SR-14.

AQ 1-5 *Reduced Tailpipe Emissions.* As technology allows, reduce tailpipe emissions from City vehicles by replacing them with alternative fuel vehicles and encourage reduction of emissions from private vehicles through such means as reducing parking requirements and providing preferential parking for alternative fuel vehicles and bicycles.

AQ 1-6 *Airport Emissions Control.* To the extent practicable, reduce emissions from the future Palmdale Regional Airport by purchasing renewable energy, installing airport renewable energy systems, reducing energy consumption, monitoring the efficiency of heating, ventilation, and colling systems, and purchasing low or zero emission vehicles and ground support equipment.

AQ 1-7 *Expand Dial-A-Ride.* Expand services of the existing dial-a-ride program, resulting in reduced need for automobiles and parking by seniors and those with disabilities.

AQ 1-8 *Environmentally Review New Development.* Use the environmental review process for new development applications to assess and, as necessary, mitigate the impacts of new development related to increased vehicle miles traveled.

AQ 1-9 *Encourage transit and bike use.* Provide incentives to residents who bike or use public transportation such as free or discounted public transit or employer-provided subsidies or reimbursements for residents willing to bike or use public transit.

AQ 1-10 *Truck routes.* Restrict freight to certain routes and times by adopting rules and regulations that prohibit the use of trucks in certain areas within Palmdale.

AQ-2: Minimize particulates less than 10 microns in size (PM10) and minimizes activities that generate dust.

AQ 2-1 *Vegetative Stabilization.* Reduce roadway dust by requiring paving or vegetative stabilization of unpaved roads and parking lots.

AQ 2-2 *Construction Site Requirements.* Require measures at construction sites to prevent deposition of soil onto public rightof-way.

AQ 2-3 *Natural Contours.* Encourage developers to maintain natural contours to the greatest degree possible, to eliminate the need for extensive land clearing, blasting, ground excavation, grading and cut and fill operations.

AQ 2-4 *Erosion and Dust Control Measures.* Require erosion and dust control measures for new construction, including covering soil with straw mats or use of chemical soil and dust binders during site grading, followed by hydroseeding and watering disturbed construction areas as soon as possible after grading to prevent fugitive dust.

AQ-3: Reduction and/or elimination of unnecessary sources of air pollution.

AQ 3-1 *AVAQMD and Proven Technologies.* Promote the AVAQMD program to encourage local entities to install public electric vehicle charging stations to offer incentivize residents to purchase electric vehicles (e.g., vehicle buyback program), and the Carl Moyer program, which aims to improve the local air quality by funding local, cost-effective projects to upgrade heavy-duty equipment (Gross Vehicle Weight Rating greater than 14,000 lbs.) using proven technologies.

AQ 3-2 *Eliminate Emissions.* Promote the AVAQMD's efforts to eliminate emissions from such sources as excessive car dealership cold starts, excessive curb idling, emissions from advertising vehicles, and emissions from leaf blowers, among others, through assisting with implementation and enforcement of AVAQMD programs and rules.

AQ 3-3 *Complete Streets.* Design a more effective street system by emphasizing complete streets which accommodate all modes of transportation.

AQ 3-4 *Reduce Reactive Organic Gas.* Reduce reactive organic gas (ROG) and particulate emissions from building materials and construction methods, by promoting the use of nonsolvent-based, highsolid, or water-based coatings, and requiring compliance with all pertinent AVAQMD rules.

AQ 3-5 *Minimize Emissions.* Minimize emissions of toxic air contaminants that contribute to climate change and ozone depletion, and that create potential health risks for residents, workers, and visitors.

AQ 3-6 *Community Awareness.* Promote community awareness of the effects of climate change and ozone depleting gases, as well as methods to minimize the creation of those gases, by preparing and distributing educational materials, and cooperating with AVAQMD in establishing regional programs.

AQ 3-7 *Environmentally Review New Development Applications.* Through the environmental review process for new development applications, ensure that emissions of toxic air contaminants are minimized and that any significant health effects associated with such contaminants are appropriately mitigated.

AQ 3-8 *Green Technology Companies.* Encourage nonpolluting industry and clean green technology companies to locate in the city.

AQ-4: Reduce air pollution caused by energy consumption.

AQ 4-1 *EPIC Participation.* Encourage residents and business owners to participate in Energy for Palmdale's Independent Choice (EPIC).

AQ 4-2 *Energy Conservation.* Encourage energy conservation from all sectors of the community by promoting and/or requiring the use of energy efficient appliances, processes, and equipment, and promoting energy audits and retrofits of existing structures.

AQ 4-3 *Recycling.* Require local government, Palmdale citizens, and local businesses and industries to recycle, as mandated by state law, and to otherwise recycle to the maximum extent possible in accordance with the requirements of the Palmdale Municipal Code.

AQ 4-4 *Solar Energy.* Require new developments to minimize obstruction of direct sunlight for solar energy systems on adjacent properties.

2.2 Greenhouse Gas Regulatory Setting

2.2.1 International

Many countries around the globe have made an effort to reduce GHGs since climate change is a global issue.

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.

2.2.2 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 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 Safety Administration 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 would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require 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 would 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 would involve proposing new fuel economy and greenhouse gas standards for model years 2017 – 2025 by September 1, 2011.

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce greenhouse gas emissions and improve fuel efficiency of heavy-duty trucks and buses. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the agencies are proposing engine and vehicle standards starting in the 2014 model year which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by 2018 model year.

Issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020), the Safer Affordable Fuel-Efficient Vehicles Rule would maintain the Corporate Average Fuel Economy (CAFE) and CO2 standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO2 standards for model year 2020 are 43.7 mpg and 204 grams of CO2 per mile for passenger cars and 31.3 mpg and 284 grams of CO2 per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. This

Rule also excludes CO2- equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020.[1]

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 Adaption Plan. The EPA Plan identifies priority actions the Agency will take to incorporate considerations of climate change into its programs, policies, rules and operations to ensure they are effective under future climatic conditions. The following link provides more information on the EPA Plan: https://www.epa.gov/arc-x/planning-climate-change-adaptation

2.2.3 California

California Code of Regulations (CCR) Title 24, Part 6. CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008 and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. 2013, 2016, and 2019 standards have been approved and became effective July 1, 2014, January 1, 2016, and January 1, 2020, respectively.

California Code of Regulations (CCR) Title 24, Part 11. All buildings for which an application for a building permit is submitted on or after January 1, 2023 must follow the 2022 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions. The following links provide more information on Title 24, Part 11:
https://www.dgs.ca.gov/BSC/Codes
https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency

[1] National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf.

California Green Building Standards On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011. The Housing and Community Development (HCD) updated CALGreen through the 2015 Triennial Code Adoption Cycle, during the 2016 to 2017 fiscal year. During the 2022-2023 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2023 Triennial Code Adoption Cycle.

The Code is a comprehensive and uniform regulatory code for all residential, commercial and school buildings. CCR Title 24, Part 11: California Green Building Standards (Title 24) became effective in 2001 in response to continued efforts to reduce GHG emissions associated with energy consumption. CCR Title 24, Part 11 now require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. One focus of CCR Title 24, Part 11 is water conservation measures, which reduce GHG emissions by reducing electrical consumption associated with pumping and treating water. CCR Title 24, Part 11 has approximately 52 nonresidential mandatory measures and an additional 130 provisions for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet.

The CEC estimates that over 30 years the 2022 Energy Code will provide $1.5 billion in consumer benefits and reduce 10 million metric tons of GHG. Changes compared to the 2019 Energy Code include increases to on-site renewable energy generation from solar, increases to electric load flexibility to support grid reliability, reduction of emissions from newly constructed buildings, reduction of air pollution for improved public health, and increased adoption of environmentally beneficial efficient electric technologies.

The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided, they provide a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official. The following link provides more on CalGreen Building Standards:
http://www.bsc.ca.gov/Home/CALGreen.aspx

Executive Order S-3-05. California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following targets:

- By 2010, California shall reduce greenhouse gas emissions to 2000 levels;
- By 2020, California shall reduce greenhouse gas emissions to 1990 levels.

- By 2050, California shall reduce greenhouse gas emissions to 80 percent below 1990 levels.

The executive order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-01-07. Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard and began implementation on January 1, 2011. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. CARB approved some amendments to the LCFS in December 2011, which were implemented on January 1, 2013. In September 2015, the Board approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In 2018, the Board approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume and low sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel as appropriate. Compressed natural gas and liquefied natural gas also may be low carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles are also considered as low carbon fuels for the low carbon fuel standard.

SB 97. Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Resource Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporate GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance are provided and no specific mitigation measures are identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

AB 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. ARB is the state agency charged with monitoring and regulating sources of greenhouse gases. AB 32 states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent (MMTCO2e) on December 6, 2007 (California Air Resources Board 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO2e. Emissions in 2020 in a "business as usual" scenario are estimated to be 596 MMTCO2e.

Under AB 32, the ARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. Discrete early action measures are currently underway or are enforceable by January 1, 2010. The ARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of these early action measures, nine are considered discrete early action measures, as they are regulatory and enforceable by January 1, 2010. The ARB estimates that the 44 recommendations are expected to result in reductions of at least 42 MMTCO2e by 2020, representing approximately 25 percent of the 2020 target.

The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 (California Air Resources Board 2008). The Scoping Plan identifies recommended measures for multiple greenhouse gas emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 greenhouse gas target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, Including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional greenhouse gas emission reductions.[4]

Senate Bill 100. Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

SB 375. Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG), which has authority to develop the SCS or APS. For the SCAG region, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 13 percent below 2005 per capita GHG emissions levels by 2035. On April 4, 2012, SCAG adopted the 2012-2035 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), which meets the CARB emission reduction requirements.

On September 3, 2020, SCAG's Regional Council approved and fully adopted the Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy), and the addendum to the Connect SoCal Program Environmental Impact Report. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning

cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than $638 billion in transportation system investments through 2045. Connect SoCal is supported by a combination of transportation and land use strategies that help the region achieve state greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry and utilize resources more efficiently. By integrating the Forecasted Development Pattern with a suite of financially constrained transportation investments, Connect SoCal can reach the regional target of reducing greenhouse gases, or GHGs, from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels).

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS or APS. However, new provisions of CEQA would incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS or APS and categorized as "transit priority projects."

Assembly Bill 939, Assembly Bill 341, and Senate Bill 1374. Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. AB 341 requires at least 75 percent of generated waste be source reduced, recycled, or composted by the year 2020. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

Executive Order S-13-08. Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resource Agency 2009) was adopted, which is the "… first statewide, multi-sector, region-specific, and information-based climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15. Executive Order B-30-15, establishing a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030, was signed by Governor Brown in April 2015.

Executive Order B-29-15. Executive Order B-29-15, mandates a statewide 25% reduction in potable water usage and was signed into law on April 1, 2015.

Executive Order B-37-16. Executive Order B-37-16, continuing the State's adopted water reduction, was signed into law on May 9, 2016. The water reduction builds off the mandatory 25% reduction called for in EO B-29-15.

Executive Order N-79-20. Executive Order N-79-20 was signed into law on September 23, 2020 and mandates 100 percent of in-state sales of new passenger cars and trucks be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the state be zero-emission vehicles by 2045 for all operations where feasible and by 2035 for drayage trucks; and to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible.

2.2.4 Antelope Valley Air Pollution Control District

The project is within the MDAB, which is under the jurisdiction of the AVAQMD. The AVAQMD has identified thresholds of 100,000 tons per year or 548,000 pounds per day of CO2e emissions for individual projects (AVAQMD 2016).

3.0 Setting

3.1 Existing Physical Setting

The project site is located in the City of Palmdale in the northern portion of the County of Los Angeles, which is part of the Mojave Desert Air Basin (MDAB) that includes the desert portion of San Bernardino County and the far eastern end of Riverside County

3.1.1 Local Climate and Meteorology

The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada's in the north by the Tehachapi Pass (3,800-foot elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 feet). The Mojave Desert is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel's by the Cajon Pass (4,200 feet). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley).

The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley) whose primary channel is the San Gorgonio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains.

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time the reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert climate (BWh), with portions classified as dry-very hot desert (BWhh), to indicate at least three months have maximum average temperatures over 100.4° F.

The temperature and precipitation levels for Palmdale, the nearest station with available data are in Table 3. Table 3 shows that July is typically the warmest month and January is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table 3: Meteorological Summary

Month	Temperature (˚F)		Average Precipitation (inches)
	Average High	Average Low	
January	56.8	29.0	1.13
February	61.7	32.2	0.76
March	66.0	36.1	0.62
April	73.1	41.6	0.40
May	81.1	48.8	0.05
June	90.5	56.3	0.03
July	98.9	64.1	0.07
August	97.9	62.5	0.11
September	91.4	55.4	0.17
October	79.4	44.6	0.20
November	65.9	35.0	0.84
December	57.5	28.8	0.67
Annual Average	**76.7**	**44.5**	**5.05**

Notes:
[1] Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?caplms+sca

3.1.2 Local Air Quality

The AVAQMD maintains an air-monitoring network that measures levels of several air pollutants throughout the air basin. The nearest air monitoring station to the project site is the Lancaster monitoring station located approximately 7.5 miles north of the project site at 43301 Division Street, Lancaster, CA. Table 4 presents the monitored pollutant levels within the vicinity. However, it should be noted that due to the air monitoring station distance from the project site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy, local air quality conditions at the project site.

<Table 4, next page>

Table 4: Local Area Air Quality Levels from Lancaster Air Monitoring Station[1]

	Year		
Pollutant (Standard)[2]	**2019**	**2020**	**2021**
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.096	0.099	0.086
Days > CAAQS (0.09 ppm)	**1**	**4**	**0**
Maximum 8-Hour Concentration (ppm)	0.081	0.083	0.079
Days > NAAQS (0.07 ppm)	**13**	**8**	**3**
Days > CAAQS (0.070 ppm)	**14**	**8**	**4**
Carbon Monoxide:			
Maximum 1-Hour Concentration (ppm)	-	-	-
Days > NAAQS (20 ppm)	-	-	-
Maximum 8-Hour Concentration (ppm)	-	-	-
Days > NAAQS (9 ppm)	-	-	-
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.050	0.052	0.046
Days > NAAQS (0.25 ppm)	0	0	0
Sulfur Dioxide:[3]			
Maximum 1-Hour Concentration (ppm)	-	-	-
Days > CAAQS (0.25 ppm)	-	-	-
Inhalable Particulates (PM10):			
Maximum 24-Hour Concentration (ug/m^3)	165.1	192.3	411.2
Days > NAAQS (150 ug/m^3)	2	1	1
Days > CAAQS (50 ug/m^3)	-	-	-
Annual Average (ug/m^3)	22.5	30.6	29.6
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	**Yes**	**Yes**
Ultra-Fine Particulates (PM2.5):			
Maximum 24-Hour Concentration (ug/m^3)	13.6	74.7	35.7
Days > NAAQS (35 ug/m^3)	**0**	**9**	**1**
Annual Average (ug/m^3)	6.1	9.2	8.1
Annual > NAAQS (15 ug/m3)	No	No	No
Annual > CAAQS (12 ug/m^3)	No	No	No

[1.] Source: obtained from https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year and /or https://www.arb.ca.gov/adam/topfour/topfour1.php.
[2] CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million
[3] No data available.

The monitoring data presented in Table 4 shows that ozone is the air pollutant of primary concern in the project area, which are detailed below.

Ozone

During the 2019 to 2021 monitoring period, the State 1-hour concentration standard for ozone has been exceeded one day in 2019 and four days in 2020 at the Lancaster Station. The State 8-hour ozone standard has been exceeded between four and fourteen days each year over the past three years at the Lancaster Station. The Federal 8-hour ozone standard has been exceeded between three and thirteen days each year over the past three years at the Lancaster Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the AVAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide
CO is another important pollutant that is due mainly to motor vehicles. During the 2019 to 2021 monitoring period, the Federal 1-hour and 8-hour concentration standards for CO were not exceeded.

Nitrogen Dioxide
During the 2019 to 2021 monitoring period, the Federal 1-hour concentration standard for Nitrogen Dioazide has not been exceeded.

Sulfur Dioxide
The Lancaster Station did not have SO_2 data available for the last three years.

Particulate Matter
During the 2019 to 2021 monitoring period, the Federal 24-hour PM10 concentration standard was exceeded between one and two days per year at the Lancaster Station.

During the same period, the Federal 24-hour standard for PM2.5 was exceeded nine days in 2020 and one day in 2021 the Lancaster Station.

According to the EPA, some people are much more sensitive than others to breathing fine particulate matter (PM10 and PM2.5). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths during exercise.

3.1.3 Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are 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. Table 5 lists the attainment status for the criteria pollutants in the AVAQMD.

Table 5: AVAQMD Attainment Status

Ambient Air Quality Standard	AVAQMD
One-hour Ozone (Federal) – standard has been revoked, this is historical information only	Proposed attainment in 2014; historical classification Severe-17
Eight-hour Ozone (Federal 84 ppb (1997))	Subpart 2 Nonattainment; classified Severe15
Eight-hour Ozone (Federal 75 ppb (2008))	Nonattainment, classified Severe-15
Eight-hour Ozone (Federal 70 ppb (2015))	Expected nonattainment; classification to be determined
Ozone (State)	Nonattainment; classified Extreme
PM10 24-hour (Federal)	Unclassifiable/attainment
PM2.5 Annual (Federal)	Unclassified/attainment
PM2.5 24-hour (Federal)	Unclassified/attainment
PM2.5 (State)	Unclassified
PM10 (State)	Nonattainment
Carbon Monoxide (State and Federal)	Attainment
Nitrogen Dioxide (State and Federal)	Attainment/unclassified
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Attainment
Particulate Sulfate (State)	Unclassified
Hydrogen Sulfide (State)	Unclassified
Visibility Reducing Particles (State)	Unclassified
[1] Obtained from 2016 Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines	

3.2 Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agricultural, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO_2 and nitrous oxide (NO_2) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the

atmosphere, include uptake by vegetation and dissolution into the ocean. Table 6 provides a description of each of the greenhouse gases and their global warming potential.

Additional information is available: https://www.arb.ca.gov/cc/inventory/data/data.htm

<Table 6, next page>

Table 6: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (N_20),also known as laughing gas is a colorless gas. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes. In addition to agricultural sources, some industrial processes (nylon production, nitric acid production) also emit N_20.
Methane	Methane (CH_4) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	A natural source of CH_4 is from the decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from the decay of organic material in landfills, fermentation of manure, and cattle farming.
Carbon dioxide	Carbon dioxide (CO_2) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). They are gases formed synthetically by replacing all hydrogen atoms in methane or methane with chlorine and/or fluorine atoms. Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone, therefore their production was stopped as required by the Montreal Protocol.
Hydrofluorocarbons	Hydrofluorocarbons (HFCs) are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above the Earth's surface. They have a lifetime 10,000 to 50,000 years. They have a global warming potential range of 6,200 to 9,500.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Notes:
1. Sources: Intergovernmental Panel on Climate Change 2014a and Intergovernmental Panel on Climate Change 2014b. https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

4.0 Modeling Parameters and Assumptions

4.1 Construction

Typical emission rates from construction activities were obtained from CalEEMod Version 2022.1.1.20 CalEEMod is a computer model published by the SCAQMD for estimating air pollutant emissions. The CalEEMod program uses the EMFAC2017 computer program to calculate the emission rates specific for the Mojave Desert portion of Los Angeles County for construction-related employee vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy truck operations. EMFAC2017 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Using CalEEMod, the peak daily air pollutant emissions were calculated and presented below. These emissions represent the highest level of emissions for each of the construction phases in terms of air pollutant emissions.

The analysis assesses the emissions associated with the construction of the proposed project as indicated in Table 1. This analysis estimated construction to begin in the first quarter of 2024 and be completed in 2024. Construction is now anticipated to be completed in 2025. Therefore, this analysis is conservative as emission factors from EMFAC used in this analysis assume increasing efficiency and decreasing emissions over time. The phases of the construction activities which have been analyzed below are: 1) site preparation, 2) grading, 3) building, 4) paving, and 5) architectural coating. For details on construction modeling and construction equipment for each phase, please see Appendix A.

4.2 Operations

Operational or long-term emissions will occur over the life of the project. Both mobile and area sources generate operational emissions. Area source emissions arise from consumer product usage, heaters that consume natural gas, gasoline-powered landscape equipment, and architectural coatings (painting). Mobile source emissions from motor vehicles are the largest single long-term source of air pollutants from the operation of the project. Small amounts of emissions would also occur from area sources such as the consumption of natural gas for heating, hearths, from landscaping emissions, and consumer product usage. The operational emissions were estimated using the latest version of CalEEMod.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project are based upon the trip generation rates given in the Traffic Scoping Agreement (Integrated Engineering Group, 2023) which uses the ITE 11th Trip Generation Manual.

The program then applies the emission factors for each trip which is provided by the EMFAC2017 model to determine the vehicular traffic pollutant emissions. The CalEEMod default trip lengths were used in this analysis. Please see CalEEMod output comments sections in Appendix A for details.

Area Sources

Area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment.

Per AVAQMD Rule, architectural coatings will be limited to an average of 50 grams per liter or less for flat coatings and 100 grams per liter or less for non-flat coatings; however, no changes were made to the CalEEMod architectural coating default values.

Energy Usage

2022.1.1.20 CalEEMod defaults were utilized.

5.0 Thresholds of Significance

5.1 Air Quality Thresholds of Significance

5.1.1 CEQA Guidelines for Air Quality

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the project must be evaluated.

The following air quality significance thresholds are contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the project would:

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 nonattainment under an applicable national or state ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, AVAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. There are daily emission thresholds for construction and operation of a proposed project in the basin.

5.1.2 Regional Significance Thresholds

According to the AVAQMD, a project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable AVAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and it is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan).

The AVAQMD currently recommends that projects with construction-related and/or operational emissions that exceed any of the following emissions thresholds should be considered significant:

- 25 tons per year or 137 pounds per day pounds per day of VOC
- 25 tons per year or 137 pounds per day of NOx
- 100 tons per year or 548 pounds per day of CO

- 25 tons per year or 137 pounds per day of Sox
- 15 tons per year or 82 pounds per day of PM10
- 12 tons per year or 65 pounds per day of PM2.5

For the purposes to this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the AVAQMD significance thresholds identified above.

5.2 Greenhouse Gas Thresholds of Significance

5.2.1 CEQA Guidelines for Greenhouse Gas

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on greenhouse gases, the type, level, and impact of emissions generated by the project must be evaluated.

The following greenhouse gas significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

(b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

However, despite this, currently neither the CEQA statutes, OPR guidelines, nor the draft proposed changes to the CEQA Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the Lead Agency. As previously discussed (Section 2.2.4 of this report), AVAQMD has identified thresholds of 100,000 tons per year or 548,000 pounds per day of CO2e emissions for individual projects. The AVAQMD thresholds were used in this analysis.

6.0 Air Quality Emissions Impact

6.1 Construction Air Quality Emissions Impact

The latest version of CalEEMod was used to estimate the onsite and offsite construction emissions. The emissions incorporate Rule 402 and 403. Rule 402 and 403 (fugitive dust) are not considered mitigation measures as the project by default is required to incorporate these rules during construction.

6.1.1 Regional Construction Emissions

The construction emissions for the Project would not exceed the AVAQMD's daily and annual emission thresholds at the regional level as demonstrated in Table 7, and therefore would be considered less than significant.

Table 7: Regional Significance – Unmitigated Construction Emissions (pounds/day)

Activity	Pollutant Emissions					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Daily Emissions (pounds/day)						
2024	6.50	30.82	19.59	0.12	12.10	5.41
Maximum	**6.50**	**30.82**	**19.59**	**0.12**	**12.10**	**5.41**
AVAQMD Daily Thresholds	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Thresholds	No	No	No	No	No	No
Annual Emissions (tons/year)						
2024	0.19	1.39	1.46	0.00	0.10	0.07
Total	**0.19**	**1.39**	**1.46**	**0.00**	**0.10**	**0.07**
AVAQMD Annual Thresholds	**25**	**25**	**100**	**25**	**15**	**12**
Exceeds Thresholds	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2022.1.1.20
[2] On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM10 and PM2.5 emissions show mitigated values for fugitive dust for compliance with AVAQMD Rule 403.
[3] Off-site emissions from equipment operated on public roads.
[4] Construction, architectural coatings and paving phases may overlap.

6.1.2 Construction-Related Human Health Impacts

Regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant. Because regional and local emissions of criteria pollutants during construction of the project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, significant adverse acute health impacts as a result of project construction are not anticipated.

6.1.3 Odors

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the

construction process are short-term in nature and the odor emissions are expected cease upon the drying or hardening of the odor producing materials. Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed project.

The AVAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the project would result in excessive nuisance odors, as defined under the California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality.

Potential sources that may emit odors during the on-going operations of the proposed project would include odor emissions from vehicle emissions as well as fueling activity. Due to the distance of the nearest receptors from the project site and through compliance with AVAQMD's Rule 402 no significant impact related to odors would occur during the on-going operations of the proposed project.

6.1.4 Construction-Related Toxic Air Contaminant Impact

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. The Office of Environmental Health Hazard Assessment (OEHHA) has issued the Air Toxic Hot Spots Program Risk Assessment Guidelines and Guidance Manual for the Preparation of Health Risk Assessments, February 2015 to provide a description of the algorithms, recommended exposure variates, cancer and noncancer health values, and the air modeling protocols needed to perform a health risk assessment (HRA) under the Air Toxics Hot Spots Information and Assessment Act of 1987. Hazard identification includes identifying all substances that are evaluated for cancer risk and/or non-cancer acute, 8-hour, and chronic health impacts. In addition, identifying any multi-pathway substances that present a cancer risk or chronic non-cancer hazard via non-inhalation routes of exposure.

Given the relatively limited number of heavy-duty construction equipment and construction schedule, the proposed project would not result in a long-term substantial source of toxic air containment emissions and corresponding individual cancer risk. Furthermore, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project.

6.2 Operational Air Quality Emissions Impact

6.2.1 Regional Operational Emissions

The operations-related criteria air quality impacts created by the proposed project have been analyzed through the use of CalEEMod model. The operating emissions were based on year 2024; however, as the project is now anticipated to begin operation in 2025, this is a conservative analysis as emission factors from EMFAC used in this analysis assume increasing efficiency and decreasing emissions over time. The summer and winter emissions created by the proposed project's long-term operations were calculated and the highest emissions from either summer or winter are summarized in Table 8.

Table 8: Regional Significance - Unmitigated Operational Emissions (lbs/day)

Activity	Pollutant Emissions[1]					
	VOC	NOx	CO	SO2	PM10	PM2.5
Daily Emissions (pounds/day)						
Area Sources[2]	0.19	0.00	0.25	0.00	0.00	0.00
Energy Usage[3]	0.00	0.03	0.02	0.00	0.00	0.00
Mobile Sources[4]	10.49	13.37	124.90	0.24	20.73	5.39
Total Emissions	**10.67**	**13.39**	**125.17**	**0.24**	**20.74**	**5.39**
AVAQMD Daily Thresholds	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Threshold?	No	No	No	No	No	No
Annual Emissions (tons/year)						
Area Sources[2]	0.03	0.00	0.02	0.00	0.00	0.00
Energy Usage[3]	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources[4]	1.37	1.18	8.98	0.02	1.52	0.40
Total Emissions	**1.40**	**1.18**	**9.00**	**0.02**	**1.53**	**0.40**
AVAQMD Annual Thresholds	**25**	**25**	**100**	**25**	**15**	**12**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2022.1.1.20
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from on-site natural gas usage.
[4] Mobile sources consist of emissions from vehicles and road dust.

Table 8 provides the project's unmitigated operational emissions. Table 8 shows that the project does not exceed the AVAQMD daily emission threshold and regional operational emissions are considered to be less than significant.

6.2.3 Operations-Related Human Health Impacts

As stated previously, regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant. Because emissions of criteria pollutants during operation of the project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, less than significant adverse acute health impacts as a result of project operation are anticipated.

6.3 CO Hot Spot Emissions

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards which were presented in above in Section 5.0.

To determine if the proposed project could cause emission levels in excess of the CO standards discussed above in Section 5.0, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

Micro-scale air quality emissions have traditionally been analyzed in environmental documents where the air basin was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to EPA that there are no "hot spots" anywhere in the air basin, even at intersections with much higher volumes, much worse congestion, and much higher background CO levels than anywhere in Los Angeles County. If the worst-case intersections in the air basin have no "hot spot" potential, any local impacts will be below thresholds.

Traffic analysis from Integrated Engineering Group (2023) showed that the project would generate a net increase of 1,543 average daily trips. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. The volume of traffic at project buildout would be well below 100,000 vehicles and below the necessary volume to even get close to causing a violation of the CO standard. Therefore, no CO "hot spot" modeling was performed and less than significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

6.4 Cumulative Regional Air Quality Impacts

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for the project's air quality must be generic by nature.

The project area is out of attainment for both ozone and PM10 particulate matter. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the Mojave Desert Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the AVAQMD methodology, projects that do not exceed the AVAQMD criteria or can be mitigated to less than criteria levels are not significant

and do not add to the overall cumulative impact. The project does not exceed any of the thresholds of significance and therefore is considered less than significant.

6.5 Air Quality Compliance

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). According to the AVAQMD, a project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan.

A project is conforming if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. An example of a non-conforming project would be one that increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area (relative to the applicable land use plan).

The project site is located within the City of Palmdale. The proposed project will be a convenience store and gas station. Per the City's Land Use Zoning map, the current land use zoning is Neighborhood Commercial (NC). As shown by the results of this air analysis, the project's emissions do not exceed any AVAQMD thresholds during either short-term construction or long-term operation of the project. Therefore, the proposed project is not anticipated to exceed the Attainment Plan assumptions for the project site.

Based on the above, the proposed project would not conflict with implementation of the AVAQMD Attainment Plans, impacts are considered to be less than significant.

7.0 Greenhouse Gas Impact Analysis

7.1 Construction Greenhouse Gas Emissions Impact

The greenhouse gas emissions from project construction equipment and worker vehicles are shown in Table 9. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at 9.52 metric tons of CO_2e per year. Annual CalEEMod output calculations are provided in Appendix A.

Table 9: Construction Greenhouse Gas Emissions

Activity	Emissions ($MTCO_2e$)[1]		
	Onsite	Offsite	Total
Site Preparation	3.71	0.14	3.85
Grading	6.70	40.43	47.13
Building Construction	220.41	5.40	225.81
Paving	5.66	2.38	8.04
Coating	0.61	0.02	0.63
Total	237.09	48.37	285.46
Averaged over 30 years[2]	7.90	1.61	9.52

Notes:
1. $MTCO_2e$=metric tons of carbon dioxide equivalents (includes carbon dioxide, methane and nitrous oxide).
2. The emissions are averaged over 30 years because the average is added to the operational emissions, pursuant to AVAQMD.
* CalEEMod output (Appendix A)

7.2 Operational Greenhouse Gas Emissions Impact

Operational emissions occur over the life of the project. The operational emissions for the project are 1,883.88 metric tons of CO_2e per year (see Table 10). Furthermore, as shown in Table 10, the project's total emissions (with incorporation of construction related GHG emissions) would be 1,893.4 metric tons of CO_2e per year or 26,882 pounds of CO_2e per day. These emissions do not exceed the AVAQMD annual threshold of 100,000 MTCO2e or the AVAQMD daily threshold of 548,000 pounds of CO2e. Therefore, the project's GHG emissions are considered to be less than significant.

<Table 10 next page>

Table 10: Opening Year Unmitigated Project-Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons/Year)[1]							(lbs/day)
	Bio-CO2	**NonBio-CO_2**	**CO_2**	**CH_4**	**N_2O**	**R**	**CO_2e**	CO2e
Area Sources[2]	0.00	0.08	0.08	0.00	0.00	0.00	0.08	1.01
Energy Usage[3]	0.00	72.72	72.72	0.00	0.00	0.00	72.99	440.84
Mobile Sources[4]	0.00	1,584.40	1,584.40	0.10	0.09	3.17	1,615.40	25,260.00
Solid Waste[5]	0.45	0.00	0.45	0.05	0.00	0.00	1.59	9.59
Water[6]	0.04	0.17	0.21	0.00	0.00	0.00	0.35	2.09
Refrigerants	0.00	0.00	0.00	0.00	0.00	193.48	193.48	1,168.70
Total Emissions	0.49	1,657.37	1,657.87	0.15	0.09	196.65	**1,883.88**	**26,882.23**
Construction[7]	0.00	9.42	9.42	0.00	0.00	0.00	9.52	26,882.00
Combined Emissions	0.49	1,666.79	1,667.29	0.15	0.09	196.65	**1,893.40**	-
AVAQMD GHG Thresholds							**100,000**	**548,000**
Exceeds Threshold?							**No**	**No**

Notes:
[1] Source: CalEEMod Version 2022.1.1.20
[2] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.
[3] Energy usage consist of GHG emissions from electricity and natural gas usage.
[4] Mobile sources consist of GHG emissions from vehicles.
[5] Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[6] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[7] Construction GHG emissions based on a 30-year amortization rate.

7.3 Greenhouse Gas Plan Consistency

CARB Scoping Plan Consistency

The ARB Board approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

This Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020.

In May 2014, CARB released its *First Update to the Climate Change Scoping Plan* (CARB 2014). This *Update* identifies the next steps for California's leadership on climate change. While California continues on its path to meet the near-term 2020 greenhouse gas limit, it must also set a clear path toward long-term, deep GHG emission reductions. This report highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.

In November 2017, CARB release the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

As the latest, 2017 Scoping Plan builds upon previous versions, project consistency with applicable strategies of both the 2008 and 2017 Plan are assessed in Table 11. As shown in Table 11, the project is consistent with the applicable strategies and would result in a less than significant impact.

Therefore, the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the project will also comply with applicable Green Building Standards and City of Palmdale's policies regarding sustainability (as dictated by the City's General Plan). With incorporation of regulatory compliance and credit for reductions due to CAPCOA location-based efficiency measures, impacts are considered to be less than significant, further analysis is not warranted.

Table 11: Project Consistency with CARB Scoping Plan Policies and Measures[1]

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.

Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2022 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as the City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	Project Compliance with Recommended Action
Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.

Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	Consistent. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	Consistent. The project will be compliant with the current Title 24 standards.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	Consistent. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341.
Notes: 1 Source: CARB Scoping Plan (2008 and 2017)	

7.4 Cumulative Regional Greenhouse Gas Impacts

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from a greenhouse gas standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for the Project's greenhouse gas impacts must be generic by nature.

Construction and operation of cumulative projects will add to greenhouse gas emissions. The greatest cumulative impact will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Greenhouse gas emissions will temporarily increase during construction activities that occur separately or simultaneously. However, in accordance with the AVAQMD methodology, projects that do not exceed the AVAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The Project does not exceed any of the thresholds of significance and therefore is considered less than significant.

8.0 Energy Analysis

Information from the CalEEMod 2022.1.1.20 Daily and Annual Outputs contained in the air quality and greenhouse gas analyses above was utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands. As shown in this Section, the project will not result in wasteful or inefficient use of energy and will therefore have a less than significant impact in regards to energy usage.

8.1 Construction Energy Demand

8.1.1 Construction Equipment Electricity Usage Estimates

Electrical service will be provided by Southern California Edison (SCE). Based on the 2017 National Construction Estimator, Richard Pray (2017)[2], the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.32. The project plans to develop the site with 5,640 square feet of new development over the course of approximately 12 months. Based on Table 12, the total power cost of the on-site electricity usage during the construction of the proposed project is estimated to be approximately $153.93. As shown in Table 12, the total electricity usage from Project construction related activities is estimated to be approximately 1,047 kWh.[3]

Table 12: Project Construction Power Cost and Electricity Usage

Power Cost (per 1,000 square foot of building per month of construction)	Total Project Size (1,000 Square Foot)[1]	Construction Duration (months)	Total Project Construction Power Cost
$2.32	5.64	12	$156.93

Cost per kWh	Total Project Construction Electricity Usage (kWh)
$0.15	1,047

* Assumes the project will be under the GS-1 General Service rate under SCE.

[2] Pray, Richard. 2017 National Construction Estimator. Carlsbad: Craftsman Book Company, 2017.
[3] General Service (GS-1) is approximately $0.15 per kWh of electricity Southern California Edison (SCE). Rates & Pricing Choices: General Service/Industrial Rates. https://edisonintl.sharepoint.com/teams/Public/TM2/Shared%20Documents/Forms/AllItems.aspx?id=%2Fteams%2FPublic%2FTM2%2FShared%20Documents%2FPublic%2FRegulatory%2FTariff%2DSCE%20Tariff%20Books%2FElectric%2FSchedules%2FGeneral%20Service%20%26%20Industrial%20Rates.

8.1.2 Construction Equipment Fuel Estimates

Using the CalEEMod data input, the project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal.[4] As presented in Table 13 below, project construction activities would consume an estimated 23,644 gallons of diesel fuel.

Table 13: Construction Equipment Fuel Consumption Estimates

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	HP hrs/ day	Total Fuel Consumption (gal diesel fuel)[1,2]
Site Preparation	3	Graders	1	8	148	0.41	485	79
	3	Scrapers	1	8	423	0.48	1,624	263
	3	Tractors/Loaders/Backhoes	1	7	84	0.37	218	35
Grading	6	Graders	1	8	148	0.41	485	157
	6	Rubber Tired Dozers	1	8	367	0.4	1,174	381
	6	Tractors/Loaders/Backhoes	2	7	84	0.37	435	141
Building Construction	220	Cranes	1	8	367	0.29	851	10,125
	220	Forklifts	2	7	82	0.2	230	2,730
	220	Generator Sets	1	8	14	0.74	83	986
	220	Tractors/Loaders/Backhoes	1	6	84	0.37	186	2,218
	220	Welders	3	8	46	0.45	497	5,908
Paving	10	Cement and Mortar Mixers	1	8	10	0.56	45	24
	10	Pavers	1	8	81	0.42	272	147
	10	Paving Equipment	1	8	89	0.36	256	139
	10	Rollers	2	8	36	0.38	219	118
	10	Tractors/Loaders/Backhoes	1	8	84	0.37	249	134
Architectural Coating	10	Air Compressors	1	6	37	0.48	107	58
CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)								**23,644**

Notes:
[1]Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp.
(Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)
[2]Discrepancies are due to rounding.

[4] Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/day (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).

8.1.3 Construction Worker Fuel Estimates

It is assumed that all construction worker trips are from light duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 11,694 VMT. Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analysis using information generated using CARB's EMFAC model (see Appendix B for details). Table 14 shows that an estimated 378 gallons of fuel would be consumed for construction worker trips.

Table 14: Construction Worker Fuel Consumption Estimates

Phase	Number of Days	Worker Trips/Day	Trip Length (miles)[1]	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)[2]
Site Preparation	3	7.5	18.5	416	30.95	13
Grading	6	10	18.5	1,110	30.95	36
Building Construction	220	1.8	18.5	7,326	30.95	237
Paving	10	15	18.5	2,775	30.95	90
Architectural Coating	10	0.36	18.5	67	30.95	2
Total Construction Worker Fuel Consumption						**378**

Notes:
[1]Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.20 defaults.
[2]Discrepancies are due to rounding.

8.1.4 Construction Vendor/Hauling Fuel Estimates

Tables 15 and 16 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 27,574 VMT. For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles.[5] Tables 15 and 16 show that an estimated 3,988 gallons of fuel would be consumed for vendor and hauling trips.

<Tables 15 & 16, next page>

[5] Vendors delivering construction material or hauling debris from the site during grading would use medium to heavy duty vehicles with an average fuel consumption of 9.22 mpg for medium heavy-duty trucks and 6.74 mpg for heavy heavy-duty trucks (see Appendix D for details).

Table 15: Construction Vendor Fuel Consumption Estimates (MHD Trucks)[1]

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	3	0	10.2	0	9.22	0
Grading	6	0	10.2	0	9.22	0
Building Construction	220	0.92	10.2	2,064	9.22	224
Paving	10	5	10.2	510	9.22	55
Architectural Coating	10	0	10.2	0	9.22	0
Total Vendor Fuel Consumption						**279**

Notes:
[1] Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.20 defaults.

Table 16: Construction Hauling Fuel Consumption Estimates (HHD Trucks)[1]

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Site Preparation	3	0	20	0	6.74	0
Grading	6	208.3	20	25,000	6.74	3,709
Building Construction	220	0	20	0	6.74	0
Paving	10	0	20	0	6.74	0
Architectural Coating	10	0	20	0	6.74	0
Total Construction Hauling Fuel Consumption						**3,709**

Notes:
[1]Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.20 defaults.

8.1.5 Construction Energy Efficiency/Conservation Measures

Construction equipment used over the approximately 12-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. In addition, the CARB Airborne Toxic Control Measure limits idling times of construction vehicles to no more than five minutes, thereby minimizing unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Furthermore, the project has been designed in compliance with California's Energy Efficiency Standards and 2022 CALGreen Standards.

Construction of the proposed commercial development would require the typical use of energy resources. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel and a less than significant impact.

8.2 Operational Energy Demand

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

8.2.1 Transportation Fuel Consumption

The largest source of operational energy use would be vehicle operation of customers. The site is located in an urbanized area just in close proximity to transit stops. Using the CalEEMod output, it is assumed that an average trip for autos were assumed to be 16.6 miles, light trucks were assumed to travel an average of 6.9 miles, and 3- 4-axle trucks were assumed to travel an average of 8.4 miles[6]. To show a worst-case analysis, as the proposed project is a commercial project, it was assumed that vehicles would operate 365 days per year. Table 17 shows the worst-case estimated annual fuel consumption for all classes of vehicles from autos to heavy-heavy trucks.[7] Table 17 shows that an estimated 686,434 gallons of fuel would be consumed per year for the operation of the proposed project.

Table 17: Estimated Vehicle Operations Fuel Consumption

Vehicle Type	Vehicle Mix	Number of Vehicles	Average Trip (miles)[1]	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	852.2	16.6	14,146	31.82	444.56	162,264
Light Truck	Automobile	89.3	6.9	616	27.16	22.68	8,277
Light Truck	Automobile	275.1	6.9	1,898	25.6	74.14	27,060
Medium Truck	Automobile	224.7	6.9	1,550	20.81	74.49	27,190
Light Heavy Truck	2-Axle Truck	42.4	8.4	356	13.81	25.78	9,408
Light Heavy Truck 10,000 lbs +	2-Axle Truck	11.6	8.4	98	14.18	6.90	2,518
Medium Heavy Truck	3-Axle Truck	18.0	8.4	152	9.58	15.82	5,776
Heavy Heavy Truck	4-Axle Truck	29.8	8.4	250	7.14	35.04	12,789
Total		1,543	--	19,065	--	699.40	--
Total Annual Fuel Consumption							**255,283**

Notes:
[1] The trip generation assessment, the project is to generate 1,543 total net new trips after reduction of existing uses. Default CalEEMod vehicle fleet mix utilized.
[1]Based on the size of the site and relative location, trips were assumed to be local rather than regional.

Trip generation generated by the proposed project are consistent with other similar commercial uses of similar scale and configuration as reflected in the traffic analysis (Integrated Engineering Group, 2023). That is, the proposed project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips, nor associated excess and wasteful vehicle energy consumption.

[6] CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 16.6 miles; 6.9 miles for H-S (home-shop) or C-C (commercial-customer); and 8.4 miles for H-O (home-other) or C-O (commercial-other).
[7] Average fuel economy based on aggregate mileage calculated in EMFAC 2017 for opening year (2023). See Appendix D for EMFAC output.

Therefore, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

8.2.2 Facility Energy Demands (Electricity and Natural Gas)

The annual natural gas and electricity demands were provided per the CalEEMod output and are provided in Table 18.

Table 18: Project Unmitigated Annual Operational Energy Demand Summary[1]

Natural Gas Demand	kBTU/year
Convenience Market with Gas Pumps	94,968
Total	94,968
Electricity Demand	**kWh/year**
Convenience Market with Gas Pumps	183,158
Parking Lot	97,304
Total	280,462

Notes:
[1]Taken from the CalEEMod 2022.1.1.20 annual output.

As shown in Table 18, the estimated electricity demand for the proposed project is approximately 280,462 kWh per year. In 2021, the nonresidential sector of the County of Los Angeles consumed approximately 44,438 million kWh of electricity.[8] In addition, the estimated natural gas consumption for the proposed project is approximately 94,968 kBTU per year. In 2021, the nonresidential sector of the County of Los Angeles consumed approximately 1,743 million therms of gas.[9] Therefore, the increase in both electricity and natural gas demand from the proposed project is insignificant compared to the County's 2021 demand.

8.3 Renewable Energy and Energy Efficiency Plan Consistency

Regarding federal transportation regulations, the project site is located in an already developed area. Access to/from the project site is from existing roads. These roads are already in place so the project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

[8] California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx
[9] California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

The project will be consistent with all relevant renewable energy and energy efficiency plans and will therefore have a less than significant impact.

9.0 CEQA Analysis

The California Environmental Quality Act Guidelines (Appendix D) establishes thresholds for air quality, greenhouse gas, and energy impact analyses as presented below:

Air Quality

Where available, the significance criteria established by the applicable air quality management district 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?

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). According to the AVAQMD, a project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan.

The project site is located within the City of Palmdale. The proposed project will be a convenience store and gas station. Per the City's Land Use Zoning map, the current land use zoning is Neighborhood Commercial (NC). As shown by the results of this air analysis, the project's emissions do not exceed any AVAQMD thresholds during either short-term construction or long-term operation of the project. Therefore, the proposed project is not anticipated to exceed the Attainment Plan assumptions for the project site.

Based on the above, the proposed project would not conflict with implementation of the AVAQMD Attainment Plans, impacts are considered to be **less than significant**.

(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?

In accordance with the AVAQMD methodology, projects that do not exceed the AVAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. The Project does not exceed any of the thresholds of significance and therefore is considered **less than significant**.

(c) Expose sensitive receptors to substantial pollutant concentrations?

The Project would not exceed construction or operational emissions thresholds set by the AVAQMD and would therefore have a **less than significant** impact on sensitive receptors.

(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Potential sources that may emit odors during the on-going operations of the proposed Project would include odor emissions from vehicle emissions. Due to the distance of the nearest receptors from the Project Site and through compliance with AVAQMD's Rule 402 **no significant impact** related to odors would occur during the on-going operations of the proposed Project. Furthermore, the Project would **not be a significant source** of toxic air contaminants during construction or operation.

Greenhouse Gas Emissions

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Combined Project emissions from construction and operation would not exceed the AVAQMD screening thresholds. Therefore, the Project's GHG emissions are considered to be **less than significant**.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As shown in Table 11, the project is consistent with the applicable strategies of the 2017 CARB Scoping Plan and would result in a less than significant impact. Therefore, the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the project will also comply with applicable Green Building Standards and City of Palmdale's policies regarding sustainability (as dictated by the City's General Plan). With incorporation of regulatory compliance and credit for reductions due to CAPCOA location-based efficiency measures, impacts are considered to be less than significant, further analysis is not warranted.

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?

Construction of the proposed commercial development would require the typical use of energy resources. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel and would have a **less than significant impact**.

Trip generation generated by the proposed Project are consistent with other similar commercial uses of similar scale and configuration as reflected in the Transportation Analysis (Integrated Engineering Group, 2023). That is, the proposed Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips, nor associated excess and wasteful vehicle energy consumption. Therefore, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary. Furthermore, the increase in both electricity and natural gas demand from the proposed Project is insignificant compared to the County's 2021 demand. Therefore, the Project would have a **less than significant** impact.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Regarding federal transportation regulations, the Project Site is located in an already developed area. Access to/from the Project Site is from existing roads. These roads are already in place so the Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the Project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by the SCE and Southern California Gas Company.

Regarding the State's Renewable Energy Portfolio Standards, the Project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would therefore have a **less than significant** impact.

10.0 References

The following references were used in the preparing this analysis.

Antelope Valley Air Quality Management District

2016 Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. August.

California Air Pollution Control Officers Association

2009 Health Risk Assessments for Proposed Land Use Projects

California Air Resources Board

2008 Resolution 08-43

2008 Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act

2008 ARB Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk – Frequently Asked Questions

2008 Climate Change Scoping Plan, a framework for change.

2011 Supplement to the AB 32 Scoping Plan Functional Equivalent Document

2014 First Update to the Climate Change Scoping Plan, Building on the Framework Pursuant to AB32, the California Global Warming Solutions Act of 2006. May.

2018 Historical Air Quality, Top 4 Summary

City of Palmdale

2023 City of Palmdale General Plan. March 15.

Governor's Office of Planning and Research

2008 CEQA and Climate: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review

2009 CEQA Guideline Sections to be Added or Amended

Integrated Engineering Group

2023 Maverik Gas Station Traffic Impact Analysis

Office of Environmental Health Hazard Assessment

2015 Air Toxics Hot Spots Program Risk Assessment Guidelines

Appendix A:

CalEEMod Output

Maverik Palmdale Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Maverik Palmdale
Construction Start Date	12/5/2023
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	4.50
Precipitation (days)	13.0
Location	34.55831608685183, -118.1358587860542
County	Los Angeles-Mojave Desert
City	Palmdale
Air District	Antelope Valley AQMD
Air Basin	Mojave Desert
TAZ	3653
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Convenience Market with Gas Pumps	12.0	Pump	0.04	5,637	0.00	—	—	—
Parking Lot	2.55	Acre	2.55	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.33	11.3	12.1	0.02	0.46	0.03	0.49	0.42	0.01	0.43	—	2,256	2,256	0.09	0.02	0.19	2,265
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.50	30.8	19.6	0.12	0.93	11.2	12.1	0.87	4.54	5.41	—	16,645	16,645	0.12	2.21	0.82	17,307
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.06	7.62	8.01	0.02	0.30	0.22	0.53	0.28	0.08	0.36	—	1,707	1,707	0.06	0.05	0.30	1,724
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	1.39	1.46	< 0.005	0.06	0.04	0.10	0.05	0.02	0.07	—	283	283	0.01	0.01	0.05	285

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.33	11.3	12.1	0.02	0.46	0.03	0.49	0.42	0.01	0.43	—	2,256	2,256	0.09	0.02	0.19	2,265
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.50	30.8	19.6	0.12	0.93	11.2	12.1	0.87	4.54	5.41	—	16,645	16,645	0.12	2.21	0.82	17,307
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.06	7.62	8.01	0.02	0.30	0.22	0.53	0.28	0.08	0.36	—	1,707	1,707	0.06	0.05	0.30	1,724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.19	1.39	1.46	< 0.005	0.06	0.04	0.10	0.05	0.02	0.07	—	283	283	0.01	0.01	0.05	285

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.7	12.3	125	0.24	0.18	20.6	20.7	0.17	5.22	5.39	2.98	25,266	25,269	1.26	1.02	1,278	26,882
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.48	13.4	93.9	0.22	0.18	20.6	20.7	0.17	5.22	5.39	2.98	23,071	23,074	1.29	1.07	1,171	24,597
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.65	6.48	49.3	0.09	0.08	8.28	8.36	0.07	2.10	2.18	2.98	10,010	10,013	0.90	0.52	1,188	11,379

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.40	1.18	9.00	0.02	0.01	1.51	1.52	0.01	0.38	0.40	0.49	1,657	1,658	0.15	0.09	197	1,884

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.5	12.2	125	0.24	0.18	20.6	20.7	0.17	5.22	5.39	—	24,825	24,825	0.94	1.02	109	25,260
Area	0.19	< 0.005	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.01	1.01	< 0.005	< 0.005	—	1.01
Energy	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	439	439	0.03	< 0.005	—	441
Water	—	—	—	—	—	—	—	—	—	—	0.24	1.05	1.29	0.02	< 0.005	—	2.09
Waste	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,169	1,169
Total	10.7	12.3	125	0.24	0.18	20.6	20.7	0.17	5.22	5.39	2.98	25,266	25,269	1.26	1.02	1,278	26,882
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.33	13.4	93.9	0.22	0.18	20.6	20.7	0.17	5.22	5.39	—	22,631	22,631	0.96	1.07	2.83	22,976
Area	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	439	439	0.03	< 0.005	—	441
Water	—	—	—	—	—	—	—	—	—	—	0.24	1.05	1.29	0.02	< 0.005	—	2.09
Waste	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,169	1,169
Total	9.48	13.4	93.9	0.22	0.18	20.6	20.7	0.17	5.22	5.39	2.98	23,071	23,074	1.29	1.07	1,171	24,597
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	7.48	6.45	49.2	0.09	0.08	8.28	8.35	0.07	2.10	2.17	—	9,570	9,570	0.58	0.52	19.1	9,757
Area	0.17	< 0.005	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.50	0.50	< 0.005	< 0.005	—	0.50
Energy	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	439	439	0.03	< 0.005	—	441
Water	—	—	—	—	—	—	—	—	—	—	0.24	1.05	1.29	0.02	< 0.005	—	2.09
Waste	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,169	1,169
Total	7.65	6.48	49.3	0.09	0.08	8.28	8.36	0.07	2.10	2.18	2.98	10,010	10,013	0.90	0.52	1,188	11,379
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.37	1.18	8.98	0.02	0.01	1.51	1.52	0.01	0.38	0.40	—	1,584	1,584	0.10	0.09	3.17	1,615
Area	0.03	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.08	0.08	< 0.005	< 0.005	—	0.08
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	72.7	72.7	< 0.005	< 0.005	—	73.0
Water	—	—	—	—	—	—	—	—	—	—	0.04	0.17	0.21	< 0.005	< 0.005	—	0.35
Waste	—	—	—	—	—	—	—	—	—	—	0.45	0.00	0.45	0.05	0.00	—	1.59
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	193	193
Total	1.40	1.18	9.00	0.02	0.01	1.51	1.52	0.01	0.38	0.40	0.49	1,657	1,658	0.15	0.09	197	1,884

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.3	22.3	< 0.005	< 0.005	—	22.4
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.70	3.70	< 0.005	< 0.005	—	3.71
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.54	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.2	98.2	0.01	< 0.005	0.01	99.5

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	7.27	7.27	—	3.45	3.45	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.3	40.3	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.72	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	< 0.005	0.02	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.26	14.9	3.45	0.10	0.18	3.77	3.95	0.18	1.06	1.24	—	14,061	14,061	0.02	2.18	0.80	14,712
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.22	2.22	< 0.005	< 0.005	< 0.005	2.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.25	0.06	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	231	231	< 0.005	0.04	0.22	242
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.2	38.2	< 0.005	0.01	0.04	40.1

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	6.77	7.20	0.01	0.28	—	0.28	0.25	—	0.25	—	1,327	1,327	0.05	0.01	—	1,331
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.14	1.24	1.31	< 0.005	0.05	—	0.05	0.05	—	0.05	—	220	220	0.01	< 0.005	—	220
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.19	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	26.6	26.6	< 0.005	< 0.005	0.11	27.0
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.2	28.2	< 0.005	< 0.005	0.08	29.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	< 0.005	23.9
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.2	28.2	< 0.005	< 0.005	< 0.005	29.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	0.03	14.9
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.02	17.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.81	2.81	< 0.005	< 0.005	< 0.005	2.94
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	6.44	8.26	0.01	0.31	—	0.31	0.29	—	0.29	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.1	34.1	< 0.005	< 0.005	—	34.2
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.64	5.64	< 0.005	< 0.005	—	5.66
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.08	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	196	196	0.01	0.01	0.02	199

Vendor	0.01	0.34	0.13	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	305	305	< 0.005	0.04	0.02	319
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.54	5.54	< 0.005	< 0.005	0.01	5.62
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.36	8.36	< 0.005	< 0.005	0.01	8.74
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.92	0.92	< 0.005	< 0.005	< 0.005	0.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.45
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	6.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.72	4.72	< 0.005	< 0.005	< 0.005	4.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	10.5	12.2	125	0.24	0.18	20.6	20.7	0.17	5.22	5.39	—	24,825	24,825	0.94	1.02	109	25,260
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	10.5	12.2	125	0.24	0.18	20.6	20.7	0.17	5.22	5.39	—	24,825	24,825	0.94	1.02	109	25,260
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	9.33	13.4	93.9	0.22	0.18	20.6	20.7	0.17	5.22	5.39	—	22,631	22,631	0.96	1.07	2.83	22,976
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	9.33	13.4	93.9	0.22	0.18	20.6	20.7	0.17	5.22	5.39	—	22,631	22,631	0.96	1.07	2.83	22,976
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Convenie Market with Gas Pumps	1.37	1.18	8.98	0.02	0.01	1.51	1.52	0.01	0.38	0.40	—	1,584	1,584	0.10	0.09	3.17	1,615
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.37	1.18	8.98	0.02	0.01	1.51	1.52	0.01	0.38	0.40	—	1,584	1,584	0.10	0.09	3.17	1,615

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	267	267	0.02	< 0.005	—	268
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	142	142	0.01	< 0.005	—	142
Total	—	—	—	—	—	—	—	—	—	—	—	409	409	0.03	< 0.005	—	410
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	267	267	0.02	< 0.005	—	268
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	142	142	0.01	< 0.005	—	142

Total	—	—	—	—	—	—	—	—	—	—	—	409	409	0.03	< 0.005	—	410
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	44.2	44.2	< 0.005	< 0.005	—	44.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Total	—	—	—	—	—	—	—	—	—	—	—	67.7	67.7	< 0.005	< 0.005	—	67.9

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.4	30.4	< 0.005	< 0.005	—	30.5
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.4	30.4	< 0.005	< 0.005	—	30.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.4	30.4	< 0.005	< 0.005	—	30.5

Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.4	30.4	< 0.005	< 0.005	—	30.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.04	5.04	< 0.005	< 0.005	—	5.05
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.04	5.04	< 0.005	< 0.005	—	5.05

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	< 0.005	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.01	1.01	< 0.005	< 0.005	—	1.01
Total	0.19	< 0.005	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.01	1.01	< 0.005	< 0.005	—	1.01

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.08	0.08	< 0.005	< 0.005	—	0.08
Total	0.03	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.08	0.08	< 0.005	< 0.005	—	0.08

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.24	1.05	1.29	0.02	< 0.005	—	2.09
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.24	1.05	1.29	0.02	< 0.005	—	2.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.24	1.05	1.29	0.02	< 0.005	—	2.09
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.24	1.05	1.29	0.02	< 0.005	—	2.09
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.04	0.17	0.21	< 0.005	< 0.005	—	0.35
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.04	0.17	0.21	< 0.005	< 0.005	—	0.35

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.45	0.00	0.45	0.05	0.00	—	1.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.45	0.00	0.45	0.05	0.00	—	1.59

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,169	1,169
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,169	1,169
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,169	1,169
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,169	1,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	193	193
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	193	193

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/3/2024	1/7/2024	5.00	3.00	—

Grading	Grading	1/8/2024	1/16/2024	5.00	6.00	—
Building Construction	Building Construction	1/17/2024	11/20/2024	5.00	220	—
Paving	Paving	11/21/2024	12/5/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	12/6/2024	12/20/2024	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	208	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1.80	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.92	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	10.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.36	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	8,456	2,819	6,665

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	4.50	0.00	—
Grading	—	10,000	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	2.55

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Convenience Market with Gas Pumps	0.00	0%
Parking Lot	2.55	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Convenience Market with Gas Pumps	1,543	1,543	1,543	563,268	4,887	29,013	29,013	4,299,750
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	8,456	2,819	6,665

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Convenience Market with Gas Pumps	183,158	532	0.0330	0.0040	94,968
Parking Lot	97,304	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Convenience Market with Gas Pumps	125,486	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Convenience Market with Gas Pumps	5.08	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Convenience Market with Gas Pumps	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market with Gas Pumps	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	32.8	annual days of extreme heat
Extreme Precipitation	2.85	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	24.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.7
AQ-PM	10.3
AQ-DPM	37.9
Drinking Water	64.2
Lead Risk Housing	22.1
Pesticides	0.00
Toxic Releases	91.4
Traffic	83.5
Effect Indicators	—
CleanUp Sites	0.00

Groundwater	43.8
Haz Waste Facilities/Generators	22.0
Impaired Water Bodies	0.00
Solid Waste	93.6
Sensitive Population	—
Asthma	58.5
Cardio-vascular	71.2
Low Birth Weights	40.5
Socioeconomic Factor Indicators	—
Education	51.5
Housing	67.3
Linguistic	—
Poverty	68.0
Unemployment	64.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	67.855768
Employed	22.03259335
Median HI	66.08494803
Education	—
Bachelor's or higher	57.08969588
High school enrollment	100
Preschool enrollment	18.94007443
Transportation	—

Auto Access	61.56807391
Active commuting	16.59181317
Social	—
2-parent households	36.78942641
Voting	1.757987938
Neighborhood	—
Alcohol availability	80.18734762
Park access	18.72192994
Retail density	56.99987168
Supermarket access	31.59245477
Tree canopy	14.43603234
Housing	—
Homeownership	49.89092776
Housing habitability	53.04760683
Low-inc homeowner severe housing cost burden	35.91684845
Low-inc renter severe housing cost burden	27.78134223
Uncrowded housing	90.74810728
Health Outcomes	—
Insured adults	67.2783267
Arthritis	73.2
Asthma ER Admissions	53.5
High Blood Pressure	78.2
Cancer (excluding skin)	49.7
Asthma	61.7
Coronary Heart Disease	72.1
Chronic Obstructive Pulmonary Disease	71.2
Diagnosed Diabetes	61.5

Life Expectancy at Birth	69.1
Cognitively Disabled	60.3
Physically Disabled	37.2
Heart Attack ER Admissions	20.1
Mental Health Not Good	57.3
Chronic Kidney Disease	73.0
Obesity	51.8
Pedestrian Injuries	19.6
Physical Health Not Good	60.5
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	21.6
Current Smoker	57.8
No Leisure Time for Physical Activity	66.6
Climate Change Exposures	—
Wildfire Risk	11.2
SLR Inundation Area	0.0
Children	19.0
Elderly	68.4
English Speaking	55.0
Foreign-born	38.8
Outdoor Workers	49.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.2
Traffic Density	63.1
Traffic Access	23.0
Other Indices	—

Hardship	42.4
Other Decision Support	—
2016 Voting	27.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	64.0
Healthy Places Index Score for Project Location (b)	42.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Per site plan
Construction: Construction Phases	No demolition required
Operations: Vehicle Data	Per traffic analysis

Appendix B:

EMFAC2017 Output

Source: EMFAC2017 (v1.0.3) Emissions Inventory
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coas	2023	HHDT	Aggregate	Aggregate	Gasoline	75.10442936	8265.097	1502.689	1.936286145	1936.286145	1913466.474	8265.097	13656273.03	7.14	**HHD**
South Coas	2023	HHDT	Aggregate	Aggregate	Diesel	109818.6753	13648008	1133618	1911.530188	1911530.188		13648008			
South Coas	2023	LDA	Aggregate	Aggregate	Gasoline	6635002.295	2.53E+08	31352477	7971.24403	7971244.03	8020635.698	2.53E+08	255180358.3	31.82	**LDA**
South Coas	2023	LDA	Aggregate	Aggregate	Diesel	62492.97958	2469816	297086.6	49.3916685	49391.6685		2469816			
South Coas	2023	LDA	Aggregate	Aggregate	Electricity	150700.3971	6237106	751566	0	0		6237106			
South Coas	2023	LDT1	Aggregate	Aggregate	Gasoline	758467.6481	27812996	3504563	1023.913006	1023913.006	1024279.466	27812996	27821405.09	27.16	**LDT1**
South Coas	2023	LDT1	Aggregate	Aggregate	Diesel	360.7799144	8408.618	1256.88	0.366459477	366.4594769		8408.618			
South Coas	2023	LDT1	Aggregate	Aggregate	Electricity	7122.93373	303507.5	35798.19	0	0		303507.5			
South Coas	2023	LDT2	Aggregate	Aggregate	Gasoline	2285150.139	85272416	10723315	3338.798312	3338798.312	3356536.438	85272416	85922778.34	25.60	**LDT2**
South Coas	2023	LDT2	Aggregate	Aggregate	Diesel	15594.68309	650362.8	76635.83	17.73812611	17738.12611		650362.8			
South Coas	2023	LDT2	Aggregate	Aggregate	Electricity	28809.63735	917592.8	145405.4	0	0		917592.8			
South Coas	2023	LHDT1	Aggregate	Aggregate	Gasoline	174910.3847	6216643	2605904	583.3851736	583385.1736	811563.1022	6216643	11211395.79	13.81	**LHDT1**
South Coas	2023	LHDT1	Aggregate	Aggregate	Diesel	125545.0822	4994753	1579199	228.1779285	228177.9285		4994753			
South Coas	2023	LHDT2	Aggregate	Aggregate	Gasoline	30102.75324	1034569	448486.2	111.5753864	111575.3864	209423.5025	1034569	2969599.008	14.18	**LHDT2**
South Coas	2023	LHDT2	Aggregate	Aggregate	Diesel	50003.13116	1935030	628976.5	97.84811618	97848.11618		1935030			
South Coas	2023	MCY	Aggregate	Aggregate	Gasoline	305044.5141	2104624	610089	57.849018	57849.018	57849.018	2104624	2104623.657	36.38	**MCY**
South Coas	2023	MDV	Aggregate	Aggregate	Gasoline	1589862.703	55684188	7354860	2693.883526	2693883.526	2744536.341	55684188	57109879.73	20.81	**MDV**
South Coas	2023	MDV	Aggregate	Aggregate	Diesel	36128.1019	1425691	176566.9	50.65281491	50652.81491		1425691			
South Coas	2023	MDV	Aggregate	Aggregate	Electricity	16376.67653	537591.7	83475.95	0	0		537591.7			
South Coas	2023	MH	Aggregate	Aggregate	Gasoline	34679.50542	330042.9	3469.338	63.26295123	63262.95123	74893.26955	330042.9	454344.9436	6.07	**MH**
South Coas	2023	MH	Aggregate	Aggregate	Diesel	13122.69387	124302	1312.269	11.63031832	11630.31832		124302			
South Coas	2023	MHDT	Aggregate	Aggregate	Gasoline	25624.3151	1363694	512691.3	265.2060557	265206.0557	989975.6425	1363694	9484317.768	9.58	**MHDT**
South Coas	2023	MHDT	Aggregate	Aggregate	Diesel	122124.488	8120623	1221858	724.7695868	724769.5868		8120623			
South Coas	2023	OBUS	Aggregate	Aggregate	Gasoline	5955.291639	245774	119153.5	48.07750689	48077.50689	86265.88761	245774	579743.8353	6.72	**OBUS**
South Coas	2023	OBUS	Aggregate	Aggregate	Diesel	4286.940093	333969.8	41558.29	38.18838072	38188.38072		333969.8			
South Coas	2023	SBUS	Aggregate	Aggregate	Gasoline	2783.643068	112189.6	11134.57	12.19474692	12194.74692	39638.85935	112189.6	323043.5203	8.15	**SBUS**
South Coas	2023	SBUS	Aggregate	Aggregate	Diesel	6671.825716	210853.9	76991.94	27.44411242	27444.11242		210853.9			
South Coas	2023	UBUS	Aggregate	Aggregate	Gasoline	957.7686184	89782.63	3831.074	17.62416327	17624.16327	17863.66378	89782.63	91199.2533	5.11	**UBUS**
South Coas	2023	UBUS	Aggregate	Aggregate	Diesel	13.00046095	1416.622	52.00184	0.239500509	239.5005093		1416.622			
South Coas	2023	UBUS	Aggregate	Aggregate	Electricity	16.11693886	1320.163	64.46776	0			1320.163			

Appendix B

Biological Resource Assessment

BIOLOGICAL RESOURCES ASSESSMENT

Palmdale Maverik Fueling Station Project

Prepared for:

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August 2023

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B. Special-Status Species' Potential to Occur on the Project Site

C. Biological Field Survey Species Compendium

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1 Purpose

This Biological Resource Assessment (BRA) has been prepared by Endemic Environmental Services on behalf of The Altum Group to document and categorize the biological resources present, or that have the potential to be present, on the Palmdale Maverik Fueling Station Project (Project) site. This includes special-status plant and wildlife species, aquatic resources, and other sensitive biological resources.

2 Project Location

The approximately 2.83-acre Project site is located north of the junction of W Avenue S and Guyon Avenue in the City of Palmdale (City) in Los Angeles County (Figure 1, Project Location and Vicinity). The site is located approximately 500 feet west of State Route 14, approximately eight miles south of the City of Lancaster and approximately 35 miles north of the City of Los Angeles. The site is in Section 34, Township 6 North, Range 12 West in the "Ritter Ridge, California" U.S. Geological Survey 7.5-minute topographic quadrangle and is located within Assessor's Parcel Number 3004-016-032. The approximate center of the site is located at 34° 55' 86.25" north latitude and -118° 13' 53.57" west longitude.

The Project site is bordered to the north by vacant undisturbed land; to the west by vacant undisturbed land; to the south by W Avenue S, industrial uses and vacant land; and to the east by vacant undisturbed land and State Route 14 (Figure 2, Local Project Vicinity). The Project site has an elevation of approximately 2,860 feet above mean sea level and is characterized by uneven terrain sloping down generally to the south. Average temperatures in the Project vicinity range from 33°F to 96°F and the area surrounding the Project site receives approximately 10.4 inches of precipitation annually (Weatherspark 2023).

3 Project Description

The Project proposes to develop 12 pumping stations, a 5,637-square-foot convenience store, parking stalls and other associated improvements on the approximately 2.83-acre Project site.

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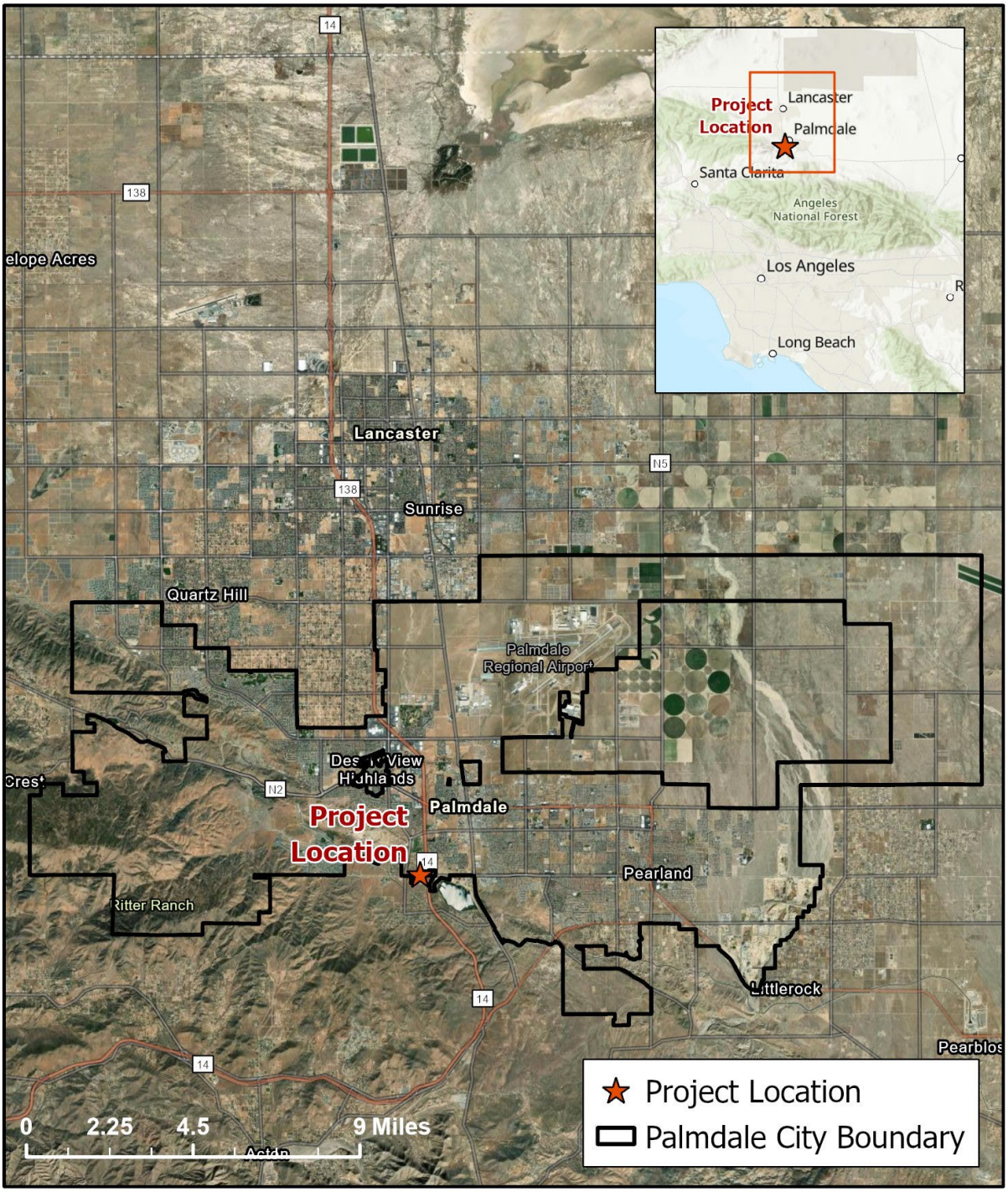

Palmdale Maverik Fueling Station Project

Figure 1

Project Location and Vicinity

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Palmdale Maverik Fueling Station Project
Figure 2
Local Project Vicinity

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Endemic
Environmental Services

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4 Regulatory Setting

4.1 Federal

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) establishes protections for plant and wildlife species that are listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of the FESA prohibits the “take” of any listed wildlife species, where take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct" (50 CFR 17.3). In regards to plants, Section 9 of the FESA prohibits possessing, damaging, maliciously destroying, or removing any listed plant located on federal land and removing, cutting, digging up, damaging, or destroying any listed plant species on any other area in knowing violation of any State law (16 USC 1538). Section 7 of the FESA requires federal agencies to consult with USFWS and/or NMFS if their actions could adversely affect a listed or proposed plant or wildlife species or its critical habitat. Section 10 of the FESA provides for the issuance of Incidental Take Permits (ITPs), which allows for the take of a listed species without further federal actions as long as a Habitat Conservation Plan (HCP) is developed.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the “take" (including killing, capturing, selling, trading, and transporting) of protected migratory birds and any of their parts, eggs, and nests. The list of protected migratory birds can be found in Title 50, Section 10.13 of the Code of Federal Regulations. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the United Stated Fish and Wildlife Service (USFWS). As authorized by the MBTA, the USFWS may issue permits to qualified applicants that would allow for the take of protected migratory birds for the purposes of falconry, rehabilitation, raptor propagation, scientific collecting, and other special purposes. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures, and 50 CFR Part 21, Migratory Bird Permits.

Clean Water Act

The Clean Water Act (CWA) was enacted to restore and maintain the chemical, physical, and biological integrity of the nation’s waters by establishing a basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

Section 404

Section 404 of the CWA requires authorization from the United States Army Corps of Engineers (USACE) for the discharge of dredged or fill material into all water of the United States, including wetlands. A permit from USACE is required whether the work is permanent or temporary. USACE implements the federal policy enacted through Executive Order 11990, which seeks to result in no net loss of wetland values or function.

Section 401

Section 401 of the CWA requires that every applicant for a federal permit or license for any activity that may result in discharge to a water body must obtain certification from the State Water Resources Control Board (SWRCB) that the proposed activity will comply with State water quality standards. The SWRCB, in conjunction with the nine California Regional Water Quality Control Boards, is responsible for administering the Section 401 water quality certification program.

4.2 State

California Endangered Species Act

The California Endangered Species Act (CESA) is similar to the FESA, however, CESA establishes protections for species listed as threatened or endangered by the State. The CESA prohibits the "take" (defined under the CESA as hunt, pursue, capture, or kill, or attempt to engage is such activity) of any state-listed plant or wildlife species unless otherwise permitted pursuant to CESA. Species considered by the State to be candidates for listing as threatened or endangered are treated as if they are listed as threatened or endangered and are, therefore, protected from take. State agencies are required to consult with CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered, threatened, or candidate species or result in destruction or adverse modification of essential habitat.

California Environmental Quality Act

Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines states that species not listed on the federal or state list of endangered species may be considered to be endangered when is survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. In addition, a species may be considered rare if the species would become endangered if its habitat worsens. CEQA Guidelines Appendix G requires a lead agency to determine whether a project would have a significant impact on biological resources, based on a number of thresholds. In addition, CEQA Guidelines Section 15065 requires that a lead agency find an impact to be significant if a project would "substantially 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; or substantially reduce the number or restrict the range of an endangered rare, or threatened species…"

Porter-Cologne Water Quality Act

The Regional Water Quality Control Board (RWQCB) implements water quality regulations under the CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Eliminations System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste,

within any region that could affect the Waters of the State" (Cal. Water Code 13260(a)). Waters of the State are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code 13050(e)). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State that are not regulated by USACE. The RWQCB may require the issuance of a Water Discharge Requirement for these activities.

California Fish and Game Code Sections 1900 – 1913

The California Fish and Game Code is administered by CDFW. Sections 1900 through 1913 of the California Fish and Game Code have been enacted to preserve, protect, and enhance endangered or rare native plants of the State. This act requires all State agencies to utilize their authority to carry out programs that conserve rare or endangered plants. In addition, this act prohibits the taking of listed plants from the wild and requires CDFW be notified at least ten days in advance of any change in land use that would adversely impact listed plant species to allow for the salvage of such plants.

California Fish and Game Codes 3503, 3511, 3513, 4700, 5000, 5050, and 5515

Under Fish and Game Code 3503, it is unlawful to destroy the nests or eggs of any birds that are protected under the MBTA. Additionally, Section 3503.5 establishes that is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provide by the California Fish and Game Code. Section 3511 lists the State's fully protected birds and states that it is unlawful to take or possess these species at any time. Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated by the MBTA except as provided by the rules adopted by the United States Secretary of the Interior under MBTA provisions. Sections 4700, 5000, 5050, and 5515 establish fully protected reptile, amphibian, and mammal species and states that it is unlawful to take or possess these species at any time, unless authorized for scientific or educational purposes.

California Fish and Game Code 4150

Under Fish and Game Code 4150, a mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A nongame mammal may not be taken or possessed except as provided in the California Fish and Game Code.

California Desert Native Plants Act

The California Desert Native Plants Act, codified in Sections 80001-80201 of the California Food and Agriculture Code, is established in order to protect California desert native plants from unlawful harvesting on both public and privately owned lands, as well as to provide information on how to legally harvest native plants to ultimately transplant those plants with the greatest possible chance of survival. This act applies to Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego counties. This act prohibits the harvest, transport, sale, or possession of specific native desert plants without a valid permit or wood receipt with the required tags or seals. The appropriate permit, tags, and seals must be obtained from the sheriff or commissioner of the county where collecting will occur; and the county will charge a fee.

The following native plants, or any parts thereof, may not be harvested except for scientific or educational purposes under a permit issued by the commissioner of the county in which the native plants are growing:

- All species of Burseraceae family (elephant tree)
- *Carnegiea gigantea* (saguaro cactus)
- *Ferocactus acanthodes* (barrel cactus)
- *Castela emoryi* (crucifixion thorn)
- *Dudleya saxosa* (panamint dudleya)
- *Pinus longaeva* (bristlecone pine)
- *Washingtonia filifera* (fan palm)

The following native plants, or any part thereof, may not be harvested except under a permit issued by the commissioner or the sheriff of the county in which the native plants are growing:

- All species of the family Agavaceae (century plants, nolinas, yuccas)
- All species of the family cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 which may be harvested under a permit obtained pursuant to that section.
- All species of the family Fouqieriaceae (ocotillo, candlewood)
- All species of the genus Prosopis (mesquites)
- All species of the genus Cercidium (palos verdes)
- *Acacia greggii* (catclaw)
- *Atriplex hymenelytra* (desert-holly)
- *Dalea spinosa* (smoke tree)
- *Olneya tesota* (desert ironwood), including both dead and live desert ironwood

Western Joshua Tree Conservation Act

The Western Joshua Tree Conservation Act (WJTCA) was passed in July 2023 with the goal to conserve western Joshua tree and its habitat while supporting the state's renewable energy and housing priorities. The WJTCA authorized CDFW to do the following:

- Permit the trimming and removal of hazardous or dead western Joshua trees.
- Permit the incidental take of western Joshua trees provided the permittee meets certain conditions.
- Enter into an agreement with a county or city to delegate limited authority to issue the permits mentioned above, provided certain conditions are met.

Under the WJTCA, no person shall trim or remove any western Joshua tree unless authorized by CDFW or the county or city in which this authority has been delegated to. In order to receive authorization for the removal of western Joshua trees, the permittee must submit to CDFW for its approval a census of all western Joshua trees on the project site, including the size information and photographs, that categorize the western Joshua trees according to the following size classes:

- Less than one meter in height.
- One meter or greater, but less than five meters in height.

- Five meters or greater in height.

In addition, the permittee must avoid and minimize impacts to, and the taking of, western Joshua tree to the maximum extent practicable. Minimization may include trimming, encroachment on root systems, relocation, or other actions that result in detrimental but nonlethal impacts to western Joshua tree. Furthermore, the permittee is required to pay a fee for each western Joshua tree to which take will occur. This fee is dependent upon the height categorization in which each western Joshua tree falls under.

4.3 Regional and Local

City of Palmdale General Plan

The Environmental Resources Element of the City of Palmdale's General Plan contains goals, policies and objectives associated with the protection of biological resources within the City's jurisdiction (City of Palmdale 1993). The following goals, policies and objectives in the City of Palmdale General Plan are applicable to the proposed Project.

- Goal ER2.1: Protect significant ecological resources and ecosystems, including but not limited to, sensitive flora and fauna habitat areas.
    - Policy ER2.2.1: Preserve and maintain significant Joshua tree woodlands and other significant habitat areas. Early in the review of development project, the feasibility of preserving any significant vegetation present on-site should be examined.
    - Objective ER2.2: Ensure local compliance with State and Federal Endangered Species Acts.

City of Palmdale Municipal Code – Chapter 14.04

Chapter 14.04, Joshua Tree and Native Desert Vegetation Preservation, establishes regulations associated with the preservation removal, and relocation of native desert vegetation, including western Joshua tree and California juniper. Section 14.04.040 of the City of Palmdale municipal code states that a native desert vegetation removal permit shall be obtained from the City's Landscape Architect, or in lieu thereof, the Director of Public Work's designee, prior to the removal of any native desert vegetation. Additionally, Section 14.04.040 states that take of western Joshua tree shall be avoided to the maximum extent practicable, and that western Joshua trees that cannot be avoided shall be relocated to another location on the project site, to the maximum extent feasible.

Section 14.04.050 of the City of Palmdale municipal code states that prior to the development of a project site that contains native desert vegetation, a desert vegetation preservation plan shall be prepared and submitted with the development application. This plan shall include the following:

- A written report and site plan which depicts the location of each Joshua tree and California juniper, discusses their age and health, and identifies and locates all trees and shrubs which can be saved in place or relocated. This report shall be prepared by a desert native plant specialist.
- A site landscaping plan showing the proposed location of those Joshua trees and California junipers, and any other native desert vegetation that will remain on-site.

- A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee, in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured.
- Such other and further information as the Director of Planning may deem necessary to fulfill the purposes and intent of this chapter in a particular case.

Section 14.04.060 of the City of Palmdale municipal code establishes the requirements regarding the methodology used to relocate western Joshua trees. This includes type and size of the equipment necessary, the characteristics of western Joshua trees that are suitable for relocation, and the actions that must be taken to increase survivability throughout the relocation process.

Section 14.04.070 of the City of Palmdale municipal code establishes the City's desert vegetation preservation criteria. This section states that California juniper shall be preserved at a minimum of two individuals per gross acre, averaged for the gross site area covered by the development application. In cases where the site conditions prevent the preservation of two individuals per gross acre, the minimum standard of preservation will be determined by a desert native plant specialist and confirmed by the City's Landscape architect, or in lieu thereof, the Director of Public Works' designee. Furthermore, Section 14.04.070 establishes that native desert vegetation that cannot be fenced and left undisturbed shall not be left in place while grading, and that vegetation slated to remain on site shall be placed in a holding area while grading occurs and then moved to a permanent location once grading activities have concluded. An alternative acceptable method includes grading in phases and transplanting vegetation to the graded area once that area is ready to receive the vegetation. Only after all other options are exhausted, project proponents may pay an in-lieu fee to the City to fulfill their obligations of preservation of native desert vegetation. This fee shall be calculated on the minimum standard of two trees per acre, less any trees preserved by other means. The in-lieu fee amount shall be determined by resolution of the City Council. Any native desert vegetation in excess of the minimum standard for preservation may be removed after the public has had the opportunity to transplant native vegetation, and after the native desert vegetation preservation plan and native desert vegetation removal permit have been approved by the City, or, if applicable, after the payment of the in-lieu fee.

Section 14.040.080 of the City of Palmdale municipal code establishes the maintenance activities that must occur for preserved desert vegetation. These activities must be done at the expense of the developer and include the following:

- Provisions shall be established that ensure that desert vegetation preserved on-site is maintained in a healthy condition for a minimum of two growing seasons.
- After one year, a desert native plant expert shall perform an inspection and evaluation of desert vegetation retained on-site. If it is determined that any quantity of desert vegetation has died, it will be the responsibility of the proponent to provide replacement desert vegetation as determined by the City's Landscape Architect, or in lieu thereof, the Direct of Public Work's designee.
- The Director of Planning shall require posting of a bond or other appropriate security measure at the time of development approval to assure maintenance of on-site trees, or trees in landscape easements

of assessment districts, for a period of two years. If the project is otherwise required to have a bond posted for landscape maintenance requirements, this requirement shall be incorporated in the same bond.

5 Methodology

5.1 Desktop Review

Endemic Environmental Services conducted a literature review of several sources to obtain information regarding the biological resources that have the potential to occur on the Project site and surrounding area. Resources reviewed include the CDFW California Natural Diversity Database (CNDDB) (CDFW 2023); the USFWS Information, Planning, and Conservation (IPaC) System Query (USFWS 2023b); the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2023) and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2023). The CNDDB query and the CNPS search included the Ritter Ridge, California; Palmdale, California; Littlerock, California; Alpine Butte, California; Lancaster East, California; and Lancaster West, California U.S. Geological Survey 7.5-minute topographic quadrangles.

The results of the special-status species searches have been compiled and analyzed to determine the likelihood of each species occurring on the Project site, as shown in Appendix B. The conclusions regarding the potential for each species to occur on the Project site has been determined by the suitable habitat for each species, the data collected during the biological field survey, and the CNDDB query. The special-status species that have been determined to be present or have a high or moderate potential to be present on the Project site are further discussed in Section 6.2, Special-Status Species, while the special-status species that have been determined to have a low or no potential to occur on the Project site are not further discussed in this report. Targeted surveys to confirm the presence or absence of special-status species were not performed as part of this analysis.

5.2 Biological Field Survey

Endemic Environmental Services Biologists Barry Nerhus and Armando Gonzales conducted a biological field survey of the Project site on August 7, 2023 from 7:30 am to 9:00 am. The temperature was 85°F, wind was eight miles per hour southwest, there was no precipitation, and weather conditions were sunny. The survey included the Project site and its immediate surroundings. During the biological field survey, observed plant and wildlife species were recorded, the vegetation communities and land covers were identified, aquatic resources were mapped, and the general conditions of the site were documented.

6 Findings

6.1 Environmental Setting

Soils

According to the U.S. Department of Agriculture's NRCS Web Soil Survey, soil on the Project site consists of Vernalis loam, 2 to 5 percent slopes (USDA 2023). The NRCS does not consider this soil to be hydric (USDA 2023).

Hydrology

One ephemeral drainage was observed on the Project site during the biological field survey. This drainage runs from beyond the northern boundary of the Project site through to the southern boundary of the site (Figure 3, Hydrologic Features Locations).

Wildlife

General wildlife species observed during the biological field survey include house finch (*Heamorhous mexicanus*), mourning dove (*Zenaida macroura*), blue-gray gnatcatcher (*Polioptila* caerulea), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Otospermophilus beecheyi*), and coyote (*Canis latrans*). Multiple burrows with the potential to support Mohave ground squirrel (*Xerospermophilus* mohavensis), burrowing owl (*Athene cunicularia*) and desert tortoise (*Gopherus agassizii*) were observed on the Project site. In addition, several red harvester ant (*Pogonomyrmex barbatus*) colonies were observed throughout the Project site, a known prey species of the coast horned lizard (*Phrynosoma blainvillii*).

Plants

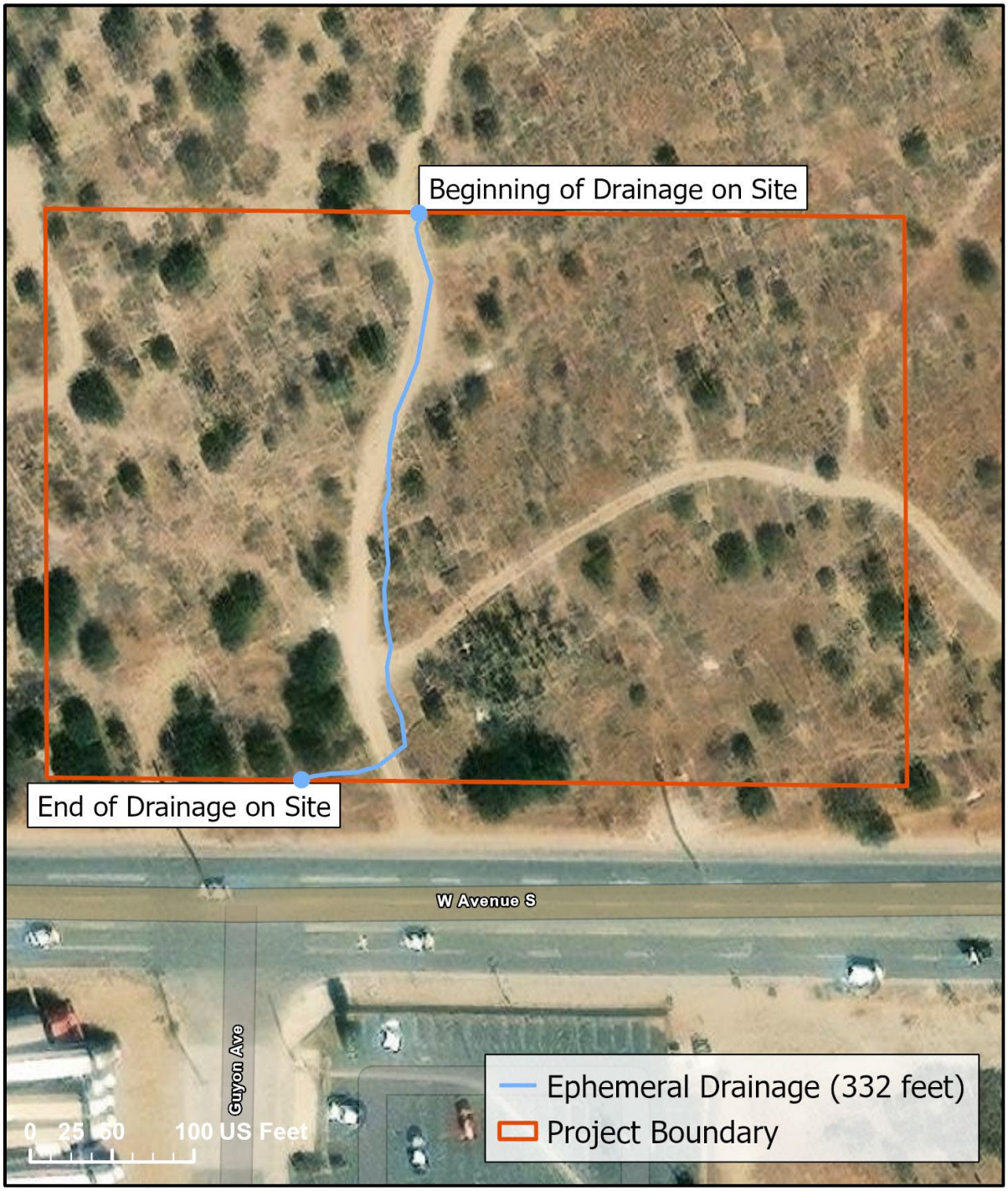
Plants on the Project site consist primarily of native desert plant species. This includes western Joshua tree (*Yucca brevifolia*), California juniper (*Juniperus californica*), chamise (*Atriplex canescens*), California buckwheat (*Eriogonum fasciculatum*), creosote bush (*Larrea tridentata*), California ephedra (*Ephedra californica*), bristly fiddleneck (*Amsinckia* tessellata), desert woolly star (*Eriastrum* eremicum), and silver cholla (*Cylindropuntia echinocarpa*). While not abundant, some invasive grasses, such as cheatgrass (*Bromus tectorum*), were observed scattered throughout the Project site.

Vegetation Communities and Land Cover Types

The Project site consists of *Juniperus californica* Woodland Alliance and *Yucca brevifolia* Woodland Alliance (Figure 4, Vegetation Communities), as further described below.

Joshua Tree (*Yucca brevifolia*) Woodland Alliance

The Project site contains approximately 1.30 acres of Joshua Tree Woodland. This habitat type is characterized by western Joshua trees (*Yucca brevifolia*). Other species associated with this habitat type include burro-weed (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), sagebrush (*Artemisia tridentata*), yellow rabbitbrush (*Chrysothamnus viscidiflorus*), blackbrush (*Coleogyne ramosissima*), buckthorn cholla (*Cylindropuntia*



Palmdale Maverik Fueling Station Project

Figure 3

Hydrologic Features Locations

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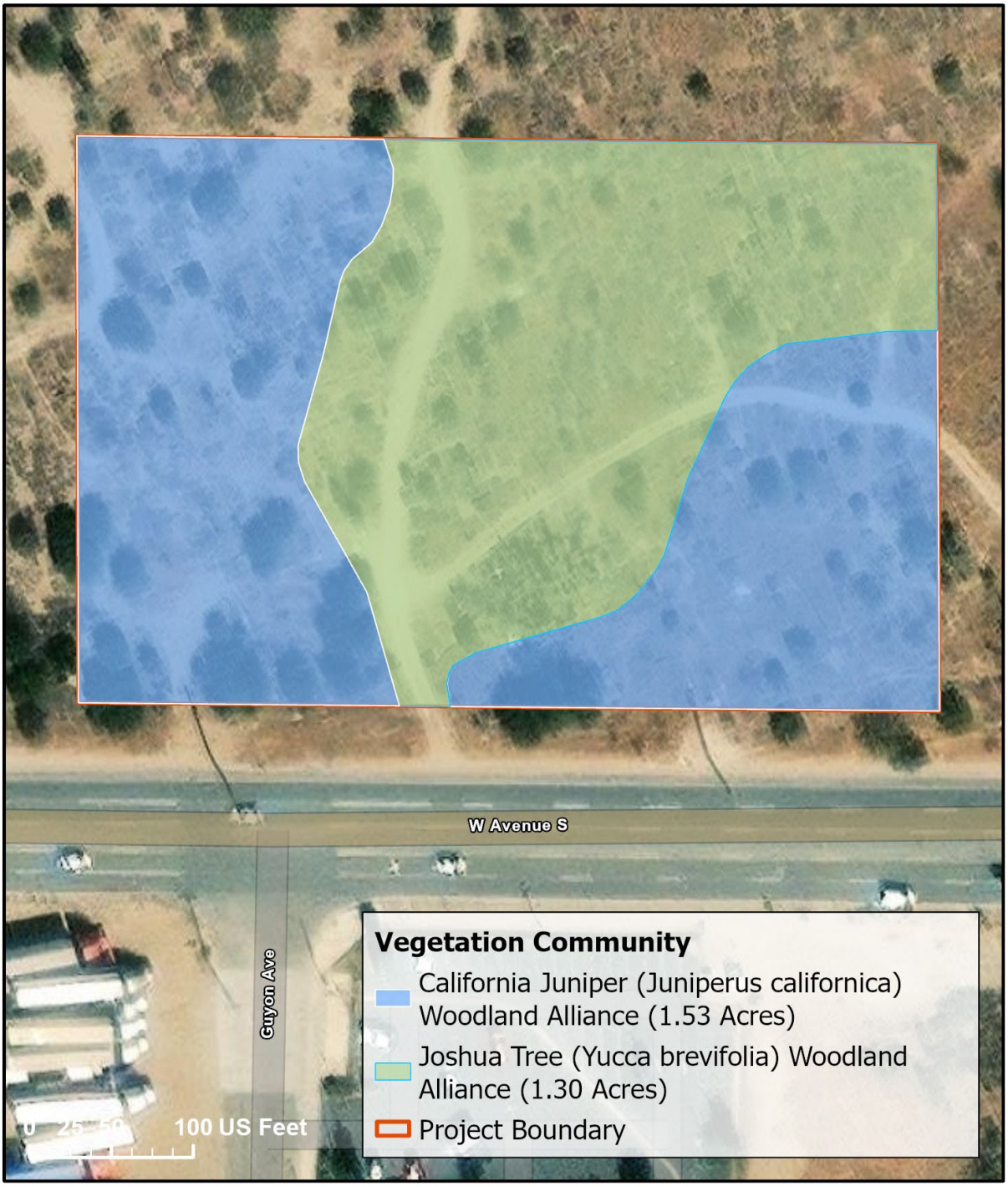

Palmdale Maverik Fueling Station Project

Figure 4

Vegetation Communities

N

Endemic Environmental Services

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acanthocarpa), Nevada ephedra (*Ephedra nevadensis*), California buckwheat (*Eriogonum fasciculatum*), sticky snakeweed (*Gutierrezia microcephala*), winterfat (*Krascheninnikovia lanata*), creosote bush (*Larrea tridentata*), Anderson thornbush (*Lycium andersonii*), banana yucca (*Yucca baccata*), and Mojave yucca (*Yucca schidigera*). California juniper (Juniperus californica), Utah juniper (*Juniperus osteosperma*), or single-leaf pinyon (*Pinus monophylla*) trees may also be present. Within this vegetation community, the canopy is open to intermittent, the shrub layer is open to intermittent, and the herbaceous layer is open to intermittent with perennial grasses and seasonal annuals (Sawer et al. 2009). This vegetation alliance has a community rank of G4S3.2 (CNPS 2023c), meaning this community is vulnerable (i.e., at risk of extirpation due to a fairly restricted range, relatively few populations or occurences, or recent and widespread declines or threats) (NatureServe 2023b). This community is considered sensitive by local, state, and/or federal agencies.

California Juniper (*Juniperus californica*) Woodland Alliance

The Project site contains approximately 1.53 acres of California Juniper Woodland. Within this vegetation community, California juniper is dominant or co-dominant in a small tree canopy. Other tree species associated with this habitat type include single-leaf pinyon (*Pinus monophylla*), blue oak (*Quercus douglasii*), and Joshua tree (*Yucca brevifolia*). Shrub species associated with this habitat type include desert agave (*Agave deserti*), sagebrush (*Artemisia tridentata*), blackbrush (*Coleogyne ramosissima*), *Ephedra* spp., chaparral yucca (*Hesperoyucca whipplei*), scale broom (*Lepidospartum squamatum*), Parry's nolina (*Nolina parryi*), Mexican cliffrose (*Purshia mexicana*), Muller oak (*Quercus cornelis-mulleri*), and Mojave yucca (*Yucca schidigera*). Within this habitat type, the tree and shrub canopy are open to intermittent and the herbaceous layer is sparse or grassy (Sawer et al. 2009). This vegetation alliance has a community rank of G4S4 (CNPS 2023b), meaning this community is apparently secure (i.e., at fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurences, but with possible cause for some concern as a result of local recent declines, threats, or other factors) (NatureServe 2023b). This community is not considered sensitive by local, state, and/or federal agencies.

6.2 Special-Status Species

6.2.1 Special-Status Plants

Special-status plants include those listed, or those that are candidates for listing, as threatened or endangered by USFWS and CDFW, and species identified as rare by the CNPS (particularly CRPR 1A, presumed extirpated in California and either rare or extinct elsewhere; CRPR 1B, rare, threatened, or endangered in California and elsewhere; CRPR 2A, presumed extirpated in California but more common elsewhere; and CRPR 2B, rare, threatened, or endangered in California but more common elsewhere). The results of the CNDDB, USFWS, and CNPS searches indicate that eight special-status plant species are known to occur in the region of the Project site. These species were evaluated for their potential to occur on the Project site based on their habitat requirements, the CNDDB search results, and the biological field survey. Species that were determined to be present or to have a high or moderate potential to occur on the Project site are further discussed below, while species determined to have a low potential to occur or are not expected to occur are not further discussed. Of the eight special-status plant species known to occur in the region of the Project site, six are not expected to

occur due to the absence of suitable habitat, the lack of CNDDB occurrences and/or the results of the biological field survey. The complete list of special-status plant species evaluated can be found in Appendix B, Table 1.

California Juniper (*Juniperus californica*)

California juniper is a locally protected plant species as established in the City of Palmdale municipal code that is present on the Project site. This species is a tree that is found in dry slopes and flats of the high desert at elevations between 122 – 11,105 feet above mean sea level. The Project site contains a total of 112 individual California junipers (Figure 5, California Juniper Locations).

Short Joint Beavertail (*Opuntia basilaris var. brachyclada*)

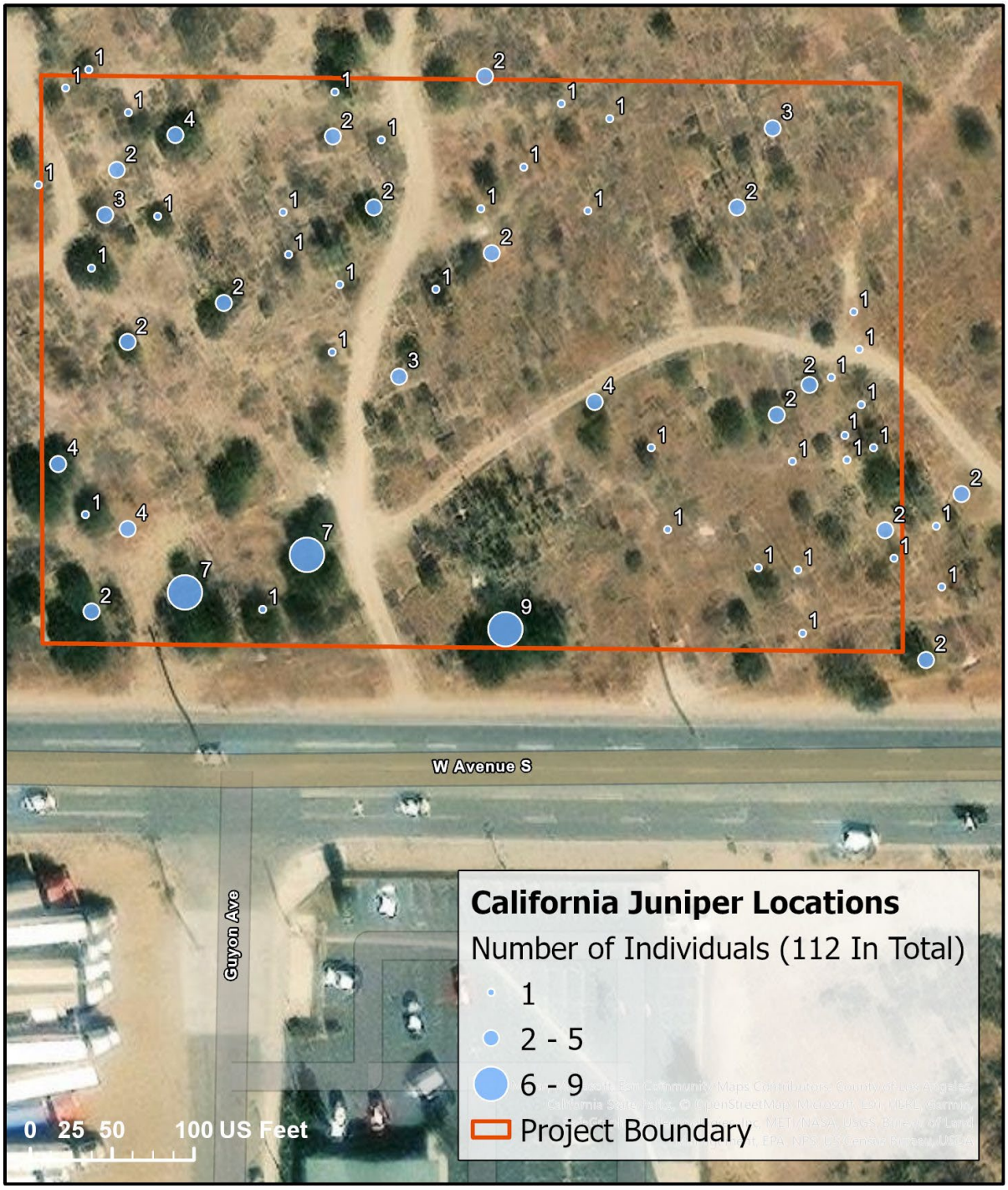
Short joint beavertail is a CRPR 1B.2 species with a moderate potential to occur on the Project site. This species is a perennial stem that is found in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats at elevations between 1,395 – 5,905 feet above mean sea level. Blooming for this species occurs between April and August. Suitable vegetation for this species is present on the Project site, and six CNDDB occurences of this species have been recorded within five miles of the Project site. This species was not observed on the Project site during the biological field survey, although targeted surveys were not carried out.

Western Joshua Tree (*Yucca brevifolia*)

Western Joshua tree is a state candidate and CRPR 4.3 species that is present on the Project site. This species occurs in Joshua tree woodland, California juniper woodland, and Mojavean desert scrub habitats at elevations between 1,600 and 11,000 feet above mean sea level. The Project site contains 120 individual western Joshua trees (Figure 6, Western Joshua Tree Locations).

6.2.2 Special-Status Wildlife

The results of the CNDDB and USFWS searches indicate that 26 special-status wildlife species are known to occur in the region of the Project site. These species were evaluated for their potential to occur on the Project site based on their habitat requirements, the CNDDB search results, the USFWS IPaC search results, and the biological field survey. Species that were determined to be present or to have a high or moderate potential to occur on the Project site are further discussed below, while species determined to have a low potential to occur or are not expected to occur are not further discussed. Of the 26 special-status wildlife species known to occur in the region, 14 of these species are not expected to occur on the Project site due to the absence of suitable habitat, the lack of CNDDB occurrences and/or the results of the biological field survey. The complete list of special-status wildlife species evaluated can be found in Appendix B, Table 2.



Palmdale Maverik Fueling Station Project

Figure 5

California Juniper Locations

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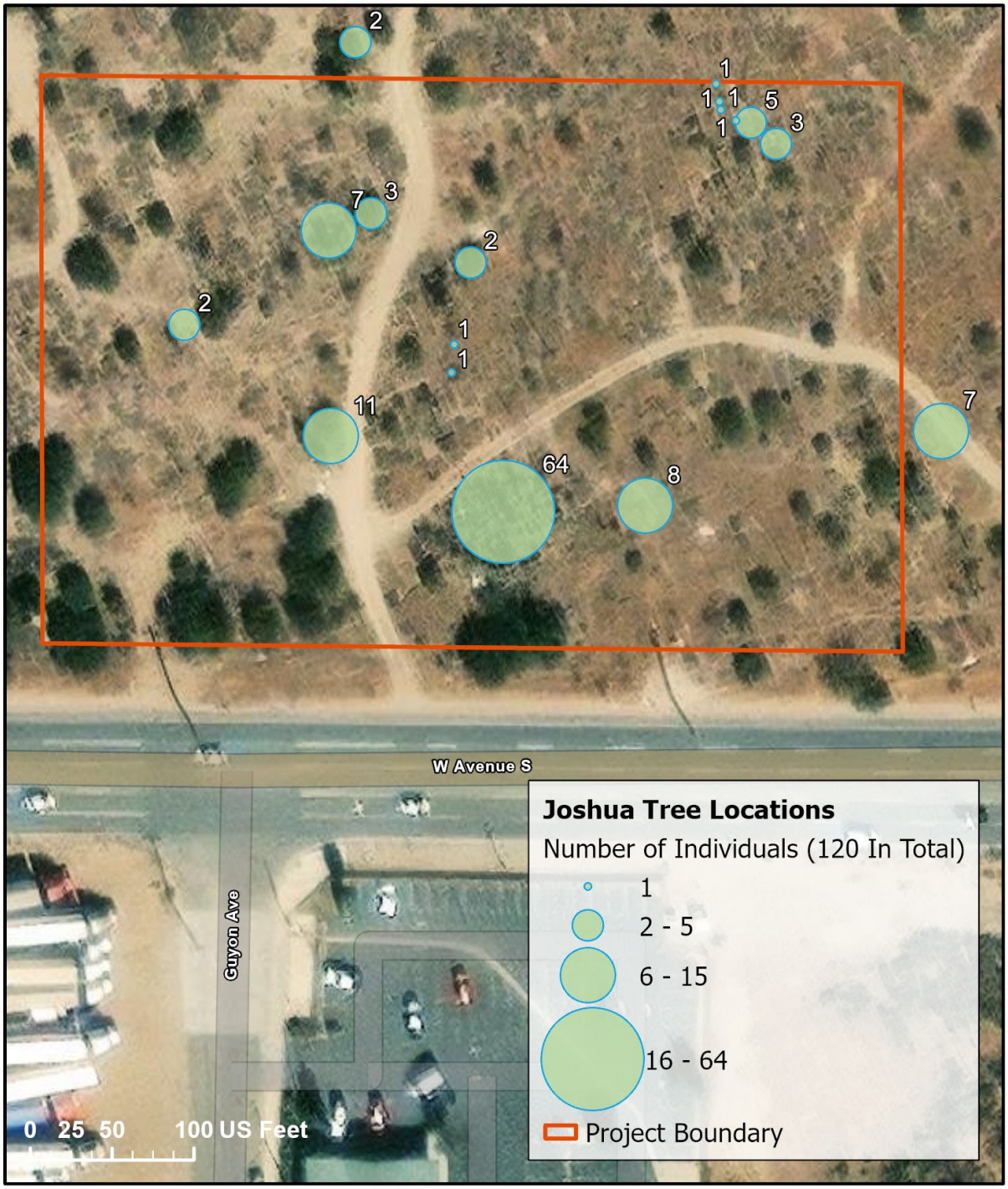

Palmdale Maverik Fueling Station Project

Figure 6

Western Joshua Tree Locations

California Glossy Snake (*Arizona elegans occidentalis*)

California glossy snake is a CDFW species of special concern (SSC) with a moderate potential to occur on the Project site. This species occurs in desert habitats, chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grasses. The species prefers open sandy areas with scattered brush, but can also be found in rocky areas (Morey et al. 1990). The Project site contains suitable vegetation and sandy soils. While CNDDB occurences of this species have been recorded within five miles of the Project, the latest occurrence was recorded in 1937.

Coast Horned Lizard (*Phyrnosoma blainvillii*)

Coast horned lizard is a CDFW SSC with a high potential to occur on the Project site. This species occurs in sage scrub, dunes, alluvial scrub, annual grassland, chaparral, oak woodland, riparian woodland, Joshua tree woodland, coniferous forest, and saltbush scrub. This species is found in areas with loose, fine soils, open areas, and shrub cover. Their diet consists primarily of ants as well as beetles, wasps, grasshoppers, flies, and caterpillars (Morey et al. 2000a). The Project site contains suitable vegetation, open areas, and sandy soils. The Project site also contains several colonies of red harvester ants, a known prey species of coast horned lizard. A CNDDB occurrence of this species has been recorded approximately 2.5 miles north of the Project site.

Desert Tortoise (*Gopherus agassizii*)

Desert tortoise is a federally and state threatened species with a moderate potential to occur on the Project site. This species occurs in desert scrub, desert wash, and Joshua tree woodland. This species relies on burrows that they excavate under bushes, overhanging soil or rock formations, or in the open. Friable, sandy, and well-drained soils are required for burrows excavation (Marlow et al. 2000). The Project contains suitable vegetation, soils, and multiple burrows with the potential to support desert tortoise were observed on the Project site during the biological field survey. No CNDDB occurences of this species have been recorded within five miles of the Project site.

Northern California Legless Lizard (*Anniella pulchra*)

Northern California legless lizard is a CDFW SSC with a moderate potential to occur on the Project site. This species occurs in coastal dunes, valley-foothill chaparral, desert scrub, sandy washes, and coastal scrub. This species is found primarily in areas with sandy or loose organic soils where there is plenty of leaf litter (Morey et al. 2000b). The Project site contains suitable vegetation and sandy, loose soils. There are 13 CNDDB occurences of this species within 5 miles of the Project site.

Cooper's Hawk (*Accipiter cooperii*)

Cooper's hawk is a CDFW Watch List species with a moderate potential to occur on the Project site. Species on the CDFW Watch List are those that were previously SSCs but do not currently meet the SSC criteria, and for which there is concern and a need for additional information to clarify status. This species is found in dense stands of live oak, riparian deciduous, or other forest habitats near water. This species usually nests near open water or riparian vegetation and feeds primarily on smalls birds and small mammals (Polite et al.

1990). While the Project site does not contain suitable nesting habitat for this species, the site may be used for foraging. A CNDDB occurrence of this species has been recorded approximately 2 miles northeast of the Project site.

Costa's Hummingbird (*Calypte costae*)

Costa's hummingbird is a USFWS bird of conservation concern (BCC) with a moderate potential to occur on the Project site. This species occurs in desert wash, edges of desert riparian and valley foothill riparian, coastal scrub, desert succulent scrub, lower-elevation chaparral, and palm oasis. Nesting occurs in a variety of trees, cacti, shrubs, woody forbs, and vines (Green et al. 1990). The Project site contains suitable nesting habitat for this species.

Ferruginous Hawk (*Buteo regalis*)

Ferruginous hawk is a CDFW Watch List species with a moderate potential to occur on the Project site. This species occurs in open grasslands, sagebrush flats, low foothills, surrounding valleys, and fringes of pinyon-juniper habitats. Prey primarily consists of lagomorphs, ground squirrels, and mice (Polite et al. 1999) . Due to the abundance of suitable prey species present on the Project site, this species may use the Project site for feeding. A CNDDB occurrence of this species has been recorded approximately four miles northwest of the Project site.

LeConte's Thrasher (*Toxostoma lecontei*)

LeConte's thrasher is a USFWS BCC and a CDFW SSC with a high potential to occur on the Project site. This species occurs in open desert wash, desert scrub, alkali desert scrub, Joshua tree woodland, and desert succulent habitats. Scattered desert shrubs and cactus are relied of for cover and nesting occurs in dense, spiny shrubs or densely branched cactus in desert wash habitat (Dobkin et al. 2005). The Project site contains suitable vegetation for this species. Two CNDDB occurences of this species have been recorded within 5 miles of the Project site.

Loggerhead Shrike (*Lanius ludovicianus*)

Loggerhead shrike is a CDFW SSC with a high potential to occur on the Project site. This species occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. This species feeds on insects, small birds, mammals, amphibians, reptiles, fish, carrion, and various other invertebrates. The Project site contains suitable vegetation for this species (Granholm et al. 1990). A CNDDB occurrence of this species has been recorded approximately two miles southwest of the Project site.

Swainson's Hawk (*Buteo Swainsoni*)

Swainson's hawk is a state threatened species with a high potential to occur on the Project site. This species nests in juniper-sage flats, riparian areas, and oak savanna. This species is also found in open desert, grassland, and cropland. Their diet consists of mice, gophers, ground squirrels, rabbits, large arthropods, amphibians, reptiles and birds. Suitable nesting habitat and prey species are present on the Project site

(Polite et al. 2006). A CNDDB occurrence of this species has been recorded approximately 0.75-mile northeast of the Project site.

Mohave Ground Squirrel (*Xerospermphilus mohavensis*)

Mohave ground squirrel is a state threatened species with a high potential to occur on the Project site. This species occurs in desert scrub, alkali desert scrub, Joshua tree woodland, and annual grasslands within the Mohave Desert in San Bernardino, Los Angeles, Kern, and Inyo counties. This species relies on burrows at the base of shrubs for cover and forages on the ground or in shrubs and Joshua trees (Johnson et al. 2019). Suitable vegetation is present on the Project site and multiple active burrows that have the potential to support this species were observed during the biological field survey. Multiple CNDDB occurences of this species have been recorded within five miles of the Project site.

Crotch's Bumblebee (*Bombus crotchii*)

Crotch's bumblebee is a state candidate species with a high potential to occur on the Project site. This species occurs in open grasslands, shrublands, chaparral, desert margins, Joshua tree woodland, creosote scrub, and semi-urban settings (NaturveServe 2023a). Suitable vegetation is present on the Project site and a CNDDB occurrence of this species has been recorded approximately 0.75-mile northeast of the Project site.

6.3 Sensitive Vegetation Communities

The Project site contains 1.3 acres of Joshua Tree Woodland Alliance (Figure 4, Vegetation Communities). This community is vulnerable and is considered sensitive by local, state, and/or federal agencies.

6.4 Aquatic Resources

One ephemeral drainage was observed on the Project site during the biological field survey (Figure 3, Hydrologic Features Locations).

7 Discussion and Recommended Mitigation

7.1 Special-status Plants

Native Desert Vegetation Preservation

The City of Palmdale requires that a desert vegetation preservation plan be prepared and submitted as part of the development application in order to maximize the amount of native desert vegetation that can be preserved throughout development. The removal of native desert vegetation without the submittal of a desert vegetation preservation plan would be considered a significant impact. As such, the following mitigation measure is recommended to reduce impacts to less than significant:

- A written report and site plan which depicts the location of each California juniper, discusses their age and health, and identifies and locates all trees and shrubs which can be saved in place or located.

- A site landscaping plan showing the proposed locations of all Joshua trees, California junipers, and any other native desert vegetation that will remain on-site.
- A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee, in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured.
- Such other and further information as the Director of Planning may deem necessary to fulfill the purposes and intent of this chapter in a particular case

Additionally, a minimum standard of preservation for California juniper shall be met by the Project developer in accordance with Section 14.04.070 of the City of Palmdale municipal code. If this standard cannot be met, the developer shall pay all associated in-lieu fees as required by the City.

Short-Joint Beavertail

If present on the Project site, the removal of native desert vegetation would result in the removal of short-joint beavertail, which would be considered a significant impact. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

Prior to the commencement of construction activities, a floristic survey shall be conducted for short-joint beavertail. If detected, each individual shall be flagged or fenced for avoidance prior to the commencement of construction activities. If avoidance is not feasible, a qualified biologist shall develop a short-join beavertail removal and reintroduction plan for any impacted plants. This plan must be approved by CDFW prior to the issuance of grading permits.

Western Joshua Tree

The Project site contains a total of 120 individual western Joshua trees. The Project would require the removal of some, if not all, of these trees, which would be considered a significant impact. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

Impacts to western Joshua trees shall be avoided to the extent feasible. A buffer shall be placed around each Western Joshua tree that can be preserved at a minimum distance of five feet beyond the tree's drip line. Temporary fencing, signage, and flagging shall be erected to prevent impacts to the tree and buffered area for the duration of construction activities.

In the event that western Joshua trees cannot be preserved during Project construction or operation, an Incidental Take Permit for the removal of western Joshua trees shall be obtained from CDFW prior to the removal of western Joshua trees and the issuance of any grading or construction permit. In addition, all applicable fees as established in the Western Joshua Tree Conservation Act shall be paid by the Project developer prior to the removal of any western Joshua trees.

7.2 Special-status Wildlife

California Glossy Snake, Coast Horned Lizard, and Northern California Legless Lizard

Construction activities on the Project site may result in direct impacts to California glossy snake, coast horned lizard, and Northern California legless lizard. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

No more than 72 hours prior to the commencement of construction activities, a qualified biologist shall conduct a survey for California glossy snake, coast horned lizard, and Northern California legless lizard. If any of these species are found to be present on the Project site, no construction activities shall commence until the individuals have left the area or have been relocated by a qualified biologist in accordance with CDFW protocols.

Desert Tortoise

Grading and vegetation removal activities may result in direct impacts to desert tortoise. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

Prior to the commencement of construction activities, a qualified biologist shall conduct clearance surveys for desert tortoise on the Project site. Clearance surveys shall follow the USFWS *Clearance Survey Protocol for the Mojave Desert Tortoise* (May 2019). If desert tortoise is determined to be present on the Project site, the Project developer shall develop and implement a mitigation and monitoring plan in consultation with USFWS and CDFW.

Burrowing Owl

Grading and vegetation removal activities on the Project site may result in direct impacts to burrowing owl, which would be considered a significant impact. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

No more than 30 days prior to the commencement of construction activities, a qualified biologist shall survey the Project site to determine whether burrowing owl occur on the site. If burrowing owl is found to be present on the Project site, CDFW shall be consulted, and all applicable protocols, as established by CDFW, shall be adhered to prior the commencement of construction activities.

Nesting Birds

The removal of vegetation during the nesting bird season may result in direct impacts to nesting birds, which would be considered a significant impact. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

To the extent feasible, construction-related activities shall be conducted outside of the nesting bird season (February 1 through August 31). If construction must occur during the nesting bird season, a qualified biologist shall conduct a nesting bird survey of the Project site no more than 72 hours prior to the commencement of vegetation removal activities. If no active nests or breeding activities are found, construction activities may

begin. If an active nest and/or breeding activities are determined to be present, the nest site/breeding habitat shall be delineated by a biological monitor, and a buffer of no less than 300 feet (500 feet for raptors) shall be established in which no construction activities are permitted until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the Project.

Mohave Ground Squirrel

Grading and vegetation removal activities on the Project site may result in direct impacts to Mohave ground squirrel, which would be considered a significant impact. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

Prior to the commencement of construction activities, a qualified biologist shall conduct surveys for Mohave ground squirrel in accordance with the California Department of Fish and Game *Mohave Ground Squirrel Survey Guidelines* (January 2003). Surveys for Mohave ground squirrel are performed between March 15 and July 15 using standard live trapping techniques. A total of three rounds of trapping are required during this time, although trapping shall cease once a Mohave ground squirrel is captured or observed. If these surveys obtain positive results for Mohave ground squirrel, or if Mohave ground squirrel presence is assumed within the Project site, the Project developer shall obtain incidental take authorization from CDFW prior to the commencement of construction activities.

Crotch's Bumblebee

Construction activities may result in direct impacts to crotch's bumblebee, which would be considered a significant impact. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

Prior to the commencement of construction activities, a qualified biologist shall conduct a survey for Crotch's bumblebee during the species' active period (March to July). This survey shall include a search for Crotch's bumblebee activity and the presence of ground nests. If a ground nest is observed, the nest shall remain in place until it is determined to be no longer active by a qualified biologist. If Crotch's bumblebee is present on the Project site and may occur during Project activities, the Project developer shall consult with CDFW regarding the implementation of avoidance measures, or the issuance of an Incidental Take Permit.

7.3 Aquatic Resources

Ephemeral Drainage

An ephemeral drainage is present on the Project site. This drainage enters the site on its northern boundary, runs through the length of the site and flows beyond the southern boundary. Impacts to this drainage would be considered a significant impact. As such, the following mitigation measure is recommended to reduce Project impacts to less than significant:

Prior to the fill, alteration, or other impacts to the bed or bank of this ephemeral drainage, a jurisdictional delineation of this drainage shall be carried out to determine which jurisdiction(s) this drainage falls under. Dependent upon the results of the jurisdictional delineation a CDFW Notification of Streambed Alteration or Water Discharge Requirement pursuant to the Porter-Cologne Water Quality Act may be required. The applicable permit shall be obtained prior to the fill, alteration, or other impacts to the bed or bank of this ephemeral drainage.

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Appendix B.1

Jurisdictional Delineation for APN 3004-016-032

Mark Hagan
44715 17th Street East
Lancaster, CA 93535
(661) 433-9956

July 12, 2024

SDC
Attn: Ms. Catherine Otis
245 E Third Street
Long Beach, CA 90802

Re: Jurisdictional Delineation for APN 3004-016-032

California Department of Fish and Wildlife CDFW) requires a Lake or Streambed Alteration (LSA) Agreement when a project activity may substantially adversely affect fish and wildlife resources. A survey was conducted to comply with Section 1602, Lake and Streambed Agreement application for streams/washes on APN 3004 016-032 in Palmdale, California. The project site is approximately 3 acres (1.2 ha) located north of Avenue S and west of Highway 14 (Figure 1).

A survey was conducted on 17 June 2024 to locate and delineate streams/washes within the proposed project site. The habitat within the study area was an ecotone of California juniper (*Juniperus californica*) woodlands and Joshua tree (*Yucca brevifolia*) desert scrub habitat. The study area consisted of sandy loam surface soil texture with a southerly aspect and 2-5 percent slope. No washes or streambeds were observed during the survey.

Subsequent to the survey, a biological report was provided that indicated an ephemeral drainage had been observed on the project site (Endemic Environmental Services 2023). This drainage appeared within or along an existing dirt road that was oriented from north to south through the study area (Figure 2).

A second field survey was conducted on 1 July 2024 to look closer at the dirt road. The focus of this survey was to verify the presence of an ephemeral drainage. No features were observed to be a stream/wash regulated under Section 1602 which would require an LSA Agreement. The dirt road exhibits some minor erosional features due to the terrain and soils (Figures 3 and 4).

It is recommended that this conclusion be submitted to CDFW with a request for written concurrence. This would comply with the Initial Study Mitigation Measure Bio-11 that requires appropriate consultation and applicable permits.

References used were:

Endemic Environmental Services. 2023. Biological resources assessment for the Palmdale Maverik fueling station project. 33pp.

Please let me know if you require further information or assistance. I can be reached at the address or phone number above or by email at wnaturelover1@aol.com.

Mark Hagan
Wildlife Biologist

Palmdale Maverik Fueling Station Project
Figure 2
Local Project Vicinity

N

Endemic
Environmental Services

Figure 1. Excerpt from Endemic Environmental Services. 2023. Biological Resources Assessment for the Palmdale Maverik Fueling Station Project. p5.

Figure 2. Excerpt from Endemic Environmental Services, 2023. Biological Resources Assessment for the Palmdale Maverik Fueling Station Project, p15.

Figure 3. Photographs of dirt road and erosional features. Views are from north looking south.

Figure 4. Photographs of area that ephemeral stream was reported veering to the west.

Appendix C

Cultural Resource Survey Confidential

ASM affiliates
Archaeology • History • Ethnography • Architectural History

September 9, 2023

Anna Choudhuri
Environmental Planning Manager
The Altum Group
44-600 Village Court, Suite 100
Palm Desert, California 92260

Re: Cultural Resource Survey for the Palmdale Maverik Project, Palmdale, Antelope Valley, California

Dear Ms. Choudhuri,

This letter report presents the results of a cultural resources survey conducted by ASM Affiliates (ASM) for the Pamdale Maverik Project (Project), Palmdale, Los Angeles County, California. This letter report provides the results of an archaeological inventory of the Project parcel. The results of this analysis will assist the City of Palmdale (City) in determining whether the Project has the potential to result in significant effects in compliance with the provisions of the California Environmental Quality Act (CEQA).

The study included a records search at the South Central Coastal Information Center (SCCIC), a search of the Sacred Lands File held by the California Native American Heritage Commission (NAHC), review of other background material related to the Project area, and a pedestrian survey of the Project parcel to determine the presence or absence of historic resources. The SCCIC summary lists are included with this report as Attachment A, and NAHC and related correspondence to date as Attachment B.

PROJECT DESCRIPTION AND LOCATION

The Project site is an approximately 5.54-acre parcel located in the southwestern portion of the City of Palmdale, on the north side of W. Avenue S at Guyon Avenue (APN 3004-016-032), approximately 0.15 mile west of State Route 14 (Figure 1). The Project is located within the SE 1/4 of Section 34, Township 6 North, Range 12 West, San Bernardino Base Meridian, as illustrated on the USGS Ritter Ridge, California 7.5-minute topographic quadrangle (Figure 2). As proposed, the Project would result in construction of a Maverik Fueling Station with a convenience store on the southern half of the parcel along W. Avenue S. The parcel is zoned as Visitor Commercial. The Project site is currently vacant and exhibits scattered modern refuse and dumping.

CULTURAL AND ENVIRONMENTAL SETTING

Environmental Setting

The project area is located on the western edge of southern California's Antelope Valley and within the southwestern Mojave Desert. The Antelope Valley is approximately 3,000 square miles. On the northwest, it is separated from the San Joaquin Valley by the Tehachapi Mountains; on the south and southwest, it is separated by the San Gabriel Mountains; and the north and east boundaries of the Antelope Valley are distinguished by isolated buttes. The City of Palmdale is 104 square miles and is located in the southern region of the Antelope Valley just 60 miles from downtown Los Angeles off the Antelope Valley Freeway (State Highway 14). Angeles National Forest is south of the city, and Edwards Air Force Base is northeast. The Project parcel is currently vacant land surrounded by other vacant parcels, with some development on the south side of W. Avenue S across from the Project parcel.

Several vegetation types are recognized in the Mojave Zone: creosote bush scrub, saltbush scrub, shadscale scrub, blackbrush scrub, juniper woodland, Joshua tree woodland, and annual vegetation (Vasek and Barbour 1990). The predominant vegetative resource found in the Project area was juniper and Joshua tree (*Yucca brevifolia*) woodland. Wildlife common to this area include kangaroo rats (*Dipodomys* spp.), woodrats (*Neotoma* spp.), and various ground squirrels (*Spermophilus* spp.). Larger mammals include cottontail rabbits (*Sylvilagus audobonii*) and coyote (*Canis latrans*). The mule deer (*Odocoileus hemionus*) is another major resident of the region, although its numbers have declined in modern times (Sutton 1990:67). Large numbers of pronghom (*Antilocapra americana*) are presumed to have existed in the region at one time, as well as bighorn sheep (*Ovis canadensis*) and black bear (*Ursus americanus*). Avian species identified in the area include Northern mockingbird (*Mimus polyglottus*), California quail (*Cattipepla cailfornica*), Common raven (*Corvus corax*), horned lark (*Eremophila atpestris*), Great-tailed grackle (*Quiscalus mexicanus*), Brewer's blackbird (*Euphagus cyanocephalus*), European starling (*Sturnus vulgaris*), and rock dove (*Columba livis*).

Prehistoric Cultural Setting

Earle et al. (1997) and Loechl et al. (2002) have divided the prehistoric cultural chronology for the Antelope Valley into seven cultural/temporal periods: Fluted Point Period, Lake Mojave Period, Pinto Period, Gypsum Period, Saratoga Springs Period, Post-Saratoga Springs/Late Period, and Contact/Ethnographic Period; the last includes the Euroamerican historic record.

Fluted Point Period (12,000-10,000 B.P.)

Sites dating to this period have been identified based on the presence of fluted-base projectile points similar to the well-known Clovis forms associated with ancient cultures of the Great Plains. Termed "Western Clovis" (Tuohy 1974; Willig and Aikens 1988), "Black Rock Concave Base" (Clewlow 1968) or "Great Basin Concave-Base" (Pendleton 1979), many types of Clovis-like points have been found in various locations throughout the western Great Basin and in California. Lithic assemblages that contain fluted points often contain crescents, gravers, scrapers, choppers, and "perforators" (Davis 1978). Fluted point sites occur in a variety of

environments, indicating that inhabitants were likely generalized foragers rather than big game hunters (Earle et al. 1997; Moratto 1984).

Lake Mohave Period (10,000-7000 B.P.)

In the western Great Basin, various stemmed projectile point forms have been dated to the early Holocene, roughly between 10,000 and 7500 B.P. Generally subsumed under the broader appellate "Great Basin Stemmed," these artifacts are elongate, lanceolate forms often with subtle, sloping shoulders, but many different regional styles exist. In the western Mojave, typical stemmed points are Lake Mohave (unshouldered) and Silver Lake forms (slightly shouldered), both of which are parts of lithic assemblages similar to those of the Fluted Point period.

Pinto Period (7000-4000 B.P.)

Pinto points, projectiles that bear "weak" shoulders and indented or split-stem bases, typify archaeological assemblages of this period. Associated flaked stone assemblages include leaf-shaped bifaces, formal unifaces, flake tools, and consistent quantities of core-cobble implements (Basgall 1993, 2000; Campbell and Campbell 1935; Hunt 1960; Rogers 1939). Lithic selection favored fine-grained igneous stones such as basalt and rhyolite for points and bifaces. Millingstones are a major part of Pinto period assemblages, reflecting the importance of seed processing. The timing of the Pinto period coincides with Antevs' (1953) Altithermal, an extended interval when climate was supposedly very hot and dry. Archaeologists once believed a scarcity of Pinto sites in the Mojave Desert signaled a near-total abandonment of the region because of the oppressive climate, but recent studies imply that the middle Holocene in the Antelope Valley was punctuated by wetter episodes (Grayson 1993; Mehringer 1986) and that the effects of the Altithermal were variable in different parts of the desert.

Gypsum Period (4000-1500 B.P.)

Diagnostic artifacts at Gypsum period sites include Gypsum contracting-stem projectile points, Elko Eared and Corner-notched points, and Humboldt Basal-notched points. Lithic assemblages feature bifaces, scrapers, and a variety of other flake-based tools but also contain mortars and pestles as evidence of processing mesquite, pine nuts, yucca, and agave. Large villages or village complexes appear during Gypsum times, reflecting a transition from seasonal transhumance to year-round sedentary habitation within the Antelope Valley (Sutton 1988). The presence of marine shell artifacts at Gypsum period sites in the Antelope Valley indicates economic ties between the Antelope Valley and the California coast (Warren 1984).

Saratoga Springs Period (1500-800 B.P.)

At around 1500 B.P., the aboriginal people of the Mojave Desert had replaced the atlatl, or spear-thrower, with the bow and arrow. This change brought about a shift toward the use of smaller projectile points, including various corner-notched and side-notched Saratoga Springs types and the corner-notched Rose Spring and Eastgate types. Anasazi ceramics also appear in the southern Mojave around 1200-1100 B.P., coinciding with the westward spread of the Virgin Anasazi into southern Nevada. Influence from the cultures of the Colorado River brought in buff ware ceramics and other goods. The intensification of plant use initiated during the Gypsum period continued in the Saratoga Springs period, and diet was expanded to include a wide range of high cost/low return plant foods that required high cost/high return procurement and processing strategies.

Post-Saratoga Springs or Late Period (800-300 B.P.)

Social and economic adaptations during this final prehistoric interval in the Antelope Valley were largely an extension of patterns that developed during the Saratoga Springs period. Trade along the Mojave River continued to provide the people of the eastern Antelope Valley with a variety of exotic goods and materials, though trade relationships with coastal groups grew stronger than trade relationships with groups from the arid interior. Cottonwood Triangular and Desert Side-notched points were smaller than those derived from previous periods.

Contact/Ethnographic Period (300 B.P.–Present)

This last interval is the period of contact between native desert people and European-American explorers and settlers. Kroeber (1925) attests that as many as six different native groups were living in the western Mojave at time of Euro American contact, including the Kawaiisu, Chemehuevi, Alliklik (Tataviam), Kitanemuk, Vanyume, and Serrano. Blackburn and Bean (1978) later reinterpreted political geography in the western Mojave, and divided the western Antelope Valley between the Tataviam (to the south) and the Kitanemuk (to the north). Sutton (1980:220) followed Blackburn and Bean and claimed that the late prehistoric population in the majority of Antelope Valley were the ancestors of the ethnographic Kitanemuk. He later hypothesized that the floor of the valley was abandoned a few decades prior to Spanish contact in 1772 (Sutton 1988; Warren 1984). However, Earle et al. (1997:8) cite the 1772 diary of Pedro Fages and the 1776 diary of Father Garcés, which mention Indian villages in the western Antelope Valley to challenge this claim.

The project area lies along the eastern portion of Tataviam territory and the western portion of Vanyume Serrano territory, north of Fernandeño territory and south of Kitanemuk territory. It is situated on the "border" of Tataviam and Vanyume Serrano settlement areas and may have been occupied and used by these groups simultaneously or at different times. These groups are Shoshonean, and their languages represent Takic branches of the Uto-Aztecan language group. Inhabitants of the area had access to the resources of the Antelope Valley and to the resources of the ranges to the east and south. The interface of the two types of biotic zones provided plant and animal resources that varied with season and elevation. Larger dependence on plant sources for subsistence is seen in later periods.

A Brief Historic Overview of Antelope Valley and Palmdale History

Settlement and agricultural development began with the completion of the Southern Pacific Railroad (SPRR) line in the Antelope Valley on September 6, 1876 (Weitze 1993:3). While sporadic homesteads and grazing stock dotted the Antelope Valley, settlement is attributed to the mid-1880s land boom in southern California sponsored by various town and colony promoters (Earle 2003). The SPRR promoted colonizing land near its railroad line, which many immigrants responded to by founding towns adjacent to the rail line. Today's Palmdale has its roots in two small, early communities: Harold (Alpine Station) and Palmenthal.

Establishing railroad stations along the line included the first southern SPRR station in the valley at Harold, near present-day Barrel Springs Road and Sierra Highway. Harold was a natural location for a community because it was at the crossroads of the two major routes on the Valley

floor: the Southern Pacific Railroad tracks and Fort Tejon Road (now Barrel Springs Road) (cityofpalmdaleca.gov n.d.; Serpico 2000:56).

Lancaster, Pennsylvanians established the nearby community of Lancaster in 1877, with Palmenthal following in 1886 (Weitze 1993:3). Palmenthal was started when land in the Antelope Valley sold for 50 cents an acre and a group of 50 to 60 Swiss and German Lutheran families migrated largely from Nebraska and Illinois and settled in the area now known as Palmdale. They named their new community "Palmenthal" because they had mistaken the native Joshua trees for the palm trees they had been told to expect to see as they arrived nearer to the Pacific Ocean (cityofpalmdaleca.gov n.d.; townsquarepublications.com n.d.).

According to Antelope Valley ethnographer David Earle (2003),

> The settlement of the Antelope Valley region was intimately tied up with the central role of the San Gabriel Mountains watershed as a water-provider to agriculture in southern California. With the experiments of the 1880s aimed at developing agricultural specialties of southern California farmers – raisin grapes, then almonds, then oranges – the factors of transport facilities and of water availability became crucial. From an early date, agriculture in the regions watered by the San Gabriel and San Bernardino Mountains watershed was designed to serve national and international markets via the rail distribution of specialty products such as raisins, nuts, or fruit, products requiring special processing.

Antelope Valley land remained relatively inexpensive and available in the 1880s as part of the San Gabriel Range watershed. Agricultural colonies developed in proximity to the watercourses of Big Rock and Littlerock Creek that provided stream runoff for irrigation (Earle 2003). The emergence of the "California Doctrine" in 1886 as a result of *Lux v. Haggin* proposed a possible problem for landowners claiming riparian rights. While the legal decision upheld the riparian doctrine, in certain instances the prior appropriation doctrine would supersede the riparian doctrine; landowners in the Antelope Valley that diverted water directly from Little Rock Creek could find their water rights in jeopardy. The passage of the Wright Act in 1887 intended to create more opportunities for local farmers by fostering collective water use through the formation of irrigation districts that could raise revenue and issue bonds, among other authorities (Earle 2003; Hundley 2001:97-100). A period of wet years (1883-1893) allowed promoters to advertise the valley as land with plenty of rainfall and underground water, a place where farmers could practice dry farming and produce grains and tree crops. However, the unusually rainy period soon ended and a drought followed, which devastated the local economy (Earle 2003).

The towns of Harold and Palmenthal were abandoned as a result of the drought, and the City of Palmdale was formed in 1899. It remained a small farming community until the mid-twentieth century, when, with nearby Lancaster, it became a focus for industrial development, chiefly aircraft assembly and electronic research; in the 1990s, with the rapid economic expansion of Antelope Valley, it was one of the fastest-growing cities in the United States (Britannica.com n.d.). The City of Palmdale celebrated its fiftieth anniversary of incorporation on Aug. 24, 2012.

STUDY METHODS

Methods used to assess the presence of and potential for cultural resources within the property included a search of existing records and a pedestrian field survey. ASM began the study by requesting a records search from the South Central Coastal Information Center (SCCIC), part of the California Historical Resources Information System (CHRIS), that included the Project area and a radius of 1 mile around it. A search of the Sacred Lands File held by the NAHC was also requested. Historical aerial photographs and USGS topographic maps were assessed to discern prior land use on the Project parcel.

ASM Senior Archaeologist Sherri Andrews, M.A., RPA conducted an intensive pedestrian archaeological field survey on September 9, 2023. The survey was undertaken to determine the presence of any previously undocumented cultural resources that may be discernable on the surface of the Project parcel using transects spaced at 15-m intervals.

STUDY RESULTS

Records Search Results

The SCCIC records search was conducted to determine whether the Project area has been previously subject to systematic survey as well as the presence or absence of previously documented cultural resources within the Project area. The search included all records and documents on file with the SCCIC, as well as the Office of Historic Preservation (OHP) Historic Properties Directory. The search was undertaken on April 17, 2023, with additional information received from SCCIC on June 12, 2023. The SCCIC summary lists are provided with this report as Attachment A.

A total of 45 previous reports were identified within a 1-mile radius of the project area as a result of the records search (Table 1), none of which includes the current Project area.

Table 1. Previous Cultural Resource Projects Conducted within the 1-Mile Records Search Radius

Report No. (LA-)	Year	Author(s)/Affiliation	Title
00033	1974	Anonymous / Northridge Archaeological Research Center, CSUN	Impact Assessment of Archaeological Resources by the Construction of Palmdale Maintenance Stations
00756	1980	Robinson, R. W.	Cultural Resources Investigation, Re: Tentative Parcel Map #38765, Submitted to Paseo Del Campo Corporation
00757	1980	Robinson, R. W. / R. W. Robinson Consulting Archaeologist	Cultural Resources Investigation Re: Parcel Map #12382
01222	1983	Colby, S., and R. Rechtman / University of California, Los Angeles Archaeological Survey	An Archaeological Resource Survey and Impact Assessment of the Area Northeast of Lake Palmdale, Los Angeles County, California
01236	1983	Colby, S. M. / University of California, Los Angeles Archaeological Survey	An Archaeological Resource Survey and Impact Assessment of a Pipeline Alignment From the California Aqueduct North to Lake Palmdale in Los Angeles County, California

Report No. (LA-)	Year	Author(s)/Affiliation	Title
01547	1986	Dillon, B. D. / Brian D. Dillon	An Archaeological Resource Survey and Impact Assessment of the Antelope Valley Master Plan of Drainage, Anaverde Basin to Lockheed Basin, Los Angeles County, California
01735	1988	Romani, G. R. / Greenwood and Associates	Cultural Resource Investigation of 120 Acres in the City of Palmdale, Los Angeles County, California
01806	1989	Robinson, R. W.	A Cultural Resources Investigation of Tentative Tract Number 47046 in the City of Palmdale, North Los Angeles County, California.
01827	1989	Love, B. / Pyramid Archaeology	Archaeological Report for Forty Acres Near Palmdale Lake, Palmdale, Los Angeles County
01938	1989	Padon, B. S., J. R. Crownover, and R. Conard / LSA Associates, Inc.	Cultural Resources Assessment Southern California Gas Company Proposed Line 335 Los Angeles and San Bernardino Counties
02206	1989	White, R. S. / Archaeological Associates, Ltd.	Appendix G: An Archaeological Assessment of Tracts 38031, 48183, and 48387 at the Intersection of Rayburn Rayburn Road and Tierra Subida Ave., Palmdale, Los Angeles County
02232	1990	Becker, K. M., and S. A. Evans / RMW Paleo Associates, Inc.	Cultural Resources Reconnaissance of the Vincent Hills Proposed Annexation Area, Approximately 1025 Acres Near Palmdale, Los Angeles County, California
02261	1991	Evans, S. A. / RMW Paleo Associates, Inc.	Cultural Resources Reconnaissance of the Antelope Valley Landfill Expansion, Approximately 132 Acres Near Palmdale, Los Angeles County, California
02348	1990	Robinson, R. W.	A Cultural Resources Investigation of Thirteen Acres in the City of Palmdale, Los Angeles County, California
02814	1993	Singer, C. A., J. E. Atwood, and S. M. Gomes / C.A. Singer & Associates, Inc.	Cultural Resources Survey and Impact Assessment for a Natural Gas Regulator Station, Southeast of the Intersection of 7th Street West and Avenue R-12, Near the City of Palmdale, Los Angeles County, California
03335	1985	Meighan, C. W. / University of California, Los Angeles Archaeological Survey	Cultural Resources Survey, Anaverde Retention Basin Antelope Valley, California
03428	1996	Padon, B. / Petra Resources Inc.	An Archaeological Resource Review of the Proposed Anaverde Flood Control Basin Project, City of Palmdale, Los Angeles County
03537	1996	Dillon, B. D.	Archaeological Assessment of the Palmdale Water District 1996 Master Plan Los Angeles County, California
03780	1997	Love, B. & B. Tang / CRM Tech	Cultural Resources Report Palmdale Sports Complex Project Monitoring and Testing
04069	1996	Anonymous / Jones & Stokes Associates, Inc.	Avenues S Corridor Study Area Final Environmental Constraints Analysis Report
05049	1999	Duke, C. / LSA Associate, Inc.	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 687-04, County of Los Angeles, California
05155	1999	Brown, J. C., and D. Ferraro / RMW Paleo Associates, Inc.	A Cultural Resources Reconnaissance for the Proposed Avenue S Road Widening, Located in Palmdale, La County, California
05252	2001	Robinson, R. W. / Consulting Archaeologists	A Cultural Resource Investigation of the Proposed Ana Verde Elementary School Site: City of Palmdale, County of Los Angeles
07168	2003	Gust, S., M. P. Hickson, and R. Turner / Cogstone Resource Management, Inc.	Archaeological and Paleontological Assessment Report and Mitigation Plan for the Palmdale 93 Project Palmdale, Los Angeles County, California

Report No. (LA-)	Year	Author(s)/Affiliation	Title
07193	2003	Bonner, W. H. / Michael Brandman Associates	Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate VY-299-01 (East Avenue S & 14 Freeway), 117 East Avenue S, Palmdale, Los Angeles County, California
07843	2002	Goodwin, R. L., and R. E. Reynolds / LSA Associates, Inc.	Cultural and Paleontological Resource Mitigation, Avenue S Widening, City of Palmdale, Los Angeles County, California
08425	2007	Cooley, T. G. / Jones & Stokes	Archaeological Survey Report for Southern California Edison Company Acton Substation Loop-in Project, Los Angeles County, California
08427	2007	Cooley, T. G. / Jones & Stokes	Archaeological Survey Report for Southern California Edison Company 66kv Antelope Bus Split Project Los Angeles County, California
08970	2007	Powell, C., and M. Rockman / PCR Services Corporation	Results of Cultural Resource Assessment for the Ashberry 12kv Dsp Transmission Line Out of the Anaverde Substation to the Antelope Valley Substation, City of Palmdale, County of Los Angeles, California; Wo: 6436-533 7-5301
09756	2009	Glover, A., and S. Gust / Cogstone Resource Management, Inc.	Supplemental Cultural Resources Assessment, Segment 2, Section 1, Tehachapi Renewable Transmission Project, Variance for the Use of Rodeo Yard, Los Angeles County, California
10053	2004	Schmidt, J. A. / W & S Consultants	Phase II Archaeological Test Excavation at CA-LAN-1845H, Palmdale, Los Angeles County, California
10055	2004	W & S Consultants	Phase I Archaeological Survey of Two Parcels at Avenue S and Tierra Subida Avenue, Palmdale, Los Angeles County, California
10056	2005	Hudlow, S. M. / Hudlow Cultural Resource Associates	A Cultural Resources Survey for Property at Division and Rayburn, City of Palmdale, California
10060	2005	Gust, S. / Hudlow Cultural Resource Management, Inc.	Archaeological and Paleontological Assessment Report and Mitigation Plan for the Quail Valley Project, California
10156	2009	Clark, F., and K. Garcia / PCR Services Corp.	Results of the Cultural Resource Assessment for the Southern California Edison Replacement of Deteriorated Pole Nos. 2139312E, 1201942E, 778561E, 693192E and 1559874E; Los Angeles County, CA
10533	1998	McLean, D. / LSA Associates, Inc.	Cultural Resources Assessment for the 73 Acre Anaverde Detention Basin Project in the City of Palmdale, Los Angeles County, California
10634	2010	Bray, M. / ESA	Preliminary Archaeological Survey Report for 98 Linear Miles of the East Branch Extension of the California Aqueduct for the DWR East Branch Enlargement Project, Los Angeles and San Bernadino Counties
11135	2011	Tang, B., and M. Hogan, M. / CRM Tech	Historical/Archaeological Resources Survey Report, City of Palmdale Recycled Water Master Plan Supplement, Los Angeles County, California
11856	2011	Tejada, B. / Pacific Legacy	3rd Supplemental Survey Report for Additional Access Roads on Segment 5, Tehachapi Renewable Transmission Project, Los Angeles County, California
12433	2013	Bonner, W. H. / Environmental Assessment Specialists, Inc.	Cultural Resources Records Search and Site Visit Results for AT&T Mobility Candidate NL0468 (Palmdale Water El Camino Tank), 36809 El Camino Drive, Palmdale, Los Angeles County, California
12492	2012	Zalarvis-Chase, D. / URS Corp	Verizon Wireless Tovey, 37071 Tovey Avenue, Palmdale, CA 93551 (APN: 3054-007-006)

Report No. (LA-)	Year	Author(s)/Affiliation	Title
12740	2014	Bonner, D. F., and C. D. Wills / MBA	Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate Essierra, Avenue S and 6th Street, Palmdale, Los Angeles County, California. EBI Project No. 61143776
12949	2014	Turner, R., L. Akyüz, R. D. Turner, and D. Ruzicka / ArchaeoPaleo Resource Management, Inc.	Report of Negative Findings for Cultural Resources at the Waste Management Antelope Valley Public Landfill (Palmdale) Phase V-A-6, City of Palmdale, Los Angeles County, California.
12995	2015	Ruzicka, D., L. Akyüz, and M. X. Kirby / ArchaeoPaleo Resource Management, Inc.	Report of Negative Findings for Archaeological and Paleontological Resources at the Waste Management Antelope Valley Public Landfill (Palmdale), Avenue R-5 Landfill Access, City of Palmdale, Los Angeles County, California
12998	2015	Ruzicka, D., L. Akyüz, and M. X. Kirby / ArchaeoPaleo Resource Management, Inc.	Archaeological and Paleontological Resources Phase 1 Assessment, Palmdale CalVet REN Development, Built by Habitat for Humanity, in the City of Palmdale, Los Angeles County, California

Sixteen resources have been previously documented within the 1-mi. records search radius, none of which appear within the Project area (Table 2). Twelve of these resources are historic in age, and include historic structure remains, refuse scatters, irrigation system remnants, a portion of the California Aqueduct, and two isolated historic glass artifacts. Four prehistoric isolates have also been documented, all consisting of isolated debitage.

Table 2. Resources Previously Recorded within the 1-Mile Records Search Radius

Primary # (P-19-)	Trinomial (CA-LAN-)	Date Recorded (Recorded by)	Description	Attribute Codes*
001907	1907H	1990 (K. Becker)	Rock pile feature and one piece of amethyst glass	AH16
002535	2535H	1996 (B. Love)	Historic water pipeline, 4-inch-diameter, made of rolled sheet metal sealed with tar and wrapped with wire in spiral fashion, joints filled with cement	AH6
002536	2536H	1996 (B. Love)	Remains of a burned-out building/homestead, and a historic refuse concentration	AH2; AH4
002537	2537H	1996 (B. Love)	Hundreds of historic domestic artifacts	AH4
002775	2775H	1999 (D. Ferraro, P. O. Maxon); 2002 (R. Goodwin)	Irrigation systems remnants: holding pond (60 ft x 120 ft x 10 ft deep), concrete tank (20 ft x 40 ft x 20 ft), two ditch segments (1,150 ft long)	AH5; AH6; AH11
002776	2776H	1999 (D. Ferraro, P. O. Maxon); 2002 (R. Goodwin)	Two historic foundations, historic septic tank, two historic refuse sites	AH2; AH4; AH5
004154	4154H	2009 (K. Anderson); 2011 (N. Lawson, M. Kaye); 2011 (P. Ambacher); 2013 (M. Strauss, M. Bray); 2015 (J. Smallwood); 2017 (A. Hill)	East Branch of the California Aqueduct (EBA): 98-mile segment of larger 444-mile California Aqueduct, consists of series of canals, siphons, tunnels, penstocks, a power plant, and a pumping plant	AH6; HP20
004602	4602H	2011 (R. J. Lichtenstein, M. Armstrong)	Remains of a historic structure including a concentration of milled lumber and a low-density refuse scatter	AH2; AH4

Primary # (P-19-)	Trinomial (CA-LAN-)	Date Recorded (Recorded by)	Description	Attribute Codes*
004603	4603H	2011 (R. J. Lichtenstein, M. Armstrong)	Low-density historic refuse/can scatter	AH4
004604	004604H	2011 (R. J. Lichtenstein, M. Armstrong)	Low-density historic refuse/can scatter	AH4
100312	-	1989 (S. Lillard)	Isolate: single porphyritic andesite secondary flake	AP2
100326	-	1999 (P. Maxon)	Isolate: 5 fragments of a small, amethyst glass jar or bottle with the base measuring 1.2 inches	AH4
100626	-	2007 (T. Cooley & A. Craft)	Isolate: two flakes, one black quartzite, 3 cm x 2.5 cm, one chalcedony, 4 cm x 3 cm	AP2
100831	-	2009 (M. Bray)	Isolate: one white fine grained quartzite flake	AP2
100985	-	1990 (K. Becker)	Isolate: one white chert secondary flake	AP2
101204	-	1990 (K. Becker)	Isolate: one neck and lip of a square medicine bottle, sealed with a cork, no seams	AH4

*AH2. Foundations/structure pads; AH4. Privies/dumps/trash scatters; AH5. Wells/cisterns; AH6. Water conveyance system; AH11. Walls/fences; AH16. Other; AP2. Lithic scatter; HP20. Canal/aqueduct

Other Background Research

Historic aerials from 1948, 1953, 1956, 1959, 1965, 1971, 1974, 1987, 1990, 1995, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020 were analyzed on historicaerials.com, as were historic topographic maps dated 1932, 1937, 1960, 1965, 1966, 1975, 2012, 2015, 2018, and 2022.

W. Avenue S is evident on the first available topo from 1932 and the aerial from 1948. From 1948, the Project parcel and all adjacent parcels north of W. Avenue S are undeveloped and appear to be in a natural state, while the area to the south of W. Avenue S is cleared of vegetation. Guyon Avenue first appears as a dirt road on the 1965 aerial and is better developed by 1971; some informal dirt roads appear within the Project parcel by 1971 as well. The first structures south of the road appear on the 2005 image. The Project parcel itself appears undeveloped throughout the available record as depicted by both the topos and aerial images.

The City's General Plan (1993) does not include an archaeological sensitivity analysis.

NAHC Sacred Lands File

A request for a search of the NAHC's Sacred Lands File (SLF) was made by ASM on June 8, 2023. This search was undertaken to supplement the SCCIC records search to inquire as to whether resources important to local Native American groups may exist within the proposed Project area that may not appear within the CHRIS system. The NAHC response was received on July 7, 2023, indicating a negative result. The response also included a list of 10 tribal contacts who may have interest in or information about the Project area. Query letters were sent to all of the contacts provided on July 7, 2023. Only one response has been received; the response from the Ft. Yuma Quechan Indian Tribe provided no comment, deferring to more local tribes. The NAHC response, a sample query letter, and the response received are included with this report as Attachment B. Any additional responses that may be received will be compiled and submitted as a supplement to Attachment B.

Pedestrian Archaeological Survey

For the archaeological survey, the entire Project parcel was walked in transects spaced approximately 15 m apart and oriented primarily east/west. The parcel is fairly heavily vegetated, covered with a number of large stands as well as singular Joshua trees amid juniper bushes, buckwheat, and creosote, with the balance being covered with low scrub and grasses (Figures 3 and 4). Surface visibility was variable, with some areas approximately 70-85 percent and others less than 50 percent. A number of dirt roads traverse the parcel, including a well-used one that bisects the parcel running roughly north/south (Figure 5). A number of dumping episodes are evident, especially along the roads and in the northern part of the parcel (Figure 6). Discarded materials appear to have been brought in from elsewhere as there is no evidence of any structures having been situated on this or nearby parcels. The dumping episodes likely date from the 1980s to the present, and include household items, such as mattresses, furniture, carpet, bottles and cans, degrading lumber, and miscellaneous construction materials and debris.

No previously undocumented cultural resources were encountered during the intensive pedestrian archaeological survey.

REGULATORY CONTEXT

California Register of Historical Resources (CRHR)

For purposes of CEQA, a historic resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the CRHR (PRC §5024.1, Title 14 CCR, §4852). The four criteria for listing in the CRHR closely mirror the criteria for listing in the NRHP. A resource is eligible for listing in the CRHR if it meets any of the following criteria:

(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, or represents the work of an important creative individual, or possesses high artistic values
(4) Has yielded, or may be likely to yield, information important to prehistory or history.

Prehistoric archaeological sites are typically evaluated only under Criterion 4 for their potential to yield data important to understanding the prehistory of the area or region. Historical archaeological sites and architectural resources may be evaluated under any of the four criteria because their features, plus available historical documentation, may be used to inform our understanding of their association with events, people, workmanship, or other important historical information. Isolates are not eligible for the listing in the CRHR because they lack association and context with other archaeological materials. Recording the physical description and location of an isolate exhausts its research potential.

City of Palmdale

The City of Palmdale Municipal Code (PMC) does not include statutes regarding the preservation of cultural and historic resources. However, the General Plan's (1993) Environmental Resources Element includes measures to protect cultural resources, as follows:

GOAL ER7: Protect historical and culturally significant resources which contribute to the community's sense of history.

Objective ER7.1: Promote the identification and preservation of historic structures, historic sites, archaeological sites, and paleontological resources in the City.

- Policy ER7.1.1: Identify and recognize historic landmarks from Palmdale's past.
- Policy ER7.1.2: Promote maintenance, rehabilitation, and appropriate reuse of identified landmarks where feasible.
- Policy ER7.1.3: Require that new development protect significant historic, paleontological, or archaeological resources, or provide for other appropriate mitigation.
- Policy ER7.1.4: Develop and maintain a cultural sensitivity map. Require special studies/surveys to be prepared for any development proposals in areas reasonably suspected of containing cultural resources, or as indicated on the sensitivity map.
- Policy ER7.1.5: When human remains, suspected to be of Native American origin are discovered, cooperate with the Native American Heritage Commission and any local Native American groups to determine the most appropriate disposition of the human remains and any associated grave goods.
- Policy ER7.1.6: Cooperate with private and public entities whose goals are to protect and preserve historic landmarks and important cultural resources.

RECOMMENDATIONS

No prehistoric or historical artifacts or sites were identified during the current survey. As such, no historical resources as defined under CEQA that would require further consideration were identified within the Project area. Further, the results of the background research conducted for the study indicate a low archaeological sensitivity for the Project area.

However, in the event that any archaeological materials are encountered during future development activities, all activities must be suspended in the vicinity of the find until the deposits are recorded and evaluated by a qualified archaeologist. If evaluated as eligible for the CRHR and if impacts to the resource cannot be avoided, mitigation would be necessary. In addition, if significant subsurface prehistoric resources are encountered that will be subject to impacts from the project, Tribes with historic and cultural ties to the area shall be contacted.

If human remains of any kind are found during construction, the requirements of CEQA Guidelines Section 15064.5(e) and AB 2641 shall be followed. According to these requirements, all construction activities must cease immediately, and the San Bernardino County Coroner and a qualified archaeologist must be notified. The Coroner will examine the remains and determine the next appropriate action based on his or her findings. If the coroner determines the remains to be of Native American origin, he or she will notify the NAHC. The NAHC will then identify the

most likely descendants (MLD) to be consulted regarding treatment and/or reburial of the remains. If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to the remains, the property owner shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Sincerely,

Sherri Andrews
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Pasadena, California 91103
(626) 793-7395
sandrews@asmaffiliates.com

Attachment A: SCCIC Summary Lists
Attachment B: NAHC and Tribal Correspondence

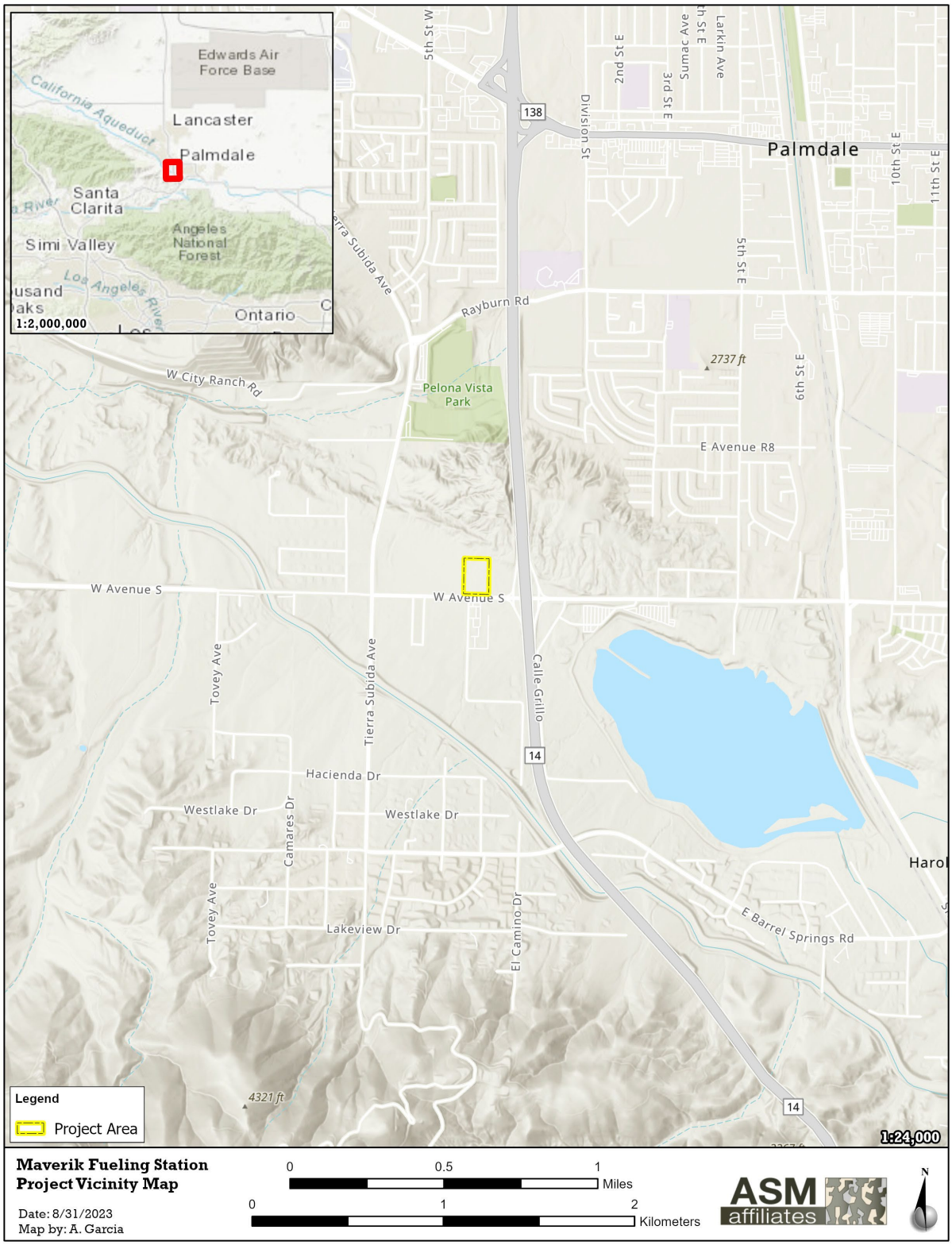

Figure 1. Project vicinity map.

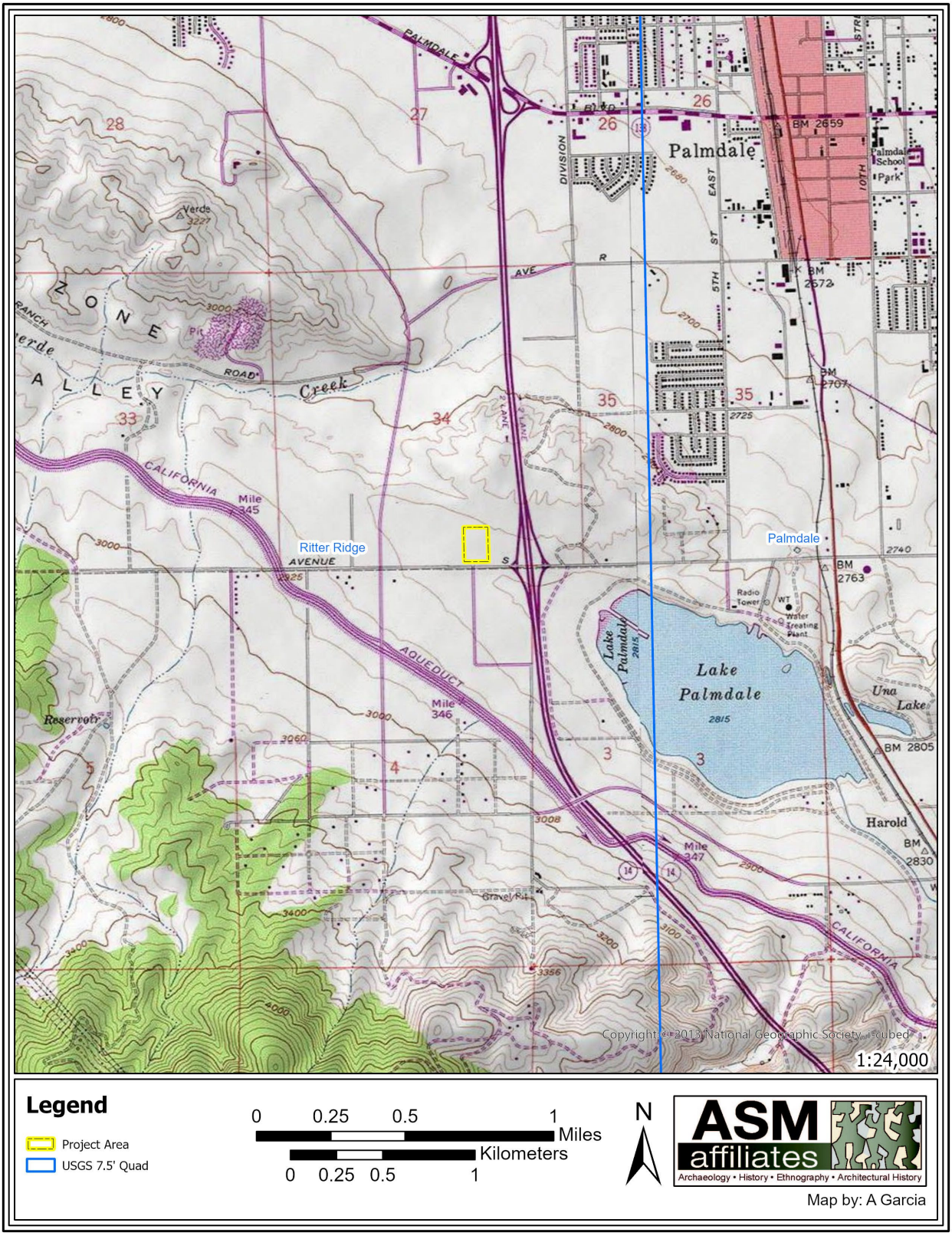

Figure 2. Project location map.

Figure 3. Project overview, view to south showing commercial development on south side of W. Avenue S.

Figure 4. Project area overview from southwest corner, view to west along W. Avenue S.

Figure 5. Project area overview, view to south along dirt road that bisects the parcel.

Figure 6. Example of dumping, view to west-southwest.

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Topos: 1932, 1937, 1960, 1965, 1966, 1975, 2012, 2015, 2018, and 2022.

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ATTACHMENT A: RECORDS SEARCH SUMMARY TABLES

Report List

Palmdale

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-00033		1974	Anonymous	Impact Assessment of Archaeological Resources by the Construction of Palmdale Maintenance Stations	Northridge Archaeological Research Center, CSUN	
LA-00756		1980	Robinson, R. W.	Cultural Resources Investigation, Re: Tentative Parcel Map #38765, Submitted to Paseo Del Campo Corporation		
LA-00757		1980	Robinson, R. W.	Cultural Resources Investigation Re: Parcel Map #12382	R.W. Robinson Consulting Archaeologist	
LA-01222		1983	Colby, Susan and Robert Rechtman	An Archaeological Resource Survey and Impact Assessment of the Area Northeast of Lake Palmdale, Los Angeles County, California	University of California, Los Angeles Archaeological Survey	
LA-01236		1983	Colby, Susan M.	An Archaeological Resource Survey and Impact Assessment of a Pipeline Alignment From the California Aqueduct North to Lake Palmdale in Los Angeles County, California	University of California, Los Angeles Archaeological Survey	
LA-01547	Paleo -	1986	Dillon, Brian D.	An Archaeological Resource Survey and Impact Assessment of the Antelope Valley Master Plan of Drainage, Anaverde Basin to Lockheed Basin, Los Angeles County, California	Brian D. Dillon	
LA-01735		1988	Romani, Gwendolyn R.	Cultural Resource Investigation of 120 Acres in the City of Palmdale, Los Angeles County, California	Greenwood and Associates	
LA-01806		1989	Robinson, R. W.	A Cultural Resources Investigation of Tentative Tract Number 47046 in the Cityof Palmdale, North Los Angeles County, California.		
LA-01827		1989	Love, Bruce	Archaeological Report for Forty Arces Near Paledale Lake, Palmdale, Los Angeles County	Pyramid Archaeology	
LA-01938		1989	Padon, Beth, S. Crownover, J. Rosenthal, and R. Conard	Cultural Resources Assessment Southern California Gas Company Proposed Line 335 Los Angeles and San Bernardino Counties	LSA Associates, Inc.	19-001618, 19-001619, 19-100310, 19-100311, 19-100312, 19-100313
LA-02206		1989	White, Robert S.	Appendix G: an Archaeological Assessment of Tracts 38031, 48183, and 48387 at the Intersection of Rayburn Rayburn Road and Tierra Subida Ave., Palmdale, Los Angeles County	Archaeological Associates, Ltd.	

Report List

Palmdale

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-02232		1990	Becker, Kenneth M. and Stuart A. Evans	Cultural Resources Reconnaissance of the Vincent Hills Proposed Annexation Area, Approximately 1025 Acres Near Palmdale, Los Angeles County, California	RMW Paleo Associates, Inc.	19-000305, 19-001888, 19-001889, 19-001890, 19-001891, 19-001892, 19-001893, 19-001894, 19-001895, 19-001896, 19-001897, 19-001898, 19-001899, 19-001900, 19-001901, 19-001902, 19-001903, 19-001904, 19-001905, 19-001906, 19-001907, 19-001987, 19-001988, 19-001989, 19-100840, 19-100841, 19-100842, 19-100843, 19-100844, 19-100845, 19-100846, 19-100847, 19-100848, 19-100849, 19-100850, 19-100851, 19-100852, 19-100853, 19-100854, 19-100855, 19-100856, 19-100857, 19-100858, 19-100859, 19-100860, 19-100861, 19-100862, 19-100863, 19-100864, 19-100865, 19-100866, 19-100867, 19-100868, 19-100869, 19-100985, 19-101204
LA-02261	Paleo -	1991	Evans, Stuart A.	Cultural Resources Reconnaissance of the Antelope Valley Landfill Expansion, Approximately 132 Acres Near Palmdale, Los Angeles County, California	RMW Paleo Associates, Inc.	19-000876, 19-001917
LA-02348		1990	Robinson, R. W.	A Cultural Resources Investigation of Thirteen Acres in the Ity of Palmdale, Los Angeles County, California		
LA-02814		1993	Singer, Clay A., John E. Atwood, and Shelley M. Gomes	Cultural Resources Survey and Impact Assessment for a Natural Gas Regulator Station, Southeast of the Intersection of 7th Street West and Avenue R-12, Near the City of Palmdale, Los Angeles County, California	C.A. Singer & Associates, Inc.	
LA-03335		1985	Meighan, Clement W.	Cultural Resources Survey, Anaverde Retention Basin Antelope Valley, California	University of California, Los Angeles Archaeological Survey	
LA-03428		1996	Padon, Beth	An Archaeological Resource Review of the Proposed Anaverde Flood Control Basin Project, City of Palmdale, Los Angeles County	Petra Resources Inc.	
LA-03537		1996	Dillon, Brian D.	Archaeological Assessment of the Palmdale Water District 1996 Master Plan Los Angeles County, California		19-001534, 19-001888, 19-002474, 19-002475
LA-03780		1997	Love, Bruce and Tang, Bai	Cultural Resources Report Palmdale Sports Complex Project Monitoring and Testing	CRM Tech	19-002535, 19-002536, 19-002537

Report List

Palmdale

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-04069		1996	Unknown	Avenues S Corridor Study Area Final Environmental Constraints Analysis Report	Jones & Stokes, Associates, Inc.	19-000239, 19-000806, 19-000878, 19-001419, 19-001534, 19-001709, 19-001845
LA-05049		1999	Duke, Curt	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 687-04, County of Los Angeles, Ca	LSA Associates, Inc.	
LA-05155	Paleo -	1999	Brown, Joan C. and Ferraro, David	A Cultural Resources Reconnaissance for the Proposed Avenue S Road Widening, Located in Palmdale, La County, California	RMW Paleo Associates, Inc.	19-002772, 19-002773, 19-002774, 19-002775, 19-002776, 19-100325, 19-100326, 19-186094
LA-05252		2001	Robinson, R. W.	A Cultural Resource Investigation of the Proposed Ana Verde Elementary School Site: City of Palmdale, County of Los Angeles	Consulting Archaeologist	19-002535, 19-002536, 19-002537
LA-07168	Paleo -	2003	Gust, Sherri, Mary Pat Hickson, and Robin Turner	Archaeological and Paleontological Assessment Report and Mitigation Plan for the Palmdale 93 Project Palmdale Los Angeles County, California	Cogstone Resource Management, Inc.	
LA-07193		2003	Bonner, Wayne H.	Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate VY-299-01 (East Avenue S & 14 Freeway), 117 East Avenue S, Palmdale, Los Angeles County, California.	Michael Brandman Associates	
LA-07843	Paleo -	2002	Goodwin, Riordan L. and Reynolds, Robert E.	Cultural and Paleontological Resource Mitigation, Avenue S Widening, City of Palmdale, Los Angeles County, California	LSA Associates, Inc.	19-002274, 19-002275, 19-002772, 19-002773, 19-002776, 19-186094
LA-08425		2007	Cooley, Theodore G.	Archaeological Survey Report for Southern California Edison Company Acton Substation Loop-in Project, Los Angeles County, California	Jones and Stokes	19-000806, 19-001854, 19-002535, 19-002537, 19-003175, 19-003177
LA-08427		2007	Cooley, Theodore G.	Archaeological Survey Report for Southern California Edison Company 66kv Antelope Bus Split Project Los Angeles County, California	Jones & Stokes	19-000217, 19-001692, 19-002215, 19-003695, 19-003696, 19-003697, 19-003698, 19-003699, 19-003700, 19-003701, 19-003702, 19-003703, 19-003704, 19-003705, 19-003706, 19-003707, 19-003708, 19-003709, 19-003710, 19-100628, 19-100629, 19-186683

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Palmdale

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-08970		2007	Powell, Chris and Marcy Rockman	Results of Cultural Resource Assessment for the Ashberry 12kv Dsp Transmission Line Out of the Anaverde Substation to the Antelope Valley Substation, City of Palmdale, County of Los Angeles, California; Wo: 6436-533 7-5301	PCR Services Corporation	
LA-09756		2009	Glover, Amy and Sherri Gust	Supplemental Cultural Resources Assessment, Segment 2, Section 1, Tehachapi Renewable Transmission Project, Variance for the Use of Rodeo Yard, Los Angeles County, California	Cogstone Resource Management, inc.	
LA-10053		2004	Schmidt, June A.	Phase Ii Archaeological Test Excavation at CA-LAN-1845h, Palmdale, Los Angeles County, California	W & S Consultants	
LA-10055		2004	Anonymous	Phase I Archaeological Survey of Two Parcels at Avenue S and Tierra Subida Avenue, Palmdale, Los Angeles County, California	W & S Consultants	
LA-10056		2005	Hudlow, Scott M.	A Cultural Resources Survey for Property at Division and Rayburn, City of Palmdale, California	Hudlow Cultural Resource Associates	
LA-10060	Paleo -	2005	Gust, Sherri	Archaeological and Paleontological Assesment Report and Mitigation Plan for the Quail Valley Project, California	Cogstone Resource Management, Inc.	19-000343, 19-000809, 19-001845, 19-002535, 19-002537, 19-002776, 19-003175, 19-003177, 19-003178, 19-003179, 19-003343
LA-10156		2009	Clark, Fatima and Kyle Garcia	Results of the Cultural Resource Assessment for the Southern California Edison Replacement of Deteriorated Pole Nos. 2139312E, 1201942E, 778561E, 693192E and 1559874E; Los Angeles County, CA	PCR Services Corp.	
LA-10533		1998	McLean, Deborah	Cultural Resources Assessment for the 73 Acre Anaverde Detention Basin Project in the City of Palmdale, Los Angeles County, California	LSA Associates, Inc.	19-002535, 19-002536, 19-002537

Report List

Palmdale

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-10634		2010	Bray, Madeleine	Preliminary Archaeological Survey Report for 98 linear Miles of the East Branch Exrention of the California Aqueduct for the DWR East Branch Enlargement Project, Los Angeles and San Bernadino Counties	ESA	19-000082, 19-000721, 19-000722, 19-001263, 19-001264, 19-001334, 19-001518, 19-001534, 19-001576, 19-001615, 19-001677, 19-001678, 19-001686, 19-001746, 19-001751, 19-001752, 19-001753, 19-001754, 19-001772, 19-001773, 19-001828, 19-001830, 19-001842, 19-001843, 19-001845, 19-001850, 19-001851, 19-001853, 19-001894, 19-001895, 19-001896, 19-001899, 19-001900, 19-001901, 19-001902, 19-001903, 19-001904, 19-001905, 19-001906, 19-001988, 19-002105, 19-002387, 19-002408, 19-002449, 19-002450, 19-002451, 19-002454, 19-002458, 19-002474, 19-002475, 19-002638, 19-002889, 19-003176, 19-003385, 19-003478, 19-003514, 19-003780, 19-100135, 19-100239, 19-100240, 19-186595, 19-186597, 19-186598, 19-186600, 19-186601

Report List

Palmdale

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-11135		2011	Tang, Bai "Tom" and Hogan, Michael	Historical/Archaeological Resources Survey Report, City of Palmdale Recycled Water Master Plan Supplement, Los Angeles County, California	CRM Tech	19-000827, 19-000878, 19-001365, 19-001419, 19-001420, 19-001553, 19-001587, 19-001588, 19-001600, 19-001609, 19-001610, 19-001613, 19-001614, 19-001687, 19-001697, 19-001709, 19-001717, 19-001823, 19-001873, 19-001874, 19-002194, 19-002535, 19-002536, 19-002537, 19-002732, 19-002734, 19-002772, 19-002773, 19-002774, 19-002775, 19-002776, 19-002808, 19-002909, 19-002910, 19-002911, 19-002912, 19-003258, 19-003377, 19-003384, 19-003785, 19-003786, 19-003861, 19-004154, 19-004160, 19-004161, 19-004184, 19-100308, 19-100312, 19-100325, 19-100326, 19-100626, 19-150148, 19-186094, 19-186813, 19-186814, 19-186815, 19-186816, 19-186817, 19-186818, 19-186819, 19-186820, 19-186821, 19-186822, 19-186823, 19-186824, 19-186825, 19-186826, 19-186827, 19-186828, 19-186829, 19-186830, 19-186831, 19-186832, 19-186833, 19-186834, 19-186835, 19-186836, 19-186837, 19-186838, 19-186839, 19-186840, 19-186841, 19-186842, 19-186843, 19-186844, 19-186845, 19-186846, 19-186847, 19-186848, 19-186849, 19-186850, 19-186851, 19-186852, 19-186853, 19-186854, 19-186855, 19-186957, 19-188187, 19-188188, 19-188439
LA-11856		2011	Tejada, Barbara	3rd Supplemental Survey Report for Additional Access Roads on Segment 5, Tehachapi Renewable Transmission Project, Los Angeles County, California	Pacific Legacy	
LA-12433		2013	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for AT&T Mobility Candidate NL0468 (Palmdale Water El Camino Tank), 36809 El Camino Drive, Palmdale, Los Angeles County, California	Environmental Assessment Specialists, Inc.	19-004154

Report List

Palmdale

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-12492		2012	Zalarvis-Chase, Dimitra	Verizon Wireless Tovey, 37071 Tovey Avenue, Palmdale, CA 93551 (APN: 3054-007-006)	URS Corp	19-004154
LA-12740		2014	Bonner, Diane F. and Carrie D. Wills	Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate Essierra, Avenue S and 6th Street, Palmdale, Los Angeles County, California. EBI Project No. 61143776	MBA	19-000878, 19-001079, 19-002775, 19-100326, 19-180638, 19-188899
LA-12949		2014	Turner, Robin, Linda Akyüz, Robin D. Turner, and Denise Ruzicka	REPORT OF NEGATIVE FINDINGS FOR CULTURAL RESOURCES AT THE WASTE MANAGEMENT ANTELOPE VALLEY PUBLIC LANDFILL (PALMDALE) PHASE V-A-6, CITY OF PALMDALE, LOS ANGELES COUNTY, CALIFORNIA	ArchaeoPaleo Resource Management, Inc.	
LA-12995	Paleo -	2015	Ruzicka, Denise, Linda Akyüz, and Michael X. Kirby	REPORT OF NEGATIVE FINDINGS FOR ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES AT THE WASTE MANAGEMENT ANTELOPE VALLEY PUBLIC LANDFILL (PALMDALE), AVENUE R-5 LANDFILL ACCESS, CITY OF PALMDALE, LOS ANGELES COUNTY, CALIFORNIA	ArchaeoPaleo Resource Management Inc.	
LA-12998	Paleo -	2015	Ruzicka, Denise, Michael H. Dice, Robin D. Turner, and Michael X. Kirby	Archaeological and Paleontological Resources Phase 1 Assessment, Palmdale CalVet REN Development, built by Habitat for Humanity, in the City of Palmdale, Los Angeles County, California	ArchaeoPaleo Resource Management Inc.	

Resource List

Palmdale

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-19-001907	CA-LAN-001907H	Resource Name - VH-20H	Site	Historic	AH16	1990 (Kenneth Becker, RMW Paleo Associates)	LA-02232, LA-09563
P-19-002535	CA-LAN-002535H	Resource Name - Water Pipeline Site; Other - CRM Tech 237-3H	Site	Historic	AH06	1996 (Bruce Love, CRM Tech)	LA-03780, LA-05252, LA-08425, LA-10060, LA-10533, LA-11135
P-19-002536	CA-LAN-002536H	Resource Name - Burned House Site; Other - CRM Tech 237-2H	Site	Historic	AH02; AH04	1996 (Bruce Love, CRM Tech)	LA-03780, LA-05252, LA-10533, LA-11135
P-19-002537	CA-LAN-002537H	Resource Name - Hillside House Site; Other - CRM Tech 237-1H	Site	Historic	AH04	1996 (Bruce Love, CRM Tech)	LA-03780, LA-05252, LA-08425, LA-10060, LA-10533, LA-11135
P-19-002775	CA-LAN-002775H	Resource Name - Old Palmdale Ditch; Other - AS-4; Other - AS-5	Site	Historic	AH05; AH06; AH11	1999 (David Ferraro & Patrick O. Maxon, RMW Paleo Associates, Inc); 2002 (R. Goodwin, LSA Assoc, Inc)	LA-05155, LA-09011, LA-10790, LA-11135, LA-12740
P-19-002776	CA-LAN-002776H	Resource Name - AS-6	Site	Historic	AH02; AH04; AH05	1999 (David Ferraro Patrick O. Maxon, RMW Paleo Associates, Inc); 2002 (R. Goodwin, LSA Assoc, Inc)	LA-05155, LA-07843, LA-09011, LA-10060, LA-11135
P-19-004154	CA-LAN-004154H	Resource Name - East Branch of the California Aqueduct (EBA); Other - California Aqueduct	Structure, Element of district	Historic	AH06; HP20	2009 (Katherine Anderson, ESA); 2011 (N. Lawson, M. Kaye, CH2M Hill); 2011 (Patricia Ambacher, AECOM); 2013 (M. Strauss and M. Bray); 2015 (Josh Smallwood, Applied Earthworks); 2017 (A. Hill, AECOM)	LA-11135, LA-11798, LA-11889, LA-12291, LA-12337, LA-12433, LA-12492, LA-12503, LA-12504, LA-12896, LA-13296
P-19-004602	CA-LAN-004602H	Resource Name - AE-HST-1H	Site	Historic	AH02; AH04	2011 (R.J. Lichtenstein, M. Armstrong, Applied Earthworks)	
P-19-004603	CA-LAN-004603H	Resource Name - AE-HST-2H	Site	Historic	AH04	2011 (R.J. Lichtenstein, M. Armstrong, Applied Earthworks)	
P-19-004604	CA-LAN-004604H	Resource Name - AE-HST-3H	Site	Historic	AH04	2011 (R.J. Lichtenstein, M. Armstrong, Applied Earthworks)	
P-19-100312		Resource Name - 335-3	Other	Prehistoric	AP02	1989 (S. Lillard, LSA Associates, Inc)	LA-01938, LA-11135
P-19-100326		Resource Name - ASI-2	Other	Historic	AH04	1999 (P. Maxon, RMW Paleo Associates)	LA-05155, LA-09563, LA-11135, LA-12740

Resource List

Palmdale

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-19-100626		Resource Name - 2007SCE19.01	Other	Prehistoric	AP02	2007 (T. Cooley, A. Craft, Jones & Stokes)	LA-11135
P-19-100831		Resource Name - D-11	Other	Prehistoric	AP02	2009 (M. Bray, ESA)	
P-19-100985		Resource Name - I-32	Other	Prehistoric	AP02	1990 (Kenneth Becker, RMW Paleo Associates)	LA-02232
P-19-101204		Resource Name - I-33H	Other	Historic	AH04	1990 (Keneth Becker, RMW Paleo Associates)	LA-02232

ATTACHMENT B: NAHC AND RELATED CORRESPONDENCE (to date)

NATIVE AMERICAN HERITAGE COMMISSION

ACTING CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Vacant

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 7, 2023

Sherri Andrews
ASM Affiliates

Via Email to: sandrews@asmaffiliates.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Maverik Fueling Station Project, Los Angeles County

Dear Ms. Andrews:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measures.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Cultural Resources Analyst

Attachment

Tribe Name	Fed (F) Non-Fed (N)	Contact Person
Fernandeno Tataviam Band of Mission Indians	N	Sarah Brunzell, CRM Manager
Morongo Band of Mission Indians	F	Ann Brierty, THPO
Morongo Band of Mission Indians	F	Robert Martin, Chairperson
Quechan Tribe of the Fort Yuma Reservation	F	Jordan Joaquin, President, Quechan Tribal Council
Quechan Tribe of the Fort Yuma Reservation	F	Jill McCormick, Historic Preservation Officer
Quechan Tribe of the Fort Yuma Reservation	F	Manfred Scott, Acting Chairman - Kw'ts'an Cultural Committee
San Fernando Band of Mission Indians	N	Donna Yocum, Chairperson
San Manuel Band of Mission Indians	F	Alexandra McCleary, Cultural Lands Manager
Serrano Nation of Mission Indians	N	Mark Cochrane, Co-Chairperson
Serrano Nation of Mission Indians	N	Wayne Walker, Co-Chairperson

This list is current only as of the date of this document. Distribution of this list does not relieve

This list is only applicable for consultation with Native

Native American Heritage Commission
Native American Contact List
Los Angeles County
7/7/2023

Contact Address	Phone #	Fax #	Email Address
1019 Second Street San Fernando, CA, 91340	(818) 837-0794		CRM@tataviam-nsn.us
12700 Pumarra Road Banning, CA, 92220	(951) 755-5259	(951) 572-6004	abrierty@morongo-nsn.gov
12700 Pumarra Road Banning, CA, 92220	(951) 755-5110	(951) 755-5177	abrierty@morongo-nsn.gov
P.O.Box 1899 Yuma, AZ, 85366	(760) 919-3600		executivesecretary@quechantribe.com
P.O. Box 1899 Yuma, AZ, 85366	(928) 261-0254		historicpreservation@quechantribe.com
P.O. Box 1899 Yuma, AZ, 85366	(928) 210-8739		culturalcommittee@quechantribe.com
P.O. Box 221838 Newhall, CA, 91322	(503) 539-0933	(503) 574-3308	dyocum@sfbmi.org
26569 Community Center Drive Highland, CA, 92346	(909) 633-0054		alexandra.mccleary@sanmanuel-nsn.gov
P. O. Box 343 Patton, CA, 92369	(909) 528-9032		serranonation1@gmail.com
P. O. Box 343 Patton, CA, 92369	(253) 370-0167		serranonation1@gmail.com

any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the P
Resources Code.

e American tribes under Public Resources Code Sections 21080.3.1 for the proposed Maverik Fueling Station Project, Los A

Cultural Affiliation	Counties	Last Updated
Tataviam	Kern,Los Angeles,Ventura	5/25/2023
Cahuilla Serrano	Imperial,Los Angeles,Riverside,San Bernardino,San Diego	
Cahuilla Serrano	Imperial,Los Angeles,Riverside,San Bernardino,San Diego	
Quechan	Imperial,Kern,Los Angeles,Riverside,San Bernardino,San Diego	5/16/2023
Quechan	Imperial,Kern,Los Angeles,Riverside,San Bernardino,San Diego	5/16/2023
Quechan	Imperial,Kern,Los Angeles,Riverside,San Bernardino,San Diego	5/16/2023
Kitanemuk Vanyume Tataviam	Kern,Los Angeles,San Bernardino,Ventura	5/8/2023
Serrano	Kern,Los Angeles,Riverside,San Bernardino	3/27/2023
Serrano	Los Angeles,Riverside,San Bernardino	
Serrano	Los Angeles,Riverside,San Bernardino	4/29/2019

ublic Resources Code and section 5097.98 of the Public

Angeles County.

ASM affiliates
archaeology
history
ethnography
architectural history

June 8, 2023

California Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, California 95691
Via email: nahc@nahc.ca.gov

Re: Sacred Lands File Search Request for the Maverik Fueling Station Project, Palmdale, Los Angeles County, California

To whom it may concern,

ASM Affiliates, Inc. (ASM) is conducting a cultural resources study for the Maverik Fueling Station Project, located on the north side of Avenue S just west of Highway 14, Palmdale, Los Angeles County, California. The proposed Project is located on the USGS Ritter Ridge, California 7.5-minute topographic quadrangle (see attached). This study is being undertaken in compliance with CEQA.

A records search has been ordered from the South Central Coastal Information Center. I am writing to request a search of your Sacred Lands File and to inquire if you have registered any cultural resources, traditional cultural properties, or areas of heritage sensitivity within this proposed project area. Please send the results of this search to me at our Pasadena office, listed below, and feel free to call, write, fax (626) 793-2008, or e-mail (sandrews@asmaffiliates.com) if you have any questions. We appreciate any information you can provide on this project.

Sincerely,

Sherri Andrews, M.A., J.D., RPA
ASM Affiliates, Inc.
Senior Archaeologist

Attachments:
Figure 1. Maverik Fueling Station Palmdale Project area shown on the USGS Ritter Ridge, California 7.5-minute topographic quadrangle.

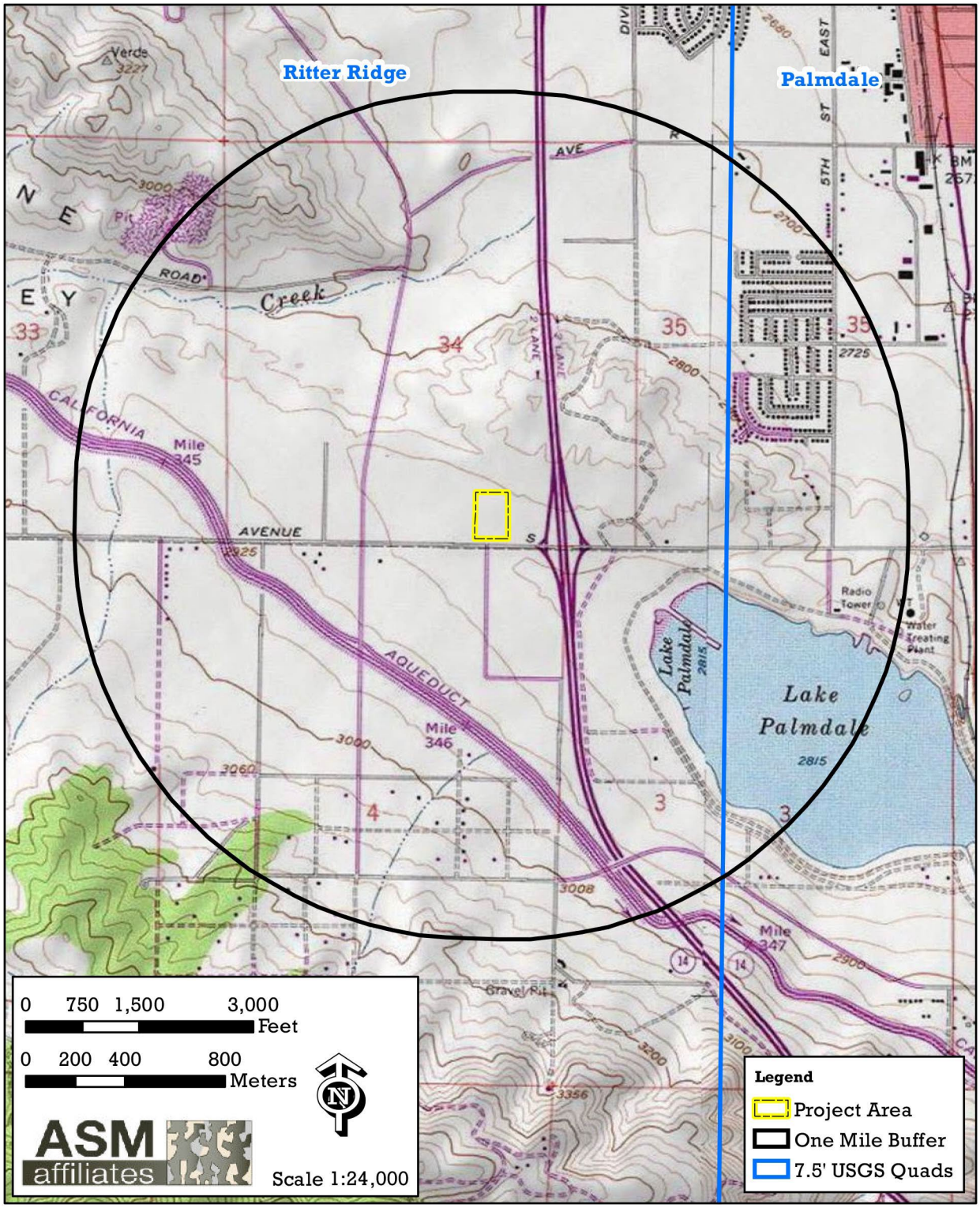


Figure 1. Maverik Fueling Station Palmdale shown on the USGS Ritter Ridge, California 7.5-minute topographic quadrangle.

ASM affiliates
Archaeology • History • Ethnography • Architectural History

July 7, 2023

Fernandeno Tataviam Band of Mission Indians
Sarah Brunzell, CRM Manager
1019 Second Street
San Fernando, California 91340
Via email: CRM@tataviam-nsn.us

Re: Maverik Fueling Station, Palmdale, Los Angeles County, California

Dear Ms. Brunzell,

ASM Affiliates, Inc. (ASM) is conducting a cultural resources study for the Maverik Fueling Station Project, Palmdale, Los Angeles County, California. The proposed Project site is a currently vacant lot located north of West Avenue S and its intersection with West Avenue S-4 in a largely undeveloped area just west of State Route 14. The Project area is illustrated on the Ritter Ridge, California USGS 7.5-minute topographic quadrangle (see attached). This study is being undertaken in compliance with CEQA.

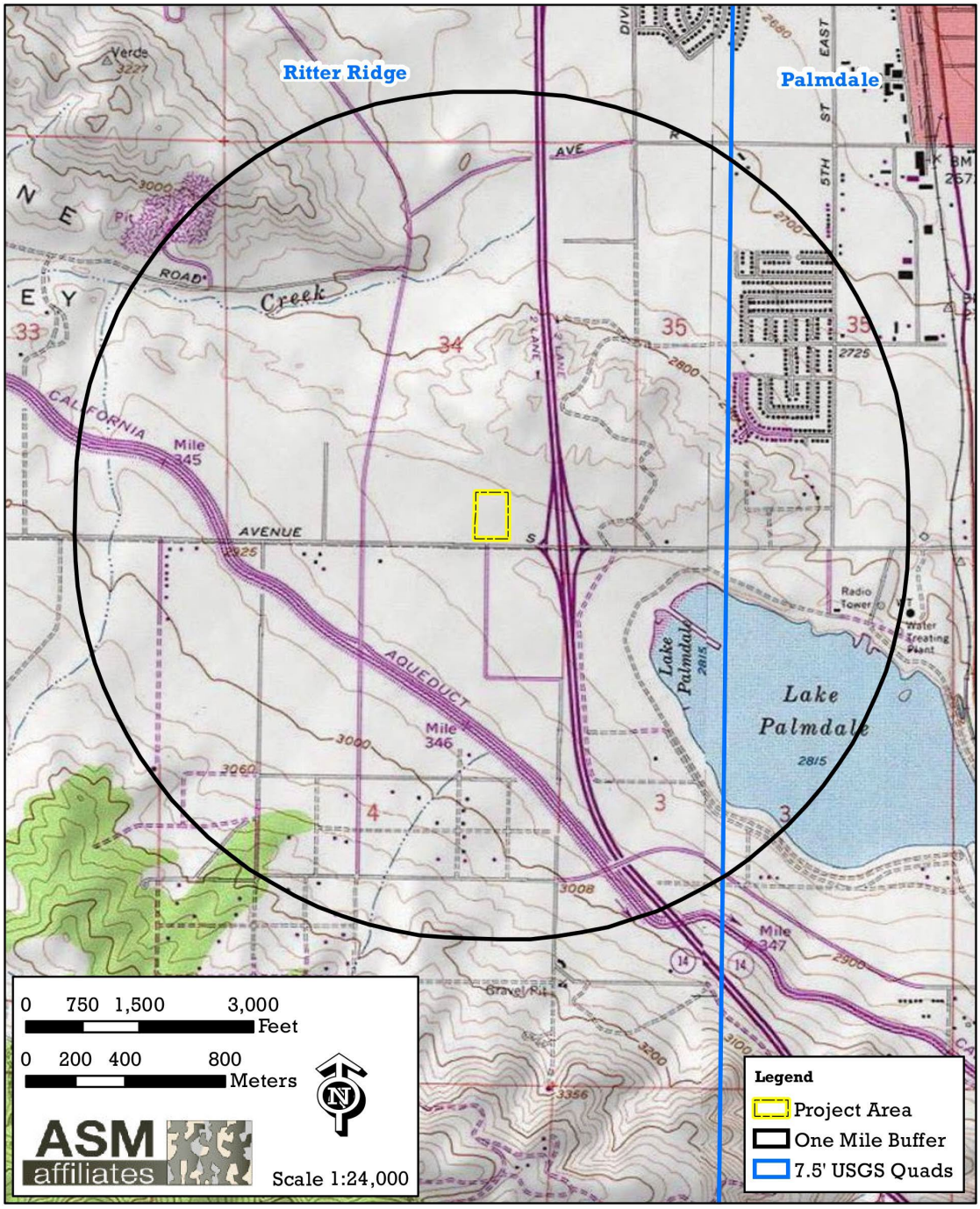
A search of the Native American Heritage Commission's (NAHC) Sacred Lands File has been undertaken with negative results. The NAHC response also included a list of contacts who may have interest in or information about the Project area, upon which you appear. As a result, we would appreciate any information you may wish to share regarding Native American cultural resources located in or near the proposed Project location or concerns you may have regarding the proposed Project. This query is for informational purposes only. Any information concerning the location, identity, character, and traditional use of cultural places identified will be considered strictly confidential.

You may contact me at sandrews@asmaffiliates.com, (626) 793-7395, or the Pasadena office address provided below. Thank you in advance for taking the time to review this request.

Respectfully yours,

Sherri Andrews, M.A., RPA
Senior Archaeologist

2034 Corte Del Nogal, Carlsbad, California 92011 • (760) 804-5757 • Fax: (760) 804-5755
20 N. Raymond Ave., Suite 220, Pasadena, California 91103 • (626) 793-7395
www.asmaffiliates.com



Map of the Maverik Fueling Station Project area shown on the USGS Ritter Ridge, California 7.5-minute topographic quadrangle.

From: Jill McCormick
To: Sherri Andrews
Subject: RE: [EXTERNAL]:Palmdale Maverik Fueling Station Project, Los Angeles County
Date: Wednesday, July 12, 2023 10:46:01 AM
Attachments: image001.png

This email is to inform you that we do not wish to comment on this project. We defer to the more local Tribes and support their determinations on this matter.

H. Jill McCormick M.A.
Ft. Yuma Quechan Indian Tribe
P.O. Box 1899
Yuma, AZ 85366-1899
Office: 760-572-2423
Cell: 928-261-0254

From: Sherri Andrews <sandrews@asmaffiliates.com>
Sent: Wednesday, July 12, 2023 10:40 AM
To: Jill McCormick <historicpreservation@quechantribe.com>
Subject: [EXTERNAL]:Palmdale Maverik Fueling Station Project, Los Angeles County

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. McCormick --

Attached please find our letter requesting your comments, if any, on Palmdale Maverik Fueling Station Project, Los Angeles County, California. Thank you for taking time to review this letter and letting us know if there are any issues or concerns.

Best regards,
Sherri

Photograph

Sherri Andrews M.A., J.D., RPA | Senior Archaeologist
20 N. Raymond Ave., Suite 220 Pasadena, CA | O: (626) 793-7395 | M:
sandrews@asmaffiliates.com | https://asmaffiliates.com

Appendix D

Geotechnical Engineering Study

CMT TECHNICAL SERVICES

ENGINEERING •GEOTECHNICAL •ENVIRONMENTAL (ESA I & II) •
MATERIALS TESTING •SPECIAL INSPECTIONS •
ORGANIC CHEMISTRY • PAVEMENT
DESIGN •GEOLOGY

GEOTECHNICAL ENGINEERING STUDY

Proposed Maverik Store

Highway 14 and Avenue S
Palmdale, California

CMT PROJECT NO. 18988

FOR:
Cardno, Inc.
1142 West 2320 South, Suite A
West Valley City, Utah 84119

September 13, 2022

CMT TECHNICAL SERVICES

September 13, 2022

Mr. Russ Hamblin
Cardno, Inc.
1142 West 2320 South, Suite A
West Valley City, Utah 84119

Subject: Geotechnical Engineering Study
Proposed Maverik Store
Highway 14 and Avenue S
Palmdale, California
CMT Project Number: 18988

Mr. Hamblin:

Submitted herewith is the report of our geotechnical engineering study for the subject site. This report contains the results of our findings and an engineering interpretation of the results with respect to the available project characteristics. It also contains recommendations to aid in the design and construction of the earth-related phases of this project.

On August 26, 2022, Cardno personnel were onsite and supervised the drilling of 6 bore holes at the site extending to depths between about 6.5 and 50.0 feet below the existing ground surface. Soil samples were obtained in the bore holes during the field operations and subsequently transported to our laboratory for further testing and observation.

Natural subsurface soils consisted of SILT (ML) and SAND (SM). Groundwater was not encountered in the explorations. Based upon the results of our study the proposed structures may be supported on conventional strip and spread footings founded on suitable, undisturbed, natural sand soils, or on structural fill placed on suitable, undisturbed natural soils. A detailed discussion of design and construction criteria is presented in this report.

We appreciate the opportunity to work with you at this stage of the project. CMT offers a full range of Geotechnical Engineering, Geological, Material Testing, Special Inspection services, and Phase I and II Environmental Site Assessments. With offices throughout Utah, Idaho, and Arizona, our staff is capable of efficiently serving your project needs. If we can be of further assistance or if you have any questions regarding this project, please do not hesitate to contact us at 801-492-4132.

Sincerely,
CMT Technical Services

Jeffrey J. Egbert, P.E., LEED A.P., M. ASCE
Senior Geotechnical Engineer

Reviewed By:

REGISTERED PROFESSIONAL ENGINEER
WILLIAM G. TURNER
No. C 43740
Exp. 3/31/23
CIVIL
STATE OF CALIFORNIA

William G. Turner, P.E.
Senior Geotechnical Engineer

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Figure 1: Site Plan
Figures 2 through 7: Bore Hole Logs
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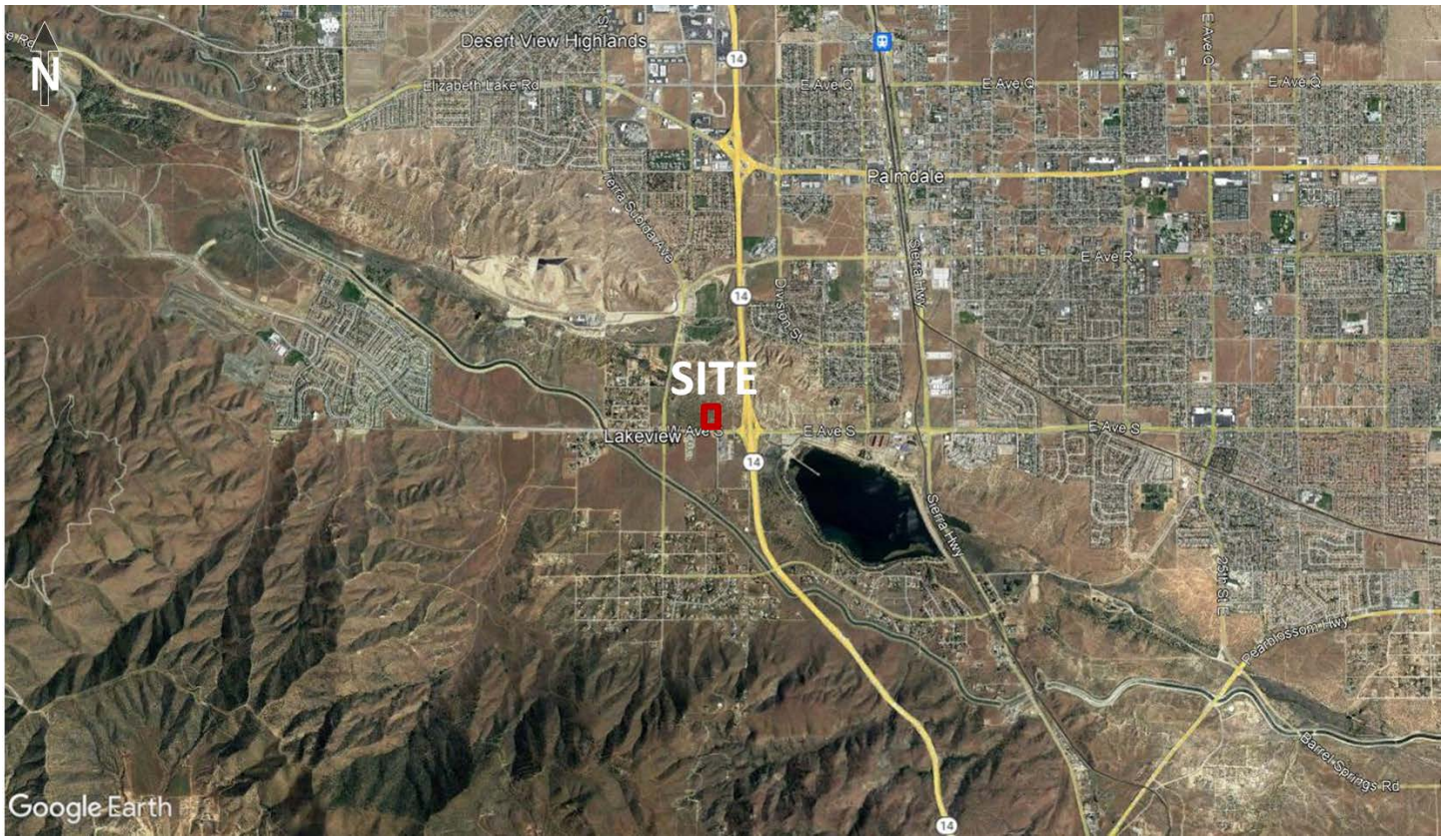
1.0 INTRODUCTION

1.1 General

CMT Technical Services (CMT) was retained to conduct a geotechnical subsurface study for a proposed Maverik Store. The site for the proposed development is situated at the north side of Avenue S, just west of Highway 14 in Palmdale, California as shown on the **Vicinity Map** below.



VICINITY MAP

1.2 Objectives, Scope and Authorization

The objectives and scope of our study were planned in communications between Mr. Russ Hamblin of Cardno, Inc., and Mr. Jeffrey Egbert of CMT. In general, the objectives of this study were to define and evaluate the subsurface soil and groundwater conditions at the site, and provide appropriate foundation, earthwork, pavement and seismic recommendations to be utilized in the design and construction of the proposed development.

In accomplishing these objectives, subsurface explorations consisting of the drilling/logging/sampling of 6 bore holes, performing an infiltration test in one of the bore holes, and driving a Dynamic Cone Penetrometer (DCP) at three locations on the site, were performed by Cardno personnel. Our scope of work included performing laboratory testing on samples of the subsurface soils collected in the bore holes as delivered to us, and

conducting an office program which included correlating available data, performing engineering analyses, and preparing this summary report.

1.3 Description of Proposed Construction

We understand that construction of a new Maverik convenience store and fuel station with accompanying fuel islands and canopies, and underground fuel storage tanks is planned for the site. We project that wall loads for the store building will not exceed 4,000 pounds per linear foot. Floor slab loads are anticipated to be relatively light, with an average uniform loading not exceeding 150 pounds per square foot.

The fuel island canopies will be supported by steel frames and columns extending to the foundation system. It is projected that the maximum canopy downward column loads will be on the order of 60,000 pounds. In addition, uplift and lateral loads will be imposed upon these foundations. If the structural loading conditions are different than we have projected, please notify us so that any appropriate modifications to our conclusions and recommendations contained herein can be made.

We also understand the parking/drive paved areas will be constructed utilizing both asphalt and concrete pavement. Concrete pavement will likely be installed in front of the proposed store structure, as well as in the canopy fuel islands and over the underground storage tank area. In other areas, asphalt concrete sections will likely be used. Traffic is projected to consist of mostly automobiles and light trucks, a few daily medium-weight delivery trucks, a weekly garbage truck, and an occasional fire truck. The site plan indicates 76 hi-flow lanes for which data provided by Maverik indicates up to 200 semi-trucks per day.

1.4 Executive Summary

The most significant geotechnical aspects regarding site development include the following:

1. Moderate vegetation, including large shrubs and small trees, and topsoil to be removed.
2. Subsurface natural soils generally consisted of near surface SILT (ML) layers, followed by SAND (SM).
3. Groundwater was not encountered within the maximum depth explored of about 50 feet.
4. The site is mapped within a liquefaction zone by the State of California, but the potential for liquefaction to occur in the subsurface soils encountered is very low.
5. An earthquake fault is mapped very near the northeast corner of the site and a fault hazard study may be required.
5. Foundations may be constructed on scarified, re-compacted suitable, natural soils, or on structural/engineered fill which extends to scarified, re-compacted natural soils.

A qualified geotechnical engineer must assess that undocumented fill (if encountered), topsoil, debris, disturbed or unsuitable soils have been removed and that suitable soils have been encountered prior to placing structural/site grading fills, footings, slabs, and pavements.

In the following sections, detailed discussions pertaining to the site, subsurface descriptions, and the geologic/seismic setting are provided, along with recommendations for earthwork, foundations, lateral resistance, lateral pressure, floor slabs, and pavements.

2.0 FIELD EXPLORATION

2.1 General

In order to define and evaluate the subsurface soil and groundwater conditions, 6 bore holes were drilled at the site to depths of approximately 6.5 to 50.0 feet below the existing ground surface. Locations of the bore holes are presented on **Figure 1** in the Appendix.

Relatively undisturbed samples of the subsurface soils were obtained by driving a split-spoon sampler with 2.05-inch outside diameter rings/liners into the undisturbed soils below the drill augers. Disturbed samples were collected utilizing a standard split spoon sampler. The split spoon sampler was driven 18 inches into the soils below the drill augers using a 140-pound hammer free-falling a distance of 30 inches. The number of hammer blows needed for each 6-inch interval was recorded. The sum of the hammer blows for the final 12 inches of penetration is known as a standard penetration test (SPT) and this 'blow count' was recorded on the bore hole logs. Where more than 50 blows occurred before the 6-inch interval was achieved, the sampling was terminated and the number of blows and inches penetrated by the sampler were recorded. The blow count provides a reasonable approximation of the relative density of granular soils, but only a limited indication of the relative consistency of fine-grained soils because the consistency of these soils is significantly influenced by the moisture content.

The subsurface soil samples retrieved in the bore holes were classified in the field based upon visual and textural examination in general accordance with ASTM[1] D-2488. These field classifications were supplemented by subsequent examination and testing of select samples in our laboratory. Graphic logs of the bore holes, including a description of the soil strata encountered, are presented on the **Bore Hole Logs**, **Figures 2 through 7**, included in the Appendix. Sampling information and other pertinent data and observations are also included on the logs. In addition, a **Key to Symbols** defining the terms and symbols used on the logs is provided as **Figure 8** in the Appendix.

2.2 Infiltration Testing

Infiltration testing was also performed in bore hole B-1 within the natural silt soils. The testing consisted of drilling to 5 feet below the surface, sampling, removing the sampler, filling the auger with water and measuring the rate of water drop over approximately 1 hour increments. The final measured rate was approximately 17 minutes per inch. This rate will likely slow over time and an appropriate factor of safety should be applied for design.

[1]American Society for Testing and Materials

3.0 LABORATORY TESTING

Selected samples of the subsurface soils were subjected to various laboratory tests to assess pertinent engineering properties, as follows:

1. Moisture Content, ASTM D-2216, Percent moisture representative of field conditions
2. Dry Density, ASTM D-2937, Dry unit weight representing field conditions
3. Atterberg Limits, ASTM D-4318, Plasticity and workability
4. Gradation Analysis, ASTM D-1140/C-117, Grain Size Analysis

Laboratory test results are presented on the bore hole logs (**Figures 2 through 7**) and in the following **Lab Summary Table**:

LAB SUMMARY TABLE

BORE HOLE	DEPTH (feet)	SAMPLE TYPE	SOIL CLASS	MOISTURE CONTENT(%)	DRY DENSITY (pcf)	GRADATION			ATTERBERG LIMITS		
						GRAV.	SAND	FINES	LL	PL	PI
B-1	2.5	SPT	ML	5				69			
B-2	5	SPT	CL-ML	4				65	22	15	7
B-3	7.5	SPT	ML	2				53			
B-4	10	SPT	ML	1		1	48	51		NP	
B-5	5	SPT	ML	3		2	34	64			
B-6	5	SPT	ML	3		2	34	64			
B-6	10	SPT	ML	4		0	31	69			
B-6	20	SPT	SM	7	87	6	55	39			
B-6	30	SPT	SM	7		3	61	36			
B-6	40	SPT	ML	11		1	40	59			
B-6	50	SPT	ML	11		3	47	50			

4.0 GEOLOGIC & SEISMIC CONDITIONS

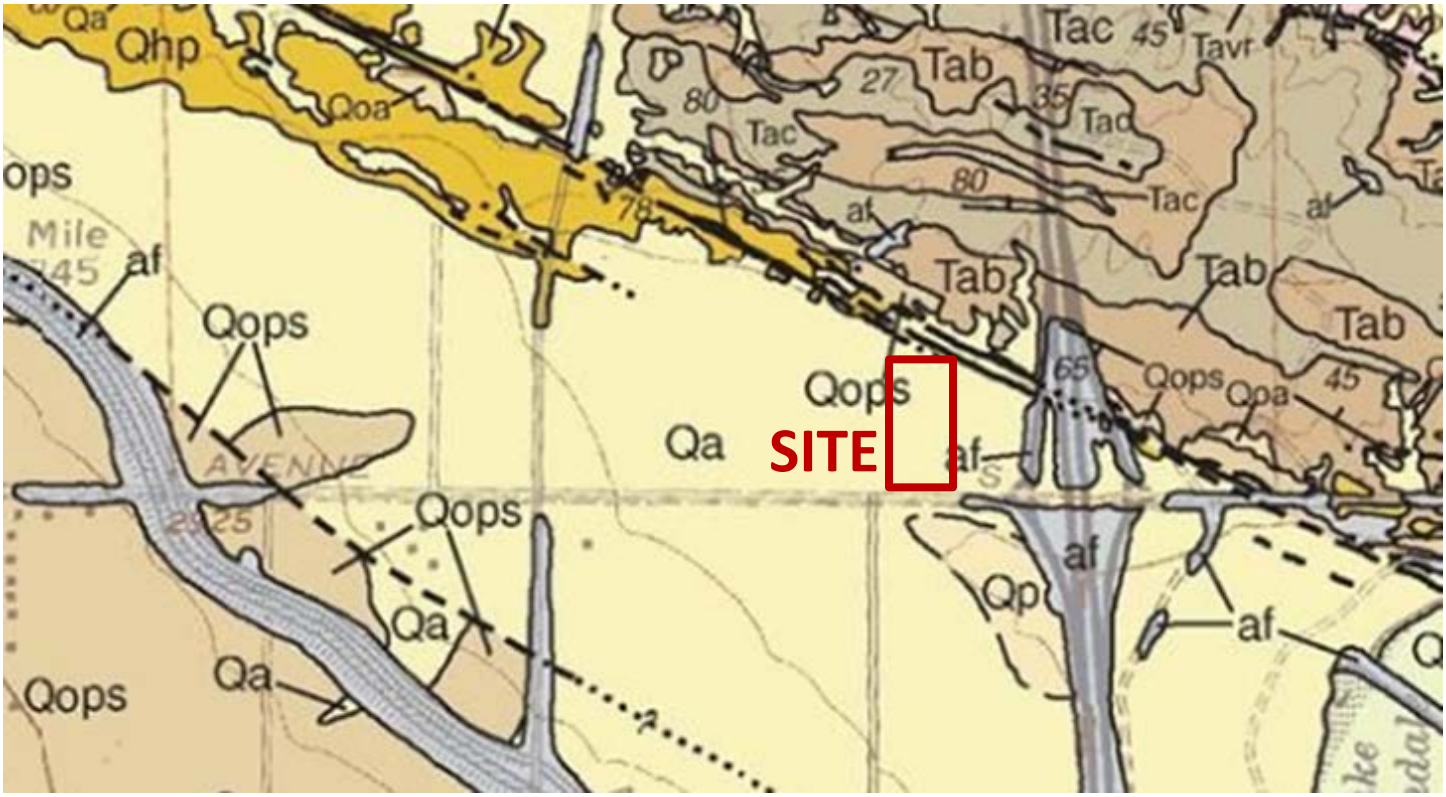
4.1 Geologic Setting

The subject site is located in the south-central portion of the Antelope Valley at the western tip of the Mojave Desert Geomorphic Province in southern California. The site sits at an elevation of approximately 2,660 feet above sea level. The Antelope Valley is a large, flat valley spanning approximately 2,200 square miles. It is located southeast of the Tehachapi Mountains and Garlock Fault, east of the Sierra Pelona Mountains, and north of the San Gabriel Mountains and San Andreas Fault, forming a large topographic and groundwater basin collecting water runoff from the surrounding mountains. Human use such as long-term groundwater pumping has lowered the water table, resulting in land subsidence and drop in elevation of the basin over time.

During the history of the Antelope Valley region, a large intermittent lake formed near the center of the basin and deposited various types of fine-grained sediment based on precipitation. Significant precipitation sourced massive beds of blue clay formed in a deep perennial lake, while mild precipitation deposited thin beds of clay

and evaporate salt deposits formed in playas or shallow intermittent lakes. The clay yields little to no water to wells, but the interbedded, coarser material can yield considerable volumes of water. Soils within the area are derived from loess and alluvial material sourced from granitic rock and others originating along the slopes of the Tehachapi and San Gabriel Mountains that were shed into the valley.

The geology of CGS Ritter Ridge 7.5' quadrangle, Los Angeles County, California, which includes the location of the subject site, has been mapped by Hernandez[2]. The surficial geology of the subject site and adjacent properties is mapped as "Modern alluvium" (map unit Qa) dated to be Holocene. Unit Qa is described in the referenced mapping as "Unconsolidated to weakly consolidated, mostly undissected, fluvial gravel, sand, and silt. Loose, yellowish-grey sand, silt, and pebble-cobble gravel. Consists predominantly of moderately sorted coarse-grained to very coarse-grained arkosic sand." No fill has been recorded at the location of the site on the geologic map. Refer to the **Geologic Map**, below.



GEOLOGIC MAP

4.2 Faulting

The nearest mapped fault is the San Andreas Fault very near the northeast corner of the site. According to California Geological Survey mapping[3] the site lies within an earthquake fault zone. A special earthquake hazard study may be required.

[2]Hernandez, J.L., 2009, Preliminary geologic map of the Ritter Ridge 7.5' quadrangle, Los Angeles County, California: A digital database, California Geological Survey, series unknown, 1:24,000.
[3] https://maps.conservation.ca.gov/cgs/EQZApp/app/

4.3 Seismicity

4.3.1 Site Class

We understand that the State of California Building Code (SCBC) 2019 was adopted on January 1, 2020, which we anticipate will be the code for design of the structures at this site. SCBC 2019 refers to Chapter 20, Site Classification Procedure for Seismic Design, of ASCE[4] 7-16, which stipulates that the average values of shear wave velocity, blow count and/or shear strength within the upper 100 feet (30 meters) be utilized to determine seismic site class. Based on the SPT blow counts obtained in bore hole B-1, which extended approximately 50 feet below the surface, and projecting that subsurface soils to 100 feet will be similar, it is our opinion the site best fits Site Class D – Stiff Soil (with data), which we recommend for seismic structural design.

4.3.2 Ground Motions

The seismic mapping utilized by the California Building Code provides values of peak ground, short period and long period spectral accelerations for the Site Class B/C boundary and the Risk-Targeted Maximum Considered Earthquake (MCE_R). This Site Class B/C boundary represents average bedrock values for the Western United States and must be corrected for local soil conditions. The following table summarizes the peak ground, short period and long period accelerations for the MCE_R event, and incorporates appropriate soil correction factors for a Site Class D (with data) soil profile at site grid coordinates of 34.6596 degrees north latitude and -118.1573 degrees west longitude:

SPECTRAL ACCELERATION PERIOD, T	SITE CLASS B/C BOUNDARY [mapped values] (g)	SITE COEFFICIENT	SITE CLASS D* [adjusted for site class effects] (g)	MULTI-PLIER	DESIGN VALUES (g)
Peak Ground Acceleration	PGA = **1.075**	F_{pga} = 1.100	PGA_M = 1.183	1.000	PGA_M = 1.183
0.2 Seconds (Long Period Acceleration)	S_S = **2.503**	F_a = 1.000	S_{MS} = 2.503	0.667	S_{DS} = 1.669
	(no exceptions needed)	F_a = (N/A)	S_{MS} = (N/A)	0.667	S_{DS} = (N/A)
1.0 Second (Long Period Acceleration)	S_1 = **1.068**	F_v = N/A	S_{M1} = N/A	0.667	S_{D1} = N/A
	(Exception 2:)	F_v = (1.700)	S_{M1} = (1.816)	0.667	S_{D1} = (1.210)

NOTES: 1. TL (seconds): **8**
2. Site Class: **D**
3. Have data to verify? **yes**

*** Site Class D With Data**

4. ASCE 7-16 Requires Site-Specific Ground Motion Hazard Analysis (Since S1≥0.2 sec) - OR Can Use Exception 2 (per §11.4.8)

As indicated in the above table, S_1 is greater than 0.2 seconds and a site-specific ground motion hazard analysis (GMHA) is required for the site, unless the Exception 2 values shown are used for seismic design. If a site-specific GMHA is desired instead of using the higher exception values, please contact CMT for a proposal to perform the GMHA.

[4] American Society of Civil Engineers

4.3.3 Liquefaction

Liquefaction is defined as the condition when saturated, loose, sandy soils lose their support capabilities because of excessive pore water pressure which develops during a seismic event. Clayey soils, even if saturated, will generally not liquefy during a major seismic event.

The previously referenced California Geological Survey mapping indicates the site is within a liquefaction zone. Groundwater was not encountered to the maximum depth explored of approximately 50 feet below the existing ground surface. Given these conditions, liquefaction will not occur at the site in the soils encountered.

4.4 Other Geologic Hazards

The site is not located within a known or mapped potential debris flow, stream flooding[5], or rock fall hazard area. No landslide deposits or features, including lateral spread deposits, are mapped on or adjacent to the site.

5.0 SITE CONDITIONS

5.1 Surface Conditions

At the time the bore holes were drilled, the site was vacant land moderately vegetated with weeds, brush, and some cactus. Site grades sloped downward to the south. Based on aerial photos dating back to 1995 that are readily available on the internet, the site appears to have been vacant since that time. The site is bordered on the north, east, and west by similar vacant land, and on the south by Avenue S (see **Vicinity Map** in **Section 1.1** above).

5.2 Subsurface Soils

Topsoil approximately 12 inches in thickness was noted on the surface at the bore hole locations. Subsurface natural soils encountered predominately consisted of near surface layers of red-yellow, slightly moist Sandy SILT (ML), and occasionally Sandy SILTY CLAY (CL-ML), extending to the bottom of bore holes B-1 through B-5, and to about 15 feet below the surface in B-6. Based upon the SPT blow counts these soils have stiff to hard consistency. Below the silt in B-6 a layer of brown, slightly moist Silty SAND (SM), with varying amounts of gravel, was encountered which extended to about 40 feet below the surface. Blow counts indicate the sand is very dense. At about 40 feet the soils turned predominately silty again and were hard based on the blow counts, extending to the bottom of B-6 at about 50 feet below the surface.

For a more descriptive interpretation of subsurface conditions, please refer to the bore hole logs, **Figures 2 through 7**, which graphically represent the subsurface conditions encountered. The lines designating the

[5] Federal Emergency Management Agency:
https://msc.fema.gov/portal/search?AddressQuery=Highway%2014%20%26%20Avenue%20S%2C%20Palmdale%2C%20California%20#searchresultsanchor

interface between soil types on the log generally represent approximate boundaries; in situ, the transition between soil types may be gradual.

5.3 Groundwater

Groundwater was not encountered within the maximum depth explored of 50 feet below the existing surface. We do not anticipate that groundwater will be encountered during construction at this site.

Groundwater levels can fluctuate seasonally and in response to numerous factors such as heavy precipitation, irrigation of neighboring land, and other unforeseen factor. The detailed evaluation of these and other factors, which may be responsible for ground water fluctuations, and the magnitude of potential fluctuations, is beyond the scope of this study.

5.4 Site Subsurface Variations

Based on the results of the subsurface explorations and our experience, variations in the continuity and nature of subsurface conditions should be anticipated. Due to the heterogeneous characteristics of natural soils, care should be taken in interpolating or extrapolating subsurface conditions between or beyond the exploratory locations.

6.0 SITE PREPARATION AND GRADING

6.1 General

All deleterious materials should be stripped from the site prior to commencement of construction activities. This includes vegetation, topsoil, loose and disturbed soils, etc. Topsoil approximately 12 inches in thickness was noted on the surface at the bore hole locations. When stripping and grubbing, topsoil should be distinguished by the apparent organic content and not solely by color; thus, we estimate that topsoil stripping will need to include at least the upper 6 inches, but roots may locally extend deeper.

Fill placed over large areas to raise overall site grades can induce settlements in the underlying natural soils. If more than 3 feet of site grading fill is anticipated over the existing ground surface, we should be notified to assess potential settlements and provide additional recommendations as needed. These recommendations may include placement of the site grading fill far in advance to allow potential settlements to occur prior to construction.

6.2 Temporary Excavations

Excavations up to 16 feet deep for underground fuel storage tanks are anticipated at the site. Based upon bore hole B-6 it appears that excavations at the proposed tank pit location will encounter mostly silt.

For silty/sandy (cohesionless) soils, temporary construction excavations not exceeding 4 feet in depth should be no steeper than one-half horizontal to one vertical (0.5H:1V). For excavations up to 16 feet and above groundwater, side slopes should be no steeper than one and one-half horizontal to one vertical (1.5H:1V) unless shored or braced. Excavations encountering saturated cohesionless soils, though not anticipated, will be very difficult to maintain, and will require very flat side slopes and/or shoring, bracing and dewatering.

All excavations must be inspected periodically by qualified personnel. If any signs of instability or excessive sloughing are noted, immediate remedial action must be initiated. All excavations should be made following OSHA safety guidelines.

6.3 Fill Material

The following table contains our recommendations for the various fill types we anticipate will be used at this site:

FILL MATERIAL TYPE	DESCRIPTION | RECOMMENDED SPECIFICATION
Structural Fill	Placed immediately below structures, flatwork and pavement. Well-graded sand/gravel mixture, with maximum particle size of 4 inches, a minimum 70% passing 3/4-inch sieve, a maximum 20% passing the No. 200 sieve, and a maximum Plasticity Index of 10.
Import Site Grading Fill	Placed over larger areas to raise the site grade to within 18 inches of bottom of footing, and to pavement subgrade level. Sandy to gravelly soil, with a maximum particle size of 6 inches, a minimum 70% passing 3/4-inch sieve, a maximum 50% passing No. 200 sieve and a maximum Plasticity Index of 15.
Non-Structural Fill	Placed below non-structural areas, such as landscaping. On-site soils or imported soils, with a maximum particle size of 8 inches, including silt/clay soils not containing excessive amounts of degradable/organic material (see discussion below).
Stabilization Fill	Placed to stabilize soft areas prior to placing structural fill and/or site grading fill. Coarse angular gravels and cobbles 1 inch to 8 inches in size. May also use 1.5- to 2.0-inch gravel placed on stabilization fabric, such as Mirafi RS280i or equivalent (see **Section 6.6**).

The natural soils at this site may be utilized as site grading fill. All on-site soils could be used as non-structural fill. Existing soils will likely be more difficult to work with depending on the fines content and plasticity. If utilized, these soils should be compacted to the requirements given below.

All fill material should be approved by a geotechnical engineer prior to placement.

6.4 Fill Placement and Compaction

The various types of compaction equipment available have their limitations as to the maximum lift thickness that can be compacted. For example, hand operated equipment is limited to lifts of about 4 inches and most "trench compactors" have a maximum, consistent compaction depth of about 6 inches. Large rollers, depending on soil and moisture conditions, can achieve compaction at 8 to 12 inches. The full thickness of each lift should

be compacted to at least the following percentages of the maximum dry density as determined by ASTM D-698 (or AASHTO[6] T-99) in accordance with the following recommendations:

LOCATION	TOTAL FILL THICKNESS (FEET)	MINIMUM PERCENTAGE OF MAXIMUM DRY DENSITY
Beneath an area extending at least 4 feet beyond the perimeter of structures, and below flatwork and pavement (applies to structural fill and site grading fill) extending at least 2 feet beyond the perimeter	0 to 5 5 to 8	95 98
Site grading fill outside area defined above	0 to 5 5 to 8	90 95
Utility trenches within structural areas	--	95
Roadbase and subbase	-	95
Non-structural fill	0 to 5 5 to 8	85 90

Structural fills greater than 8 feet thick are not anticipated at the site. For best compaction results, we recommend that the moisture content for structural fill/backfill be within 2% of optimum. Field density tests should be performed on each lift as necessary to verify that proper compaction is being achieved.

6.5 Utility Trenches

For the bedding zone around the utility, we recommend utilizing sand bedding fill material that meets current local or APWA[7] requirements.

All utility trench backfill material below structurally loaded facilities (foundations, floor slabs, flatwork, parking lots/drive areas, etc.) should be placed at the same density requirements established for structural fill in the previous section.

Most utility companies and local governments are requiring Type A-1a or A-1b (AASHTO Designation) soils (sand/gravel soils with limited fines) be used as backfill over utilities within public rights of way, and the backfill be compacted over the full depth above the bedding zone to at least 95% of the maximum dry density as determined by AASHTO T-99 (ASTM D-698).

Where the utility does not underlie structurally loaded facilities and public rights of way, natural soils may be utilized as trench backfill above the bedding layer, provided they are properly moisture conditioned and compacted to the minimum requirements stated above in **Section 6.4**.

[6] American Association of State Highway and Transportation Officials
[7] American Public Works Association

6.6 Stabilization

To stabilize soft subgrade conditions a mixture of coarse, clean, angular gravels and cobbles and/or 1.5- to 2.0-inch clean gravel should be utilized. Often the amount of gravelly material can be reduced with the use of a geotextile fabric such as Mirafi RS280i, or equivalent. Its use will also help avoid mixing of the subgrade soils with the gravelly material. After excavating the soft/disturbed soils, the fabric should be spread across the bottom of the excavation and up the sides a minimum of 18 inches. Otherwise, it should be placed in accordance with the manufacturer's recommendation, including proper overlaps. The gravel material can then be placed over the fabric in compacted lifts as described above.

7.0 FOUNDATION RECOMMENDATIONS

The following recommendations have been developed on the basis of the previously described project characteristics, the subsurface conditions observed in the field and the laboratory test data, as well as common geotechnical engineering practice.

7.1 Foundation Recommendations

Based on our geotechnical engineering analyses, the proposed structures may be supported upon conventional spread and/or continuous wall foundations placed on suitable, scarified and re-compacted natural soils, or on structural fill placed on suitable, scarified, re-compacted natural soils. Footings may be designed using a net bearing pressure of 2,000 psf if bearing on scarified and re-compacted natural soils, and 2,500 psf if bearing on a minimum of 18 inches of structural fill placed upon scarified, re-compacted natural soils. The term "net bearing pressure" refers to the pressure imposed by the portion of the structure located above lowest adjacent final grade, thus the weight of the footing and backfill to lowest adjacent final grade need not be considered. The allowable bearing pressure may be increased by 1/3 for temporary loads such as wind and seismic forces.

We also recommend the following:

1. Exterior footings subject to frost should be placed at least 18 inches below final grade, or per city standards if deeper.
2. Interior footings not subject to frost should be placed at least 12 inches below grade.
3. Continuous footing widths should be maintained at a minimum of 18 inches.
4. Spot footings should be a minimum of 24 inches wide.

7.2 Installation

Under no circumstances shall foundations be placed on undocumented fill, topsoil with organics, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. If unsuitable soils are encountered, they must be completely removed and replaced with properly compacted structural fill. The base of footing excavations and floor slab sub grades should be observed by a qualified geotechnical engineer to confirm that suitable bearing soils have been exposed.

The base of footing excavations should be scarified a minimum of 12 inches, moisture conditioned as needed, and re-compacted to the requirements for structural fill given in **Section 6.4** prior to forming for footings or placement of structural fill.

All structural fill should meet the requirements for such, and should be placed and compacted in accordance with **Section 6** above. The width of structural replacement fill below footings should be equal to the width of the footing plus 1 foot for each foot of fill thickness. For instance, if the footing width is 2 feet and the structural fill depth beneath the footing is 4 feet, the fill replacement width should be 6 feet, centered beneath the footing.

The minimum thickness of structural fill below footings should be equivalent to one-third the thickness of structural fill below any other portion of the foundations. For example, if the maximum depth of structural fill is 6 feet, all footings for the new structure should be underlain by a minimum 2 feet of structural fill.

7.3 Estimated Settlement

Foundations designed and constructed in accordance with our recommendations could experience some settlement, but we anticipate that total settlements of footings founded as recommended above will not exceed 1 inch, with differential settlements on the order of 0.5 inches over a distance of 25 feet. We expect approximately 50% of the total settlement to initially take place during construction.

7.4 Lateral Resistance

Lateral loads imposed upon foundations due to wind or seismic forces may be resisted by the development of passive earth pressures and friction between the base of the footings and the supporting soils. In determining frictional resistance, a coefficient of 0.30 for natural soils and 0.40 for structural fill may be utilized for design. Passive resistance provided by properly placed and compacted natural soils above the water table may be considered equivalent to a fluid with a density of 350 pcf. A combination of passive earth resistance and friction may be utilized if the passive pressure component of the total is divided by 1.5.

7.5 Uplift Loads

Uplift loads may be resisted by the weight of the foundation and the backfill wedge above the top of the foundation within the area defined by an imaginary line extending outward from the outside top edge of the footing 10 degrees from vertical, up to final grade. A unit weight of 120 pounds per square foot can be used for sand and gravel backfill over the footings.

8.0 LATERAL EARTH PRESSURES

We anticipate that below-grade walls up to 4 feet high may be constructed at this site. The lateral earth pressure values given in the table below are for a backfill material that will consist of drained sand soils (less than 10% passing No. 200 sieve) placed and compacted in accordance with the recommendations presented herein. If

other soil types will be used as backfill, we should be notified so that appropriate modifications to these values can be provided, as needed.

The lateral pressures imposed upon subgrade facilities will depend upon the relative rigidity and movement of the backfilled structure. In the table on the following page are the recommended lateral pressure values, which also assume that the soil surface behind the wall is horizontal and that the backfill within 3 feet of the wall will be compacted with hand-operated compacting equipment.

CONDITION	STATIC (psf/ft)*	SEISMIC (psf)**
Active Pressure (wall is allowed to yield, i.e. move away from the soil, with a minimum 0.001H movement/rotation at the top of the wall, where "H" is the total height of the wall)	40	106
At-Rest Pressure (wall is not allowed to yield)	60	283
Passive Pressure (wall moves into the soil)	350	0

*Equivalent Fluid Pressure (applied at 1/3 Height of 4-foot High Wall)
**Uniform Pressure, Seismic Only (applied at 1/2 Height of 4-foot High Wall)

9.0 BOUYANT FORCES

Groundwater was not encountered to the maximum depth explored of 50 feet. Based upon this condition we anticipate that underground tanks will not need to be designed to resist buoyant forces.

10.0 FLOOR SLABS

Floor slabs may be established upon suitable, natural scarified and re-compacted soils and/or on structural fill extending to suitable, natural scarified and re-compacted soils (same as for foundations). Under no circumstances shall floor slabs be established directly on any topsoil, undocumented fills, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.

In order to facilitate curing of the concrete, we recommend that floor slabs be directly underlain by at least 4 inches of "free-draining" fill, such as "pea" gravel or 3/4-inch quarters to 1-inch minus, clean, gap-graded gravel. To help control normal shrinkage and stress cracking, the floor slabs should have the following features:

1. Adequate reinforcement for the anticipated floor loads with the reinforcement continuous through interior floor joints;
2. Frequent crack control joints; and
3. Non-rigid attachment of the slabs to foundation walls and bearing slabs.

11.0 DRAINAGE RECOMMENDATIONS

It is important to the long-term performance of foundations and floor slabs that water not be allowed to collect near the foundation walls and infiltrate into the underlying soils. We recommend the following:

1. All areas around the structures should be sloped to provide drainage away from the foundations. We recommend a minimum slope of 4 inches in the first 10 feet away from the structure. This slope should be maintained throughout the lifetime of the structure.

2. All roof drainage should be collected in rain gutters with downspouts designed to discharge at least 10 feet from the foundation walls or well beyond the backfill limits, whichever is greater.

3. Adequate compaction of the foundation backfill should be provided. We suggest a minimum of 90% of the maximum laboratory density as determined by ASTM D-698. Water consolidation methods should not be used under any circumstances.

4. Landscape sprinklers should be aimed away from foundation walls. The sprinkling systems should be designed with proper drainage and be well-maintained. Over watering should be avoided.

5. Other precautions that may become evident during construction.

12.0 PAVEMENTS

All pavement areas must be prepared as discussed above in **Section 6.1.** Under no circumstances shall pavements be established over topsoil, un-prepared existing undocumented fill soils, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.

To assess subgrade strength for pavement support Dynamic Cone Penetrometer (DCP) tests were performed at three locations within proposed pavement areas. Test results were varied, with correlated average California Bearing Ratio (CBR) values ranging from 4.3 to 9.1 (see **Figures 11 through 13**). We have utilized a correlated CBR value of 5 as the basis for the pavement design.

Given the projected traffic as discussed above in **Section 1.3**, the following pavement sections are recommended for the estimated ESAL's:

MATERIAL	PAVEMENT SECTION THICKNESS (inches)						
	PARKING AREAS (Moderate Duty) (4 ESAL'S per day)		HI-FLOW AREAS (Heavy Duty) (521 ESAL'S per day)				
Asphalt	**4***	**---**	**6***	**6***	**6***	**6***	**---**
Concrete	**---**	**4**	**---**	**---**	**---**	**---**	**6**
Road-Base	**8***	**6**	**22**	**10**	**12†**	**15‡**	**6**
Subbase	**0**	**0**	**0**	**15**	**0**	**0**	**0**
Total Thickness	**12**	**10**	**28**	**31**	**18**	**21**	**12**

*Maverik Minimum
†Cement Treated
‡Over Tensar TX-7 Geogrid

Untreated base course (UTBC) should conform to city or DOT specifications. Material meeting our specification for structural fill can be used for subbase, as long as the fines content (percent passing No. 200 sieve) does not exceed 15%. Roadbase and subbase material should be compacted as recommended above in **Section 6.4**. Asphalt material generally should conform to DOT or APWA requirements.

Concrete pavement should be designed in accordance with the American Concrete Institute (ACI) and joint details should conform to the Portland Cement Association (PCA) guidelines. The concrete should have a minimum 28-day unconfined compressive strength of 4,000 pounds per square inch.

13.0 QUALITY CONTROL

We recommend that a comprehensive quality control testing and observation program be established during construction to help facilitate implementation of our recommendations and address, in a timely manner, any subsurface conditions encountered which vary from those described in this report. Without such a program CMT cannot be responsible for application of our recommendations to subsurface conditions which may vary from those described herein. This program may include, but not necessarily be limited to, the following:

13.1 Field Observations

Observations should be completed during all phases of construction such as site preparation, foundation excavation, structural fill placement and concrete placement.

13.2 Fill Compaction

Compaction testing is required for all structural supporting fill materials. Maximum Dry Density (Standard Proctor, ASTM D-698) tests should be requested by the contractor immediately after delivery of any fill materials. The maximum density information should then be used for field density tests on each lift as necessary to ensure that the required compaction is being achieved.

13.3 Excavations

All excavation procedures and processes should be observed by a geotechnical engineer. In addition, for the recommendations in this report to be valid, all backfill and structural fill placed in trenches and all pavements should be density tested. We recommend that freshly mixed concrete be tested in accordance with ASTM designations.

14.0 LIMITATIONS

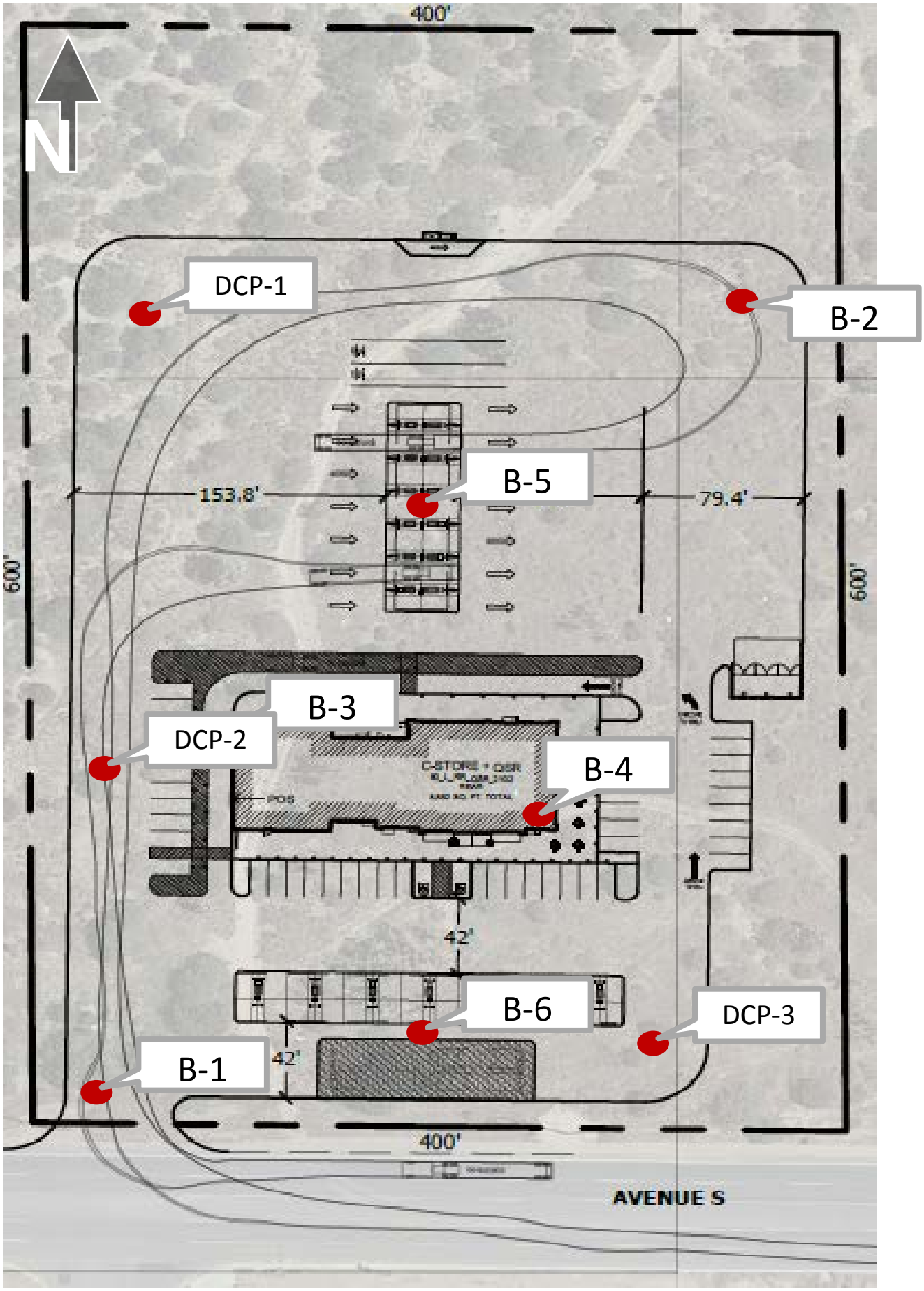
The recommendations provided herein were developed by evaluating the information obtained from the subsurface explorations and soils encountered therein. The exploration logs reflect the subsurface conditions only at the specific location at the particular time designated on the logs. Soil and ground water conditions may differ from conditions encountered at the actual exploration locations. The nature and extent of any variation in the explorations may not become evident until during the course of construction. If variations do appear, it may become necessary to re-evaluate the recommendations of this report after we have observed the variation.

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied.

We appreciate the opportunity to be of service to you on this project. If we can be of further assistance or if you have any questions regarding this project, please do not hesitate to contact us at 801-492-4132.

APPENDIX

SUPPORTING
DOCUMENTATION



Maverik Store Hwy 14 & Avenue S, Palmdale, CA	CMT TECHNICAL SERVICES **Site Map**	Date: 26-Aug-22 Job # 18988	Figure: 1

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-1

Total Depth: 6.5'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), red-yellow, slightly moist												
		stiff		1	4 5 6	11	5				69			
4														
		stiff to very stiff		2	24 12 18	30								
		END AT 6.5'												
8														
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55813°, -118.13542°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 2

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-2

Total Depth: 6.5'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), red-yellow, slightly moist												
		stiff		3	5 6 7	13								
4														
		Sandy Silty CLAY (CL-ML), red-yellow, slightly moist hard		4	15 16 18	34	4				65	22	15	7
		END AT 6.5'												
8														
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55915°, -118.13467°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 3

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-3

Total Depth: 10.5'
Water Depth: (see Remarks)
Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), red-yellow, slightly moist												
		very stiff		5	8 8 12	20								
4														
		hard		6	60/6"									
8				7	60/6"		2				53			
				8	60/6"									
		END AT 10.5'												
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55874°, -118.13538°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 4

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-4

Total Depth: 10.5'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), trace gravel, red-yellow, slightly moist												
		very stiff		9	6 4 15	19								
4														
				10	24 10 16	26								
8		hard		11	60/6"									
				12	60/6"		1		1	48	51		NP	NP
		END AT 10.5'												
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.53869°, -118.13525°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 5

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-5

Total Depth: 15.5'
Water Depth: (see Remarks)
Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), trace gravel, red-yellow, slightly moist												
		very stiff		13	2 8 12	20								
4														
		stiff		14	3 6 6	12	3		2	34	64			
8				15	4 6 7	13								
		hard		16	12 16 16	32	3				57			
12														
		grades with gravel, brown, moist		17	60/6"									
16		END AT 15.5'												
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55894°, -118.13511°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 6

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-6

Total Depth: 50'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), trace gravel, red-yellow, slightly moist												
		stiff		18	6 7 7	14								
4														
		hard		19	15 17 21	38	3		2	34	64			
				20	60/6"									
8														
				21	60/6"		4		0	31	69			
12														
		Silty SAND (SM), some gravel, brown, slightly moist very dense		22	60/6"									
16														
20				23	60/6"		7	87	6	55	39			
24				24	60/6"									
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.53818°, -118.13494°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 7

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-6

Total Depth: 50'
Water Depth: (see Remarks)
Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
28		Silty SAND (SM), some gravel, brown, slightly moist												
		very dense		25	60/6"		7		3	61	36			
32														
				26	60/6"									
36														
40		Sandy SILT (ML), trace gravel, brown, slightly moist hard		27	60/6"		11		1	40	59			
44														
				28	60/6"									
48														
		REFUSAL AT 50.0'		29			11		3	47	50	26	13	13
52														
56														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.53818°, -118.13494°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 7

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Key to Symbols

Date: 9/12/22

Job #: 18988

① Depth (ft)	② GRAPHIC LOG	③ Soil Description	④ Sample Type	⑤ Sample #	Blows(N) ⑥	Blows(N) ⑦ Total	⑧ Moisture (%)	⑨ Dry Density(pcf)	Gradation ⑩ Gravel %	Gradation ⑩ Sand %	Gradation ⑩ Fines %	Atterberg ⑪ LL	Atterberg ⑪ PL	Atterberg ⑪ PI

COLUMN DESCRIPTIONS

① **Depth (ft.):** Depth (feet) below the ground surface (including groundwater depth - see below right).

② **Graphic Log:** Graphic depicting type of soil encountered (see ② below).

③ **Soil Description:** Description of soils, including Unified Soil Classification Symbol (see below).

④ **Sample Type:** Type of soil sample collected; sampler symbols are explained below-right.

⑤ **Sample #:** Consecutive numbering of soil samples collected during field exploration.

⑥ **Blows:** Number of blows to advance sampler in 6" increments, using a 140-lb hammer with 30" drop.

⑦ **Total Blows:** Number of blows to advance sampler the 2nd and 3rd 6" increments.

⑧ **Moisture (%):** Water content of soil sample measured in laboratory (percentage of dry weight).

⑨ **Dry Density (pcf):** The dry density of a soil measured in laboratory (pounds per cubic foot).

⑩ **Gradation:** Percentages of Gravel, Sand and Fines (Silt/Clay), from lab test results of soil passing No. 4 and No. 200 sieves.

⑪ **Atterberg:** Individual descriptions of Atterberg Tests are as follows:

LL = Liquid Limit (%): Water content at which a soil changes from plastic to liquid behavior.

PL = Plastic Limit (%): Water content at which a soil changes from liquid to plastic behavior.

PI = Plasticity Index (%): Range of water content at which a soil exhibits plastic properties (= Liquid Limit - Plastic Limit).

STRATIFICATION	
Description	**Thickness**
Seam	Up to ½ inch
Lense	Up to 12 inches
Layer	Greater than 12 in.
Occasional	1 or less per foot
Frequent	More than 1 per foot

MODIFIERS
Trace
<5%
Some
5-12%
With
> 12%

MOISTURE CONTENT
Dry: Absence of moisture, dusty, dry to the touch.
Moist: Damp / moist to the touch, but no visible water.
Saturated: Visible water, usually soil below groundwater.

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)

MAJOR DIVISIONS			USCS SYMBOLS	②	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS More than 50% of material is larger than No. 200 sieve size.	GRAVELS The coarse fraction retained on No. 4 sieve.	CLEAN GRAVELS (< 5% fines)	GW		Well-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
			GP		Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
		GRAVELS WITH FINES (≥ 12% fines)	GM		Silty Gravels, Gravel-Sand-Silt Mixtures
			GC		Clayey Gravels, Gravel-Sand-Clay Mixtures
	SANDS The coarse fraction passing through No. 4 sieve.	CLEAN SANDS (< 5% fines)	SW		Well-Graded Sands, Gravelly Sands, Little or No Fines
			SP		Poorly-Graded Sands, Gravelly Sands, Little or No Fines
		SANDS WITH FINES (≥ 12% fines)	SM		Silty Sands, Sand-Silt Mixtures
			SC		Clayey Sands, Sand-Clay Mixtures
FINE-GRAINED SOILS More than 50% of material is smaller than No. 200 sieve size.	SILTS AND CLAYS Liquid Limit less than 50%		ML		Inorganic Silts and Very Fine Sands, Silty or Clayey Fine Sands or Clayey Silts with Slight
			CL		Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean
			OL		Organic Silts and Organic Silty Clays o f Low Plasticity
	SILTS AND CLAYS Liquid Limit greater than 50%		MH		Inorganic Silts, Micacious or Diatomacious Fine Sand or Silty Soils with Plasticity (Elastic Silts)
			CH		Inorganic Clays of High Plasticity, Fat Clays
			OH		Organic Silts and Organic Clays of Medium to High Plasticity
HIGHLY ORGANIC SOILS			PT		Peat, Humus, Swamp Soils with High Organic Contents

Note: Dual Symbols are used to indicate borderline soil classifications (i.e. GP-GM, SC-SM, etc.).

SAMPLER SYMBOLS

- Block Sample
- Bulk/Bag Sample
- Modified California Sampler 3.5" OD, 2.42" ID
- D&M Sampler
- Rock Core
- Standard Penetration Split Spoon Sampler
- Thin Wall (Shelby Tube)

WATER SYMBOL

- Encountered Water Level
- Measured Water Level

(see Remarks on Logs)

1. The results of laboratory tests on the samples collected are shown on the logs at the respective sample depths.
2. The subsurface conditions represented on the logs are for the locations specified. Caution should be exercised if interpolating between or extrapolating beyond the exploration locations.
3. The information presented on each log is subject to the limitations, conclusions, and recommendations presented in this report.

CMT TECHNICAL SERVICES

Figure: 8

DCP TEST DATA

Project: Maverik-Palmdale, CA
Location: DCP-1
Hammer: 17.6 lb
Soil Type(s): SILT (ML)

Date: 8/26/2022

No. of Blows	Individual Penetration (mm)	Type of Hammer
1	0	2
1	21	2
1	15	2
1	14	2
1	14	2
1	10	2
1	12	2
1	12	2
1	10	2
1	12	2
1	10	2
1	12	2
1	10	2
1	10	2
1	12	2
1	26	2
1	13	2
1	17	2
1	14	2
1	13	2
1	12	2
1	12	2
1	12	2
1	11	2
1	12	2
1	11	2
1	12	2
1	12	2
1	10	2
1		2
1		2
1		2
1		2
1		2
1		2
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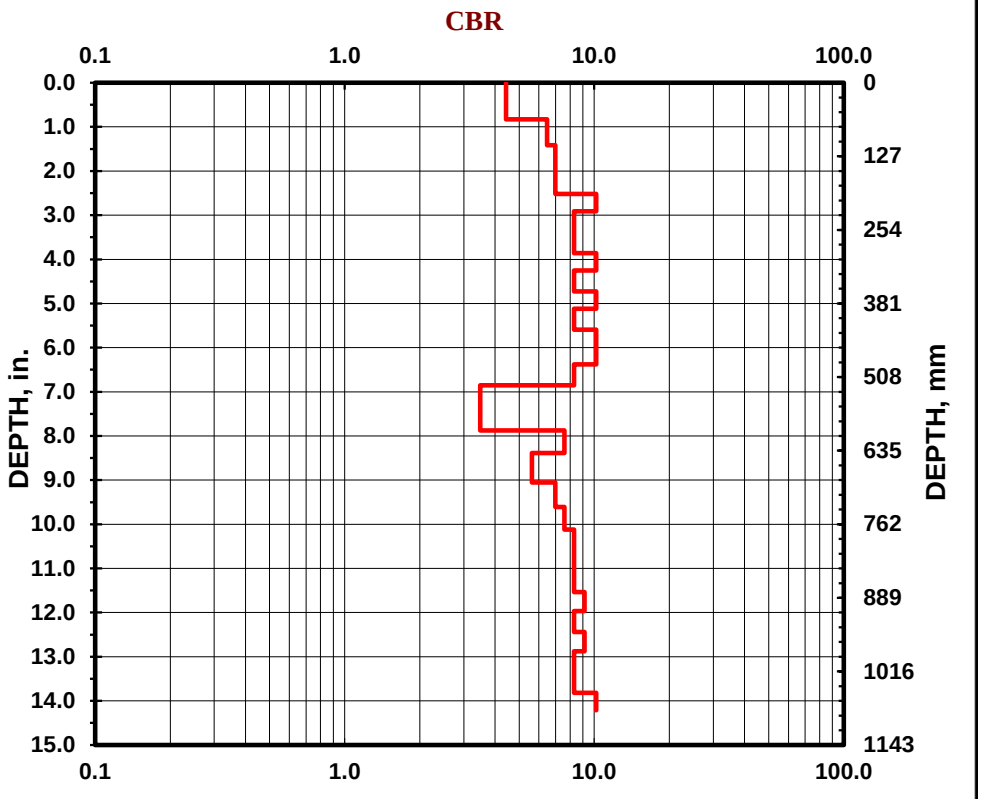
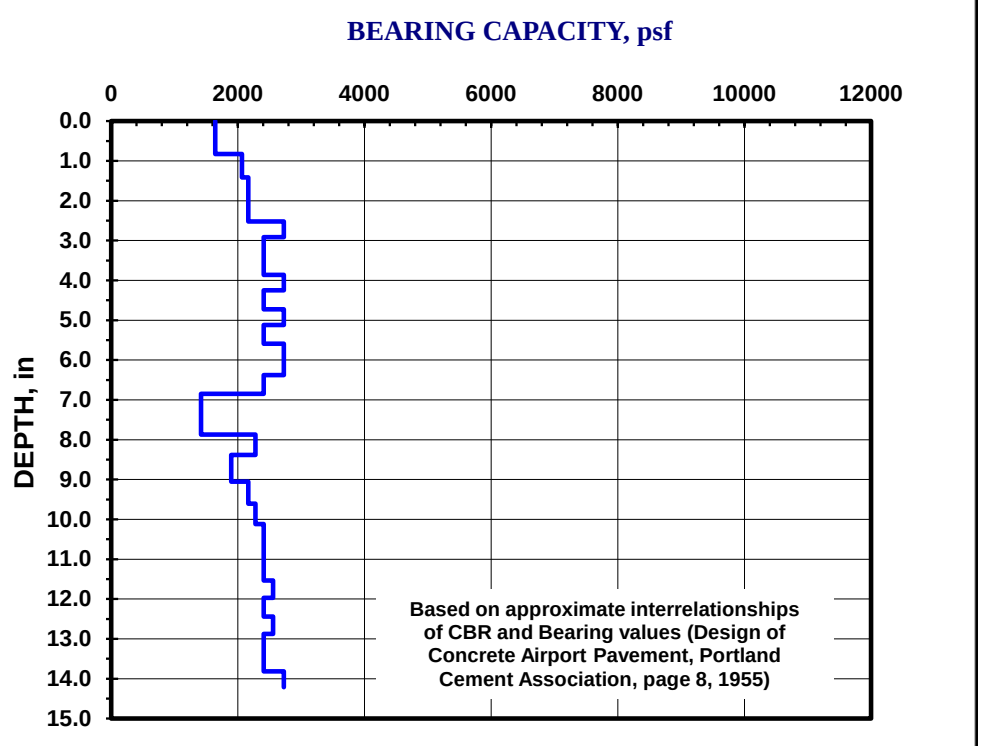
1		2
1		2
1		2





DCP TEST DATA

Project: Maverik-Palmdale, CA
Location: DCP-2
Hammer: 17.6 lb
Soil Type(s): SILT (ML)
Date: 8/26/2022

No. of Blows	Individual Penetration (mm)	Type of Hammer
1	0	2
1	10	2
1	12	2
1	10	2
1	10	2
1	11	2
1	10	2
1	10	2
1	8	2
1	11	2
1	10	2
1	10	2
1	7	2
1	11	2
1	10	2
1	11	2
1	11	2
1	11	2
1	11	2
1	11	2
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1	14	2
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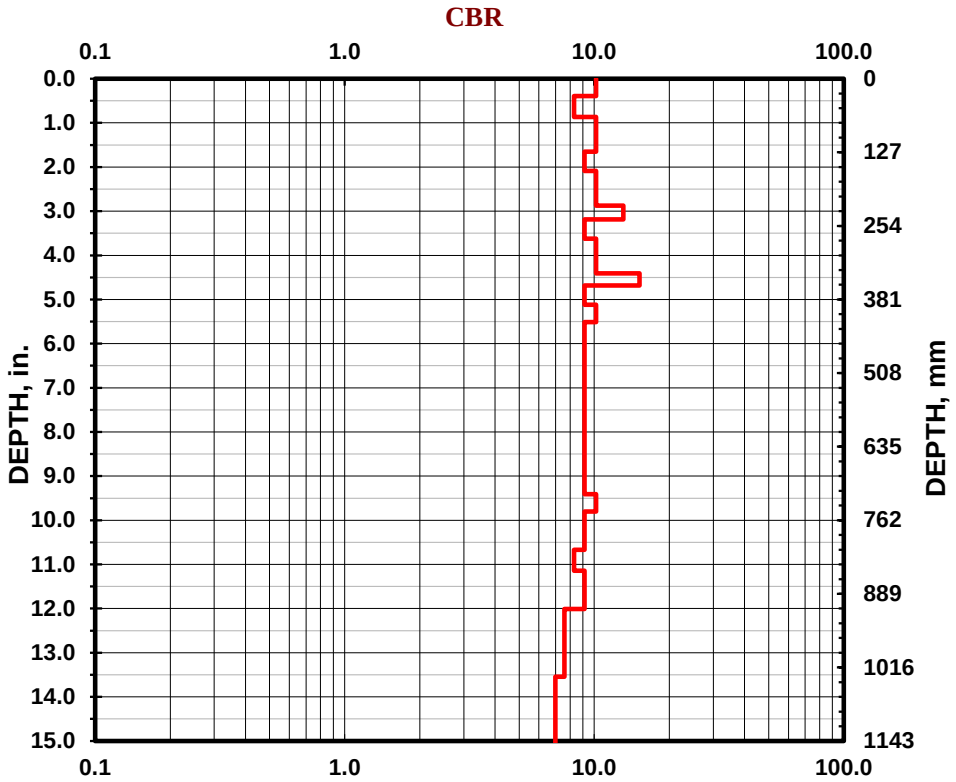
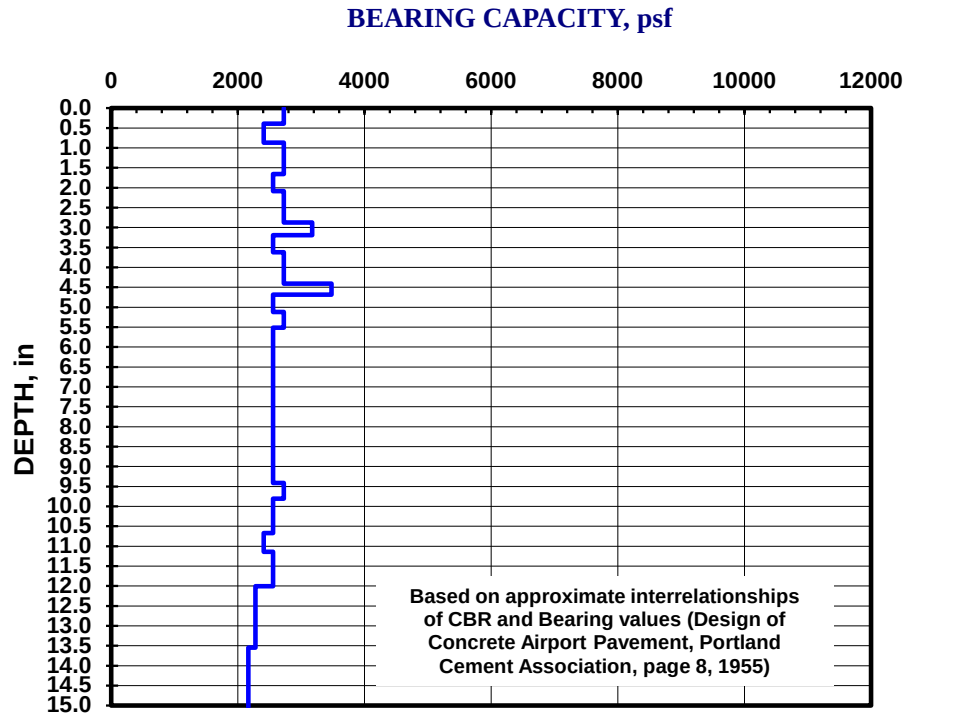
1		2
1		2





DCP TEST DATA

Project: Maverik-Palmdale, CA
Location: DCP-3
Hammer: 17.6 lb
Soil Type(s): SILT (ML)

Date: 8/26/2022

No. of Blows	Individual Penetration (mm)	Type of Hammer
1	0	2
1	26	2
1	31	2
1	27	2
1	26	2
1	25	2
1	23	2
1	21	2
1	22	2
1	20	2
1	20	2
1	18	2
1	19	2
1	18	2
1	19	2
1	20	2
1	19	2
1	21	2
1	23	2
1	23	2
1	23	2
1	20	2
1		2
1		2
1		2
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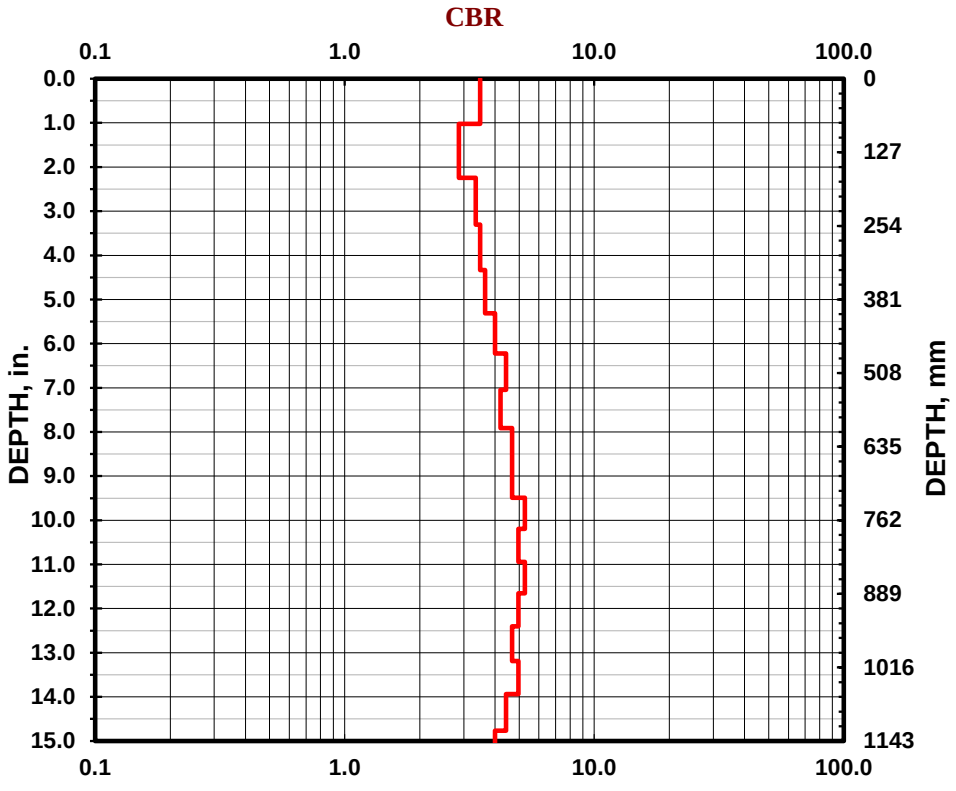
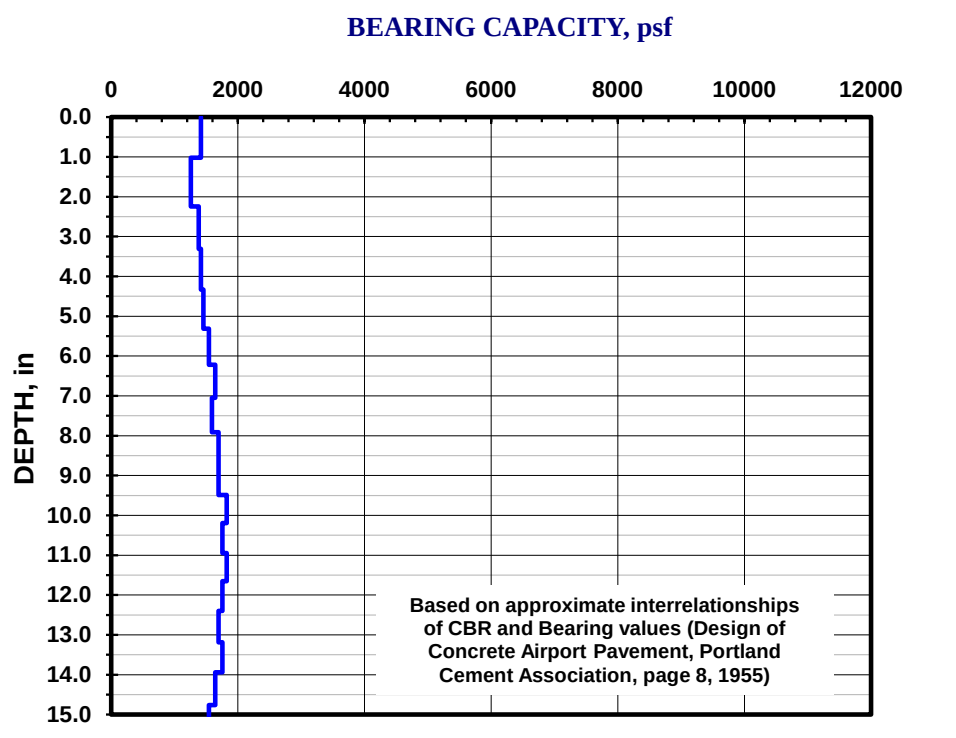
1		2
1		2
1		2





Appendix E

Preliminary Hydrology Report

MAVERIK FUELING STATION PALMDALE

NORTHWEST CORNER OF AVENUE S AND STATE ROUTE 14
PALMDALE, CA

PRELIMINARY HYDROLOGY REPORT

PREPARED FOR:
SITE DESIGN COLLABORATIVE (SDC)
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AUGUST 4, 2023

Prepared Under the Supervision of:

_____

James R. Bazua, PE
R.C.E. 58394
Expiration Date: December 31, 2024

MAVERIK FUELING STATION PALMDALE

PRELIMINARY HYDROLOGY REPORT

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I. PURPOSE AND SCOPE

This report was prepared in support of the Maverik Fueling Station Palmdale Entitlement package. The purpose of this report is to analyze the existing and proposed drainage patterns, discuss the on-site drainage design and size the proposed on-site drainage facilities in order to meet the City of Palmdale and County of Los Angeles Public Department of Works requirements.

The proposed project involves the development of an 8,852 square-foot gas station and attached convenience store and quick service restaurant located at the northwest corner of Avenue S and State Route 14 (APN 3004-016-032), City of Palmdale, Los Angeles County, California. The subject parcel is currently undeveloped and 100% pervious in its current condition. The site is bound to the south fully improved public streets; however, there are no public storm drain facilities in this area.

In general, the existing site is not subject to offsite storm flows and there is no existing onsite retention of storm flow. The project proposes to obtain access from Avenue S to the south for access onto the site. The site area drains from northeast to the southwest under the existing and proposed conditions.

The proposed impervious area is 77,285 square-feet (1.77 acres). The new improvements will include six fueling station islands, convenience store, quick service restaurant, and outdoor patio area. Two on-site stormwater retention basins will be constructed to collect and store storm runoff generated during the 25-year design storm per City of Palmdale drainage requirements. One basin will be located along the southwesterly property boundary; the second basin will be located along the southerly property boundary.

II. DESIGN METHODOLOGY AND SITE CONDITIONS

The 5.91 acre existing site where improvements are proposed is currently undeveloped. The site is located in an area consisting of sandy soils that exhibited a moderate infiltration rate during testing. The terrain slopes mildly from the northeast corner to the southwest corner of the lot. In general, the existing site is not subject to offsite storm flows. In the developed condition, less than half of the project site will be paved surfaces.

The project will provide an on-site storm drain system designed to capture the runoff generated from a 25-year, 24-hour design storm based on existing undeveloped conditions per the City of Palmdale drainage requirements. Two separate storm retention systems will be proposed to capture, store, and infiltrate the on-site runoff generated during the design storm event. Runoff from the convenience store rooftop and fueling station canopies will be captured and included in the runoff volume conveyed to the retention systems. However, no rainfall will be allowed to land on the portion of the fueling station island where there is a potential for pollutant spills and cleanup. These areas are protected from rainfall by the overhead canopies. Additionally, a swale drain system will be implemented to capture surface flows from the fueling islands and conveyed to a separate oil separator system located onsite. Overflow from the oil separator system will be connected to the site's sewer septic system to prevent pollutants from co-mingling with storm runoff that could potentially enter into an MS4 facility as required by the National Pollution Discharge Elimination System (NPDES) permit. Overflow of pollution elimination systems is generally directed sewer septic rather than infiltration type storm drain facilities in order to prevent potential for soil contamination by pollutants. Conveyance of possible fuel and oil spills via the oil separator that connects to the sewer septic system because it is less likely to leave the site with storm runoff during the overflow condition.

On-site tested infiltration rates are 3.53 in/hr and an assumed infiltration rate of 3 in/hr will be used for design purposes to provide a Factor of Safety. Per City of Palmdale requirements, the preliminary hydrology calculations will be per the method outlined in the Los Angeles County Hydrology Manual – Section 3 Storm Drain Hydrology – to quantify the runoff volume generated and stored on-site during the design storm return period. Infiltration of stored runoff is assumed to occur on the bottom of the on-site retention system. The Los Angeles County Soil Types GIS database was used to determine the site soil type.

Pre-Developed Conditions

<u>On-Site:</u>

The existing onsite conditions is considered as a single subarea because the entire site drains from the northeast corner of the property boundary to the southwest corner. The site lies within Zone "X" according to FEMA Map No. 06037C0670F, dated 9/26/2008 (Appendix D). Zone "X" is identified as an area of minimal flood hazard with a 1% chance flood – depth 1 foot or less – annually. The site has no existing drainage structures and all runoff is conveyed via sheet flow. The conveyed flow leaves the site and flows southerly along Guoyan Avenue. Refer to appendices for HydroCalc results. Refer to table below for summary calculations:

Pre-Development Hydrology Summary		
Storm Frequency	Flows (cfs)	Volume (CF)
2-Year	0.6712	5,894
10-Year	3.0555	12,859
25-Year	**4.8913**	**16,820**
50-Year	6.0398	19,975

The maximum allowable flow post development is the flow below 85% of the pre-developed peak flow ($Q_{25\text{-Year}}$). Therefore, the following tolerance was calculated:

$Q_{25\text{- Year}}$ = 4.89 cfs
$Q_{Peak} = Q_{25\text{-Year}*85\%}$ = 4.16 cfs

<u>Off-Site:</u>

Along Avenue S, directly adjacent to the proposed project site, there are no existing drainage facilities. Sheet flow leaves the project site, is conveyed across the street to Guoyan Avenue, where the is an existing stormwater collection facility within the curb and gutter, under the sidewalk.

Proposed Conditions

The site will no longer convey runoff via sheet flow, but rather be collected in either of the two proposed, on-site retention basins. See Appendix A for Preliminary Hydrology Map. All HydroCalc results for post development conditions can be found in Appendix C and are summarized in the table below:

Post-Development Hydrology Summary		
Storm Frequency	Flows (cfs)	Volume (CF)
2-Year	0.9615	10,735
10-Year	3.7026	21,364
25-Year	**5.5235**	**27,052**
50-Year	6.7732	31,445

In accordance with the Los Angeles County Hydrology Manual and City of Palmdale's DMP requirements, flows greater than 85% of the existing pre-developed peak flow conditions will be retained on-site. As part of construction, two permanent retention basins will be constructed to meet these requirements.

III. CALCULATIONS

DESIGN CRITERIA

The following parameters were used in the preparation of the analyses:

- Assumed Design Percolation Rate 3 in/hr
- Project Area 5.91 acres
- Soil Type 176
- Design Storm Frequency 25-year, 24-hour
- 50-year, 24-hour Rainfall Depth 3.75 in

- City of Palmdale. Section 5: Drainage Studies and Improvement Plans; Subsection 3 "Detention Basins"

1-year 24-hour	0.283
2-year 24-hour	0.387
5-year 24-hour	0.584
10-year 24-hour	0.714
25-year 24-hour	0.878
50-year 24-hour	1.000
100-year 24-hour	1.122
500-year 24-hour	1.402

CALCULATIONS

Using Equation 5.1.2 frm the Los Angelese County Department of Public Works Hydrology Manual:

$$\frac{I_t}{I_{1440}} = \left(\frac{1440}{t}\right)^{0.47}$$

Where:
t = Duration (mins.)
I_t = Rainfall intensity for duration (in/hr)
I_{1440} = 24-hour rainfall intensity (in/hr)
$\frac{I_t}{I_{1440}}$ = Peak normalized intensity (unitless)

Using Table 5.3.1, multiplication factor 0.878 to be applied to 25-year, 24-hour storm event:

$25\ year = 3.75\ in. * 0.878 = \mathbf{3.29\ in.}$

Using 3.29 in, calculate 24-hour rainfall intensity:

$$I_{1440} = \frac{3.29\ in}{24\ hr} = \mathbf{0.137\ in/hr}$$

In the developed condition, the longest path of travel for stormwater runoff is 732 linear feet and the change in elevation is 27 feet. Using figure in Appendix E, apply the aforementioned data and are able to assume a time of concentration (T_c) of 8.1 mins.

Equation 5.1.2 can now be solved to calculate I_t:

$$\frac{I_t}{I_{1440}} = \left(\frac{1440}{t}\right)^{0.47} \rightarrow \frac{I_t}{0.137\frac{in}{hr}} = \left(\frac{1440}{8.1\ mins}\right)^{0.47} \rightarrow \boldsymbol{I_t = 1.56\ in/hr}$$

Where:
t = 8.1 mins
I_{1440} = 0.137 in/hr
The rational equation is used to calculate the peak flow for the design frequency:

$$Q = C * I * A$$

Where:
Q = Peak discharge (cfs)
C = Runoff Coefficient (unitless)
I = I_t = Rainfall intensity for duration (in/hr)
A = Project site area (acres)

In undeveloped conditions, C = 0.35. In developed conditions, C = 0.95. For the proposed project site, 29.9% of the parcel will be impervious (IMP = 1.77 acres) and 70.1% will remain pervious (PER = 4.14 acres). Therefore:

$$C = \frac{0.35(IMP)+0.95(PER)}{\sum A} = \frac{0.35(1.77acre)+0.95(4.14acre)}{5.91acre} = \mathbf{0.77}$$

Application of the Rational Equation:

$$Q = C * I * A$$

Where:
C = 0.77
I = I_t = 1.56 in/hr
A = 5.91 acres

$$Q_{25-peak} = C * I * A = 0.77\left(1.56\frac{in}{hr}\right)(5.91\ acre) = \mathbf{7.10\ cfs}$$

Per the City of Palmdale Engineering Design Guidelines Policies and Procedures, a spillway overflow structure is required to discharge 125% of the 25-year storm runoff without flooding upstream development. Therefore, the design overflow discharge is calculated as follows:

$$Q_{125\%} = 1.25 * Q_{25-peak} = 1.25 * 7.10cfs = \mathbf{8.875\ cfs}$$

Using the County of Los Angeles Department of Public Works HydroCalc Program, the following required stormwater storage volumes were calculated:

$$V_{pre} = 16{,}820\ cu.ft.$$

$$V_{post} = 27{,}052\ cu.ft$$

$$V_{req} = \Delta V = V_{post} - V_{pre} = 27{,}052\ cu.ft. - 16{,}820\ cu.ft. = \mathbf{10{,}232\ cu.ft.}$$

See appendices for HydroCalc sheets.

IV. CALCULATED RETENTION VOLUMES

25-YEAR, 24-HOUR REQUIRED STORAGE =10,232 CU. FT.

TOTAL VOLUME PROVIDED = 45,321 CU. FT.

STORAGE DEPTH = 3.00 FT

V. INFILTRATION BASIN DRAWDOWN SUMMARY

Project runoff stored in the on-site retention basin system will be designed to infiltrate into the soil to eliminate the presence of standing water within a period of 7 days in accordance with the City of Palmdale basin design criteria.

Assuming that the effective infiltration in the underground retention system occurs along the bottom surface area of the basin, the design infiltration rate can be applied to the stored volume depth to calculate the drawdown time for complete evacuation as follows:

Effective Surface Area – Underground Chamber System:

Stored Runoff Volume Depth = 3.00 ft = 36 in

Assumed Infiltration Rate = 3 in/hr

$$\frac{36\ in}{3\ in/hr} = 12\ hrs < 7\ days \ll O.K.$$

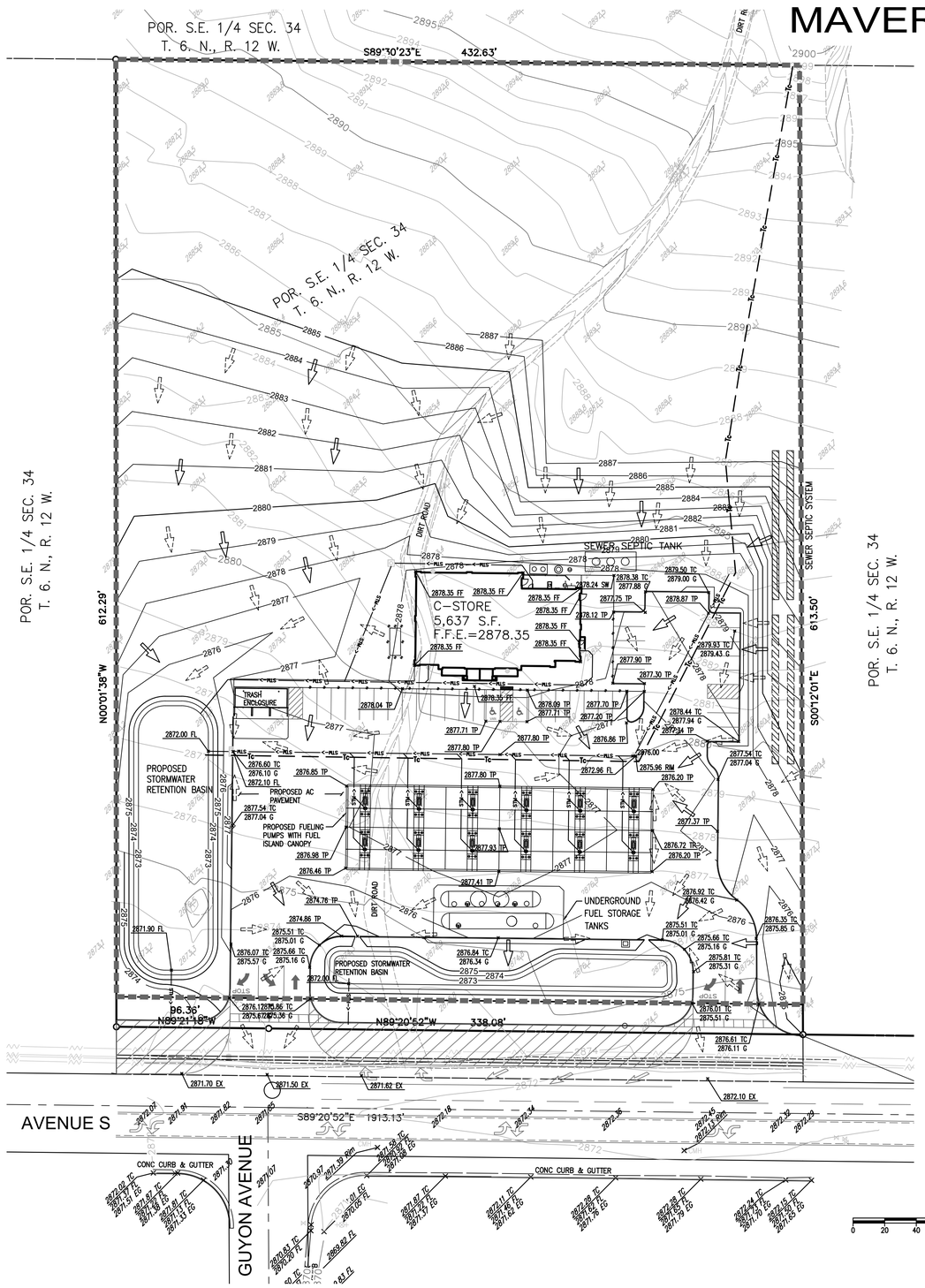
The total stored runoff volume in the on-site surface retention basin can be evacuated completely via infiltration within a period of 12 hours, assuming a conservative design infiltration rate of 3 in/hr. This satisfies City requirements.

VI. APPENDIX A – PRELIMINARY HYDROLOGY MAP

IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

PRELIMINARY HYDROLOGY MAP

MAVERIK FUEL STATION PALMDALE



LOS ANGELES COUNTY DATA

SOIL TYPE (2-180): 176

ASSUMED PERVIOUS AREA INFILTRATION RATE: 3.00 INCH/HOUR

50-YEAR, 24-HOUR RAINFALL DEPTH: 3.75 INCH

DESIGN STORM FREQUENCY: 25-YEAR, 24-HOUR

SITE DATA

TOTAL SITE AREA: 5.91 AC

EXISTING IMPERVIOUS AREA: 0.00 AC = 0%
EXISTING PERVIOUS AREA: 5.91 AC = 100%

PROPOSED IMPERVIOUS AREA: 1.77 AC = 29.2%
PROPOSED PERVIOUS AREA: 4.14 AC = 70.1%
PROPOSED DISTURBED AREA: 4.50 AC

PRECIPITATION DATA FROM ISOHETYL GIS

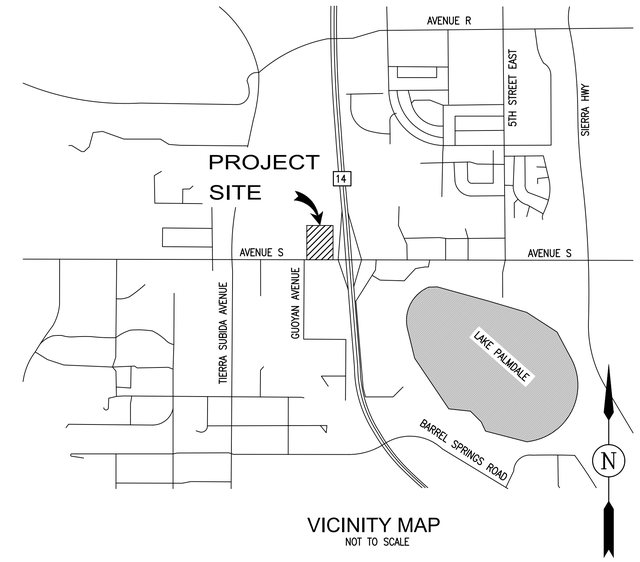
50-YEAR, 24-HOUR PRECIPITATION = 3.75"
25-YEAR, 24-HOUR PRECIPITATION = 3.29"

25-YEAR, 24-HOUR DESIGN FLOWS

Q_25-YEAR = 4.89 CFS
Q_PEAK = 4.16 CFS

25-YEAR, 24-HOUR DESIGN VOLUME

VOLUME(REQ,25) = 10,232 CU.FT.
VOLUME(PROVIDED) = 45,321 CU.FT.
STORAGE DEPTH = 3 FT.



VICINITY MAP
NOT TO SCALE

LEGEND

- TRIBUTARY AREA BOUNDARY
- Tc — Tc — LONGEST TIME OF CONCENTRATION PATH OF TRAVEL
- HISTORIC DRAINAGE PATH
- PROPOSED DRAINAGE PATH

N

GRAPHIC SCALE
SCALE 1"=40'
0 20 40 80 120 160

(NOT FOR CONSTRUCTION)

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CITY OF PALMDALE, CALIFORNIA

PRELIMINARY HYDROLOGY MAP
MAVERIK FUEL STATION PALMDALE

FOR: MAVERIK

SHEET 1 OF 1

VII. APPENDIX B – STORMWATER QUALITY CONTROL/LID REPORT

Stormwater Quality Control Measure for Designated Project

The proposed project is a retail gasoline outlet with more than 5,000 square feet with the following, post development, characteristics:

- Subarea ID: Maverick Fuel Station
- Development Area (ac): 5.91
- Flow Path Length (ft): 732 LF
- Flow Path Slope (vft/hft): 3.69%
- 0.75-inch Rainfall Depth (in)
- Development is 29.9% impervious
- Soil Type: 176 per https://geohub.lacity.org/datasets/lacounty::soil-types-feature-layer/
- Corrected in-situ infiltration rate = 3 in/hr

Additional soil information may be found in the geotechnical report from CMT Technical Services, dated September 13, 2022, attached hereto in the appendices.

Per section 5 of the Los Angeles County Low Impact Development Standards Manual, table 5-1, the following source control measures will be implemented on-site in accordance with Appendix D: storm drain message and signage (S-1), landscape irrigation practices to be implemented (S-8), and building materials selection (S-9).

Determine the SWQDv

The design storm for the proposed project location is 0.75-inch, 24-hour rain event. Using the HydroCalc program provided by the Los Angeles County Department of Public Works, the stormwater quality design volume (SWQDv) was calculated with the characteristics above.

Under pre-development conditions, the required 24-hour clear runoff volume is 2,873 cu-ft. Under post development conditions, the 24-hour clear runoff volume is 5,413 cu-ft. Therefore, the ΔSWQDv is **2,540 cu-ft**.

See attached for HydroCalc data and related hydrographs.

Determine the Design Infiltration Rate

The design infiltration rate is the corrected in-situ infiltration rate as determined according to the most recent Geotechnical and Materials Engineering Division (GMED) Policy GS 200.1. The design infiltration rate (f_{design}) is 3.0 in/hr.

Calculate the Bioretention Surface Area

Maximum depth that can be infiltrated within the maximum retention time:

$$d_{max} = \frac{f_{design}}{12} * t$$

Where:

- d_{max} = Maximum depth of water that can be infiltrated within the maximum detention time (ft);
- f_{design} = Design infiltration rate (in/hr); and
- t = Maximum retention time (96 hrs)

$$d_{max} = \frac{f_{design}}{12} * t = \frac{3.0\ \left(\frac{in}{hr}\right)}{12} * 96\ hr = 24\ ft$$

Assume ponding depth less than the maximum ponding depth: $d_{max} \geq d_p$

- d_{max} = Maximum depth of water that can be infiltrated within the maximum detention time (ft); and
- d_p = Ponding depth (ft)
- d_p = 20 ft

Infiltrating surface area (bottom of bioretention area) required:

$$A = \frac{SWQDv}{d_p}$$

Where:

- A = Bottom surface area of bioretention area (ft^2);
- SWQDv = Stormwater quality design volume (cu. ft.); and
- d_p = Ponding depth (ft)

$$A = \frac{SWQDv}{d_p} = \frac{2{,}540\ cu - ft}{20\ ft} = 127\ ft^2$$

Stormwater Runoff Harvest and Use

The full SWQDv will be retained on-site through infiltration. Therefore, no additional measures will be required.

Stormwater Quality Control Measures

Retention-based stormwater quality control measures will be implemented to retain 100 percent of the ΔSWQDv (2,540 cu-ft). The proposed, on-site, privately owned and maintained retention for this project has been designed to retain the 25-year, 24-hour storm event. The proposed retention volume for this project is 45,321 cu-ft, which is sufficient to store the LID storm event (0.75-inch, 24-hour rain). No off-site mitigation will be required for the proposed improvements.

Peak Flow Hydrologic Analysis

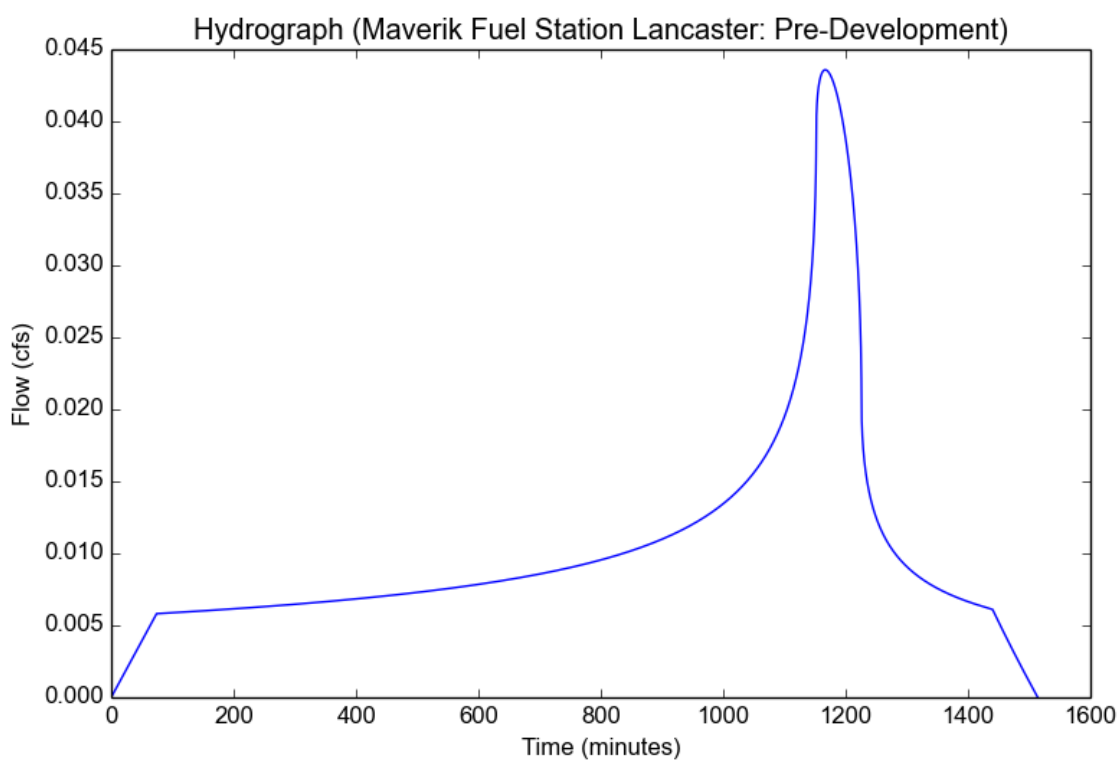
File location: L:/projects/C1904 Maverik Fueling Station Lancaster/engineering/reports/drainage/LID Report/Maverik Fuel Station Lancaster - Pre-Develop
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station Lancaster
Subarea ID	Pre-Development
Area (ac)	1.92
Flow Path Length (ft)	410.0
Flow Path Slope (vft/hft)	0.0114
0.75-inch Rainfall Depth (in)	0.75
Percent Impervious	0.1
Soil Type	124
Design Storm Frequency	0.75 inch storm
Fire Factor	0
LID	True

Output Results

Modeled (0.75 inch storm) Rainfall Depth (in)	0.75
Peak Intensity (in/hr)	0.1261
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.18
Time of Concentration (min)	74.0
Clear Peak Flow Rate (cfs)	0.0436
Burned Peak Flow Rate (cfs)	0.0436
24-Hr Clear Runoff Volume (ac-ft)	0.0214
24-Hr Clear Runoff Volume (cu-ft)	933.1871



Peak Flow Hydrologic Analysis

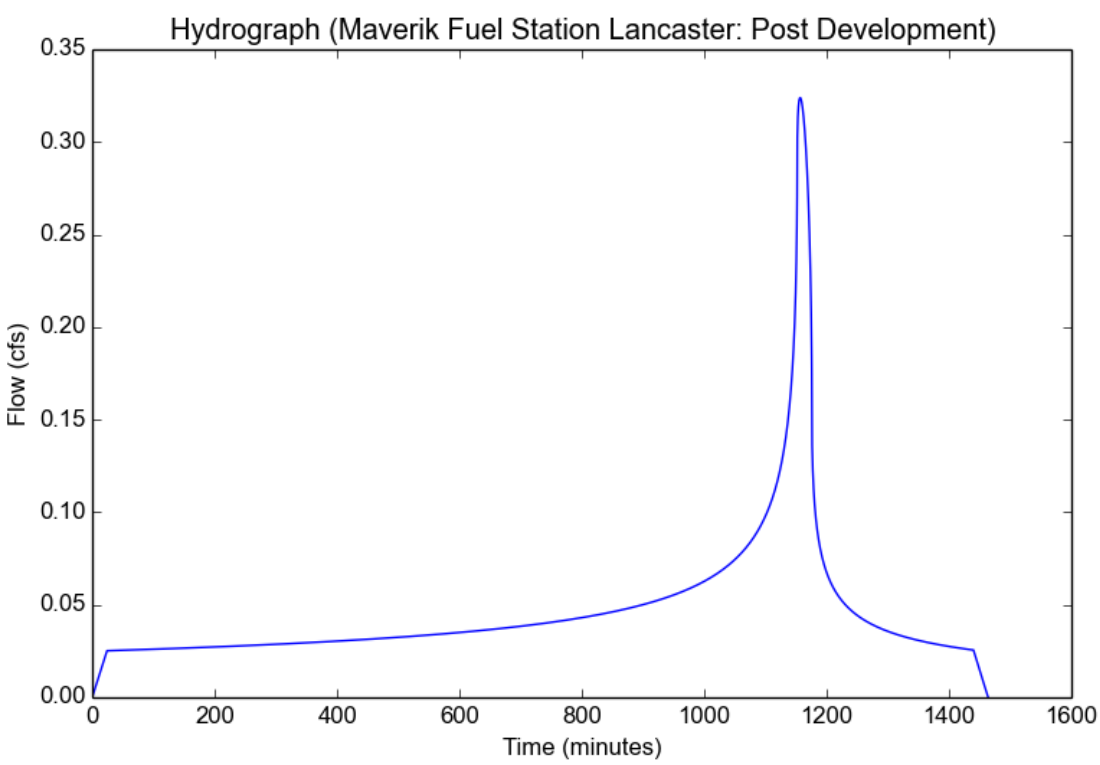
File location: L:/projects/C1904 Maverik Fueling Station Lancaster/engineering/reports/drainage/LID Report/Maverik Fuel Station Lancaster - Post Develo
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station Lancaster
Subarea ID	Post Development
Area (ac)	1.92
Flow Path Length (ft)	380.0
Flow Path Slope (vft/hft)	0.016
0.75-inch Rainfall Depth (in)	0.75
Percent Impervious	0.86
Soil Type	124
Design Storm Frequency	0.75 inch storm
Fire Factor	0
LID	True

Output Results

Modeled (0.75 inch storm) Rainfall Depth (in)	0.75
Peak Intensity (in/hr)	0.2141
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.788
Time of Concentration (min)	24.0
Clear Peak Flow Rate (cfs)	0.3239
Burned Peak Flow Rate (cfs)	0.3239
24-Hr Clear Runoff Volume (ac-ft)	0.0938
24-Hr Clear Runoff Volume (cu-ft)	4085.0219



VIII. APPENDIX C – HYDROCALC DATA AND HYDROGRAPHS

(i) PRE-DEVELOPMENT: 2-YEAR, 24-HOUR SOTRM
(ii) PRE-DEVELOPMENT: 10-YEAR, 24-HOUR SOTRM
(iii) PRE-DEVELOPMENT: 25-YEAR, 24-HOUR SOTRM
(iv) PRE-DEVELOPMENT: 50-YEAR, 24-HOUR SOTRM
(v) POST DEVELOPMENT: 2-YEAR, 24-HOUR SOTRM
(vi) POST DEVELOPMENT: 10-YEAR, 24-HOUR SOTRM
(vii) POST DEVELOPMENT: 25-YEAR, 24-HOUR SOTRM
(viii) POST DEVELOPMENT: 50-YEAR, 24-HOUR SOTRM

Peak Flow Hydrologic Analysis

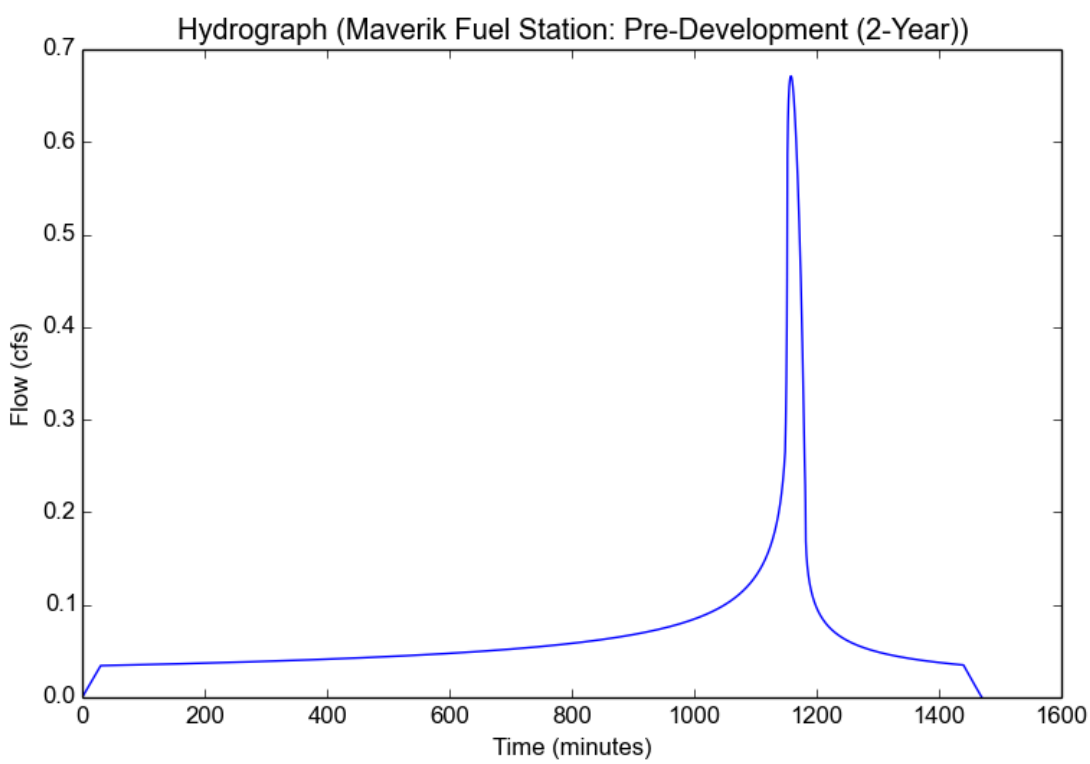
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C1_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station
Subarea ID	Pre-Development (2-Year)
Area (ac)	5.91
Flow Path Length (ft)	752.0
Flow Path Slope (vft/hft)	0.0344
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.1
Soil Type	176
Design Storm Frequency	2-yr
Fire Factor	0
LID	False

Output Results

Modeled (2-yr) Rainfall Depth (in)	1.4512
Peak Intensity (in/hr)	0.373
Undeveloped Runoff Coefficient (Cu)	0.2383
Developed Runoff Coefficient (Cd)	0.3045
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	0.6712
Burned Peak Flow Rate (cfs)	0.6712
24-Hr Clear Runoff Volume (ac-ft)	0.1353
24-Hr Clear Runoff Volume (cu-ft)	5893.7483



Peak Flow Hydrologic Analysis

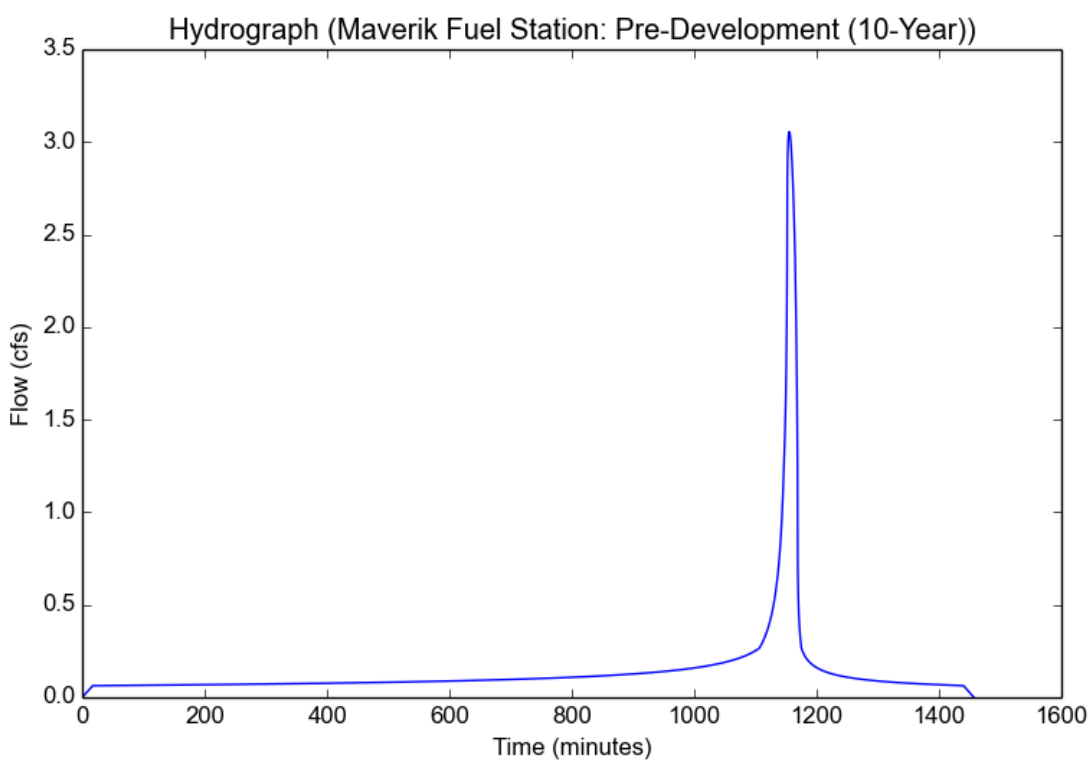
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C2_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station
Subarea ID	Pre-Development (10-Year)
Area (ac)	5.91
Flow Path Length (ft)	752.0
Flow Path Slope (vft/hft)	0.0344
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.1
Soil Type	176
Design Storm Frequency	10-yr
Fire Factor	0
LID	False

Output Results

Modeled (10-yr) Rainfall Depth (in)	2.6775
Peak Intensity (in/hr)	0.8987
Undeveloped Runoff Coefficient (Cu)	0.5392
Developed Runoff Coefficient (Cd)	0.5753
Time of Concentration (min)	17.0
Clear Peak Flow Rate (cfs)	3.0555
Burned Peak Flow Rate (cfs)	3.0555
24-Hr Clear Runoff Volume (ac-ft)	0.2952
24-Hr Clear Runoff Volume (cu-ft)	12859.2664



Peak Flow Hydrologic Analysis

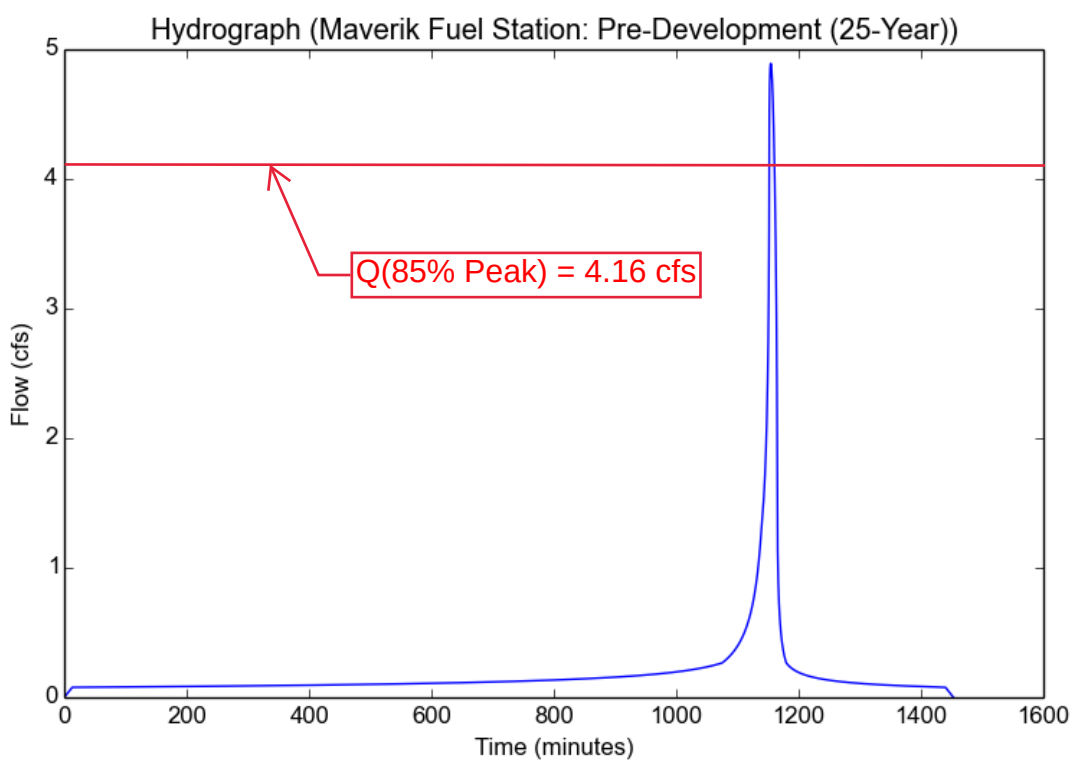
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C3_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station
Subarea ID	Pre-Development (25-Year)
Area (ac)	5.91
Flow Path Length (ft)	752.0
Flow Path Slope (vft/hft)	0.0344
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.1
Soil Type	176
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	3.2925
Peak Intensity (in/hr)	1.2537
Undeveloped Runoff Coefficient (Cu)	0.6335
Developed Runoff Coefficient (Cd)	0.6602
Time of Concentration (min)	13.0
Clear Peak Flow Rate (cfs)	4.8913
Burned Peak Flow Rate (cfs)	4.8913
24-Hr Clear Runoff Volume (ac-ft)	0.3861
24-Hr Clear Runoff Volume (cu-ft)	16820.1911



Peak Flow Hydrologic Analysis

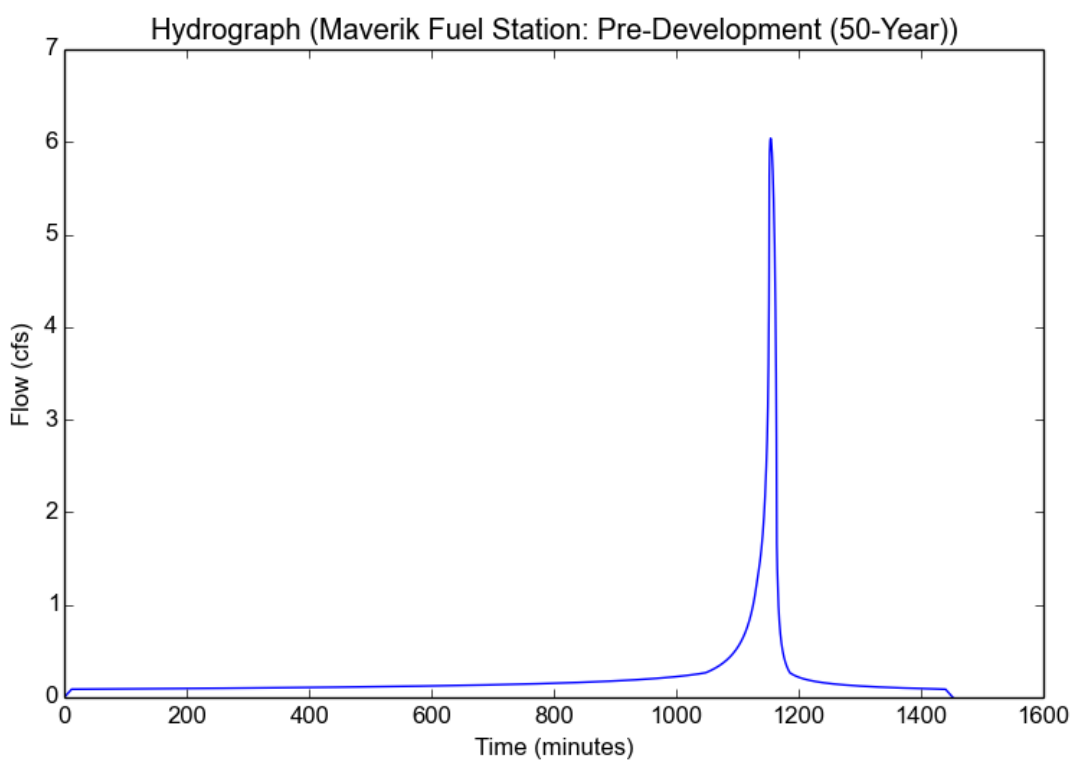
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C4_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station
Subarea ID	Pre-Development (50-Year)
Area (ac)	5.91
Flow Path Length (ft)	752.0
Flow Path Slope (vft/hft)	0.0344
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.1
Soil Type	176
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	3.75
Peak Intensity (in/hr)	1.4826
Undeveloped Runoff Coefficient (Cu)	0.6659
Developed Runoff Coefficient (Cd)	0.6893
Time of Concentration (min)	12.0
Clear Peak Flow Rate (cfs)	6.0398
Burned Peak Flow Rate (cfs)	6.0398
24-Hr Clear Runoff Volume (ac-ft)	0.4586
24-Hr Clear Runoff Volume (cu-ft)	19975.1756



Peak Flow Hydrologic Analysis

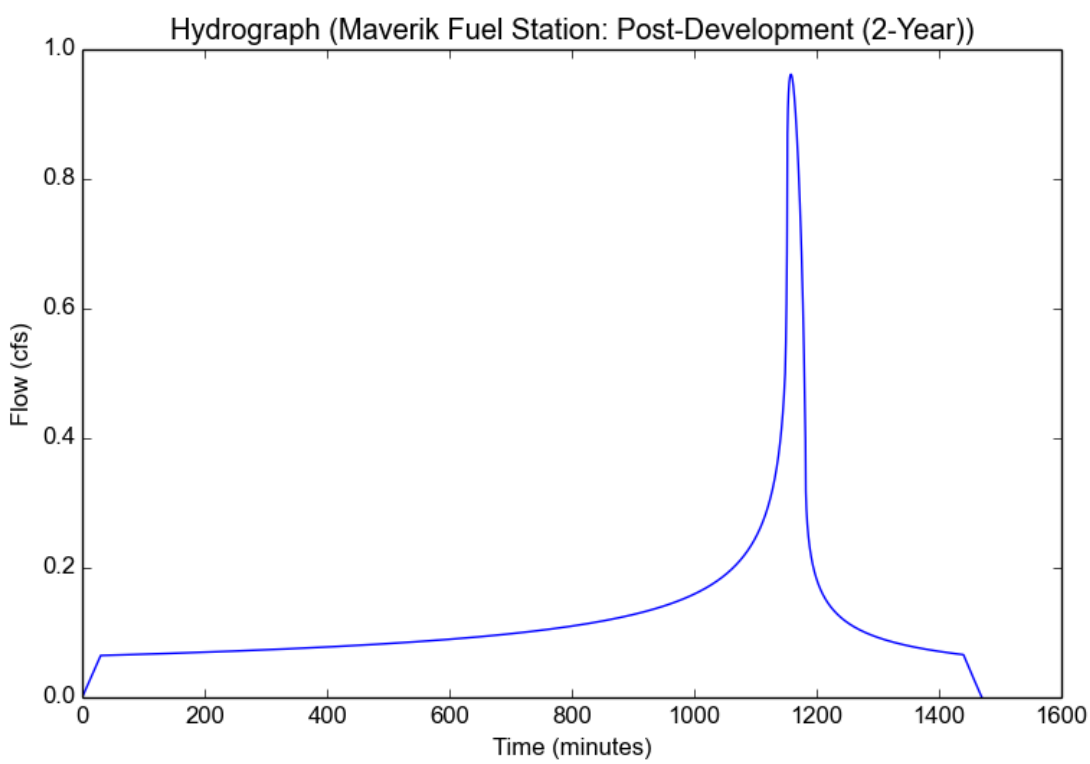
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C4_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station
Subarea ID	Post-Development (2-Year)
Area (ac)	5.91
Flow Path Length (ft)	732.0
Flow Path Slope (vft/hft)	0.036885
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.299
Soil Type	176
Design Storm Frequency	2-yr
Fire Factor	0
LID	False

Output Results

Modeled (2-yr) Rainfall Depth (in)	1.4512
Peak Intensity (in/hr)	0.373
Undeveloped Runoff Coefficient (Cu)	0.2383
Developed Runoff Coefficient (Cd)	0.4362
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	0.9615
Burned Peak Flow Rate (cfs)	0.9615
24-Hr Clear Runoff Volume (ac-ft)	0.2464
24-Hr Clear Runoff Volume (cu-ft)	10735.1278



Peak Flow Hydrologic Analysis

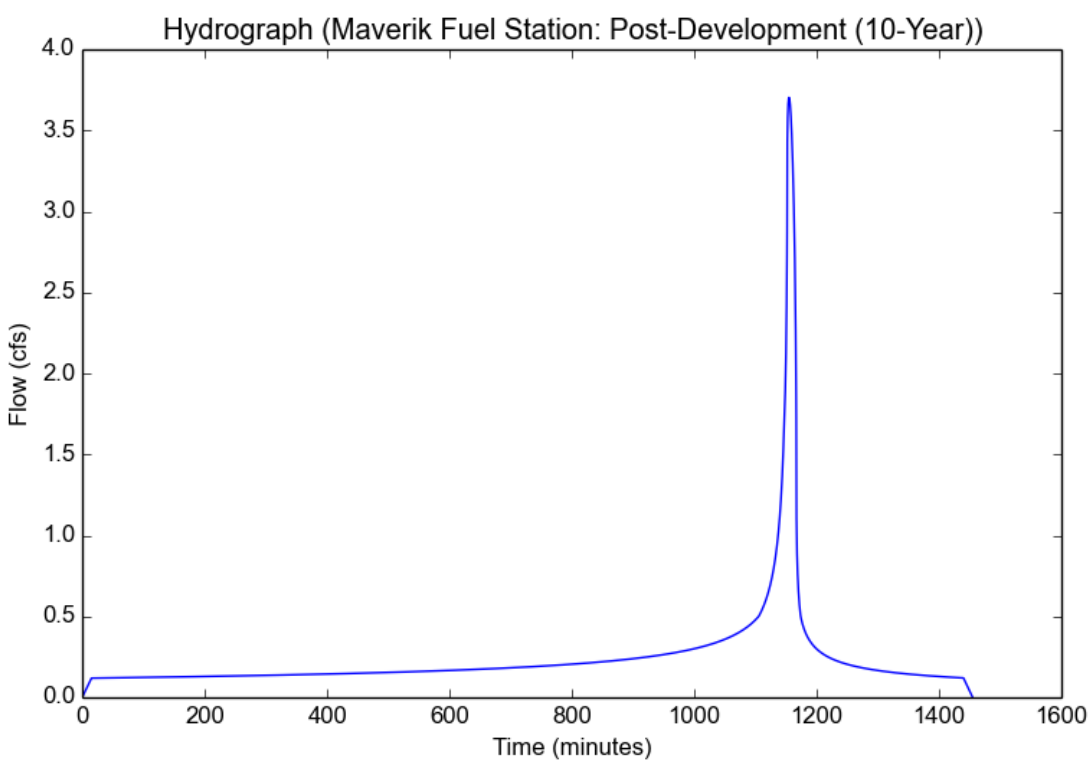
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C6_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station
Subarea ID	Post-Development (10-Year)
Area (ac)	5.91
Flow Path Length (ft)	732.0
Flow Path Slope (vft/hft)	0.036885
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.299
Soil Type	176
Design Storm Frequency	10-yr
Fire Factor	0
LID	False

Output Results

Modeled (10-yr) Rainfall Depth (in)	2.6775
Peak Intensity (in/hr)	0.9532
Undeveloped Runoff Coefficient (Cu)	0.5537
Developed Runoff Coefficient (Cd)	0.6573
Time of Concentration (min)	15.0
Clear Peak Flow Rate (cfs)	3.7026
Burned Peak Flow Rate (cfs)	3.7026
24-Hr Clear Runoff Volume (ac-ft)	0.4905
24-Hr Clear Runoff Volume (cu-ft)	21364.1365



Peak Flow Hydrologic Analysis

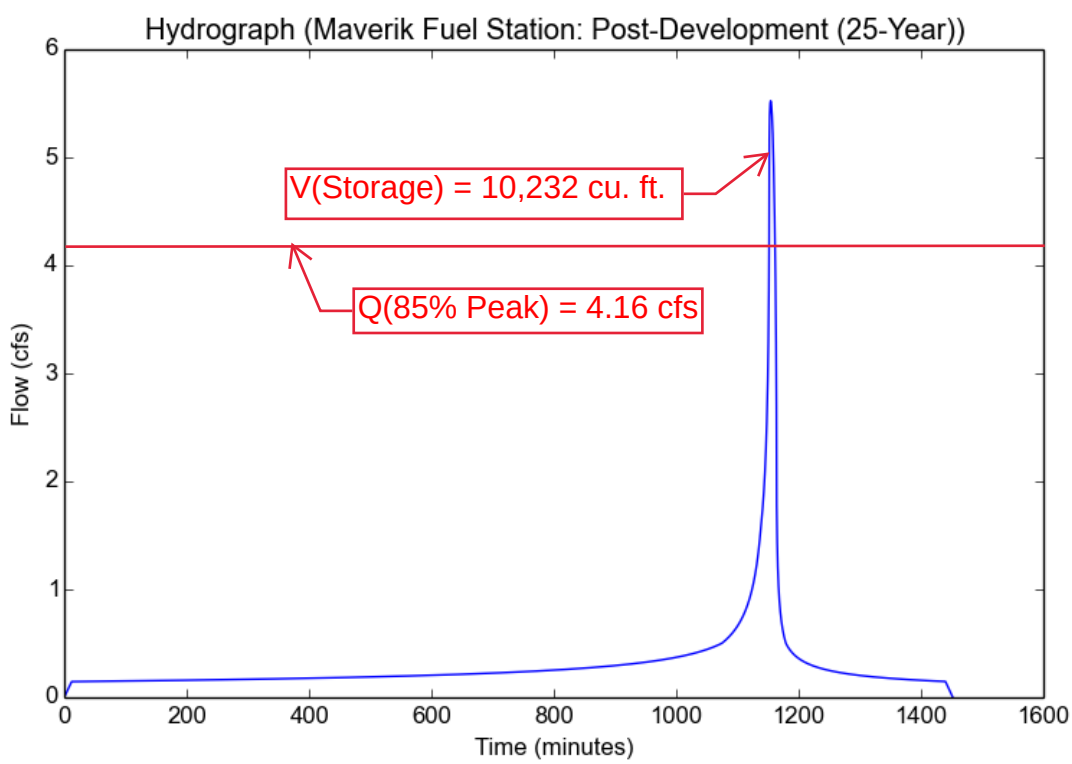
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C7_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Maverik Fuel Station
Subarea ID	Post-Development (25-Year)
Area (ac)	5.91
Flow Path Length (ft)	732.0
Flow Path Slope (vft/hft)	0.036885
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.299
Soil Type	176
Design Storm Frequency	25-yr
Fire Factor	0
LID	False

Output Results

Modeled (25-yr) Rainfall Depth (in)	3.2925
Peak Intensity (in/hr)	1.3018
Undeveloped Runoff Coefficient (Cu)	0.6403
Developed Runoff Coefficient (Cd)	0.718
Time of Concentration (min)	12.0
Clear Peak Flow Rate (cfs)	5.5235
Burned Peak Flow Rate (cfs)	5.5235
24-Hr Clear Runoff Volume (ac-ft)	0.621
24-Hr Clear Runoff Volume (cu-ft)	27052.4756



Peak Flow Hydrologic Analysis

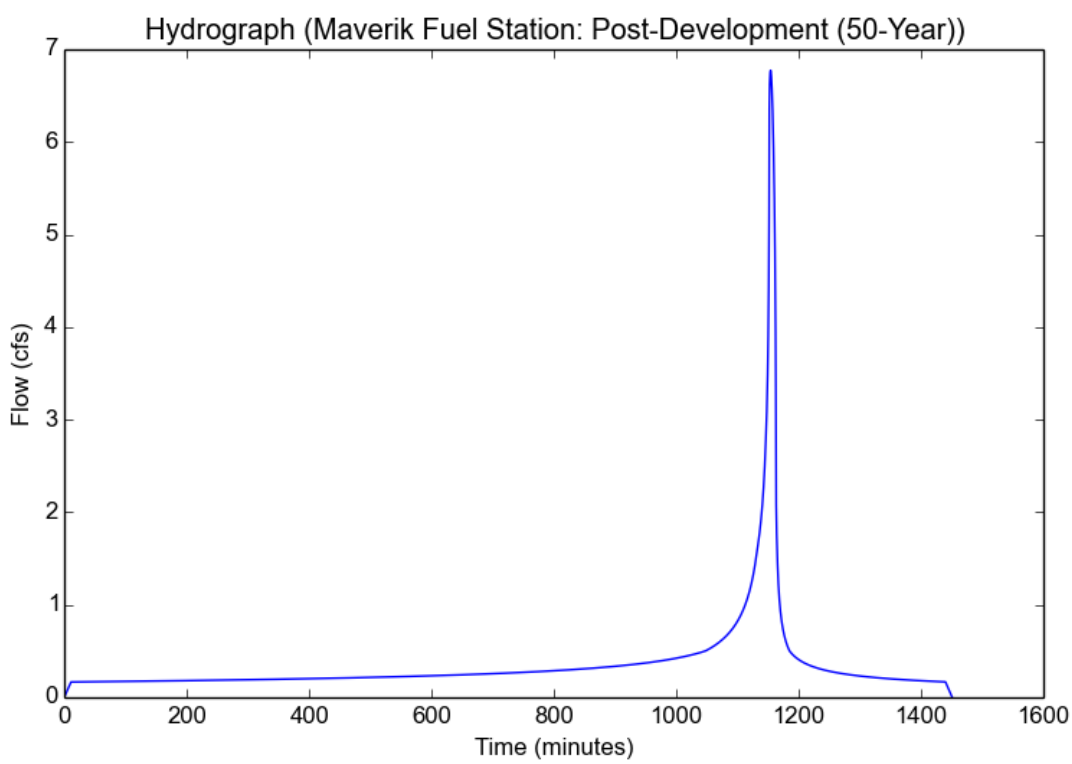
File location: L:/projects/C1913 Maverik Fueling Station Palmdale/engineering/reports/drainage/Hydrology Report/Appendices/App C8_Maverik Fuel Stat
Version: HydroCalc 1.0.3

Input Parameters

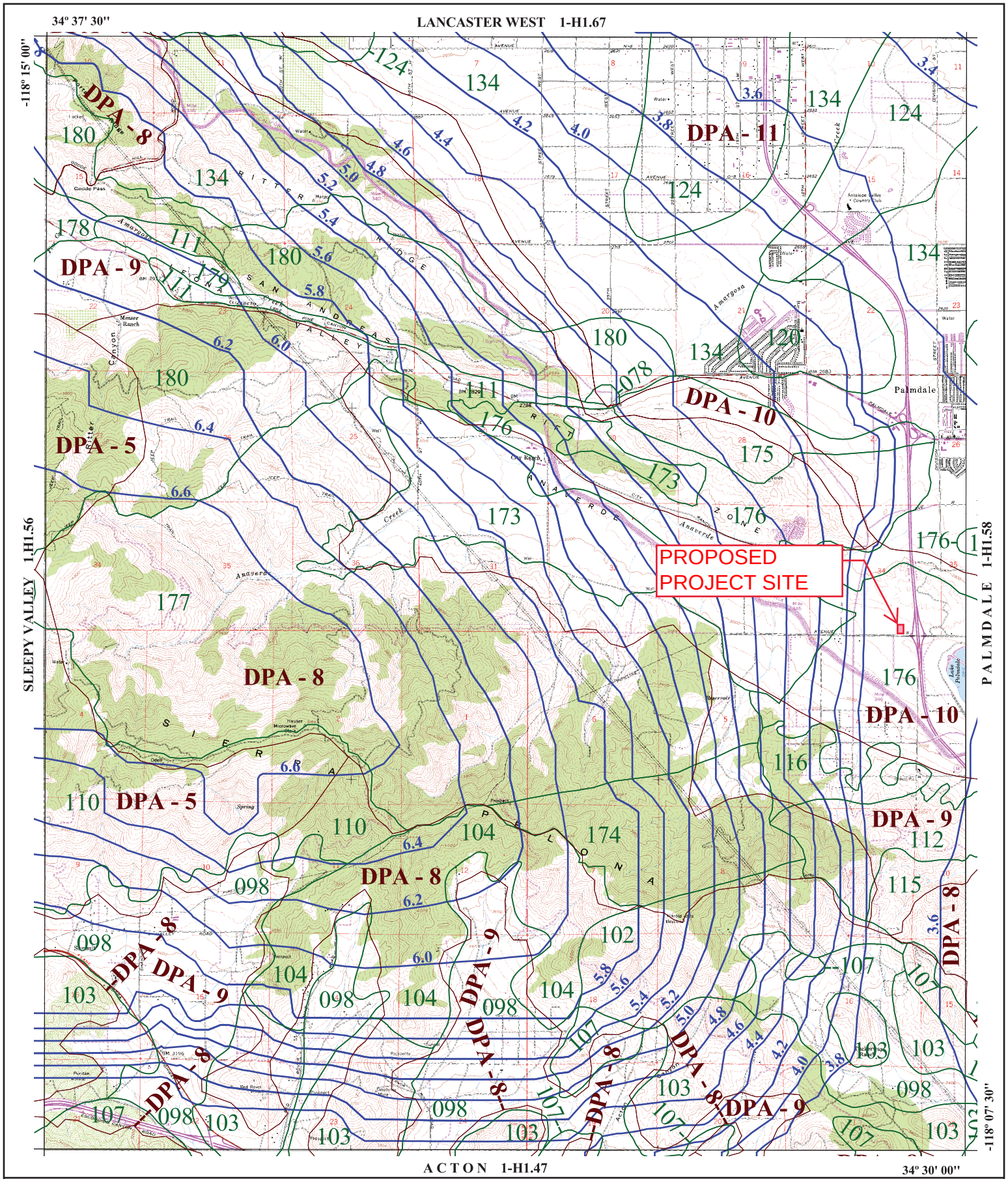
Project Name	Maverik Fuel Station
Subarea ID	Post-Development (50-Year)
Area (ac)	5.91
Flow Path Length (ft)	732.0
Flow Path Slope (vft/hft)	0.036885
50-yr Rainfall Depth (in)	3.75
Percent Impervious	0.299
Soil Type	176
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	3.75
Peak Intensity (in/hr)	1.5445
Undeveloped Runoff Coefficient (Cu)	0.6746
Developed Runoff Coefficient (Cd)	0.742
Time of Concentration (min)	11.0
Clear Peak Flow Rate (cfs)	6.7732
Burned Peak Flow Rate (cfs)	6.7732
24-Hr Clear Runoff Volume (ac-ft)	0.7219
24-Hr Clear Runoff Volume (cu-ft)	31445.2688



IV. APPENDIX D – 50 YEAR, 24 HOUR ISOHYET MAP


34° 37' 30"
LANCASTER WEST 1-H1.67
-118° 15' 00"
SLEEPY VALLEY 1-H1.56
PALMDALE 1-H1.58
-118° 07' 30"
ACTON 1-H1.47
34° 30' 00"
PROPOSED PROJECT SITE
DPA - 8
DPA - 9
DPA - 5
DPA - 11
DPA - 10
RITTER RIDGE
SAN ANDREAS RIFT ZONE
ANAVERDE VALLEY
SIERRA PELONA
Palmdale
Lake Palmdale
Antelope Valley Country Club
Goode Pass
Messer Ranch
Cow Ranch
Amargosa Creek
Anaverde Creek
Ritter Canyon
Prospect
Microwave
Puritan
Red Rover
Spring
Well
Water
Tunnel
Mine
Quarry
Sump
Beacon
Sphinx
Sewer
Pipeline
Aqueduct
Canal
Ditch
Levee
Dam
Reservoir
Trail
Jeep
Road
Avenue
Street
City Limits
Boundary
Fence
Locked
Mile Post
Gate
Cemetery
Church
Schools
Hospital
Airport
Landing Strip
Helipad
Radio Tower
Microwave Tower
Power Line
Pipeline
Tank
Pump
Windmill
Cistern

X. APPENDIX E – NOMOGRAPH DATA

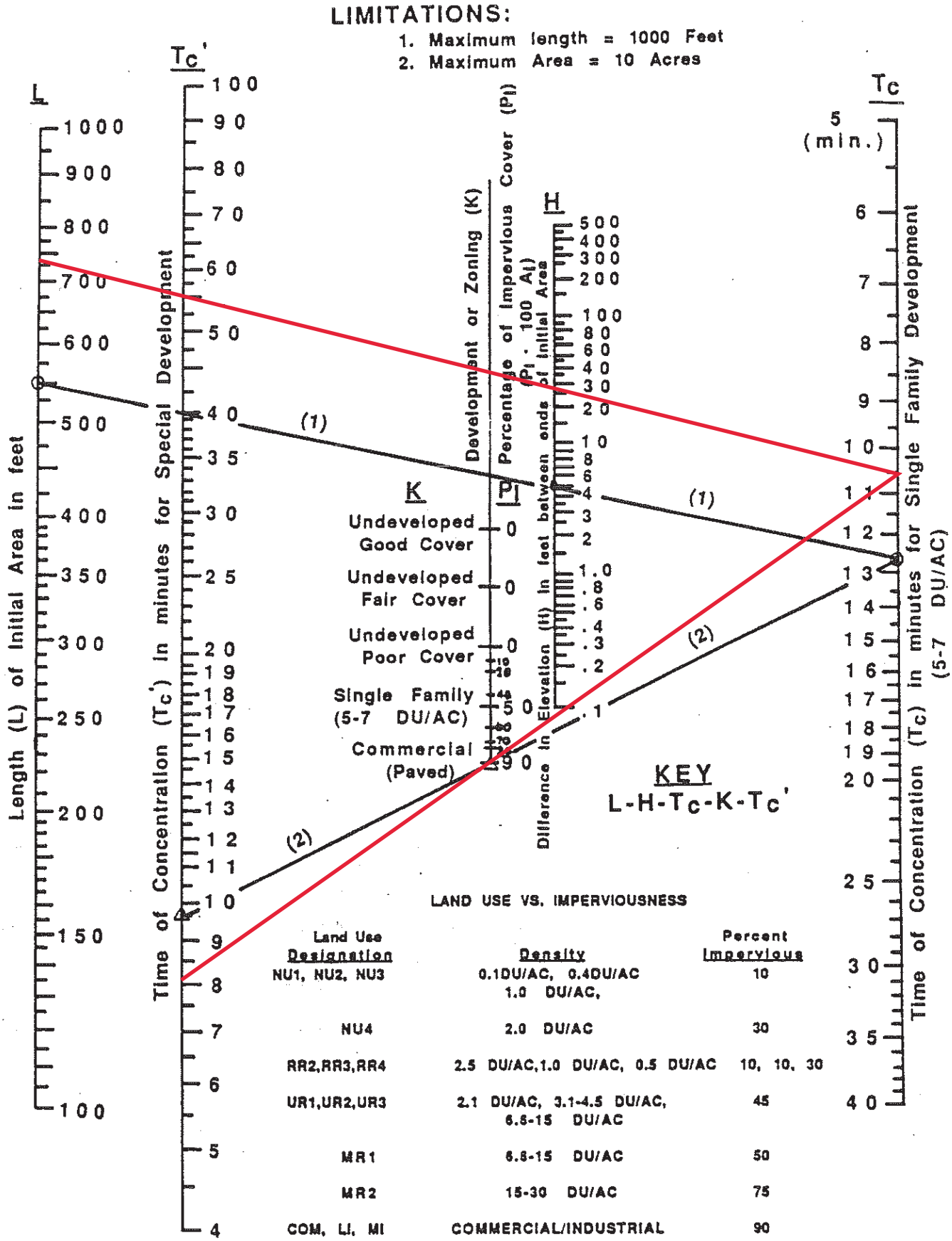
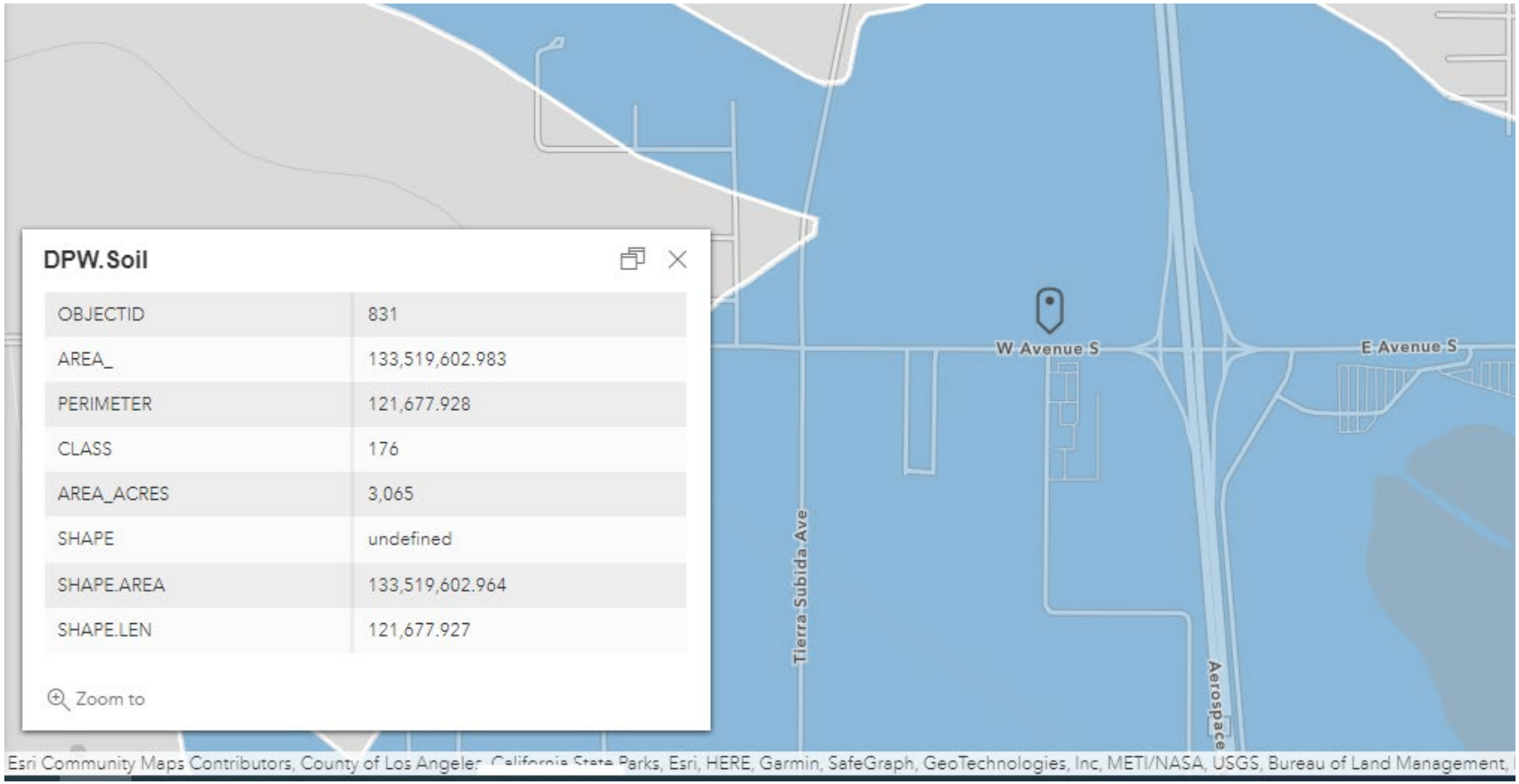


FIGURE 3.6.1 TIME OF CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA

XI. APPENDIX F – SOIL TYPE FEATURE MAP

County of Los Angeles
Soils Type Feature Layer

Source: https://egis-lacounty.hub.arcgis.com/datasets/e754a6de1ba448f68d15d0d48ee6ba49/explore?location=34.562966%2C-118.133714%2C14.43



OBJECTID	831
AREA_	133,519,602.983
PERIMETER	121,677.928
CLASS	176
AREA_ACRES	3,065
SHAPE	undefined
SHAPE.AREA	133,519,602.964
SHAPE.LEN	121,677.927

XII. APPENDIX G – FEMA MAP NO. 060370C0670F

National Flood Hazard Layer FIRMette

FEMA

118°8'22"W 34°33'47"N

118°7'45"W 34°33'18"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/3/2023 at 5:03 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

XIII. APPENDIX H – GEOTECHNICAL INVESTIGATIVE REPORT

CMT TECHNICAL SERVICES

ENGINEERING •GEOTECHNICAL •ENVIRONMENTAL (ESA I & II) •
MATERIALS TESTING •SPECIAL INSPECTIONS •
ORGANIC CHEMISTRY • PAVEMENT
DESIGN •GEOLOGY

GEOTECHNICAL ENGINEERING STUDY

Proposed Maverik Store

Highway 14 and Avenue S
Palmdale, California

CMT PROJECT NO. 18988

FOR:
Cardno, Inc.
1142 West 2320 South, Suite A
West Valley City, Utah 84119

September 13, 2022

CMT TECHNICAL SERVICES

September 13, 2022

Mr. Russ Hamblin
Cardno, Inc.
1142 West 2320 South, Suite A
West Valley City, Utah 84119

Subject: Geotechnical Engineering Study
Proposed Maverik Store
Highway 14 and Avenue S
Palmdale, California
CMT Project Number: 18988

Mr. Hamblin:

Submitted herewith is the report of our geotechnical engineering study for the subject site. This report contains the results of our findings and an engineering interpretation of the results with respect to the available project characteristics. It also contains recommendations to aid in the design and construction of the earth-related phases of this project.

On August 26, 2022, Cardno personnel were onsite and supervised the drilling of 6 bore holes at the site extending to depths between about 6.5 and 50.0 feet below the existing ground surface. Soil samples were obtained in the bore holes during the field operations and subsequently transported to our laboratory for further testing and observation.

Natural subsurface soils consisted of SILT (ML) and SAND (SM). Groundwater was not encountered in the explorations. Based upon the results of our study the proposed structures may be supported on conventional strip and spread footings founded on suitable, undisturbed, natural sand soils, or on structural fill placed on suitable, undisturbed natural soils. A detailed discussion of design and construction criteria is presented in this report.

We appreciate the opportunity to work with you at this stage of the project. CMT offers a full range of Geotechnical Engineering, Geological, Material Testing, Special Inspection services, and Phase I and II Environmental Site Assessments. With offices throughout Utah, Idaho, and Arizona, our staff is capable of efficiently serving your project needs. If we can be of further assistance or if you have any questions regarding this project, please do not hesitate to contact us at 801-492-4132.

Sincerely,
CMT Technical Services

Jeffrey J. Egbert, P.E., LEED A.P., M. ASCE
Senior Geotechnical Engineer

Reviewed By:

REGISTERED PROFESSIONAL ENGINEER
WILLIAM G. TURNER
No. C 43740
Exp. 3/31/23
CIVIL
STATE OF CALIFORNIA

William G. Turner, P.E.
Senior Geotechnical Engineer

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APPENDIX
Figure 1: Site Plan
Figures 2 through 7: Bore Hole Logs
Figure 8: Key to Symbols
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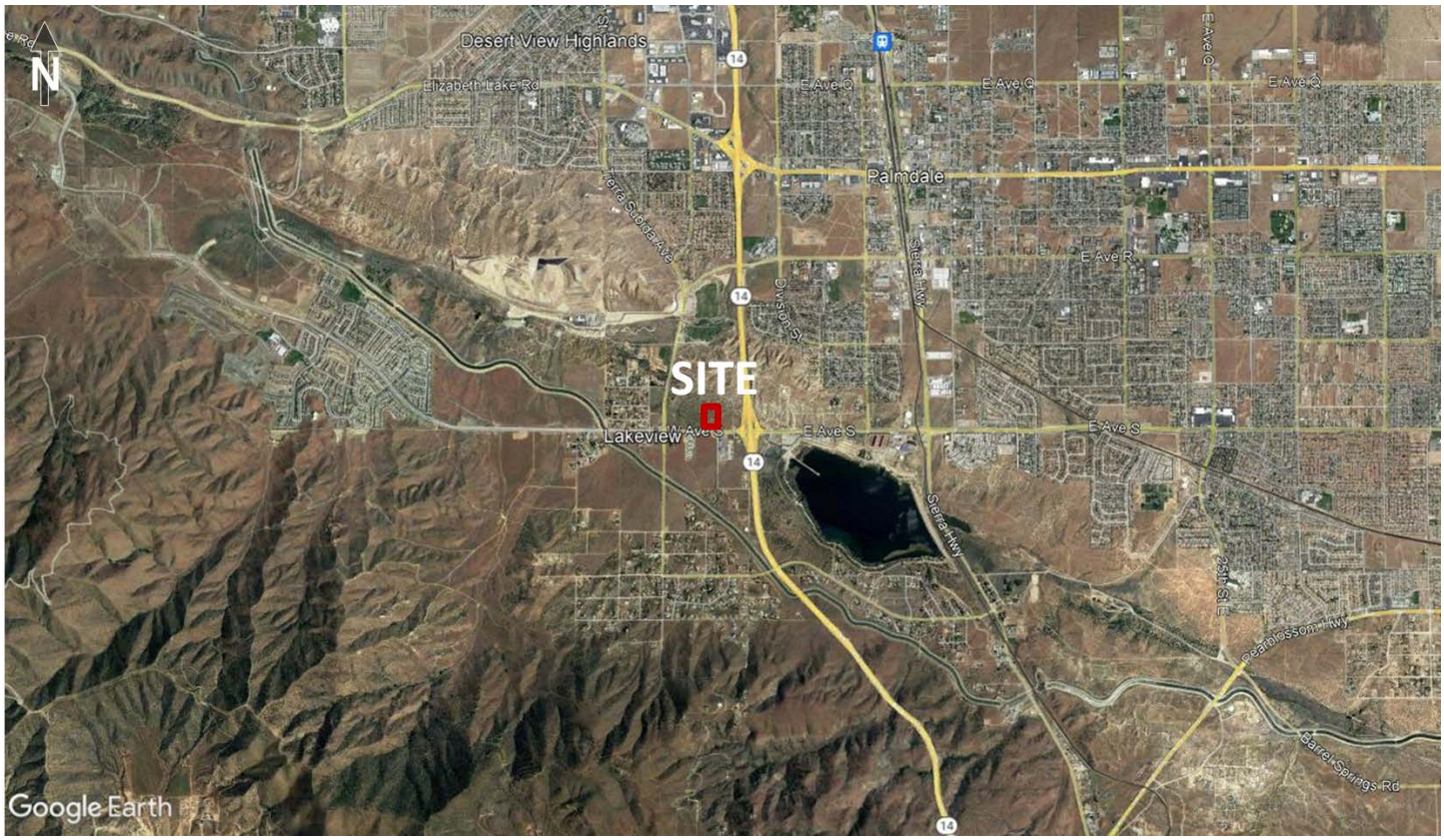
1.0 INTRODUCTION

1.1 General

CMT Technical Services (CMT) was retained to conduct a geotechnical subsurface study for a proposed Maverik Store. The site for the proposed development is situated at the north side of Avenue S, just west of Highway 14 in Palmdale, California as shown on the **Vicinity Map** below.



VICINITY MAP

1.2 Objectives, Scope and Authorization

The objectives and scope of our study were planned in communications between Mr. Russ Hamblin of Cardno, Inc., and Mr. Jeffrey Egbert of CMT. In general, the objectives of this study were to define and evaluate the subsurface soil and groundwater conditions at the site, and provide appropriate foundation, earthwork, pavement and seismic recommendations to be utilized in the design and construction of the proposed development.

In accomplishing these objectives, subsurface explorations consisting of the drilling/logging/sampling of 6 bore holes, performing an infiltration test in one of the bore holes, and driving a Dynamic Cone Penetrometer (DCP) at three locations on the site, were performed by Cardno personnel. Our scope of work included performing laboratory testing on samples of the subsurface soils collected in the bore holes as delivered to us, and

conducting an office program which included correlating available data, performing engineering analyses, and preparing this summary report.

1.3 Description of Proposed Construction

We understand that construction of a new Maverik convenience store and fuel station with accompanying fuel islands and canopies, and underground fuel storage tanks is planned for the site. We project that wall loads for the store building will not exceed 4,000 pounds per linear foot. Floor slab loads are anticipated to be relatively light, with an average uniform loading not exceeding 150 pounds per square foot.

The fuel island canopies will be supported by steel frames and columns extending to the foundation system. It is projected that the maximum canopy downward column loads will be on the order of 60,000 pounds. In addition, uplift and lateral loads will be imposed upon these foundations. If the structural loading conditions are different than we have projected, please notify us so that any appropriate modifications to our conclusions and recommendations contained herein can be made.

We also understand the parking/drive paved areas will be constructed utilizing both asphalt and concrete pavement. Concrete pavement will likely be installed in front of the proposed store structure, as well as in the canopy fuel islands and over the underground storage tank area. In other areas, asphalt concrete sections will likely be used. Traffic is projected to consist of mostly automobiles and light trucks, a few daily medium-weight delivery trucks, a weekly garbage truck, and an occasional fire truck. The site plan indicates 76 hi-flow lanes for which data provided by Maverik indicates up to 200 semi-trucks per day.

1.4 Executive Summary

The most significant geotechnical aspects regarding site development include the following:

1. Moderate vegetation, including large shrubs and small trees, and topsoil to be removed.
2. Subsurface natural soils generally consisted of near surface SILT (ML) layers, followed by SAND (SM).
3. Groundwater was not encountered within the maximum depth explored of about 50 feet.
4. The site is mapped within a liquefaction zone by the State of California, but the potential for liquefaction to occur in the subsurface soils encountered is very low.
5. An earthquake fault is mapped very near the northeast corner of the site and a fault hazard study may be required.
5. Foundations may be constructed on scarified, re-compacted suitable, natural soils, or on structural/engineered fill which extends to scarified, re-compacted natural soils.

A qualified geotechnical engineer must assess that undocumented fill (if encountered), topsoil, debris, disturbed or unsuitable soils have been removed and that suitable soils have been encountered prior to placing structural/site grading fills, footings, slabs, and pavements.

In the following sections, detailed discussions pertaining to the site, subsurface descriptions, and the geologic/seismic setting are provided, along with recommendations for earthwork, foundations, lateral resistance, lateral pressure, floor slabs, and pavements.

2.0 FIELD EXPLORATION

2.1 General

In order to define and evaluate the subsurface soil and groundwater conditions, 6 bore holes were drilled at the site to depths of approximately 6.5 to 50.0 feet below the existing ground surface. Locations of the bore holes are presented on **Figure 1** in the Appendix.

Relatively undisturbed samples of the subsurface soils were obtained by driving a split-spoon sampler with 2.05-inch outside diameter rings/liners into the undisturbed soils below the drill augers. Disturbed samples were collected utilizing a standard split spoon sampler. The split spoon sampler was driven 18 inches into the soils below the drill augers using a 140-pound hammer free-falling a distance of 30 inches. The number of hammer blows needed for each 6-inch interval was recorded. The sum of the hammer blows for the final 12 inches of penetration is known as a standard penetration test (SPT) and this 'blow count' was recorded on the bore hole logs. Where more than 50 blows occurred before the 6-inch interval was achieved, the sampling was terminated and the number of blows and inches penetrated by the sampler were recorded. The blow count provides a reasonable approximation of the relative density of granular soils, but only a limited indication of the relative consistency of fine-grained soils because the consistency of these soils is significantly influenced by the moisture content.

The subsurface soil samples retrieved in the bore holes were classified in the field based upon visual and textural examination in general accordance with ASTM[1] D-2488. These field classifications were supplemented by subsequent examination and testing of select samples in our laboratory. Graphic logs of the bore holes, including a description of the soil strata encountered, are presented on the **Bore Hole Logs**, **Figures 2 through 7**, included in the Appendix. Sampling information and other pertinent data and observations are also included on the logs. In addition, a **Key to Symbols** defining the terms and symbols used on the logs is provided as **Figure 8** in the Appendix.

2.2 Infiltration Testing

Infiltration testing was also performed in bore hole B-1 within the natural silt soils. The testing consisted of drilling to 5 feet below the surface, sampling, removing the sampler, filling the auger with water and measuring the rate of water drop over approximately 1 hour increments. The final measured rate was approximately 17 minutes per inch. This rate will likely slow over time and an appropriate factor of safety should be applied for design.

[1]American Society for Testing and Materials

3.0 LABORATORY TESTING

Selected samples of the subsurface soils were subjected to various laboratory tests to assess pertinent engineering properties, as follows:

1. Moisture Content, ASTM D-2216, Percent moisture representative of field conditions
2. Dry Density, ASTM D-2937, Dry unit weight representing field conditions
3. Atterberg Limits, ASTM D-4318, Plasticity and workability
4. Gradation Analysis, ASTM D-1140/C-117, Grain Size Analysis

Laboratory test results are presented on the bore hole logs (**Figures 2 through 7**) and in the following **Lab Summary Table**:

LAB SUMMARY TABLE

BORE HOLE	DEPTH (feet)	SAMPLE TYPE	SOIL CLASS	MOISTURE CONTENT(%)	DRY DENSITY (pcf)	GRADATION			ATTERBERG LIMITS		
						GRAV.	SAND	FINES	LL	PL	PI
B-1	2.5	SPT	ML	5				69			
B-2	5	SPT	CL-ML	4				65	22	15	7
B-3	7.5	SPT	ML	2				53			
B-4	10	SPT	ML	1		1	48	51		NP	
B-5	5	SPT	ML	3		2	34	64			
B-6	5	SPT	ML	3		2	34	64			
B-6	10	SPT	ML	4		0	31	69			
B-6	20	SPT	SM	7	87	6	55	39			
B-6	30	SPT	SM	7		3	61	36			
B-6	40	SPT	ML	11		1	40	59			
B-6	50	SPT	ML	11		3	47	50			

4.0 GEOLOGIC & SEISMIC CONDITIONS

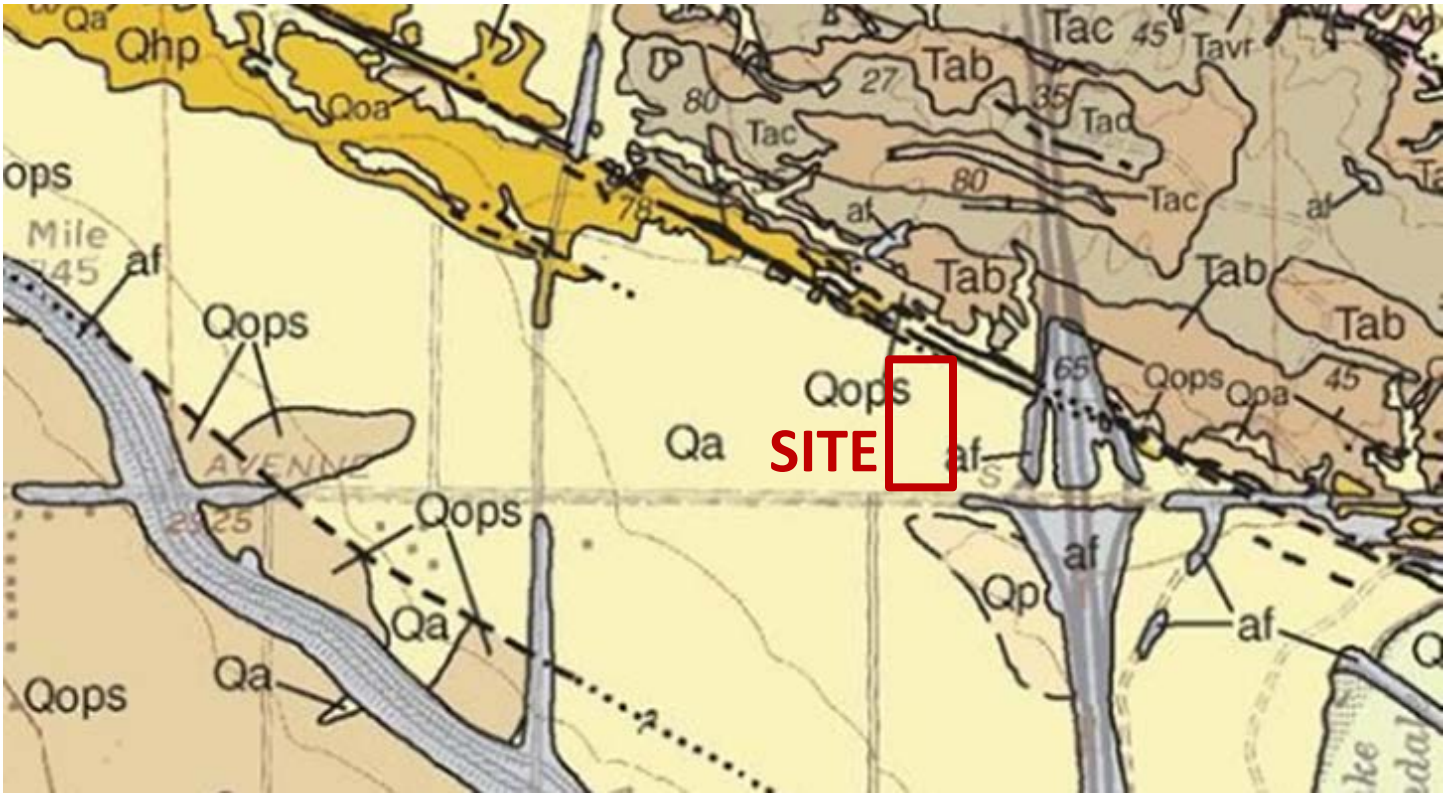
4.1 Geologic Setting

The subject site is located in the south-central portion of the Antelope Valley at the western tip of the Mojave Desert Geomorphic Province in southern California. The site sits at an elevation of approximately 2,660 feet above sea level. The Antelope Valley is a large, flat valley spanning approximately 2,200 square miles. It is located southeast of the Tehachapi Mountains and Garlock Fault, east of the Sierra Pelona Mountains, and north of the San Gabriel Mountains and San Andreas Fault, forming a large topographic and groundwater basin collecting water runoff from the surrounding mountains. Human use such as long-term groundwater pumping has lowered the water table, resulting in land subsidence and drop in elevation of the basin over time.

During the history of the Antelope Valley region, a large intermittent lake formed near the center of the basin and deposited various types of fine-grained sediment based on precipitation. Significant precipitation sourced massive beds of blue clay formed in a deep perennial lake, while mild precipitation deposited thin beds of clay

and evaporate salt deposits formed in playas or shallow intermittent lakes. The clay yields little to no water to wells, but the interbedded, coarser material can yield considerable volumes of water. Soils within the area are derived from loess and alluvial material sourced from granitic rock and others originating along the slopes of the Tehachapi and San Gabriel Mountains that were shed into the valley.

The geology of CGS Ritter Ridge 7.5' quadrangle, Los Angeles County, California, which includes the location of the subject site, has been mapped by Hernandez[2]. The surficial geology of the subject site and adjacent properties is mapped as "Modern alluvium" (map unit Qa) dated to be Holocene. Unit Qa is described in the referenced mapping as "Unconsolidated to weakly consolidated, mostly undissected, fluvial gravel, sand, and silt. Loose, yellowish-grey sand, silt, and pebble-cobble gravel. Consists predominantly of moderately sorted coarse-grained to very coarse-grained arkosic sand." No fill has been recorded at the location of the site on the geologic map. Refer to the **Geologic Map**, below.



GEOLOGIC MAP

4.2 Faulting

The nearest mapped fault is the San Andreas Fault very near the northeast corner of the site. According to California Geological Survey mapping[3] the site lies within an earthquake fault zone. A special earthquake hazard study may be required.

[2]Hernandez, J.L., 2009, Preliminary geologic map of the Ritter Ridge 7.5' quadrangle, Los Angeles County, California: A digital database, California Geological Survey, series unknown, 1:24,000.
[3] https://maps.conservation.ca.gov/cgs/EQZApp/app/

4.3 Seismicity

4.3.1 Site Class

We understand that the State of California Building Code (SCBC) 2019 was adopted on January 1, 2020, which we anticipate will be the code for design of the structures at this site. SCBC 2019 refers to Chapter 20, Site Classification Procedure for Seismic Design, of ASCE[4] 7-16, which stipulates that the average values of shear wave velocity, blow count and/or shear strength within the upper 100 feet (30 meters) be utilized to determine seismic site class. Based on the SPT blow counts obtained in bore hole B-1, which extended approximately 50 feet below the surface, and projecting that subsurface soils to 100 feet will be similar, it is our opinion the site best fits Site Class D – Stiff Soil (with data), which we recommend for seismic structural design.

4.3.2 Ground Motions

The seismic mapping utilized by the California Building Code provides values of peak ground, short period and long period spectral accelerations for the Site Class B/C boundary and the Risk-Targeted Maximum Considered Earthquake (MCE_R). This Site Class B/C boundary represents average bedrock values for the Western United States and must be corrected for local soil conditions. The following table summarizes the peak ground, short period and long period accelerations for the MCE_R event, and incorporates appropriate soil correction factors for a Site Class D (with data) soil profile at site grid coordinates of 34.6596 degrees north latitude and -118.1573 degrees west longitude:

SPECTRAL ACCELERATION PERIOD, T	SITE CLASS B/C BOUNDARY [mapped values] (g)	SITE COEFFICIENT	SITE CLASS D* [adjusted for site class effects] (g)	MULTI-PLIER	DESIGN VALUES (g)
Peak Ground Acceleration	PGA = **1.075**	F_{pga} = 1.100	PGA_M = 1.183	1.000	PGA_M = 1.183
0.2 Seconds (Long Period Acceleration)	S_S = **2.503**	F_a = 1.000	S_{MS} = 2.503	0.667	S_{DS} = 1.669
	(no exceptions needed)	F_a = (N/A)	S_{MS} = (N/A)	0.667	S_{DS} = (N/A)
1.0 Second (Long Period Acceleration)	S_1 = **1.068**	F_v = N/A	S_{M1} = N/A	0.667	S_{D1} = N/A
	(Exception 2:)	F_v = (1.700)	S_{M1} = (1.816)	0.667	S_{D1} = (1.210)

NOTES: 1. TL (seconds): **8**
2. Site Class: **D**
3. Have data to verify? **yes**

*** Site Class D With Data**

4. ASCE 7-16 Requires Site-Specific Ground Motion Hazard Analysis (Since S1≥0.2 sec) - OR Can Use Exception 2 (per §11.4.8)

As indicated in the above table, S_1 is greater than 0.2 seconds and a site-specific ground motion hazard analysis (GMHA) is required for the site, unless the Exception 2 values shown are used for seismic design. If a site-specific GMHA is desired instead of using the higher exception values, please contact CMT for a proposal to perform the GMHA.

[4] American Society of Civil Engineers

4.3.3 Liquefaction

Liquefaction is defined as the condition when saturated, loose, sandy soils lose their support capabilities because of excessive pore water pressure which develops during a seismic event. Clayey soils, even if saturated, will generally not liquefy during a major seismic event.

The previously referenced California Geological Survey mapping indicates the site is within a liquefaction zone. Groundwater was not encountered to the maximum depth explored of approximately 50 feet below the existing ground surface. Given these conditions, liquefaction will not occur at the site in the soils encountered.

4.4 Other Geologic Hazards

The site is not located within a known or mapped potential debris flow, stream flooding[5], or rock fall hazard area. No landslide deposits or features, including lateral spread deposits, are mapped on or adjacent to the site.

5.0 SITE CONDITIONS

5.1 Surface Conditions

At the time the bore holes were drilled, the site was vacant land moderately vegetated with weeds, brush, and some cactus. Site grades sloped downward to the south. Based on aerial photos dating back to 1995 that are readily available on the internet, the site appears to have been vacant since that time. The site is bordered on the north, east, and west by similar vacant land, and on the south by Avenue S (see **Vicinity Map** in **Section 1.1** above).

5.2 Subsurface Soils

Topsoil approximately 12 inches in thickness was noted on the surface at the bore hole locations. Subsurface natural soils encountered predominately consisted of near surface layers of red-yellow, slightly moist Sandy SILT (ML), and occasionally Sandy SILTY CLAY (CL-ML), extending to the bottom of bore holes B-1 through B-5, and to about 15 feet below the surface in B-6. Based upon the SPT blow counts these soils have stiff to hard consistency. Below the silt in B-6 a layer of brown, slightly moist Silty SAND (SM), with varying amounts of gravel, was encountered which extended to about 40 feet below the surface. Blow counts indicate the sand is very dense. At about 40 feet the soils turned predominately silty again and were hard based on the blow counts, extending to the bottom of B-6 at about 50 feet below the surface.

For a more descriptive interpretation of subsurface conditions, please refer to the bore hole logs, **Figures 2 through 7**, which graphically represent the subsurface conditions encountered. The lines designating the

[5] Federal Emergency Management Agency:
https://msc.fema.gov/portal/search?AddressQuery=Highway%2014%20%26%20Avenue%20S%2C%20Palmdale%2C%20California%20#searchresultsanchor

interface between soil types on the log generally represent approximate boundaries; in situ, the transition between soil types may be gradual.

5.3 Groundwater

Groundwater was not encountered within the maximum depth explored of 50 feet below the existing surface. We do not anticipate that groundwater will be encountered during construction at this site.

Groundwater levels can fluctuate seasonally and in response to numerous factors such as heavy precipitation, irrigation of neighboring land, and other unforeseen factor. The detailed evaluation of these and other factors, which may be responsible for ground water fluctuations, and the magnitude of potential fluctuations, is beyond the scope of this study.

5.4 Site Subsurface Variations

Based on the results of the subsurface explorations and our experience, variations in the continuity and nature of subsurface conditions should be anticipated. Due to the heterogeneous characteristics of natural soils, care should be taken in interpolating or extrapolating subsurface conditions between or beyond the exploratory locations.

6.0 SITE PREPARATION AND GRADING

6.1 General

All deleterious materials should be stripped from the site prior to commencement of construction activities. This includes vegetation, topsoil, loose and disturbed soils, etc. Topsoil approximately 12 inches in thickness was noted on the surface at the bore hole locations. When stripping and grubbing, topsoil should be distinguished by the apparent organic content and not solely by color; thus, we estimate that topsoil stripping will need to include at least the upper 6 inches, but roots may locally extend deeper.

Fill placed over large areas to raise overall site grades can induce settlements in the underlying natural soils. If more than 3 feet of site grading fill is anticipated over the existing ground surface, we should be notified to assess potential settlements and provide additional recommendations as needed. These recommendations may include placement of the site grading fill far in advance to allow potential settlements to occur prior to construction.

6.2 Temporary Excavations

Excavations up to 16 feet deep for underground fuel storage tanks are anticipated at the site. Based upon bore hole B-6 it appears that excavations at the proposed tank pit location will encounter mostly silt.

For silty/sandy (cohesionless) soils, temporary construction excavations not exceeding 4 feet in depth should be no steeper than one-half horizontal to one vertical (0.5H:1V). For excavations up to 16 feet and above groundwater, side slopes should be no steeper than one and one-half horizontal to one vertical (1.5H:1V) unless shored or braced. Excavations encountering saturated cohesionless soils, though not anticipated, will be very difficult to maintain, and will require very flat side slopes and/or shoring, bracing and dewatering.

All excavations must be inspected periodically by qualified personnel. If any signs of instability or excessive sloughing are noted, immediate remedial action must be initiated. All excavations should be made following OSHA safety guidelines.

6.3 Fill Material

The following table contains our recommendations for the various fill types we anticipate will be used at this site:

FILL MATERIAL TYPE	DESCRIPTION | RECOMMENDED SPECIFICATION
Structural Fill	Placed immediately below structures, flatwork and pavement. Well-graded sand/gravel mixture, with maximum particle size of 4 inches, a minimum 70% passing 3/4-inch sieve, a maximum 20% passing the No. 200 sieve, and a maximum Plasticity Index of 10.
Import Site Grading Fill	Placed over larger areas to raise the site grade to within 18 inches of bottom of footing, and to pavement subgrade level. Sandy to gravelly soil, with a maximum particle size of 6 inches, a minimum 70% passing 3/4-inch sieve, a maximum 50% passing No. 200 sieve and a maximum Plasticity Index of 15.
Non-Structural Fill	Placed below non-structural areas, such as landscaping. On-site soils or imported soils, with a maximum particle size of 8 inches, including silt/clay soils not containing excessive amounts of degradable/organic material (see discussion below).
Stabilization Fill	Placed to stabilize soft areas prior to placing structural fill and/or site grading fill. Coarse angular gravels and cobbles 1 inch to 8 inches in size. May also use 1.5- to 2.0-inch gravel placed on stabilization fabric, such as Mirafi RS280i or equivalent (see **Section 6.6**).

The natural soils at this site may be utilized as site grading fill. All on-site soils could be used as non-structural fill. Existing soils will likely be more difficult to work with depending on the fines content and plasticity. If utilized, these soils should be compacted to the requirements given below.

All fill material should be approved by a geotechnical engineer prior to placement.

6.4 Fill Placement and Compaction

The various types of compaction equipment available have their limitations as to the maximum lift thickness that can be compacted. For example, hand operated equipment is limited to lifts of about 4 inches and most "trench compactors" have a maximum, consistent compaction depth of about 6 inches. Large rollers, depending on soil and moisture conditions, can achieve compaction at 8 to 12 inches. The full thickness of each lift should

be compacted to at least the following percentages of the maximum dry density as determined by ASTM D-698 (or AASHTO[6] T-99) in accordance with the following recommendations:

LOCATION	TOTAL FILL THICKNESS (FEET)	MINIMUM PERCENTAGE OF MAXIMUM DRY DENSITY
Beneath an area extending at least 4 feet beyond the perimeter of structures, and below flatwork and pavement (applies to structural fill and site grading fill) extending at least 2 feet beyond the perimeter	0 to 5 5 to 8	95 98
Site grading fill outside area defined above	0 to 5 5 to 8	90 95
Utility trenches within structural areas	--	95
Roadbase and subbase	-	95
Non-structural fill	0 to 5 5 to 8	85 90

Structural fills greater than 8 feet thick are not anticipated at the site. For best compaction results, we recommend that the moisture content for structural fill/backfill be within 2% of optimum. Field density tests should be performed on each lift as necessary to verify that proper compaction is being achieved.

6.5 Utility Trenches

For the bedding zone around the utility, we recommend utilizing sand bedding fill material that meets current local or APWA[7] requirements.

All utility trench backfill material below structurally loaded facilities (foundations, floor slabs, flatwork, parking lots/drive areas, etc.) should be placed at the same density requirements established for structural fill in the previous section.

Most utility companies and local governments are requiring Type A-1a or A-1b (AASHTO Designation) soils (sand/gravel soils with limited fines) be used as backfill over utilities within public rights of way, and the backfill be compacted over the full depth above the bedding zone to at least 95% of the maximum dry density as determined by AASHTO T-99 (ASTM D-698).

Where the utility does not underlie structurally loaded facilities and public rights of way, natural soils may be utilized as trench backfill above the bedding layer, provided they are properly moisture conditioned and compacted to the minimum requirements stated above in **Section 6.4**.

[6] American Association of State Highway and Transportation Officials
[7] American Public Works Association

6.6 Stabilization

To stabilize soft subgrade conditions a mixture of coarse, clean, angular gravels and cobbles and/or 1.5- to 2.0-inch clean gravel should be utilized. Often the amount of gravelly material can be reduced with the use of a geotextile fabric such as Mirafi RS280i, or equivalent. Its use will also help avoid mixing of the subgrade soils with the gravelly material. After excavating the soft/disturbed soils, the fabric should be spread across the bottom of the excavation and up the sides a minimum of 18 inches. Otherwise, it should be placed in accordance with the manufacturer's recommendation, including proper overlaps. The gravel material can then be placed over the fabric in compacted lifts as described above.

7.0 FOUNDATION RECOMMENDATIONS

The following recommendations have been developed on the basis of the previously described project characteristics, the subsurface conditions observed in the field and the laboratory test data, as well as common geotechnical engineering practice.

7.1 Foundation Recommendations

Based on our geotechnical engineering analyses, the proposed structures may be supported upon conventional spread and/or continuous wall foundations placed on suitable, scarified and re-compacted natural soils, or on structural fill placed on suitable, scarified, re-compacted natural soils. Footings may be designed using a net bearing pressure of 2,000 psf if bearing on scarified and re-compacted natural soils, and 2,500 psf if bearing on a minimum of 18 inches of structural fill placed upon scarified, re-compacted natural soils. The term "net bearing pressure" refers to the pressure imposed by the portion of the structure located above lowest adjacent final grade, thus the weight of the footing and backfill to lowest adjacent final grade need not be considered. The allowable bearing pressure may be increased by 1/3 for temporary loads such as wind and seismic forces.

We also recommend the following:

1. Exterior footings subject to frost should be placed at least 18 inches below final grade, or per city standards if deeper.
2. Interior footings not subject to frost should be placed at least 12 inches below grade.
3. Continuous footing widths should be maintained at a minimum of 18 inches.
4. Spot footings should be a minimum of 24 inches wide.

7.2 Installation

Under no circumstances shall foundations be placed on undocumented fill, topsoil with organics, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water. If unsuitable soils are encountered, they must be completely removed and replaced with properly compacted structural fill. The base of footing excavations and floor slab sub grades should be observed by a qualified geotechnical engineer to confirm that suitable bearing soils have been exposed.

The base of footing excavations should be scarified a minimum of 12 inches, moisture conditioned as needed, and re-compacted to the requirements for structural fill given in **Section 6.4** prior to forming for footings or placement of structural fill.

All structural fill should meet the requirements for such, and should be placed and compacted in accordance with **Section 6** above. The width of structural replacement fill below footings should be equal to the width of the footing plus 1 foot for each foot of fill thickness. For instance, if the footing width is 2 feet and the structural fill depth beneath the footing is 4 feet, the fill replacement width should be 6 feet, centered beneath the footing.

The minimum thickness of structural fill below footings should be equivalent to one-third the thickness of structural fill below any other portion of the foundations. For example, if the maximum depth of structural fill is 6 feet, all footings for the new structure should be underlain by a minimum 2 feet of structural fill.

7.3 Estimated Settlement

Foundations designed and constructed in accordance with our recommendations could experience some settlement, but we anticipate that total settlements of footings founded as recommended above will not exceed 1 inch, with differential settlements on the order of 0.5 inches over a distance of 25 feet. We expect approximately 50% of the total settlement to initially take place during construction.

7.4 Lateral Resistance

Lateral loads imposed upon foundations due to wind or seismic forces may be resisted by the development of passive earth pressures and friction between the base of the footings and the supporting soils. In determining frictional resistance, a coefficient of 0.30 for natural soils and 0.40 for structural fill may be utilized for design. Passive resistance provided by properly placed and compacted natural soils above the water table may be considered equivalent to a fluid with a density of 350 pcf. A combination of passive earth resistance and friction may be utilized if the passive pressure component of the total is divided by 1.5.

7.5 Uplift Loads

Uplift loads may be resisted by the weight of the foundation and the backfill wedge above the top of the foundation within the area defined by an imaginary line extending outward from the outside top edge of the footing 10 degrees from vertical, up to final grade. A unit weight of 120 pounds per square foot can be used for sand and gravel backfill over the footings.

8.0 LATERAL EARTH PRESSURES

We anticipate that below-grade walls up to 4 feet high may be constructed at this site. The lateral earth pressure values given in the table below are for a backfill material that will consist of drained sand soils (less than 10% passing No. 200 sieve) placed and compacted in accordance with the recommendations presented herein. If

other soil types will be used as backfill, we should be notified so that appropriate modifications to these values can be provided, as needed.

The lateral pressures imposed upon subgrade facilities will depend upon the relative rigidity and movement of the backfilled structure. In the table on the following page are the recommended lateral pressure values, which also assume that the soil surface behind the wall is horizontal and that the backfill within 3 feet of the wall will be compacted with hand-operated compacting equipment.

CONDITION	STATIC (psf/ft)*	SEISMIC (psf)**
Active Pressure (wall is allowed to yield, i.e. move away from the soil, with a minimum 0.001H movement/rotation at the top of the wall, where "H" is the total height of the wall)	40	106
At-Rest Pressure (wall is not allowed to yield)	60	283
Passive Pressure (wall moves into the soil)	350	0

*Equivalent Fluid Pressure (applied at 1/3 Height of 4-foot High Wall)
**Uniform Pressure, Seismic Only (applied at 1/2 Height of 4-foot High Wall)

9.0 BOUYANT FORCES

Groundwater was not encountered to the maximum depth explored of 50 feet. Based upon this condition we anticipate that underground tanks will not need to be designed to resist buoyant forces.

10.0 FLOOR SLABS

Floor slabs may be established upon suitable, natural scarified and re-compacted soils and/or on structural fill extending to suitable, natural scarified and re-compacted soils (same as for foundations). Under no circumstances shall floor slabs be established directly on any topsoil, undocumented fills, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.

In order to facilitate curing of the concrete, we recommend that floor slabs be directly underlain by at least 4 inches of "free-draining" fill, such as "pea" gravel or 3/4-inch quarters to 1-inch minus, clean, gap-graded gravel. To help control normal shrinkage and stress cracking, the floor slabs should have the following features:

1. Adequate reinforcement for the anticipated floor loads with the reinforcement continuous through interior floor joints;
2. Frequent crack control joints; and
3. Non-rigid attachment of the slabs to foundation walls and bearing slabs.

11.0 DRAINAGE RECOMMENDATIONS

It is important to the long-term performance of foundations and floor slabs that water not be allowed to collect near the foundation walls and infiltrate into the underlying soils. We recommend the following:

1. All areas around the structures should be sloped to provide drainage away from the foundations. We recommend a minimum slope of 4 inches in the first 10 feet away from the structure. This slope should be maintained throughout the lifetime of the structure.

2. All roof drainage should be collected in rain gutters with downspouts designed to discharge at least 10 feet from the foundation walls or well beyond the backfill limits, whichever is greater.

3. Adequate compaction of the foundation backfill should be provided. We suggest a minimum of 90% of the maximum laboratory density as determined by ASTM D-698. Water consolidation methods should not be used under any circumstances.

4. Landscape sprinklers should be aimed away from foundation walls. The sprinkling systems should be designed with proper drainage and be well-maintained. Over watering should be avoided.

5. Other precautions that may become evident during construction.

12.0 PAVEMENTS

All pavement areas must be prepared as discussed above in **Section 6.1.** Under no circumstances shall pavements be established over topsoil, un-prepared existing undocumented fill soils, loose or disturbed soils, sod, rubbish, construction debris, other deleterious materials, frozen soils, or within ponded water.

To assess subgrade strength for pavement support Dynamic Cone Penetrometer (DCP) tests were performed at three locations within proposed pavement areas. Test results were varied, with correlated average California Bearing Ratio (CBR) values ranging from 4.3 to 9.1 (see **Figures 11 through 13**). We have utilized a correlated CBR value of 5 as the basis for the pavement design.

Given the projected traffic as discussed above in **Section 1.3**, the following pavement sections are recommended for the estimated ESAL's:

MATERIAL	PAVEMENT SECTION THICKNESS (inches)						
	PARKING AREAS (Moderate Duty) (4 ESAL'S per day)		HI-FLOW AREAS (Heavy Duty) (521 ESAL'S per day)				
Asphalt	**4***	**---**	**6***	**6***	**6***	**6***	**---**
Concrete	**---**	**4**	**---**	**---**	**---**	**---**	**6**
Road-Base	**8***	**6**	**22**	**10**	**12†**	**15‡**	**6**
Subbase	**0**	**0**	**0**	**15**	**0**	**0**	**0**
Total Thickness	**12**	**10**	**28**	**31**	**18**	**21**	**12**

*Maverik Minimum
†Cement Treated
‡Over Tensar TX-7 Geogrid

Untreated base course (UTBC) should conform to city or DOT specifications. Material meeting our specification for structural fill can be used for subbase, as long as the fines content (percent passing No. 200 sieve) does not exceed 15%. Roadbase and subbase material should be compacted as recommended above in **Section 6.4**. Asphalt material generally should conform to DOT or APWA requirements.

Concrete pavement should be designed in accordance with the American Concrete Institute (ACI) and joint details should conform to the Portland Cement Association (PCA) guidelines. The concrete should have a minimum 28-day unconfined compressive strength of 4,000 pounds per square inch.

13.0 QUALITY CONTROL

We recommend that a comprehensive quality control testing and observation program be established during construction to help facilitate implementation of our recommendations and address, in a timely manner, any subsurface conditions encountered which vary from those described in this report. Without such a program CMT cannot be responsible for application of our recommendations to subsurface conditions which may vary from those described herein. This program may include, but not necessarily be limited to, the following:

13.1 Field Observations

Observations should be completed during all phases of construction such as site preparation, foundation excavation, structural fill placement and concrete placement.

13.2 Fill Compaction

Compaction testing is required for all structural supporting fill materials. Maximum Dry Density (Standard Proctor, ASTM D-698) tests should be requested by the contractor immediately after delivery of any fill materials. The maximum density information should then be used for field density tests on each lift as necessary to ensure that the required compaction is being achieved.

13.3 Excavations

All excavation procedures and processes should be observed by a geotechnical engineer. In addition, for the recommendations in this report to be valid, all backfill and structural fill placed in trenches and all pavements should be density tested. We recommend that freshly mixed concrete be tested in accordance with ASTM designations.

14.0 LIMITATIONS

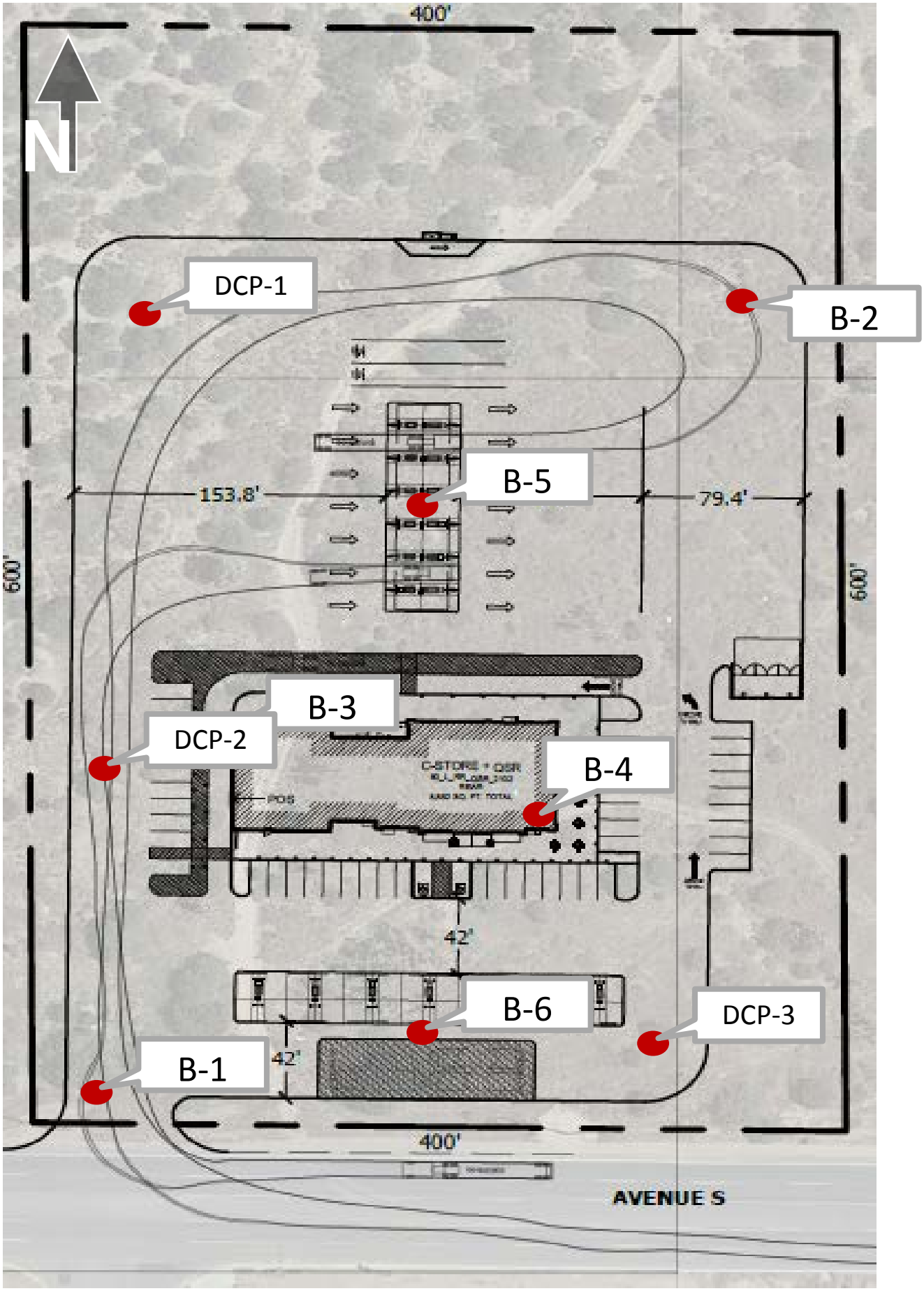
The recommendations provided herein were developed by evaluating the information obtained from the subsurface explorations and soils encountered therein. The exploration logs reflect the subsurface conditions only at the specific location at the particular time designated on the logs. Soil and ground water conditions may differ from conditions encountered at the actual exploration locations. The nature and extent of any variation in the explorations may not become evident until during the course of construction. If variations do appear, it may become necessary to re-evaluate the recommendations of this report after we have observed the variation.

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied.

We appreciate the opportunity to be of service to you on this project. If we can be of further assistance or if you have any questions regarding this project, please do not hesitate to contact us at 801-492-4132.

APPENDIX

SUPPORTING
DOCUMENTATION



Maverik Store Hwy 14 & Avenue S, Palmdale, CA	CMT TECHNICAL SERVICES **Site Map**	Date: 26-Aug-22 Job # 18988	Figure: 1

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-1

Total Depth: 6.5'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), red-yellow, slightly moist												
		stiff		1	4 5 6	11	5				69			
4														
		stiff to very stiff		2	24 12 18	30								
		END AT 6.5'												
8														
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55813°, -118.13542°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 2

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-2

Total Depth: 6.5'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), red-yellow, slightly moist												
		stiff		3	5 6 7	13								
4														
		Sandy Silty CLAY (CL-ML), red-yellow, slightly moist hard		4	15 16 18	34	4				65	22	15	7
		END AT 6.5'												
8														
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55915°, -118.13467°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 3

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-3

Total Depth: 10.5'
Water Depth: (see Remarks)
Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), red-yellow, slightly moist												
		very stiff		5	8 8 12	20								
4														
		hard		6	60/6"									
8				7	60/6"		2				53			
				8	60/6"									
		END AT 10.5'												
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55874°, -118.13538°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 4

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-4

Total Depth: 10.5'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), trace gravel, red-yellow, slightly moist												
		very stiff		9	6 4 15	19								
4														
				10	24 10 16	26								
8		hard		11	60/6"									
				12	60/6"		1		1	48	51		NP	NP
		END AT 10.5'												
12														
16														
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.53869°, -118.13525°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 5

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-5

Total Depth: 15.5'
Water Depth: (see Remarks)
Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), trace gravel, red-yellow, slightly moist												
		very stiff		13	2 8 12	20								
4														
		stiff		14	3 6 6	12	3		2	34	64			
8				15	4 6 7	13								
		hard		16	12 16 16	32	3				57			
12														
		grades with gravel, brown, moist		17	60/6"									
16		END AT 15.5'												
20														
24														
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.55894°, -118.13511°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 6

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-6

Total Depth: 50'
Water Depth: (see Remarks)

Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
0		Topsoil												
		Sandy SILT (ML), trace gravel, red-yellow, slightly moist												
		stiff		18	6 7 7	14								
4														
		hard		19	15 17 21	38	3		2	34	64			
				20	60/6"									
8														
				21	60/6"		4		0	31	69			
12														
		Silty SAND (SM), some gravel, brown, slightly moist very dense		22	60/6"									
16														
20				23	60/6"		7	87	6	55	39			
24				24	60/6"									
28														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.53818°, -118.13494°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 7

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Bore Hole Log B-6

Total Depth: 50'
Water Depth: (see Remarks)
Date: 8/26/22
Job #: 18988

Depth (ft)	GRAPHIC LOG	Soil Description	Sample Type	Sample #	Blows (N)	Total	Moisture (%)	Dry Density(pcf)	Gradation Gravel %	Gradation Sand %	Gradation Fines %	Atterberg LL	Atterberg PL	Atterberg PI
28		Silty SAND (SM), some gravel, brown, slightly moist												
		very dense		25	60/6"		7		3	61	36			
32														
				26	60/6"									
36														
40		Sandy SILT (ML), trace gravel, brown, slightly moist hard		27	60/6"		11		1	40	59			
44														
				28	60/6"									
48														
		REFUSAL AT 50.0'		29			11		3	47	50	26	13	13
52														
56														

Remarks: Groundwater not encountered during drilling.

Coordinates: 34.53818°, -118.13494°
Surface Elev. (approx): Not Given

Equipment: Hollow-Stem Auger
Automatic Hammer, Wt=140 lbs, Drop=30"
Excavated By: Geoboden
Logged By: Tom Gordon

CMT TECHNICAL SERVICES

Figure: 7

Maverik Store

Highway 14 & Avenue S, Palmdale, CA

Key to Symbols

Date: 9/12/22

Job #: 18988

① Depth (ft)	② GRAPHIC LOG	③ Soil Description	④ Sample Type	⑤ Sample #	Blows(N) ⑥	Blows(N) ⑦ Total	⑧ Moisture (%)	⑨ Dry Density(pcf)	Gradation ⑩ Gravel %	Gradation ⑩ Sand %	Gradation ⑩ Fines %	Atterberg ⑪ LL	Atterberg ⑪ PL	Atterberg ⑪ PI

COLUMN DESCRIPTIONS

① **Depth (ft.):** Depth (feet) below the ground surface (including groundwater depth - see below right).

② **Graphic Log:** Graphic depicting type of soil encountered (see ② below).

③ **Soil Description:** Description of soils, including Unified Soil Classification Symbol (see below).

④ **Sample Type:** Type of soil sample collected; sampler symbols are explained below-right.

⑤ **Sample #:** Consecutive numbering of soil samples collected during field exploration.

⑥ **Blows:** Number of blows to advance sampler in 6" increments, using a 140-lb hammer with 30" drop.

⑦ **Total Blows:** Number of blows to advance sampler the 2nd and 3rd 6" increments.

⑧ **Moisture (%):** Water content of soil sample measured in laboratory (percentage of dry weight).

⑨ **Dry Density (pcf):** The dry density of a soil measured in laboratory (pounds per cubic foot).

⑩ **Gradation:** Percentages of Gravel, Sand and Fines (Silt/Clay), from lab test results of soil passing No. 4 and No. 200 sieves.

⑪ **Atterberg:** Individual descriptions of Atterberg Tests are as follows:

LL = Liquid Limit (%): Water content at which a soil changes from plastic to liquid behavior.

PL = Plastic Limit (%): Water content at which a soil changes from liquid to plastic behavior.

PI = Plasticity Index (%): Range of water content at which a soil exhibits plastic properties (= Liquid Limit - Plastic Limit).

STRATIFICATION	
Description	**Thickness**
Seam	Up to ½ inch
Lense	Up to 12 inches
Layer	Greater than 12 in.
Occasional	1 or less per foot
Frequent	More than 1 per foot

MODIFIERS
Trace
<5%
Some
5-12%
With
> 12%

MOISTURE CONTENT
Dry: Absence of moisture, dusty, dry to the touch.
Moist: Damp / moist to the touch, but no visible water.
Saturated: Visible water, usually soil below groundwater.

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)

MAJOR DIVISIONS			USCS SYMBOLS	②	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS More than 50% of material is larger than No. 200 sieve size.	GRAVELS The coarse fraction retained on No. 4 sieve.	CLEAN GRAVELS (< 5% fines)	GW		Well-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
			GP		Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
		GRAVELS WITH FINES (≥ 12% fines)	GM		Silty Gravels, Gravel-Sand-Silt Mixtures
			GC		Clayey Gravels, Gravel-Sand-Clay Mixtures
	SANDS The coarse fraction passing through No. 4 sieve.	CLEAN SANDS (< 5% fines)	SW		Well-Graded Sands, Gravelly Sands, Little or No Fines
			SP		Poorly-Graded Sands, Gravelly Sands, Little or No Fines
		SANDS WITH FINES (≥ 12% fines)	SM		Silty Sands, Sand-Silt Mixtures
			SC		Clayey Sands, Sand-Clay Mixtures
FINE-GRAINED SOILS More than 50% of material is smaller than No. 200 sieve size.	SILTS AND CLAYS Liquid Limit less than 50%		ML		Inorganic Silts and Very Fine Sands, Silty or Clayey Fine Sands or Clayey Silts with Slight
			CL		Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean
			OL		Organic Silts and Organic Silty Clays o f Low Plasticity
	SILTS AND CLAYS Liquid Limit greater than 50%		MH		Inorganic Silts, Micacious or Diatomacious Fine Sand or Silty Soils with Plasticity (Elastic Silts)
			CH		Inorganic Clays of High Plasticity, Fat Clays
			OH		Organic Silts and Organic Clays of Medium to High Plasticity
HIGHLY ORGANIC SOILS			PT		Peat, Humus, Swamp Soils with High Organic Contents

Note: Dual Symbols are used to indicate borderline soil classifications (i.e. GP-GM, SC-SM, etc.).

SAMPLER SYMBOLS

- Block Sample
- Bulk/Bag Sample
- Modified California Sampler 3.5" OD, 2.42" ID
- D&M Sampler
- Rock Core
- Standard Penetration Split Spoon Sampler
- Thin Wall (Shelby Tube)

WATER SYMBOL

- Encountered Water Level
- Measured Water Level

(see Remarks on Logs)

1. The results of laboratory tests on the samples collected are shown on the logs at the respective sample depths.
2. The subsurface conditions represented on the logs are for the locations specified. Caution should be exercised if interpolating between or extrapolating beyond the exploration locations.
3. The information presented on each log is subject to the limitations, conclusions, and recommendations presented in this report.

CMT TECHNICAL SERVICES

Figure: 8

DCP TEST DATA

Project: Maverik-Palmdale, CA
Location: DCP-1
Hammer: 17.6 lb
Soil Type(s): SILT (ML)

Date: 8/26/2022

No. of Blows	Individual Penetration (mm)	Type of Hammer
1	0	2
1	21	2
1	15	2
1	14	2
1	14	2
1	10	2
1	12	2
1	12	2
1	10	2
1	12	2
1	10	2
1	12	2
1	10	2
1	10	2
1	12	2
1	26	2
1	13	2
1	17	2
1	14	2
1	13	2
1	12	2
1	12	2
1	12	2
1	11	2
1	12	2
1	11	2
1	12	2
1	12	2
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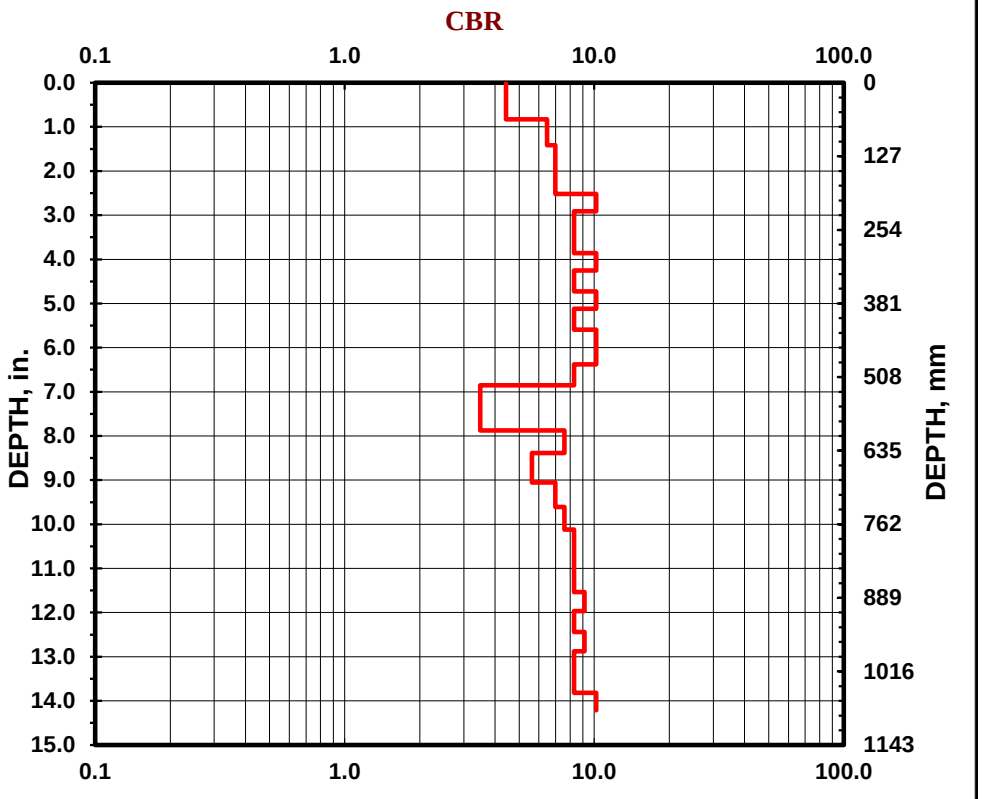

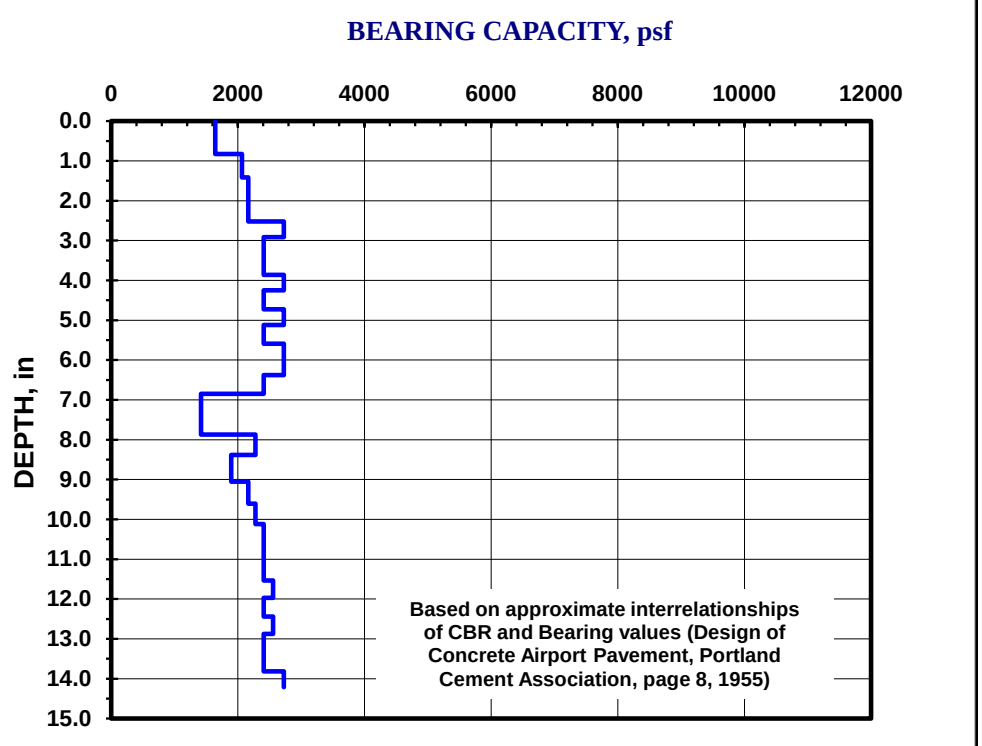

DCP TEST DATA

Project: Maverik-Palmdale, CA
Location: DCP-2
Hammer: 17.6 lb
Soil Type(s): SILT (ML)
Date: 8/26/2022

No. of Blows	Individual Penetration (mm)	Type of Hammer
1	0	2
1	10	2
1	12	2
1	10	2
1	10	2
1	11	2
1	10	2
1	10	2
1	8	2
1	11	2
1	10	2
1	10	2
1	7	2
1	11	2
1	10	2
1	11	2
1	11	2
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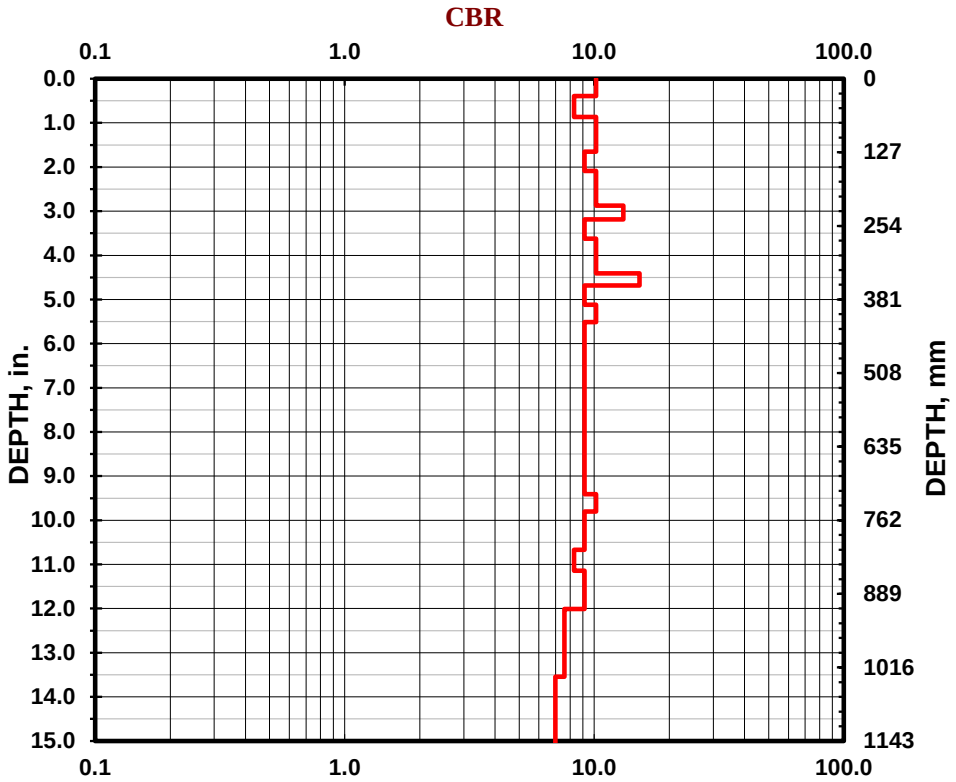

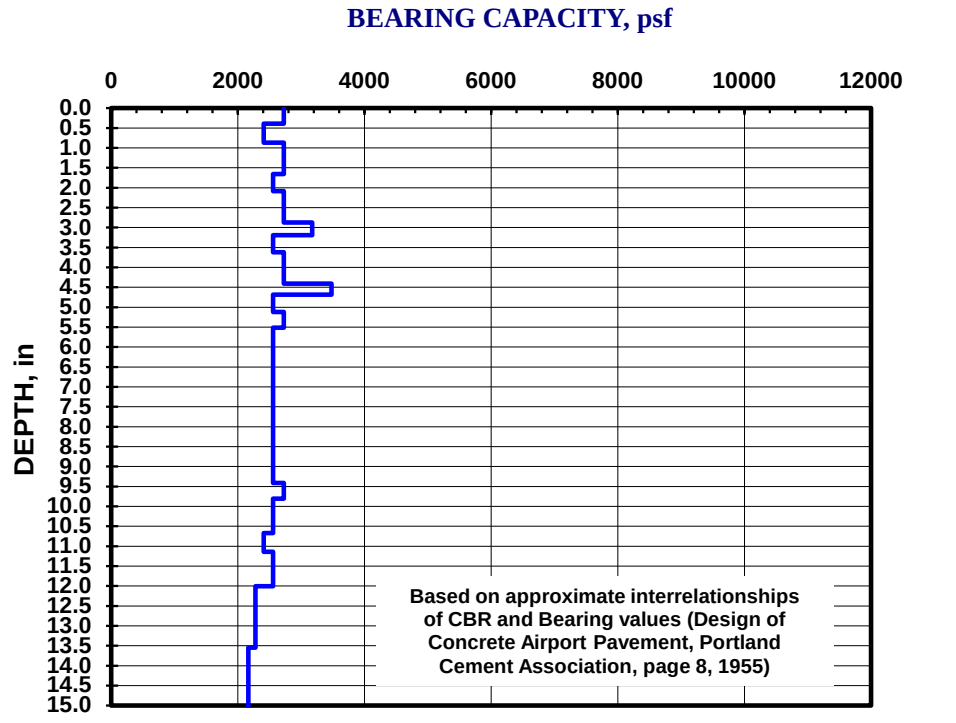

DCP TEST DATA

Project: Maverik-Palmdale, CA
Location: DCP-3
Hammer: 17.6 lb
Soil Type(s): SILT (ML)

Date: 8/26/2022

No. of Blows	Individual Penetration (mm)	Type of Hammer
1	0	2
1	26	2
1	31	2
1	27	2
1	26	2
1	25	2
1	23	2
1	21	2
1	22	2
1	20	2
1	20	2
1	18	2
1	19	2
1	18	2
1	19	2
1	20	2
1	19	2
1	21	2
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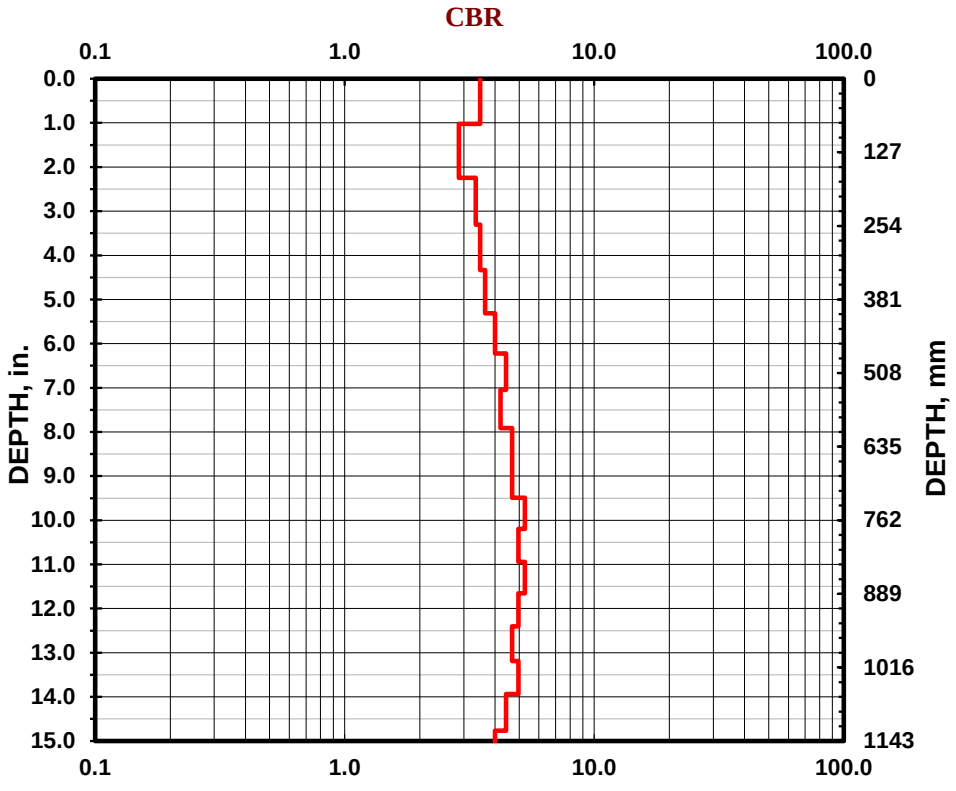
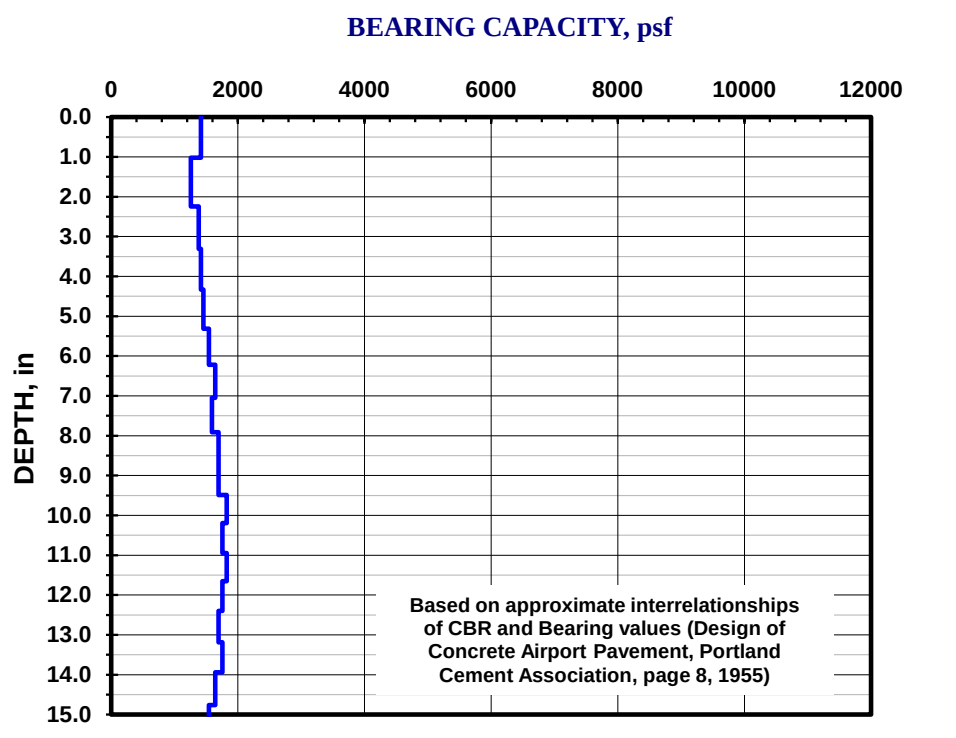
1		2





Appendix F

Noise Impact Study

Maverik Fueling Station Project

Noise Impact Study

City of Palmdale, CA

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1.0 Introduction

1.1 Purpose of Analysis and Study Objectives

This noise assessment was prepared to evaluate the potential noise impacts for the project study area and to recommend noise mitigation measures, if necessary, to minimize the potential noise impacts. The assessment was conducted and compared to the noise standards set forth by the Federal, State, and Local agencies. Consistent with the City's Noise Guidelines, the project must demonstrate compliance to the applicable noise criteria as outlined within the City of Lancaster Noise Element and Municipal Code.

The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- A description of the local noise guidelines and standards;
- An analysis of traffic noise impacts to the sensitive receptors and the project site; and
- An analysis of construction noise impacts.

1.2 Site Location and Study Area

The project site is located near the corner of West Avenue South and State Route 14 (APN: 3004-016-032) in the City of Palmdale, CA, as shown in Exhibit A. The site is currently zoned as special development by the City of Palmdale. The project borders special development uses to the east and west, low density residential use to the north, industrial use to the south, and rural land uses to the southeast and southwest. West Avenue South is to the south and State Route 14 is to the east.

1.3 Proposed Project Description

The project proposes the construction of a 5,637-square foot convenience store, a total of thirty seven (37) parking spaces, twenty-four (24) gasoline fueling stations. Exhibit B demonstrates the site plan for the project.

Exhibit A

Location Map

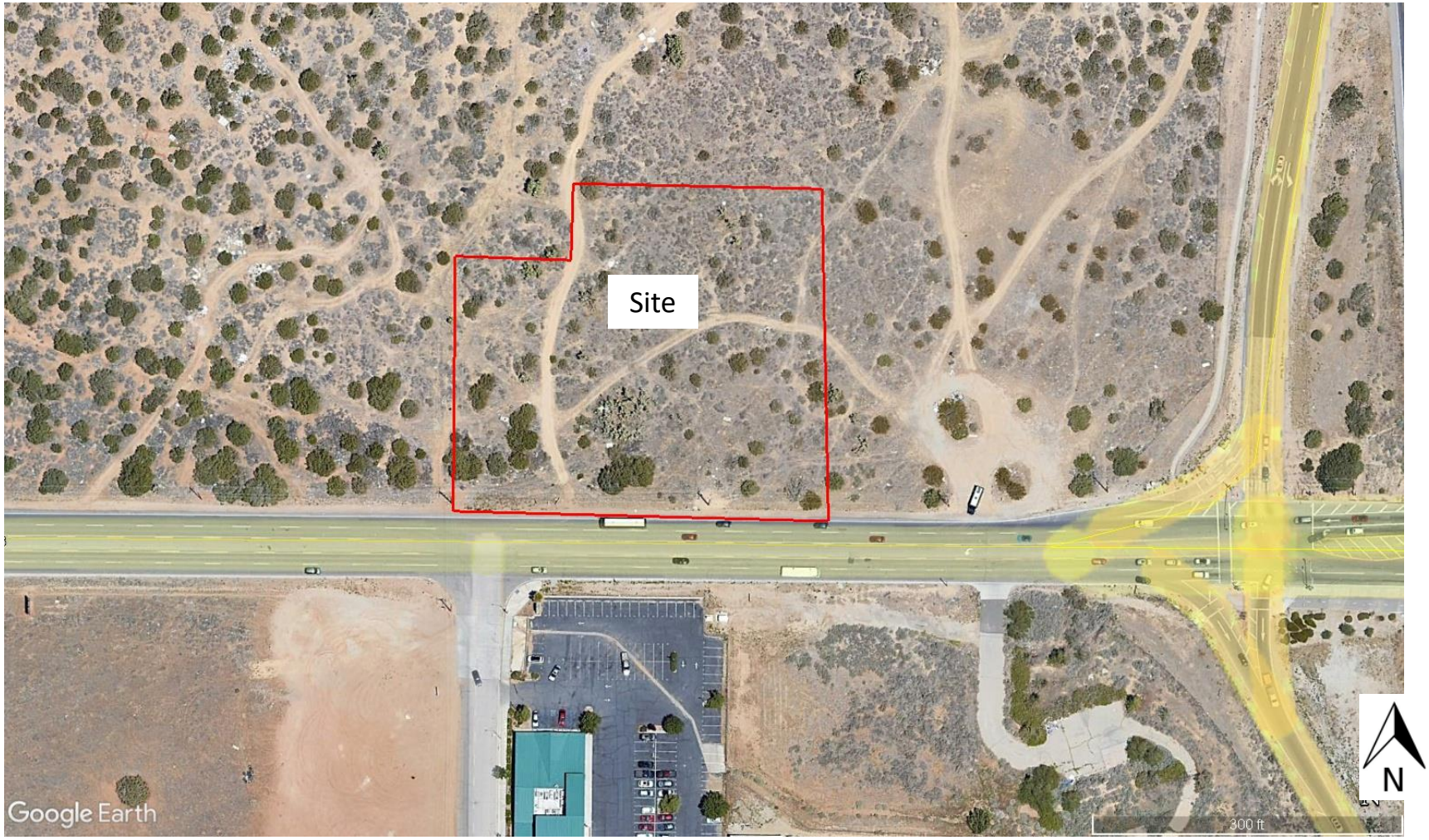
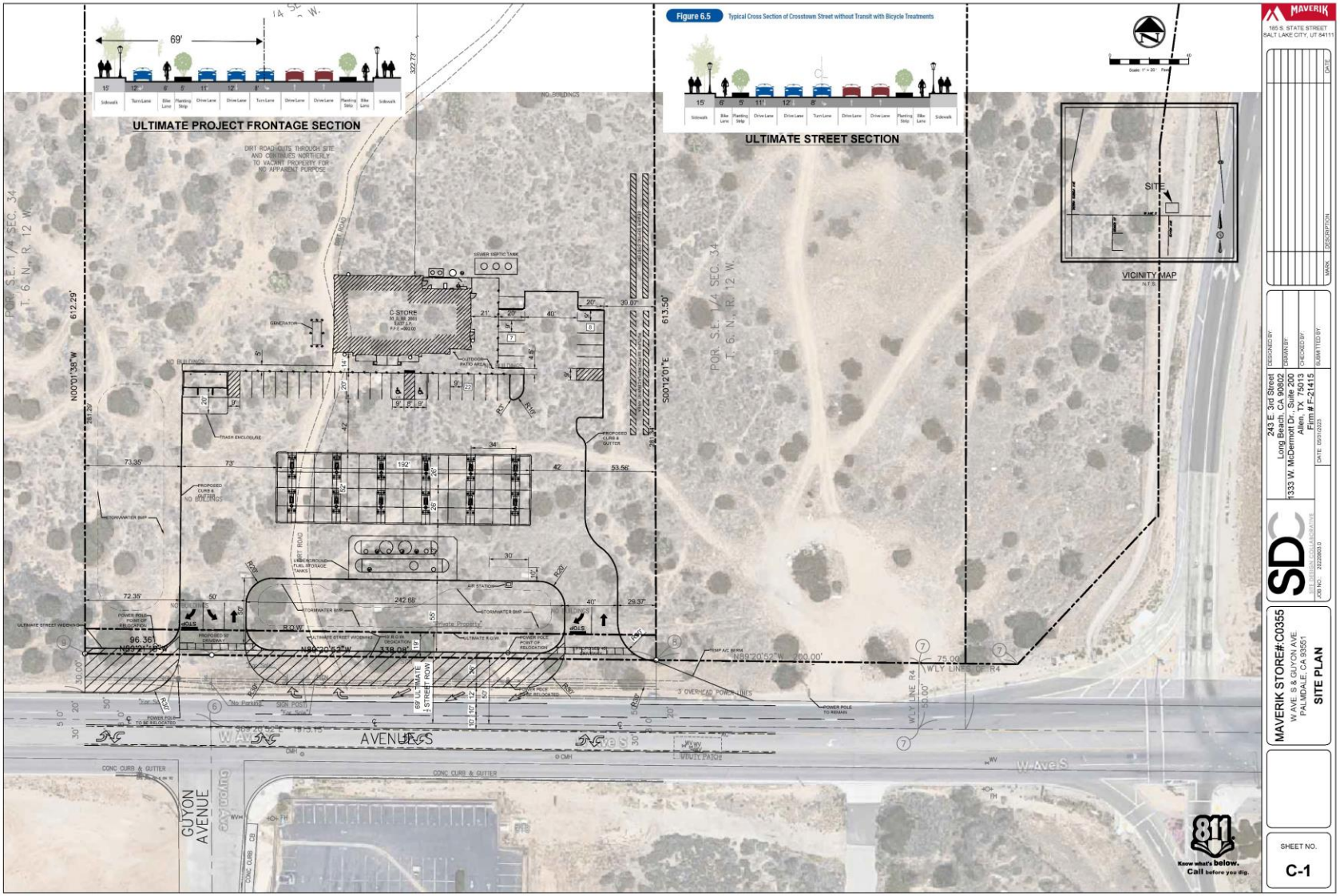


Exhibit B

Site Plan



2.0 Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used within the report.

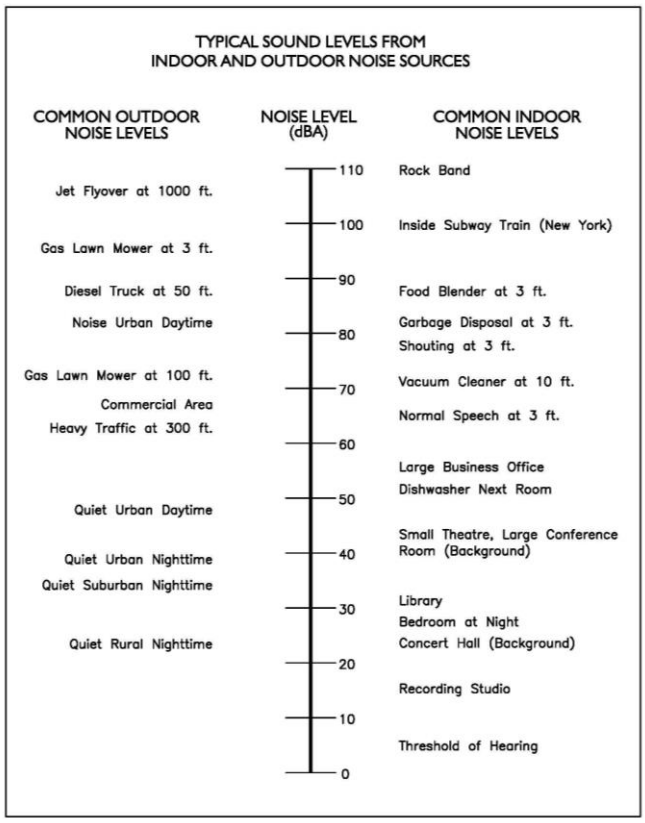
2.1 Sound, Noise, and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. 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 at 20 Hz to the high pitch of 20,000 Hz.

Exhibit C: Typical A-Weighted Noise



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 abbreviated dB. Exhibit C illustrates references sound levels for different noise sources.

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 sounds or 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 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound.

2.5 Human Response to Changes in Noise Levels

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 weighting is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive a 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.

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.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after the 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: *A*ny 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...".

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

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 dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

2.7 Traffic Noise Prediction

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2 axle), and heavy truck percentage (3 axle and greater), and (4) sound propagation. The greater the volume of traffic, the higher speeds and truck percentages equate to a louder volume in noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately 3 dB; reasons for this are discussed in the sections above.

2.8 Sound Propagation

As sound propagates from a source it spreads geometrically. 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.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use 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 a 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 7.5 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 from a noise source. Wind, temperature, air humidity, and turbulence can further impact how far sound can travel.

3.0 *Ground-Borne Vibration Fundamentals*

3.1 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 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.

3.2 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. According to the FTA, fragile buildings can be exposed to ground-borne vibration levels of 0.3 inches per second without experiencing structural damage.

3.3 Vibration Perception

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.

4.0 *Regulatory Setting*

The proposed project is located in Palmdale, California, and noise regulations are addressed through the efforts of various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three 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) originally was 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 for regulating noise from aircraft and airports. The Federal Highway Administration (FHWA) is responsible for regulating 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 Housing and Urban Development (HUD) is responsible for establishing noise regulations as it relates to exterior/interior noise levels for new HUD-assisted housing developments near high noise areas.

The federal government advocates that local jurisdictions 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 that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has 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.

4.2 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 the compatibility of sensitive uses with various incremental levels of noise.

The State of California has established noise insulation standards as outlined in Title 24 and the Uniform Building Code (UBC) 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 as illustrated in Exhibit D, which presents the City of Palmdale's adaptation of these guidelines.

Exhibit D: Land Use Compatibility Guidelines

[1] Source: California Office of Noise Control. Guidelines for the Preparation and Content of Noise Elements of the General Plan. February 2017.

4.3 City of Palmdale Noise Regulations

The City of Palmdale outlines their noise regulations and standards within the Noise Element from the General Plan and Chapter 9.18 of the Municipal Code. For purposes of this analysis, the City's General Plan and Noise Ordinance is used to evaluate the roadway noise and stationary noise impacts to and from the proposed project. The Noise Element outlines Goals and Polices and establishes Noise/Land Use Compatibility Criteria (Table N-1). This assessment will compare the project noise levels to the commercial noise limits since the proposed project and surrounding uses are zoned as commercial land uses. The project impacts were compared to the City's commercial and residential noise standards.

The City of Palmdale outlines their noise regulations and standards within the Noise Element of the City's General Plan and the Noise Code located in the City's Municipal Code.

City of Palmdale General Plan

The City requires that acoustical analysis reports include an evaluation of impacts associated with noise levels at the project site as well as the impact of the project on the existing noise environment. Where appropriate, the City will require acoustical analysis reports to include acoustical design to achieve the appropriate interior and exterior noise levels through sound insulation, or other means, as indicated in Table 1. For commercial land uses, an interior noise level of 55 dBA Leq would apply to the proposed commercial building, and a "noise level which does not interfere with normal business activity" is the standard for on-site exterior noise levels.

Table 1: Maximum Acceptable Noise Levels

Land Use	Exterior	Interior	Scale
Residential			
SFR	65	45	dBA, CNEL
MFR	65	45	dBA, CNEL
MHP	65	45	dBA, CNEL
Commercial including, but not limited to:	A noise level which does not jeopardize health, safety, and welfare of visitors.		
Retail		55	Leq(h)
Services		55	Leq(h)
Office		55	Leq(h)
Institutional including, but not limited to:	A noise level which does not jeopardize health, safety, and welfare of visitors.		
School		45	Leq(h)
Hospitals		45	Leq(h)
Nursing Homes		45	Leq(h)
Industrial including but not limited to:	A noise level which does not interfere with normal business activity.		
Industrial Park		65	Leq(h)
Business Park		65	Leq(h)
Quarry	Maximum 65 Leq(h) at the interface with residentially designated land.	n/a	n/a
Source: City of Palmdale General Plan Noise Element, 1993			

General Plan Noise Element Goals, objectives and policies applicable to the proposed project are presented below.

Goal N1: Minimize the exposure of residents to excessive noise to the extent possible, through the land planning and the development review process.

Objective N1.1: Utilize appropriate land use planning as the primary method of achieving noise compatibility among adjacent land uses.

Policy N1.1.1: Locate noise compatible land uses near existing and future air, rail and highway transportation noise sources.

Policy N1.1.3: When proposed stationary noise sources could exceed an exterior noise level of 65 dBA CNEL at present, or could impact future noise sensitive land uses, require preparation of an acoustical analysis and mitigation measures to reduce noise levels to no more than 65 dBA CNEL exterior and 45 dBA CNEL interior; if the noise level cannot be reduced to these thresholds through mitigation, the new noise source should not be permitted.

Policy N1.1.4: Consider the noise environment when making land use decisions with respect to the guidelines contained in Table 2, and require noise standards consistent with the criteria listed on Table 1. The State Recommended Acceptable Noise Guidelines, listed in Table 2, are provided as guidelines only, and are not represented as standards.

Objective N1.2: Protect and maintain those areas having acceptable noise environments.

Policy N1.2.2: Restrict construction hours during the evening, early morning and Sundays.

Policy N1.2.3: Utilize any or all of the following measures in order to maintain acceptable noise environments throughout the City:

1. Control of noise at its source, including noise barriers and other muffling devices built into the noise source;
2. The provision of buffer areas and/or wide setbacks between the noise source and other development;
3. The reduction of densities, where practical, adjacent to the noise source (freeway, airport, railroad);
4. The use of sound insulation, blank walls, double paned windows and other design or architectural techniques to reduce interior noise levels; and
5. Designation of appropriate land uses adjacent to known noise sources.

City of Palmdale Municipal Code

Section 9.18.101 Noise

Section 9.18.010 of the City of Palmdale Municipal Code makes it unlawful for any person to willfully make or continue, or cause or permit to be made or continued, any loud, unnecessary, or unusual noise which unreasonably disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The characteristics and conditions, which may be considered in determining whether such noise violates the provisions of this section, shall include, but not be limited to, the following:

(1) The volume of the noise;
(2) The intensity of the noise;
(3) Whether the nature of the noise is usual or unusual;
(4) Whether the origin of the noise is natural or unnatural;
(5) The volume and intensity of the background noise, if any;
(6) The proximity of the noise to sleeping facilities;
(7) The nature and zoning of the area within which the noise emanates;
(8) The density of the inhabitation of the area within which the noise emanates;
(9) The time of the day or night the noise occurs;
(10) The duration of the noise;
(11) Whether the noise is recurrent, intermittent, or constant;
(12) Whether the noise is produced by a commercial or noncommercial activity.

Section 9.18.020 Acts constituting disturbing, excessive, loud, offensive noise

Section 9.18.020 of the code identifies horns, signaling devices, etc. and radios, television sets, phonograph, amplifiers and similar devices as noise sources that among others, that can be disturbing, excessive, loud, or offensive noise. Causing or allowing such activities in a manner that is disturbing to the peace is unlawful. This section of the ordinance clarifies that these are not the only noise sources that may be found to cause disturbing, excessive, loud, or offensive noises,

Section 9.18.020 also prohibits the use of jake brakes, using compression release engine brakes, and any method of using engine compression to slow a vehicle is prohibited in the City of Palmdale and unlawful.

Section 8.28.030 Construction noise prohibited in residential zones

Except as otherwise provided in this chapter, no person shall perform any construction or repair work on any Sunday, or any other day after 8:00 p.m. or before 6:30 a.m., in any residential zone or within 500 feet of any residence, hotel, motel or recreational vehicle park. For the purposes of this section, construction and repair work includes work of any kind upon any building or structure, earth excavating, filling, or moving, and delivery, preparation or operation of construction equipment, materials or supplies where any of the foregoing entails the use of an air compressor, jack hammer, power-driven drill, riveting machine, excavator, semi-truck, diesel power truck, tractor, cement truck, or earth moving equipment, hand hammer, or other machine, tool, device or equipment which makes loud noise which disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness sleeping or residing in the area.

The City of Palmdale has not adopted a numerical threshold that identifies what a substantial increase

would be. For purposes of this analysis, the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2006) criteria will be used to establish significance thresholds. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} averaged over an 8-hour period ($L_{eq\ (8\text{-}hr)}$); and the nighttime noise threshold is 70 dBA $L_{eq\ (8\text{-}hr)}$. For commercial uses, the daytime and nighttime noise threshold is 85 dBA $L_{eq\ (8\text{-}hr)}$. In compliance with the City's Code, it is assumed that construction would not occur during the noise-sensitive nighttime hours.

Threshold Applied to the Project

According to Table N-3 of the Noise Element of the Palmdale General Plan (see Table 1), there are different thresholds and different noise metrics applied to commercial and residential uses adjacent to the project. Uses bordering the project are zoned commercial to the east and north, and residential uses to the south and west. Therefore, the adjacent residential use is compared to the residential limits set forth in the General Plan and the adjacent commercial uses are compared to the commercial limits described in the General Plan.

The threshold applied to the nearest adjacent residential use is that the project only CNEL may not exceed the exterior limit of 65 dBA, CNEL or the interior limit of 45 dBA, CNEL. Typical building construction will provide a very conservative 20 dBA noise level reduction, so it is safe to assume that if the project meets the exterior limit of 65 dBA, CNEL, it will also comply with the interior noise limit.

The threshold applied to the nearest existing and zoned commercial uses is computed using an Leq(h) metric. There is no exterior commercial limit so long as the project does not produce sufficient noise to "jeopardize health, safety, and welfare of visitors." However, there is a commercial interior limit of 55 dBA, Leq(h). Typical building construction will provide a very conservative 20 dBA noise level reduction, so it is safe to assume that if the project noise level at the façade of an adjacent commercial use is less than 75 dBA, Leq(h), it will also comply with the interior noise limit of 55 dBA, Leq(h).

5.0 Study Method and Procedure

The following section describes the noise modeling procedures and assumptions used for this assessment.

5.1 Noise Measurement Procedure and Criteria

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as the first row of houses
- Locations that are acoustically representative and equivalent of the area of concern
- Human land usage
- Sites clear of major obstruction and contamination

All measurements equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA). MD noise measurement procedures are presented below:

- The sound level meter was calibrated (Piccolo-II) before and after the measurement
- Following the calibration of equipment, a windscreen was placed over the microphone
- Frequency weighting was set on “A” and slow response
- Results of the noise measurements were recorded on field data sheets
- Temperature and sky conditions were observed and documented

5.2 Noise Measurement Locations

The noise monitoring location was selected to obtain a baseline of the existing noise environment. One short-term noise measurement was conducted at the Project site. Appendix A includes photos, the field sheet, and measured noise data. Exhibit E illustrates the location of the measurement.

5.3 SoundPLAN Noise Model (Operational Noise)

SoundPLAN acoustical modeling software was utilized to model project operational noise at nearby sensitive receptors. The SoundPLAN software utilizes algorithms (based on the inverse square law) to calculate noise level projections. It allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations. It also calculates noise level increases due to the reflection of noise from hard surfaces.

The future worst-case noise level projections were modeled using referenced sound level data for the various stationary on-site sources (parking spaces, gas and diesel canopies). The model assumes that approximately thirty (37) parking spaces, twenty (24) gasoline fueling stations.

The SoundPLAN model assumes that all noise sources are operating simultaneously (worst-case scenario) when in actuality the noise will be intermittent and lower in noise level. The model is able to evaluate the noise attenuating effects of any existing or proposed property line walls.

Parking was modeled as three (3) car movements per parking/fueling space per hour. Three movements per hour was determined by taking the AM peak hour trip generation of 156 movements and divided by 61 parking and fueling spaces for 3 cars per hour. Modeling assumptions are summarized in Table 2. Input and output calculations are provided in Appendix B.

Table 2: SoundPLAN Modeling Assumptions

Noise Source	Source Type	Movements per Hour
Parking/Fueling Area	Parking Lot Tool	3

5.4 Traffic Noise Prediction Modeling

The FHWA Traffic Noise Prediction Methodology (FHWA-RD-77-108) was utilized to model future traffic noise levels on the project site and existing and existing plus project traffic noise volumes along roadways affected by project generated vehicle traffic. The FHWA model arrives at the predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL).

Project-generated vehicle traffic will result in an incremental increase in ambient noise levels. To determine the project's noise impact to the surrounding land uses, MD generated noise contours for existing ADT, and existing plus project conditions. Table 3 indicates the roadway parameters and vehicle distribution utilized for the modeling. Noise contours are used to provide a characterization of sound levels experienced at a set distance from the centerline of a subject roadway. They are intended to represent a worst-case scenario and do not take into account structures, sound walls, topography, and/or other sound attenuating features that may further reduce the actual noise level. Noise contours are developed for comparative purposes and are used to demonstrate potential increases/decreases along subject roadways as a result of a project. The referenced traffic data and traffic noise calculation worksheets outputs are located in Appendix C.

- Roadway classification – (e.g., freeway, major arterial, arterial, secondary, collector, etc.),
- Roadway Active Width – (distance between the center of the outermost travel lanes on each side of the roadway)
- Average Daily Traffic Volumes (ADT), Speeds, Percentages of autos, medium 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

Table 3: Roadway Parameters and Vehicle Distribution

Roadway/Type	Segment	Existing ADT[1]	Existing + Project ADT[2]	Speed (MPH)	Site Conditions
West Avenue S	W. of SR14 SB ramp	11,600	12,500	55	Hard
Motor-Vehicle Type[3]		**Daytime % (7AM to 7 PM)**	**Evening % (7 PM to 10 PM)**	**Night % (10 PM to 7 AM)**	**Total % of Traffic Flow**
Automobiles		77.5	12.9	9.6	97.4
Medium Trucks		84.8	4.9	10.3	1.8
Heavy Trucks		86.5	2.7	10.8	0.7

Notes:
[1] See Appendix C for Traffic Volume Flow Map for the City of Lancaster.
[2] Traffic – IEG Maverik Gas Station Transportation Impact Analysis. See Appendix C.
[3] https://dot.ca.gov/programs/traffic-operations/census

5.5 Construction Noise Modeling

Construction noise associated with the proposed project was calculated utilizing methodology presented in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2018) together with several key construction parameters including distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the project site. Construction activities are anticipated to include four phases site preparation, grading, building construction, and paving.

Construction noise levels were calculated for each phase based on the CalEEMod Air Quality Model assumptions. All equipment was assumed to be situated at the center of the project site. Construction worksheets are provided in Appendix D.

6.0 Existing Noise Environment

One (1) 1-hour noise measurement was conducted at the project site to document the existing noise environment. The measurements include the Leq, Lmin, Lmax, and other statistical data (e.g. L2, L8). The results of the noise measurement are presented in Table 4. Noise measurement field sheets are provided in Appendix A.

Table 4: Short-Term Noise Measurement Data (dBA)[1]

Date	Time	1-Hour dB(A)							
		L_{EQ}	L_{MAX}	L_{MIN}	L_2	L_8	L_{25}	L_{50}	L_{90}
6/1/2023	9:41AM-10:41 AM	61.5	72.0	46.1	68.0	65.9	63.0	59.1	49.8

Notes:
[1.] Short-term noise monitoring location (ST-1) is illustrated in Exhibit E.

Short.

Exhibit E

Measurement Locations

X = Measurement location

7.0 Future Noise Environment Impacts and Mitigation

This assessment analyzes future noise impacts to sensitive receptors and the project and compares the results to the City's Noise Standards. The analysis details the estimated exterior noise levels associated with traffic from adjacent roadway sources. The City has established different significance thresholds for different types of noise impacts.

7.1 Off-Site Traffic Noise Impact

The potential off-site noise impacts caused by the increase in vehicular traffic as a result of the project were calculated at a distance of 287 feet from the centerline of affected road segments. The noise levels at 287 feet both with and without project-generated vehicle traffic were compared and the increase was calculated. The distance to the 70, 65, 60, and 55 dBA CNEL noise contours are also provided for reference (Appendix C). Noise contours were calculated for the following scenarios and conditions:

- Existing Condition: This scenario refers to the existing year traffic noise condition and is demonstrated in Table 5.

- Existing + Project Condition: This scenario refers to the existing year plus project traffic noise condition and is demonstrated in Table 5.

As shown in Table 5, the addition of project-generated vehicle traffic to West Avenue South would result in negligible increases in ambient noise levels and would not be significant.

Table 5: Existing Scenario - Noise Levels Along Roadways (dBA CNEL)

Existing Without Project Exterior Noise Levels

Roadway	Segment	CNEL at 287 Ft (dBA)	Distance to Contour (Ft)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
West Avenue S	W. of SR14 SB ramp	58.1	46	100	215	462

Existing With Project Exterior Noise Levels

Roadway	Segment	CNEL at 287 Ft (dBA)	Distance to Contour (Ft)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
West Avenue S	W. of SR14 SB ramp	58.4	49	105	226	486

Change in Existing Noise Levels as a Result of Project

Roadway[1]	Segment	CNEL at 70 Feet dBA[2]			
		Existing Without Project	Existing With Project	Change in Noise Level	Potential Significant Impact
West Avenue S	W. of SR14 SB ramp	58.1	58.4	0.3	No

Notes:
[1] Exterior noise levels calculated at 5 feet above ground level.
[2] Noise levels calculated from centerline of subject roadway.

7.2 On-Site Traffic Noise Impact

Future noise levels associated with traffic were modeled using the FHWA Traffic Noise Model calculations to evaluate the project. The results of the FHWA calculations were compared with the City's

exterior standards presented in Table 1 of this report as they apply to future traffic noise impacts to the proposed project. The Project noise level is less than the 70 dBA CNEL maximum applied to commercial properties. It will not change due to the increase in traffic levels due to the project. There are no outdoor uses for this Project, and the on-site traffic noise impact is considered less than significant.

7.3 Noise Impacts to Off-Site Receptors Due to Stationary Noise Sources

The project is surrounded by vacant land to the north, east, and west with West Avenue S to the south. There are no sensitive receptors surrounding the site. The vacant land surrounding the site is zoned commercial and has the potential to be affected by the projects operational noise Worst-case operational noise was modeled using SoundPLAN acoustical modeling software. Three (3) receptors representative of the potential commercial uses adjacent to the site were modeled using the SoundPLAN noise model to evaluate the proposed project's operational impact. A receptor is denoted by a yellow dot. All yellow dots represent property lines. The results are presented in Table 6.

Project Operational Noise Levels

Worst-case "project only" exterior operational noise is presented in Exhibit F. Operational noise levels are expected to reach 53 to 56 dBA CNEL at the adjacent receptors.

Project Plus Ambient Operational Noise Levels

Existing plus project noise level projections are anticipated to reach up to 66 dBA Leq at the nearest commercial receptors. The project-generated operational noise is expected to result in a interior noise level of 45 to 46 dBA at the adjacent commercial sites. This does not exceed the Interior Commercial noise limit of 55 dBA. Therefore, the impact is less than significant.

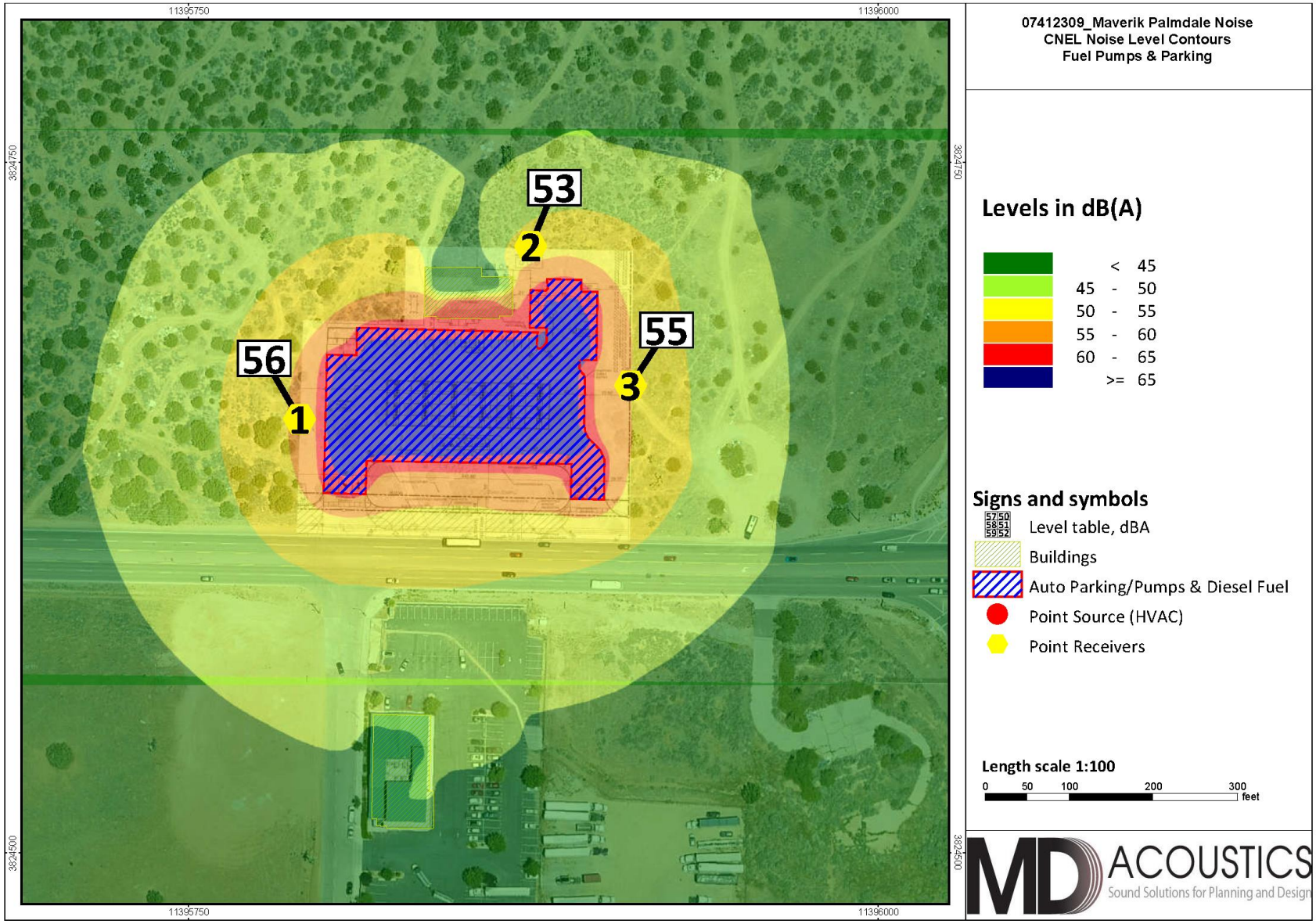
Table 6: Operational Noise Levels (dBA, Leq)

Receptor[1]	Existing Ambient Noise Level (dBA, Leq)[2]	Project Noise Level (dBA, Leq)[3]	Total Combined Noise Level (dBA, Leq)	Interior Noise Limit (dBA, Leq)	Interior noise level (dBA, Leq)
R1	62	56	66	55	46
R2		53	65		45
R3		55	66		46

Notes:
1. R1 to R3 represent potential commercial uses.
2. See Table 5 for measured ambient noise levels.
3. See Exhibit E for the operational noise level projections at said receptors.

Exhibit F

Project Leq Operational Noise Levels



8.0 Construction Noise and Vibration Impacts

The degree of construction noise may vary for different areas of the project site and also vary depending on the construction activities. Project construction will occur in five (5) phases: site preparation, grading, building construction, paving, and finishing. This section summarizes and discusses noise and ground-borne vibration modeling efforts, impact analysis, and mitigation, if necessary.

8.1 Construction Noise

Typical construction equipment noise levels are presented in Table 7.

Table 7: Typical Construction Equipment Noise Levels[1]

EQUIPMENT POWERED BY INTERNAL COMBUSTION ENGINES

Type	Noise Levels (dBA) at 50 Feet
Earth Moving	
Compactors (Ground)	80
Front Loaders	80
Backhoes	80
Tractors	84
Scrapers, Graders	85
Pavers	85
Trucks	84
Materials Handling	
Concrete Mixers	85
Concrete Pumps	82
Cranes	85
Stationary	
Pumps	77
Generators	82
Compressors	80

IMPACT EQUIPMENT

Type	Noise Levels (dBA) at 50 Feet
Concrete Saws	90
Vibratory Pile Driver	95

Notes:
[1] Referenced Noise Levels from the FHWA Construction Noise Handbook

Construction noise associated with each phase of the project was calculated at nearby sensitive receptors utilizing methodology presented in the Federal Highway Administration (FHWA) Construction Noise Model together with several key construction parameters including distance to each sensitive

receiver, equipment usage, percent usage factor, and baseline parameters for the project site. Construction was modeled from the edge of the site to the nearest adjacent properties in use.

Construction activities are anticipated to include five phases: site preparation, grading, building construction, paving, and architectural coating. Noise levels associated with each phase are shown in Table 8. The construction noise calculation output worksheet is located in Appendix D.

Table 8: Construction Noise Level by Phase (dBA, Leq)

Location	Phase	Construction Noise Level (dBA, Leq)
South Commercial	Prep	59.1
	Grade	61.6
	Build	63.1
	Paving	57.2
	Finish	51.0

As shown in Table 8, project construction noise will range between 51 to 63 dBA Leq at the nearest sensitive receptors, which is the commercial use south across West Avenue South from the project.

The Project will be required to adhere to Section 08.28.030 of the City of Palmdale Municipal Code which outlines the allowed times for construction. Therefore, the impact is less than significant.

In addition to complying with Section 08.28.030 of the City of Palmdale Municipal Code, the following best practices are recommended to reduce construction noise:

1. During construction, the contractor shall ensure that all construction equipment is equipped with appropriate noise attenuating devices.

2. The contractor should locate equipment staging areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.

3. Idling equipment should be turned off when not in use.

4. Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

8.2 Construction Vibration

Construction activities can produce vibration that may be felt by adjacent land uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may

be from a bulldozer. A large bulldozer has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet which is perceptible but below any risk to architectural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{equipment} = PPV_{ref} (100/D_{rec})^n$$

Where: PPV_{ref} *= reference PPV at 100ft.*
D_{rec} *= distance from equipment to receiver in ft.*
n = 1.5 (the value related to the attenuation rate through the ground)

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual in Table 9 (below) provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

Table 9: Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Table 19, Transportation and Construction Vibration Guidance Manual, Caltrans, Sept. 2013.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 10 gives approximate vibration levels for particular construction activities. This data provides a reasonable estimate for a wide range of soil conditions.

<Table 10, next page>

Table 10: Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (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	0.21	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
Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2018.		

The nearest existing building is 212 feet west of the center of the project site. At this distance, a large bulldozer would yield a worst-case 0.008 PPV (in/sec) which is not perceptible and will not result in architectural damage. The impact is not significant. The ground-borne vibration worksheet is provided in Appendix E.

9.0 CEQA Analysis

The California Environmental Quality Act Guidelines (Appendix D) establishes thresholds for noise impact analysis as presented below:

(a) Would the project 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 Code, or applicable standards of other agencies?

Transportation Noise Impacts

Transportation noise impacts would be considered significant if the existing plus project levels are expected to increase by more than 3 dB. Compared to existing traffic noise levels, future traffic volumes are expected to increase 0.3 dBA CNEL at existing land uses. The impact is therefore less than significant.

Stationary Noise Sources

Stationary noise impacts would be considered significant if they result in exceedances of Policy N1.1.3 of the General Plan. Implementation of the proposed project may result in stationary noise related to cars coming and going from the project site.

Operational noise levels are expected to reach 53 to 56 dBA Leq at the adjacent commercial receptors. The city does not have an exterior noise level for commercial uses. However, the city does have an interior noise level of 55 dBA for commercial uses. Standard building construction would result in a minimum 20 dBA decrease of the exterior noise levels. These noise levels do not exceed the City's interior commercial noise standard of 55 dBA. Therefore, the impact would be less than significant.

Construction Noise and Vibration

Construction noise will be significant if construction activities occur outside of the permitted construction hours specified in Section 08.28.030 of the City of Palmdale Municipal Code.

Noise due to construction will result in short-term noise impacts associated with construction activities.

The site preparation and building phases of on-site construction activities will generate the highest temporary noise levels. The loudest construction equipment on the site will be tractors, graders, scrapers, and dozers. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. The maximum Leq level for the loudest phase of construction is expected to be 63.1 dBA Leq and 67.3 dBA Lmax at the nearest existing adjacent commercial building.

b) Generate excessive ground-borne vibration or ground-borne noise levels?

Construction vibration will be significant if vibration exceeds levels that would result in structural damage to existing buildings. Construction activity is not anticipated to occur within 50 feet of sensitive

receptors. At a distance of 212 feet, the nearest commercial building to the project property line, a large bulldozer would yield a worst-case 0.008 PPV (in/sec) which is below the threshold of any risk of damage. The project may result in temporary daytime residential annoyance. Construction activity is not expected to fall within the limits of structural damage, and therefore, the impact is less than significant.

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?

The nearest airport to the project site is the Palmdale Regional Airport. The Palmdale Regional Airport is approximately 5 miles to the southeast of the project. The project would be located outside the noise contours of Palmdale Regional Airport. Therefore, no substantial noise exposure from airport noise would occur and it would have no impact.

10.0 References

City of Palmdale
2023 2045 General Plan
2023 Municipal Code

California Department of Transportation (Caltrans)
2013 Transportation and Construction Induced Vibration Guidance Manual.
2018 Technical Noise Supplement to the Traffic Noise Analysis Protocol. Sept.

Federal Highway Administration (FHWA)
2006 Construction Noise Handbook

Federal Transit Administration (FTA)
2018 Transit Noise and Vibration Impact Assessment Manual

Governor's Office of Planning and Research
State of California General Plan Guidelines, 1998

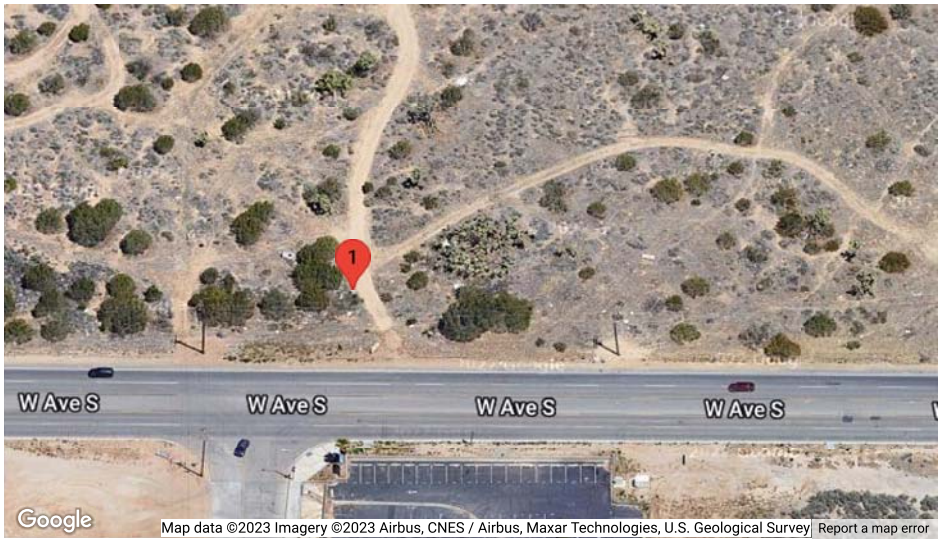
SoundPLAN International, LLC
2019 SoundPLAN Essential 8.1 Manual.

Appendix A:

Field Measurement Data

1-Hour Noise Measurement Datasheet

Project Name:	Maverik Palmdale Noise		**Site Observations:**
Project: #/Name:	0741-2023-009		63°, sunny and clear, winds 10 to 20 mph, traffic light to moderate
Site Address/Location:	West Avenue South and State Rout		
Date:	06/01/2023		
Field Tech/Engineer:	Dennis Jordan / Robert Pearson		
Sound Meter:	XL2, NTI	**SN:** A2A-05967-E0	
Settings:	A-weighted, slow, 1-sec, 1-hour interval		
Site Id:	ST-1		



MD ACOUSTICS

1-Hour Noise Measurement Datasheet - Cont.

Project Name: Maverik Palmdale Noise

Site Address/Location: West Avenue South and State Rout

Site Id: ST-1

Figure 1: ST-1

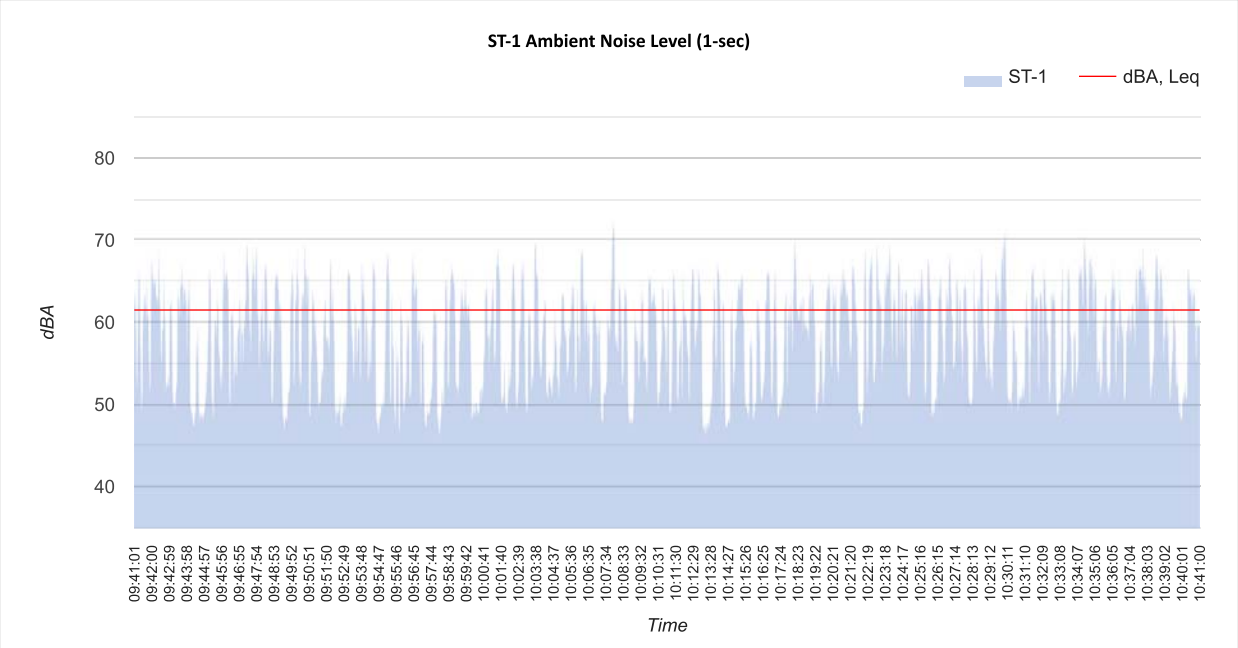
Table 1: Baseline Noise Measurement Summary

Location	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
ST-1	9:41 AM	10:41 AM	61.5	72.0	46.1	68	65.9	63	59.1	49.8

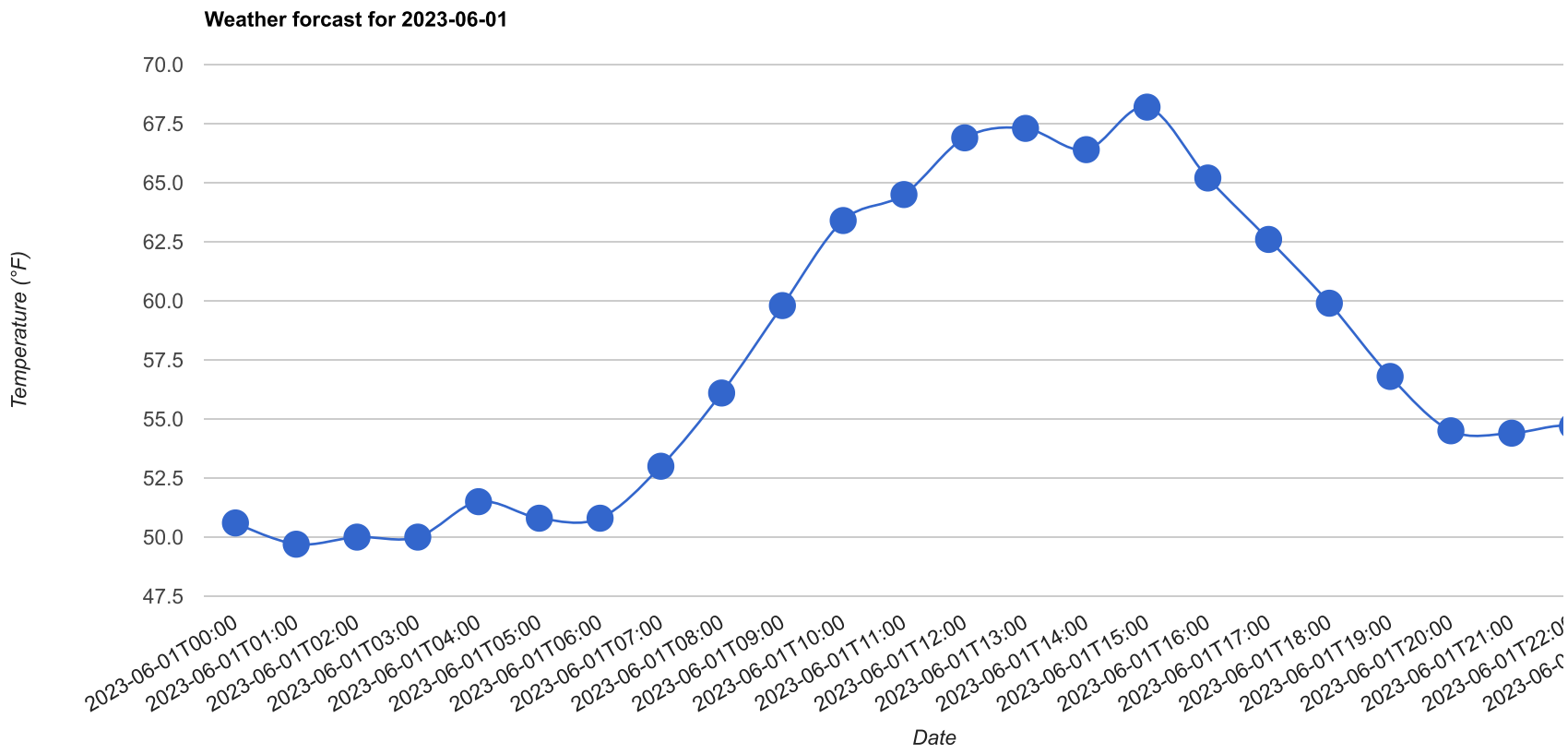
MD ACOUSTICS

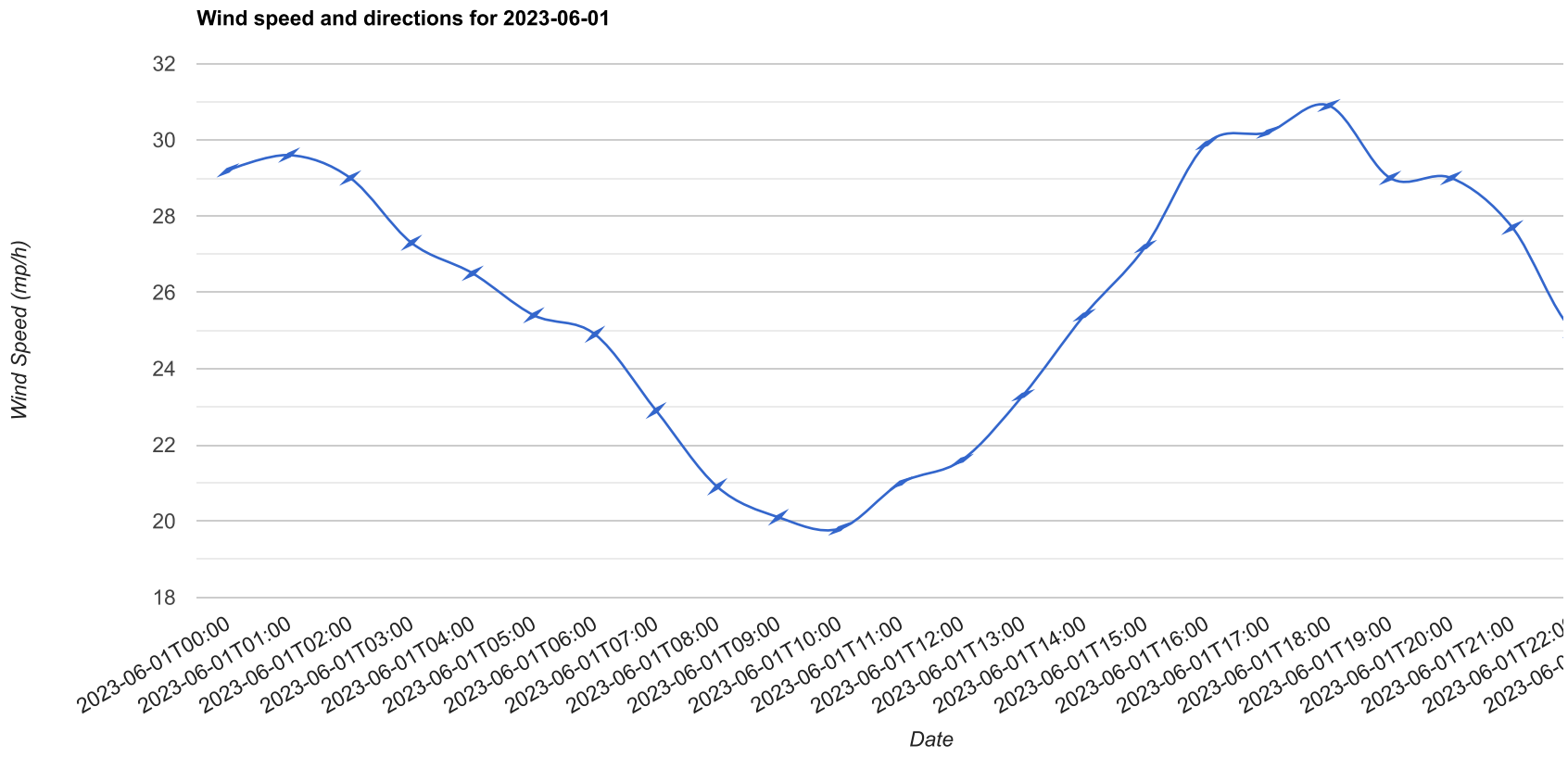
1-Hour Noise Measurement Datasheet - Cont.

Project Name:	Maverik Palmdale Noise	**Site Topo:**	Single story housing/buildings	**Noise Source(s) w/ Distance:**
Site Address/Location:	West Avenue South and State Rout	**Meteorological Cond.:**	63°, winds 10 to 20 mph, sunny and clear	Road Noise / Avenue S 75 ft, Hwy 14 approx 1/4 mile
Site Id:	ST-1	**Ground Type:**	Asphalt, Dirt and Vegetation	



MD ACOUSTICS


Weather forcast for 2023-06-01
70.0
67.5
65.0
62.5
60.0
57.5
55.0
52.5
50.0
47.5
Temperature (°F)
2023-06-01T00:00
2023-06-01T01:00
2023-06-01T02:00
2023-06-01T03:00
2023-06-01T04:00
2023-06-01T05:00
2023-06-01T06:00
2023-06-01T07:00
2023-06-01T08:00
2023-06-01T09:00
2023-06-01T10:00
2023-06-01T11:00
2023-06-01T12:00
2023-06-01T13:00
2023-06-01T14:00
2023-06-01T15:00
2023-06-01T16:00
2023-06-01T17:00
2023-06-01T18:00
2023-06-01T19:00
2023-06-01T20:00
2023-06-01T21:00
Date


Wind speed and directions for 2023-06-01
Wind Speed (mp/h)
32
30
28
26
24
22
20
18
2023-06-01T00:00
2023-06-01T01:00
2023-06-01T02:00
2023-06-01T03:00
2023-06-01T04:00
2023-06-01T05:00
2023-06-01T06:00
2023-06-01T07:00
2023-06-01T08:00
2023-06-01T09:00
2023-06-01T10:00
2023-06-01T11:00
2023-06-01T12:00
2023-06-01T13:00
2023-06-01T14:00
2023-06-01T15:00
2023-06-01T16:00
2023-06-01T17:00
2023-06-01T18:00
2023-06-01T19:00
2023-06-01T20:00
2023-06-01T21:00
Date

Appendix B:

SoundPLAN Noise Modeling Data

Maverik Palmdale Noise
Contribution spectra - 002 - Maverik Palmdale 3 Events per

Time slice	Sum dB(A)	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)	16kHz dB(A)
Receiver Rec 1 Fl G dB(A) Ldn 56.5 dB(A) Sigma(Ldn) 0.0 dB(A)										
Ldn	56.5	42.2	51.6	41.5	47.1	49.0	49.5	46.1	37.6	19.7
Receiver Rec 2 Fl G dB(A) Ldn 52.7 dB(A) Sigma(Ldn) 0.0 dB(A)										
Ldn	52.7	38.8	48.0	36.9	42.4	45.3	45.9	42.3	33.2	13.6
Receiver Rec 3 Fl G dB(A) Ldn 55.0 dB(A) Sigma(Ldn) 0.0 dB(A)										
Ldn	55.0	40.9	50.3	39.4	45.0	47.6	48.3	44.7	35.5	15.5

Maverik Palmdale Noise
Contribution level - 002 - Maverik Palmdale 3 Events per Hour -

Source group	Source type	Ldn dB(A)	A dB	
Receiver Rec 1 Fl G dB(A) Ldn 56.5 dB(A) Sigma(Ldn) 0.0 dB(A)				
Default parking lot noise	PLot	56.5	0.0	
Receiver Rec 2 Fl G dB(A) Ldn 52.7 dB(A) Sigma(Ldn) 0.0 dB(A)				
Default parking lot noise	PLot	52.7	0.0	
Receiver Rec 3 Fl G dB(A) Ldn 55.0 dB(A) Sigma(Ldn) 0.0 dB(A)				
Default parking lot noise	PLot	55.0	0.0	

Maverik Palmdale Noise
3rd octave spectra of the sources in dB(A) - 002 - Maverik Palmdale 3 Events per Hour - Outdoor SP

Name	l or A	Li	R'w	L'w	Lw	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	20kHz
	m,m²	dB(A)	dB	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
Auto Parking	5189.14			50.4	87.5	66	66.1	66.1	77.7	77.7	77.7	70.2	70.2	70.2	74.7	74.7	74.7	74.8	74.8	74.8	75.2	75.2	75.2	72.5	72.5	72.5	66.3	66.3	66.3	53.5	53.5	53.5

Appendix C:

FHWA Roadway Noise Modeling Worksheets

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT:	Maverik Palmdale	JOB #:	0741-2023-09
ROADWAY:	West Avenue S -EXISTING	DATE:	26-Oct-23
LOCATION:	BUILDING FACADE	ENGINEER:	R. Pearson

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	11,600	
SPEED =	55	
PK HR % =	10	
NEAR LANE/FAR LANE DIS	0	
ROAD ELEVATION =	0.0	
GRADE =	1.0	%
PK HR VOL =	1,160	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		287
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER		287
PAD ELEVATION =		0.5
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

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	0.775	0.129	0.096	0.9742
MEDIUM TRUCK	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	287.02	- -
MEDIUM TRUCKS	4.0	287.00	- -
HEAVY TRUCKS	8.0	287.01	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	56.0	54.2	48.1	56.8	57.4
MEDIUM TRUCKS	47.7	46.2	39.9	38.3	46.8	47.0
HEAVY TRUCKS	47.8	46.3	37.3	38.5	46.9	47.0
NOISE LEVELS (dBA)	58.6	56.8	54.4	49.0	57.6	58.1

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	57.9	56.0	54.2	48.1	56.8	57.4
MEDIUM TRUCKS	47.7	46.2	39.9	38.3	46.8	47.0
HEAVY TRUCKS	47.8	46.3	37.3	38.5	46.9	47.0
NOISE LEVELS (dBA)	58.6	56.8	54.4	49.0	57.6	58.1

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	46	100	215	462
LDN	43	92	198	426

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL

PROJECT:	Maverik Palmdale	JOB #:	0741-2023-09
ROADWAY:	West Avenue S -EXISTING	DATE:	26-Oct-23
LOCATION:	BUILDING FACADE	ENGINEER:	R. Pearson

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	12,500	
SPEED =	55	
PK HR % =	10	
NEAR LANE/FAR LANE DIS	0	
ROAD ELEVATION =	0.0	
GRADE =	1.0	%
PK HR VOL =	1,250	

RECEIVER INPUT DATA

RECEIVER DISTANCE =		287
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5.0
WALL DISTANCE FROM RECEIVER		287
PAD ELEVATION =		0.5
ROADWAY VIEW:	LF ANGLE=	-90
	RT ANGLE=	90
	DF ANGLE=	180

SITE CONDITIONS

AUTOMOBILES =	15	
MEDIUM TRUCKS =	15	(10 = HARD SITE, 15 = SOFT SITE)
HEAVY TRUCKS =	15	

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	0.775	0.129	0.096	0.9742
MEDIUM TRUCK	0.848	0.049	0.103	0.0184
HEAVY TRUCKS	0.865	0.027	0.108	0.0074

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES	2.0	287.02	- -
MEDIUM TRUCKS	4.0	287.00	- -
HEAVY TRUCKS	8.0	287.01	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	56.3	54.5	48.5	57.1	57.7
MEDIUM TRUCKS	48.1	46.6	40.2	38.7	47.1	47.4
HEAVY TRUCKS	48.1	46.7	37.6	38.9	47.2	47.4
NOISE LEVELS (dBA)	59.0	57.1	54.8	49.3	57.9	58.4

NOISE IMPACTS (WITH TOPO AND BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	58.2	56.3	54.5	48.5	57.1	57.7
MEDIUM TRUCKS	48.1	46.6	40.2	38.7	47.1	47.4
HEAVY TRUCKS	48.1	46.7	37.6	38.9	47.2	47.4
NOISE LEVELS (dBA)	59.0	57.1	54.8	49.3	57.9	58.4

NOISE CONTOUR (FT)				
NOISE LEVELS	70 dBA	65 dBA	60 dBA	55 dBA
CNEL	49	105	226	486
LDN	45	96	208	448

Appendix D:

Construction Noise Modeling Output

Receptor - Commercial to the South

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA[1]	Edge of Site to Receptor, feet	Center of Site to Receptor, feet	Item Usage Percent[1]	Ground Factor[2]	Usage Factor	Receptor Item Lmax, dBA	Recptor. Item Leq, dBA
SITE PREP									
Tractor	1	84	212	368	40	0.66	0.40	67.3	57.0
Dozer	1	82	212	368	40	0.66	0.40	65.3	55.0
							Log Sum	67.3	59.1
GRADE									
Excavator	2	81	212	368	40	0.66	0.40	64.3	54.0
Grader	1	85	212	368	40	0.66	0.40	68.3	58.0
Dozer	1	82	212	368	40	0.66	0.40	65.3	55.0
								68.3	61.6
BUILD									
Crane	1	81	212	368	16	0.66	0.16	64.3	50.0
Man lift	3	75	212	368	20	0.66	0.20	58.3	45.0
Generator	1	81	212	368	50	0.66	0.50	64.3	54.9
Tractor	3	84	212	368	40	0.66	0.40	67.3	57.0
Welder/Torch	1	74	212	368	40	0.66	0.40	57.3	47.0
								67.3	63.1
PAVE									
Paver	1	77	212	368	50	0.66	0.50	60.3	50.9
Compactor (ground)	1	83	212	368	20	0.66	0.20	66.3	53.0
Roller	2	80	212	368	20	0.66	0.20	63.3	50.0
								66.3	57.2
ARCH COAT									
Compressor (air)	1	78	212	368	40	0.66	0.40	61.3	51.0
								61.3	51.0

[1]FHWA Construction Noise Handbook: Table 9.1 RCNM Default Noise Emission Reference Levels and Usage Factors

Appendix E:

Construction Vibration Modeling Output

VIBRATION LEVEL IMPACT

Project:	Maverik Palmdale	Date: 10/31/23
Source:	Large Bulldozer	
Scenario:	Unmitigated	
Location:	Adjacent residences	
Address:	Palmdale	

PPV = PPVref(25/D)^n (in/sec)

DATA INPUT

Equipment = Type	2	Large Bulldozer	INPUT SECTION IN BLUE
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	212.00	Distance from Equipment to Receiver (ft)	
n =	1.10	Vibration attenuation rate through the ground	

Note: Based on reference equations from Vibration Guidance Manual, California Department of Transportation, 2006, pgs 38-43.

DATA OUT RESULTS

PPV =	**0.008**	IN/SEC	OUTPUT IN RED

Appendix G

Phase I Environmental Site Assessment

Phase I Environmental Site Assessment

Potential Maverik Acquisition – Hwy 14 & Ave S, Palmdale, CA

238001856

Prepared by
Cardno Now Stantec, Inc.
1142 West 2320 South, Suite A
Salt Lake City, Utah 84119
Phone: (801) 256-3800
Fax: (801) 973-1095

Prepared for
Maverik, Inc.

August 22, 2022

Cardno now Stantec

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1 Executive Summary

1.1 General Information

Project Information	Approximate 6.08-acre parcel
Site Information	Potential Maverik Acquisition Hwy 14 & Ave S Palmdale, Lost Angeles County California
Site Access Contact	Casey McKeon, Owner Representative
Client Information	Maverik, Inc. 185 South State Street, Suite 800 Salt Lake City, UT 84111 Paul Heywood, Sr. Real Estate Development Manager
Consultant Information	Cardno Now Stantec, Inc. 1142 West 2320 South, Suite A Salt Lake City, Utah 84119 Phone: (801) 256-3800 Fax: (801) 973-1095
Reconnaissance Date	August 9, 2022
Site Assessor	Thomas Gordon
Report Writer	Alisha Harper
Environmental Professional	Russell D. Hamblin

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 part of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Russell D. Hamblin, P.G.
National Client Manager
Environmental Professional

1.2 Findings and Conclusions Summary

Cardno Now Stantec (Cardno) performed this Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of American Society of Testing and Material (ASTM) Standard Practice E 1527-21. Any exceptions to, or deletions from, this practice are described in Section 2.0 of this report. This assessment did not reveal evidence of *recognized environmental conditions* (RECs) in connection with the Subject Property. Information regarding this finding is detailed in the following table.

Findings and Conclusions Summary

Report Section		Further Action	*De Minimis* Condition	REC	Historical REC	Controlled REC	ASTM Non-Scope Condition	Description
4.0	User Provided Information	No						
5.1.1	Federal Database Findings	No						
5.1.2	State and Tribal Database Findings	No						
5.1.3	Local Environmental Record Sources	No						
5.3	Historical Records Sources	No						
6.2	Hazardous Substance Use, Storage and Disposal	No						
6.3	Underground Storage Tanks	No						
6.4	Aboveground Storage Tanks	No						
6.5	Other Petroleum Products	No						
6.6	Polychlorinated Biphenyls	No						
6.7	Unidentified Substance Containers	No						
6.8	Nonhazardous Solid Waste	**Yes**	X					Removal of illegally dumped trash and furniture
6.9	Wastewater	No						
6.10	Waste Pits, Ponds and Lagoons	No						
6.11	Sumps	No						
6.12	Septic Systems	No						
6.13	Storm water Management System	No						
6.14	Wells	No						
7.0	Interviews	No						
8.1	Asbestos-Containing Material	No						
8.2	Radon	No						
8.3	Lead in Drinking Water	No						
8.4	Lead-Based Paint	No						
8.5	Mold Screening	No						

Report Section		Further Action	*De Minimis* Condition	REC	Historical REC	Controlled REC	ASTM Non-Scope Condition	Description
8.6	Vapor Encroachment	No						

1.3 Significant Data Gap Summary

Data gaps may have been encountered during the performance of this Phase I ESA and are discussed within the section of the report where they were encountered. According to ASTM Standard Practice E 1527-21, *data gaps* are only significant if "other information and/or professional experience raise reasonable concerns involving the *data gap*." The following is a list of common sources of *significant data gaps* and Cardno's experience with them on this Phase I ESA.

Significant Data Gap Summary

Report Section		Description
3.5	Current Uses of Adjoining Properties	No significant data gap identified.
4.2	Environmental Liens or Activity and Use Limitations	No significant data gap identified.
5.1	Standard Environmental Records	No significant data gap identified.
5.2	Physical Setting Sources	No significant data gap identified.
5.3	Historical Records Sources	No significant data gap identified.
6.1	Methodology and Limiting Conditions	No significant data gap identified.
7.0	Interviews	No significant data gap identified.

1.4 Findings

1.4.1 Recognized Environmental Condition

A REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to release to the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.

Cardno did not identify any RECs at the Subject Property during the course of this assessment.

1.4.2 Controlled Recognized Environmental Condition

A *controlled recognized environmental condition* (CREC) refers to a REC 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.

Cardno did not identify any CRECs at the Subject Property during the course of this assessment.

1.4.3 Historical Recognized Environmental Condition

An *historical recognized environmental condition* (HREC) refers to a past release of any hazardous substances or petroleum products that occurred in connection with the Subject 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 Subject Property to any required controls.

Cardno did not identify any HRECs at the Subject Property during the course of this assessment.

1.4.4 Environmental Issue

An *environmental issue* refers to environmental concerns identified by Cardno that warrant further discussion, but that do not qualify as RECs.

Cardno did not identify any environmental issues during the course of this assessment.

1.5 Conclusions, Opinions and Recommendations

Cardno performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-21 of Hwy 14 & Ave S in the City of Palmdale, Lost Angeles County, California (the "Subject Property"). Any exceptions to, or deletions from, are described in Section 1.3 of this report.

This assessment did not reveal evidence of RECs or environmental issues in connection with the Subject Property. Based on the conclusions of this assessment no further investigation of the Subject Property is warranted at this time.

Cardno recommends the removal of on-site trash and illegally dumped furniture found on the Subject Property.

2 Introduction

2.1 Purpose

The purpose of this Phase I ESA was to identify RECs and certain potential environmental conditions outside the scope of ASTM Standard Practice E 1527-21 in connection with the Subject Property at the time of the site reconnaissance. This report documents the findings, opinions, and conclusions of the Phase I ESA.

2.2 Scope

This Phase I ESA was conducted in general accordance with the ASTM Standard Practice E 1527-21, consistent with a level of care and skill ordinarily practiced by the environmental consulting profession currently providing similar services under similar circumstances. Significant additions, deletions, or exceptions to ASTM Standard Practice E 1527-21 are noted below or in the corresponding sections of this report. The scope of this assessment included an evaluation of the following:

- Physical setting characteristics of the Subject Property through a review of referenced sources such as topographic maps and geologic, soils, and hydrologic reports.
- Usage of the Subject Property, adjoining properties, and surrounding area through a review of referenced historical sources such as land title records, fire insurance maps, city directories, aerial photographs, prior reports, and interviews.
- Observations and interviews regarding current Subject Property usage and conditions including the use, treatment, storage, disposal, or generation of hazardous substances, petroleum products, hazardous wastes, non-hazardous solid wastes, and wastewater.
- Usage of adjoining and surrounding properties and the likely impact of known or suspected releases of hazardous substances or petroleum products on the Subject Property.
- Information referenced in environmental agency databases and local environmental records within the specified approximate minimum search distance from the Subject Property.

The scope of the assessment also included consideration of the following environmental issues or conditions that are beyond the scope of ASTM Standard Practice E 1527-21:

- Mold screening to report the findings of a baseline survey of readily observable mold and conditions conducive to mold on the Subject Property identified by limited interview, document review, and physical observation and to provide an opinion on whether an identified condition warrants further action. The scope of work for the mold screening was intended to be consistent with ASTM Standard Practice E 2418-06: *Standard Guide for Readily Observable Mold and Conditions Conducive to Mold in Commercial Buildings: Baseline Survey Process*. The scope of work, including potential deviations from the Standard Guide, is described as follows. The interview was limited to one knowledgeable person from property management or engineering staff. The document review was limited to only those relevant documents made readily available to Cardno in a timely manner. The physical observations were limited to certain heating, ventilation, and air conditioning (HVAC) system areas and other readily accessible building areas likely to become subject to water damage, plumbing leaks, and flooding. Unless noted otherwise herein, Cardno observed the HVAC equipment room(s) and readily accessible mechanical rooms and, in buildings with package units in the ceiling, at least one unit per floor. Also, unless noted otherwise, Cardno observed readily accessible areas of the basement (or lowest level), the top floor, the roof and at least one mid-level floor (if applicable). For multi-story buildings, the total number of floors observed (inclusive of those already mentioned) was intended to be up to 10% of the total number of floors (if readily accessible). For hotel and multi-family buildings, Cardno targeted the lowest and highest levels and roof as described above and up to 10% of units, including one per floor if readily accessible.

The mold screening did not include destructive methods of observation. No sampling or laboratory analyses were conducted. The mold screening service as described herein was limited in scope and by the time and cost considerations typically associated with performing a Phase I ESA. No method can guarantee that a hazard will be discovered if evidence of the hazard is not encountered within the performance of the mold screening as authorized and that opinions and conclusions must, out of necessity, be extrapolated from limited information and discrete, non-continuous data points. Unidentified mold or other microbial conditions may exist on the Subject Property.

- Visual observation and limited sampling of suspect asbestos-containing material (ACM) at the Subject Property. The visual observation consists of providing an opinion on the condition of suspect ACM on the Subject Property, based upon visual observation during the site reconnaissance. The limited sampling, if conducted, consists of the submission of bulk material samples to an accredited laboratory for determination of asbestos concentrations. The sampling was "limited" in that it was not intended to comply with the sampling requirements described in 40 CFR Part 763 or 40 CFR Part 61. Limited surveys are performed to identify the presence of readily accessible suspect ACM and to develop recommendations as to the need for a more thorough survey and/or an operations and maintenance (O&M) program.
- Radon document review, consisting of the review of published radon data with regard to the potential for elevated levels of radon gas in the surrounding area of the Subject Property.
- Lead in drinking water data review, consisting of contacting the water supplier for information regarding whether or not the potable water provided to the Subject Property meets or exceeds drinking water standards for lead.
- Visual observation of lead-based paint (LBP), consisting of providing an opinion on the potential for LBP based on the construction date of buildings on the Subject Property and visual observation of the condition of suspect LBP.
- Wetlands document review, consisting of a review of a current National Wetlands Inventory map of the surrounding area to note if the Subject Property is identified as having a wetland.
- Flood plain document review, consisting of a review of a reasonably ascertainable flood plain map of the surrounding area to note if the Subject Property is identified as being located within a flood plain.

2.3 Significant Assumption

Any assumptions in this report were not considered as having significant impact on the determination of RECs associated with the Subject Property.

2.4 Limitations and Exceptions

Cardno prepared this Phase I ESA report using reasonable efforts to identify RECs associated with hazardous substances or petroleum products at the Subject Property. Findings contained within this report are based on information collected from observations made on the day(s) of the site reconnaissance and from reasonably ascertainable information obtained from certain public agencies and other referenced sources.

The ASTM Standard Practice E 1527-21 recognizes inherent limitations for Phase I ESAs, including, but not limited to:

- *Uncertainty Not Eliminated* – A Phase I ESA cannot completely eliminate uncertainty regarding the potential for RECs in connection with any property.
- *Not Exhaustive* – A Phase I ESA is not an exhaustive investigation of the Subject Property and environmental conditions on such property.

- *Past Uses of the Property* – Phase I requirements only require review of standard historical sources at five year intervals; therefore, past uses of the Subject Property at less than five year intervals may not be discovered.

Users of this report may refer to ASTM Standard Practice E 1527-21 for further information regarding these and other limitations. This report is not definitive and should not be assumed to be a complete and/or specific definition of all conditions above or below grade. Current subsurface conditions may differ from the conditions determined by surface observations, interviews, and reviews of historical sources. The most reliable method of evaluating subsurface conditions is through intrusive techniques, which are beyond the scope of this report. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other property construction purposes. Any use of this report by any party, beyond the scope and intent of the original parties, shall be at the sole risk and expense of such user.

Cardno makes no representation or warranty that the past or current operations at the Subject Property are, or have been, in compliance with all applicable federal, state, and local laws, regulations, and codes. 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. Regardless of the findings stated in this report, Cardno is not responsible for consequences or conditions arising from facts not fully disclosed to Cardno during the assessment.

An independent data research company provided the government agency database referenced in this report. Information on surrounding area properties was requested for approximate minimum search distances and is assumed to be correct and complete unless obviously contradicted by Cardno's observations or other credible referenced sources reviewed during the assessment. Cardno shall not be liable for any such database firm's failure to make relevant files or documents properly available, to properly index files, or otherwise to fail to maintain or produce accurate or complete records.

Cardno used reasonable efforts to identify evidence of aboveground and underground storage tanks (USTs) and ancillary equipment on the Subject Property during the assessment. "Reasonable efforts" were limited to observation of accessible areas, review of referenced public records and interviews. These reasonable efforts may not identify subsurface equipment or evidence hidden from view by things including, but not limited to, snow cover, paving, construction activities, stored materials and landscaping.

Any estimates of costs or quantities in this report are approximations for commercial real estate transaction due diligence purposes and are based on the findings, opinions, and conclusions of this assessment, which are limited by the scope of the assessment, schedule demands, cost constraints, accessibility limitations, and other factors associated with performing the Phase I ESA. Subsequent determinations of costs or quantities may vary from the estimates in this report. The estimated costs or quantities in this report are not intended to be used for financial disclosure related to the Financial Accounting Standards Board (FASB) Statement No. 143, FASB Interpretation No. 47, Sarbanes/Oxley Act or any United States Securities and Exchange Commission reporting obligations, and may not be used for such purposes in any form without the express written permission of Cardno.

Cardno is not a professional title insurance or land surveyor firm and makes no guarantee, express or implied, that any land title records acquired or reviewed in this report, or any physical descriptions or depictions of the Subject Property in this report, represent a comprehensive definition or precise delineation of property ownership or boundaries.

The Environmental Professional Statement in Section 1.1 of this report does not "certify" the findings contained in this report and is not a legal opinion of the Environmental Professional. The Environmental Professional Statement is intended to document Cardno's opinion that an individual meeting the qualifications of an Environmental Professional was involved in the performance of the assessment and that the activities performed by, or under the supervision of, the Environmental Professional were performed in conformance with the standards and practices set forth in 40 CFR Part 312 per the methodology in ASTM Standard Practice E 1527-21 and the scope of work for this assessment.

Per ASTM Standard Practice E 1527-21, Section 6, User Responsibilities, the user of this assessment has specific obligations for performing tasks during this assessment that will help identify the possibility of RECs in connection with the Subject Property. Failure by the user to fully comply with the requirements may impact their ability to use this report to help qualify for Landowner Liability Protections (LLPs) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Cardno makes no representations or warranties regarding a user's qualification for protection under any federal, state, or local laws, rules, or regulations.

In accordance with the ASTM Standard Practice E 1527-21, this report is presumed to be valid for a six-month period. If the report is older than six months, the following information must be updated for the report to be valid: (1) regulatory review, (2) site visit, (3) interviews, (4) specialized knowledge, and (5) environmental liens search. Reports older than one year may not meet the ASTM Standard Practice 1527-21 and, therefore, the entire report must be updated to reflect current conditions and property-specific information.

Other limitations and exceptions that are specific to the scope of this report may be found in corresponding sections.

2.5 Special Terms and Conditions (User Reliance)

This report is for the use and benefit of, and may be relied upon by the Maverik, Inc., its affiliates, and third parties authorized in writing by the client and Cardno, including the lender(s) in connection with a secured financing of the Subject Property, and their respective successors and assigns. Any third party agrees by accepting this report that any use or reliance on this report shall be limited by the exceptions and limitations in this report, and with the acknowledgment that actual Subject Property conditions may change with time, and that hidden conditions may exist at the Subject Property that were not discovered within the authorized scope of the assessment. Any use by or distribution of this report to third parties, without the express written consent of Cardno, is at the sole risk and expense of such third party.

Cardno makes no other representation to any third party except that it has used the degree of care and skill ordinarily exercised by environmental consultants in the preparation of the report and in the assembling of data and information related thereto. No other warranties are made to any third party, either expressed or implied. Unless otherwise agreed upon in writing by Cardno and a third party, Cardno's liability to any third party authorized to use or rely on this report with respect to any acts or omissions shall be limited to a total maximum amount of $50,000.

3 Site Description

3.1 Local and Legal Description

The Subject Property at Hwy 14 & Ave S in Palmdale, California is located on the north side of W Avenue S and northeast of Guyon Avenue. According to the county assessor, the Subject Property is legally described as FOR DESC SEE ASSESSOR'S MAPS POR OF SE 1/4 OF SEC 34 T 6N R 12W, and owned by ANAVERDE HOLDINGS LLC.

A Site Vicinity Map is located in Appendix A, a Site Plan is included in Appendix B, and Subject Property photographs are provided in Appendix C.

3.2 Surrounding Area General Characteristics

The surrounding area is primarily characterized by residential properties. The Subject Property can be accessed from W Avenue S. Elevation at the Subject Property is at 2,866 feet above mean sea level (msl). The topography of the Subject Property is generally flat. The Subject Property topography is discussed in detail in Section 5.2.1 of this report.

Specific adjoining property information is further discussed in Section 3.5.

3.3 Current Use of the Property

The Subject Property is currently unoccupied, vacant land. The Subject Property was mostly generally flat, and covered with a sandy topsoil. The entire area was littered with illegally dumped refuse, garbage and wind-blown trash.

Vehicular access to the Subject Property is provided from E Avenue South along the southern perimeter of the Subject Property.

The Subject Property is designated for residential development by the City of Palmdale and is considered a legal use in its current configuration.

The Subject Property was not identified in the regulatory database report of Section 5.1.

Subject Property photographs are provided in Appendix C.

3.4 Description of Property Improvements

The following table provides general descriptions of the Subject Property improvements.

Property Improvements

Size of Property (approximate)	Approximate 6.08-acre parcel
General Topography of Property	Generally flat
Adjoining and/or Access/Egress Roads	South: W Avenue South
Approximate % Paved or Concrete Areas	☐ Asphalt 0% ☐ Concrete 0%
Approximate % Unimproved Areas	100%
Approximate % Landscaped Areas	0%
Approximate % Surface Water	0%
Potable Water Source	NA

Sanitary Sewer Utility	NA
Storm Sewer Utility	NA
Electrical Utility	NA
Natural Gas Utility	NA
Current Occupancy Status	Unoccupied
Unoccupied Buildings/Spaces/Structures	NA
Number of Occupied Buildings	NA

3.5 Current Uses of Adjoining Properties

The Subject Property is located within a mixed commercial area of Lost Angeles County. During the vicinity reconnaissance, Cardno observed land use in the immediate vicinity of the Subject Property as detailed in the following table.

Adjacent Properties

Direction	Street or Address	Across street (address if applicable)
North	Vacant	
South	W Avenue S	Ana Verde Market (332 W Avenue S)
East	Vacant	
West	Vacant	

The adjacent property to the south was identified as a CERS TANK, CUPA LA COUNTY, HMS LA, and RCRA NON GEN site in the regulatory database report of Section 5.1.2.

4 User-Provided Information

The following section summarizes information (if any) provided by Maverik, Inc. (User) with regard to the Phase I ESA. Documentation may be found where referenced in this report.

4.1 Title Records

User did not provide title record information for the Subject Property.

4.2 Environmental Liens or Activity and Use Limitations

User did not provide information regarding property environmental liens or activity and use limitations (AULs). Cardno attempted to identify environmental liens and AULs through client-supplied data. No liens or AULs were identified on the Subject Property.

4.3 Specialized Knowledge

User did not provide specialized knowledge regarding RECs associated with the Subject Property.

4.4 Significant Valuation Reduction for Environmental Issues

User did not provide information regarding a significant valuation reduction for environmental issues associated with the Subject Property.

4.5 Owner, Property Manager and Occupant Information

User provided Cardno with a site access contact indicating the Subject Property was currently unoccupied and an escort would not be needed.

4.6 Reason for Performing Phase I ESA

User indicated that the Phase I ESA was being completed prior to a financial transaction regarding the Subject Property.

4.7 Other User Provided Documents

The User was provided an environmental questionnaire concerning the Subject Property. Cardno had not received the completed document by August 18, 2022. A site map was provided by the User.

This information can be reviewed in Appendix D. No other documents were supplied to Cardno as described in the ASTM Standard Practice E 1527-21.

5 Records Review

5.1 Standard Environmental Records

The regulatory agency database report discussed in this section, provided by Environmental Risk Information Services (ERIS), was reviewed for information regarding reported releases of hazardous substances and petroleum products on or near the Subject Property. Cardno also reviewed the "unmappable" (also referred to as "orphan") listings within the database report, cross-referencing available address information and facility names. Unmappable sites are listings that could not be plotted with confidence, but are potentially in the general area of the Subject Property based on the partial street address, city, or zip code. Any unmappable site that was identified by Cardno as a being within the approximate minimum search distance from the Subject Property based on the site reconnaissance and/or cross-referencing to mapped listings, is included in the discussion within this section. The complete regulatory agency database report may be found in Appendix E. The following table is a summary of the findings of the database review.

Summary of Federal, State, and Tribal Database Findings

Regulatory Database	Approx. Minimum Search Distance	Property Listed?	Additional Sites Listed
Federal			
DOE FUSRAP	1 mile	No	No
NPL	1 mile	No	No
PROPOSED NPL	1 mile	No	No
DELETED NPL	½ mile	No	No
SEMS	½ mile	No	No
ODI	½ mile	No	No
SEMS ARCHIVE	½ mile	No	No
CERCLIS	½ mile	No	No
IODI	½ mile	No	No
CERCLIS NFRAP	½ mile	No	No
CERCLIS LIENS	Property	No	No
RCRA CORRACTS	1 mile	No	No
RCRA TSD	½ mile	No	No
RCRA LQG	¼ mile	No	No
RCRA SQG	¼ mile	No	No
RCRA VSQG	¼ mile	No	No
RCRA NON GEN	¼ mile	No	**Yes (1)**
RCRA CONTROLS	½ mile	No	No
FED ENG	½ mile	No	No
FED INST	½ mile	No	No
LUCIS	½ mile	No	No
NPL IC	½ mile	No	No
ERNS 1982 to 1986	Property	No	No
ERNS 1987 to 1989	Property	No	No
ERNS	Property	No	No
FED BROWNFIELDS	½ mile	No	No
FEMA UST	¼ mile	No	No
FRP	¼ mile	No	No
DELISTED FRP	¼ mile	No	No
HIST GAS STATION	¼ mile	No	No

Regulatory Database	Approx. Minimum Search Distance	Property Listed?	Additional Sites Listed
REFN	¼ mile	No	No
BULK TERMINAL	¼ mile	No	No
SEMS LIEN	Property	No	No
SUPERFUND ROD	1 mile	No	No
State			
RESPONSE	1 mile	No	No
ENVIROSTOR	1 mile	No	**Yes (1)**
DELISTED ENVS	1 mile	No	No
SWF/LF	½ mile	No	No
SWRCB SWF	½ mile	No	No
WMUD	½ mile	No	No
HWP	1 mile	No	No
SWAT	½ mile	No	No
C&D DEBRIS RECY	½ mile	No	No
RECYCLING	½ mile	No	No
PROCESSORS	½ mile	No	No
CONTAINER RECY	½ mile	No	No
LDS	½ mile	No	No
LUST	½ mile	No	No
DELISTED LST	½ mile	No	No
UST	¼ mile	No	No
UST CLOSURE	½ mile	No	No
HHSS	¼ mile	No	No
UST SWEEPS	¼ mile	No	No
AST	¼ mile	No	No
AST SWRCB	¼ mile	No	No
TANK OIL GAS	¼ mile	No	No
DELISTED TNK	¼ mile	No	No
CERS TANK	¼ mile	No	**Yes (1)**
DELISTED CTNK	¼ mile	No	No
HIST TANK	¼ mile	No	No
LUR	½ mile	No	No
CALSITES	½ mile	No	No
HLUR	½ mile	No	No
DEED	½ mile	No	No
VCP	½ mile	No	No
CLEANUP SITES	½ mile	No	No
DELISTED CLEANUP	½ mile	No	No
DELISTED COUNTY	¼ mile	No	No
Tribal			
INDIAN LUST	½ mile	No	No
INDIAN UST	¼ mile	No	No
DELISTED ILST	½ mile	No	No
DELISTED IUST	¼ mile	No	No

Regulatory Database	Approx. Minimum Search Distance	Property Listed?	Additional Sites Listed
County			
SML LA	½ mile	No	No
SWF LA COUNTY	½ mile	No	No
CUPA LA COUNTY	¼ mile	No	No
HMS LA	¼ mile	No	No
UST SANTAFESP	¼ mile	No	No
UST LONGB	¼ mile	No	No
CUPA BURBANK	¼ mile	No	No
UST ELSEGUNDO	¼ mile	No	No
UST SANTA MONICA	¼ mile	No	No
AST SANTAMON	¼ mile	No	No
CUPA SANTAMON	¼ mile	No	No
UST TORRANCE	¼ mile	No	No
UST VERNON	¼ mile	No	No
CUPA VERNON	¼ mile	No	No
UST LA CITY	¼ mile	No	No
AST LA CITY	¼ mile	No	No
HAZMAT LA CITY	1/8 mile	No	No
Additional Environmental Records			
Federal			
FINDS/FRS	Property	No	No
TRIS	Property	No	No
PFAS TRI	½ mile	No	No
PFAS NPL	½ mile	No	No
PFAS WATER	½ mile	No	No
PFAS SSEHRI	½ mile	No	No
ERNS PFAS	½ mile	No	No
HMIRS	1/8 mile	No	No
NCDL	1/8 mile	No	No
TSCA	1/8 mile	No	No
HIST TSCA	1/8 mile	No	No
FTTS ADMIN	Property	No	No
FTTS INSP	Property	No	No
PRP	Property	No	No
SCRD DRYCLEANER	½ mile	No	No
ICIS	Property	No	No
FED DRYCLEANER	¼ mile	No	No
DELISTED FED DRY	¼ mile	No	No
FUDS	1 mile	No	No
FORMER NIKE	1 mile	No	No
PIPELINE INCIDENT	Property	No	No
MLTS	Property	No	No
HIST MLTS	Property	No	No
MINES	¼ mile	No	No
SMCRA	1 mile	No	No
MRDS	1 mile	No	**Yes (4)**
URANIUM	1 mile	No	No

Regulatory Database	Approx. Minimum Search Distance	Property Listed?	Additional Sites Listed
ALT FUELS	¼ mile	No	No
CONSENT DECREES	¼ mile	No	No
AFS	Property	No	No
SSTS	¼ mile	No	No
PCBT	½ mile	No	No
PCB	½ mile	No	No
State			
DRYCLEANERS	¼ mile	No	No
DELISTED DRYCLEANERS	¼ mile	No	No
DRYC GRANT	¼ mile	No	No
PFAS	½ mile	No	No
PFAS GW	½ mile	No	No
HWSS CLEANUP	½ mile	No	No
TOXIC PITS	1 mile	No	No
DTSC HWF	½ mile	No	No
INSP COMP ENF	1 mile	No	No
SCH	1 mile	No	**Yes (1)**
CHMIRS	Property	No	No
HIST CHMIRS	Property	No	No
HAZNET	Property	No	No
HIST MANIFEST	Property	No	No
HW TRANSPORT	1/8 mile	No	No
WASTE TIRE	Property	No	No
MEDICAL WASTE	¼ mile	No	No
HIST CORTESE	½ mile	No	No
CDO/CAO	½ mile	No	No
CERS HAZ	1/8 mile	No	No
DELISTED HAZ	½ mile	No	No
GEOTRACKER	1/8 mile	No	No
MINE	1 mile	No	No
LIEN	Property	No	No
WASTE DISCHG	¼ mile	No	No
EMMISSIONS	¼ mile	No	No
CDL	1/8 mile	No	No
County			
HAZMAT SANTAMON	1/8 mile	No	No
HAZ WST SANTAMON	1/8 mile	No	No

5.1.1 Subject Property Listings

The Subject Property is not identified in the regulatory database report.

5.1.2 Adjacent Property Listings

The adjacent properties are identified in the regulatory database report:

- The adjacent property, identified as Antelope Valley Airport at 332 W Avenue S, Palmdale, CA, is located adjacent to the south of the Subject Property. This site reported as a HMS LA, RCRA NON GEN, CERS

TANK, and CUPA LA COUNTY. Multiple violations were reported regarding an AST containing petroleum. These violations did not result in a release of hazardous substance and were brought back into compliance withing a timely matter. Based on the type of listings and lack of a release, these listing are not expected to represent a significant environmental concern to the Subject Property.

5.1.3 Sites of Concern Listings

No sites of concern are identified in the regulatory database report.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

5.1.4 Orphan Listings

One unplottable listing was identified. This listing was identified as a HAZMAT. No releases were reported. Based on the lack of release and type of listing, this listing is not expected to represent a significant environmental concern for the Subject Property.

5.1.5 Local Environmental Records Search

Name of Agency:	California Environmental Protection Agency
Point of Contact:	ERIS Xplorer
Agency Address:	1001 I Street, Sacramento, CA 95814
Agency Phone Number:	(916) 323-2514
Date of Contact:	August 18, 2022
Method of Communication:	Online
Communication Summary:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the Subject Property were on file with the agency.

A copy of pertinent documents is included in Appendix E of this report.

5.1.6 Health Department

Name of Agency:	County of Los Angeles Department of Public Health Environmental Health
Point of Contact:	Website
Agency Address:	5050 Commerce Dr, Baldwin Park, CA 91706
Agency Phone Number:	(626) 430-5560
Date of Contact:	August 18, 2022
Method of Communication:	Email
Communication Summary:	As of the date of this report, Cardno has not received a response from this agency for inclusion in this report.

5.1.7 Fire Department

Name of Agency: County of Los Angeles Fire Department

Point of Contact: Website

Agency Address: 1320 N Eastern Avenue, Lost Angeles, CA 90063

Agency Phone Number: (323) 881-2411

Date of Contact: August 18, 2022

Method of Communication: Online

Communication Summary: As of the date of this report, Cardno has not received a response from this agency for inclusion in this report.

5.1.8 Planning Department

Name of Agency: Palmdale Planning Department

Point of Contact: Website

Agency Address: 38250 Sierra Hwy, Palmdale, CA 93550

Agency Phone Number: (661) 267-5200

Date of Contact: August 18, 2022

Method of Communication: Online

Communication Summary: According to records reviewed, the Subject Property is zoned for residential development by the City of Palmdale.

A copy of pertinent documents is included in Appendix G of this report.

5.1.9 Oil & Gas Exploration

Name of Agency: California Department of Conservation Gas and Oil

Point of Contact: ERIS Xplorer

Agency Address: 715 P Street, MS 1900, Sacramento, CA 95814

Agency Phone Number: (916) 322-1080

Date of Contact: August 18, 2022

Method of Communication: Online

Communication Summary: According to the agency, no oil or gas wells are located on or adjacent to the Subject Property.

5.1.10 Assessor's Office

Name of Agency: Los Angeles County Assessor

Point of Contact: Website

Agency Address: 500 W. Temple Street, Room 225, Los Angeles, CA 90012

Agency Phone Number: (213) 874-3211

Date of Contact: August 18, 2022

Method of Communication: Online

Communication Summary: According to records reviewed, the Subject property is identified by Assessor Parcel Number (APN) 3004-016-032 and is currently owned by Anaverde Holdings LLC since 2018.

5.1.11 Utilities

Utility providers for the Subject Property are detailed in the following table.

Utility Providers

Utility	Provider
Electrical Utility Company	NA
Water Utility	NA
Sewer Utility	NA
Natural Gas Utility	NA

5.1.12 Other Local Environmental Records Sources

No additional local environmental records sources were reviewed for this assessment.

5.2 Physical Setting Sources

5.2.1 Topography

The United States Geological Survey (USGS) *Ritter Ridge & Palmdale,* California Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the Subject Property is located at approximately 2,866 feet above msl. The contour lines in the area of the Subject Property indicate the area is sloping gently toward the southeast. The Subject Property is depicted on the 2022 map as undeveloped.

5.2.2 Geology/Soils

The Subject Property is situated within an area characterized by quaternary alluvium and marine deposits.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the Subject Property is mapped as Vernalis loam. The Vernalis series consists of Class B soils that have a moderately low runoff potential when thoroughly west. Water transition through the soil is unimpeded. Slopes range from 2 to 5 percent.

5.2.3 Hydrology

According to topographic map interpretation, the direction of groundwater in the vicinity of the Subject Property is inferred to flow toward the southeast. The nearest surface water in the vicinity of the Subject Property is the Lake Palmdale, located approximately 0.4 miles southeast of the Subject Property. No settling ponds, lagoons, surface impoundments, wetlands, or natural catch basins were observed at the Subject Property during this assessment.

According to available information, a public water system operated by the Palmdale Water District serves the Subject Property vicinity. The sources of public water for the City of Palmdale are surface water from the State Water Project, surface water from Littlerock Reservoir, and groundwater from the Antelope Valley groundwater basin.

Information specific to the Subject Property regarding the depth to groundwater and direction of groundwater flow was not available for the subject area.

5.2.4 Other Physical Setting Sources

5.2.4.1 Flood Plain Map

Cardno performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA). According to Community Panel Number 06037C0670F, the Subject Property appears to be located in Zone X*,* an area located *within* an area of minimal flood hazard.

A copy of the FEMA Map is included in Appendix G.

5.2.4.2 Wetlands Map

According to the U.S. Fish and Wildlife Service, National Wetlands Inventory, wetlands *are not* located on the Subject Property. A copy of the Wetland Map is included in Appendix G. It is noted that this investigation did not include a formal determination relating to the presence of possible wetlands areas on the Subject Property.

5.3 Historical Records Sources

The following table summarizes the findings of the research presented in the following subsections pertaining to historical property and surrounding area uses.

Historical Use Information

Period / Date	Source	Description / Use
1928 - present	Aerial Photographs, Interviews, Topographic Maps, On-site Observations	Undeveloped, vacant land

Potential environmental concerns were not identified in association with the current or former use of the Subject Property.

Data gaps were encountered; however, based on the historical research conducted, *significant data gaps* were not identified during this Phase I ESA. As such, the requirements of ASTM Standard Practice E 1527-21 §8.3.2.1 and §8.3.2.2 have been satisfied and the historical research is considered complete.

5.3.1 Aerial Photographs

Cardno obtained available aerial photographs of the Subject Property and surrounding area from ERIS on August 4, 2022. The observations in the following tables were noted to be visible on the Subject Property and adjacent properties during the aerial photograph review.

Aerial Photographs (1928, 1948, 1959, 1968, 1974, 1980, 1989, 1995)

	Description	Scale: *1"=500'*

Subject Property	Appears to be undeveloped vacant land
North	Appears to be undeveloped vacant land
South	Appears to be undeveloped vacant land across a road
East	Appears to be undeveloped vacant land
West	Appears to be undeveloped vacant land

Aerial Photographs (2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020)

	Description	Scale: *1"=500'*
Subject Property	Appears to be undeveloped vacant land	
North	Appears to be undeveloped vacant land	
South	Appears to be developed with multiple commercial structures across a road	
East	Appears to be undeveloped vacant land	
West	Appears to be undeveloped vacant land	

Copies of select aerial photographs are included in Appendix F of this report.

5.3.2 Fire Insurance Maps

Cardno reviewed the collection of Sanborn Fire insurance maps from ERIS on August 4, 2022. Sanborn map coverage was not available for the Subject Property.

Copies of reviewed Sanborn Maps are included in Appendix G of this report.

5.3.3 Property Tax Files

According to information obtained from the Los Angeles County Assessor's office, the Subject Property is made up of 1 parcel of land. This is parcel 3004-016-032. According to the Lost Angeles County Assessor's online data, the parcel is owned by Anaverde Holdings LLC.

Additional historical ownership information was not available. The review of tax files did not identify past uses indicating RECs at the Subject Property.

5.3.4 Recorded Land Title Records and AULs

The acquisition of recorded land title records was not required by the scope of work for this ESA; however, Cardno did conduct a search for environmental liens and/or AULs using client-supplied information. No environmental liens or AULs were identified from the client-supplied information.

5.3.5 Historical USGS Topographic Quadrangles

Cardno reviewed historical topographic maps obtained from ERIS on August 4, 2022. The observations of the Subject Property and adjacent properties made during the topographic map review are as follows.

Historic USGS Topographic Quadrangles (1932, 1937, 1958, 1974, 2015, 2018, 2022)

	Description
Subject Property	Appears to be undeveloped vacant land
North	Appears to be undeveloped vacant land
South	Appears to be undeveloped vacant land across a road
East	Appears to be undeveloped vacant land
West	Appears to be undeveloped vacant land

Copies of reviewed topographic maps are included in Appendix G of this report.

5.3.6 City Directories

Cardno reviewed historical city directories obtained from ERIS on August 8, 2022 for past names and businesses that were listed for the Subject Property and adjacent properties.

City directory findings are presented in the following tables.

City Directory Search (Adjacent Properties)

Year(s)	Occupant	Address	Environmentally Sensitive
1991, 1992, 1995	Brodt B D Crane Service	322 W Avenue S	No
2007, 2012, 2016, 2020	Antelope Express	332 W Avenue S	Yes
2007, 2012, 2016, 2020	Penske Truck Rental	332 W Avenue S	Yes
2007, 2012, 2016, 2020	One Stop Muffler & Auto Repair	343 W Avenue S	Yes
2016, 2020	Aha Verde Market	332 W Avenue S	No
2020	Thompson Harvey Bay Area	332 W Avenue S	No
2020	Village Barber Shop	332 W Avenue S	No

Environmentally system was previously discussed in Section 5.1.2.

Copies of reviewed city directories are included in Appendix G of this report.

5.3.7 Building Department Records

Building Department records were previously discussed in Section 5.1.8.

5.3.8 Zoning/Land Use Records

Zoning/land use records were previously discussed in Section 5.1.9.

5.3.9 Prior Reports

No prior reports were reviewed for this assessment.

5.3.10 Other Historical Sources

No other historical sources were reviewed for this assessment.

6 Site Reconnaissance

The initial unaccompanied site reconnaissance was conducted by Thomas Gordon of Cardno on August 9, 2022. This visit was focused on the publicly accessible areas of the Subject Property and noted only exterior features. The Subject Property is generally flat and covered with sandy topsoil. The Subject Property was littered with illegally dumped refuse, garbage, and wind-blown trash. Abandoned old furniture like chairs, sofas, an old mattress or two, and a few old tires were observed on the Subject Property. It appeared as though homeless people had stayed on the Subject Property.

Photographs of the Subject Property are included in Appendix C.

6.1 Methodology and Limiting Conditions

The site reconnaissance consisted of visual and/or physical observations of the Subject Property and improvements, adjoining sites as viewed from the Subject Property, and the surrounding area based on visual observations made during the trip to and from the Subject Property. At the time of the Subject Property inspection, the weather conditions were sunny and approximately 87 degrees Fahrenheit. The ground was covered in natural vegetation, allowing for an obstructed visual inspection.

6.2 Hazardous Substance Use, Storage, and Disposal

No hazardous substances or petroleum products were observed on the Subject Property during the site reconnaissance.

6.3 Aboveground and Underground Hazardous Substance or Petroleum Product Storage Tanks

No evidence of current or former aboveground storage tanks (ASTs) or USTs was observed during the site reconnaissance.

6.4 Polychlorinated Biphenyls

No potential polychlorinated biphenyl (PCB)-containing equipment (transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, etc.) was observed on the Subject Property.

A transformer was observed on the Subject Property but appears to be in good condition with no leakage. There is no indication that the transformer contains PCBs.

Additionally, no other potential PCB-containing equipment (interior transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, balers, etc.) was observed on the Subject Property.

6.5 Unidentified Substance Containers

Cardno did not observe any unidentified substance containers on the Subject Property.

6.6 Non-hazardous Solid Waste

Cardno observed non-hazardous or solid waste on the Subject Property. The Subject Property was littered with illegally dumped refuse, garbage, and wind-blown trash. Abandoned old furniture like chairs, sofas, an old mattress or two, and a few old tires were observed on the Subject Property. It appeared as though homeless people had stayed on the Subject Property.

6.7 Wastewater

Cardno did not observe evidence of wastewater generated, treated or discharged (including sanitary sewage and storm water) on the Subject Property or to adjoining properties.

6.8 Waste Pits, Ponds and Lagoons

Cardno did not observe evidence of waste pits, ponds, or lagoons on the Subject Property.

6.9 Sumps

Cardno did not observe evidence of sumps or oil/water separators on the Subject Property.

6.10 Septic Systems

Cardno did not observe evidence of a septic system on the Subject Property.

6.11 Storm water Management System

Cardno did not observe evidence of surface water, surface impoundments, retention ponds, dry wells, or other storm water management systems at the Subject Property.

Storm water from the Subject Property either percolates into the ground or runs off the Subject Property to adjacent sites.

6.12 Wells

Cardno did not observe evidence of wells on the Subject Property.

7 Interviews

Persons were interviewed to obtain information regarding RECs in connection with the Subject Property. Pertinent information (if any) identified during those interviews are discussed in the respective sections of this report.

Record of Communication

Communication with	Date	Summary of Communication
Paul Heywood, Maverik	August 2, 2022	Cardno contacted Maverik to obtain site access and contact information.
Casey McKeon, Owner Representative	August 18, 2022	Cardno contacted Casey Mckeon regarding the past use of the Subject Property. No response has been received.

8 Other Environmental Conditions

8.1 Asbestos-Containing Material

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be presumed to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are *presumed asbestos-containing material* (PACM).

Due to the undeveloped nature of the Subject Property, ACMs were not considered within the scope of this assessment.

8.2 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The U.S. EPA has prepared a map to assist national, state, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, as detailed in the following table.

U.S. EPA Radon Zones

Zones	Average Predicted Radon Levels	Potential
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the U.S. EPA has found homes with elevated levels of radon in all three zones, and the U.S. EPA recommends site-specific testing to determine radon levels at a specific location; however, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the U.S. EPA Map of Radon Zones places the Subject Property in Zone 2. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

Due to the undeveloped nature of the Subject Property, radon is not considered to be a significant environmental concern.

A copy of the County Radon Map is included in Appendix G of this report.

8.3 Lead in Drinking Water

According to available information, a public water system operated by the Palmdale Water District serves the Subject Property vicinity. The sources of public water for the City of Palmdale are surface water from the State Water Project, surface water from Littlerock Reservoir, and groundwater from the Antelope Valley groundwater basin. According to the City of Palmdale and the 2021 Annual Water Quality Report, water supplied to the Subject Property is in compliance with all state and federal regulations pertaining to drinking water standards, including lead and copper.

Water sampling was not conducted to verify water quality.

8.4 Lead-Based Paint

Lead is a highly toxic metal that affects virtually every system of the body. Lead-based paint (LBP) is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm^2 (or 5,000 µg/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X," to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the U.S. Department of Housing and Urban Development (HUD) and the U.S. EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

Due to the undeveloped nature of the Subject Property, LBP was not considered within the scope of this assessment.

8.5 Mold Screening

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g., in the form of very high humidity, condensation, or water from a leaking pipe), and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Due to the undeveloped nature of the Subject Property, Mold Screening was not considered within the scope of this assessment.

8.6 Vapor Encroachment

Cardno, Inc. conducted a limited screening for potential vapor encroachment conditions (VECs) that may affect the Subject Property. The VEC screening focused on the current and historical usage of the Subject Property and also used the aforementioned regulatory database report provided by ERIS to evaluate identified chemicals of concern, including petroleum hydrocarbons. The results of the limited screening did not indicate the presence of potential VECs for the Subject Property. This would not be considered a REC related to the Subject Property. A VEC report is located in Appendix K.

If the client should choose to further evaluate the potential VECs, Cardno, Inc. can provide those services accordingly.

9 References

ASTM International (ASTM). *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation E 1527-21*, dated November 2021.

ASTM International (ASTM). *Standard Guide for Readily Observable Mold and Conditions Conducive to Mold in Commercial Buildings: Baseline Survey Process, ASTM Designation E 2418-06*, dated March 2006.

Environmental Risk Information Services (ERIS). *ERIS Vapor Screening; Inquiry Number 22080300932*, dated August 16, 2022.

Environmental Risk Information Services (ERIS). *ERIS Fire Insurance Maps, Inquiry Number 22080300932*, dated August 4, 2022.

Environmental Risk Information Services (ERIS). *The ERIS Historical Aerials; Inquiry Number 22080300932*, dated August 4, 2022.

Environmental Risk Information Services (ERIS). *The ERIS-City Directory Report; Inquiry Number 22080300932*, dated August 8, 2022.

Environmental Risk Information Services (ERIS). *The ERIS Historical Topographic Map Report; Inquiry Number 22080300932*, dated August 4, 2022.

Environmental Risk Information Services (ERIS). *The ERIS Database Report; Inquiry Number 22080300932*, dated August 4, 2022.

Environmental Risk Information Services (ERIS). *The ERIS Physical Settings Report; Inquiry Number 22080300932*, dated August 4, 2022.

Federal Emergency Management Act, Map Service Center website, https://msc.fema.gov/webapp/, accessed August 18, 2022.

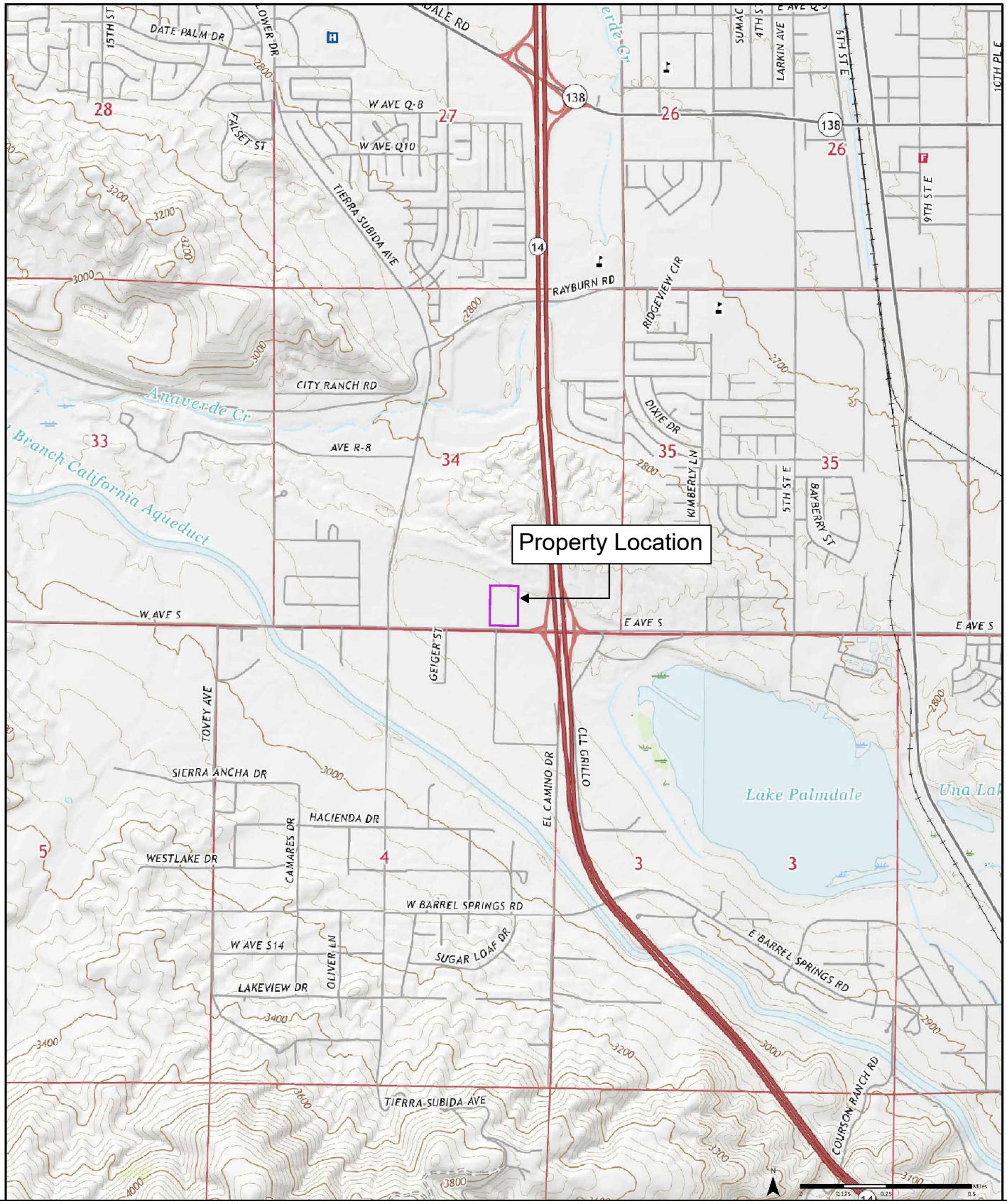
U.S. Fish and Wildlife Service, National Wetlands Inventory, http://www.fws.gov/wetlands/Data/Mapper, accessed August 18, 2022.

United States Department of Agriculture (USDA) Soil Conservation Service (SCS) Soil Survey website, http://websoilsurvey.sc.egov.usda.gov/App/, accessed August 18, 2022.

United States Geological Survey (USGS) Interactive Geologic Map of California, http://ngmdb.usgs.gov/maps/, accessed August 18, 2022.

Appendix A

Site Vicinity Map



1

Latitude: 34° 33' 32" N
Longitude: -118° 8' 7" W
Ritter Ridge, CA, 2022
Palmdale, CA, 2022
Project No. 238001856

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Figure 1: Site Vicinity Map

Maverik - Palmdale, CA
Potential Maverik Location
Highway 14 & Avenue S
Palmdale, Los Angeles County, California

0 1050 2100 4200 ft

N

Cardno now Stantec

1142 WEST 2320 SOUTH, SUITE A
WEST VALLEY, UTAH 84119
P: 801-256-3800 F: 801-973-1095

Date Created: 8/16/2022 Date Revised: 8/16/2022 File Path: C:\Users\alisha.strong\OneDrive - Cardno\Desktop\Projects\Maverik\1856 Maverik Palmdale, CA\1856 Figures\1856 Figures.dwg
Data Sources: ERIS Historical Topo #22061300189

CAD Analyst: Alisha.Strong

Appendix B

Site Plan

2

Latitude: 34° 33' 32" N
Longitude: -118° 8' 7" W

Project No. 238001856

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Figure 2: SOIL SAMPLE LOCATIONS

Maverik - Palmdale, CA
Potential Maverik Location
Highway 14 & Avenue S
Palmdale, Los Angeles County, California

0 250 500 ft

N

Cardno
now
Stantec

1142 WEST 2320 SOUTH, SUITE A
WEST VALLEY, UTAH 84119
P: 801-256-3800 F: 801-973-1095

Date Created: 8/16/2022 Date Revised: 8/16/2022 File Path: C:\Users\alisha.strong\OneDrive - Cardno\Desktop\Projects\Maverik\1856 Maverik Palmdale, CA\1856 Figures\1856 Figures.dwg
Data Sources: GOOGLE MAP

CAD Analyst: Alisha.Strong

Appendix C

Subject Property Photographs

Photo 1
Comments: View to the north showing the SP from the south central boundary.

Photo 2
Comments: View to the north from the SWC of the SP.

Photo 3
Comments: View to the western portion of the SP from the SEC of the SP.

Photo 4
Comments: Northern view of the SP from the SWC of the SP.

Photo 5
Comments: View to the east from the SEC of the SP.

Photo 6
Comments: View to the west of the SP from the NWC.

Photo 7
Comments: View to the southern portion of the SP from the NWC of the SP.

Photo 8
Comments: View to the west from the SWC of the SP.

Photo 9
Comments: View to the south from the NWC of the SP.

Photo 10
Comments: Illegal dumping located on the SP in the southern portion of the SP.

Photo 11
Comments: View to the north from the central portion of the SP.

Photo 12
Comments: Southern view from the center of the SP.

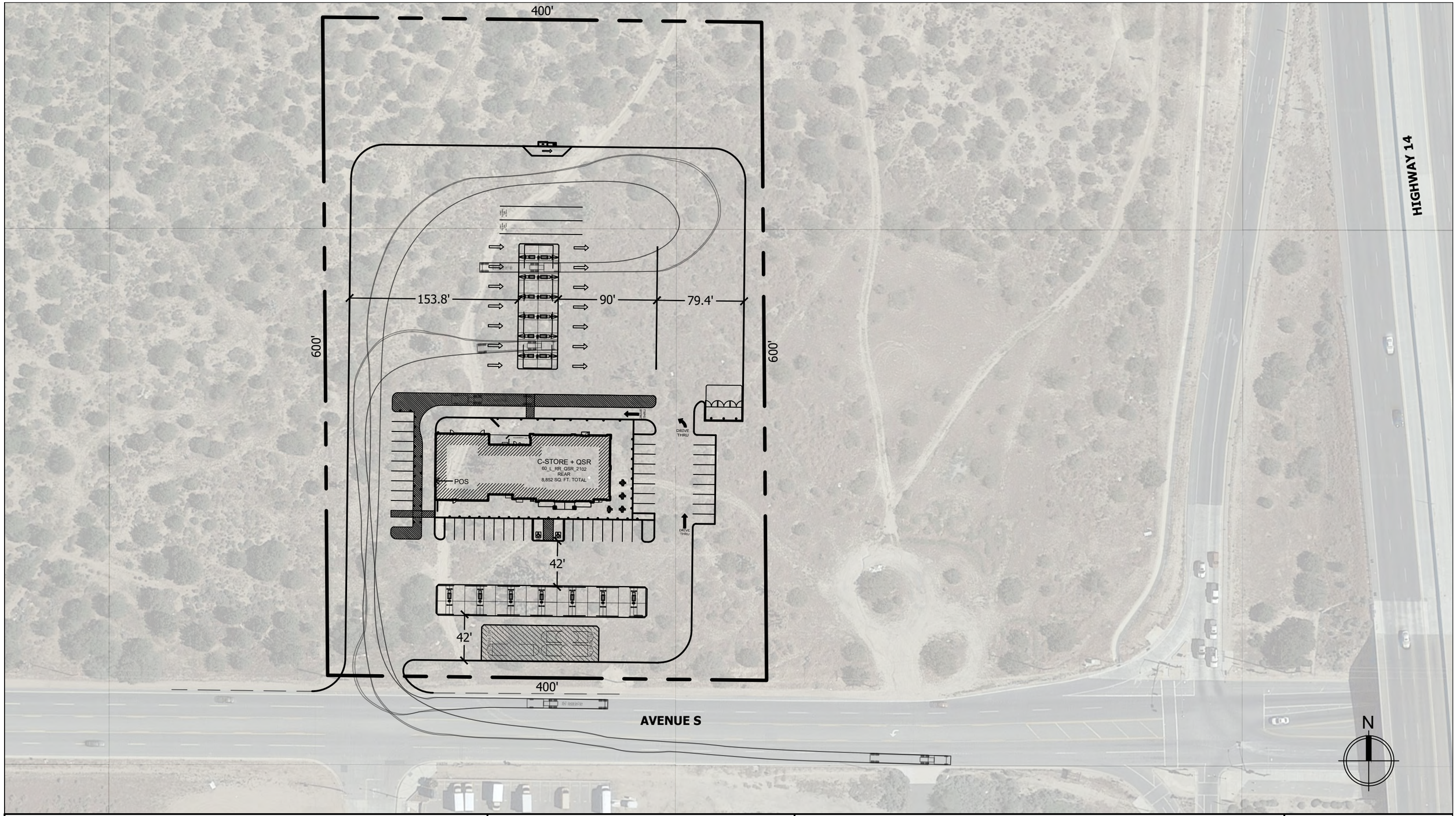
Photo 13
Comments: Eastern view from the center of the SP.

Photo 14
Comments: Western view from the center of the SP.

Photo 15
Comments: Pole mounted transformer near the SWC of the SP.

Appendix D

User Provided Documentation



SITE DATA

PARKING:	APPROX. 47 STALLS PROVIDED	
PARCEL AREA:	239,971 SQ. FT.	5.51 ACRES
BUILDING AREA:	8,852 SQ. FT.	0.21 ACRES

Scale:

80 0 80

Scale: 1" = 80'

QUICK FIT STUDY

HIGHWAY 14 & AVENUE S
PALMDALE, CALIFORNIA

Date: 2022/03/16 BY: WO Project number: 22-033

MAVERIK

185 S. State Street
Salt Lake City, Utah 84111

Potential Maverik Acquisition – Hwy 14 & Ave S, Palmdale, CA

Appendix E

Regulatory Database Report

DATABASE REPORT

Project Property:	*Maverik Palmdale, CA* *Highway 14 & Ave S* *Palmdale CA*
Project No:	*2380018XX*
Report Type:	*Database Report*
Order No:	*22080300932*
Requested by:	*Cardno Inc.*
Date Completed:	*August 4, 2022*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

Property Information:

Project Property:	*Maverik Palmdale, CA* *Highway 14 & Ave S Palmdale CA*
Project No:	*2380018XX*

Coordinates:

Latitude:	*34.55892571*
Longitude:	*-118.13530699*
UTM Northing:	*3,824,716.77*
UTM Easting:	*395,846.07*
UTM Zone:	*UTM Zone 11S*

Elevation:	*2,866 FT*

Order Information:

Order No:	*22080300932*
Date Requested:	*August 3, 2022*
Requested by:	*Cardno Inc.*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
City Directory Search	*CD - 2 Street Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*
Vapor Screening Tool	*Vapor Screening Tool*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
DOE FUSRAP	Y	1	0	0	0	0	0	0
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	**1**	0	-	-	**1**
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
FRP	Y	0.25	0	0	0	-	-	0
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
RESPONSE	Y	1	0	0	0	0	0	0
ENVIROSTOR	Y	1	0	0	0	0	**1**	**1**
DELISTED ENVS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
SWRCB SWF	Y	0.5	0	0	0	0	-	0
WMUD	Y	0.5	0	0	0	0	-	0
HWP	Y	1	0	0	0	0	0	0
SWAT	Y	0.5	0	0	0	0	-	0
C&D DEBRIS RECY	Y	0.5	0	0	0	0	-	0
RECYCLING	Y	0.5	0	0	0	0	-	0
PROCESSORS	Y	0.5	0	0	0	0	-	0
CONTAINER RECY	Y	0.5	0	0	0	0	-	0
LDS	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	0	0	-	0
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
UST CLOSURE	Y	0.5	0	0	0	0	-	0
HHSS	Y	0.25	0	0	0	-	-	0
UST SWEEPS	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	0	0	-	-	0
AST SWRCB	Y	0.25	0	0	0	-	-	0
TANK OIL GAS	Y	0.25	0	0	0	-	-	0
DELISTED TNK	Y	0.25	0	0	0	-	-	0
CERS TANK	Y	0.25	0	**1**	0	-	-	**1**
DELISTED CTNK	Y	0.25	0	0	0	-	-	0
HIST TANK	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
LUR	Y	0.5	0	0	0	0	-	0
CALSITES	Y	0.5	0	0	0	0	-	0
HLUR	Y	0.5	0	0	0	0	-	0
DEED	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
CLEANUP SITES	Y	0.5	0	0	0	0	-	0
DELISTED CLEANUP	Y	0.5	0	0	0	0	-	0
DELISTED COUNTY	Y	0.25	0	0	0	-	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED ILST	Y	0.5	0	0	0	0	-	0
DELISTED IUST	Y	0.25	0	0	0	-	-	0
County								
SML LA	Y	0.5	0	0	0	0	-	0
SWF LA COUNTY	Y	0.5	0	0	0	0	-	0
CUPA LA COUNTY	Y	0.25	0	**1**	0	-	-	**1**
HMS LA	Y	0.25	0	**1**	**1**	-	-	**2**
UST SANTAFESP	Y	0.25	0	0	0	-	-	0
UST LONGB	Y	0.25	0	0	0	-	-	0
CUPA BURBANK	Y	0.25	0	0	0	-	-	0
UST ELSEGUNDO	Y	0.25	0	0	0	-	-	0
UST SANTA MONICA	Y	0.25	0	0	0	-	-	0
AST SANTAMON	Y	0.25	0	0	0	-	-	0
CUPA SANTAMON	Y	0.25	0	0	0	-	-	0
UST TORRANCE	Y	0.25	0	0	0	-	-	0
UST VERNON	Y	0.25	0	0	0	-	-	0
CUPA VERNON	Y	0.25	0	0	0	-	-	0
UST LA CITY	Y	0.25	0	0	0	-	-	0
AST LA CITY	Y	0.25	0	0	0	-	-	0
HAZMAT LA CITY	Y	0.125	0	0	-	-	-	0
Additional Environmental Records								
Federal								
FINDS/FRS	Y	PO	0	-	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
TRIS	Y	PO	0	-	-	-	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
ERNS PFAS	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	**1**	**3**	**4**
URANIUM	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DRYC GRANT	Y	0.25	0	0	0	-	-	0
PFAS	Y	0.5	0	0	0	0	-	0
PFAS GW	Y	0.5	0	0	0	0	-	0
HWSS CLEANUP	Y	0.5	0	0	0	0	-	0
TOXIC PITS	Y	1	0	0	0	0	0	0
DTSC HWF	Y	0.5	0	0	0	0	-	0
INSP COMP ENF	Y	1	0	0	0	0	0	0
SCH	Y	1	0	0	0	0	**1**	**1**
CHMIRS	Y	PO	0	-	-	-	-	0
HIST CHMIRS	Y	PO	0	-	-	-	-	0
HAZNET	Y	PO	0	-	-	-	-	0
HIST MANIFEST	Y	PO	0	-	-	-	-	0
HW TRANSPORT	Y	0.125	0	0	-	-	-	0
WASTE TIRE	Y	PO	0	-	-	-	-	0
MEDICAL WASTE	Y	0.25	0	0	0	-	-	0
HIST CORTESE	Y	0.5	0	0	0	0	-	0
CDO/CAO	Y	0.5	0	0	0	0	-	0
CERS HAZ	Y	0.125	0	0	-	-	-	0
DELISTED HAZ	Y	0.5	0	0	0	0	-	0
GEOTRACKER	Y	0.125	0	0	-	-	-	0
MINE	Y	1	0	0	0	0	0	0
LIEN	Y	PO	0	-	-	-	-	0
WASTE DISCHG	Y	0.25	0	0	0	-	-	0
EMISSIONS	Y	0.25	0	0	0	-	-	0
CDL	Y	0.125	0	0	-	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County								
HAZMAT SANTAMON	Y	0.125	0	0	-	-	-	0
HAZ WST SANTAMON	Y	0.125	0	0	-	-	-	0
Total:			0	**4**	**1**	**1**	**5**	**11**

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	HMS LA		332 W AVENUE S PALMDALE CA 935517804	S	0.11 / 605.93	-8	19
1	RCRA NON GEN	ANTELOPE VALLEY AIRPORT EXPRESS INC DBA ANTELOP EXPRESS	332 W AVENUE S PALMDALE CA 93551-7804 ***EPA Handler ID:*** CAL000330596	S	0.11 / 605.93	-8	19
1	CERS TANK	ANTELOPE VALLEY AIRPORT EXPRESS	332 W AVENUE S # A PALMDALE CA 93551 ***Site ID:*** 371964	S	0.11 / 605.93	-8	20
1	CUPA LA COUNTY	ANTELOPE VALLEY AIRPORT EXPRESS	332 W AVENUE S A PALMDALE CA 93551	S	0.11 / 605.93	-8	24
2	HMS LA		145 W AVENUE S PALMDALE CA 93551	E	0.20 / 1,059.03	14	24
3	MRDS	FIRE PULP PLASTER CO.	LOS ANGELES COUNTY PALMDALE CA 93550 ***Dep ID:*** 10284878	NNE	0.43 / 2,256.72	-33	24
4	MRDS	ALPINE	LOS ANGELES COUNTY PALMDALE CA 93550 ***Dep ID:*** 10110785	NNE	0.58 / 3,071.28	-104	25
4	MRDS	ALPINE	LOS ANGELES COUNTY PALMDALE CA 93550 ***Dep ID:*** 10187960	NNE	0.58 / 3,071.28	-104	25
5	SCH	ANA VERDE ELEMENTARY	DIVISION STREET/RAYBURN ROAD PALMDALE CA 93551 ***Estor/EPA ID | Cleanup Status:*** 19990025 | NO FURTHER ACTION AS OF 1/11/2001	NNE	0.95 / 5,005.54	-149	26
5	ENVIROSTOR	ANA VERDE ELEMENTARY	DIVISION STREET/RAYBURN ROAD PALMDALE CA 93551 ***Estor/EPA ID | Cleanup Status:*** 19990025 | NO FURTHER ACTION AS OF 1/11/2001	NNE	0.95 / 5,005.54	-149	27
6	MRDS	EVERT DEPOSIT	LOS ANGELES COUNTY PALMDALE CA 93551 ***Dep ID:*** 10212321	SSE	1.00 / 5,263.98	135	29

Executive Summary: Summary by Data Source

Standard

Federal

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Apr 11, 2022 has found that there are 1 RCRA NON GEN site(s) within approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ANTELOPE VALLEY AIRPORT EXPRESS INC DBA ANTELOP EXPRESS	332 W AVENUE S PALMDALE CA 93551-7804 ***EPA Handler ID**: CAL000330596*	S	0.11 / 605.93	1

State

ENVIROSTOR - EnviroStor Database

A search of the ENVIROSTOR database, dated May 30, 2022 has found that there are 1 ENVIROSTOR site(s) within approximately 1.00 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ANA VERDE ELEMENTARY	DIVISION STREET/RAYBURN ROAD PALMDALE CA 93551 ***Estor/EPA ID	Cleanup Status**: 19990025 | NO FURTHER ACTION AS OF 1/11/2001*	NNE	0.95 / 5,005.54	5

CERS TANK - California Environmental Reporting System (CERS) Tanks

A search of the CERS TANK database, dated Apr 5, 2022 has found that there are 1 CERS TANK site(s) within approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ANTELOPE VALLEY AIRPORT EXPRESS	332 W AVENUE S # A PALMDALE CA 93551 ***Site ID**: 371964*	S	0.11 / 605.93	1

County

CUPA LA COUNTY - Los Angeles County - CUPA Program Records

A search of the CUPA LA COUNTY database, dated Mar 25, 2020 has found that there are 1 CUPA LA COUNTY site(s) within approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ANTELOPE VALLEY AIRPORT EXPRESS	332 W AVENUE S A PALMDALE CA 93551	S	0.11 / 605.93	1

HMS LA - Los Angeles County - HMS List

A search of the HMS LA database, dated Nov 5, 2020 has found that there are 2 HMS LA site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	145 W AVENUE S PALMDALE CA 93551	E	0.20 / 1,059.03	2

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	332 W AVENUE S PALMDALE CA 935517804	S	0.11 / 605.93	1

Non Standard

Federal

MRDS - Mineral Resource Data System

A search of the MRDS database, dated Mar 15, 2016 has found that there are 4 MRDS site(s) within approximately 1.00 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
EVERT DEPOSIT	LOS ANGELES COUNTY PALMDALE CA 93551 ***Dep ID**: 10212321*	SSE	1.00 / 5,263.98	6

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
FIRE PULP PLASTER CO.	LOS ANGELES COUNTY PALMDALE CA 93550 ***Dep ID**: 10284878*	NNE	0.43 / 2,256.72	3
ALPINE	LOS ANGELES COUNTY PALMDALE CA 93550 ***Dep ID**: 10110785*	NNE	0.58 / 3,071.28	4
ALPINE	LOS ANGELES COUNTY PALMDALE CA 93550 ***Dep ID**: 10187960*	NNE	0.58 / 3,071.28	4

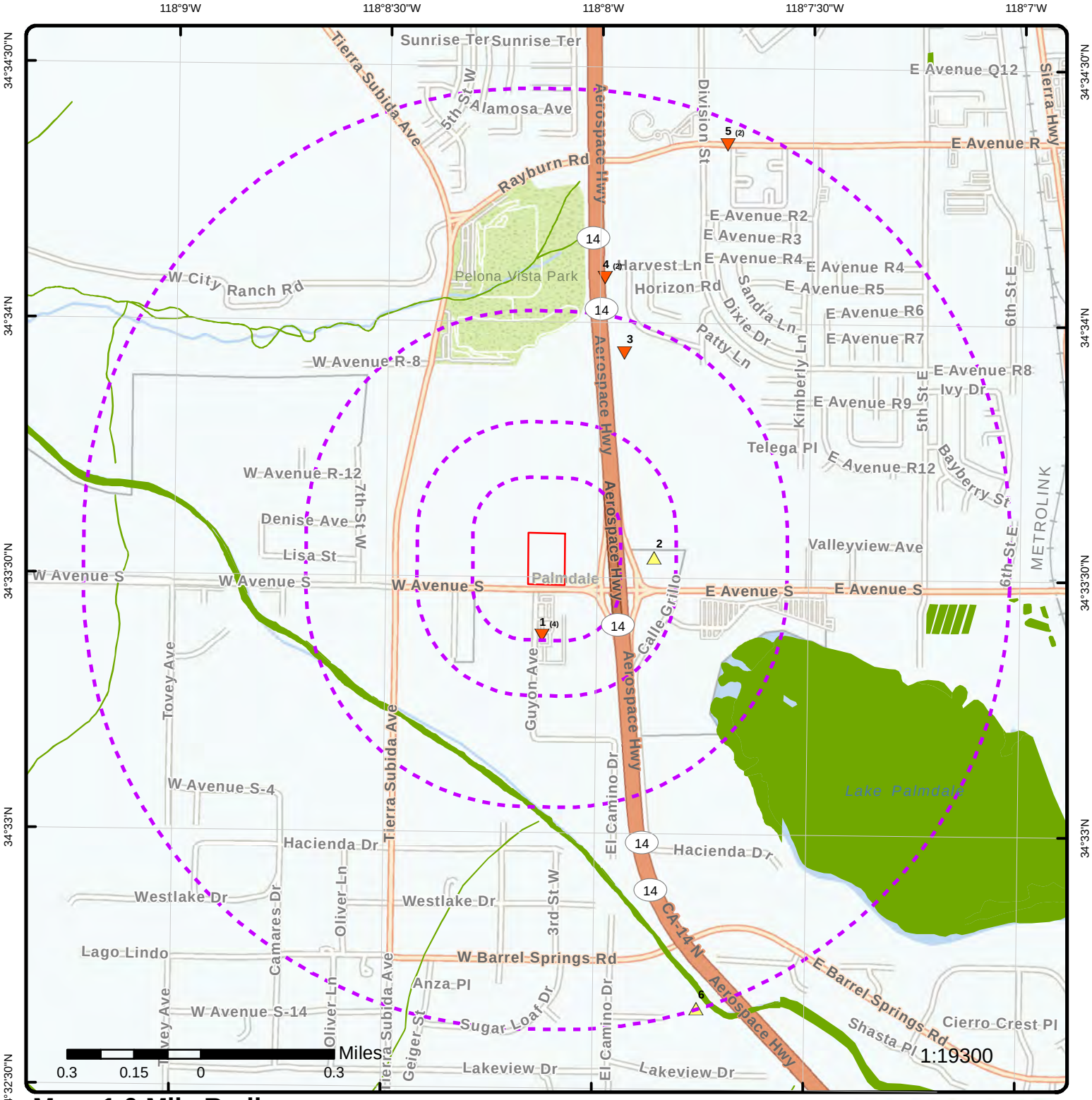
State

SCH - School Property Evaluation Program Sites

A search of the SCH database, dated May 30, 2022 has found that there are 1 SCH site(s) within approximately 1.00 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
ANA VERDE ELEMENTARY	DIVISION STREET/RAYBURN ROAD PALMDALE CA 93551	NNE	0.95 / 5,005.54	5

***Estor/EPA ID | Cleanup Status**: 19990025 | NO FURTHER ACTION AS OF 1/11/2001*



Map: 1.0 Mile Radius

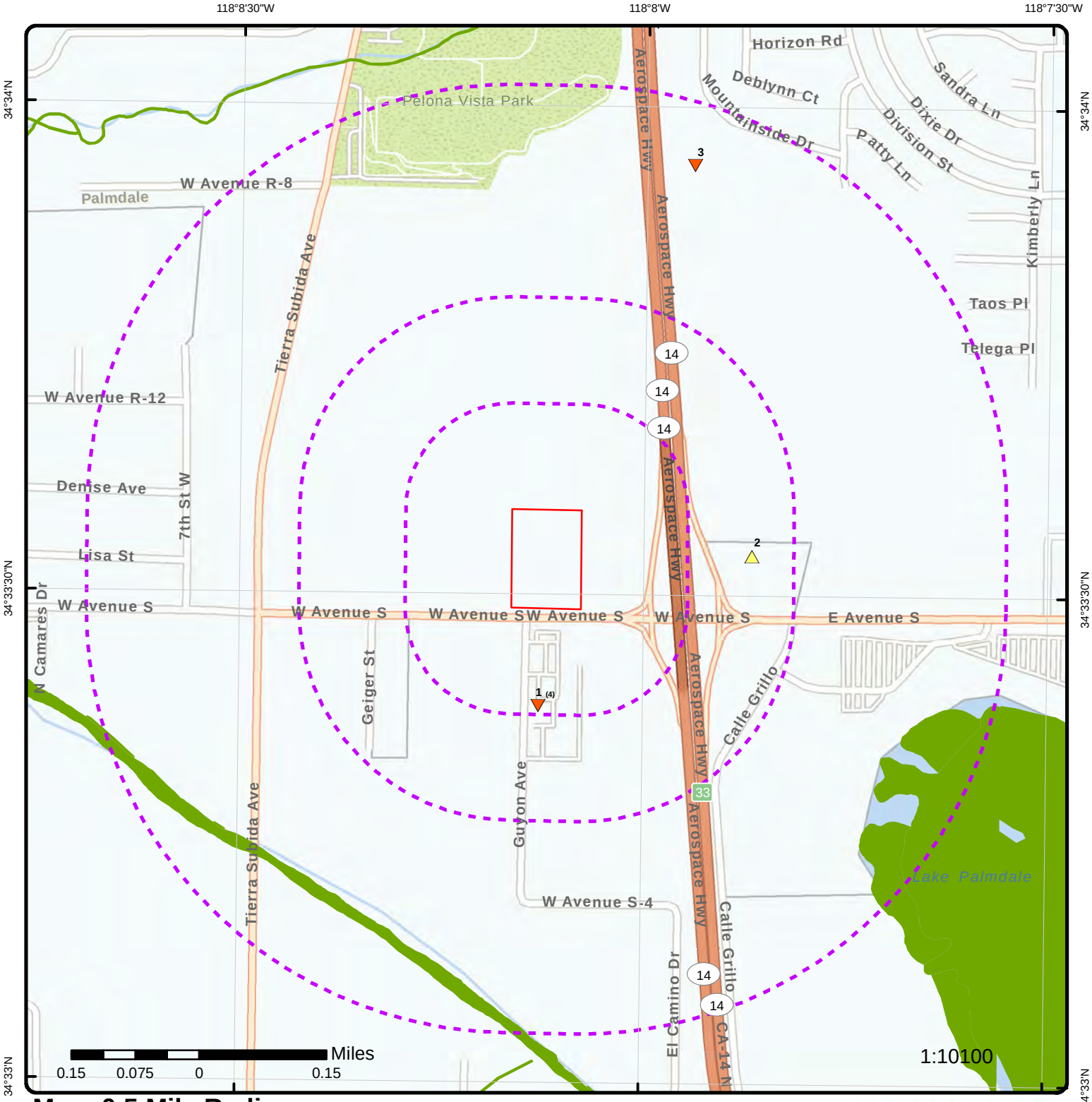
Order Number: 22080300932

Address: Highway 14 & Ave S, Palmdale, CA

Project Property
Buffer Outline
Eris Sites with Higher Elevation
Eris Sites with Same Elevation
Eris Sites with Lower Elevation
Eris Sites with Unknown Elevation
Eris Areas with Higher Elevation
Eris Areas with Same Elevation
Eris Areas with Lower Elevation
Eris Areas with Unknown Elevation
Freeways; Highways
Traffic Circle; Ramp
Major & Minor Arterial
Traffic Circle; Ramp
Local Road
Rail
State
Country
National Wetland
Indian Reserve Land
Plume
100 Year Flood Zone
500 Year Flood Zone
FWS Special Designation Areas

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Map: 0.5 Mile Radius

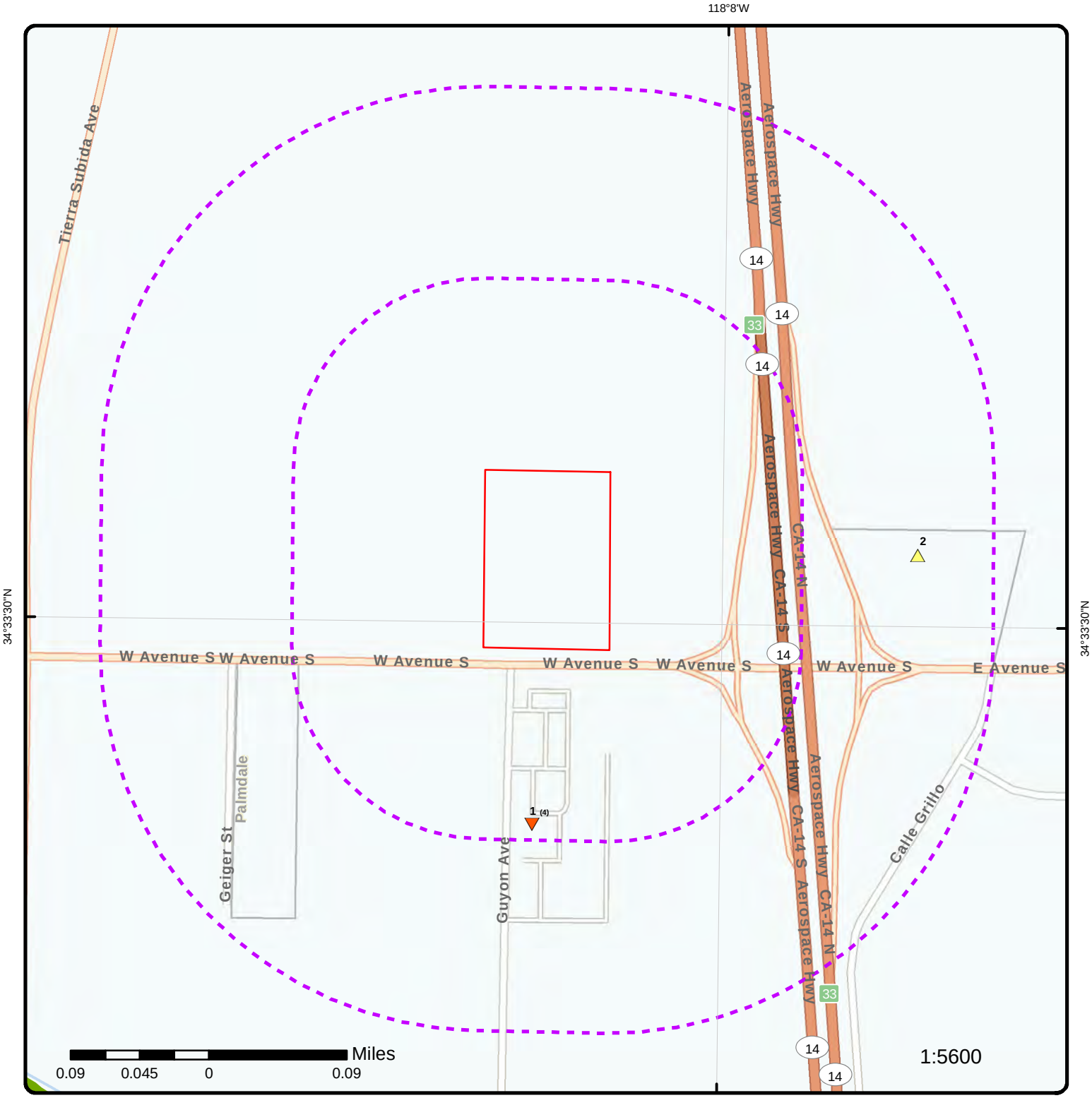
Order Number: 22080300932

Address: Highway 14 & Ave S, Palmdale, CA

Project Property
Buffer Outline
Eris Sites with Higher Elevation
Eris Sites with Same Elevation
Eris Sites with Lower Elevation
Eris Sites with Unknown Elevation
Eris Areas with Higher Elevation
Eris Areas with Same Elevation
Eris Areas with Lower Elevation
Eris Areas with Unknown Elevation
Freeways; Highways
Traffic Circle; Ramp
Major & Minor Arterial
Traffic Circle; Ramp
Local Road
Rail
State
Country
National Wetland
Indian Reserve Land
Plume
100 Year Flood Zone
500 Year Flood Zone
FWS Special Designation Areas

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Map: 0.25 Mile Radius

Order Number: 22080300932
Address: Highway 14 & Ave S, Palmdale, CA

Project Property
Buffer Outline
Eris Sites with Higher Elevation
Eris Sites with Same Elevation
Eris Sites with Lower Elevation
Eris Sites with Unknown Elevation
Eris Areas with Higher Elevation
Eris Areas with Same Elevation
Eris Areas with Lower Elevation
Eris Areas with Unknown Elevation
Freeways; Highways
Traffic Circle; Ramp
Major & Minor Arterial
Traffic Circle; Ramp
Local Road
Rail
State
Country
National Wetland
Indian Reserve Land
Plume
100 Year Flood Zone
500 Year Flood Zone
FWS Special Designation Areas

Source: © 2021 ESRI StreetMap Premium
© ERIS Information Inc.

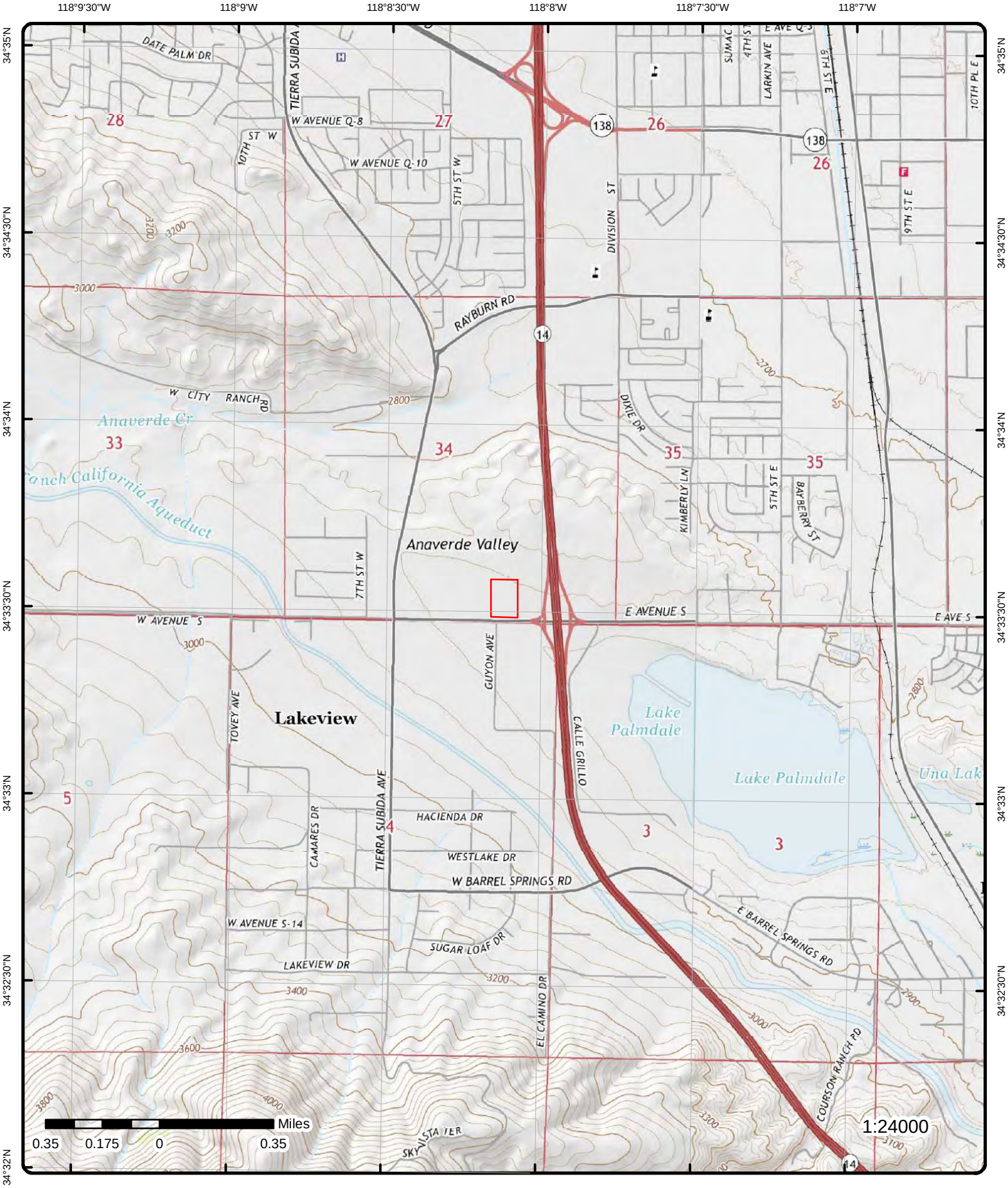
Aerial **Year: 2021**

Order Number: 22080300932

Address: Highway 14 & Ave S, Palmdale, CA

© ERIS Information Inc.

Source: ESRI World Imagery



Topographic Map

Year: 2018

Order Number: 22080300932

Address: Highway 14 & Ave S, CA

Quadrangle(s): Ritter Ridge, CA; Palmdale, CA

Source: USGS Topographic Map

© ERIS Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 4	S	0.11 / 605.93	2,857.99 / -8	332 W AVENUE S PALMDALE CA 935517804	HMS LA

Site No: 028679
Area: 4

Detail Info

Permit No: 000408312
Permit Cat Desc: Industrial Waste Permit
Status Code: PERM
Status Desc: Equipment Permitted
Permit Status Desc: Equipment Permitted
Permit Type: 05
Permit Type Desc: Operating Industrial Waste Permit - Onsite
Permit Status Code: PERM
Permit Category: I
File No: 040599
File Name: A V AIRPORT EXPRESS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	2 of 4	S	0.11 / 605.93	2,857.99 / -8	ANTELOPE VALLEY AIRPORT EXPRESS INC DBA ANTELOP EXPRESS 332 W AVENUE S PALMDALE CA 93551-7804	RCRA NON GEN

EPA Handler ID: CAL000330596
Gen Status Universe: No Report
Contact Name: THOMAS MILLER
Contact Address: 332 WEST AVE S , STE A , PALMDALE , CA, 93551 ,
Contact Phone No and Ext: 661-947-2529
Contact Email: TOM@ANTELOPEEXPRESS.COM
Contact Country:
County Name: LOS ANGELES
EPA Region: 09
Land Type:
Receive Date: 20080313
Location Latitude: 34.557282
Location Longitude: -118.135409

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2022, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No

Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20080313
Handler Name: ANTELOPE VALLEY AIRPORT EXPRESS INC DBA ANTELOP EXPRESS
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: ANTELOPE VALLEY AIRPORT EXPRESS INC
Date Became Current:
Date Ended Current:
Phone: 661-947-2529
Source Type: Implementer
Street No:
Street 1: 332 W AVE S
Street 2: SUITE A
City: PALMDALE
State: CA
Country:
Zip Code: 93551-7804

Owner/Operator Ind: Current Operator
Type: Other
Name: THOMAS MILLER
Date Became Current:
Date Ended Current:
Phone: 661-947-2529
Source Type: Implementer
Street No:
Street 1: 332 WEST AVE S
Street 2: STE A
City: PALMDALE
State: CA
Country:
Zip Code: 93551

1	3 of 4	S	0.11 / 605.93	2,857.99 / -8	ANTELOPE VALLEY AIRPORT EXPRESS 332 W AVENUE S # A PALMDALE CA 93551	CERS TANK

Site ID: 371964
Latitude: 34.55668
Longitude: -118.13527

Regulated Programs

EI ID: 10288855
EI Description: Chemical Storage Facilities

EI ID: 10288855
EI Description: Aboveground Petroleum Storage

EI ID: 10288855
EI Description: Hazardous Waste Generator

Violations

Violation Date: 04/01/2016
Violation Source: CERS
Violation Program: HW
Violation Division: Los Angeles County Fire Department
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 04/18/2017. OBSERVATION: Observed unlabeled containers of used motor oil, waste antifreeze, and used oil filters. All hazardous waste containers shall be marked with the following information: 1) the words "Hazardous Waste"; 2) name and address of generator; 3) hazardous properties; 4) physical state; 5) composition (contents); 6) accumulation start date. CORRECTIVE ACTION: Immediately label these containers and ensure that all hazardous waste containers are marked with all the required information.

Violation Description:

Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 04/01/2016 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Los Angeles County Fire Department
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31
Violation Notes:

Returned to compliance on 04/18/2017. OBSERVATION: Generator failed to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment. Observed accumulated oil and debris inside the secondary containment pallet for the used oil and waste coolant. Secondary containment areas must be kept dry. CORRECTIVE ACTION: Owner/Operator shall maintain the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment. The Owner/Operator shall develop procedures to operate the facility in such a manner to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste [Truncated]

Violation Description:

Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment..

Violations

Violation Date: 04/01/2016 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Los Angeles County Fire Department
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Notes:

Returned to compliance on 04/18/2017. OBSERVATION: A business plan has not been received by the CUPA. CORRECTIVE ACTION: Submit the business plan electronically in the California Environmental Reporting System (CERS) and implement immediately.

Violation Description:

Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Evaluations

Eval Date: 07/31/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Los Angeles County Fire Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 04/18/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Los Angeles County Fire Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 04/01/2016
Violations Found: Yes

Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Los Angeles County Fire Department
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Tom Miller; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/01/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Los Angeles County Fire Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Tom Miller; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/18/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Los Angeles County Fire Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Eval Date: 07/31/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Los Angeles County Fire Department
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Eval Date: 07/31/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Los Angeles County Fire Department
Eval Program: HW
Eval Source: CERS
Eval Notes:

Jennifer Blair; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Identification Signer
Entity Name: THOMAS MILLER
Entity Title: PRESIDENT
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Operator
Entity Name: Tom Miller
Entity Title:

Address:
City:
State:
Country:
Zip Code:
Phone: (661) 947-2529

Affil Type Desc: Parent Corporation
Entity Name: ANTELOPE VALLEY AIRPORT EXPRESS
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 332 W AVENUE S #A
City: PALMDALE
State: CA
Country:
Zip Code: 93551
Phone:

Affil Type Desc: Legal Owner
Entity Name: Tom Miller
Entity Title:
Address: 332 WEST AVENUE S #A
City: PALMDALE
State: CA
Country: United States
Zip Code: 93551
Phone: (661) 947-2529

Affil Type Desc: Document Preparer
Entity Name: Jennifer Blair
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Los Angeles County Fire
Entity Title:
Address: 5825 Rickenbacker Road
City: Commerce
State: CA
Country:
Zip Code: 90040-3027
Phone: (323) 890-4000

Affil Type Desc: Environmental Contact
Entity Name: Thomas Miller
Entity Title:
Address: 332 West Ave S S#A
City: Palmdale
State: CA
Country:
Zip Code: 93551
Phone:

Affil Type Desc: Property Owner
Entity Name: Thomas Miller

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Entity Title:
Address: 332 West Ave S
City: Palmale
State: CA
Country: United States
Zip Code: 93551
Phone: (661) 947-2529

1	4 of 4	S	0.11 / 605.93	2,857.99 / -8	ANTELOPE VALLEY AIRPORT EXPRESS 332 W AVENUE S A PALMDALE CA 93551	CUPA LA COUNTY

Facility ID: FA0039312
CERS ID: 10288855

Active Facility Details

PE: 1000

PE: 3701

PE: 3001

2	1 of 1	E	0.20 / 1,059.03	2,879.71 / 14	145 W AVENUE S PALMDALE CA 93551	HMS LA

Site No: 017181
Area: 4

Detail Info

Permit No:
Permit Cat Desc:
Status Code: OPEN
Status Desc: File Opened, no permit exists
Permit Status Desc:
Permit Type:
Permit Type Desc:
Permit Status Code:
Permit Category:
File No: 023133
File Name: SHELL OIL #204-0030-0003

3	1 of 1	NNE	0.43 / 2,256.72	2,833.08 / -33	FIRE PULP PLASTER CO. LOS ANGELES COUNTY PALMDALE CA 93550	MRDS

Dep ID: 10284878
Dev Status: PAST PRODUCER
Code List: GYP
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10284878
I1: 10
Latitude: 34.565674
Longitude: -118.132324

Commodity

I1: 34
Code: GYP
Commodity: Gypsum-Anhydrite
Commodity Type: Non-metallic
Commodity Group: Gypsum-Anhydrite
Importance: Primary
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:02:28

Names

I1: 14
Inserted By: MAS migration

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Fire Pulp Plaster Co.	**Updated By:**	USGS
Line:	2	**Update Date:**	29-OCT-02

Names

I1:	33	**Inserted By:**	MAS migration
Status:	Previous	**Insert Date:**	29-OCT-02
Site Name:	Fire Pulp Plaster	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

Names

I1:	14	**Inserted By:**	MAS migration
Status:	Previous	**Insert Date:**	29-OCT-02
Site Name:	Alpine Plaster Co.	**Updated By:**	USGS
Line:	3	**Update Date:**	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	1 of 2	NNE	0.58 / 3,071.28	2,762.40 / -104	ALPINE LOS ANGELES COUNTY PALMDALE CA 93550	MRDS

Dep ID:	10110785	**I1:**	22
Dev Status:	PRODUCER	**Latitude:**	34.568115
Code List:	GYP	**Longitude:**	-118.133118
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10110785		

Commodity

I1:	29	**Line:**	1
Code:	GYP	**Inserted By:**	MRDS migration
Commodity:	Gypsum-Anhydrite	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Non-metallic	**Updated By:**	USGS
Commodity Group:	Gypsum-Anhydrite	**Update Date:**	29-OCT-2002 09:01:17
Importance:	Primary		

Names

I1:	12	**Inserted By:**	MRDS migration
Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Alpine	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	2 of 2	NNE	0.58 / 3,071.28	2,762.40 / -104	ALPINE LOS ANGELES COUNTY PALMDALE CA 93550	MRDS

Dep ID:	10187960	**I1:**	21
Dev Status:	PAST PRODUCER	**Latitude:**	34.568115
Code List:	GYP	**Longitude:**	-118.133118
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10187960		

Commodity

I1:	33	**Line:**	1
Code:	GYP	**Inserted By:**	MAS migration
Commodity:	Gypsum-Anhydrite	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Non-metallic	**Updated By:**	USGS
Commodity Group:	Gypsum-Anhydrite	**Update Date:**	29-OCT-2002 09:01:47
Importance:	Primary		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Names

I1:	14	***Inserted By:***	MAS migration
Status:	Current	***Insert Date:***	29-OCT-02
Site Name:	Alpine	***Updated By:***	USGS
Line:	1	***Update Date:***	29-OCT-02

5	*1 of 2*	*NNE*	*0.95 / 5,005.54*	*2,716.84 / -149*	***ANA VERDE ELEMENTARY DIVISION STREET/RAYBURN ROAD PALMDALE CA 93551***	***SCH***

Estor/EPA ID:	19990025	***Permit Renewal Lead:***	
Site Code:	304085, 304175	***Project Manager:***	
Nat Priority List:	NO	***Supervisor:***	JAVIER HINOJOSA
Acres:	16.5 ACRES	***Public Partici Spclst:***	
Special Program:		***Census Tract:***	6037910403
Funding:	SCHOOL DISTRICT	***County:***	LOS ANGELES
Assembly District:	36	***Latitude:***	34.57251
Senate District:	21	***Longitude:***	-118.12834

School District: PALMDALE ELEMENTARY SCHOOL DISTRICT
APN: NONE SPECIFIED
Cleanup Status: NO FURTHER ACTION AS OF 1/11/2001
Cleanup Oversight Agencies: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY
Site Type: SCHOOL
Office: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
Past Use that Caused Contam: NONE
Potential Media Affected: NO MEDIA AFFECTED
Potential Contamin of Concern:

NO CONTAMINANTS FOUND

SITE HISTORY:

The site consists of 16.5 acres and has never been developed.

Status: NO FURTHER ACTION
Program Type: SCHOOL EVALUATION
CalEnviroScreen Score: 75-80%
Summary Link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19990025

Completed Activities

Title: Phase 1
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&doc_id=6002716
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Phase 1
Date Completed: 3/23/2000
Comments: Phase I - Pursuant to an agreement between the Department of Toxic Substances Control (DTSC) and the California Department of Education, DTSC's Site Mitigation Program completed review of a Phase I Environmental Assessment and has determined that a Preliminary Endangerment Assessment (PEA) is required. The PEA will be conducted under DTSC's oversight pursuant to an agreement between DTSC and the Palmdale School District (PSD). Any sub- sequent cleanup activities (if needed) after the PEA wouldbe conducted pursuant to an agreement with DTSC and PSD.

Title: Public Participation
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: * Public Participation
Date Completed: 12/12/2000

Comments:

Title: Preliminary Endangerment Assessment Report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&doc_id=6002715
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Report
Date Completed: 1/11/2001
Comments: DTSC approved the Preliminary Endangerment Assessment (PEA). Based on the information presented in the PEA, neither an actual or a potential release of hazardous material, nor the presence of naturally occurring hazardous material indicated at the site pose a threat to human health or the environment under any land use. Therefore, DTSC concurred that no further environmental investigation or cleanup was required at this site, and approved the PEA.

Title: PEA Workplan
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&doc_id=6002718
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Workplan
Date Completed: 8/22/2000
Comments:

Title: Environmental Oversight Agreement
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&enforcement_id=6002712
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Environmental Oversight Agreement
Date Completed: 7/20/2000
Comments: DTSC entered into an Environmental Oversight Agreement (Docket Number HSA-A 99/00-143) with the Palmdale School District to provide oversight for a Preliminary Endangerment Assessment for the proposed Ana Verde Elementary School site.

Title: Preliminary Endangerment Assessment Report
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Report
Date Completed: 10/27/2000
Comments:

5	2 of 2	NNE	0.95 / 5,005.54	2,716.84 / -149	ANA VERDE ELEMENTARY DIVISION STREET/RAYBURN ROAD PALMDALE CA 93551	ENVIROSTOR

Estor/EPA ID:	19990025	**Assembly District:**	36
Site Code:	304085, 304175	**Senate District:**	21
Nat Priority List:	NO	**Permit Renewal Lead:**	
APN:	NONE SPECIFIED	**Public Partici Spclst:**	
Census Tract:	6037910403	**Project Manager:**	
Site Type:	SCHOOL	**County:**	LOS ANGELES
Address Description:	DIVISION STREET/RAYBURN ROAD	**Latitude:**	34.57251
Office:	SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH	**Longitude:**	-118.12834
Special Program:		**Acres:**	16.5 ACRES
Funding:	SCHOOL DISTRICT	**Supervisor:**	JAVIER HINOJOSA

Cleanup Status: NO FURTHER ACTION AS OF 1/11/2001
Cleanup Oversight Agencies: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY
School District: PALMDALE ELEMENTARY SCHOOL DISTRICT
Past Use that Caused Contam: NONE

Potential Media Affected: NO MEDIA AFFECTED
Potential Contamin of Concern:

NO CONTAMINANTS FOUND

Site History:

The site consists of 16.5 acres and has never been developed.

Status: NO FURTHER ACTION
Program Type: SCHOOL EVALUATION
CalEnviroScreen Score: 75-80%
Summary Link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19990025

Completed Activities

Title: Environmental Oversight Agreement
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&enforcement_id=6002712
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Environmental Oversight Agreement
Date Completed: 7/20/2000
Comments: DTSC entered into an Environmental Oversight Agreement (Docket Number HSA-A 99/00-143) with the Palmdale School District to provide oversight for a Preliminary Endangerment Assessment for the proposed Ana Verde Elementary School site.

Title: Public Participation
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: * Public Participation
Date Completed: 12/12/2000
Comments:

Title: Phase 1
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&doc_id=6002716
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Phase 1
Date Completed: 3/23/2000
Comments: Phase I - Pursuant to an agreement between the Department of Toxic Substances Control (DTSC) and the California Department of Education, DTSC's Site Mitigation Program completed review of a Phase I Environmental Assessment and has determined that a Preliminary Endangerment Assessment (PEA) is required. The PEA will be conducted under DTSC's oversight pursuant to an agreement between DTSC and the Palmdale School District (PSD). Any sub- sequent cleanup activities (if needed) after the PEA wouldbe conducted pursuant to an agreement with DTSC and PSD.

Title: PEA Workplan
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&doc_id=6002718
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Workplan
Date Completed: 8/22/2000
Comments:

Title: Preliminary Endangerment Assessment Report
Title Link:
Area Name:
Area Link:

Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Report
Date Completed: 10/27/2000
Comments:

Title: Preliminary Endangerment Assessment Report
Title Link: https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19990025&doc_id=6002715
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Preliminary Endangerment Assessment Report
Date Completed: 1/11/2001
Comments: DTSC approved the Preliminary Endangerment Assessment (PEA). Based on the information presented in the PEA, neither an actual or a potential release of hazardous material, nor the presence of naturally occurring hazardous material indicated at the site pose a threat to human health or the environment under any land use. Therefore, DTSC concurred that no further environmental investigation or cleanup was required at this site, and approved the PEA.

6	1 of 1	SSE	1.00 / 5,263.98	3,001.48 / 135	EVERT DEPOSIT LOS ANGELES COUNTY PALMDALE CA 93551	MRDS

Dep ID: 10212321
Dev Status: OCCURRENCE
Code List: CR
Url: http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10212321
I1: 28
Latitude: 34.544312
Longitude: -118.129211

Commodity

I1: 20
Code: CR
Commodity: Chromium
Commodity Type: Metallic
Commodity Group: Chromium
Importance: Primary
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-2002 09:00:24
Updated By: USGS
Update Date: 29-OCT-2002 09:01:56

Names

I1: 34
Status: Current
Site Name: Evert Deposit
Line: 1
Inserted By: MAS migration
Insert Date: 29-OCT-02
Updated By: USGS
Update Date: 29-OCT-02

Unplottable Summary

Total: 1 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
HAZNET	CLANDESTINE DRUG LAB OPERATOR UNKNOWN	AVENUE S	PALMDALE CA	935500000	826187964

Unplottable Report

Site: ***CLANDESTINE DRUG LAB OPERATOR UNKNOWN AVENUE S PALMDALE CA 935500000***

HAZNET

SIC Code:		***Mailing City:***	SACRAMENTO
NAICS Code:		***Mailing State:***	CA
EPA ID:	CLU970016439	***Mailing Zip:***	958120806
Create Date:	6/26/1997	***Region Code:***	3
Fac Act Ind:	No	***Owner Name:***	--
Inact Date:	6/19/2002	***Owner Addr 1:***	--
County Code:	19	***Owner Addr 2:***	
County Name:	Los Angeles	***Owner City:***	--
Mail Name:	DTSC CLU/ERU	***Owner State:***	99
Mailing Addr 1:	PO BOX 806	***Owner Zip:***	--
Mailing Addr 2:		***Owner Phone:***	0000000000
Owner Fax:			

Contact Information

--	--
Contact Name:	DUTY OFFICER - DTSC CLU/ERU
Street Address 1:	PO BOX 806
Street Address 2:	
City:	SACRAMENTO
State:	CA
Zip:	958120806
Phone:	9163233600
--	--
--	--

Tanner Information

--	--
Generator EPA ID:	CLU970016439
Generator County Code:	19
Generator County:	Los Angeles
TSD EPA ID:	CAD008302903
TSD County Code:	19
TSD County:	Los Angeles
State Waste Code:	181
State Waste Code Desc.:	Other inorganic solid waste
Method Code:	H01
Method Description:	Transfer station
Tons:	0.4
Year:	1997
--	--
Generator EPA ID:	CLU970016439
Generator County Code:	19
Generator County:	Los Angeles
TSD EPA ID:	CAD008302903
TSD County Code:	19
TSD County:	Los Angeles
State Waste Code:	611
State Waste Code Desc.:	Contaminated soil from site clean-up
Method Code:	H01
Method Description:	Transfer station
Tons:	0.7
Year:	1997
--	--
Generator EPA ID:	CLU970016439
Generator County Code:	19
Generator County:	Los Angeles
TSD EPA ID:	CAD008302903
TSD County Code:	19
TSD County:	Los Angeles

State Waste Code:	741
State Waste Code Desc.:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Method Code:	R01
Method Description:	Recycler
Tons:	0.3
Year:	1997
--	--
Generator EPA ID:	CLU970016439
Generator County Code:	19
Generator County:	Los Angeles
TSD EPA ID:	CAD008302903
TSD County Code:	19
TSD County:	Los Angeles
State Waste Code:	791
State Waste Code Desc.:	Liquids with pH <= 2
Method Code:	H01
Method Description:	Transfer station
Tons:	0.03
Year:	1997
--	--

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

Formerly Utilized Sites Remedial Action Program: DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

National Priority List: NPL

Sites on the United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

National Priority List - Proposed: PROPOSED NPL

Sites proposed - by the EPA, the state agency, or concerned citizens - for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

Deleted NPL: DELETED NPL

Sites deleted from the United States Environmental Protection Agency (EPA)'s National Priorities List. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

SEMS List 8R Active Site Inventory: SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Apr 27, 2022

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Apr 27, 2022

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Apr 11, 2022

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Apr 11, 2022

RCRA Generator List: RCRA LQG

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Apr 11, 2022

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Apr 11, 2022

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Apr 11, 2022

RCRA Non-Generators: RCRA NON GEN

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Apr 11, 2022

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Apr 11, 2022

Federal Engineering Controls-ECs: FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 25, 2022

Federal Institutional Controls- ICs: FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: May 25, 2022

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Institutional Control Boundaries at NPL sites: NPL IC

Boundaries of Institutional Control areas at sites on the United States Environmental Protection Agency (EPA)'s National Priorities List, or Proposed or Deleted, made available by the EPA's Shared Enterprise Geodata and Services (SEGS). United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.

Government Publication Date: Mar 30, 2022

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Jun 5, 2022

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Aug 20, 2021

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 31, 2021

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 31, 2021

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Feb 4, 2022

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Feb 4, 2022

LIEN on Property: SEMS LIEN

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: Apr 27, 2022

Superfund Decision Documents: SUPERFUND ROD

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: May 3, 2022

State

State Response Sites: RESPONSE

A list of identified confirmed release sites where the Department of Toxic Substances Control (DTSC) is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database is state equivalent NPL.

Government Publication Date: May 30, 2022

EnviroStor Database: ENVIROSTOR

The EnviroStor Data Management System is made available by the Department of Toxic Substances Control (DTSC). Includes Corrective Action sites, Tiered Permit sites, Historical Sites and Evaluation/Investigation sites. This database is state equivalent CERCLIS.

Government Publication Date: May 30, 2022

Delisted State Response Sites: DELISTED ENVS

Sites removed from the list of State Response Sites made available by the EnviroStor Data Management System, Department of Toxic Substances Control (DTSC).

Government Publication Date: May 30, 2022

Solid Waste Information System (SWIS): SWF/LF

The Solid Waste Information System (SWIS) database made available by the Department of Resources Recycling and Recovery (CalRecycle) contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

Government Publication Date: May 2, 2022

Solid Waste Disposal Sites with Waste Constituents Above Hazardous Waste Levels: SWRCB SWF

This is a list of solid waste disposal sites identified by California State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit.

Government Publication Date: Sep 20, 2006

Waste Management Unit Database: WMUD

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

Government Publication Date: Jan 1, 2000

EnviroStor Hazardous Waste Facilities: HWP

A list of hazardous waste facilities including permitted, post-closure and historical facilities found in the Department of Toxic Substances Control (DTSC) EnviroStor database.

Government Publication Date: May 30, 2022

Sites Listed in the Solid Waste Assessment Test (SWAT) Program Report: SWAT

In a 1993 Memorandum of Understanding, the State Water Resources Control Board (SWRCB) agreed to submit a comprehensive report on the Solid Waste Assessment Test (SWAT) Program to the California Integrated Waste Management Board (CIWMB). This report summarizes the work completed to date on the SWAT Program, and addresses both the impacts that leakage from solid waste disposal sites (SWDS) may have upon waters of the State and the actions taken to address such leakage.

Government Publication Date: Dec 31, 1995

Construction and Demolition Debris Recyclers: C&D DEBRIS RECY

This listing of Construction and Demolition Debris Recyclers is maintained by the California Intergrated Waste Management Board-common C&D materials include lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, or green waste related to land development.

Government Publication Date: Jun 20, 2018

Recycling Centers: RECYCLING

This list of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jul 12, 2022

Listing of Certified Processors: PROCESSORS

This list of Certified Processors that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jul 12, 2022

Listing of Certified Dropoff, Collection, and Community Service Programs: CONTAINER RECY

This list of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jul 12, 2022

Land Disposal Sites: LDS

Land Disposal Sites in GeoTracker, the State Water Resources Control Board (SWRCB)'s data management system. The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units. Waste management units include waste piles, surface impoundments, and landfills.

Government Publication Date: Feb 15, 2022

Leaking Underground Fuel Tank Reports: LUST

List of Leaking Underground Storage Tanks within the Cleanup Sites data in GeoTracker database. GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense and Site Cleanup Program) as well as permitted facilities such as operating Underground Storage Tanks. The Leak Prevention Program that overlooks LUST sites is the SWRCB in California's Environmental Protection Agency.

Government Publication Date: Feb 15, 2022

Delisted Leaking Storage Tanks: DELISTED LST

List of Leaking Underground Storage Tanks (LUST) cleanup sites removed from GeoTracker, the State Water Resources Control Board (SWRCB)'s database system, as well as sites removed from the SWRCB's list of UST Case closures.

Government Publication Date: Feb 15, 2022

Permitted Underground Storage Tank (UST) in GeoTracker: UST

List of Permitted Underground Storage Tank (UST) sites made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA).

Government Publication Date: Apr 25, 2022

Proposed Closure of Underground Storage Tank Cases: UST CLOSURE

List of UST cases that are being considered for closure by either the California Environmental Protection Agency, State Water Resources Control Board or the Executive Director that have been posted for a 60-day public comment period.

Government Publication Date: May 5, 2021

Historical Hazardous Substance Storage Information Database: HHSS

The Historical Hazardous Substance Storage database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms, was later transferred to microfiche, and recently indexed as a searchable database. When using this database, please be aware that it is based upon self-reported information submitted by facilities which has not been independently verified. It is unlikely that every facility responded to the survey and the database should not be expected to be a complete inventory of all facilities that were operating at that time. This database is maintained by the California State Water Resources Control Board's (SWRCB) Geotracker.

Government Publication Date: Aug 27, 2015

Statewide Environmental Evaluation and Planning System: UST SWEEPS

The Statewide Environmental Evaluation and Planning System (SWEEPS) is a historical listing of active and inactive underground storage tanks made available by the California State Water Resources Control Board (SWRCB).

Government Publication Date: Oct 1, 1994

Aboveground Storage Tanks: AST

A statewide list from 2009 of aboveground storage tanks (ASTs) made available by the Cal FIRE Office of the State Fire Marshal (OSFM). This list is no longer maintained or updated by the Cal FIRE OSFM.

Government Publication Date: Aug 31, 2009

SWRCB Historical Aboveground Storage Tanks: AST SWRCB

A list of aboveground storage tanks made available by the California State Water Resources Control Board (SWRCB). Effective January 1, 2008, the Certified Unified Program Agencies (CUPAs) are vested with the responsibility and authority to implement the Aboveground Petroleum Storage Act (APSA).

Government Publication Date: Dec 1, 2007

Oil and Gas Facility Tanks: TANK OIL GAS

Locations of oil and gas tanks that fall under the jurisdiction of the Geologic Energy Management Division of the California Department of Conservation (CalGEM) (CCR 1760). CalGEM was formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR).

Government Publication Date: Jul 6, 2022

Delisted Storage Tanks: DELISTED TNK

This database contains a list of storage tank sites that were removed by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA) and the Cal FIRE Office of State Fire Marshal (OSFM).

Government Publication Date: Jul 27, 2022

California Environmental Reporting System (CERS) Tanks: CERS TANK

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Apr 5, 2022

Delisted California Environmental Reporting System (CERS) Tanks: DELISTED CTNK

This database contains a list of Aboveground Petroleum Storage and Underground Storage Tank sites that were removed from in the California Environmental Protection Agency (CalEPA) Regulated Site Portal.

Government Publication Date: Apr 5, 2022

Historical Hazardous Substance Storage Container Information - Facility Summary: HIST TANK

The State Water Resources Control Board maintained the Hazardous Substance Storage Containers listing and inventory in th 1980s. This facility summary lists historic tank sites where the following container types were present: farm motor vehicle fuel tanks; waste tanks; sumps; pits, ponds, lagoons, and others; and all other product tanks. This set, published in May 1988, lists facility and owner information, as well as the number of containers. This data is historic and will not be updated.

Government Publication Date: May 27, 1988

Site Mitigation and Brownfields Reuse Program Facility Sites with Land Use Restrictions: LUR

The Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents land use restrictions that are active. Some sites have multiple land use restrictions.

Government Publication Date: May 30, 2022

CALSITES Database: CALSITES

This historical database was maintained by the Department of Toxic Substance Control (DTSC) for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

Government Publication Date: May 1, 2004

Hazardous Waste Management Program Facility Sites with Deed / Land Use Restrictions: HLUR

The Department of Toxic Substances Control (DTSC) Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Government Publication Date: Feb 18, 2021

Deed Restrictions and Land Use Restrictions: DEED

List of Deed Restrictions, Land Use Restrictions and Covenants in GeoTracker made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency. A deed restriction (land use covenant) may be required to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

Government Publication Date: Feb 15, 2022

Voluntary Cleanup Program: VCP

List of sites in the Voluntary Cleanup Program made available by the Department of Toxic Substances and Control (DTSC). The Voluntary Cleanup Program was designed to respond to lower priority sites. Under the Voluntary Cleanup Program, DTSC enters site-specific agreements with project proponents for DTSC oversight of site assessment, investigation, and/or removal or remediation activities, and the project proponents agree to pay DTSC's reasonable costs for those services.

Government Publication Date: May 30, 2022

GeoTracker Cleanup Program Sites: CLEANUP SITES

A list of Cleanup Program sites in the state of California made available by The State Water Resources Control Board (SWRCB) of the California Environmental Protection Agency (EPA). SWRCB tracks leaking underground storage tank cleanups as well as other water board cleanups.

Government Publication Date: Feb 15, 2022

Delisted Cleanup Program Sites: DELISTED CLEANUP

A list of Cleanup Program sites which were once included - and have since been removed from - the list of Cleanup Program Sites in GeoTracker. GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Government Publication Date: Feb 15, 2022

Delisted County Records: DELISTED COUNTY

Records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: May 26, 2022

Tribal

Leaking Underground Storage Tanks (LUSTs) on Indian Lands: INDIAN LUST

LUSTs on Tribal/Indian Lands in Region 9, which includes California.

Government Publication Date: Apr 8, 2022

Underground Storage Tanks (USTs) on Indian Lands: INDIAN UST

USTs on Tribal/Indian Lands in Region 9, which includes California.

Government Publication Date: Apr 8, 2022

Delisted Tribal Leaking Storage Tanks: DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: Apr 11, 2022

Delisted Tribal Underground Storage Tanks: DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: Apr 11, 2022

County

Los Angeles County - Site Mitigation List: SML LA

A Site Mitigation List in the County of Los Angeles. The list is made available by Los Angeles County Fire Department. Site mitigation is handled by the Site Mitigation Unit (SMU) which facilitates completion of site clean-up projects of contaminated sites in an expeditious manner in all cities of the Los Angeles County except El Segundo, Glendale, Long Beach, Santa Fe Springs, and Vernon.

Government Publication Date: May 26, 2021

Los Angeles County - Solid Waste Sites: SWF LA COUNTY

List of permitted solid waste facilities, closed landfills, historical dumpsites and other solid waste sites in Los Angeles County, made available by the Department of Public Works in Los Angeles County.

Government Publication Date: May 13, 2022

Los Angeles County - CUPA Program Records: CUPA LA COUNTY

A list of inspection and enforcement records for active and inactive CUPA Program facilities, made available by the Health Hazardous Materials Division (HHMD) of the County of Los Angeles Fire Department. Includes Hazardous Materials Business Plan (HMBP), California Accidental Release Prevention Plan (CalARP), Hazardous Waste Generator (HWG), and the Aboveground Petroleum Storage Act Programs (APSA). Inactive programs include facilities that are out of business or no longer regulated by the HHMD.

Government Publication Date: Mar 25, 2020

Los Angeles County - HMS List: HMS LA

List of sites in the Los Angeles County Department of Public Works Hazardous Materials System (HMS) Database which have or have had permits for Industrial Waste, Underground Storage Tanks, or Stormwater in the county of Los Angeles.

Government Publication Date: Nov 5, 2020

Los Angeles County - Santa Fe Springs Underground Storage Tank: UST SANTAFESP

A list of registered active Underground Storage Tanks (USTs) in the City of Santa Fe Springs. This list is made available by Santa Fe Springs Department of Fire-Rescue.

Government Publication Date: Feb 11, 2022

Los Angeles County - Long Beach UST List: UST LONGB

List of registered Underground Storage Tanks (USTs) in the City of Long Beach, Los Angeles County, made available by the Long Beach Certified Unified Program Agency (CUPA). The Long Beach CUPA operates under oversight shared by the Long Beach Fire Department and Health Department.

Government Publication Date: Jul 9, 2018

Los Angeles County - Burbank City CUPA List: CUPA BURBANK

A list of facilities associated with various Certified Unified Program Agency (CUPA) programs in the City of Burbank. This list is made available by the City of Burbank Fire Department.

Government Publication Date: Aug 21, 2019

Los Angeles County - El Segundo City Underground Storage Tanks List: UST ELSEGUNDO

List of registered Underground Storage Tanks (USTs) in the City of El Segundo of Los Angeles County, made available by El Segundo City Fire Department.

Government Publication Date: Jan 17, 2017

Los Angeles County - Santa Monica City Underground Storage Tank List: UST SANTA MONICA

A list of registered active Underground Storage Tanks (USTs) in the City of Santa Monica made available by Santa Monica Fire Prevention Division.

Government Publication Date: Dec 3, 2020

Los Angeles County - Santa Monica City Aboveground Storage Tank List: AST SANTAMON

List of registered Aboveground Storage Tanks (ASTs) made available by the Santa Monica Fire Department in the City of Santa Monica of Los Angeles County, California.

Government Publication Date: Jan 14, 2022

Los Angeles County - Santa Monica City CUPA Facilities List: CUPA SANTAMON

The Santa Monica Fire Department's office maintains a list of CUPA Facilities located in Santa Monica city.

Government Publication Date: Jan 14, 2022

Los Angeles County - Torrance City Underground Storage Tanks: UST TORRANCE

A list of registered Underground Storage Tank (UST) sites in Torrance City of Los Angeles County. This list is made available by Torrance City Office of Clerk.

Government Publication Date: Apr 20, 2022

Los Angeles County - Vernon City UST List: UST VERNON

A list of Underground Storage Tanks (UST) in Vernon City provided by the Vernon City Fire Department.

Government Publication Date: May 26, 2022

Los Angeles County - Vernon City CUPA List: CUPA VERNON

The Vernon City Fire Department's office maintains a list of CUPA Facilities located in Vernon city.

Government Publication Date: May 26, 2022

Los Angeles County - City of Los Angeles UST List: UST LA CITY

A list of active and inactive underground storage tank facilities made available by the Los Angeles Fire Department CUPA.

Government Publication Date: Jan 13, 2022

Los Angeles County - City of Los Angeles AST List: AST LA CITY

A list of active and inactive above ground petroleum storage tanks made available by the Los Angeles Fire Department CUPA.

Government Publication Date: Jun 1, 2019

Los Angeles County - City of Los Angeles Hazardous Materials Facilities: HAZMAT LA CITY

A list of active and inactive hazardous materials facilities made available by the Los Angeles Fire Department CUPA.

Government Publication Date: Jun 1, 2019

Additional Environmental Record Sources

Federal

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Nov 2, 2020

Toxics Release Inventory (TRI) Program: TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U. S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Aug 24, 2021

Perfluorinated Alkyl Substances (PFAS) Releases: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

Government Publication Date: Aug 24, 2021

PFOA/PFOS Contaminated Sites: PFAS NPL

List of National Priorities List (NPL) and related Superfund Alternative Agreement (SAA) sites where PFOA or PFOS contaminants have been found in water and/or soil. The site listing is provided by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Jul 18, 2022

Perfluorinated Alkyl Substances (PFAS) Water Quality: PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Jul 20, 2020

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Access the following for the most current informations https://pfasproject.com/pfas-contamination-site-tr acker/

Government Publication Date: Dec 12, 2019

National Response Center PFAS Spills: ERNS PFAS

National Response Center (NRC) calls from 1990 to the most recent complete calendar year where there is indication of Aqueous Film Forming Foam (AFFF) usage. NRC calls may reference AFFF usage in the "Material Involved" or "Incident Description" fields. Data made available by the US Environmental Protection Agency (EPA). Disclaimer: dataset may include initial or misidentified incident data not yet validated or investigated by a federal/state response agency.

Government Publication Date: Feb 23, 2022

Hazardous Materials Information Reporting System: HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Sep 1, 2020

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Apr 30, 2022

Toxic Substances Control Act: TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).
Government Publication Date: Apr 11, 2019

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.
Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.
Government Publication Date: May 25, 2022

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.
Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.
Government Publication Date: Apr 30, 2022

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.
Government Publication Date: May 5, 2021

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).
Government Publication Date: May 5, 2021

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: May 26, 2021

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

Government Publication Date: Jul 7, 2020

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: Feb 1, 2022

Surface Mining Control and Reclamation Act Sites: SMCRA

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of Abandoned Mine Land (AML) impacts, as well as information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Government Publication Date: Feb 22, 2022

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

Uranium Mill Tailings Radiation Control Act Sites: URANIUM

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

Government Publication Date: Mar 4, 2017

Alternative Fueling Stations: ALT FUELS

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: May 16, 2022

Superfunds Consent Decrees: CONSENT DECREES

A list of Superfund consent decrees made available by the Department of Justice, Environment & Natural Resources Division (ENRD).

Government Publication Date: May 18, 2022

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: Mar 30, 2022

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Jan 20, 2022

State

Dry Cleaning Facilities: DRYCLEANERS

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial, linen supply, commercial laundry, dry cleaning and pressing machines - Coin Operated Laundry and Dry Cleaning. This is provided by the Department of Toxic Substance Control.

Government Publication Date: Dec 20, 2021

Delisted Drycleaners: DELISTED DRYCLEANERS

Sites removed from the list of drycleaner related facilities that have EPA ID numbers, made available by the California Department of Toxic Substance Control.

Government Publication Date: Feb 28, 2020

Non-Toxic Dry Cleaning Incentive Program: DRYC GRANT

A list of grant recipients of the Non-Toxic Dry Cleaning Incentive Program made available by the California Air Resources Board (CARB). The program provides grants to eligible dry cleaning businesses to assist them in transitioning away from PERC machines to alternative non-toxic and non-smog forming technologies.

Government Publication Date: Feb 28, 2020

Per- and Polyfluoroalkyl Substances (PFAS): PFAS

List of sites from the State Water Resources Control Board (SWRCB)'s GeoTracker at which one or more of the potential contaminants of concern are in the PFAS Master List of PFAS Substances made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Feb 15, 2022

PFOA/PFOS Groundwater: PFAS GW

A list of water wells from the Groundwater Ambient Monitoring and Assessment Program (GAMA) Groundwater Information System with the groundwater chemical perfluorooctanoic acid (PFOA) (NL = 0.014 UG/L) or perfluorooctanoic sulfonate (PFOS) (NL = 0.013 UG/L). The GAMA Groundwater Information System search is made available by California Water Boards.

Government Publication Date: Jun 29, 2022

Hazardous Waste and Substances Site List - Site Cleanup: HWSS CLEANUP

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. This list is published by California Department of Toxic Substance Control.

Government Publication Date: May 20, 2021

Toxic Pit Cleanup Act Sites: TOXIC PITS

The Toxic Pits Cleanup Act (TPCA) list identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. This list was maintained by the State Water Resources Control Board (SWRCB), is not longer maintained, and updates are not planned.

Government Publication Date: Jul 1, 1995

List of Hazardous Waste Facilities Subject to Corrective Action: DTSC HWF

This is a list of hazardous waste facilities identified in Health and Safety Code (HSC) § 25187.5. These facilities are those where Department of Toxic Substances Control (DTSC) has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.

Government Publication Date: Jul 18, 2016

EnviroStor Inspection, Compliance, and Enforcement: INSP COMP ENF

A list of permitted facilities with inspections and enforcements tracked in the Department of Toxic Substance Control (DTSC) EnviroStor.

Government Publication Date: Apr 29, 2021

School Property Evaluation Program Sites: SCH

A list of sites registered with The Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup (SPEC) Division. SPEC is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school.

Government Publication Date: May 30, 2022

California Hazardous Material Incident Report System (CHMIRS): CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS). This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: May 31, 2022

Historical California Hazardous Material Incident Report System (CHMIRS): HIST CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS) prior to 1993. This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: Jan 1, 1993

Hazardous Waste Manifest Data: HAZNET

A list of hazardous waste manifests received each year by Department of Toxic Substances Control (DTSC). The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Oct 24, 2016

Historical Hazardous Waste Manifest Data: HIST MANIFEST

A list of historic hazardous waste manifests received by the Department of Toxic Substances Control (DTSC) from year the 1980 to 1992. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Dec 31, 1992

DTSC Registered Hazardous Waste Transporters: HW TRANSPORT

The California Department of Toxic Substances Control (DTSC) maintains this list of Registered Hazardous Waste Transporters.

Government Publication Date: Jun 13, 2022

Registered Waste Tire Haulers: WASTE TIRE

This list of registered waste tire haulers is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Jul 12, 2022

California Medical Waste Management Program Facility List: MEDICAL WASTE

This list of Medical Waste Management Program Facilities is maintained by the California Department of Public Health. The Medical Waste Management Program (MWMP) regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations. This list contains transporters, treatment, and transfer facilities.

Government Publication Date: May 6, 2022

Historical Cortese List: HIST CORTESE

List of sites which were once included on the Cortese list. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements for providing information about the location of hazardous sites.

Government Publication Date: Nov 13, 2008

Cease and Desist Orders and Cleanup and Abatement Orders: CDO/CAO

The California Environment Protection Agency "Cortese List" of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO). This list contains many CDOs and CAOs that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

Government Publication Date: Dec 6, 2021

California Environmental Reporting System (CERS) Hazardous Waste Sites: CERS HAZ

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Apr 5, 2022

Delisted Environmental Reporting System (CERS) Hazardous Waste Sites: DELISTED HAZ

This database contains a list of sites that were removed from the California Environmental Protection Agency (CalEPA) in the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator.

Government Publication Date: Nov 29, 2018

Sites in GeoTracker: GEOTRACKER

GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. This is a list of sites in GeoTracker that aren't otherwise categorized as LUST, Land Disposal Sites (LDS), Cleanup Sites, or sites having Waste Discharge Requirements (WDR). This listing includes program types such as Underground Injection Control (UIC), Confined Animal Facilities (CAF), Irrigated Lands Regulatory Program, plans, and non-case information.

Government Publication Date: Feb 15, 2022

Mines Listing: MINE

This list includes mine site locations extracted from the Mines Online database, maintained by the California Department of Conservation. Mines Online (MOL) is an interactive web map designed with GIS features that provide information such as the mine name, mine status, commodity sold, location, and other mine specific data. Please note: Mine location information is provided to assist experts in determining the location of mine operators in accordance with California Civil Code section 1103.4 and reflects information reported by mine operators in annual reports provided under Public Resources Code section 2207. While the Division of Mine Reclamation (DMR) attempts to populate MOL with accurate location information, the DMR cannot guarantee the accuracy of operator reported location information.

Government Publication Date: Jun 23, 2022

Recorded Environmental Cleanup Liens: LIEN

The California Department of Toxic Substance Control (DTSC) maintains this list of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

Government Publication Date: May 4, 2022

Waste Discharge Requirements: WASTE DISCHG

List of sites in California State Water Resources Control Board (SWRCB) Waste Discharge Requirements (WDRs) Program in California, made available by the SWRCB via GeoTracker. The WDR program regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Government Publication Date: Feb 15, 2022

Toxic Pollutant Emissions Facilities: EMISSIONS

A list of criteria and toxic pollutant emissions data for facilities in California made available by the California Environmental Protection Agency - Air Resources Board (ARB). Risk data may be based on previous inventory submittals. The toxics data are submitted to the ARB by the local air districts as requirement of the Air Toxics "Hot Spots" Program. This program requires emission inventory updates every four years.

Government Publication Date: Dec 31, 2020

Clandestine Drug Lab Sites: CDL

The Department of Toxic Substances Control (DTSC) maintains a listing of drug lab sites. DTSC is responsible for removal and disposal of hazardous substances discovered by law enforcement officials while investigating illegal/clandestine drug laboratories.

Government Publication Date: Jan 19, 2021

Tribal

No Tribal additional environmental record sources available for this State.

County

Los Angeles County - Santa Monica City Hazardous Materials Facilities: HAZMAT SANTAMON

A list of Hazardous Materials Facilities in the City of Santa Monica, Los Angeles county. This list is made available by Santa Monica Fire Prevention Division which has been designated as the CUPA for the City.

Government Publication Date: Dec 17, 2021

Los Angeles County - Santa Monica City Hazardous Waste Facilities: HAZ WST SANTAMON

A list of Hazardous Waste Facilities in Los Angeles County, City of Santa Monica. This list is made available by Santa Monica Fire Prevention Division.

Government Publication Date: Jan 14, 2022

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:	22080300932p
Date Completed:	August 4, 2022
Project Number:	2380018XX
Project Property:	Maverik Palmdale, CA Highway 14 & Ave S Palmdale CA
Coordinates:	
Latitude:	34.55892571
Longitude:	-118.13530699
UTM Northing:	3824716.77184 Meters
UTM Easting:	395846.072229 Meters
UTM Zone:	UTM Zone 11S
Elevation:	2,866.21 ft
Slope Direction:	SSW

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Geologic Information....7
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The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information

Current USGS Topo (2015)

0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Palmdale, CA; Ritter Ridge, CA

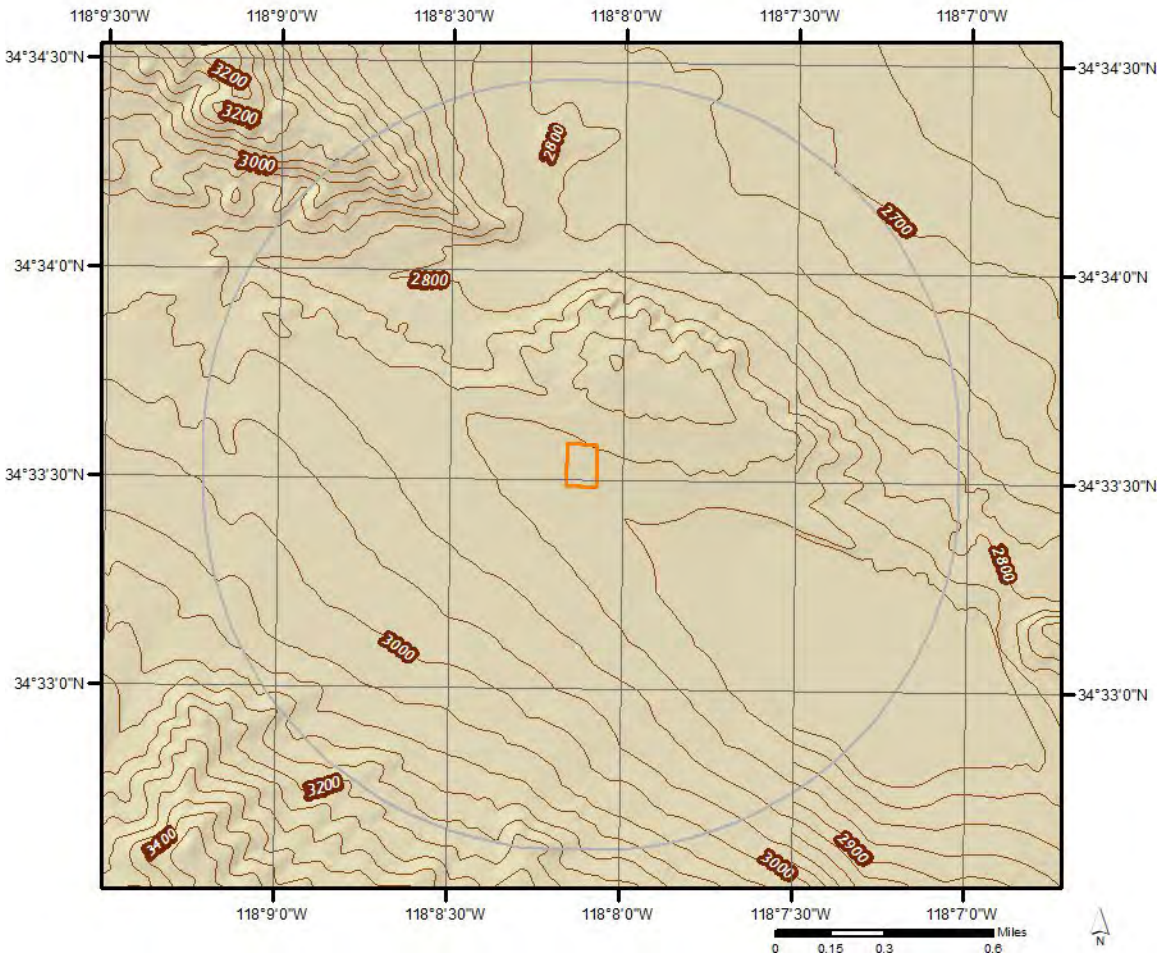
Source: USGS 7.5 Minute Topographic Map

Topographic Information

The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	2,866.21 ft
Slope Direction:	SSW



Hydrologic Information

Wetland

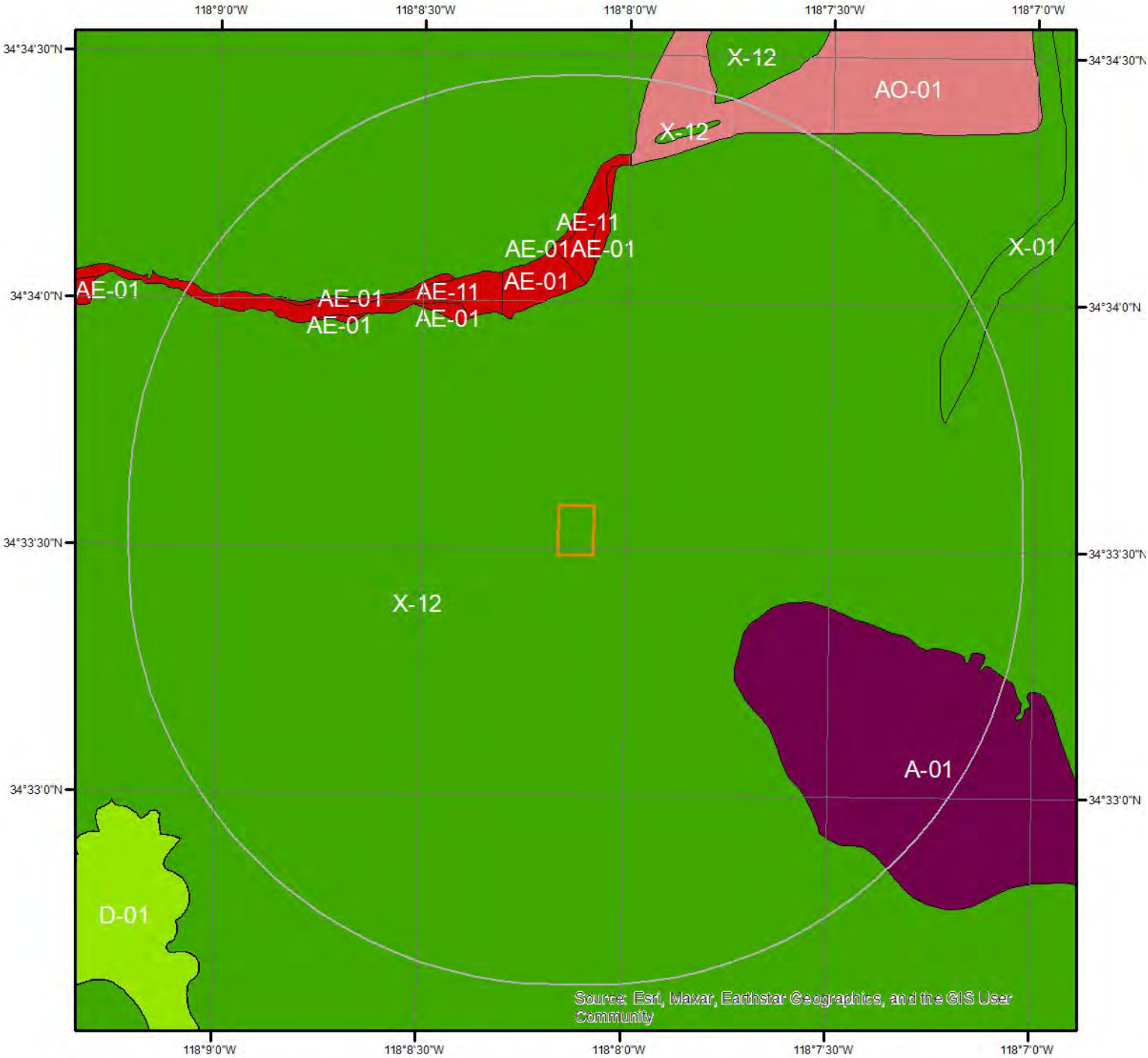
0 0.075 0.15 0.3 Miles

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Hydrologic Information

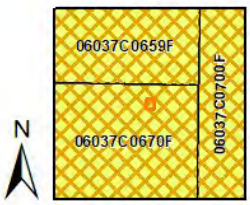


Flood Hazard Zones

Miles
0 0.2 0.4

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED



Quadrangle(s): Palmdale,CA; Ritter Ridge,CA

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	06037C0670F(effective:2008-09-26) 06037C0659F(effective:2008-09-26) 06037C0700F(effective:2008-09-26)

Flood Zone A-01

Zone:	A
Zone subtype:	

Flood Zone AE-01

Zone:	AE
Zone subtype:	

Flood Zone AE-11

Zone:	AE
Zone subtype:	FLOODWAY

Flood Zone AO-01

Zone:	AO
Zone subtype:	

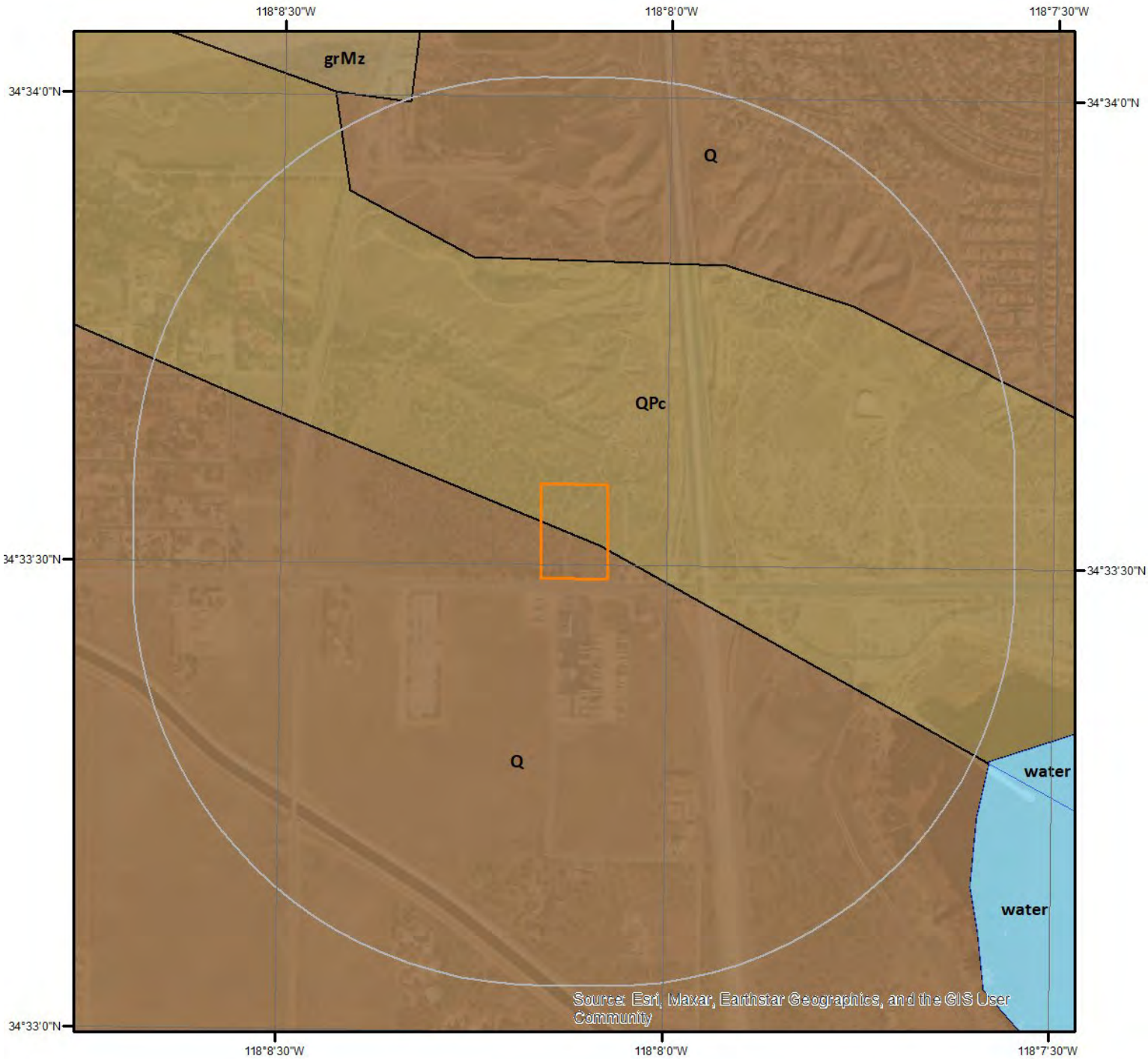
Flood Zone X-01

Zone:	X
Zone subtype:	0.2 PCT ANNUAL CHANCE FLOOD HAZARD

Flood Zone X-12

Zone:	X
Zone subtype:	AREA OF MINIMAL FLOOD HAZARD

Geologic Information



0 0.225 0.45 Miles

N

Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

0 0.3 0.6 Miles

Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit Q

Unit Name:	Quaternary alluvium and marine deposits
Unit Age:	Pliocene to Holocene
Primary Rock Type:	alluvium
Secondary Rock Type:	terrace
Unit Description:	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.

Geologic Unit Q

Unit Name:	Quaternary alluvium and marine deposits
Unit Age:	Pliocene to Holocene
Primary Rock Type:	alluvium
Secondary Rock Type:	terrace
Unit Description:	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.

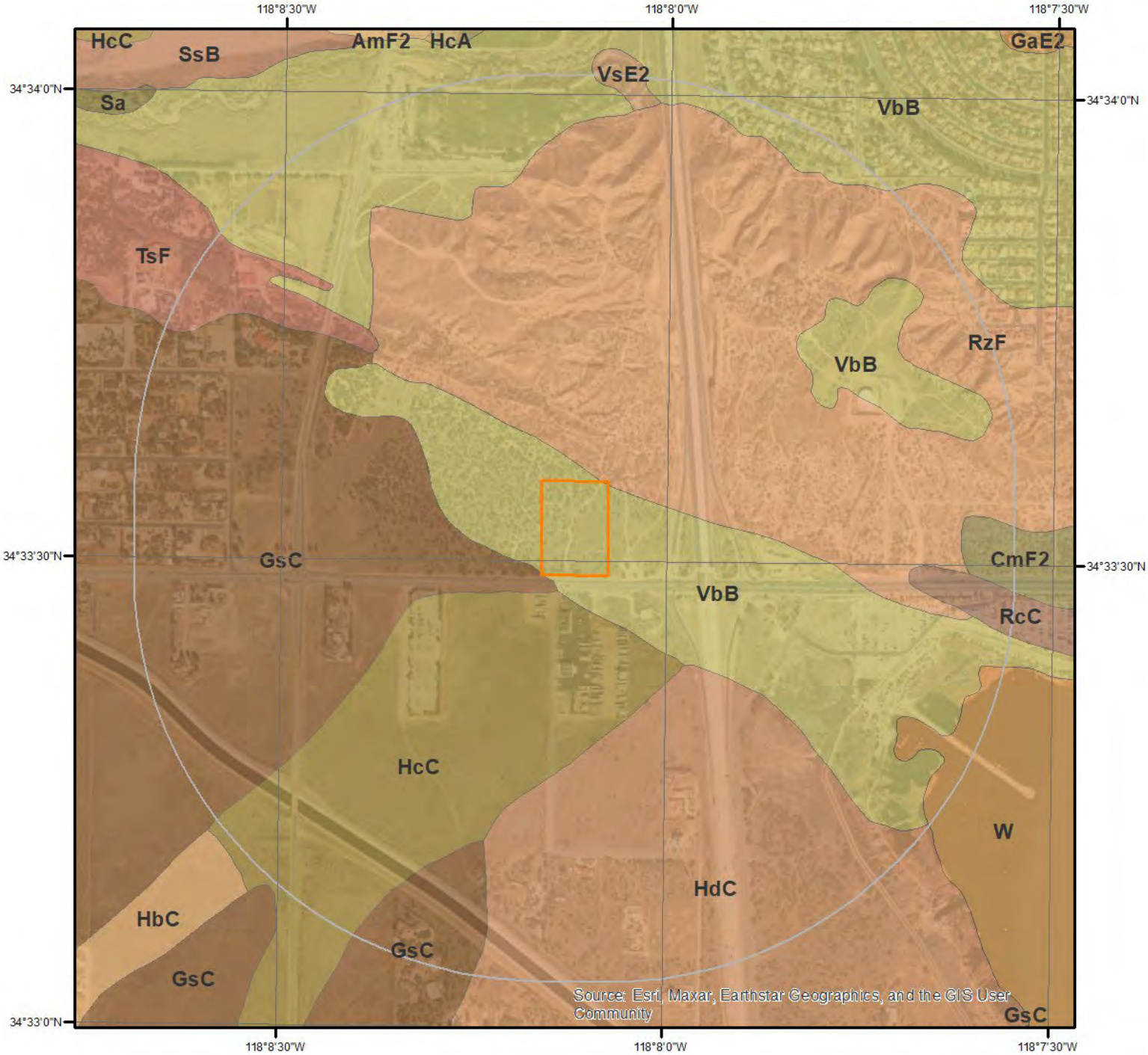
Geologic Unit QPc

Unit Name:	Plio-Pleistocene and Pliocene loosely consolidated deposits
Unit Age:	Miocene to Pleistocene
Primary Rock Type:	sandstone
Secondary Rock Type:	conglomerate
Unit Description:	Pliocene and/or Pleistocene sandstone, shale, and gravel deposits; in part Miocene.

Geologic Unit grMz

Unit Name:	Mesozoic granitic rocks, unit 3 (Sierra Nevada, Death Valley area, Northern Mojave Desert and Transverse Ranges)
Unit Age:	Permian to Tertiary; most Mesozoic
Primary Rock Type:	granodiorite
Secondary Rock Type:	quartz monzonite
Unit Description:	Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite

Soil Information



SSURGO Soils

0 0.2 0.4 Miles N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit CmF2 (1.87%)

Map Unit Name:	Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded
Bedrock Depth - Min:	64cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.
Major components are printed below	
Castaic(50%)	
horizon H1(0cm to 23cm)	Silty clay loam
horizon H2(23cm to 66cm)	Silty clay loam
horizon H3(66cm to 76cm)	Weathered bedrock
Balcom(40%)	
horizon H1(0cm to 18cm)	Silty clay loam
horizon H2(18cm to 64cm)	Silty clay loam
horizon H3(64cm to 74cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: CmF2 - Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded

Component: Castaic (50%)
The Castaic component makes up 50 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills, uplands. The parent material consists of residuum weathered from sedimentary rock. Depth to a root restrictive layer, bedrock, paralithic, is 22 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD063CA Clayey 9-20" ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Balcom (40%)
The Balcom component makes up 40 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills, uplands. The parent material consists of residuum weathered from sedimentary rock. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD063CA Clayey 9-20" ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Saugus (4%)
Generated brief soil descriptions are created for major soil components. The Saugus soil is a minor component.

Component: Unnamed (3%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Gaviota (3%)
Generated brief soil descriptions are created for major soil components. The Gaviota soil is a minor component.

Soil Information

Map Unit GsC (25.4%)

Map Unit Name:	Greenfield sandy loam, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Greenfield(85%)

horizon H1(0cm to 51cm)	Sandy loam
horizon H2(51cm to 152cm)	Sandy loam
horizon H3(152cm to 203cm)	Stratified loamy sand to coarse sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: GsC - Greenfield sandy loam, 2 to 9 percent slopes

Component: Greenfield (85%)
The Greenfield component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on terraces, alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Hanford (8%)
Generated brief soil descriptions are created for major soil components. The Hanford soil is a minor component.

Component: Ramona (5%)
Generated brief soil descriptions are created for major soil components. The Ramona soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit HcC (4.7%)

Map Unit Name:	Hanford sandy loam, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Hanford(85%)

horizon H1(0cm to 20cm)	Sandy loam
horizon H2(20cm to 178cm)	Fine sandy loam
horizon H2(20cm to 178cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: HcC - Hanford sandy loam, 2 to 9 percent slopes

Soil Information

Component: Hanford (85%)
The Hanford component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Greenfield (10%)
Generated brief soil descriptions are created for major soil components. The Greenfield soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit HdC (13.58%)

Map Unit Name:	Hanford gravelly sandy loam, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Hanford(85%)

horizon H1(0cm to 20cm)	Gravelly sandy loam
horizon H2(20cm to 178cm)	Gravelly coarse sandy loam
horizon H2(20cm to 178cm)	Gravelly fine sandy loam
horizon H2(20cm to 178cm)	Gravelly sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: HdC - Hanford gravelly sandy loam, 2 to 9 percent slopes

Component: Hanford (85%)
The Hanford component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Greenfield (10%)
Generated brief soil descriptions are created for major soil components. The Greenfield soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit RcC (2.49%)

Map Unit Name:	Ramona coarse sandy loam, 5 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Soil Information

Major components are printed below

Ramona(85%)

horizon H1(0cm to 51cm)	Coarse sandy loam
horizon H2(51cm to 79cm)	Fine sandy loam
horizon H3(79cm to 229cm)	Sandy clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: RcC - Ramona coarse sandy loam, 5 to 9 percent slopes

Component: Ramona (85%)
The Ramona component makes up 85 percent of the map unit. Slopes are 5 to 9 percent. This component is on terraces. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Hanford (5%)
Generated brief soil descriptions are created for major soil components. The Hanford soil is a minor component.

Component: Greenfield (5%)
Generated brief soil descriptions are created for major soil components. The Greenfield soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit RzF (11.69%)

Map Unit Name:	Rough broken land
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	null
Hydrologic Group - Dominant:	null

Major components are printed below

Rough broken land(85%)

horizon H1(0cm to 152cm)	Variable

Component Description:

Minor map unit components are excluded from this report.

Map Unit: RzF - Rough broken land

Component: Rough broken land (85%)
Generated brief soil descriptions are created for major soil components. The Rough broken land is a miscellaneous area.

Component: Badlands (5%)
Generated brief soil descriptions are created for major soil components. The Badlands soil is a minor component.

Component: Gullied land (5%)
Generated brief soil descriptions are created for major soil components. The Gullied land soil is a minor component.

Component: Rock outcrop (4%)
Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Component: Unnamed (1%)

Soil Information

Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit TsF (3.05%)

Map Unit Name:	Terrace escarpments
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	null
Hydrologic Group - Dominant:	null
Major components are printed below	
Terrace escarpments(90%)	
horizon H1(0cm to 152cm)	Variable

Component Description:

Minor map unit components are excluded from this report.

Map Unit: TsF - Terrace escarpments

Component: Terrace escarpments (90%)
Generated brief soil descriptions are created for major soil components. The Terrace escarpments is a miscellaneous area.

Component: Unnamed (10%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit VbB (25.6%)

Map Unit Name:	Vernalis loam, 2 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.
Major components are printed below	
Vernalis(85%)	
horizon H1(0cm to 36cm)	Loam
horizon H2(36cm to 89cm)	Loam
horizon H3(89cm to 152cm)	Stratified sandy loam to silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: VbB - Vernalis loam, 2 to 5 percent slopes

Component: Vernalis (85%)
The Vernalis component makes up 85 percent of the map unit. Slopes are 2 to 5 percent. This component is on alluvial fans. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 1 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Unnamed (10%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Soil Information

Component: Hanford (5%)
Generated brief soil descriptions are created for major soil components. The Hanford soil is a minor component.

Map Unit VsE2 (0.12%)

Map Unit Name:	Vista coarse sandy loam, 15 to 30 percent slopes, eroded
Bedrock Depth - Min:	71cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Vista(85%)

horizon H1(0cm to 30cm)	Coarse sandy loam
horizon H2(30cm to 71cm)	Coarse sandy loam
horizon H2(30cm to 71cm)	Sandy loam
horizon H3(71cm to 81cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: VsE2 - Vista coarse sandy loam, 15 to 30 percent slopes, eroded

Component: Vista (85%)
The Vista component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on hills, uplands. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD064CA Loamy 9-20" ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Amargosa (10%)
Generated brief soil descriptions are created for major soil components. The Amargosa soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit W (11.51%)

Map Unit Name:	Water

No more attributes available for this map unit

Component Description:

Minor map unit components are excluded from this report.

Map Unit: W - Water

Component: Water (100%)
Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Wells and Additional Sources

Wells & Additional Sources

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	PWS ID	Distance (ft)	Direction
1	CA1909647	117.26	SW

Safe Drinking Water Information System (SDWIS)

Map Key	ID	Distance (ft)	Direction
	No records found		

USGS National Water Information System

Map Key	Monitoring Loc Identifier	Distance (ft)	Direction
2	USGS-343334118083301	2240.75	W

State Sources

Oil and Gas Wells

Map Key	ID	Distance (ft)	Direction
	No records found		

Periodic Groundwater Level Measurement Locations

Map Key	Site Code	Distance (ft)	Direction
3	345594N1181443W001	2399.93	W

Well Completion Reports

Map Key	WCR No	Distance (ft)	Direction
4	WCR0299434	3911.58	SSW
4	WCR1998-009578	3911.58	SSW
4	WCR1776-006833	3911.58	SSW
4	WCR1981-007113	3911.58	SSW
4	WCR2003-013246	3911.58	SSW
4	WCR2007-011557	3911.58	SSW
4	WCR2003-015109	3911.58	SSW
4	WCR2010-010907	3911.58	SSW
4	WCR0096990	3911.58	SSW
4	WCR0069110	3911.58	SSW
4	WCR2008-009258	3911.58	SSW
4	WCR1993-012510	3911.58	SSW
5	WCR0150622	4707.04	ENE
6	WCR1991-017877	4895.53	SE
6	WCR1989-016713	4895.53	SE

Public Water Systems Violations and Enforcement Data

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	SW	0.02	117.26	2,859.98	PWSV

Address Line 2:	
State Code:	CA
Zip Code:	93551
City Name:	PALMDALE
Address Line 1:	322 W. Avenue S
PWS ID:	CA1909647
PWS Type Code:	TNCWS
PWS Type Description:	Transient Non-Community Water System
Primary Source Code:	GW
Primary Source Desc:	Groundwater
PWS Activity Code:	A
PWS Activity Description:	Active
PWS Deactivation Date:	
Phone Number:	661-947-2529

--Details--

Population Served Count:	50
City Served:	
County Served:	Los Angeles
State Served:	CA
Zip Code Served:	

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	W	0.42	2,240.75	2,903.97	FED USGS

Organiz Identifier:	USGS-CA	Formation Type:	
Organiz Name:	USGS California Water Science Center	Aquifer Name:	Other aquifers
Well Depth:		Aquifer Type:	
Well Depth Unit:		Country Code:	US
Well Hole Depth:	400	Provider Name:	NWIS
W Hole Depth Unit:	ft	County:	LOS ANGELES
Construction Date:		Latitude:	34.55969444000000
Source Map Scale:	24000	Longitude:	-118.1434722000000
Monitoring Loc Name:	006N012W34N001S		
Monitoring Loc Identifier:	USGS-343334118083301		
Monitoring Loc Type:	Well		
Monitoring Loc Desc:			
HUC Eight Digit Code:	18090206		

Drainage Area:	
Drainage Area Unit:	
Contrib Drainage Area:	
Contrib Drainage Area Unit:	
Horizontal Accuracy:	.5
Horizontal Accuracy Unit:	seconds
Horizontal Collection Mthd:	Mapping grade GPS unit (handheld accuracy range 12 to 40 ft)
Horiz Coord Refer System:	NAD83
Vertical Measure:	3007
Vertical Measure Unit:	feet
Vertical Accuracy:	4.3
Vertical Accuracy Unit:	feet
Vertical Collection Mthd:	Interpolated from Digital Elevation Model
Vert Coord Refer System:	NAVD88

Periodic Groundwater Level Measurement Locations

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	W	0.45	2,399.93	2,910.52	MONITOR WELLS

Site Code:	345594N1181443W001	Basin ID:	
State Well No:	06N12W34N001S	Basin Code:	6-044
Station ID:	28680	Basin Name:	Antelope Valley
WCR No:		Basin Region Code:	6
Well Depth:		Basin Region Desc:	San Joaquin River
Well Use:	Unknown	Basin Region Actv:	Y
Well Type:	Unknown	Basin Region Order:	6
Well Name:		County Name:	Los Angeles
Latitude:	34.5594	WLM Method:	
Longitude:	-118.144	WLM Accuracy:	
Ground Surface Elevation:	2902.87		
GSE Accuracy:	Unknown		
GSE Method:	Unknown		
Monitoring Program:	VOLUNTARY		

Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR0299434	City(OSWCR):	None
City:		County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:			

Location(OSWCR):	None
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR1998-009578	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	854 SHANER RD		
Location(OSWCR):	854 SHANER RD		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR1776-006833	City(OSWCR):	None
City:		County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	AVE S, 10 ST W		
Location(OSWCR):	AVE S, 10 ST W		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR1981-007113	City(OSWCR):	None
City:		County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:			
Location(OSWCR):	None		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR2003-013246	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	332 W Avenue S		
Location(OSWCR):	332 W Avenue S		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR2007-011557	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	San Bernardino
County:	San Bernardino	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	36845 El Camino Drive		
Location(OSWCR):	36845 El Camino Drive		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR2003-015109	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	El Camino Road		
Location(OSWCR):	El Camino Road		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR2010-010907	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	825 Barrel Springs Road		
Location(OSWCR):	825 Barrel Springs Road		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water		

Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR0096990	City(OSWCR):	None
City:		County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:			
Location(OSWCR):	None		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR0069110	City(OSWCR):	None
City:		County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:			
Location(OSWCR):	None		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR2008-009258	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	El Camino Drive & Avenue S-6		
Location(OSWCR):	El Camino Drive & Avenue S-6		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SSW	0.74	3,911.58	3,051.90	WATER WELLS

WCR No:	WCR1993-012510	City(OSWCR):	Acton
City:	Acton	County(OSWCR):	Los Angeles

County:	Los Angeles	Decimal Lat(OSWCR):	34.54822
Decimal Latitude:	34.54822	Decim Long(OSWCR):	-118.14117
Decimal Longitude:	-118.14117		
Location:	FORESTON DR		
Location(OSWCR):	FORESTON DR		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	ENE	0.89	4,707.04	2,728.46	WATER WELLS

WCR No:	WCR0150622	City(OSWCR):	None
City:		County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.56521
Decimal Latitude:	34.56521	Decim Long(OSWCR):	-118.12041
Decimal Longitude:	-118.12041		
Location:			
Location(OSWCR):	None		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	SE	0.93	4,895.53	2,823.01	WATER WELLS

WCR No:	WCR1991-017877	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54806
Decimal Latitude:	34.54806	Decim Long(OSWCR):	-118.12373
Decimal Longitude:	-118.12373		
Location:	S-14, EL CAMINO, BARREL SPRINGS		
Location(OSWCR):	S-14, EL CAMINO, BARREL SPRINGS		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	SE	0.93	4,895.53	2,823.01	WATER WELLS

WCR No:	WCR1989-016713	City(OSWCR):	Palmdale
City:	Palmdale	County(OSWCR):	Los Angeles
County:	Los Angeles	Decimal Lat(OSWCR):	34.54806
Decimal Latitude:	34.54806	Decim Long(OSWCR):	-118.12373
Decimal Longitude:	-118.12373		
Location:	FIFTH ST, S ST		
Location(OSWCR):	FIFTH ST, S ST		
Original Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports		

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *LOS ANGELES* County: **2**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *LOS ANGELES* County

No Measures/Homes:	69
Geometric Mean:	0.4
Arithmetic Mean:	0.7
Median:	0.5
Standard Deviation:	1
Maximum:	5.6
% >4 pCi/L:	1
% >20 pCi/L:	0
Notes on Data Table:	TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of California conducted during 1989-90. Data represent 2-7 day charcoal canister measurements from the lowest level of each home tested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data **PWSV**

List of drinking water violations and enforcement actions from the Safe Drinking Water Information System (SDWIS) made available by the Drinking Water Protection Division of the US EPA's Office of Groundwater and Drinking Water. Enforcement sensitive actions are not included in the data released by the EPA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) **SDWIS**

The Safe Drinking Water Information System (SDWIS) contains information about public water systems as reported to US Environmental Protection Agency (EPA) by the states. Addresses may correspond with the location of the water system, or with a contact address.

Soil Survey Geographic database **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System **FED USGS**

The U.S. Geological Survey (USGS)'s National Water Information System (NWIS) is the nation's principal repository of water resources data. This database includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data.

State Sources

Oil and Gas Wells **OGW**

A list of Oil and Gas well locations. This is provided by California's Department of Conservation Division of

Appendix

Oil, Gas and Geothermal Resources.

Periodic Groundwater Level Measurement Locations **MONITOR WELLS**

Locations of groundwater level monitoring wells in the Department of Water Resources (DWR)'s Periodic Groundwater Levels dataset. The DWR Periodic Groundwater Levels dataset contains seasonal and long-term groundwater level measurements collected by the Department of Water Resources and cooperating agencies.

Well Completion Reports **WATER WELLS**

List of wells from the Well Completion Reports data made available by the California Department of Water Resources' (DWR) Online System for Well Completion Reports (OSWCR). Please note that the majority of well completion reports have been spatially registered to the center of the 1x1 mile Public Land Survey System section that the well is located in.

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Appendix F

Aerial Photographs

HISTORICAL AERIALS

Project Property: Maverik Palmdale, CA
Highway 14 & Ave S
Palmdale CA

Project No: 2380018XX

Requested By: Cardno Inc.

Order No: 22080300932

Date Completed: August 04,2022

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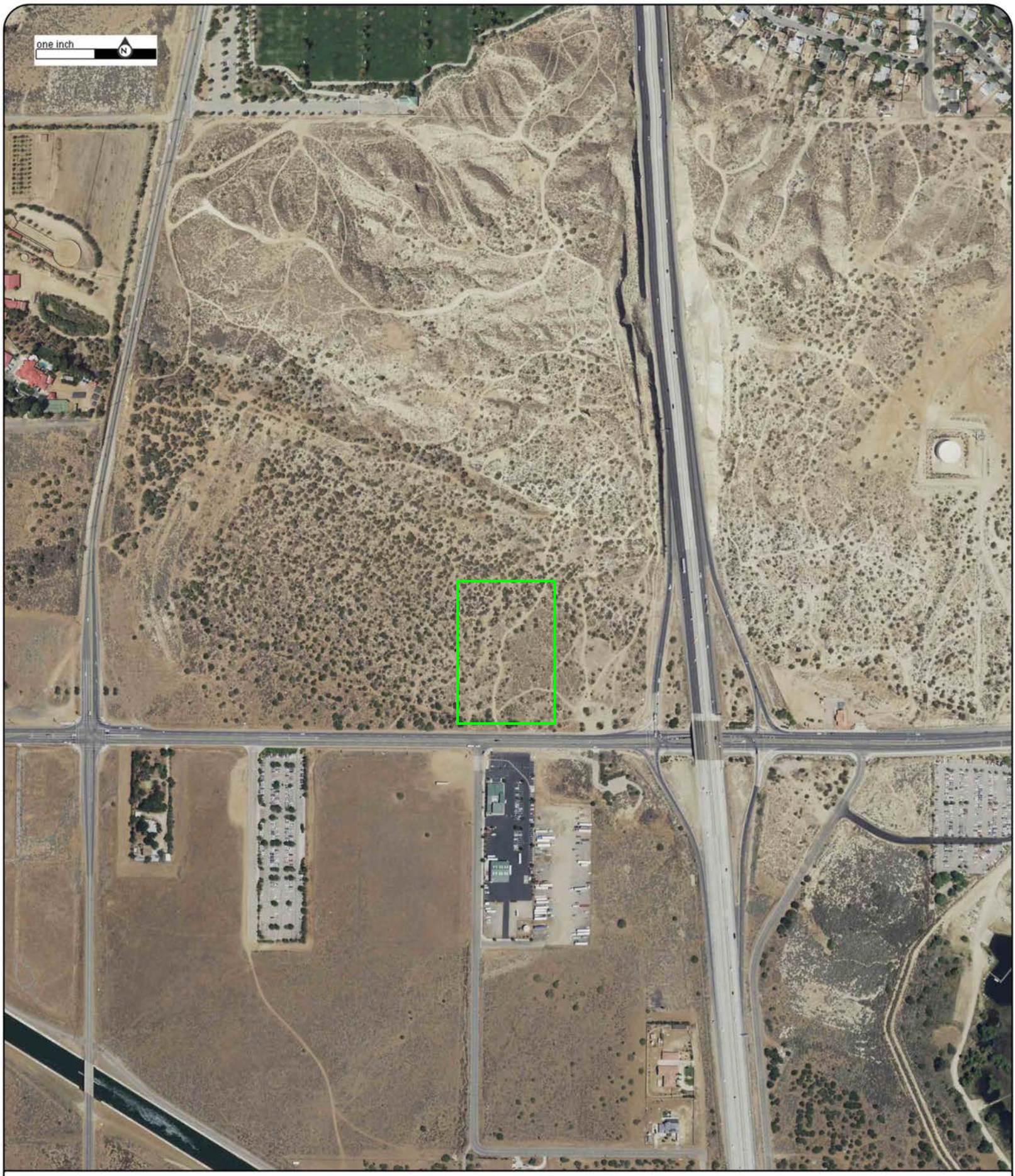
Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Date	Source	Scale	Comments
2020	United States Department of Agriculture	1" = 500'	
2018	United States Department of Agriculture	1" = 500'	
2016	United States Department of Agriculture	1" = 500'	
2014	United States Department of Agriculture	1" = 500'	
2012	United States Department of Agriculture	1" = 500'	
2010	United States Department of Agriculture	1" = 500'	
2009	United States Department of Agriculture	1" = 500'	
2005	United States Department of Agriculture	1" = 500'	
1995	United States Geological Survey	1" = 500'	
1989	United States Geological Survey	1" = 500'	
1980	United States Department of Agriculture	1" = 500'	Best Copy Available
1974	United States Geological Survey	1" = 500'	
1968	Teledyne	1" = 500'	
1959	Agricultural Stabilization & Conserv. Service	1" = 500'	
1948	United States Geological Survey	1" = 500'	
1928	FAIRCHILD	1" = 500'	

Year: 2020
Source: USDA
Scale: 1" = 500'
Comment:

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932



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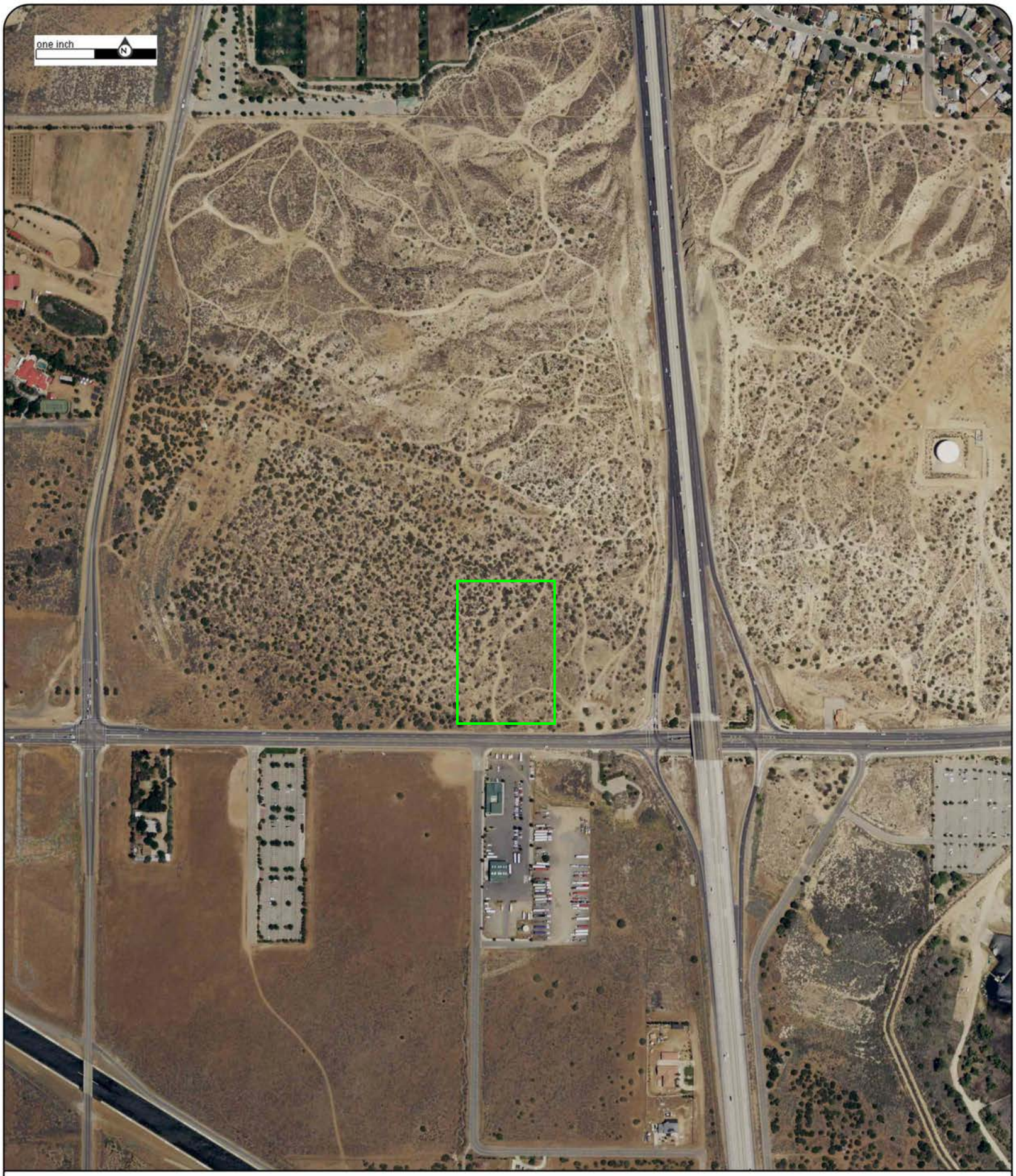
Order No: 22080300932



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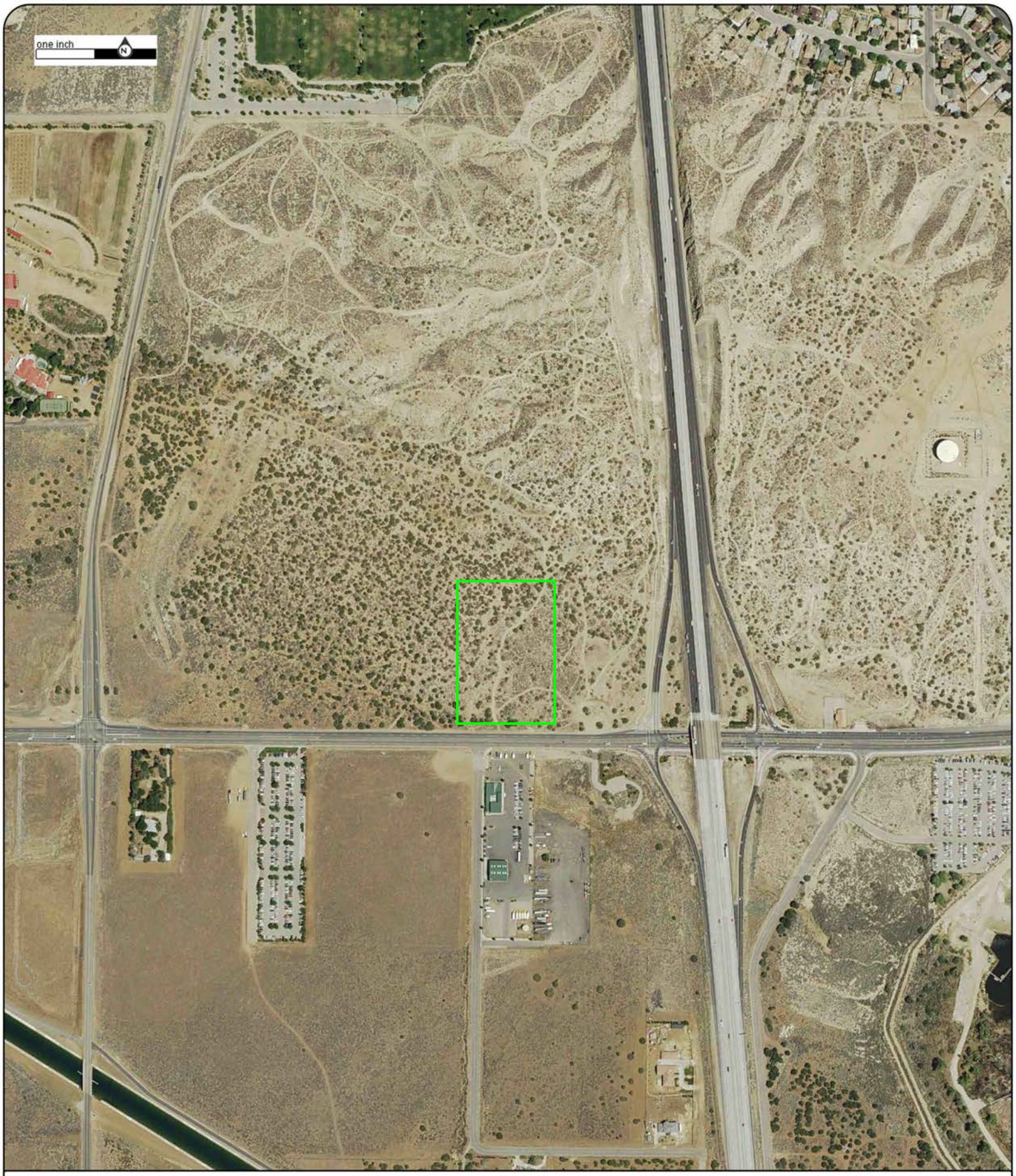

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Source: USDA
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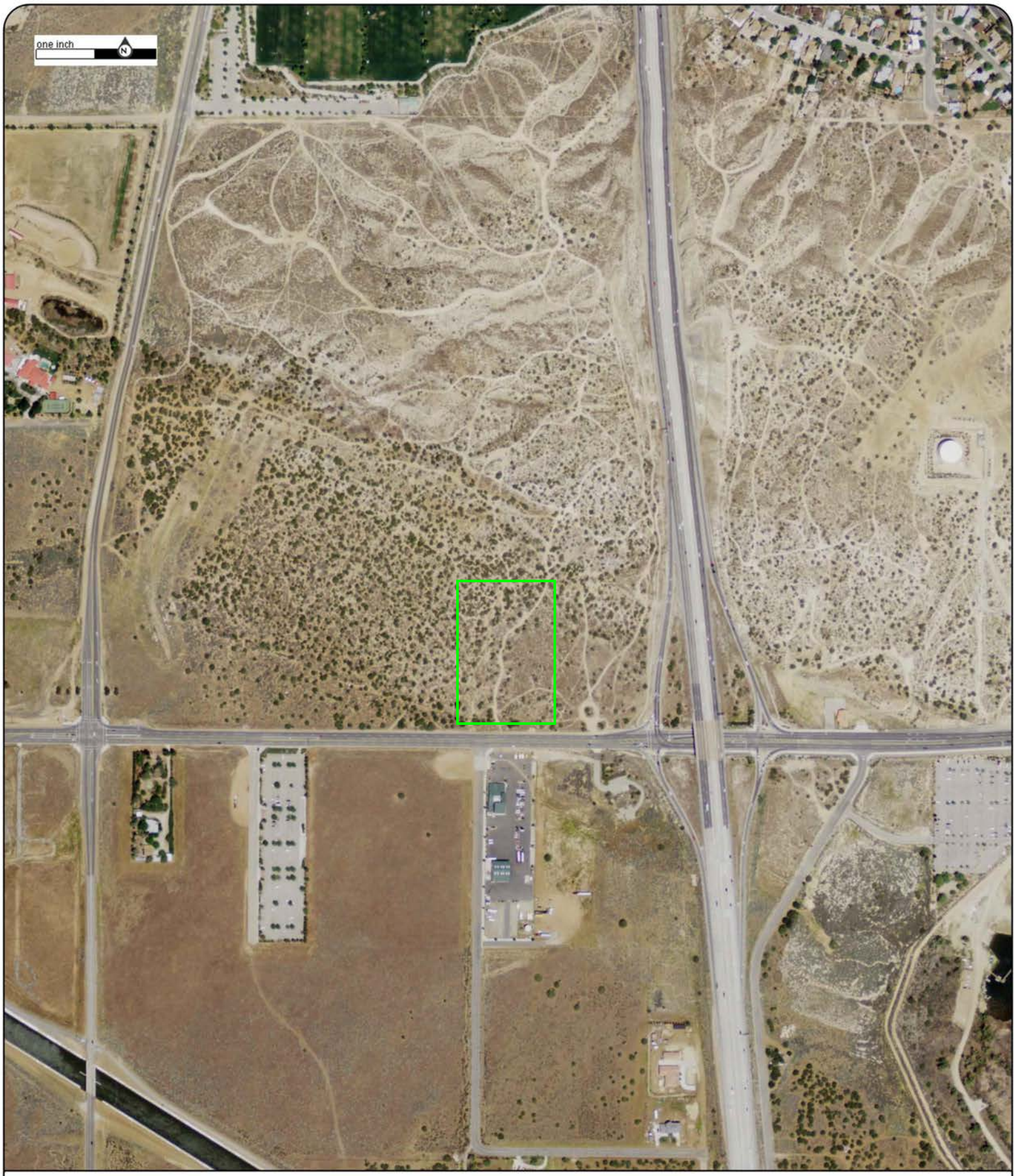
Order No: 22080300932



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Source: USDA
Scale: 1" = 500'
Comment:

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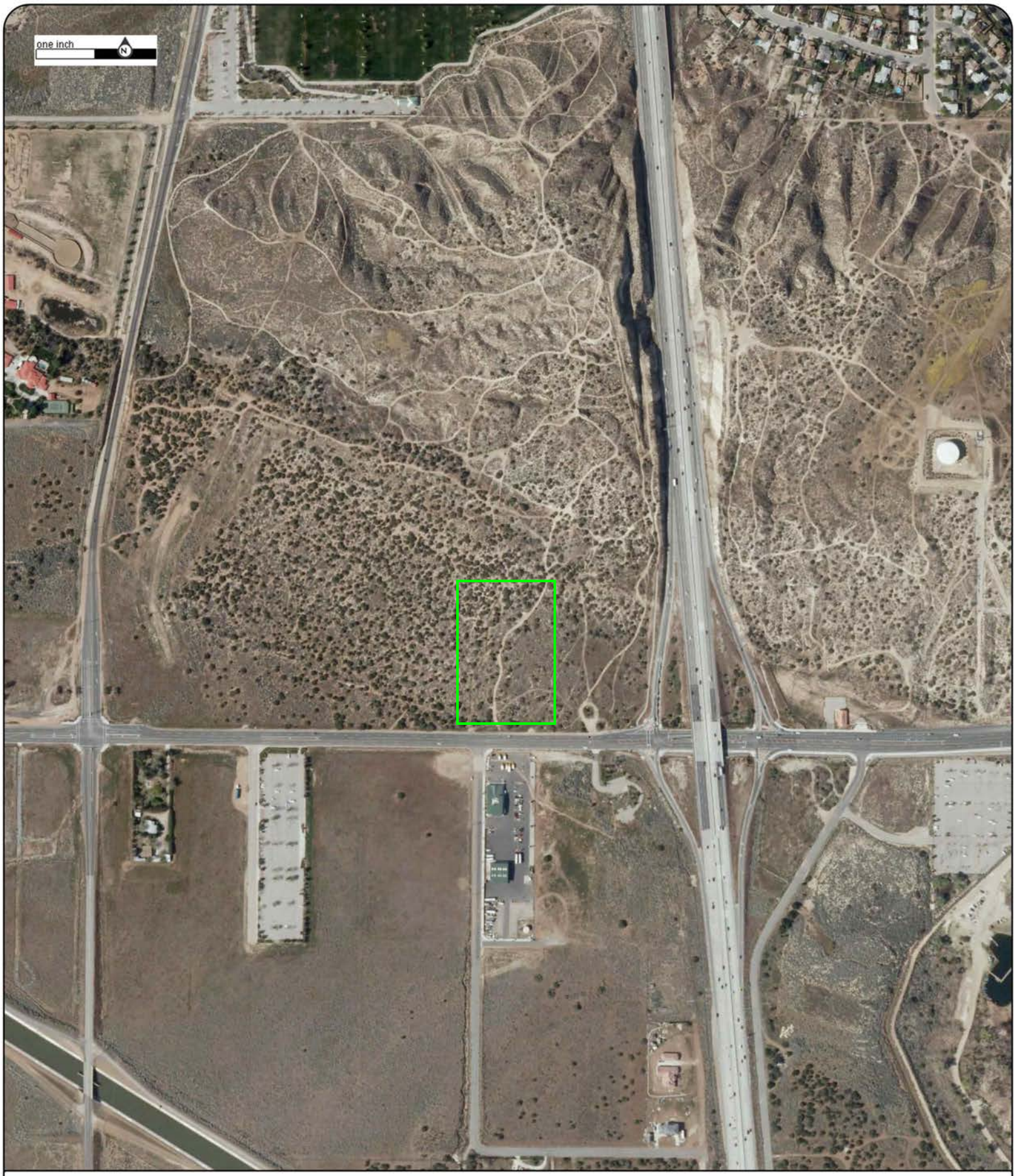
Approx Center: -118.13530699,34.55892571

Order No: 22080300932



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Source: USDA
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Comment:

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932

Year: 2009
Source: USDA
Scale: 1" = 500'
Comment:

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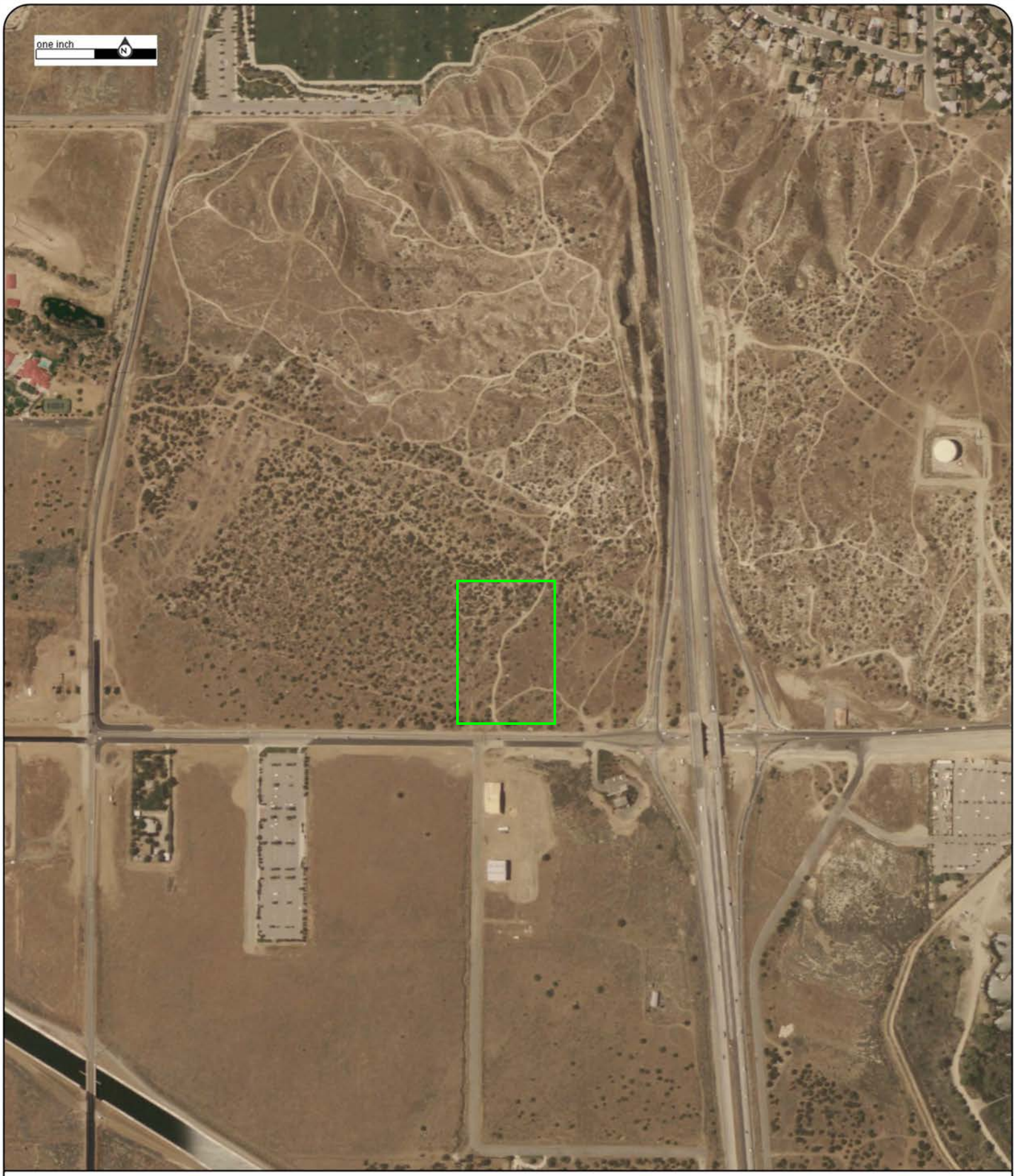


Year: 2005
Source: USDA
Scale: 1" = 500'
Comment:

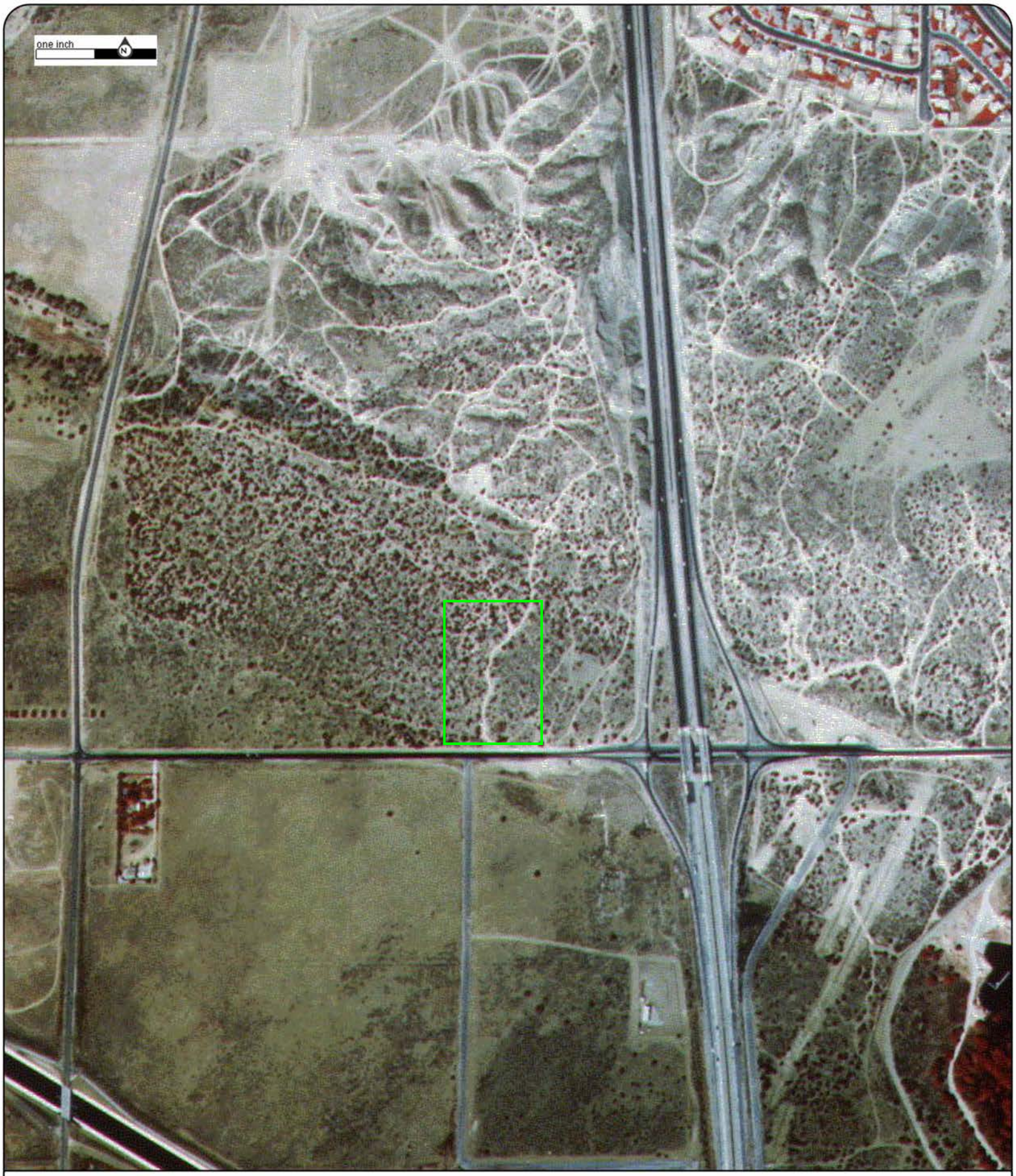
Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932

Year: 1995
Source: USGS
Scale: 1" = 500'
Comment:

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932



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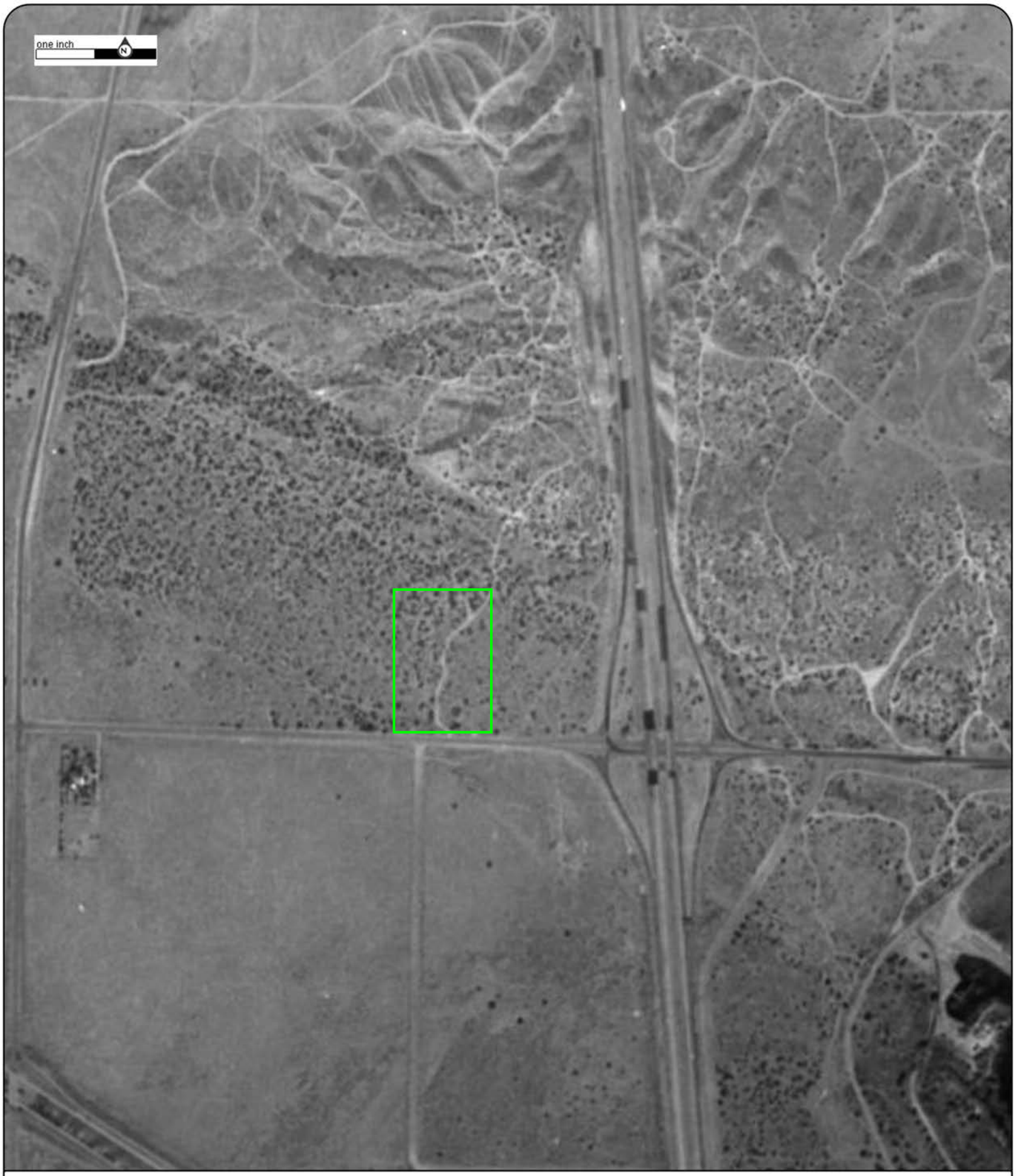
Order No: 22080300932



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Source: USDA
Scale: 1" = 500'
Comment: Best Copy Available

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932

Year: 1974
Source: USGS
Scale: 1" = 500'
Comment:

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932

Year: 1968
Source: TG
Scale: 1" = 500'
Comment:

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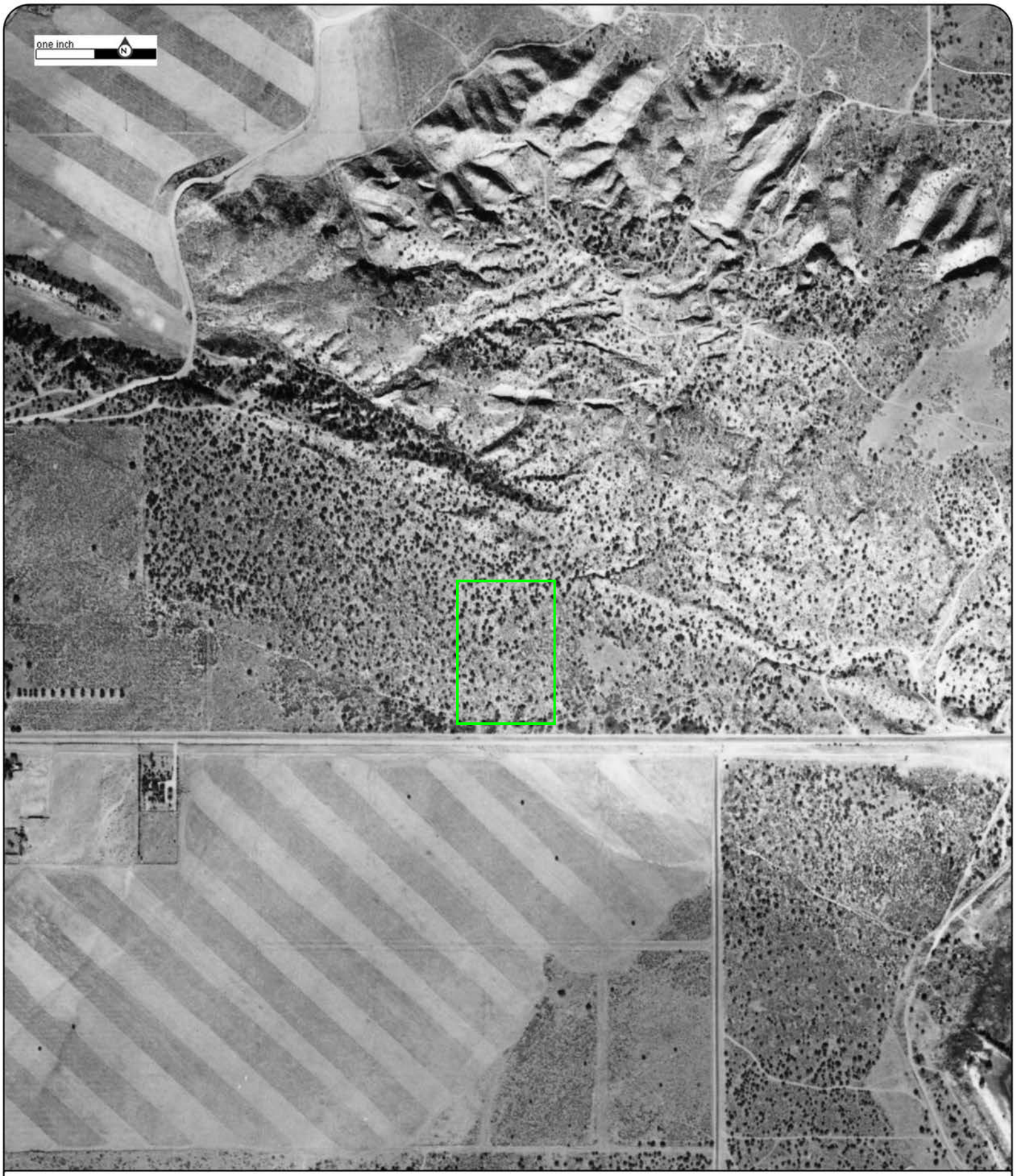
Approx Center: -118.13530699,34.55892571

Order No: 22080300932



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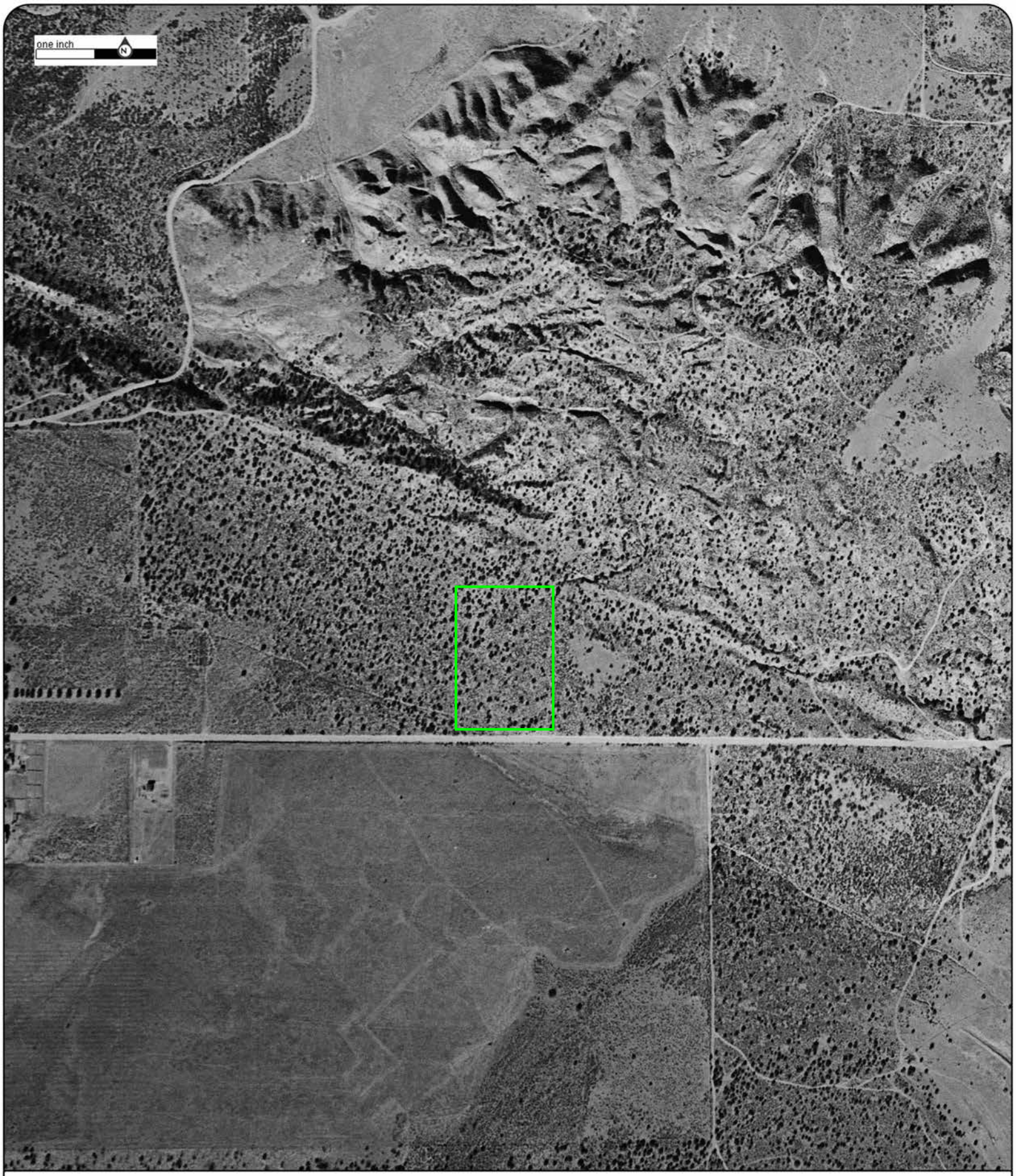
Scale: 1" = 500'
Comment:

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932



Year: 1948
Source: USGS
Scale: 1" = 500'
Comment:

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932

Year: 1928
Source: FAIRCHILD
Scale: 1" = 500'
Comment:

Address: Highway 14 & Ave S, Palmdale, CA
Approx Center: -118.13530699,34.55892571

Order No: 22080300932

Potential Maverik Acquisition – Hwy 14 & Ave S, Palmdale, CA

Appendix G

Historical Research Documentation

National Flood Hazard Layer FIRMette

FEMA

118°8'25"W 34°33'45"N

118°7'47"W 34°33'16"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/17/2022 at 11:58 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

G—1

Latitude: 34° 33' 32" N
Longitude: -118° 8' 7" W

Project No. 238001856

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Appendix G-1: Flood Plain Map

Maverik - Palmdale, CA
Potential Maverik Location
Highway 14 & Avenue S
Palmdale, Los Angeles County, California

N

Cardno now Stantec

1142 WEST 2320 SOUTH, SUITE A
WEST VALLEY, UTAH 84119
P: 801-256-3800 F: 801-973-1095

Date Created: 8/16/2022 Date Revised: 8/16/2022 File Path: C:\Users\alisha.strong\OneDrive - Cardno\Desktop\Projects\Maverik\1856 Maverik Palmdale, CA\1856 Figures\1856 Figures.dwg
Data Sources: FEMA's National Flood Hazard Layer

CAD Analyst: Alisha.Strong

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands

August 17, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

G—2

Latitude: 34° 33' 32" N
Longitude: -118° 8' 7" W

Project No. 238001856

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Appendix G-2: Wetlands Map

Maverik - Palmdale, CA
Potential Maverik Location
Highway 14 & Avenue S
Palmdale, Los Angeles County, California

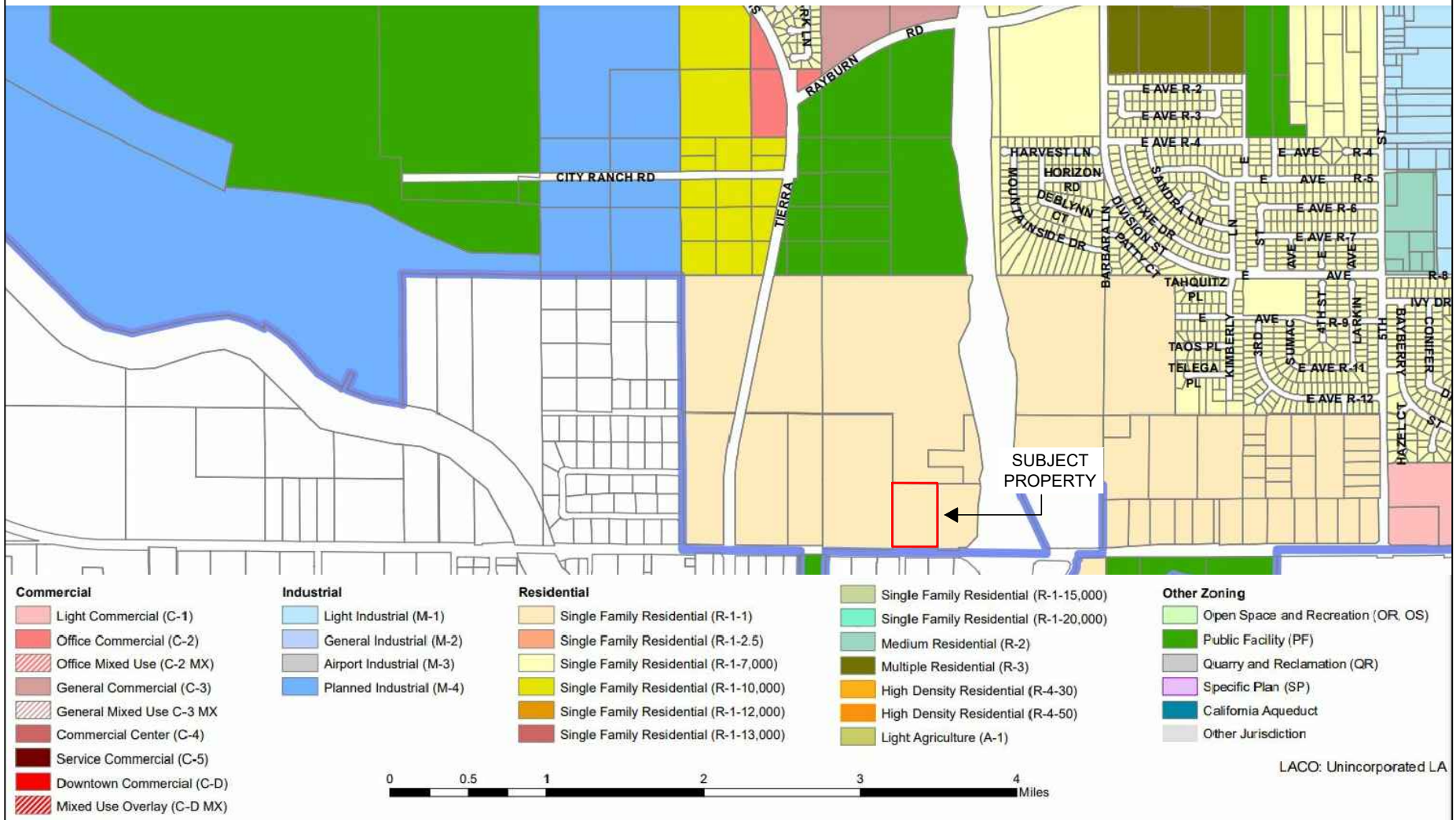
N

Cardno
now
Stantec

1142 WEST 2320 SOUTH, SUITE A
WEST VALLEY, UTAH 84119
P: 801-256-3800 F: 801-973-1095

Date Created: 8/16/2022 Date Revised: 8/16/2022 File Path: C:\Users\alisha.strong\OneDrive - Cardno\Desktop\Projects\Maverik\1856 Maverik Palmdale, CA\1856 Figures\1856 Figures.dwg
Data Sources: National Wetlands Inventory

CAD Analyst: Alisha.Strong



G—3

Latitude: 34° 33' 32" N
Longitude: -118° 8' 7" W

Project No. 238001856

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Appendix G3: Zoning Map

Maverik - Palmdale, CA
Potential Maverik Location
Highway 14 & Avenue S
Palmdale, Los Angeles County, California

N

Cardno
now
Stantec

1142 WEST 2320 SOUTH, SUITE A
WEST VALLEY, UTAH 84119
P: 801-256-3800 F: 801-973-1095

Date Created: 8/16/2022 Date Revised: 8/16/2022 File Path: C:\Users\alisha.strong\OneDrive - Cardno\Desktop\Projects\Maverik\1856 Maverik Palmdale, CA\1856 Figures\1856 Figures.dwg
Data Sources: Palmdale, CA Zoning Map

CAD Analyst: Alisha.Strong

TOPOGRAPHIC MAPS

Project Property:	Maverik Palmdale, CA Highway 14 & Ave S Palmdale CA None
Project No:	2380018XX
Requested By:	Cardno Inc.
Order No:	22080300932
Date Completed:	August 04, 2022

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

Year	Map Series
2022	7.5
2018	7.5
2015	7.5
1974	7.5
1958	7.5
1937	7.5
1932	7.5
1958	15

Topographic Map Symbology for the maps may be available in the following documents:

Pre-1947

Page 223 of 1918 Topographic Instructions

Page 130 of 1928 Topographic Instructions

1947-2009

Topographic Map Symbols

2009-present

US Topo Map Symbols

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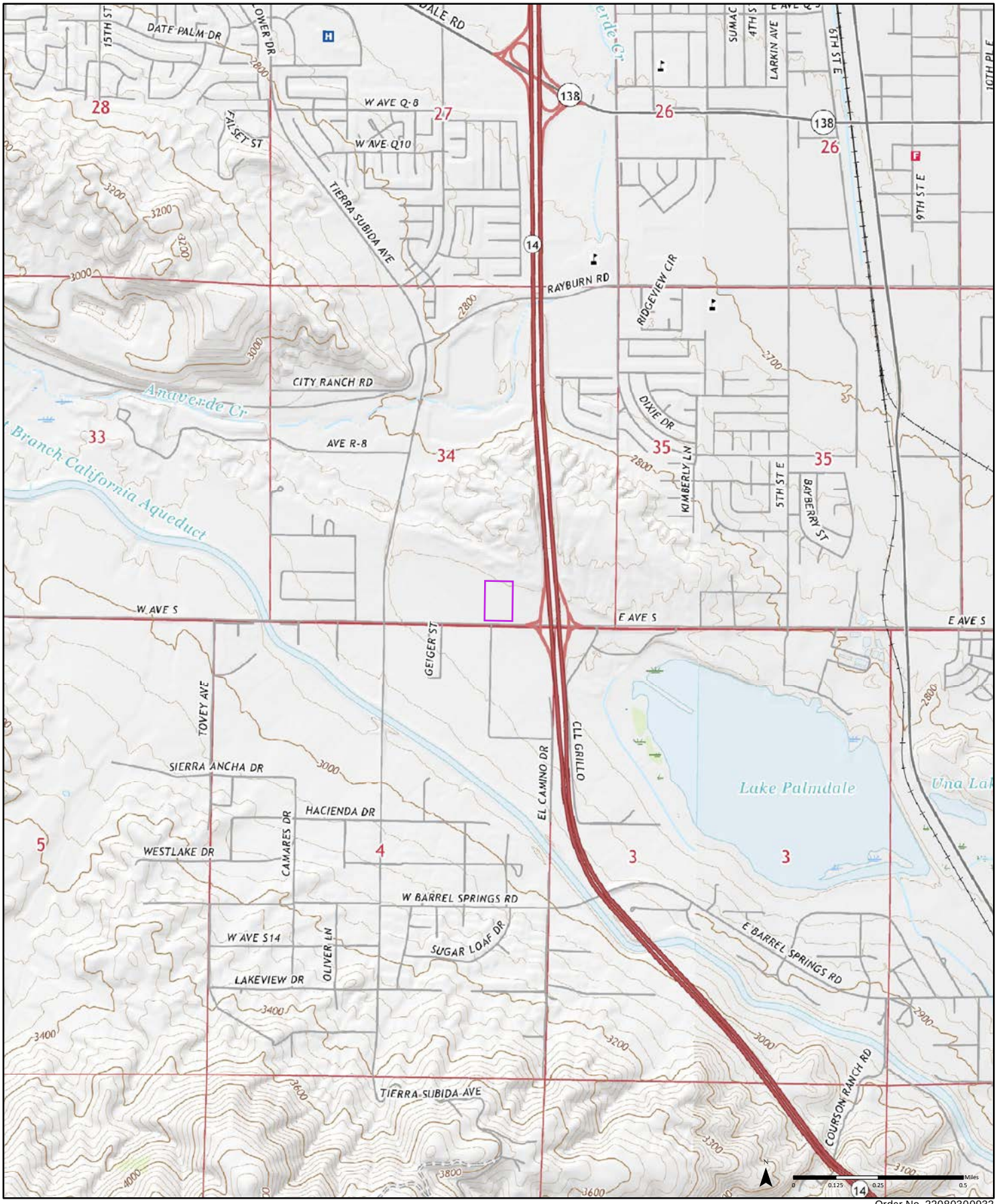
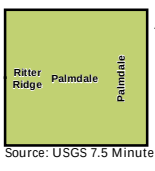


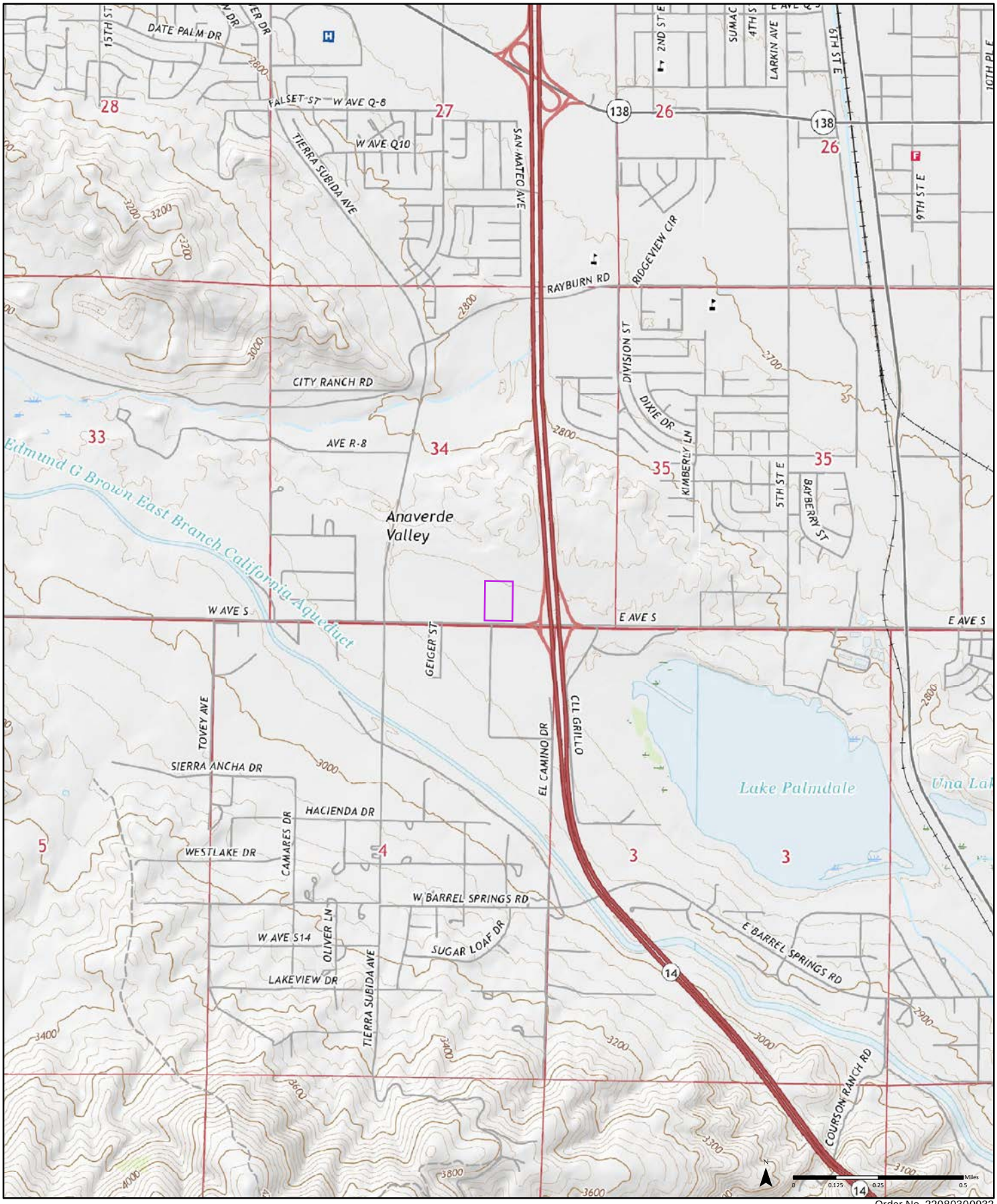
2022

Order No. 22080300932



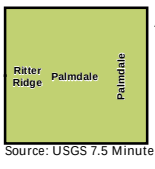
Available Quadrangle(s): Ritter Ridge, CA
Palmdale, CA

Source: USGS 7.5 Minute Topographic Map



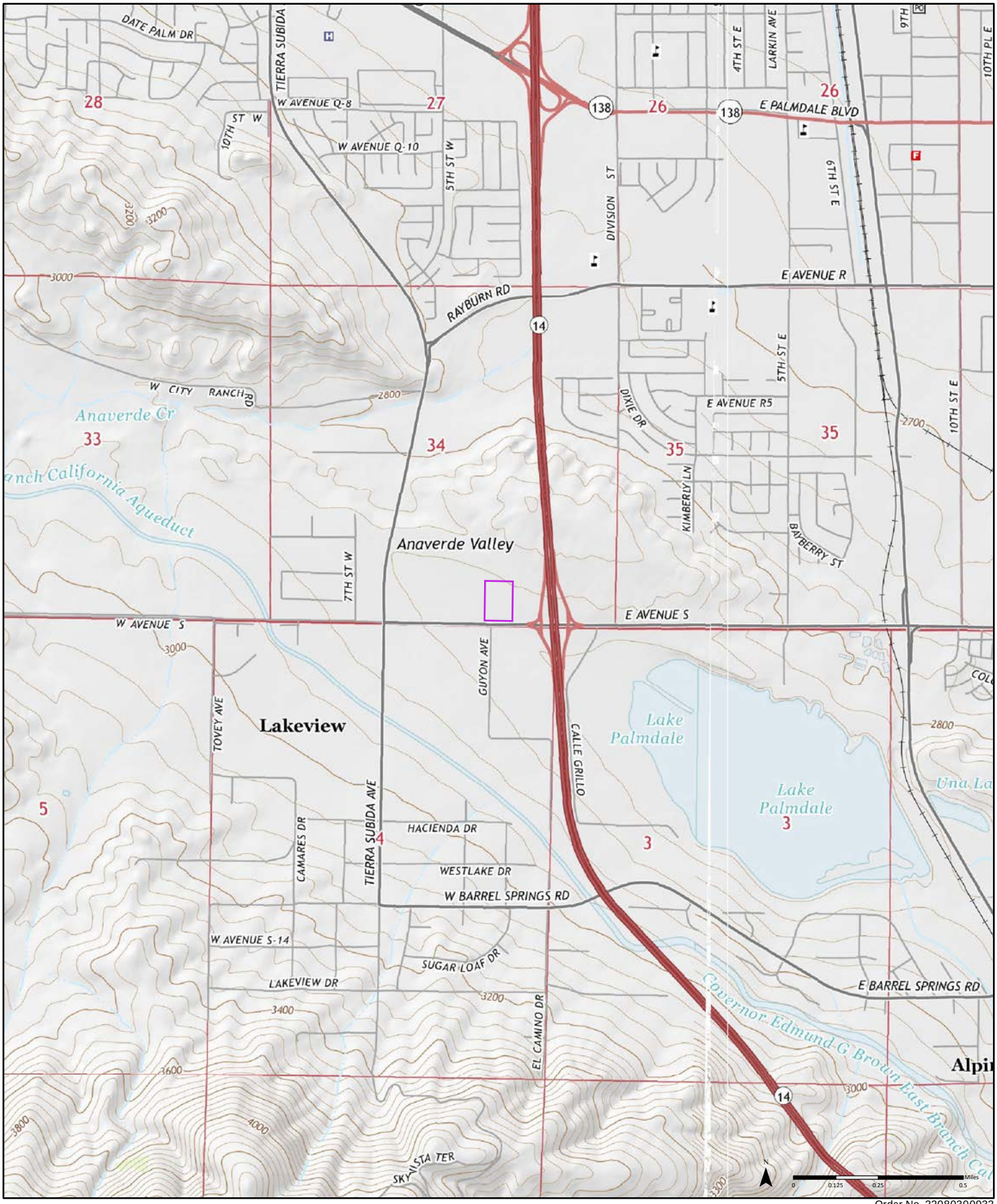
2018

Order No. 22080300932



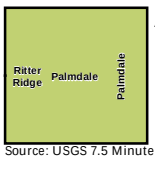
Available Quadrangle(s): Ritter Ridge, CA
Palmdale, CA

Source: USGS 7.5 Minute Topographic Map



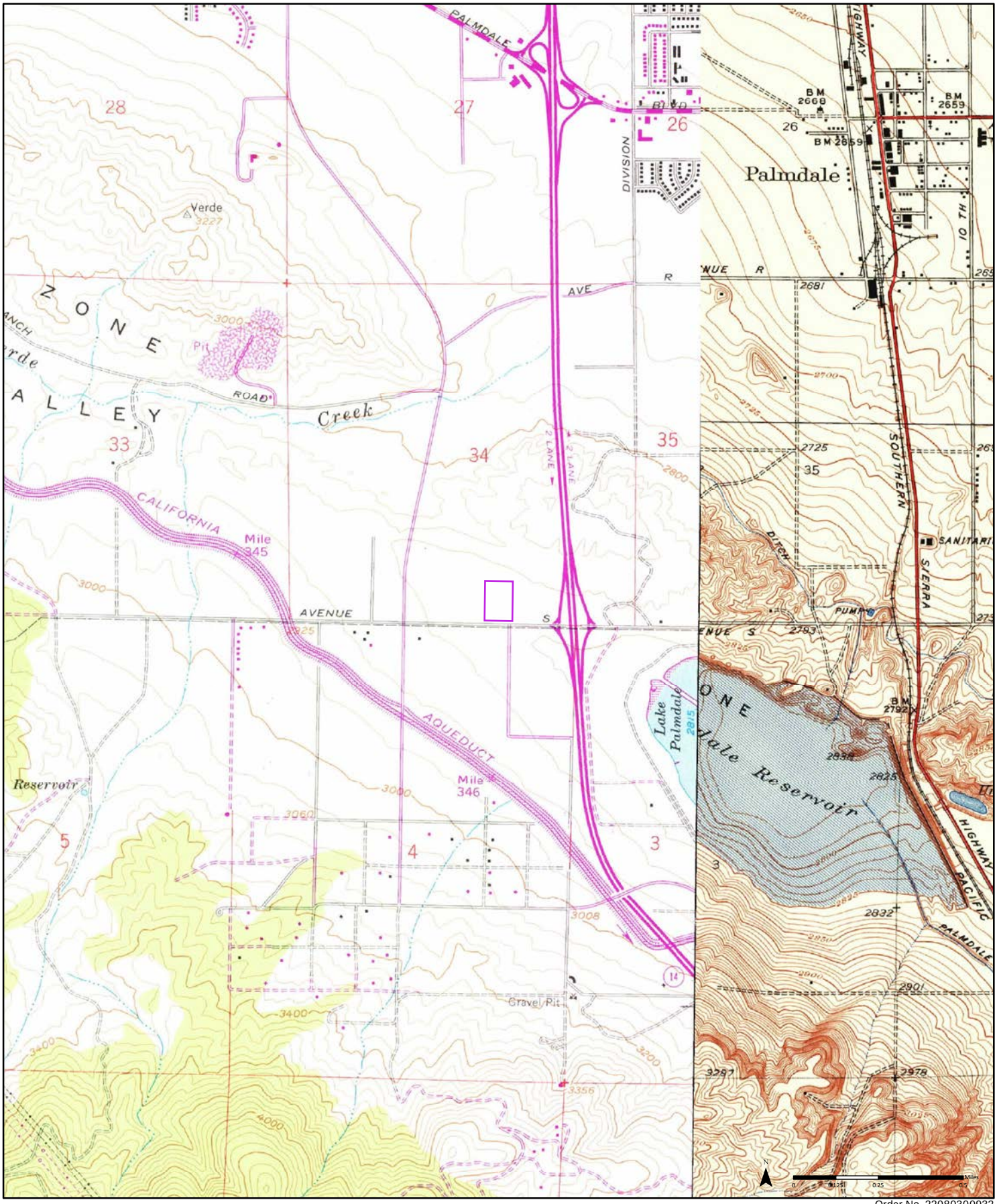
2015

Order No. 22080300932



Available Quadrangle(s): Ritter Ridge, CA
Palmdale, CA

Source: USGS 7.5 Minute Topographic Map

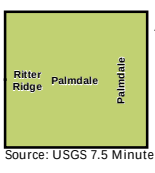


1974

(1-1974)
Aerial Photo Year: 1974
Photo Revision Year: 1974

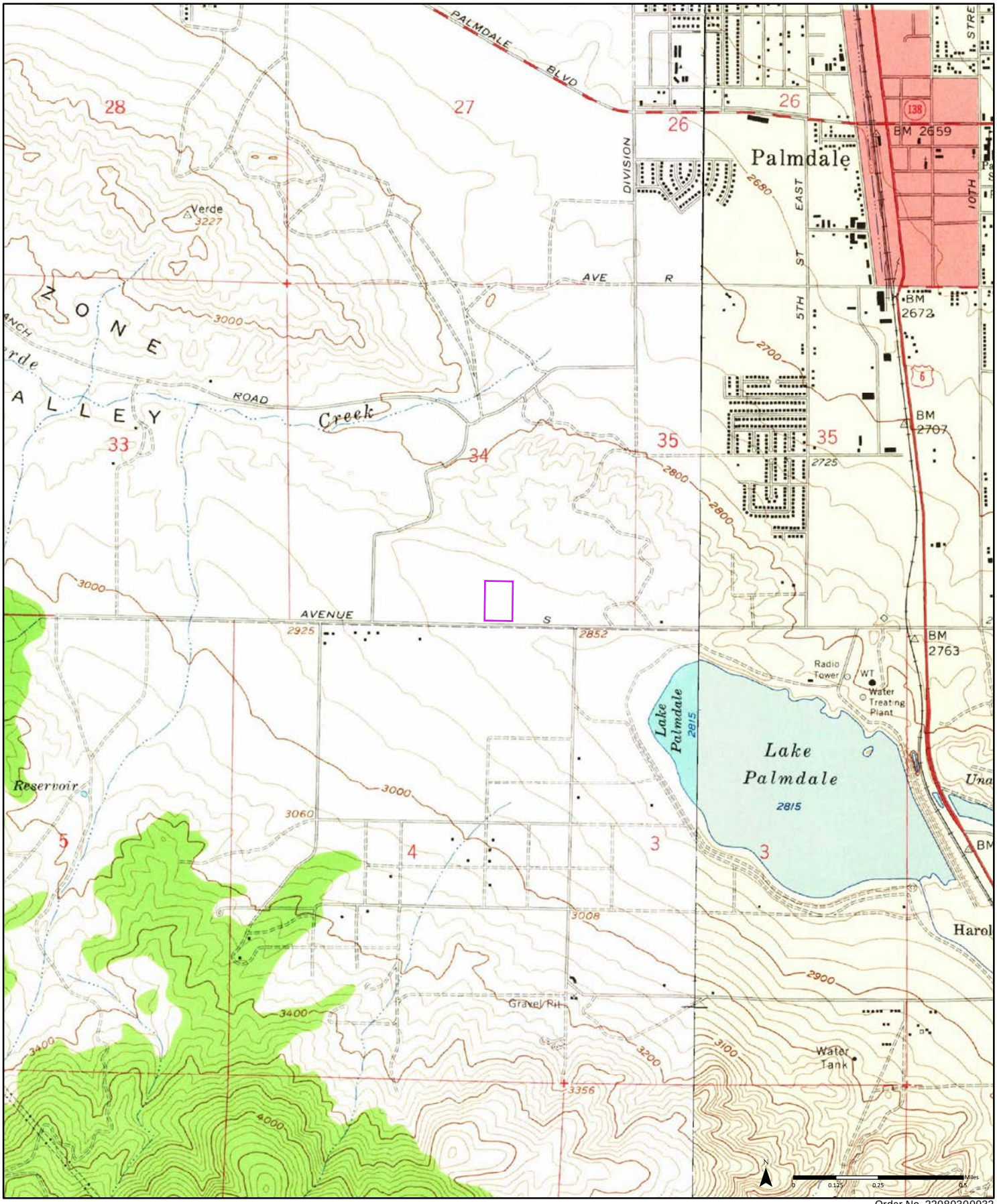
(2-1974)
Aerial Photo Year: 1974
Photo Revision Year: 1974

Order No. 22080300932



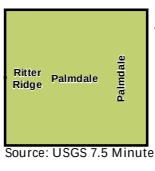
Available Quadrangle(s): Palmdale, CA
Ritter Ridge, CA(2-1974)
Palmdale, CA(1-1974)

Source: USGS 7.5 Minute Topographic Map



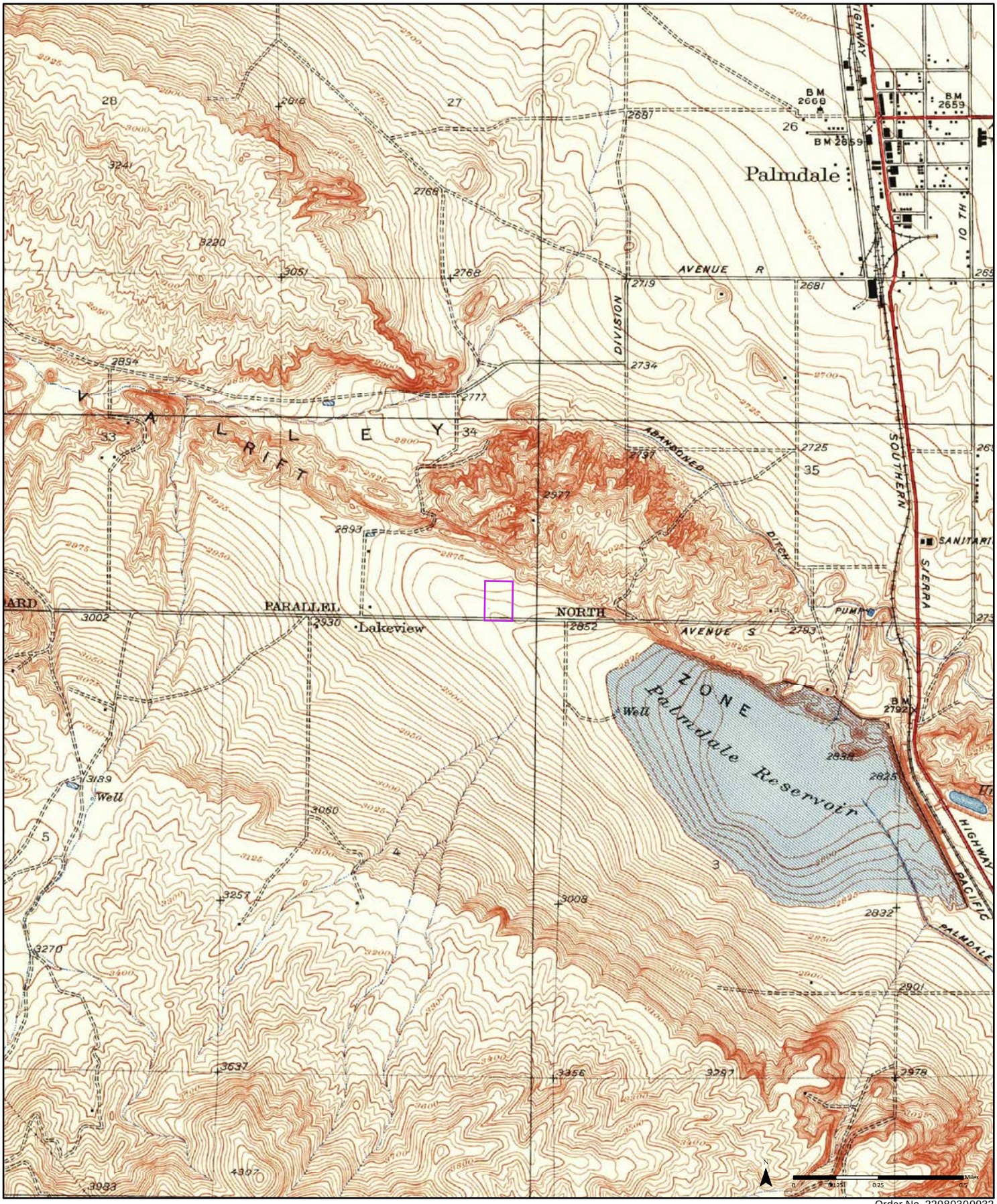
1958 (1-1958) *Aerial Photo Year: 1956* (2-1958) *Aerial Photo Year: 1956*

Order No. 22080300932



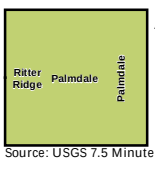
Available Quadrangle(s): Palmdale, CA
Ritter Ridge, CA(2-1958)
Palmdale, CA(1-1958)

Source: USGS 7.5 Minute Topographic Map



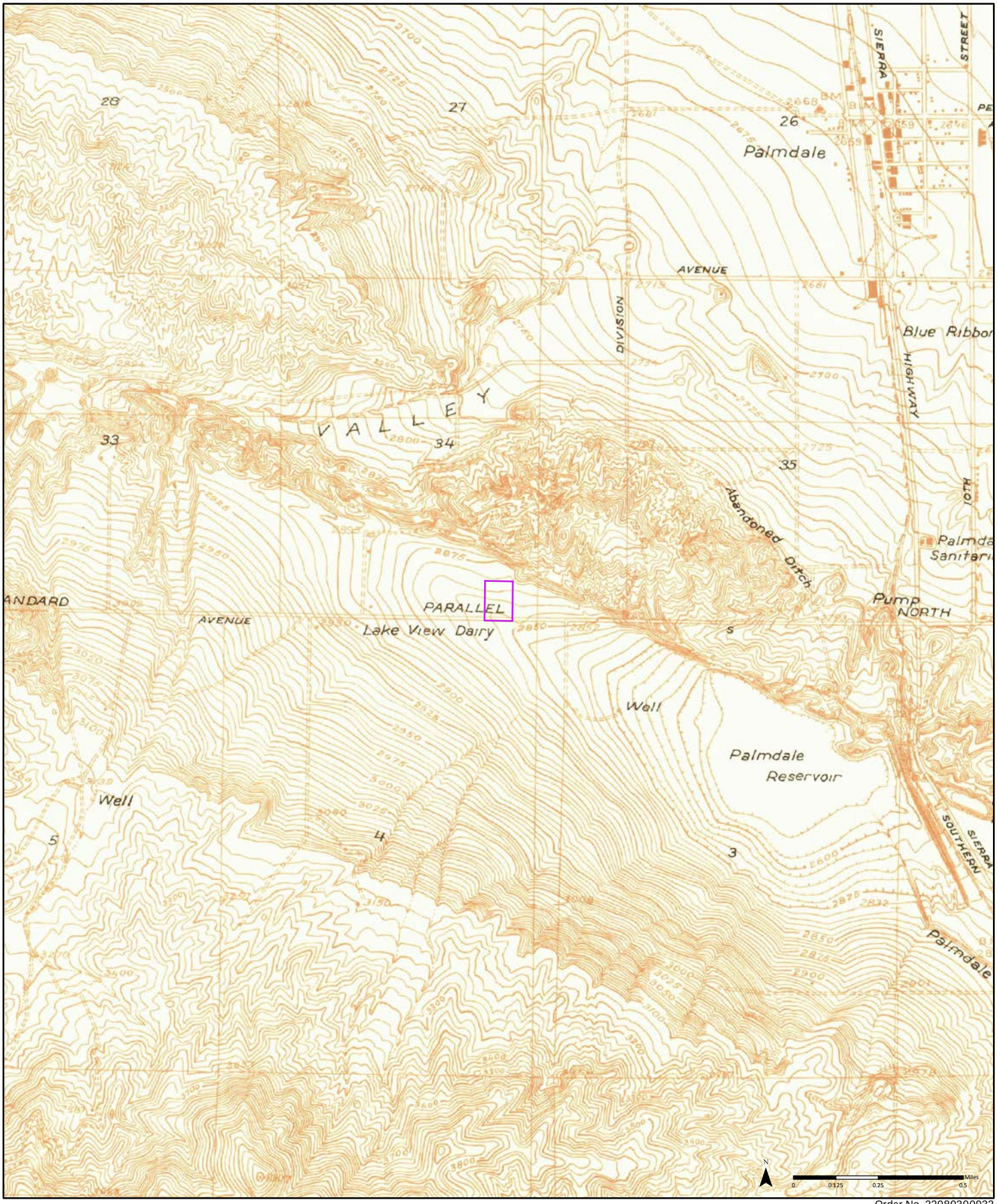
1937

Order No. 22080300932



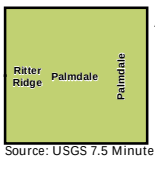
Available Quadrangle(s): Palmdale, CA

Source: USGS 7.5 Minute Topographic Map



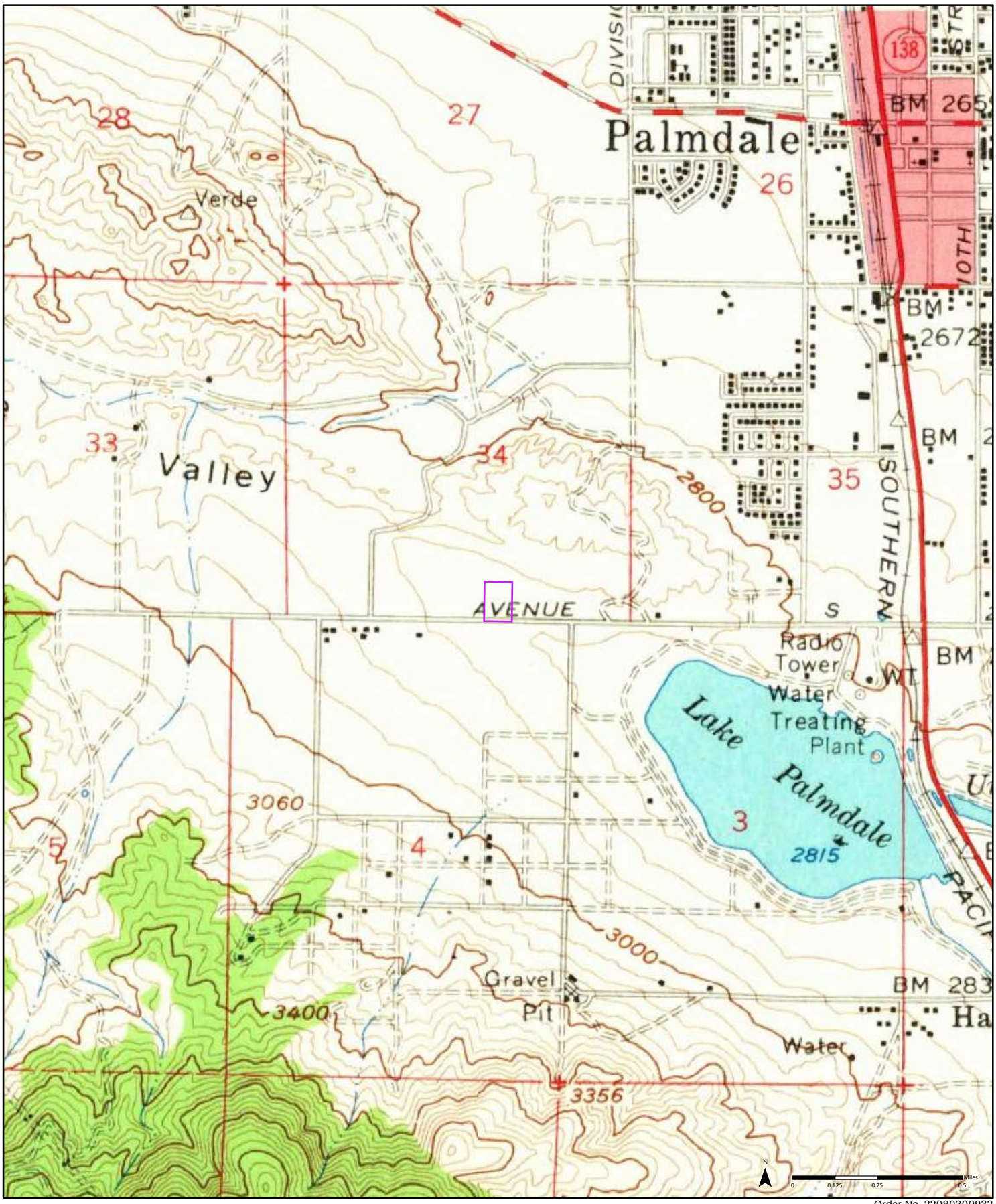
1932

Order No. 22080300932



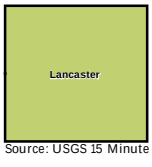
Available Quadrangle(s): Palmdale, CA

Source: USGS 7.5 Minute Topographic Map



1958 (1-1958)
Aerial Photo Year: 1956

Order No. 22080300932



Available Quadrangle(s): Lancaster, CA(1-1958)

Source: USGS 15 Minute Topographic Map

CITY DIRECTORY

Project Property:	*Maverik Palmdale, CA* *Highway 14 & Ave S* *Palmdale,CA*
Project No:	*2380018XX*
Requested By:	*Cardno Inc.*
Order No:	*22080300932*
Date Completed:	*August 08, 2022*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

August 08, 2022
RE: CITY DIRECTORY RESEARCH
Highway 14 & Ave S
Palmdale,CA

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:
All of California 14
1-702 of W Avenue S
Search Notes:

Search Results Summary

Date	Source	Comment
2020	DIGITAL BUSINESS DIRECTORY	
2016	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2007	DIGITAL BUSINESS DIRECTORY	
2002	DIGITAL BUSINESS DIRECTORY	
1995	HAINES	
1991-92	HAINES	
1987	HAINES	
1981	HAINES	
1975	HAINES	

2020 CALIFORNIA 14

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2020 W AVENUE S

SOURCE: DIGITAL BUSINESS DIRECTORY

332 **AHA VERDE MARKET**...*LIQUORS-RETAIL*
332 **ANTELOPE EXPRESS**...*AIRPORT TRANSPORTATION SERVICE*
332 **ANTELOPE EXPRESS**...*TOURSOPERATORS & PROMOTERS*
332 **ANTELOPE EXPRESS**...*BUSES-CHARTER & RENTAL*
332 **ANTELOPE EXPRESS**...*FEDERAL GOVERNMENT CONTRACTORS*
332 **PENSKE TRUCK RENTAL**...*TRUCK RENTING & LEASING*
332 **THOMPSON HARVEY BAY AREA LLC**...*REAL ESTATE MANAGEMENT*
332 **VILLAGE BARBER SHOP**...*BARBERS*
343 **ONE STOP MUFFLER & AUTO REPAIR**...*MUFFLERS & EXHAUST SYSTEMS-ENGINE*
360 **A V INDEPENDENT TAXI CAB**...*TAXICABS & TRANSPORTATION SERVICE*
548 **KAREN RILEY**...*RESIDENTIAL*
702 **DEBRA LAUREN**...*RESIDENTIAL*
702 **MICHAEL GILBOY**...*RESIDENTIAL*

2016 CALIFORNIA 14

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2016 W AVENUE S

SOURCE: DIGITAL BUSINESS DIRECTORY

332 **AHA VERDE MARKET**...*LIQUORS-RETAIL*
332 **ANTELOPE EXPRESS**...*AIRPORT TRANSPORTATION SERVICE*
332 **ANTELOPE EXPRESS**...*BUSES-CHARTER & RENTAL*
332 **PENSKE TRUCK RENTAL**...*TRUCK RENTING & LEASING*
332 **PENSKE TRUCK RENTAL**...*BOXES-CORRUGATED & FIBER (WHLS)*
343 **ONE STOP MUFFLER & AUTO REPAIR**...*MUFFLERS & EXHAUST SYSTEMS-ENGINE*
360 **A V INDEPENDENT TAXI CAB**...*TAXICABS & TRANSPORTATION SERVICE*
503 **PRIORITY CARE**...*HOME HEALTH SERVICE*
548 **KAREN RILEY**...*RESIDENTIAL*
548 **PAUL RILEY**...*RESIDENTIAL*
548 **PERFORMANCE TRANSMISSION**...*TRANSMISSIONS-AUTOMOBILE*
548 **PRECISION ENGINE BALANCING**...*ENGINES-REBUILDING & EXCHANGING*

2012 CALIFORNIA 14

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2012 W AVENUE S

SOURCE: DIGITAL BUSINESS DIRECTORY

332 **ANTELOPE EXPRESS**...*AIRPORT TRANSPORTATION SERVICE*
332 **PENSKE TRUCK RENTAL**...*TRUCK RENTING & LEASING*
343 **ONE STOP MUFFLER & AUTO REPAIR**...*MUFFLERS & EXHAUST SYSTEMS-ENGINE*
548 **HEATHER RILEY**...*RESIDENTIAL*
548 **KAREN RILEY**...*RESIDENTIAL*
548 **PAUL RILEY**...*RESIDENTIAL*
548 **PRECISION ENGINE BALANCING**...*ENGINES-REBUILDING & EXCHANGING*

2007 CALIFORNIA 14

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2007 W AVENUE S

SOURCE: DIGITAL BUSINESS DIRECTORY

332 **ANTELOPE EXPRESS**...*AIRPORT TRANSPORTATION SERVICE*
332 **PENSKE TRUCK RENTAL**...*TRUCK RENTING & LEASING*
343 **ONE STOP MUFFLER & AUTO REPAIR**...*MUFFLERS & EXHAUST SYSTEMS-ENGINE*
548 **PAUL RILEY**...*RESIDENTIAL*
548 **PRECISION ENGINE BALANCING**...*ENGINES-REBUILDING & EXCHANGING*
702 **JOSEPH RETHI**...*RESIDENTIAL*

2002 CALIFORNIA 14

SOURCE: DIGITAL BUSINESS DIRECTORY

NO LISTING FOUND

2002 W AVENUE S

SOURCE: DIGITAL BUSINESS DIRECTORY

548 **PAUL RILEY**...*RESIDENTIAL*
548 **PERFORMANCE TRANSMISSION**
607 **LITTLE KREEK RANCH**
702 **ATTILA A RETHI**...*RESIDENTIAL*
702 **JOSEPH RETHI**...*RESIDENTIAL*

1995 CALIFORNIA 14

SOURCE: HAINES

STREET NOT LISTED

1995 W AVENUE S

SOURCE: HAINES

322	**BRODT B D CRANE SRV**
350	**STEINMANN HANS G**
548	**RILEY PAUL**
702	**RETHI ATTILA A**
702	**RETHI JOSEPH**
708	**FESTHY ILONA**
740	**JOHNSON GLEN A**
1010	**MACUK SAM**
1020	**XXXX**
1025	**MONTOYA SUZANNE**

1991-92 CALIFORNIA 14

SOURCE: HAINES

STREET NOT LISTED

1991-92 W AVENUE S

SOURCE: HAINES

322	**BRODT B D CRANE SRV**
350	**STEINMANN HANS G**
548	**RILEY PAUL**
702	**RETHI JOSEPH**
708	**XXXX**
740	**JOHNSON GLEN A**
1010	**MACUK SAM**
1020	**XXXX**
1130	**XXXX**
1222	**XXXX**

1987 CALIFORNIA 14

SOURCE: HAINES

STREET NOT LISTED

1987 W AVENUE S

SOURCE: HAINES

350	**STEINMANN HANS G**
548	**RILEY PAUL**
702	**RETHI JOSEPH**
708	**XXXX**
728	**JOHNSON CARL A**
740	**JOHNSON GLEN A**
1010	**SHAW DAVID L**
1020	**FAHEY JOE S**
1130	**XXXX**
1150	**BEDNER V**
1222	**XXXX**

1981 CALIFORNIA 14

SOURCE: HAINES

STREET NOT LISTED

1981 W AVENUE S

SOURCE: HAINES

548	**JACOBSON T L**
702	**XXXX**
708	**EKLER LOUIS**
1010	**WILSON BEVERLY**
1020	**FAHEY JOE S**
1130	**XXXX**
1150	**MARAGIOGLIO CHAS**
1222	**XXXX**

1975 CALIFORNIA 14

SOURCE: HAINES

STREET NOT LISTED

1975 W AVENUE S

SOURCE: HAINES

548	**JACOBSON T L**
708	**XXXX**
1130	**ALDRICH V L**
1150	**PECK DONALD J**

FIRE INSURANCE MAPS

Project Property:	Maverik Palmdale, CA Highway 14 & Ave S Palmdale CA
Project No:	2380018XX
Requested By:	Cardno Inc.
Order No:	22080300932
Date Completed:	August 04, 2022

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Appendix H

Prior Reports (intentionally left blank)

Appendix

I

Resumes

Russell D. Hamblin, P.G.

Current Position
Principal Geologist and National Client Manager

Profession
Environmental Consultant

Years' Experience
29

Joined Cardno
May 2014

Education
M.S., Geology/Paleoecology, Brigham Young University, Provo, UT, 1985

B.S., Geology, Oregon State University, Corvallis, Oregon 1983

Professional Registrations
UT PG, ID PG, OR PG, WI PG

Affiliations
National Ground Water Association

Summary of Experience

Mr Hamblin has over 29 years of professional experience in the environmental consulting field. He currently serves as a Principal Geologist, Business Development Practice Leader and a National Client Manager for Cardno. His experience has included local and regional operations management, geologic and hydrogeologic hazardous materials investigations, remedial activities, compliance and air permitting, geotechnical investigations, cartography, and due diligence-related environmental assessments. Mr Hamblin has served as field supervisor and project manager for numerous environmental site assessments (ESAs), hydrogeologic assessments, solid waste assessments, industrial and agricultural waste compliance projects, environmental due diligence assessments, and underground storage tank (UST) investigations and related remedial activities throughout the United States and Canada. Mr Hamblin has also provided project management services on industrial-related remediation and compliance projects throughout the United States. Specific tasks include planning, conducting, and managing soil and groundwater sampling at hazardous and industrial waste sites; interpreting geologic and hydrogeologic conditions and laboratory analytical results; designing and implementing soil and groundwater remediation systems; obtaining air operational permits; client and regulatory agency contact; and preparing and editing final reports.

As a regional manager with SECOR from 2002 to 2005, Mr Hamblin managed over 9 offices including offices in Utah, Montana, Arizona, Nevada, Texas, Louisiana, and Oklahoma. As part of this assignment, Mr Hamblin provided leadership and a corporate vision for the regional offices to manage and mentor other senior and principal staff to carry forth a multi-disciplined operation to care for client and program needs at the highest level of professionalism. Areas of for mentoring of staff included holding workshops in key improvement issues such as professionalism, leadership, management, effective client development, time and cost efficiency, corporate and personal health and safety, and innovation towards solving complex environmental problems. Mr Hamblin was also responsible for ensuring appropriate execution of the client projects; review of office and regional monthly profit and loss reports with senior staff; conducting marketing and sales meetings to ensure appropriate level of balance between business development and billable client work; regular communication with other regional managers to support national clients, national business development opportunities, and holding of regular staffing and load levelling conference calls; and initial and support local and national recruiting needs. Regional management duties also included holding project and client managers accountable for budgets; marketing, junior staff reviews mentoring, and accounts receivables.

Selected Project Experience

Farmland Remedial Investigations

Investigation and remedial activities at 180,000-acre Cattle and Sheep ranches in Central and Eastern Montana. The total environmental spend was $475,000. Activities included the investigation and soil and groundwater remediation at various ranch and farm-related facilities at each of these ranches including, several localized farm-related landfills, fuelling centers with USTs and ASTs, farm vehicle maintenance shops, drum storage areas, wood post treatment centers, and cattle and sheep dip tank operations. Hundreds of soil and groundwater samples were collected and analyzed and several groundwater monitoring wells were installed to establish groundwater networks for each area of investigation and remediation. Approximately 5,000 tons of soil contaminated with RCRA 8 metals (includingPb and As), petroleum (diesel, gasoline, and used oil), pentachlorophenol, dioxins, and pesticides (including DDT and Beta-BHC) were permitted and transported to various state and federal solid waste landfills including approximately 700 tons transported to a hazardous waste facility in Idaho. Penta, dioxin, and pesticide-contaminated groundwater from abandoned wood post treatment centers and sheep dip tank areas were treated via post excavation natural attenuation. Additional remediation activities of groundwater contaminated with DDT and beta-BHC required installation of an in situ groundwater infiltration curtain consisting of enclosed filter fabric filled with activated granular carbon charcoal material, various reactive chemicals, and fungus-containing pine tree bark chips designed to react and adsorb the dissolved Beta-BHC contaminants. Regulatory No Further Action Status letters were submitted by the MT Department of Environmental Quality for the closures of each of these facilities.

Investigation and remediation activities of soil and groundwater at a 275-arce sod farm in Northern Utah. The total environmental spend was $140,000. Activities included the investigation and soil and groundwater remediation at various farm-related facilities including three AST fueling centers and a farm vehicle maintenance shop with a drum storage area. Nearly 100 soil and groundwater samples were collected and analyzed and four groundwater monitoring wells were installed to establish a groundwater monitoring network one area of investigation and remediation. Diesel, gasoline, and used oil petroleum-related compounds were the main contaminants of concern. Approximately 500 tons of contaminated soil were removed from the three areas of investigation and transported to a local bioremediation repository near Salt Lake City, Utah. Groundwater was treated with several applications of an oxygen release compound (ORC). The ORC material was injected into on-site monitoring wells and directly into an open excavation to expedite the remediation process. Once confirmation sampling confirmed that site soils and groundwater reached compliance with respect to State of Utah screening levels, the remediation team applied for and obtained an Enforceable Written Assurance (EWA) letter, on a fast-track basis, with the Utah Division of Environmental Response and Remediation. The EWA letter allowed for the sale of the property to be completed.

Investigation and remediation activities of soil at a 2,500-arce hay farm in Northern California. The total environmental spend was $30,000. Activities included the investigation and soil remediation at various farm-related facilities including a farm equipment storage and wash area, a drum storage area, and two AST fuelling centers. Approximately 30 soil and groundwater samples were collected and analyzed to determine the extent of contamination in these farm facilities. Diesel, gasoline, and used oil petroleum-related compounds were the main contaminants of concern. Approximately 175 tons of contaminated soil were removed from the three areas of investigation and transported to an on-site treatment cell constructed for this remediation activity. Contaminated soils were spread to a thickness of approximately 12 to 16 inches and contained on a plastic liner in a berm area in a remote location at the farm. The soils were treated with bioremediation and oxygen release compounds to allow for ex-situ bio-chemical degradation of the hydrocarbons in the soil. Following four months of product applications, tilling, and watering of the soil, the contaminant levels decreased within California Regional Water Quality Control Board soil

clean-up criteria and the treated soils were reused on site in non-farming areas.

Investigation and remediation activities of soil at three 500-arce grape vineyards in the Southern San Joaquin Valley, California. The total environmental spend was $130,000. Activities included the investigation and soil remediation at various farm-related facilities including farm AST fuelling centers and drum storage area. Approximately 90 soil samples were collected and analyzed to determine the extent of contamination in these farm facilities. Diesel and used oil petroleum-related compounds were the main contaminants of concern. Approximately 500 tons of contaminated soil were removed from the three areas of investigation and transported to an off-site bioremediation treatment center for this remediation activity. The remediation team coordinated investigation, remediation, and site closure activities with the Kern County Environmental Department and the Central Valley Regional Water Quality Control Board for No Further Action Status at each of the three sites.

Investigation and remediation activities of soil at a farm labor camp and abandoned orange orchard totalling approximately 1,000 acres of derelict farm properties, located approximately 50 miles south of Tampa, Florida. The total environmental spend was $72,000. Farm facilities consisted of an abandoned orange orchard with several AST fuel storage areas where about 400 tons of diesel-contaminated soils were excavated and transported to a county landfill. The services also included an investigation and soil remediation of approximately 100 tons of pesticide-contaminated and heavy oil contaminated soil associated with a former agricultural vehicle wash pad.

Completed several other farm-related investigation and remedial activities at contaminated agricultural sites in Eastern Montana, Southern Georgia, Northern California, Central California, Western Kansas, and in Northern Utah.

Mining-Related Investigations

In 2006-2007 Mr. Hamblin conducted detailed due diligence-related studies including a Phase I ESA, Expanded Phase I ESAs, and Phase II ESA sampling and analyses for a approximately 500-acre abandoned uranium mine site on Prince of Wales Island in Alaska. The studies included contamination assessments of uranium and other radioactive compounds and heavy metals of four areas where mine-related waste material have been disposed. The goal of the investigation was to differentiate areas which have been affected by radioactive mine waste materials and areas of naturally high radioactivity, which have not been affected by mining activities and associated waste materials.

In 2007-2008 Mr. Hamblin completed due diligence studies at two large open pit mining operations within the Mesabi Range in northern Minnesota. Evaluated past and current environmental issues including areas of petroleum contamination from USTs and ASTs and current and futures status of the facilities' Mine Closure Permit, Title V Air Quality Permit, and National Pollutant Discharge Elimination System (NPDES) permits with the State of Minnesota Department of Natural Resources and Pollution Control Agency to determine current and future liabilities for the prospective purchaser. This assessment was to allow the client to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability. The scope of services also included sampling and analyses of near surface soils in an abandoned explosives magazine. This assessment constituted all appropriate inquiry into the previous ownership and uses of the site consistent with good commercial or customary practice, as defined in 42 U.S.C. § 9601(35)(B) of CERCLA.

Conducted detailed due diligence-related studies on a mining operation in Emery County Utah including evaluation of facility compliance related to the use of on-site organic solvents; spill containment and integrity of aboveground storage tanks; evaluation of wastewater discharge permits; waste-rock storage evaluation; and ore processing operation.

Participated in the writing and review of several chapters of a Hydrologic Description Section

of an underground mine permit for proposed coal mining in western Colorado. The purpose of the Hydrologic Description was to evaluate the potential hydrologic consequences of additional underground mining operations. Evaluations included the study of groundwater chemistry from existing groundwater monitoring wells and surface water monitoring locations (including creeks and springs) and proposing additional monitoring wells to fill data gaps related to proposed additional mining locations.

Managed a team that completed and submitted a Notice of Intent (NOI) to Utah's Division of Air Quality as part of the Air Quality permitting process for a client conducting mining and milling of copper and other precious metals in Southern Utah. Services also included completing a fugitive dust permit and a compliance program to implement and stay in compliance with the air quality permit.

Conducted soil and vegetation sampling in Juab County as part of a University academic study on the potential for heavy metal (Cu, Au, Ag) absorption by desert flora. Tasks included field sampling, mapping, and laboratory sample preparation.

Manufacturing and Hazardous Waste-Related Investigations

Managed soil and groundwater assessments at chemical and industrial manufacturing facilities in Oregon, California, and Utah, including RCRA and CERCLA facilities. Soil and groundwater studies involved the investigations and remediation of halogenated and aromatic volatile constituents, petroleum (gasoline diesel, and waste oil) products and metals.

Managed a preliminary RCRA soil sampling investigation and completed a RCRA Facilities Investigation (RFI) Work Plan development at a solvent recovery in the Portland Oregon, area. Services have also included negotiations with state [Oregon Department of Environmental Quality (DEQ)] and Federal (EPA) regulatory agencies for corrective measures study (CMS).

Performed Hydrogeologic Assessment Report (HAR) studies for the State of California's Regional Water Quality Control Board (RQCB) at two chemical manufacturing facilities in Bakersfield and Fresno County. The study at the Fresno County facility involved investigation of radionuclides, metals, sulfuric acid, and dissolved solids. The Bakersfield facility involved the investigation of metals and chlorinated solvents. Both HARs included aquifer testing and characterization.

Conducted groundwater assessments and Solid Waste Assessment Testing (SWAT) for the State of California at several landfills, including sites near Fresno, Modesto, Visalia, and Corcoran. The studies included ongoing groundwater monitoring and aquifer- and vadose-zone monitoring.

Performed hydrogeologic investigations at several agricultural impoundment facilities throughout the West Coast. Included evaluation of pesticide and agricultural chemical source areas, including USTs, lined ponds, and unlined impoundments. Agricultural chemical included organophosphorus and chlorinated pesticides, carbonated and phenoxy herbicides investigations included soil and groundwater investigations and on-going quarterly groundwater monitoring.

Managed installation of groundwater remediation network at an NPL Superfund site in Salt Lake City, Utah. This remedial investigation included installation of extraction wells and piezometers, well development, soil sampling, step drawdown testing and evaluation, and well modification to network with an air-stripping system.

Conducted and managed a Remedial Investigation (RI) at a major paper products facility in Portland, Oregon. Multiple investigations were conducted at this facility concurrently, based on CERCLA investigation protocols, following the removal of over 25 USTs, which previously

contained various ethyl-based alcohols, MIBK, toluene, and diesel and gasoline fuels. Soil and groundwater samples were analyzed for several other organic chemicals including chlorinated solvents (TCE and PCE) and total priority pollutant metals. A vapor extraction system was designed, pilot tested, and installed at this site to remediate toluene-impacted soils.

Managed the design, implementation, and monitoring of five vapor extraction systems for soil and groundwater remediation systems at several UST and hazardous waste facilities in Oregon and Utah.

Designed and installed a vapor extraction/air sparging dual system at a wood products facility in North Bend, Oregon. The System operated for approximately 1.5 years and was successful in remediation of soil and shallow groundwater contaminated with mineral spirits. Multiple remedial investigations were also conducted at this facility to evaluate and assess hydraulic oil, mineral spirits, diesel, and gasoline contaminated soil and groundwater.

Managed design, implementation, and monitoring of soil mounding and venting bioremediation systems. Included treatment of over 1,000 cubic yards of excavated soils contaminated with gasoline, heavy fuels, and waste oil via injection of nitrogen and phosphate nutrients, microbes, and emulsifiers for bioremediation at an 80-year-old bulk storage facility for a major petroleum company in Cornelius, Oregon. Completion of the bioventing mound was accomplished in approximately one year.

Conducted feasibility studies at industrial waste facilities for soil and groundwater remediation considerations; including completing aquifer slug and pumping tests, vapor extraction pilot testing, air sparging pilot testing, soil permeability assessments, chemical evaluation, and historical research. Mr. Hamblin utilized data from these studies to evaluate the most feasible and cost-effective remedial action alternatives.

Designed, installed, and operated soil vapor extraction (SVE) system for a paper products company in Portland, Oregon, for the remediation of toluene-contaminated soils.

Underground Storage Tank (UST) Remedial Investigations

Managed soil and groundwater investigations and remediation relating to (Leaking Underground Storage Tanks (LUST systems at over 100 service station facilities and Managed soil and groundwater investigations and remediation relating to bulk chemical plants for major oil companies (7-Eleven, Texaco, Mid-State Petroleum, Unocal, ARCO, and Pennzoil) sites in Oregon, California, Washington, Idaho, and Utah. Projects included UST decommissioning, site inspections, initial contaminant abatement measures, follow-up soil and groundwater investigation to define the extent of contamination, and Feasibility Studies (FSs) for on-site and off-site remediation.

Managed a $1.25 million remediation project for a major US oil company in a rural community in southern Utah. Remedial investigations included installation of 16 groundwater monitoring wells and 20 remediation wells, including 10 extraction wells, seven monitoring wells, and three injection wells. Well depths ranged from 40 to 120 feet. Remedial investigations also included quarterly groundwater monitoring, natural attenuation monitoring and evaluations, development of a remedial strategy, evaluation of light non-aqueous phase liquid (LNAPL), soil vapor extraction (SVE) and high vacuum (HiVac) pilot testing, ecologic and human health risk assessment, indoor air quality monitoring and evaluation, remedial design, and SVE/HiVac system installation, operation, monitoring, and maintenance. Also conducted sound monitoring and assisted with the design and construction of sound attenuation measures for the remediation system, which included a sound attenuation barrier and silencer emissions stack. Project management duties also included holding public meetings, preparation and

publication of community newsletter for public awareness, and conducting community public relations for the client.

Expert Witness

Served as an expert witness on a case in Hillsboro, Oregon for an owner of a gasoline service station who was in part bought out by the state of Oregon Highway Division as part of a state road expansion project. The buy-out resulted in the closure of the gasoline retail operation, and because contamination was encountered during closure of the USTs, the State offered minimal financial reimbursement for the property. Legal counsel and Mr. Hamblin were successful in negotiating additional State money for our client based on the argument that retail gasoline operations could have been reopened while in situ vapor extraction remedial activities were completed on site if the State had not purchased the property.

Due Diligence-Related Property Transfer Assessments and Auditing

Completed and managed over 1,600 Phase I and Phase II property transfer assessments for various landowners, land developers, commercial lending institutions, and industrial facilities in over 30 U.S. states, three Canadian Provinces, and Baja California, Mexico.

Managed and performed over 100 transaction screen process (TSP) investigations of proposed cellular tower sites in accordance with ASTM standards in Utah and Idaho for a major regional FCC-regulated cellular telecommunications company. TSPs were augmented with inquiries into National Environmental Policy Act (NEPA) issues including wilderness areas, wildlife preserves, endangered species, flood plains, wetlands, and archeological sites.

Managed a nationwide program that included Phase I, Phase II, and geotechnical investigations on over 1,300 sites for a worldwide church organization since 1993. Projects have included residential, agricultural, industrial, and commercial properties throughout the United States and Canada.

Conducted a Phase I environmental site assessment and an Environmental Compliance Audit for a facility in Utah that manufactures storage retrieval cranes and automated guided vehicles. Also managed a RCRA and Industrial Waste Compliance Audit for a national jeweler manufacturer in Bountiful, Utah.

Other Environmental and Geologic Projects

Conducted a Geologic Investigation near the Weber State University Campus in Ogden, Utah to determine potential geologic hazards in a seismic-sensitive area. The field investigation consisted of excavating four test trenches perpendicular to mapped fault traces along the east and west property boundaries and associated reporting.

Performed a slope stability and geologic hazards investigation and geologic mapping and aerial photography interpretation at two sites under consideration for development in the hills near Ventura, California.

Coordinated and assisted with completion of a hazardous waste minimization plan for an industrial coated-paper products facility in Portland, Oregon.

Conducted geotechnical soil and groundwater characterization and environmental investigation at sites near Sanger, California, under consideration for use as winery stillage disposal fields. Included evaluation of metals, dissolved solids, and pH of soil and groundwater samples. Hydrogeologic data were based on evaluation of permeability, percolation, and infiltration tests and from hydrographs.

Conducted drilling, soil sampling, compaction testing and building materials testing and inspections for several geotechnical studies in the Fresno and Visalia areas of California.

Management and coordination of demolition projects and geotechnical-related studies associated with environmental due diligence services for a real estate investor in over 25 U.S. states.

Education

M.S., Geology, Brigham Young University, Provo, Utah, 1985

B.S., Geology, Oregon State University, Corvallis, Oregon, 1983

Career Summary

BSK and Associates: Visalia and Fresno, CA: Soil Technician and Staff Geologist, 1985-1987

Kleinfelder and Associates: Fresno, CA: Staff Geologist, 1987-1988

Brown and Caldwell: Portland, OR: Senior Geologist, Project Manager, 1988-1991

SECOR International; Portland, OR and Salt Lake City, UT, Principal Geologist, Office Principal-in-Charge, Regional Manager; 1991-2005

SLR International Corporation; Salt Lake City, UT, Principal Geologist/Managing Principal; 2005-2014

Cardno, Salt Lake City, UT, Principal Geologist, Practice Leader, and National Client Manager, May 2014 to Present

Registrations/Certifications

Registered Professional Geologist, Oregon, 1989: No. 1057

Registered Professional Geologist, Idaho, 1990: No. 680

Professional Geologist, Utah, 2003: No. 5419780-2250

Certified UST Consultant, Utah, 1996-2004: No. CC0080

Additional training And certifications

40-Hour OSHA Health & Safety Certification (29 CFR 1910.120), 1988

40-Hour OSHA Health & Safety Annual Update Certification, 1997-2003

8-Hour OSHA Site Supervisor's Certification, 1995

PUBLICATIONS AND PRESENTATIONS

"The Stratigraphy and Depositional Environments of the Gebel El-Rus area, Eastern Faiyum, Egypt'.

M.S. Thesis, BYU Geology Studies, Vol. 34, Pg. 1, 1987. 'The Geology of the Gebel El-Rus Area and Archaeology Sites in the Eastern Faiyum, Egypt", excavations at Seila, Egypt, Religious Study Center, Brigham Young University, Provo, Utah, Vol. 1, 1988.

Cardno now Stantec

Alisha Harper

Current Position
Environmental Technician II

Profession
Environmental Science

Years' Experience
12+

Joined Cardno
January 2016

Education
Associates of Science, Southern Utah University 2006

Certifications
40-Hour HAZWOPER

American Red Cross Adult and Pediatric First Aid/CPR/AED

Summary of Experience

Has 12+ years of experience providing key staff-level support in environmental service sectors with a primary emphasis in environmental site assessments and remediation. Projects are primarily U.S. domestic-based with some international projects. Key responsibilities include project management, report production, and product finalization.

Project management responsibilities include proposal preparation, project administration, client relations, field work scheduling, utility locate request, and deadline management.

Report production responsibilities include requesting/obtaining regulatory database reports, prepares/submits FOIA requests, site visits, interviewing of regulatory agencies and property owner representatives, consolidation of data, provides interpretative analysis of the data, technical writing, incorporating the data into the report in compliance with current ASTM Standards, and completion of site figures.

Product finalization responsibilities include report formatting, final report review, print to pdf, consolidation, and submission of the final product to the client.

Significant Experience

Phase I Environmental Site Assessments – Over the past 6.5 years, have managed over 350 Phase I Environmental Site Assessments (ESAs) to current ASTM Standard Practice E 1527-13, the new ASTM Standard Practice E 1527-21 standards, as well as HUD standards; including, but not limited to:

- Retail complexes
- Church/ Schools
- Residential Properties
- Municipal Properties
- Petroleum facilities
- Manufacturing plants
- Commercial properties
- Scout camps
- Agricultural/grazing land

Phase II Environmental Site Assessments – Supports and manages the production of Phase II Environmental Site Assessment reports with an in depth review of the regulatory history of the site as well as preparing CADD report figures and the final support for formatting, word processing, and compilation of the final product.

Drafting – Drafted figures for Phase I ESAs and Phase II ESAs for the past 11 years in AutoCAD. Examples of drawings completed include, but not limit to:

- Site location maps
- Site plans
- Soil & groundwater sample locations
- Wetlands Delineation
- Flood Plain
- Radon Maps
- Boring Logs/GINT
- Quarterly reports for groundwater monitoring
- Geologic cross-section

Administrative – Support and managed office and administrative duties for an Engineering firm from 2007 to 2010. Duties include office operations and was tasked with creating/processing client invoicing, accounts payable/receivable, proposal identification and production, client networking, and creation of marketing material in Photoshop and Microsoft PowerPoint.

Experienced in the following software:

- Microsoft Suite including:
  - Word
  - Excel
  - PowerPoint
  - Outlook
- Adobe including:
  - Photoshop
  - Acrobat
- Autodesk AutoCAD
- gINT

Appendix J

Laboratory Reports (intentionally left blank)

Appendix K

Other Supporting Documentation

CALIFORNIA - EPA Map of Radon Zones

http://www.epa.gov/radon/zonemap.html

The purpose of this map is to assist National, State and local organizations to target their resources and to implement radon-resistant building codes.

This map is not intended to determine if a home in a given zone should be tested for radon. Homes with elevated levels of radon have been found in all three zones.

All homes should be tested, regardless of zone designation.

IMPORTANT: Consult the publication entitled "Preliminary Geologic Radon Potential Assessment of California" (USGS Open-file Report 93-292-I) before using this map. See http://energy.cr.usgs.gov/radon/grpinfo.html This document contains information on radon potential variations within counties. EPA also recommends that this map be supplemented with any available local data in order to further understand and predict the radon potential of a specific area.

Zone 1 Zone 2 Zone 3

K—1

Latitude: 34° 33' 32" N
Longitude: -118° 8' 7" W

Project No. 238001856

This map and all data contained within are supplied as is with no warranty. Cardno, Inc. expressly disclaims responsibility for damages or liability from any claims that may arise out of the use or misuse of this map. It is the sole responsibility of the user to determine if the data on this map meets the user's needs. This map was not created as survey data, nor should it be used as such. It is the user's responsibility to obtain proper survey data, prepared by a licensed surveyor, where required by law.

Appendix K1: Radon Map

Maverik - Palmdale, CA
Potential Maverik Location
Highway 14 & Avenue S
Palmdale, Los Angeles County, California

N

Cardno
now
Stantec

1142 WEST 2320 SOUTH, SUITE A
WEST VALLEY, UTAH 84119
P: 801-256-3800 F: 801-973-1095

Date Created: 8/16/2022 Date Revised: 8/16/2022 File Path: C:\Users\alisha.strong\OneDrive - Cardno\Desktop\Projects\Maverik\1856 Maverik Palmdale, CA\1856 Figures\1856 Figures.dwg
Data Sources: California County Radon Map

CAD Analyst: Alisha.Strong

VAPOR SCREENING

Project Property:	*Maverik Palmdale, CA* *Highway 14 & Ave S* *Palmdale CA*
Project No:	*2380018XX*
Report Type:	*Vapor Report with Database Details*
Order No:	*22080300932v*
Requested by:	*Cardno Inc.*
Date Completed:	*August 16, 2022*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

This Report was produced through the ERIS Vapor Screening Tool. The ERIS Vapor Screening Tool and this report output are designed to help those in conducting a Vapor Encroachment Screening on a Property Involved in Real Estate Transactions under the ASTM Standard Designation E2600 – 15.

The following table lists the data sources searched and any hits in the Area of Concern (AOC) that have been included in the report. The search distances listed are based on search distances used in the Database Report and the search results are grouped based on the minimum default search distances for Chemicals of Concern (COCs) and Petroleum Hydrocarbon Chemicals of Concern (PHCOCs) as outlined in E2600-15. The default AOC may be expanded or reduced by the environmental professional (adjusted AOC) using experience and professional judgment.

Standard Environmental Sources	***Search Distance (miles)****	***Project Property***	***Within 1/10***	***1/10 plus***	***Total***
Federal NPL site list	1.0	0	0	0	0
Federal Delisted NPL site list	0.5	0	0	0	0
Federal CERCLIS list	1.0	0	0	0	0
Federal CERCLIS NFRAP site list	0.5	0	0	0	0
Federal RCRA CORRACTS facilities list	1.0	0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list	0.5	0	0	0	0
Federal RCRA generators list	0.25	0	0	0	0
Federal institutional control/engineering control registries	0.5	0	0	0	0
Federal ERNS list	PO	0	0	0	0
State and tribal equivalent NPL	1.0	0	0	0	0
State and tribal equivalent CERCLIS	1.0	0	0	0	0
State and tribal landfill and/or solid waste disposal site lists	0.5	0	0	0	0
State and tribal leaking storage tank lists	0.5	0	0	0	0
State and Tribal registered storage tank lists	0.25	0	0	0	0
State and tribal institutional control/engineering control registries	0.5	0	0	0	0
State and tribal voluntary cleanup sites	0.5	0	0	0	0
State and tribal Brownfield sites	0.5	0	0	0	0
State Hazardous Waste Facilities	1.0	0	0	0	0
Others	0.5	0	0	0	0
Non Standard Environmental Sources					
Federal Spill sites list	0.125	0	0	0	0
Federal Drycleaner Facilities	0.5	0	0	0	0
State and tribal equivalent CERCLIS	1.0	0	0	0	0
State Hazardous Waste Facilities	0.5	0	0	0	0
State and Tribal Spill sites list	PO	0	0	0	0
State and Tribal Dry Cleaner Facilities	0.25	0	0	0	0
Others	1.0	0	0	0	0
Federal PFAS sites list	0.5	0	0	0	0
State and Tribal PFAS site list	0.5	0	0	0	0

** Please refer to the Appendix of this report to view specific databases searched within each category. Search distances within each category may vary by database - the largest search radius per category will be displayed.*

Executive Summary: Report Summary

Project Property:	Maverik Palmdale, CA Highway 14 & Ave S Palmdale CA	**PO No:**	2380018XX
		Order No:	22080300932v
Coordinates:	34.55892571, -118.13530699	**Elevation:**	2866.21 ft

Project Property - Results

Map Key	DB	Company/Site Name	Address	Direction	Distance (m/ft)	Elev Diff (ft)	Page Number

No records for the project property.

Surrounding Properties - Results

Map Key	DB	Company/Site Name	Address	Direction	Distance (m/ft)	Elev Diff (ft)	Page Number

No records for the surrounding properties.

Address: Highway 14 & Ave S,Palmdale,CA

Order No: 22080300932v

Up-gradient

Down-gradient

Cross-gradients

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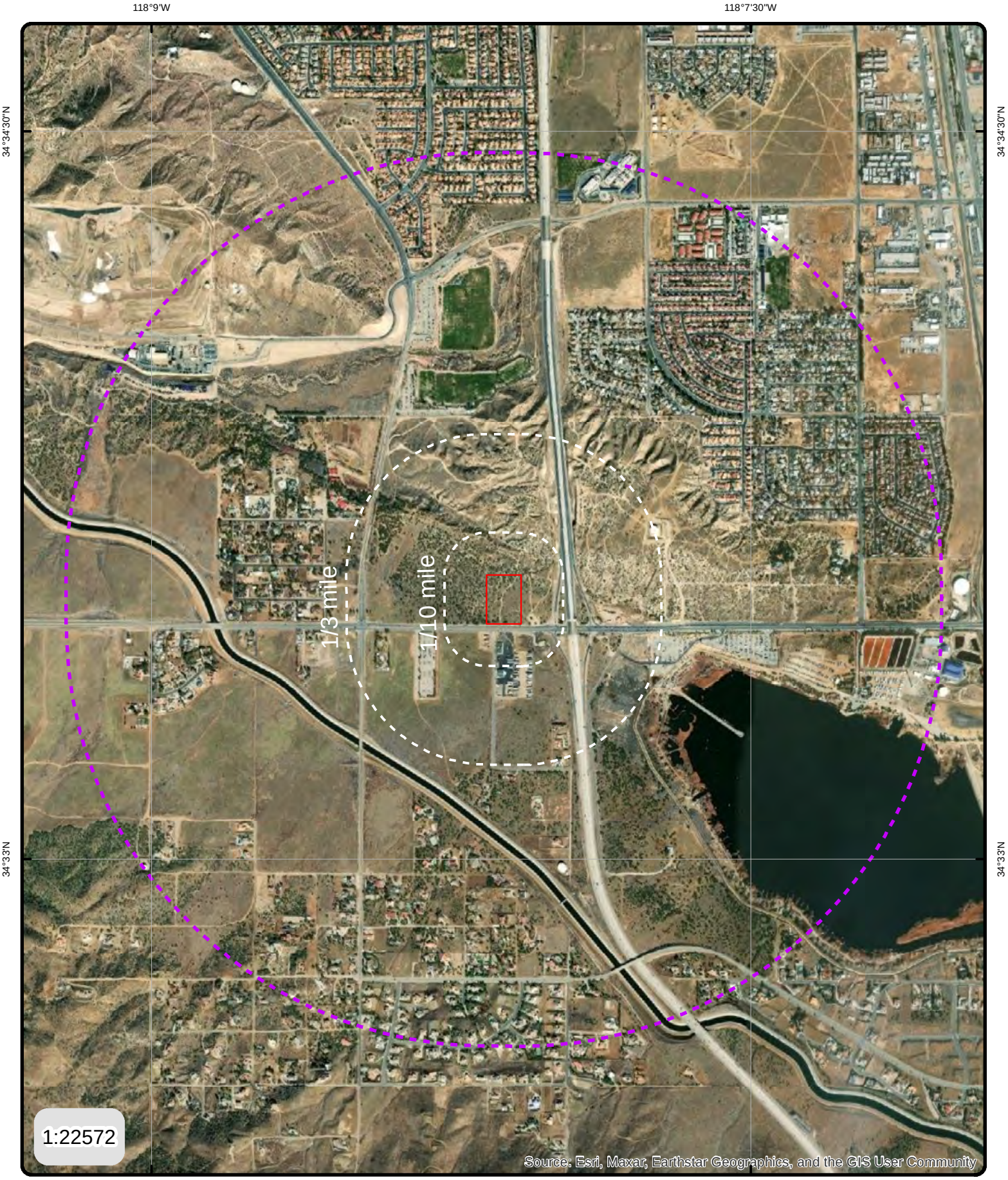

Address: Highway 14 & Ave S,Palmdale,CA

Order No: 22080300932v

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Detail Report

No details.

Appendix: Database Descriptions

The following are data source listings found in the attached report. For full descriptions, please refer to the associated ERIS Database Report.

DB	Database Name	Publication Date	Source	Classification	ASTM Category

Appendix L

Terminology

Terminology

The following provides definitions and descriptions of certain terms that may be used in this report. Italics indicate terms that are defined by ASTM Standard Practice E 1527-13. The Standard Practice should be referenced for further detail (such as the precise wording), related definitions, or additional explanation regarding the meaning of terms.

recognized environmental condition (REC) - the presence or likely presence of any hazardous substances or petroleum products in, on, or at the Subject Property: (1) due to any 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.

de minimis conditions – conditions that generally do 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. Conditions determined to be *de minimis* are not recognized environmental conditions.

historical recognized environmental condition (HREC) – a past release of any hazardous substances in connection with the Subject 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 V to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls). The final decision rests with the environmental professional and will be influenced by the current impact of the historical recognized environmental condition on the Subject Property.

controlled recognized environmental condition (CREC) – 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 (e.g., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

material threat – a physically observable or obvious threat that is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment. An example might include an aboveground storage tank system that contains a hazardous substance and that shows evidence of damage such that it may cause or contribute to tank integrity failure with a release of contents to the environment.

threat to human health or the environment – a substantial risk of harm to public health or the environment resulting from the presence or likely presence of an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the Subject Property or into the ground, ground water, or surface water of the Subject Property. An example might include a release of a hazardous substance in concentrations exceeding applicable governmental agency standards under conditions that could reasonably and foreseeably result in substantial exposure to humans or substantial damage to natural resources. The risk of that exposure or damage would represent a threat to human health or the environment.

generally would not be the subject of an enforcement action – the likelihood that an environmental condition would not be subject to enforcement action if brought to the attention of appropriate governmental agencies. If the circumstances suggest an enforcement action would be less likely than not, then the condition is considered to be generally not the likely the subject of an enforcement action.

Appendix H

Transportation Impact Analysis (TIA) Vehicle Miles Travelled (VMT) Analysis

Maverik Gas Station
Transportation Impact Analysis

Prepared for:

The Altum Group
Strive Higher

44-600 Village Court, Suite 100
Palm Desert CA, 92260

Prepared by:

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

23905 Clinton Keith Road 114-280
Wildomar, CA 92595

August 2023

EXECUTIVE SUMMARY

Purpose of the Report

The purpose of this Transportation Impact Analysis (TIA) report is to analyze the site access and circulation constraints related to the provision of access to and from the proposed Maverik Gas Station project (Project), consistent with the Los Angeles County Public Works Transportation Impact Analysis Guidelines (Guidelines, July 23, 2020). This TIA will also recommend transportation improvements to address any potential Project deficiencies on local and regional transportation facilities.

Project Overview

The Project is proposing the construction of a service station with 24 vehicle fueling positions and 5,637 square feet (sf) of convenience store. The Project is located at the northeast corner of Guyon Avenue and West Avenue S in the City of Palmdale. Access to the Project site will be provided via one (1) proposed right-in/right-out only driveway along W Avenue S that will be restricted by the construction of a raised median and one (1) proposed driveway that would result as the north leg of the existing W Avenue S and Guyon Avenue intersection.

The project trip generation was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual (TGM), 11th Edition*. It is estimated that the project will generate 1,543 daily trips, 156 AM peak hour trips and 136 PM peak hour trips. Project trip distribution and assignment were developed, in coordination with City staff, based on the land use characteristics of the proposed project and surrounding area, existing travel patterns within the study area and anticipated travel patterns to and from the project site. Project scenarios and study area intersections were then established in coordination with City staff to determine the potential operational deficiencies on the transportation network due to the construction of the Project.

Analysis Scenarios

- Existing Conditions (Year 2023)
- Opening Year 2024 (Existing + 3% Annual Ambient Growth) Conditions
- Opening Year 2024 + Project Conditions

Study Area Intersections

1. Tierra Subida Avenue and W Avenue S
2. Guyon Avenue/Project Driveway 1 and W Avenue S
3. State Route (SR)-14 Southbound Ramps and W Avenue S
4. SR-14 Northbound Ramps and W Avenue S

Analysis Results and Recommendations

Existing Conditions (Year 2023)

All intersections are expected to operate at an acceptable LOS under Existing Conditions.

Opening Year 2024 Conditions

All intersections are expected to operate at an acceptable LOS under Opening Year 2024 without Project Conditions.

The Project would have a project related traffic operational deficiency under Opening Year 2024 with Project Conditions at the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S. Installation of a traffic signal would improve the deficient intersection to operate at an acceptable level of services. The intersection warrants a signal under Opening Year 2024 With Project Conditions during the AM or PM peak hours.

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1.0 PROJECT INTRODUCTION

The purpose of this Transportation Impact Analysis (TIA) report is to analyze the site access and circulation constraints related to the provision of access to and from the proposed Maverik Gas Station project (Project), consistent with the Los Angeles County Public Works Transportation Impact Analysis Guidelines (Guidelines, July 23, 2020). This TIA will also recommend transportation improvements to address any potential Project deficiencies on local and regional transportation facilities.

PROJECT DESCRIPTION

The Project is proposing the construction of a service station with 24 vehicle fueling positions and 5,637 square feet (sf) of convenience store. The Project is located at the northeast corner of Guyon Avenue and West Avenue S in the City of Palmdale. **Figure 1-1** shows the project site plan.

STUDY AREA

The study area for this project was developed consistent with the Guidelines, including all primary driveways and unsignalized or signalized intersections adjacent to the project or integral to project trip distribution. IEG prepared a scoping agreement defining the study area, which was reviewed and approved by City staff prior to the preparation of this TIA. Refer to **Appendix A** for approved scoping agreement.

Figure 1-2 presents the study area that includes the following key intersections:

1. Tierra Subida Avenue and W Avenue S
2. Guyon Avenue/Project Driveway 1 and W Avenue S
3. SR-14 Southbound Ramps and W Avenue S
4. SR-14 Northbound Ramps and W Avenue S

Turning movement counts for one weekday during the morning and evening peak hours were conducted on Tuesday, July 18, 2023. The turning movement counts are included in **Appendix B.** These counts were utilized in Synchro 11 software to determine LOS at all study intersections. Year 2024 without Project traffic volumes were developed by adding a 3% annual growth for one year to the existing counts.

PROJECT TRIP GENERATION

Trip generation is a measure or forecast of the number of trips that begin or end at the project site. The traffic generated is a function of the extent and type of development proposed for the site. These trips will result in some traffic increases on the streets where they occur. Per the TIA Guidelines, trip generation for proposed uses must be calculated based on rates from the *Trip Generation Manual (TGM), 11th Edition*, published by the Institute of Transportation Engineers (ITE). Project ITE average trip generation rates are presented in **Table 1-1**.

Table 1-1
Project Trip Generation Rate

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	Daily
Convenience Store/Gas Station	VFP	945	13.52	13.52	27.04	11.38	11.38	22.76	257.13

[1] Trip Generation Source: Institute of Transportation Engineers, Trip Generation Manual, Eleventh Edition (2021).
[2] VFP = Vehicle Fueling Positions

Table 1-2 summarizes the calculated trip generation based on land use intensity associated with the Project. As shown, the Project is anticipated to generate approximately 1,543 new daily trips, 156 AM peak hour trips and 136 PM peak hour trips.

Table 1-2
Project Trip Generation Summary

Land Use[1]	Intensity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Convenience Store/Gas Station	24	VFP	324	324	648	273	273	546	6,171
Pass-by Reduction (76% - AM Peak, 75% - PM Peak & Daily)[3]			246	246	492	205	205	410	4,628
Cumulative Total			**78**	**78**	***156***	***68***	***68***	***136***	***1,543***

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).
[2] SF = Thousand Square Feet; VFP = Vehicle Fueling Positions
[3] Pass-by reduction percentage is based on the ITE methodology per 2021 Pass-By Tables for ITE Trip Generation Appendices.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution and assignment is the process of identifying the probable destinations, directions and traffic routes that project related traffic will affect. Once the proposed development's trips have been estimated, they are assigned to the study area network. For this development, the project trip distribution and assignment were developed, in coordination with City staff, based on the land use characteristics of the proposed project and surrounding area, existing travel patterns within the study area, anticipated travel patterns to and from the project site, and approved projects located in the vicinity of the project site.

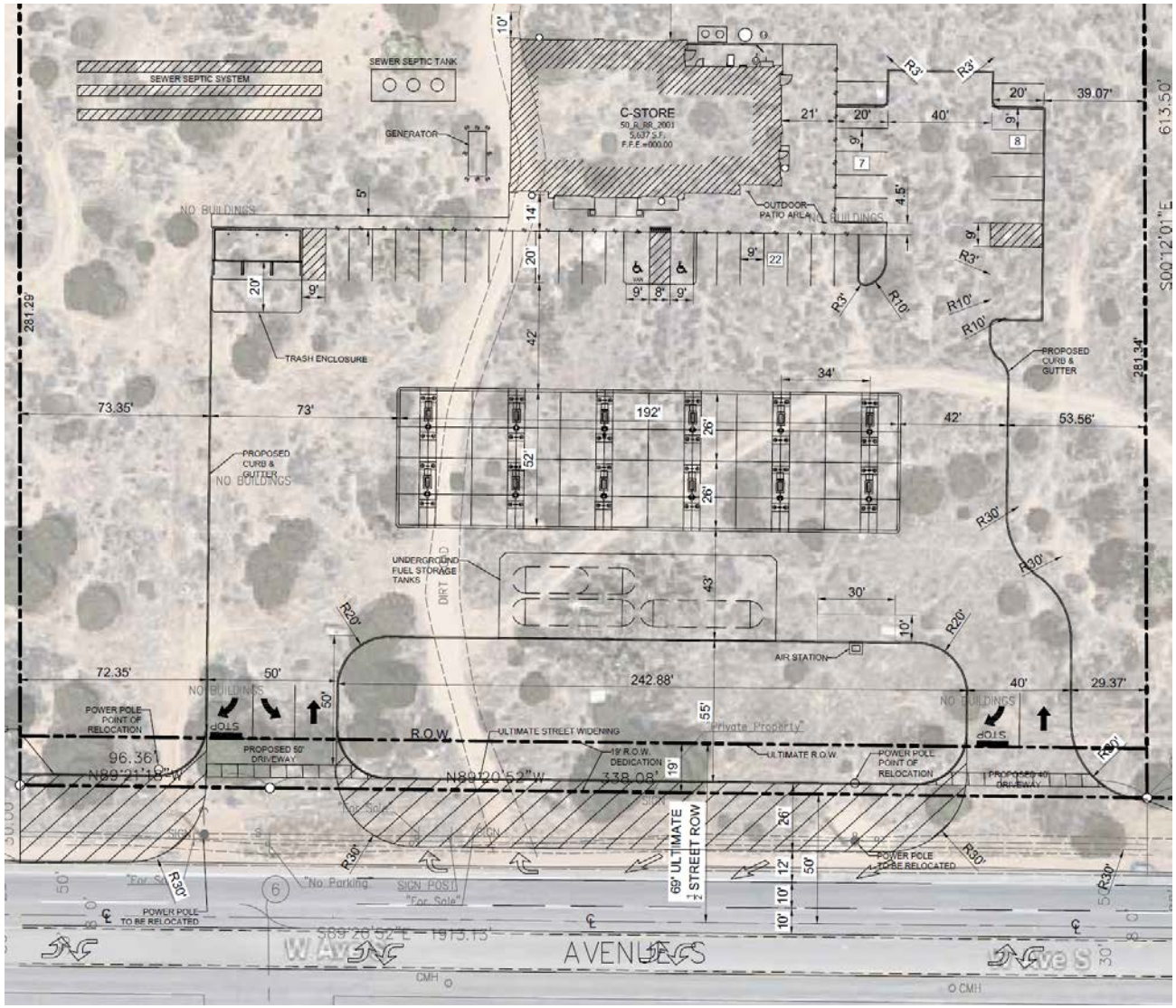
Figure 1-2 shows the trip distribution and **Figure 1-3** shows the Project intersection turning movement volumes.

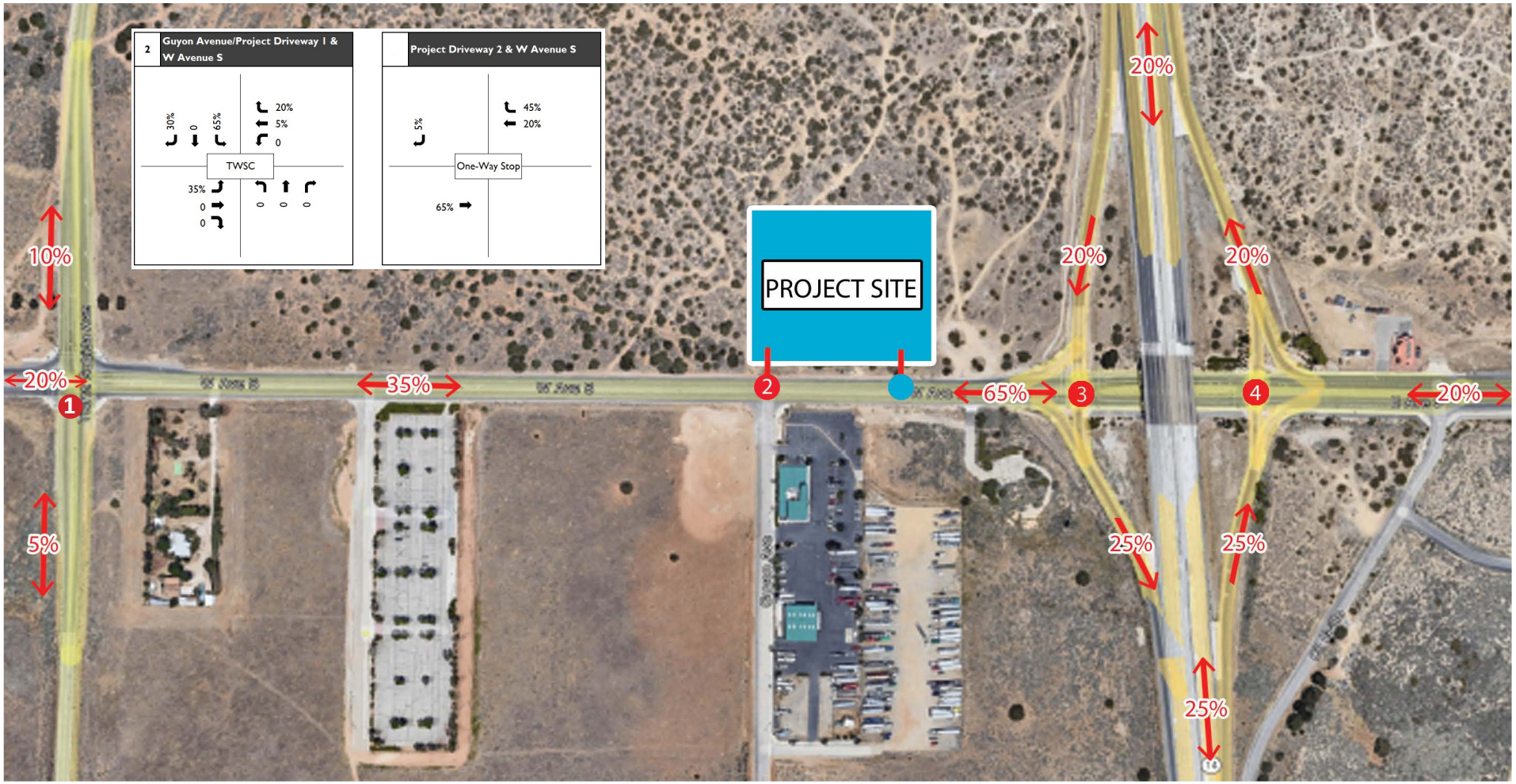
PROJECT ACCESS

Access to the Project site will be provided via one (1) proposed right-in/right-out only driveway along W Avenue S that will be restricted by the construction of a raised median and one (1) proposed driveway that would result as the north leg of the existing W Avenue S and Guyon Avenue intersection.

PARKING

The proposed development will provide on-site parking spaces consistent with City of Palmdale minimum parking requirements.

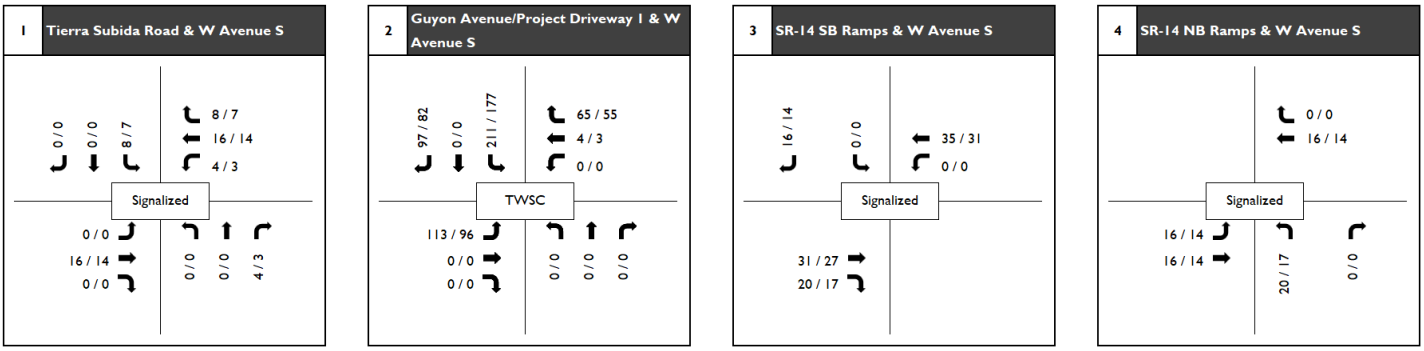

SEWER SEPTIC SYSTEM
SEWER SEPTIC TANK
GENERATOR
C-STORE
NO BUILDINGS
TRASH ENCLOSURE
OUTDOOR PATIO AREA
PROPOSED CURB & GUTTER
UNDERGROUND FUEL STORAGE TANKS
DIRT ROAD
AIR STATION
POWER POLE POINT OF RELOCATION
PROPOSED 50' DRIVEWAY
R.O.W.
ULTIMATE STREET WIDENING
19' R.O.W. DEDICATION
ULTIMATE R.O.W.
"Private Property"
69' ULTIMATE STREET ROW
POWER POLE TO BE RELOCATED
"No Parking"
SIGN POST
"For Sale"
W Avenue
AVENUE
Avenue S
S00°12'01"E
613.50'
281.29'
281.34'
73.35'
73'
192'
42'
53.56'
34'
30'
242.88'
72.35'
50'
40'
29.37'
39.07'
21'
20'
9'
8'
14'
5'
4.5'
43'
55'
26'
12'
10'
R3'
R10'
R20'
R30'
STOP
96.361
N89°21'18"W
N89°20'52"W
338.08'
S89°20'52"E 1915.15'
CMH



LEGEND # Intersection Driveway

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

Maverick Gas Station
Project Trip Distribution
Figure 1-2



LEGEND

0/0 = (AM/PM) Peak Hour Volumes

2.0 METHODOLOGIES

This section documents the methodologies and assumptions used to conduct the circulation impact analysis for the proposed project. This section contains the following background information:

- Study scenarios
- Study time periods
- Analysis methodologies

Refer to **Appendix A** for approved scoping agreement.

STUDY SCENARIOS

This report presents an analysis of the intersection operating conditions during the peak periods, which were selected in consultation with City staff for the following anticipated timeframe scenarios:

- Existing Conditions (Year 2023)
- Opening Year 2024 (Existing + 3% Annual Ambient Growth) Conditions
- Opening Year 2024 + Project Conditions

STUDY TIME PERIODS

The Guidelines recommend the following peak hours for analysis:

- Weekday AM (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM (peak hour between 4:00 PM and 6:00 PM)

ANALYSIS METHODOLOGIES

Street system operating conditions are typically described in terms of "level of service." Level of service is a report-card scale used to indicate the quality of traffic flow on roadway segments and at intersections. Level of service (LOS) ranges from LOS A (free flow, little congestion) to LOS F (forced flow, extreme congestion). **Table 2-1** describes generalized definitions of auto LOS A through F.

Table 2-1
Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections have a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual, Transportation Research Board (2016)

Intersection Capacity Analysis

The analysis of peak hour intersection performance was conducted using the Trafficware Synchro 10 software program, which uses methodologies defined in the Highway Capacity Manual 6th Edition (HCM6) to calculate LOS. Level of service for intersections is determined by control delay. Control delay is defined as the total elapsed time from when a vehicle stops at the end of a queue to the time the vehicle departs from the stop line. The total elapsed time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in the queue.

Signalized Intersections

The HCM6 analysis methodology for evaluating signalized intersections is based on the "operational analysis" procedure. This technique uses 1,900 passenger cars per hour of green per lane (pcphgpl) as the maximum saturation flow of a single lane at an intersection. Average control delay is calculated by taking a volume-weighted average of all the delays for all vehicles entering the intersection. **Table 2-2** summarizes the level of service criteria for signalized intersections.

Table 2-2
Signalized Intersection Level of Service HCM Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board (2016)

Side-Street Stop-controlled (SSSC) Intersections

The HCM6 analysis methodology for evaluating side-street stop-controlled (SSSC) intersections is based on gap acceptance and conflicting traffic for vehicles stopped on the minor-street approaches. The critical gap (minimum gap that would be acceptable) is defined as the minimum time interval in the major-street traffic stream that allows intersection entry for one minor-street vehicle. Average control delay and LOS for the "worst approach" are reported. **Table 2-3** summarizes the level of service criteria for unsignalized intersections.

Table 2-3
Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
> 50.0	F

Source: Highway Capacity Manual, Transportation Research Board (2016)

Traffic Signal Warrant Analysis

The Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), amended with California MUTCD 2014 Edition, presents warrant criteria for justifying the installation of a traffic signal at an unsignalized intersection. The criteria include studying traffic conditions, pedestrian characteristics, and physical characteristics of the intersection location. The MUTCD indicates that satisfaction of one or more of the traffic signal warrants does not in itself require the installation of a traffic control signal.

This study uses MUTCD Section 4C.04 Warrant 3, Peak Hour to assess the need of a traffic signal at the unsignalized intersection of Guyon Avenue/Project Driveway 1 and W Avenue S. Signal warrant worksheets are included in **Appendix F**.

City of Palmdale General Plan Compliance

The TIA will identify intersection LOS deficiencies for compliance with the City of Palmdale General Plan (effective October 22, 2022). Per the General Plan Final Environmental Impact Report (August 2022, SCH# 2021060494), the City of Palmdale has established LOS "D" as the minimum acceptable level of service. Therefore, any study intersection resulting in LOS worse than this minimum will be considered deficient for the purposes of this analysis.

3.0 EXISTING CONDITIONS (YEAR 2023)

This section documents the circulation system conditions within the study area of the project under the existing without and with project scenarios. The Existing Conditions (Year 2023) scenario is analyzed using existing volumes counts. This section also documents potential project related operational deficiencies on the existing local and regional circulation networks. No network improvements are assumed under Existing Conditions scenarios.

ROADWAY NETWORK

The locally significant roadway located within the study area of the Project is discussed below.

W Avenue S is an east-west four-lane two-lane collector roadway between Tierra Subida Avenue and State Route 14 Southbound Ramps and transitions to a four-lane divided roadway from SR-14 SB Ramps to SR-14 NB Ramps, within the study area. The posted speed limit is 55 miles per hour. This roadway connects the Project to north-south corridors such as State Route 14 and Tierra Subida Avenue. Per the City of Palmdale General Plan Circulation and Mobility Element, W Avenue S is classified as a Crosstown Roadway Facility with a max 84' curb to curb distance within 114' right-of-way.

Figure 3-1 shows the City of Palmdale Roadway Classification Map.

TRANSIT NETWORK

Antelope Valley Transit Authority (AVTA) services the Cities of Palmdale and Lancaster, and unincorporated portions of northern Los Angeles County. AVTA does not operate any routes within the vicinity of the Project. The nearest bus stop is 1.6 mi east for Route 3 to travel north to Antelope Valley Mall and east to South Valley Transit Center. Bus route information is included in **Appendix G**.

ACTIVE TRANSPORTATION NETWORK

There is an existing sidewalk along the south side of W Avenue S east of SR-14 SB Ramps and no sidewalk on either side of W Avenue S west of SR-14 SB Ramps from the Project site. Additionally, marked pedestrian crossings are provided at the signalized study intersections. There is an existing Class I bike path along the south side of W Avenue S, beginning east of SR-14 SB Ramps. However, there are no existing bicycle facilities along W Avenue S from the Project site to this bike path. The City of Palmdale General Plan Circulation and Mobility Element proposes Class II bike lanes along W Avenue S. **Figure 3-2** shows the City of Palmdale Planned Bicycle Network Map.

TRAFFIC VOLUMES

The intersection turning movement counts were conducted during the weekday morning peak period from 7:00 AM to 9:00 AM and during the weekday evening peak period from 4:00 PM to 6:00 PM on Tuesday, July 18, 2023. Traffic count data is provided in **Appendix B**.

ANALYSIS RESULTS

Table 3-1 shows Existing Conditions intersection operation analysis results. **Figure 3-3** shows Existing Conditions intersection turning movement volumes.

Table 3-1
Existing Conditions (Year 2023) Intersection Operation Analysis

Intersection	Traffic Control	Existing Without Project	
		Delay (a)	LOS (b)
AM/PM Peak			
1. Tierra Subida Avenue and W Avenue S	Signalized	12.4/14.5	B/B
2. Guyon Avenue and W Avenue S	SSCC	14.3/18.8	B/C
3. SR-14 Southbound Ramps and W Avenue S	Signalized	11.0/11.2	B/B
4. SR-14 Northbound Ramps and W Avenue S	Signalized	7.3/7.5	A/A

Notes:
(a) Delay refers to the average control delay for the entire intersection and control delay for the worst movement for SSSC intersections, measured in seconds per vehicle.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 11

Per the analysis results shown in **Table 3-1**, all analyzed intersections are operating at an acceptable LOS under Existing Conditions. Existing Conditions peak hour analysis worksheets are provided in **Appendix C**.

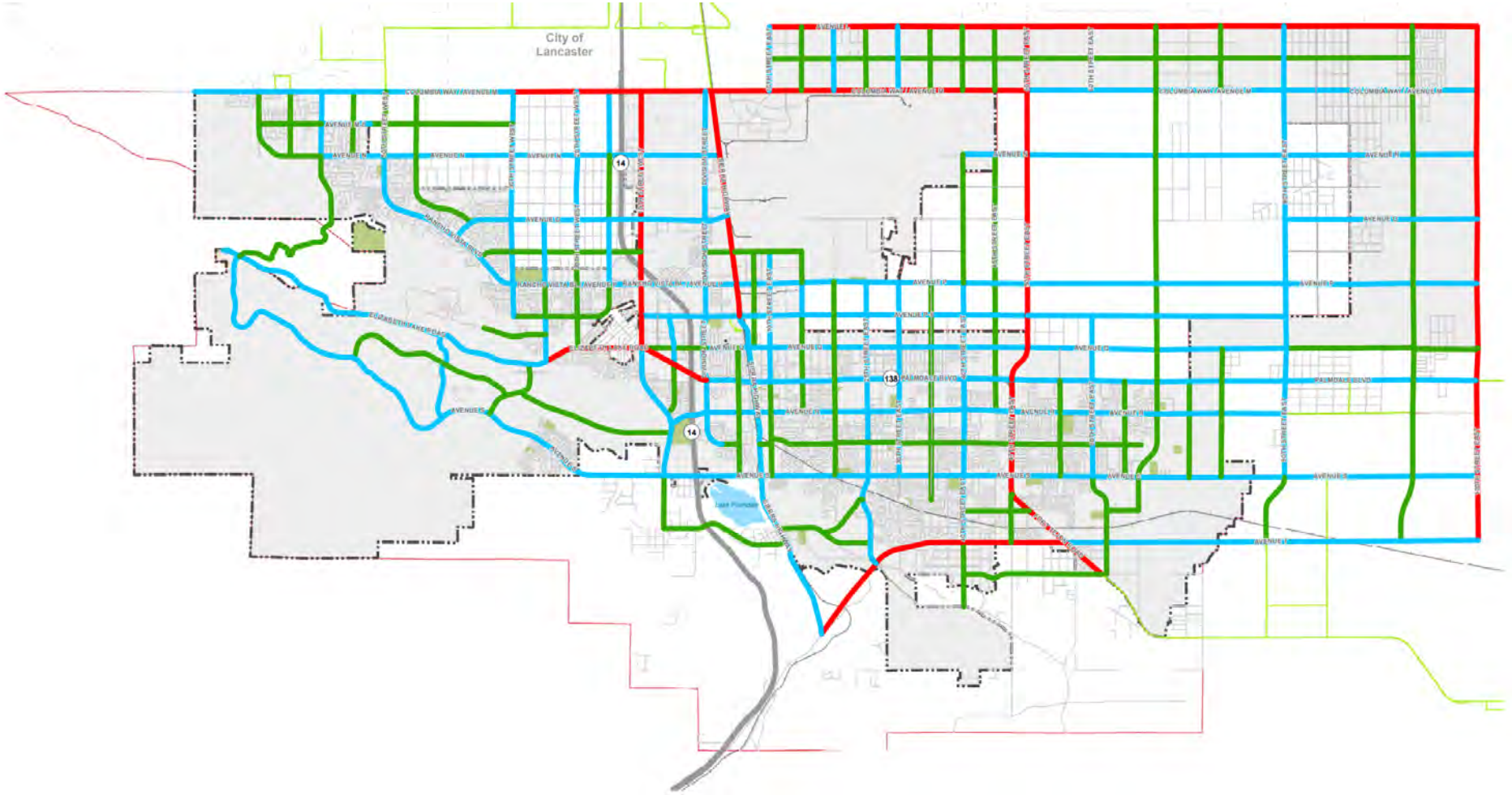


Figure 6.2

Palmdale Roadway Classification Map

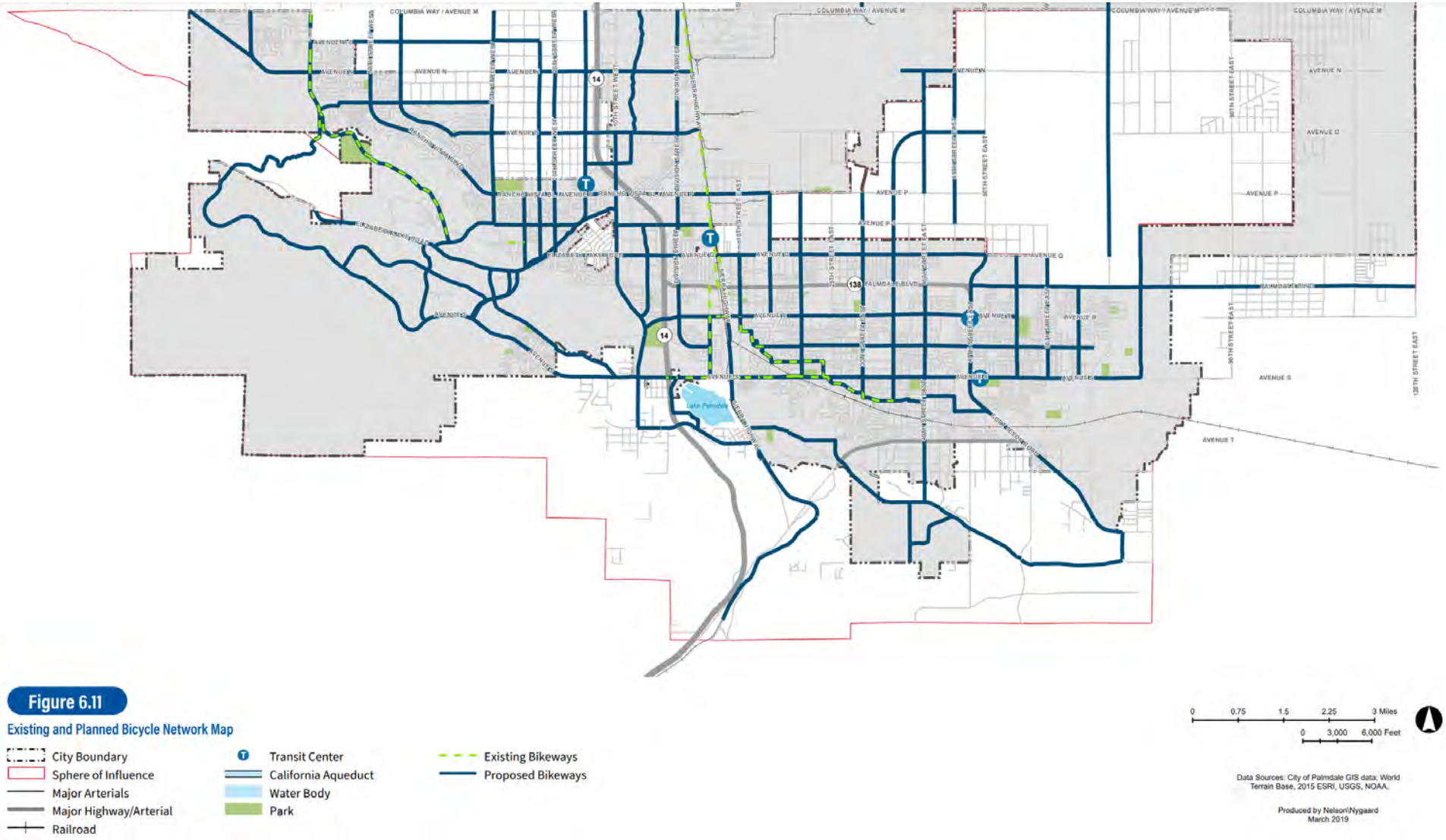
- City Boundary
- Sphere of Influence
- Major Arterials
- Major Highway/Arterial
- Railroad
- Transit Center
- California Aqueduct
- Water Body
- Park
- Regional
- Crosstown
- Connector
- Neighborhood

0 0.75 1.5 2.25 3 Miles

0 3,000 6,000 Feet

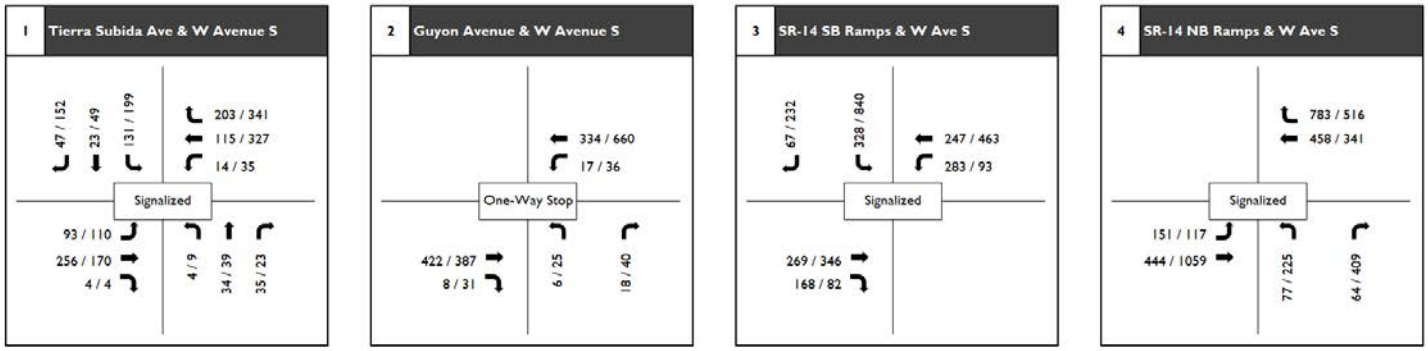
Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.

Produced by Nelson\Nygaard March 2019



INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

Maverick Gas Station
Palmdale Planned Bicycle Network Map
Figure 3-2



LEGEND
(AM/PM) Peak Hour Volumes

4.0 OPENING YEAR 2024 CONDITIONS

This section documents the circulation system conditions within the study area of the project under Opening Year 2024 without and with Project scenarios. The Opening Year without Project Conditions traffic volumes were developed by applying a 3% growth for one year to the Existing counts. Project traffic volumes are then added to the Opening Year without Project Conditions traffic volumes to develop Opening Year with Project Conditions traffic volumes. This section also documents potential cumulative project impacts on the existing local and regional circulation networks. No network improvements are assumed under Opening Year Condition scenarios.

ANALYSIS RESULTS

Table 4-1 shows Opening Year 2024 Conditions intersection operation analysis results. **Figures 4-1** and **4-2** show Opening Year 2024 without and with Project Conditions intersection turning movement volumes.

Table 4-1
Opening Year 2024 Conditions Intersection Operation Analysis

Intersection	Traffic Control	Opening Year Without Project		Opening Year With Project		Operational Deficiency?
		Delay (a)	LOS (b)	Delay (a)	LOS (b)	
AM/PM Peak Hour						
1. Tierra Subida Avenue and W Avenue S	Signalized	12.6/14.7	B/B	12.7/14.8	B/B	N/N
2. Guyon Avenue/Project Driveway 1 and W Avenue S	SSCC	14.7/19.6	B/C	92.1/352.8	**F/F**	**Y/Y**
3. SR-14 Southbound Ramps and W Avenue S	Signalized	11.1/11.5	B/B	11.2/11.7	B/B	N/N
4. SR-14 Northbound Ramps and W Avenue S	Signalized	7.4/7.7	A/A	8.0/8.0	A/A	N/N

Notes:
***Bold** indicates deficient LOS*
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At unsignalized intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 11

Per the analysis results shown in Table 4-1, all analyzed intersections are operating at an acceptable LOS under Opening Year Conditions. Opening Year without Project Conditions peak hour analysis worksheets are provided in **Appendix D**.

DEFICIENT INTERSECTIONS AND RECOMMENDED IMPROVEMENTS

The Project would have a project related traffic operational deficiency under Opening Year 2024 with Project Conditions at the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S. Opening Year With Project Conditions peak hour analysis worksheets are provided in **Appendix E**.

Installation of a traffic signal would improve the deficient intersection to operate at an acceptable level of services, as shown in **Table 4-2**. The intersection warrants a signal under Opening Year 2024 With Project Conditions during the AM or PM peak hours.

Table 4-2
Opening Year 2024 With Project and Improvement Conditions Intersection Operation Analysis

Intersection	Traffic Control	Opening Year With Project		Opening Year With Project and Improvement		Operational Deficiency?
		Delay (a)	LOS (b)	Delay (a)	LOS (b)	
AM/PM Peak Hour						
2. Guyon Avenue/Project Driveway 1 and W Avenue S	Signalized	92.1/352.8	**F/F**	9.8/36.6	A/D	N/N

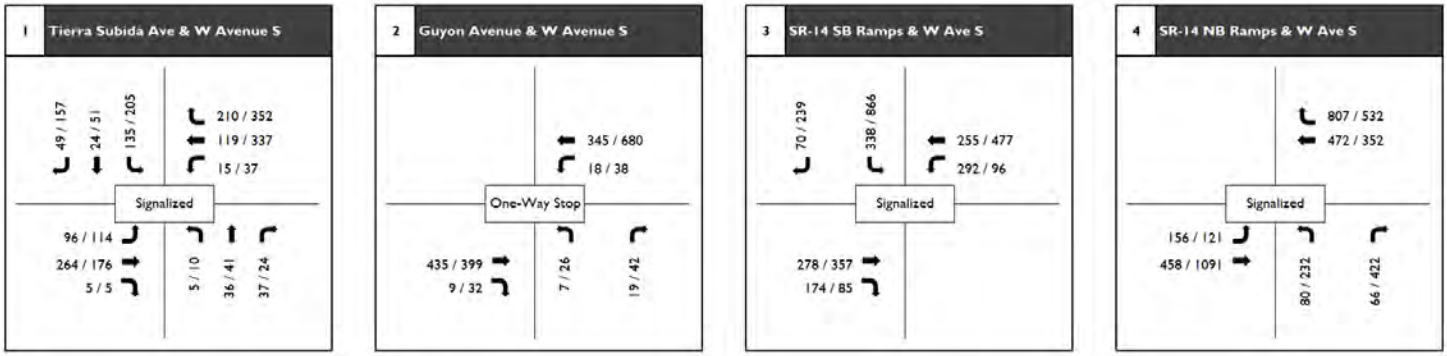
Notes:
***Bold** indicates deficient LOS*
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
(b) LOS calculations are based on the methodology outlined in the Highway Capacity Manual 6th Edition and performed using Synchro 11

Table 4-3 shows Opening Year 2024 With Project and Improvement Conditions queue analysis results. As shown, the proposed 100 ft storage length for the eastbound left turn lane at the Guyon Avenue/Project Driveway 1 and W Avenue S intersection would accommodate the anticipated queue from the Project traffic.

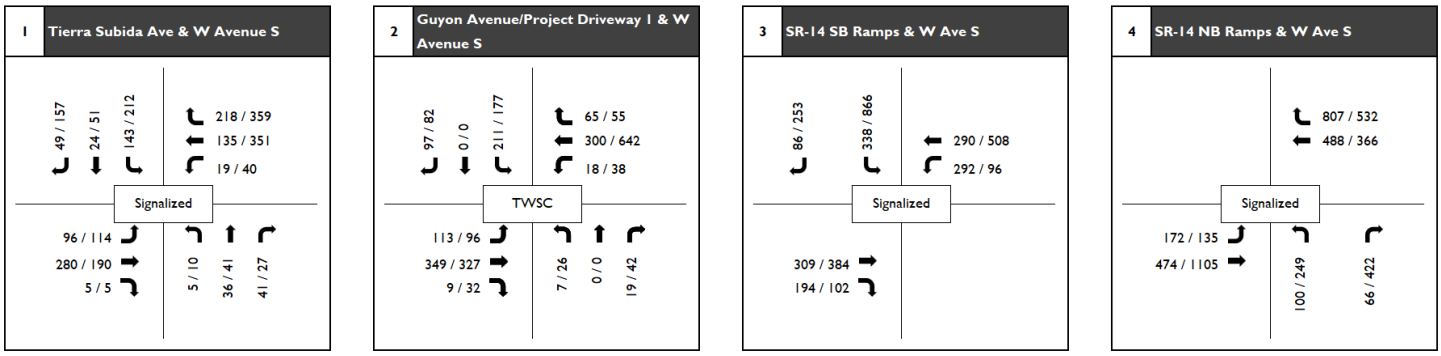
Table 4-3
Opening Year 2024 With Project and Improvement Conditions Queue Analysis

Intersection	Movement	Storage Length (ft)	AM Peak		PM Peak	
			Queue (ft)	Excess (ft)	Queue (ft)	Excess (ft)
2. Guyon Avenue/Project Driveway 1 and W Avenue S	EBL	100	83	-	86	-

Opening Year With Project and Improvement Conditions peak hour, queue and signal warrant analysis worksheets are provided in **Appendix F**.



LEGEND
(AM/PM) Peak Hour Volumes



LEGEND
(AM/PM) Peak Hour Volumes

5.0 CONCLUSION

This LTA evaluated the potential traffic deficiencies related to the Project in conformance with the analysis requirements per the City of Palmdale General Plan (effective October 22, 2022) and the Los Angeles County Public Works Transportation Impact Analysis Guidelines (Guidelines, July 23, 2020). An intersection operation analysis was conducted per the Guidelines at the study area intersections for Existing Year 2023 and Year 2024 without and with Project conditions. Based on the analysis, all study intersections operate at satisfactory LOS D or better during the weekday AM and PM peak hours under all conditions except during PM peak at the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S.

It was determined that the Project left turn out vehicular movement at the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S will experience delays once the project is constructed. The intersection warrants a signal under Opening Year 2024 With Project Conditions; therefore, the installation of a traffic signal would improve the deficient intersection to operate at an acceptable level of services. The project will be conditioned to provide the following:

- Project will signalize the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S to the satisfaction of the City Engineer.
- Project will construct required improvements along the property frontage including curb, gutter, sidewalk and exclusive right turn lane at Guyon Avenue/Project Driveway 1 and W Avenue S to the satisfaction of the City Engineer.
- Project will construct a raised median along the property frontage including an eastbound left turn lane at the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S with a recommended length of 100 feet minimum with the appropriate transition to the satisfaction of the City Engineer.

APPENDIX A -

SCOPING AGREEMENT

INTEGRATED ENGINEERING GROUP

TRANSPORTATION PLANNING AND ENGINEERING

Date: July 14, 2023

To: Jay Nelson, Traffic Engineer, City of Palmdale

From: George Ghossain, Principal Engineer, Integrated Engineering Group

Subject: Scoping Agreement for Maverik Gas Station Project

Integrated Engineering Group (IEG) is pleased to submit this scoping agreement for the Maverik Gas Station Project located in the City of Palmdale within the County of Los Angeles, California. The project will be developed on a vacant parcel with construction of a service station with 24 vehicle fueling positions and 5,637 square feet (sf) of convenience store.

Our goal is to obtain comments from City of Palmdale staff, to ensure that this memo fully addresses the analysis requirements per the Los Angeles County Public Works Transportation Impact Analysis Guidelines (TIA Guidelines, July 23, 2020).

The preliminary site plan for the proposed Project is shown on **Attachment 1**. It is anticipated that the proposed development will be built in one phase by Opening Year 2024. Access to the Project site will be provided via one (1) proposed right-in/right-out only driveway along W Avenue S that will be restricted by the construction of a raised median and one (1) proposed driveway that would create the north leg of the existing W Avenue S and Guyon Avenue T-intersection.

TRANSPORTATION IMPACT ANALYSIS PROCESS

The TIA Guidelines provide recommendations and guidance for the California Environmental Quality Act (CEQA) TIA process including screening criteria, assessment methods and defining thresholds of significance.

SCREENING CRITERIA

The TIA Guidelines provide screening criteria to determine if a development can be screened from conducting a project-level VMT assessment. The proposed gas station with convenience store use is considered a retail use for VMT purposes. This 5,637 sf retail project is a local serving retail project that does not exceed 50,000 sf. Therefore, the project can be presumed to have a less than significant VMT impact and a project-level VMT assessment is not required.

SITE ACCESS STUDY PROCESS

Per the TIA Guidelines, a site access study to determine the project's effect on the existing circulation network may be analyzed as part of the environmental review. Although the project is not required to provide a TIA per discussion above, a site access study may be required, per coordination with City staff.

TRIP GENERATION

Trip generation is a measure or forecast of the number of trips that begin or end at the project site. The traffic generated is a function of the extent and type of development proposed for the site. These trips will result in some traffic increases on the streets where they occur. Per the TIA Guidelines, trip generation for proposed uses must be calculated based on rates from the *Trip Generation Manual (TGM), 11th Edition*, published by the Institute of Transportation Engineers (ITE). Project ITE average trip generation rates and trip calculations summary are presented in **Table 1** and **Table 2**, respectively. ITE TGM trip rates are included in **Attachment 2**.

Table 1 – Project Trip Generation Rates

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Convenience Store/Gas Station	VFP	945	13.52	13.52	27.04	11.38	11.38	22.76	257.13

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).
[2] VFP = Vehicle Fueling Positions

Table 2 – Project Trip Generation Summary

Land Use[1]	Intensity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Convenience Store/Gas Station (GFA 4-5.5K)	24	VFP	324	324	648	273	273	546	6,171
Pass-by Reduction (76% - AM Peak Hour, 75% - PM Peak Hour & Daily)[4]			246	246	492	205	205	410	4,628
		Total	***78***	***78***	***156***	***68***	***68***	***136***	***1,543***

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).
[2] VFP = Vehicle Fueling Positions
[3] Pass-by reduction percentage is based on the ITE methodology per 2021 Pass-By Tables for ITE Trip Generation Appendices.

As shown in Table 2, the proposed project is estimated to generate approximately 1,543 new daily trips, with 156 new AM peak hour trips and 136 new PM peak hour trips.

STUDY AREA

The study area for this project was developed consistent with the TIA Guidelines criteria of all primary driveways and unsignalized or signalized intersections adjacent to the project or integral to project trip distribution. The following key intersections satisfy this study area criteria:

Intersections

1. Tierra Subida Avenue and W Avenue S
2. Guyon Avenue/Project Driveway 1 and W Avenue S
3. SR-14 Southbound Ramps and W Avenue S

4. SR-14 Northbound Ramps and W Avenue S

Turning movement counts will be conducted for one weekday (Tuesday through Thursday) during the morning (7:00-9:00am) and evening (4:00-6:00) peak hours. The turning movement counts will be utilized in Synchro to determine level of service (LOS) at all study intersections.

TRIP DISTRIBUTION

Trip distribution and assignment is the process of identifying the probable destinations, directions and traffic routes that project related traffic will likely affect. Consistent with the TIA Guidelines, trip distribution was developed based on the project land use characteristics, surrounding land uses in the vicinity of the project site, anticipated travel patterns to and from the project site and existing travel patterns within the study area. **Attachment 3** shows the project's outbound and inbound trip distribution, respectively.

Once the proposed project trips and distribution have been estimated, they are assigned to the study area network. **Attachment 4** shows the project study area and project trip assignment at the 2 project driveways and 3 study intersections.

ANALYSIS SCENARIOS

Analysis of the intersection operating conditions during the peak periods will be conducted for the anticipated timeframe scenarios listed below.

- Existing Conditions (Year 2023)
- Opening Year 2024 (Existing + 3% Annual Ambient Growth) Conditions
- Opening Year 2024 + Project Conditions

SIGNAL WARRANT ASSESSMENTThe Project will use MUTCD Section 4C.04 Warrant 3, Peak Hour to assess the need for a traffic signal at the unsignalized intersection of Guyon Avenue/Project Driveway 1 and W Avenue S.

Sincerely,
IEG

George Ghossain, PE, MSCE, MPA
Principal Engineer

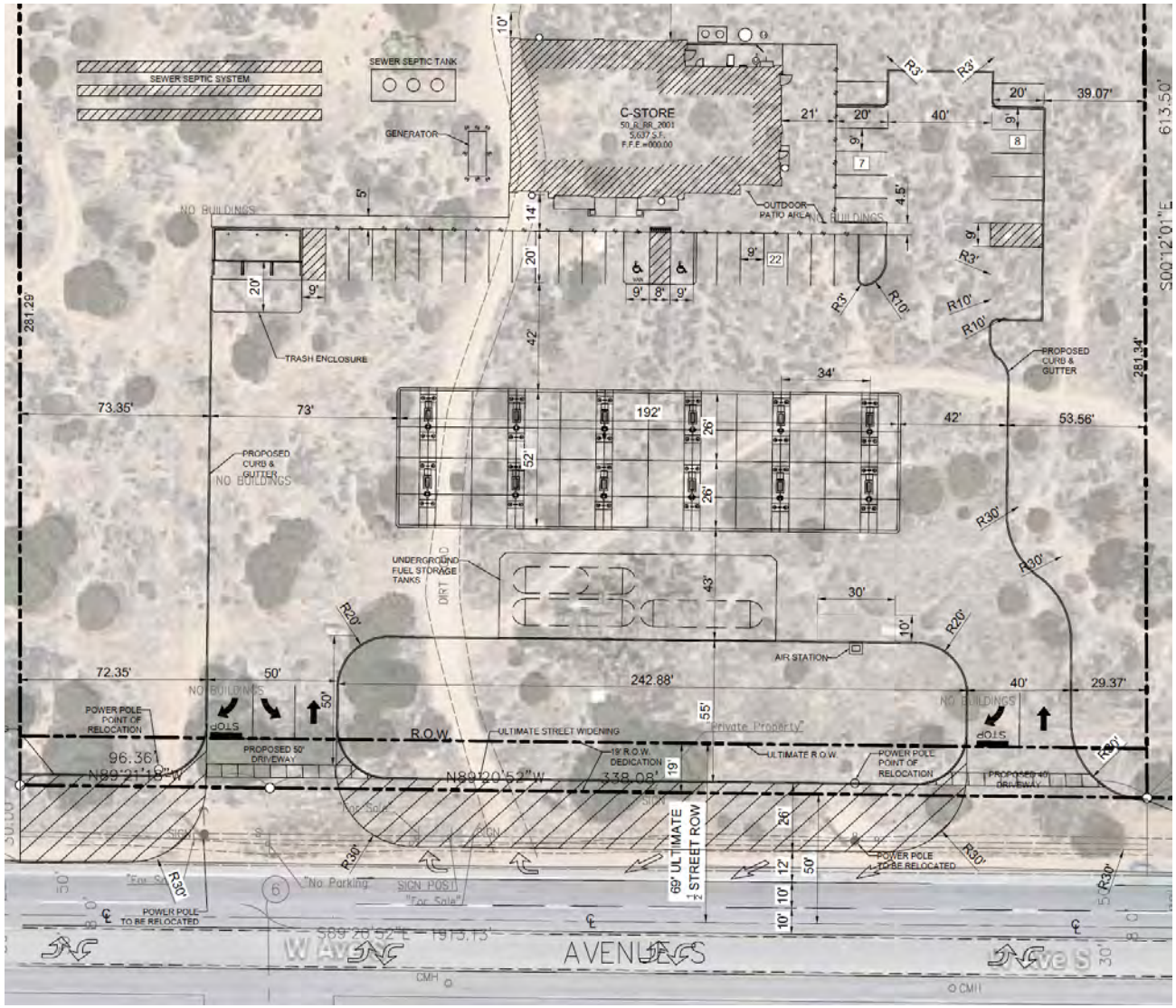
Approved By:

Signature: _____
Name: Jay L. Nelson
Address: 38250 Sierra Highway
Palmdale, CA 93550

INTEGRATED ENGINEERING GROUP

TRANSPORTATION PLANNING AND ENGINEERING

Attachments: 1 – Project Site Plan
2 – ITE TGM Excerpts
3 – Project Trip Distribution
4 – Project Trip Assignment



INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

Maverik Gas Station
Project Site Plan
Attachment 1

Attachment 2 - ITE TGM Excerpts

Land Use: 945
Convenience Store/Gas Station

Description

A convenience store/gas station is a facility with a co-located convenience store and gas station. The convenience store sells grocery and other everyday items that a person may need or want as a matter of convenience. The gas station sells automotive fuels such as gasoline and diesel.

A convenience store/gas station is typically located along a major thoroughfare to optimize motorist convenience. Extended hours of operation (with many open 24 hours, 7 days a week) are common at these facilities.

The convenience store product mix typically includes pre-packaged grocery items, beverages, dairy products, snack foods, confectionary, tobacco products, over-the-counter drugs, and toiletries. A convenience store may sell alcohol, often limited to beer and wine. Coffee and pre-made sandwiches are also commonly sold at a convenience store. Made-to-order food orders are sometimes offered. Some stores offer limited seating.

The sites in this land use include both self-pump and attendant-pumped fueling positions and both pre-pay and post-pay operations.

Convenience store (Land Use 851), gasoline/service station (Land Use 944), and truck stop (Land Use 950) are related uses.

Land Use Subcategory

Multiple subcategories were added to this land use to allow for multi-variable evaluation of sites with single-variable data plots. All study sites are assigned to one of three subcategories, based on the number of vehicle fueling positions (VFP) at the site: between 2 and 8 VFP, between 9 and 15 VFP, and between 16 and 24 VFP. For each VFP range subcategory, data plots are presented with GFA as the independent variable for all time periods and trip types for which data are available. The use of both GFA and VFP (as the independent variable and land use subcategory, respectively) provides a significant improvement in the reliability of a trip generation estimate when compared to the single-variable data plots in prior editions of *Trip Generation Manual*.

Further, the study sites were also assigned to one of three other subcategories, based on the gross floor area (GFA) of the convenience store at the site: between 2,000 and 4,000 square feet, between 4,000 and 5,500 square feet, and between 5,500 and 10,000 square feet. For each GFA subcategory range, data plots are presented with VFP as the independent variable for all time periods and trip types for which data are available. The use of both VFP and GFA (as the independent variable and land use subcategory, respectively) provides a significant improvement in the reliability of a trip generation estimate when compared to the single-variable data plots in prior editions of *Trip Generation Manual*.

When analyzing the convenience store/gas station land use with each combination of GFA and VFP values as described above, the two sets of data plots will produce two estimates of site-generated trips. Both values can be considered when determining a site trip generation estimate.

Data plots are also provided for three additional independent variables: AM peak hour traffic on adjacent street, PM peak hour traffic on adjacent street, and employees. These independent variables are intended to be analyzed as single independent variables and do not have sub-categories associated with them. Within the data plots and within the ITETripGen web app, these plots are found under the land use subcategory "none."

Additional Data

ITE recognizes there are existing convenience store/gas station sites throughout North America that are larger than the sites presented in the data plots. However, the ITE database does not include any site with more than 24 VFP or any site with gross floor area greater than 10,000 square feet. Submission of trip generation data for larger sites is encouraged.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), Arkansas, California, Connecticut, Delaware, Florida, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, Pennsylvania, Rhode Island, South Dakota, Texas, Utah, Vermont, Washington, and Wisconsin.

Source Numbers

221, 245, 274, 288, 300, 340, 350, 351, 352, 355, 359, 385, 440, 617, 718, 810, 813, 844, 850, 853, 864, 865, 867, 869, 882, 883, 888, 904, 926, 927, 936, 938, 954, 960, 962, 977, 1004, 1024, 1025, 1027, 1052

Convenience Store/Gas Station - GFA (4-5.5k) (945)

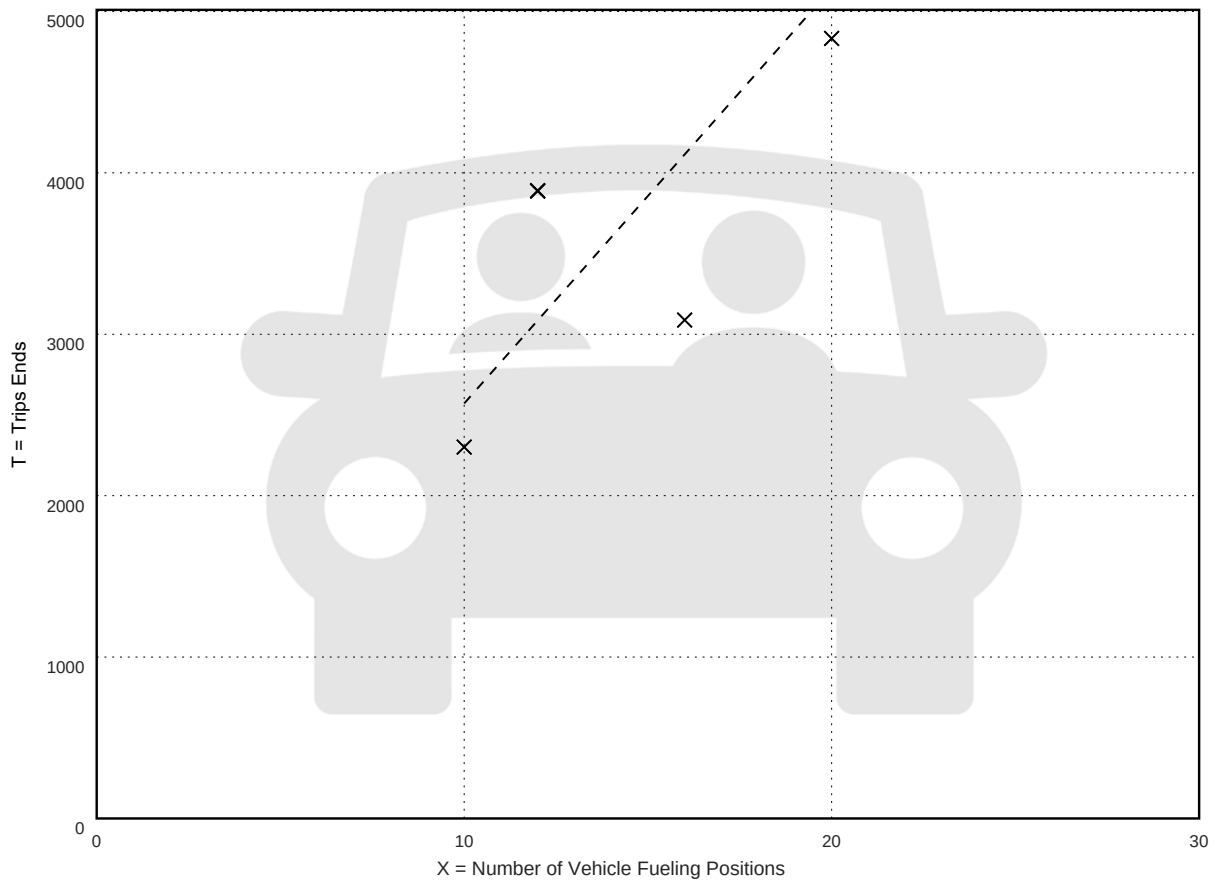
Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. Num. of Vehicle Fueling Positions: 14
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
257.13	193.00 - 324.17	57.53

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

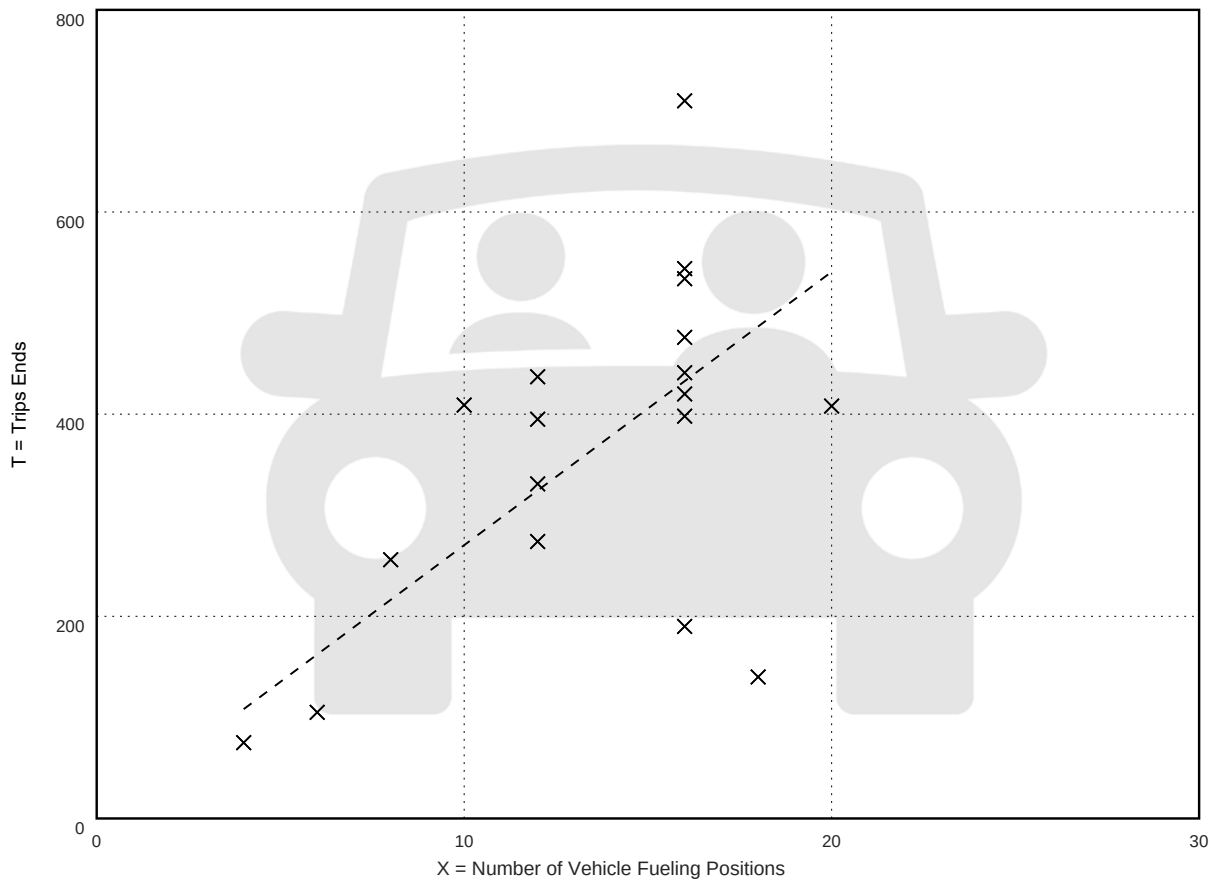
Convenience Store/Gas Station - GFA (4-5.5k) (945)

Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. Num. of Vehicle Fueling Positions: 13
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
27.04	7.78 - 44.38	9.88

Data Plot and Equation



× **Study Site**

– – – – – **Average Rate**

Fitted Curve Equation: Not Given

R^2= ***

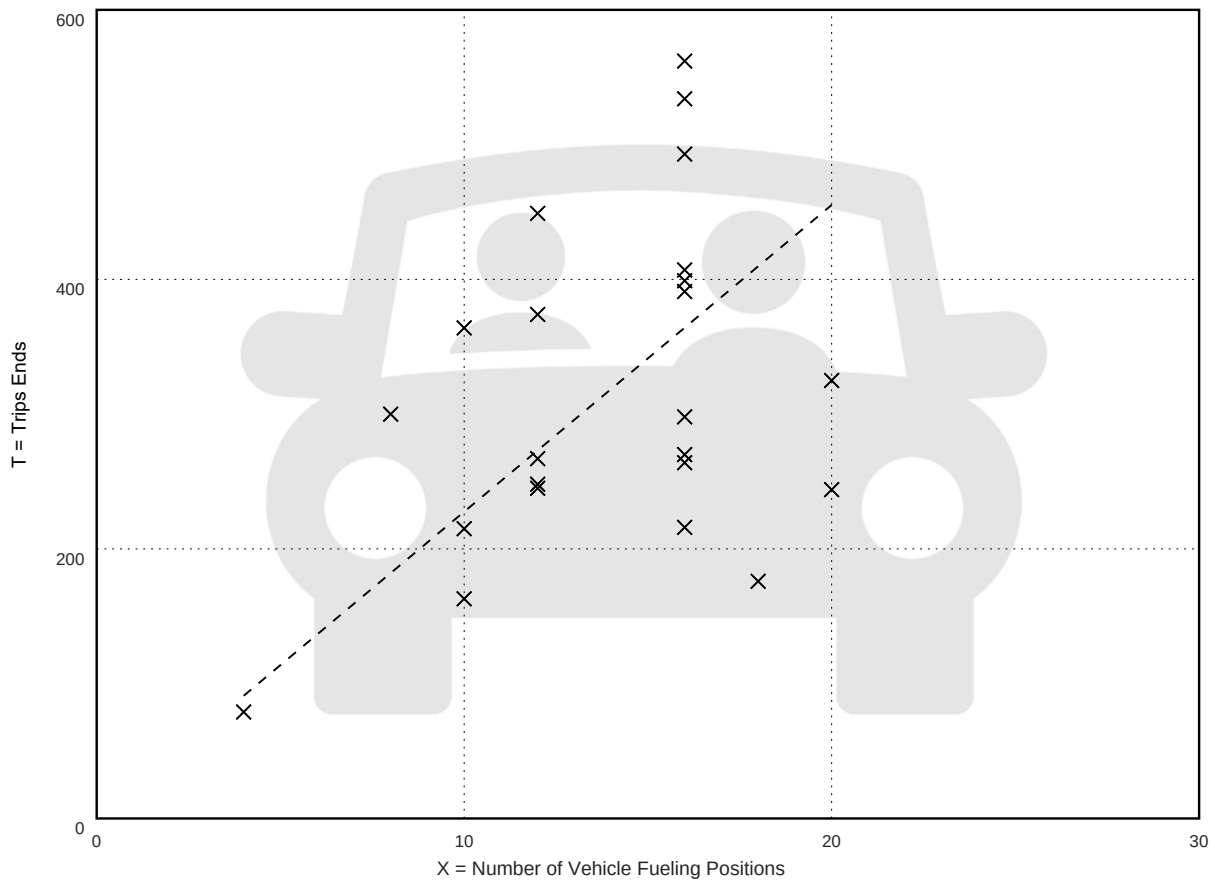
Convenience Store/Gas Station - GFA (4-5.5k) (945)

Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 23
Avg. Num. of Vehicle Fueling Positions: 14
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
22.76	9.78 - 37.50	8.49

Data Plot and Equation



× **Study Site**

– – – – – **Average Rate**

Fitted Curve Equation: Not Given

R^2= ***

Vehicle Pass-By Rates by Land Use

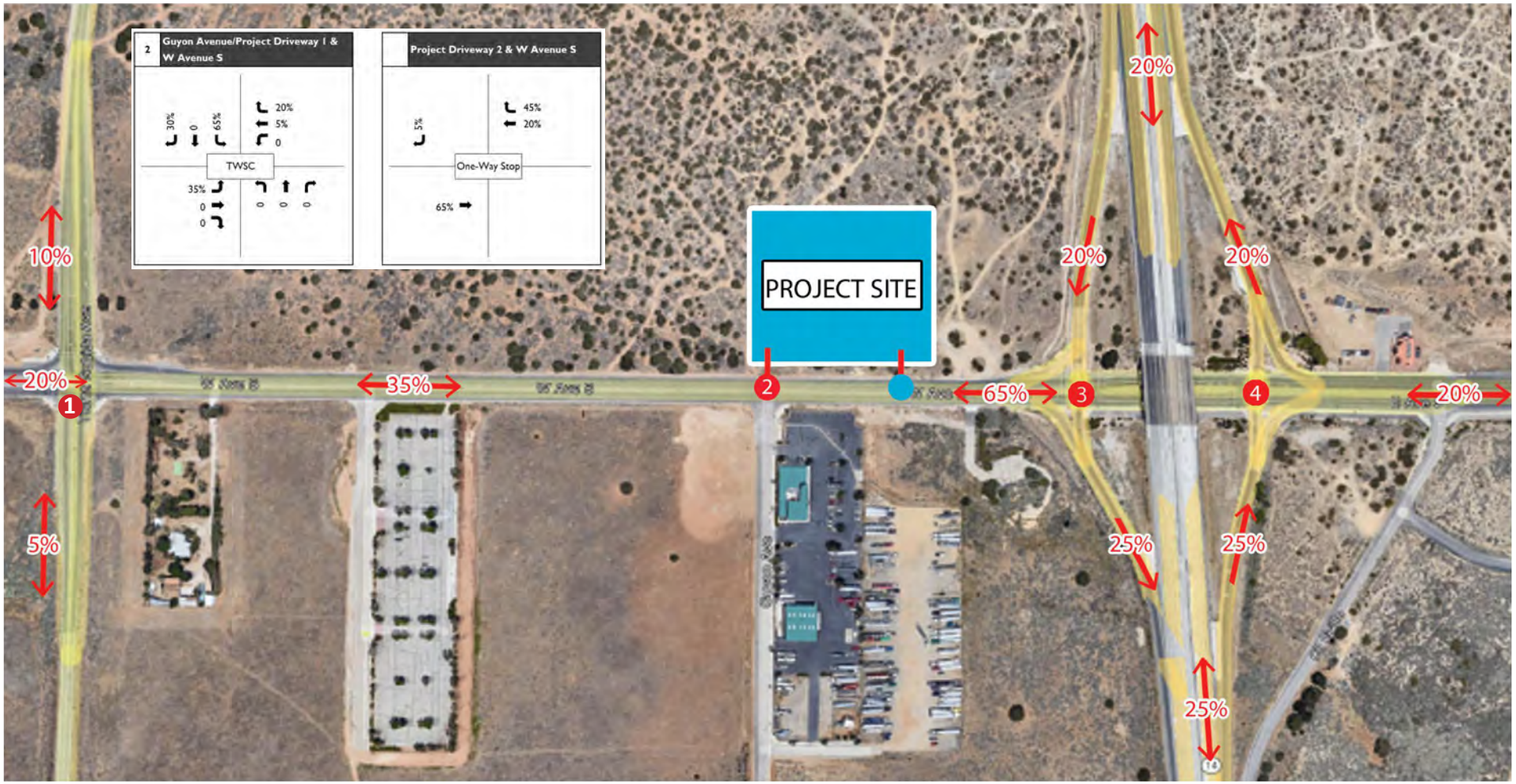
Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday AM Peak Period									
# Data Sites	16 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	60% for Sites with between 2 and 8 VFP					76% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2	8	Maryland	1992	46	87	13	0	13	2235	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.2	8	Maryland	1992	31	47	34	19	53	1785	25
2.2	< 8	Indiana	1993	79	56	6	38	44	635	2
2.2	8	Maryland	1992	35	78	9	13	22	7080	25
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.3	< 8	Kentucky	1993	58	64	5	31	36	1255	2
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.4	< 8	Kentucky	1993	—	48	17	35	52	1210	2
2.6	< 8	Kentucky	1993	—	72	15	13	28	940	2
2.8	< 8	Kentucky	1993	—	54	11	35	46	1240	2
3	< 8	Indiana	1993	62	74	10	16	26	790	2
3.6	< 8	Kentucky	1993	49	67	4	29	33	1985	2
3.7	< 8	Kentucky	1993	49	66	16	18	34	990	2
4.694	12	Maryland	2000	—	72	—	—	28	2440	30
4.694	12	Maryland	2000	—	78	—	—	22	1561	30
4.694	12	Maryland	2000	—	79	—	—	21	2764	30
4.848	12	Virginia	2000	—	55	—	—	45	1398	30
5.06	12	Pennsylvania	2000	—	84	—	—	16	3219	30
5.242	12	Virginia	2000	—	74	—	—	26	1160	30
5.242	12	Virginia	2000	—	71	—	—	29	548	30
5.488	12	Delaware	2000	—	80	—	—	20	—	30
5.5	12	Pennsylvania	2000	—	85	—	—	15	2975	30
4.2	< 8	Kentucky	1993	47	62	19	19	38	1705	2
4.694	16	Maryland	2000	—	90	—	—	10	2278	30
4.694	16	Delaware	2000	—	74	—	—	26	2185	30
4.694	16	Delaware	2000	—	58	—	—	42	962	30
4.694	16	Delaware	2000	—	84	—	—	16	2956	30
4.694	16	New Jersey	2000	—	79	—	—	21	1859	30
4.694	20	Delaware	2000	—	84	—	—	16	3864	30
4.848	16	Virginia	2000	—	68	—	—	32	2106	30
4.848	16	Virginia	2000	—	85	—	—	15	2676	30
4.848	16	Virginia	2000	—	75	—	—	25	3244	30
4.848	16	Virginia	2000	—	71	—	—	29	1663	30
4.993	16	Pennsylvania	2000	—	75	—	—	25	1991	30
5.094	16	New Jersey	2000	—	86	—	—	14	1260	30
5.5	16	Pennsylvania	2000	—	82	—	—	18	1570	30
5.543	16	Pennsylvania	2000	—	84	—	—	16	1933	30
5.565	16	Pennsylvania	2000	—	77	—	—	23	2262	30
5.565	16	Pennsylvania	2000	—	68	—	—	32	2854	30
5.565	16	New Jersey	2000	—	58	—	—	42	1253	30
5.565	16	New Jersey	2000	—	79	—	—	21	1928	30
5.565	16	New Jersey	2000	---	84	---	---	16	1953	30

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

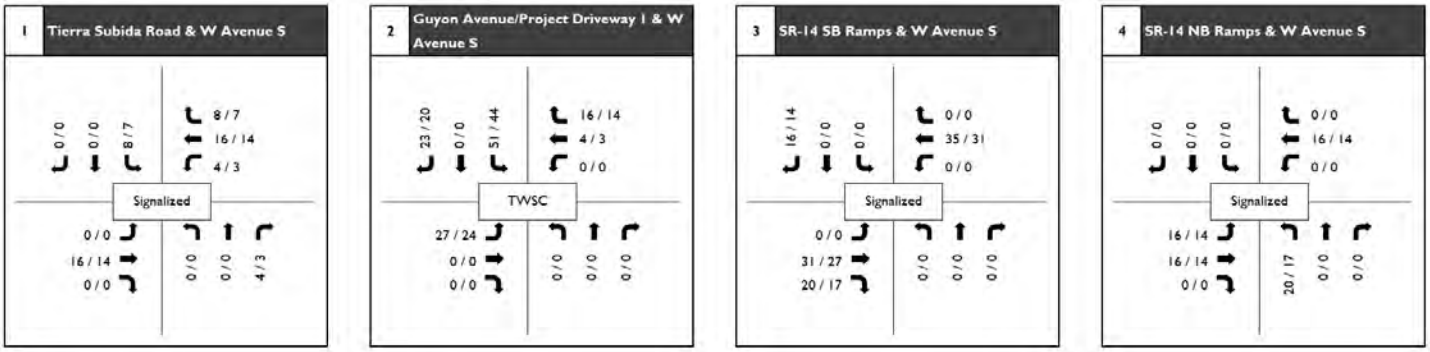
Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday PM Peak Period									
# Data Sites	12 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	56% for Sites with between 2 and 8 VFP					75% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2.1	8	Maryland	1992	31	52	13	35	48	1785	25
2.1	6	Maryland	1992	30	53	20	27	47	1060	25
2.2	< 8	Indiana	1993	115	48	16	36	52	820	2
2.3	< 8	Kentucky	1993	67	57	16	27	43	1954	2
2.3	6	Maryland	1992	55	40	11	49	60	2760	25
2.4	< 8	Kentucky	1993	—	58	13	29	42	2655	2
2.6	< 8	Kentucky	1993	68	67	15	18	33	950	2
2.8	< 8	Kentucky	1993	—	62	11	27	38	2875	2
3	< 8	Indiana	1993	80	65	15	20	35	1165	2
3.6	< 8	Kentucky	1993	60	56	17	27	44	2505	2
3.7	< 8	Kentucky	1993	70	61	16	23	39	2175	2
4.2	< 8	Kentucky	1993	61	58	26	16	42	2300	2
4.694	12	Maryland	2000	—	78	—	—	22	3549	30
4.694	12	Maryland	2000	—	67	—	—	33	2272	30
4.694	12	Maryland	2000	—	66	—	—	34	3514	30
4.848	12	Virginia	2000	—	71	—	—	29	2350	30
5.06	12	Pennsylvania	2000	—	91	—	—	9	4181	30
5.242	12	Virginia	2000	—	70	—	—	30	2445	30
5.242	12	Virginia	2000	—	56	—	—	44	950	30
5.488	12	Delaware	2000	—	73	—	—	27	—	30
5.5	12	Pennsylvania	2000	—	84	—	—	16	4025	30
4.694	16	Maryland	2000	—	89	—	—	11	2755	30
4.694	16	Delaware	2000	—	73	—	—	27	1858	30
4.694	16	Delaware	2000	—	59	—	—	41	1344	30
4.694	16	Delaware	2000	—	72	—	—	28	3434	30
4.694	16	New Jersey	2000	—	81	—	—	19	1734	30
4.694	20	Delaware	2000	—	76	—	—	24	1616	30
4.848	16	Virginia	2000	—	67	—	—	33	2.954	30
4.848	16	Virginia	2000	—	78	—	—	22	3086	30
4.848	16	Virginia	2000	—	83	—	—	17	4143	30
4.848	16	Virginia	2000	—	73	—	—	27	2534	30
4.993	16	Pennsylvania	2000	—	72	—	—	28	2917	30
5.094	16	New Jersey	2000	—	86	—	—	14	1730	30
5.5	16	Pennsylvania	2000	—	90	—	—	10	2616	30
5.543	16	Pennsylvania	2000	—	87	—	—	13	2363	30
5.565	16	Pennsylvania	2000	—	81	—	—	19	2770	30
5.565	16	Pennsylvania	2000	—	76	—	—	24	3362	30
5.565	16	New Jersey	2000	—	61	—	—	39	1713	30
5.565	16	New Jersey	2000	—	86	—	—	14	1721	30
5.565	16	New Jersey	2000	---	81	---	---	19	2227	30



LEGEND # Intersection ● Driveway

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

Maverik Gas Station
Project Trip Distribution
Attachment 3



LEGEND
0/0 = (AM/PM) Peak Hour Volumes

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

Maverik Gas Station
Project Peak Hour Trip Assignment
Attachment 4

APPENDIX B -

TRAFFIC COUNT DATA

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

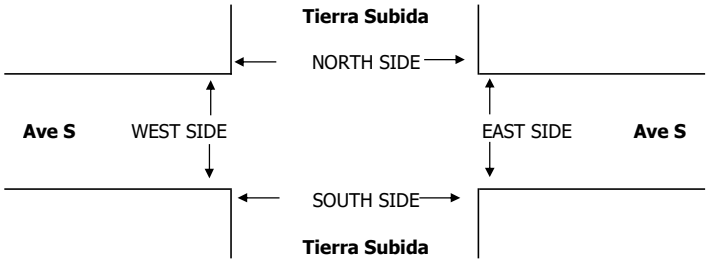
DATE:			
Tue, Jul 18, 23	LOCATION:	Palmdale	PROJECT #: SC4121
	NORTH & SOUTH:	Tierra Subida	LOCATION #: 1
	EAST & WEST:	Ave S	CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ◄ W, E ►, ▲ N, S ▼

Add U-Turns to Left Turns

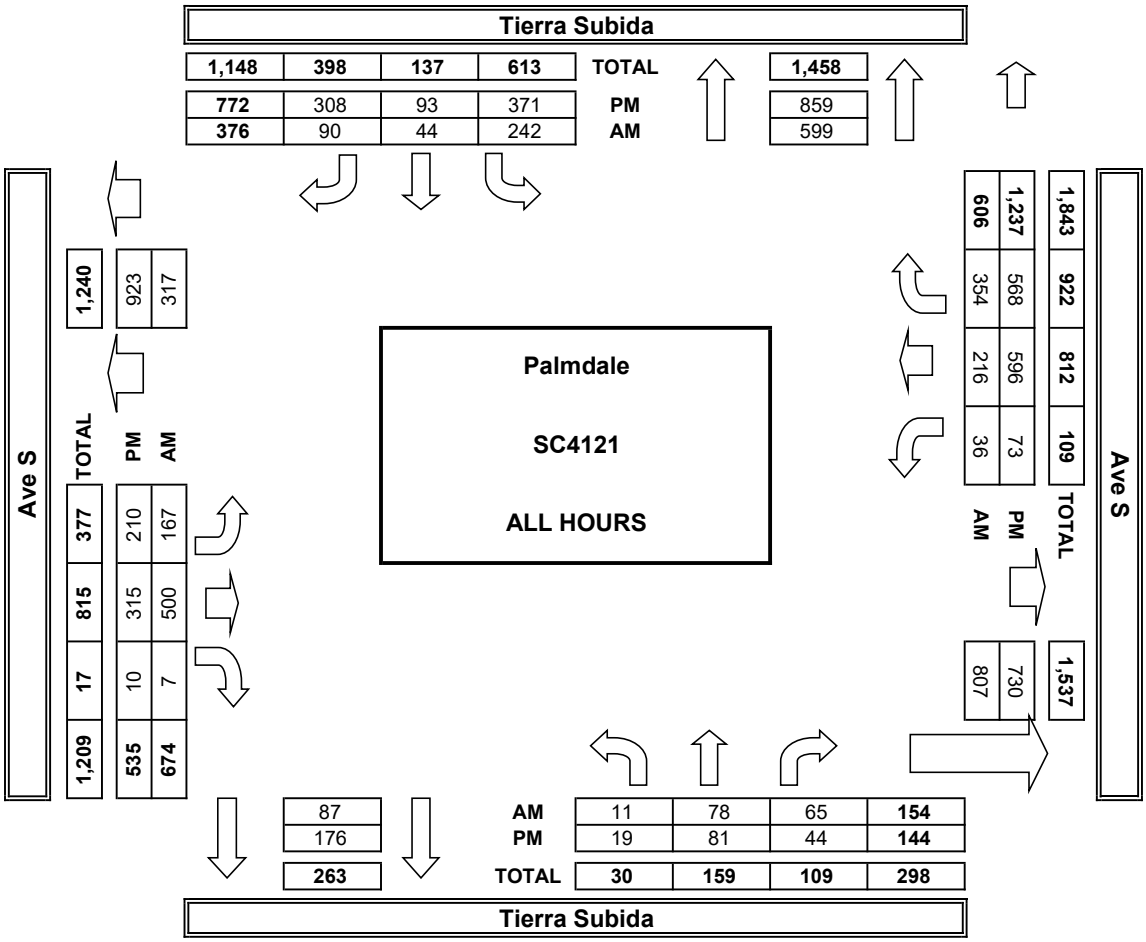
		NORTHBOUND Tierra Subida			SOUTHBOUND Tierra Subida			EASTBOUND Ave S			WESTBOUND Ave S				U-TURNS				
	LANES:	NL 1	NT 1	NR 0	SL 1	ST 2	SR 1	EL 2	ET 2	ER 0	WL 1	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	1	8	3	26	7	6	12	63	0	4	22	33	185	0	0	0	0	0
	7:15 AM	3	8	8	35	5	8	19	60	1	8	23	28	206	0	0	0	0	0
	7:30 AM	3	11	10	28	4	13	23	73	1	3	31	40	240	0	0	0	0	0
	7:45 AM	0	10	10	34	5	12	30	64	0	4	25	62	256	0	0	0	0	0
	8:00 AM	1	6	7	29	6	14	21	71	2	3	25	37	222	0	0	0	0	0
	8:15 AM	0	8	14	28	3	5	23	66	0	3	29	51	230	0	0	0	0	0
	8:30 AM	3	10	4	40	9	16	19	55	2	4	36	53	251	0	0	0	0	0
	8:45 AM	0	17	9	22	5	16	20	48	1	7	25	50	220	0	0	0	0	0
	VOLUMES	11	78	65	242	44	90	167	500	7	36	216	354	1,810	0	0	0	0	0
	APPROACH %	7%	51%	42%	64%	12%	24%	25%	74%	1%	6%	36%	58%						
	APP/DEPART	154	/	599	376	/	87	674	/	807	606	/	317	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	4	34	35	131	23	47	93	256	4	14	115	203	959					
	APPROACH %	5%	47%	48%	65%	11%	23%	26%	73%	1%	4%	35%	61%						
	PEAK HR FACTOR		0.830			0.773			0.939			0.892		0.937					
	APP/DEPART	73	/	330	201	/	41	353	/	422	332	/	166	0					
PM	4:00 PM	2	11	7	48	11	32	32	27	0	11	65	57	303	0	0	0	0	0
	4:15 PM	2	10	5	38	13	38	31	37	0	8	62	62	306	0	0	0	0	0
	4:30 PM	3	14	5	36	11	39	21	42	4	11	75	51	312	0	0	0	0	0
	4:45 PM	3	7	4	50	9	47	16	39	2	8	67	57	309	0	0	0	0	0
	5:00 PM	2	10	5	40	15	37	25	36	1	9	67	77	324	0	0	0	0	0
	5:15 PM	0	9	5	53	11	33	31	45	0	10	88	75	360	0	0	0	0	0
	5:30 PM	3	11	8	43	13	40	35	49	0	8	93	92	395	0	0	0	0	0
	5:45 PM	4	9	5	63	10	42	19	40	3	8	79	97	379	0	0	0	0	0
	VOLUMES	19	81	44	371	93	308	210	315	10	73	596	568	2,688	0	0	0	0	0
	APPROACH %	13%	56%	31%	48%	12%	40%	39%	59%	2%	6%	48%	46%						
	APP/DEPART	144	/	859	772	/	176	535	/	730	1,237	/	923	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	9	39	23	199	49	152	110	170	4	35	327	341	1,458					
	APPROACH %	13%	55%	32%	50%	12%	38%	39%	60%	1%	5%	47%	49%						
	PEAK HR FACTOR		0.807			0.870			0.845			0.911		0.923					
	APP/DEPART	71	/	490	400	/	88	284	/	392	703	/	488	0					

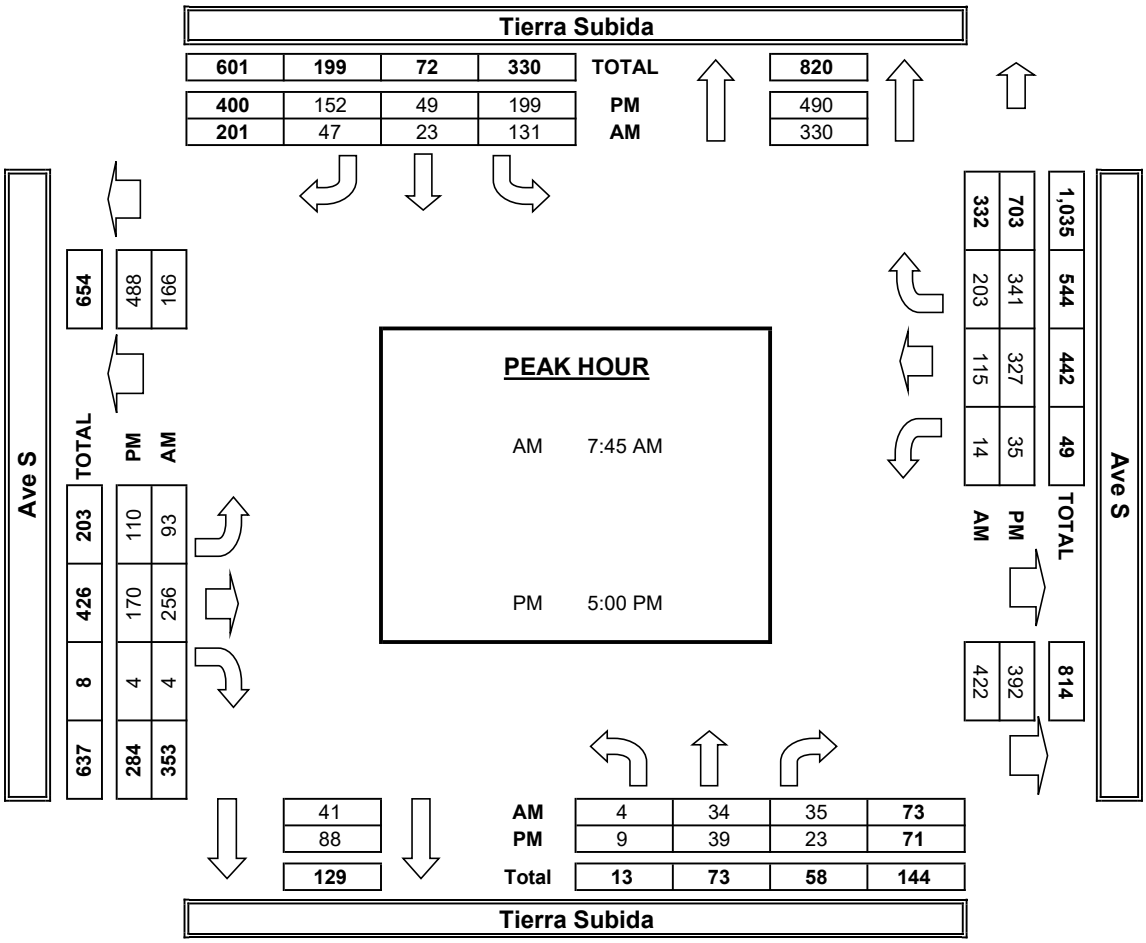


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:45 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			5:00 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

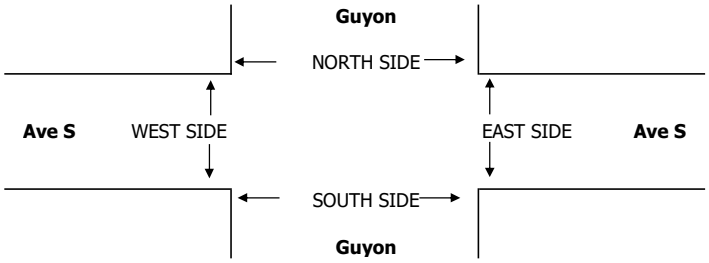
DATE:			
Tue, Jul 18, 23	LOCATION:	Palmdale	PROJECT #: SC4121
	NORTH & SOUTH:	Guyon	LOCATION #: 2
	EAST & WEST:	Ave S	CONTROL: STOP N

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

Add U-Turns to Left Turns

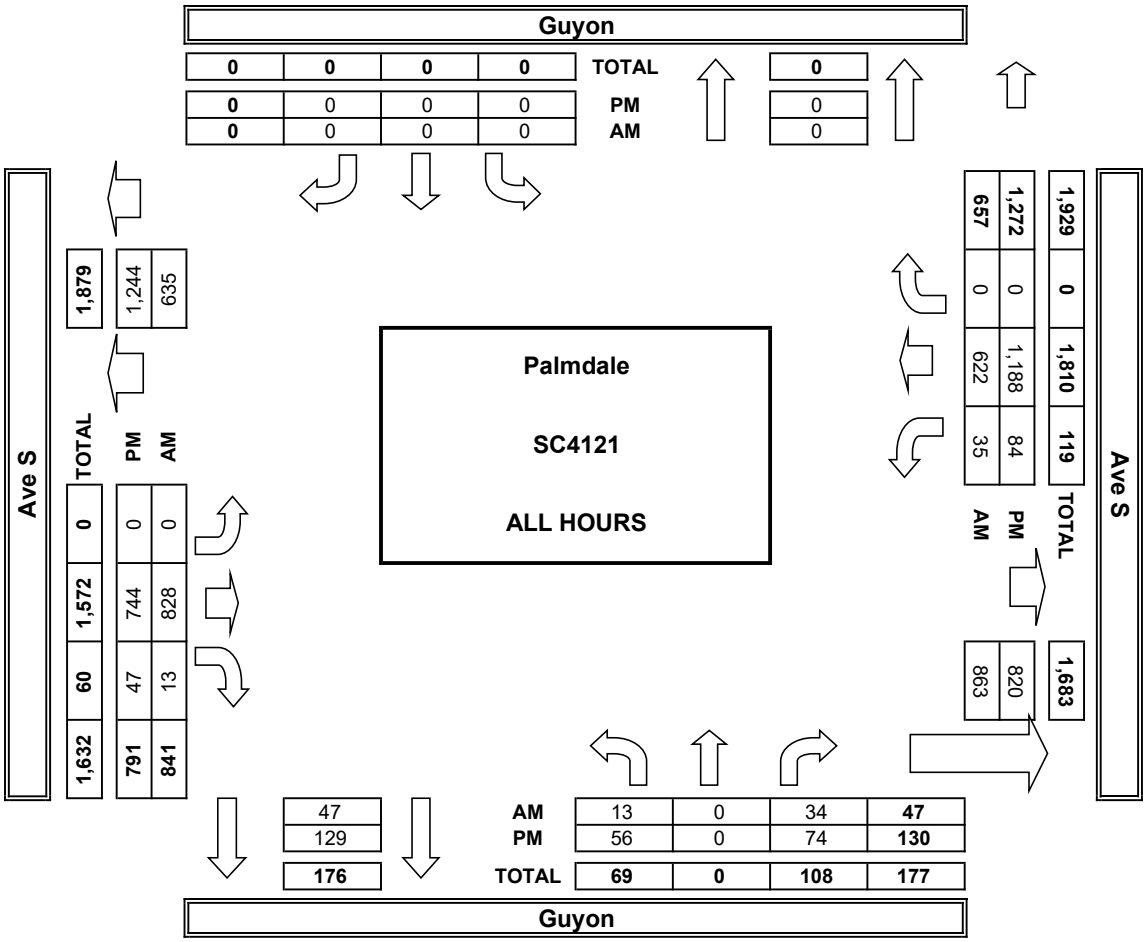
		NORTHBOUND Guyon			SOUTHBOUND Guyon			EASTBOUND Ave S			WESTBOUND Ave S				U-TURNS				
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 0	WT 2	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	3	0	2	0	0	0	0	90	2	8	64	0	169	0	0	0	1	1
	7:15 AM	0	0	5	0	0	0	0	105	1	4	64	0	179	0	0	0	0	0
	7:30 AM	2	0	4	0	0	0	0	109	1	3	71	0	190	0	0	0	0	0
	7:45 AM	1	0	3	0	0	0	0	106	1	5	93	0	209	0	0	0	0	0
	8:00 AM	2	0	8	0	0	0	0	112	2	3	68	0	195	0	0	0	0	0
	8:15 AM	2	0	3	0	0	0	0	103	2	5	82	0	197	0	0	0	0	0
	8:30 AM	1	0	4	0	0	0	0	101	3	4	91	0	204	0	0	0	0	0
	8:45 AM	2	0	5	0	0	0	0	102	1	3	89	0	202	0	0	0	0	0
	VOLUMES	13	0	34	0	0	0	0	828	13	35	622	0	1,545	0	0	0	1	1
	APPROACH %	28%	0%	72%	0%	0%	0%	0%	98%	2%	5%	95%	0%						
	APP/DEPART	47	/	0	0	/	47	841	/	863	657	/	635	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	6	0	18	0	0	0	0	422	8	17	334	0	805					
	APPROACH %	25%	0%	75%	0%	0%	0%	0%	98%	2%	5%	95%	0%						
	PEAK HR FACTOR		0.600			0.000			0.943			0.895		0.963					
	APP/DEPART	24	/	0	0	/	25	430	/	440	351	/	340	0					
PM	4:00 PM	8	0	7	0	0	0	0	91	2	8	139	0	255	0	0	0	0	0
	4:15 PM	8	0	9	0	0	0	0	85	5	13	127	0	247	0	0	0	1	1
	4:30 PM	7	0	5	0	0	0	0	84	7	14	126	0	243	0	0	0	0	0
	4:45 PM	8	0	13	0	0	0	0	97	2	13	136	0	269	0	0	0	0	0
	5:00 PM	6	0	11	0	0	0	0	83	8	15	145	0	268	0	0	0	1	1
	5:15 PM	10	0	12	0	0	0	0	102	8	10	165	0	307	0	0	0	0	0
	5:30 PM	4	0	9	0	0	0	0	99	8	5	189	0	314	0	0	0	0	0
	5:45 PM	5	0	8	0	0	0	0	103	7	6	161	0	290	0	0	0	0	0
	VOLUMES	56	0	74	0	0	0	0	744	47	84	1,188	0	2,193	0	0	0	2	2
	APPROACH %	43%	0%	57%	0%	0%	0%	0%	94%	6%	7%	93%	0%						
	APP/DEPART	130	/	0	0	/	129	791	/	820	1,272	/	1,244	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	25	0	40	0	0	0	0	387	31	36	660	0	1,179					
	APPROACH %	38%	0%	62%	0%	0%	0%	0%	93%	7%	5%	95%	0%						
	PEAK HR FACTOR		0.739			0.000			0.950			0.897		0.939					
	APP/DEPART	65	/	0	0	/	66	418	/	428	696	/	685	0					

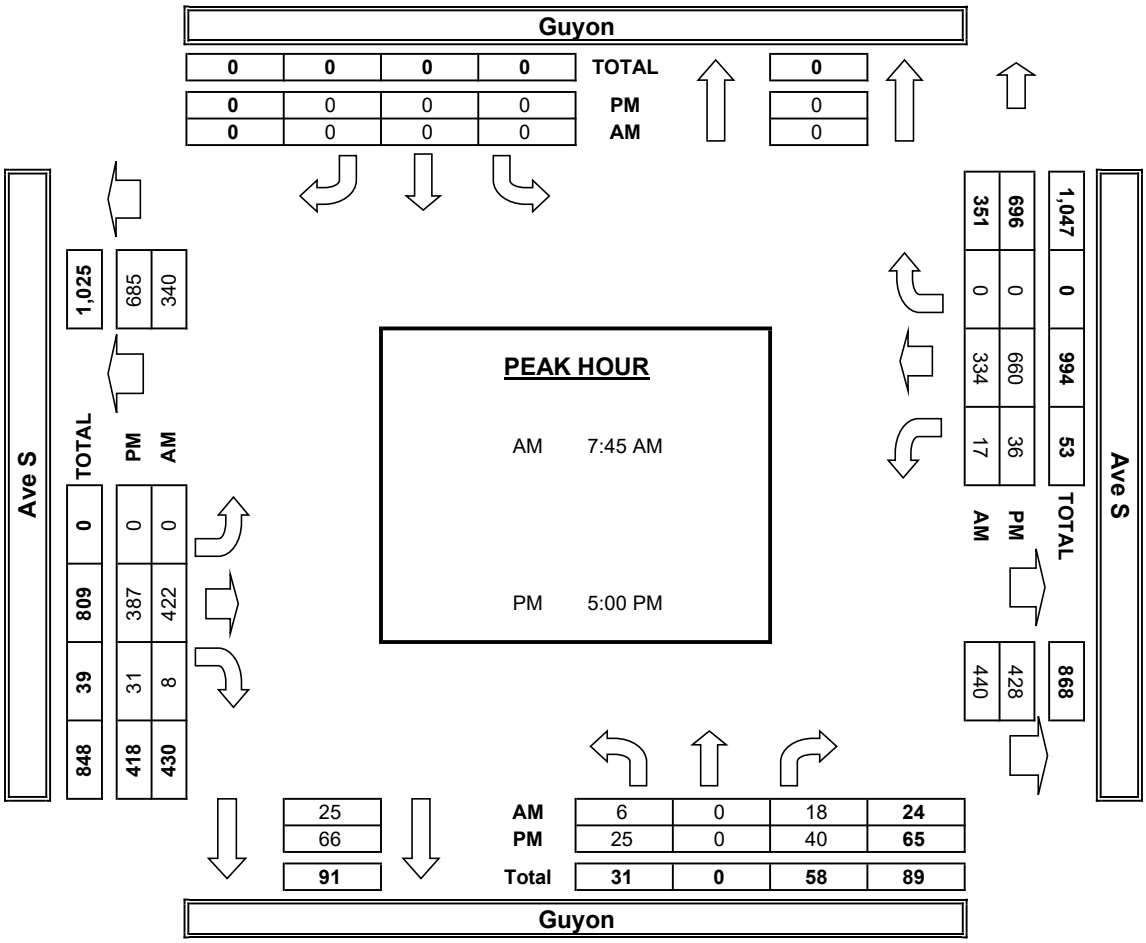


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:45 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	PM BEGIN PEAK HR			5:00 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

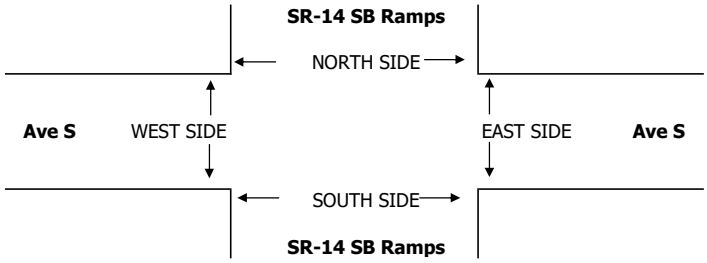
DATE:			
Tue, Jul 18, 23	LOCATION:	Palmdale	PROJECT #: SC4121
	NORTH & SOUTH:	SR-14 SB Ramps	LOCATION #: 3
	EAST & WEST:	Ave S	CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☐ Add U-Turns to Left Turns

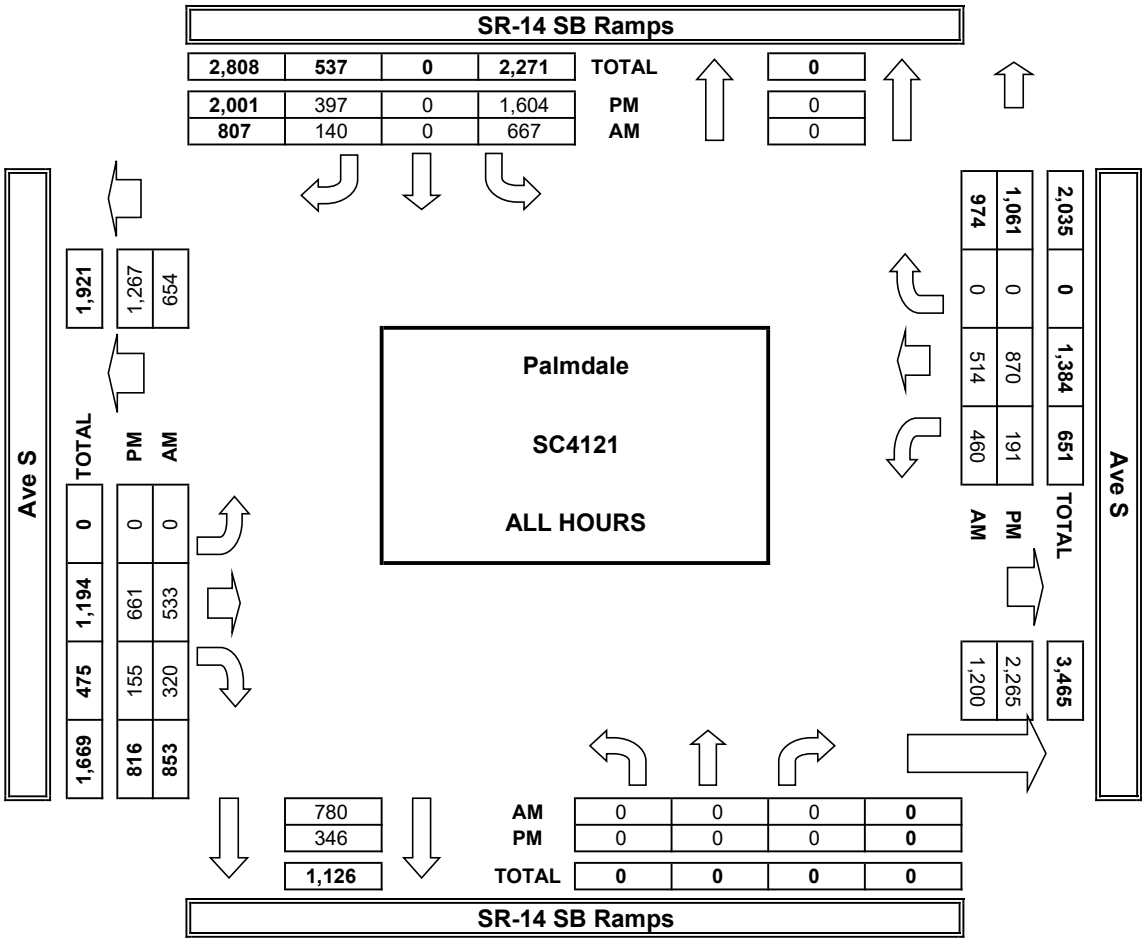
		NORTHBOUND SR-14 SB Ramps			SOUTHBOUND SR-14 SB Ramps			EASTBOUND Ave S			WESTBOUND Ave S				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 2	ST X	SR 1	EL X	ET 2	ER 1	WL 1	WT 1	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	0	84	0	17	0	57	39	85	54	0	336	0	0	0	0	0
	7:15 AM	0	0	0	83	0	16	0	61	49	76	55	0	340	0	0	0	0	0
	7:30 AM	0	0	0	68	0	17	0	81	35	59	56	0	316	0	0	0	0	0
	7:45 AM	0	0	0	93	0	17	0	70	45	63	82	0	370	0	0	0	0	0
	8:00 AM	0	0	0	69	0	16	0	73	44	55	52	0	309	0	0	0	0	0
	8:15 AM	0	0	0	77	0	20	0	71	40	45	69	0	322	0	0	0	0	0
	8:30 AM	0	0	0	105	0	14	0	62	42	42	83	0	348	0	0	0	0	0
	8:45 AM	0	0	0	88	0	23	0	58	26	35	63	0	293	0	0	0	0	0
	VOLUMES	0	0	0	667	0	140	0	533	320	460	514	0	2,634	0	0	0	0	0
	APPROACH %	0%	0%	0%	83%	0%	17%	0%	62%	38%	47%	53%	0%						
	APP/DEPART	0	/	0	807	/	780	853	/	1,200	974	/	654	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	0	0	0	328	0	67	0	269	168	283	247	0	1,362					
	APPROACH %	0%	0%	0%	83%	0%	17%	0%	62%	38%	53%	47%	0%						
	PEAK HR FACTOR		0.000			0.898			0.942			0.914		0.920					
	APP/DEPART	0	/	0	395	/	451	437	/	597	530	/	314	0					
PM	4:00 PM	0	0	0	179	0	39	0	74	20	32	98	0	442	0	0	0	0	0
	4:15 PM	0	0	0	225	0	37	0	75	20	19	106	0	482	0	0	0	0	0
	4:30 PM	0	0	0	184	0	50	0	75	14	17	98	0	438	0	0	0	0	0
	4:45 PM	0	0	0	176	0	39	0	91	19	30	105	0	460	0	0	0	0	0
	5:00 PM	0	0	0	219	0	50	0	74	18	26	110	0	497	0	0	0	0	0
	5:15 PM	0	0	0	249	0	63	0	94	17	30	106	0	559	0	0	0	0	0
	5:30 PM	0	0	0	192	0	62	0	86	20	25	129	0	514	0	0	0	0	0
	5:45 PM	0	0	0	180	0	57	0	92	27	12	118	0	486	0	0	0	0	0
	VOLUMES	0	0	0	1,604	0	397	0	661	155	191	870	0	3,878	0	0	0	0	0
	APPROACH %	0%	0%	0%	80%	0%	20%	0%	81%	19%	18%	82%	0%						
	APP/DEPART	0	/	0	2,001	/	346	816	/	2,265	1,061	/	1,267	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	0	0	0	840	0	232	0	346	82	93	463	0	2,056					
	APPROACH %	0%	0%	0%	78%	0%	22%	0%	81%	19%	17%	83%	0%						
	PEAK HR FACTOR		0.000			0.859			0.899			0.903		0.919					
	APP/DEPART	0	/	0	1,072	/	175	428	/	1,186	556	/	695	0					

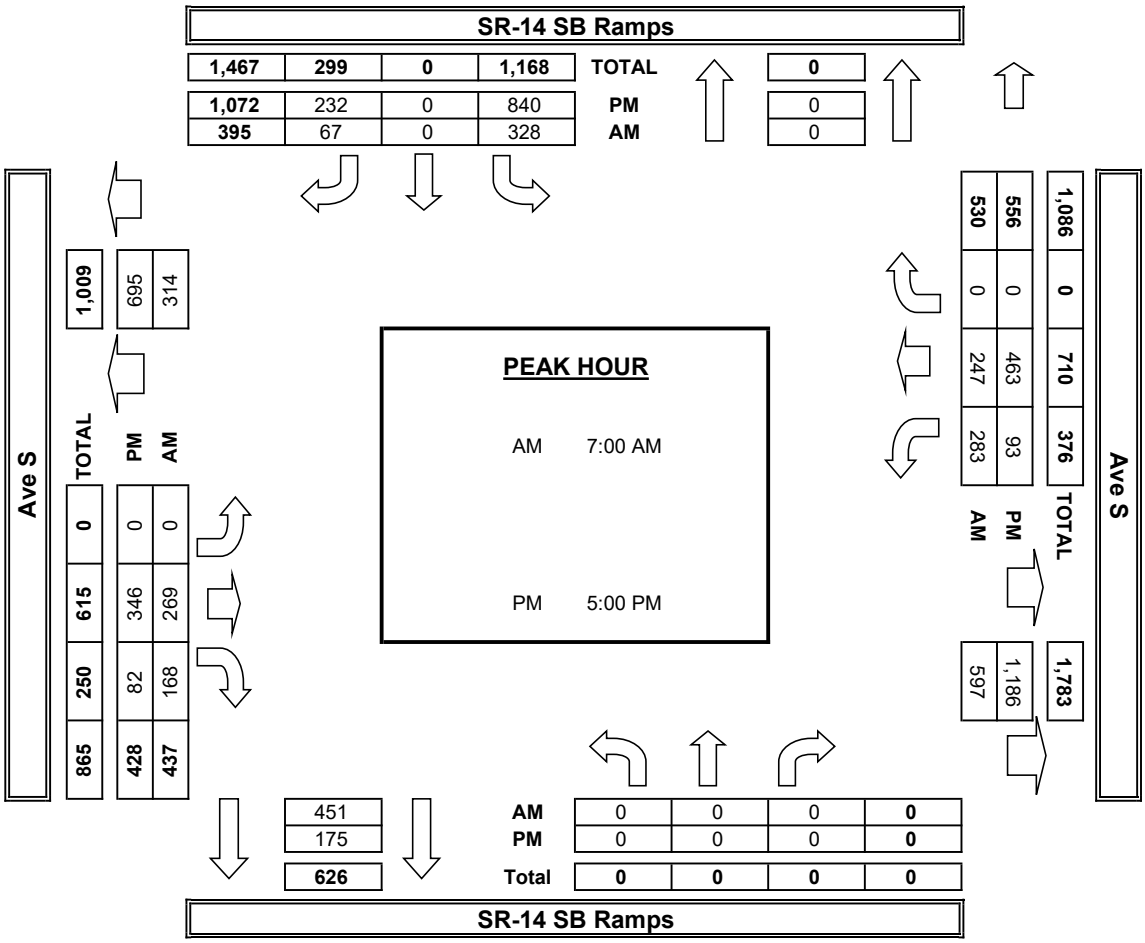


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:00 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
	PM BEGIN PEAK HR			5:00 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

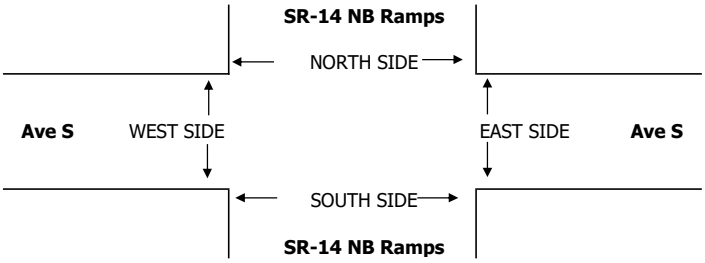
DATE:			
Tue, Jul 18, 23	LOCATION:	Palmdale	PROJECT #: SC4121
	NORTH & SOUTH:	SR-14 NB Ramps	LOCATION #: 4
	EAST & WEST:	Ave S	CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ◄ W ▲ N S ▼ E ►

Add U-Turns to Left Turns

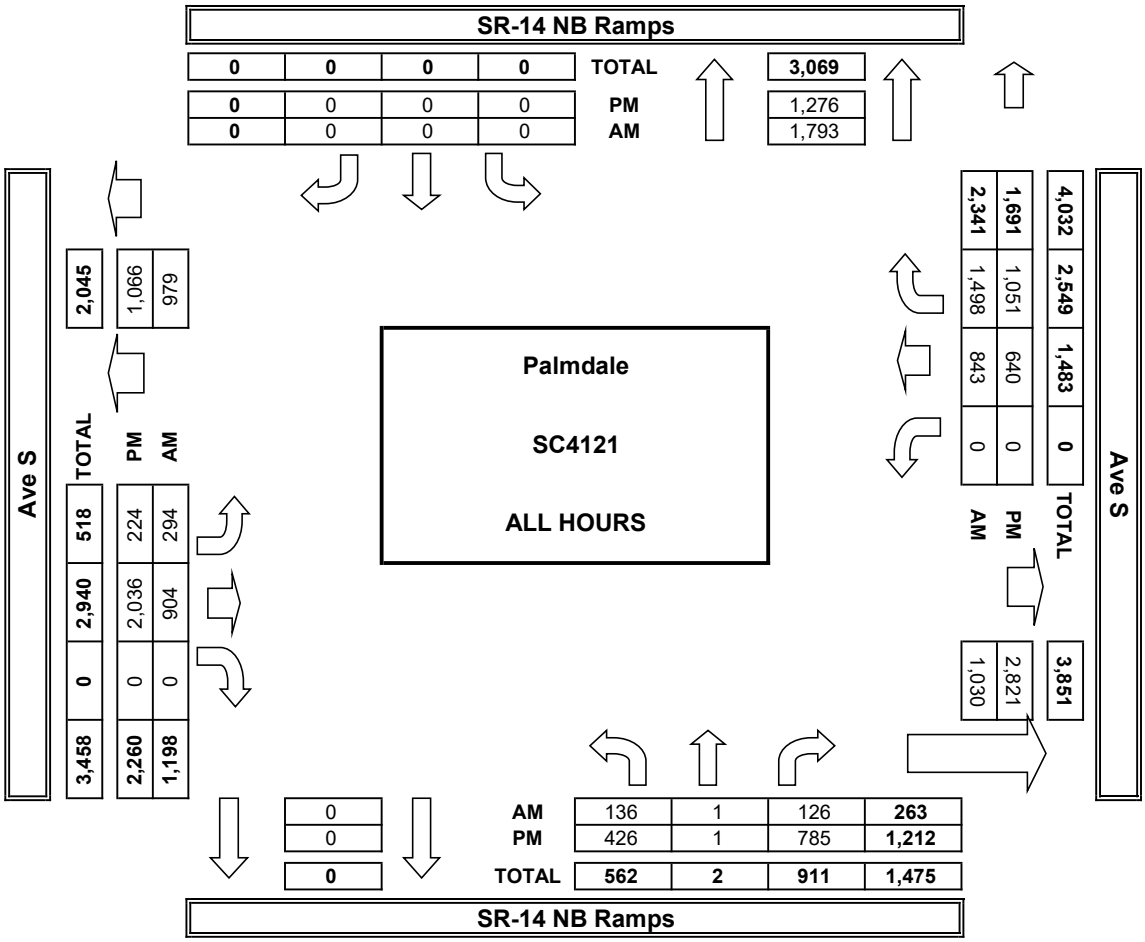
		NORTHBOUND SR-14 NB Ramps			SOUTHBOUND SR-14 NB Ramps			EASTBOUND Ave S			WESTBOUND Ave S				U-TURNS				
	LANES:	NL 1	NT 0	NR 1	SL X	ST X	SR X	EL 1	ET 2	ER X	WL X	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	18	0	14	0	0	0	26	115	0	0	121	139	433	0	0	0	0	0
	7:15 AM	12	0	15	0	0	0	36	108	0	0	119	186	476	0	0	0	0	0
	7:30 AM	22	0	14	0	0	0	46	103	0	0	98	226	509	0	0	0	0	0
	7:45 AM	25	0	21	0	0	0	43	118	0	0	120	232	559	0	0	0	0	0
	8:00 AM	10	1	12	0	0	0	41	101	0	0	97	167	429	0	0	0	0	0
	8:15 AM	21	0	15	0	0	0	38	110	0	0	93	193	470	0	0	0	0	0
	8:30 AM	21	0	10	0	0	0	30	137	0	0	104	195	497	0	0	0	0	0
	8:45 AM	7	0	25	0	0	0	34	112	0	0	91	160	429	0	0	0	0	0
	VOLUMES	136	1	126	0	0	0	294	904	0	0	843	1,498	3,802	0	0	0	0	0
	APPROACH %	52%	0%	48%	0%	0%	0%	25%	75%	0%	0%	36%	64%						
	APP/DEPART	263	/	1,793	0	/	0	1,198	/	1,030	2,341	/	979	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	77	0	64	0	0	0	151	444	0	0	458	783	1,977					
	APPROACH %	55%	0%	45%	0%	0%	0%	25%	75%	0%	0%	37%	63%						
	PEAK HR FACTOR		0.766			0.000			0.924			0.881		0.884					
	APP/DEPART	141	/	934	0	/	0	595	/	508	1,241	/	535	0					
PM	4:00 PM	45	0	79	0	0	0	28	225	0	0	85	107	569	0	0	0	0	0
	4:15 PM	58	0	98	0	0	0	29	271	0	0	67	151	674	0	0	0	0	0
	4:30 PM	46	0	81	0	0	0	22	237	0	0	69	147	602	0	0	0	0	0
	4:45 PM	42	0	109	0	0	0	28	239	0	0	93	147	658	0	0	0	0	0
	5:00 PM	56	0	104	0	0	0	20	268	0	0	85	132	665	0	0	0	0	0
	5:15 PM	55	1	97	0	0	0	34	309	0	0	81	117	694	0	0	0	0	0
	5:30 PM	72	0	99	0	0	0	35	243	0	0	82	120	651	0	0	0	0	0
	5:45 PM	52	0	118	0	0	0	28	244	0	0	78	130	650	0	0	0	0	0
	VOLUMES	426	1	785	0	0	0	224	2,036	0	0	640	1,051	5,163	0	0	0	0	0
	APPROACH %	35%	0%	65%	0%	0%	0%	10%	90%	0%	0%	38%	62%						
	APP/DEPART	1,212	/	1,276	0	/	0	2,260	/	2,821	1,691	/	1,066	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	225	1	409	0	0	0	117	1,059	0	0	341	516	2,668					
	APPROACH %	35%	0%	64%	0%	0%	0%	10%	90%	0%	0%	40%	60%						
	PEAK HR FACTOR		0.928			0.000			0.857			0.893		0.961					
	APP/DEPART	635	/	634	0	/	0	1,176	/	1,468	857	/	566	0					

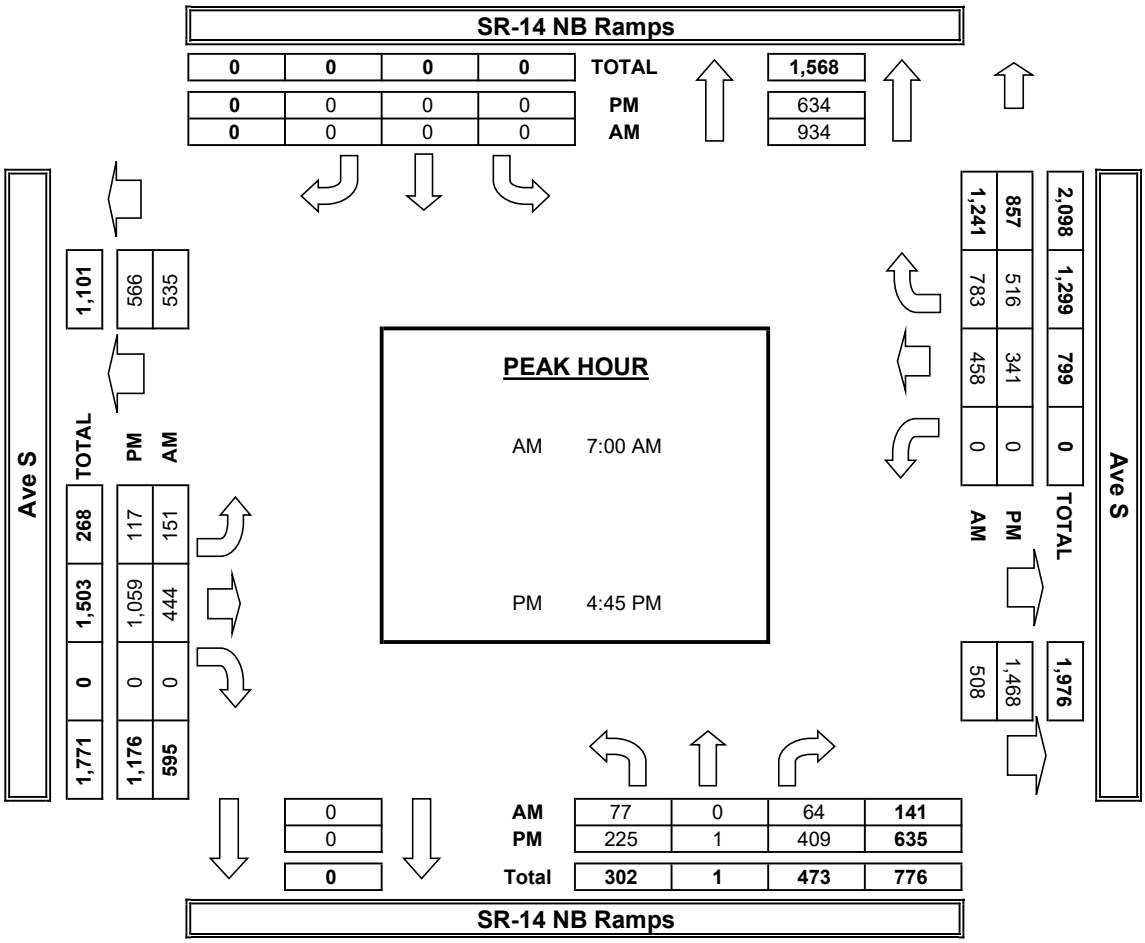


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AM BEGIN PEAK HR			7:00 AM			0	0	0	0	0					
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PM BEGIN PEAK HR			4:45 PM			0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





APPENDIX C -

EXISTING CONDITIONS PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	256	4	14	115	203	4	34	35	131	23	47
Future Volume (veh/h)	93	256	4	14	115	203	4	34	35	131	23	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	272	4	15	122	216	4	36	37	139	24	50
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	304	966	14	35	714	485	10	129	133	364	473	401
Arrive On Green	0.09	0.27	0.27	0.02	0.20	0.20	0.01	0.15	0.15	0.11	0.25	0.25
Sat Flow, veh/h	3456	3585	53	1781	3554	1585	1781	845	869	3456	1870	1585
Grp Volume(v), veh/h	99	135	141	15	122	216	4	0	73	139	24	50
Grp Sat Flow(s),veh/h/ln	1728	1777	1861	1781	1777	1585	1781	0	1714	1728	1870	1585
Q Serve(g_s), s	1.0	2.1	2.1	0.3	1.0	3.9	0.1	0.0	1.3	1.3	0.3	0.9
Cycle Q Clear(g_c), s	1.0	2.1	2.1	0.3	1.0	3.9	0.1	0.0	1.3	1.3	0.3	0.9
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	304	479	501	35	714	485	10	0	262	364	473	401
V/C Ratio(X)	0.33	0.28	0.28	0.43	0.17	0.45	0.41	0.00	0.28	0.38	0.05	0.12
Avail Cap(c_a), veh/h	489	1307	1369	252	2615	1333	252	0	1261	685	1482	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	10.2	10.2	17.1	11.7	9.8	17.5	0.0	13.2	14.7	10.0	10.2
Incr Delay (d2), s/veh	0.6	0.3	0.3	8.4	0.1	0.6	25.6	0.0	0.6	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.5	0.2	0.3	0.8	0.1	0.0	0.4	0.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	10.5	10.5	25.5	11.8	10.5	43.1	0.0	13.8	15.4	10.0	10.3
LnGrp LOS	B	B	B	C	B	B	D	A	B	B	B	B
Approach Vol, veh/h		375			353			77			213	
Approach Delay, s/veh		11.9			11.6			15.3			13.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	9.4	4.7	13.5	4.2	12.9	7.1	11.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	5.0	26.0	5.0	28.0	5.0	26.0
Max Q Clear Time (g_c+I1), s	3.3	3.3	2.3	4.1	2.1	2.9	3.0	5.9
Green Ext Time (p_c), s	0.1	0.3	0.0	1.2	0.0	0.2	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	422	8	17	334	6	18
Future Vol, veh/h	422	8	17	334	6	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	440	8	18	348	6	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	448	0	654	224
Stage 1	-	-	-	-	444	-
Stage 2	-	-	-	-	210	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1109	-	400	779
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1109	-	394	779
Mov Cap-2 Maneuver	-	-	-	-	394	-
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	394	779	-	-	1109	-
HCM Lane V/C Ratio	0.016	0.024	-	-	0.016	-
HCM Control Delay (s)	14.3	9.7	-	-	8.3	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	269	168	283	247	0	0	0	0	328	0	67
Future Volume (veh/h)	0	269	168	283	247	0	0	0	0	328	0	67
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	292	0	308	268	0				357	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	747		404	1042	0				700	0	
Arrive On Green	0.00	0.21	0.00	0.23	0.56	0.00				0.20	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	1870	0				3456	0	1585
Grp Volume(v), veh/h	0	292	0	308	268	0				357	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1728	0	1585
Q Serve(g_s), s	0.0	2.4	0.0	5.4	2.5	0.0				3.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.4	0.0	5.4	2.5	0.0				3.1	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	747		404	1042	0				700	0	
V/C Ratio(X)	0.00	0.39		0.76	0.26	0.00				0.51	0.00	
Avail Cap(c_a), veh/h	0	961		963	1742	0				2180	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.3	0.0	12.0	3.8	0.0				11.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	3.0	0.1	0.0				0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.0	1.5	0.1	0.0				0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.6	0.0	15.0	3.9	0.0				12.4	0.0	0.0
LnGrp LOS	A	B		B	A	A				B	A	
Approach Vol, veh/h		292			576						357	
Approach Delay, s/veh		11.6			9.9						12.4	
Approach LOS		B			A						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		11.6	11.0		10.7		22.6					
Change Period (Y+Rc), s		4.0	4.0		4.0		4.0					
Max Green Setting (Gmax), s		18.0	9.0		21.0		31.0					
Max Q Clear Time (g_c+I1), s		7.4	4.4		5.1		4.5					
Green Ext Time (p_c), s		0.6	0.6		1.1		1.3					

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	444	0	0	458	783	77	0	64	0	0	0
Future Volume (veh/h)	151	444	0	0	458	783	77	0	64	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	1870			
Adj Flow Rate, veh/h	172	505	0	0	520	0	88	0	0			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	238	2070	0	0	1076		222	0				
Arrive On Green	0.13	0.58	0.00	0.00	0.30	0.00	0.12	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1781	0	1585			
Grp Volume(v), veh/h	172	505	0	0	520	0	88	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1781	0	1585			
Q Serve(g_s), s	2.5	1.9	0.0	0.0	3.3	0.0	1.2	0.0	0.0			
Cycle Q Clear(g_c), s	2.5	1.9	0.0	0.0	3.3	0.0	1.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	238	2070	0	0	1076		222	0				
V/C Ratio(X)	0.72	0.24	0.00	0.00	0.48		0.40	0.00				
Avail Cap(c_a), veh/h	587	5720	0	0	4030		521	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.4	2.8	0.0	0.0	7.8	0.0	11.0	0.0	0.0			
Incr Delay (d2), s/veh	4.2	0.1	0.0	0.0	0.3	0.0	1.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	2.8	0.0	0.0	8.1	0.0	12.2	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		677			520			88				
Approach Delay, s/veh		6.1			8.1			12.2				
Approach LOS		A			A			B				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		7.4		19.9			7.6	12.3				
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0				
Max Green Setting (Gmax), s		8.0		44.0			9.0	31.0				
Max Q Clear Time (g_c+I1), s		3.2		3.9			4.5	5.3				
Green Ext Time (p_c), s		0.1		3.1			0.2	3.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	170	4	35	327	341	9	39	23	199	49	152
Future Volume (veh/h)	110	170	4	35	327	341	9	39	23	199	49	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	185	4	38	355	371	10	42	25	216	53	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	1207	26	75	1046	633	23	169	100	362	459	389
Arrive On Green	0.09	0.34	0.34	0.04	0.29	0.29	0.01	0.15	0.15	0.10	0.25	0.25
Sat Flow, veh/h	3456	3557	77	1781	3554	1585	1781	1099	654	3456	1870	1585
Grp Volume(v), veh/h	120	92	97	38	355	371	10	0	67	216	53	165
Grp Sat Flow(s),veh/h/ln	1728	1777	1857	1781	1777	1585	1781	0	1753	1728	1870	1585
Q Serve(g_s), s	1.5	1.6	1.6	0.9	3.5	8.2	0.2	0.0	1.5	2.7	1.0	3.9
Cycle Q Clear(g_c), s	1.5	1.6	1.6	0.9	3.5	8.2	0.2	0.0	1.5	2.7	1.0	3.9
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	301	603	630	75	1046	633	23	0	269	362	459	389
V/C Ratio(X)	0.40	0.15	0.15	0.51	0.34	0.59	0.43	0.00	0.25	0.60	0.12	0.42
Avail Cap(c_a), veh/h	389	1040	1087	201	2081	1094	201	0	1026	545	1180	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	10.2	10.2	20.8	12.3	10.5	21.7	0.0	16.5	19.0	13.0	14.1
Incr Delay (d2), s/veh	0.9	0.1	0.1	5.2	0.2	0.9	12.0	0.0	0.5	1.6	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.4	0.4	0.4	0.9	1.8	0.2	0.0	0.5	0.9	0.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	10.3	10.3	26.0	12.5	11.3	33.8	0.0	17.0	20.6	13.1	14.9
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	B	B
Approach Vol, veh/h		309			764			77			434	
Approach Delay, s/veh		14.1			12.6			19.2			17.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	10.8	5.9	19.1	4.6	14.9	7.9	17.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	5.0	26.0	5.0	28.0	5.0	26.0
Max Q Clear Time (g_c+I1), s	4.7	3.5	2.9	3.6	2.2	5.9	3.5	10.2
Green Ext Time (p_c), s	0.2	0.2	0.0	0.8	0.0	0.7	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	387	31	36	660	25	40
Future Vol, veh/h	387	31	36	660	25	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	412	33	38	702	27	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	445	0	856	223
Stage 1	-	-	-	-	429	-
Stage 2	-	-	-	-	427	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1112	-	297	780
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	626	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1112	-	287	780
Mov Cap-2 Maneuver	-	-	-	-	287	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	287	780	-	-	1112	-
HCM Lane V/C Ratio	0.093	0.055	-	-	0.034	-
HCM Control Delay (s)	18.8	9.9	-	-	8.4	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	346	82	93	463	0	0	0	0	840	0	232
Future Volume (veh/h)	0	346	82	93	463	0	0	0	0	840	0	232
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	376	0	101	503	0				913	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	703		158	748	0				1292	0	
Arrive On Green	0.00	0.20	0.00	0.09	0.40	0.00				0.37	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	1870	0				3456	0	1585
Grp Volume(v), veh/h	0	376	0	101	503	0				913	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1728	0	1585
Q Serve(g_s), s	0.0	3.4	0.0	1.9	7.8	0.0				8.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.4	0.0	1.9	7.8	0.0				8.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	703		158	748	0				1292	0	
V/C Ratio(X)	0.00	0.53		0.64	0.67	0.00				0.71	0.00	
Avail Cap(c_a), veh/h	0	1407		453	1428	0				2443	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.7	0.0	15.6	8.7	0.0				9.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	4.2	1.1	0.0				0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.0	0.7	1.5	0.0				2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.4	0.0	19.8	9.8	0.0				10.1	0.0	0.0
LnGrp LOS	A	B		B	A	A				B	A	
Approach Vol, veh/h		376			604						913	
Approach Delay, s/veh		13.4			11.4						10.1	
Approach LOS		B			B						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		7.1	11.0		17.2		18.1					
Change Period (Y+Rc), s		4.0	4.0		4.0		4.0					
Max Green Setting (Gmax), s		9.0	14.0		25.0		27.0					
Max Q Clear Time (g_c+I1), s		3.9	5.4		10.0		9.8					
Green Ext Time (p_c), s		0.1	1.3		3.3		2.5					

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	1059	0	0	341	516	225	0	409	0	0	0
Future Volume (veh/h)	117	1059	0	0	341	516	225	0	409	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	1870			
Adj Flow Rate, veh/h	122	1103	0	0	355	0	234	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	192	1858	0	0	989		363	0				
Arrive On Green	0.11	0.52	0.00	0.00	0.28	0.00	0.20	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1781	0	1585			
Grp Volume(v), veh/h	122	1103	0	0	355	0	234	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1781	0	1585			
Q Serve(g_s), s	1.9	6.3	0.0	0.0	2.3	0.0	3.5	0.0	0.0			
Cycle Q Clear(g_c), s	1.9	6.3	0.0	0.0	2.3	0.0	3.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	192	1858	0	0	989		363	0				
V/C Ratio(X)	0.64	0.59	0.00	0.00	0.36		0.65	0.00				
Avail Cap(c_a), veh/h	427	3525	0	0	2188		1401	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	12.5	4.8	0.0	0.0	8.5	0.0	10.7	0.0	0.0			
Incr Delay (d2), s/veh	3.5	0.3	0.0	0.0	0.2	0.0	1.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.0	0.0	0.4	0.0	1.2	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	5.1	0.0	0.0	8.7	0.0	12.6	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		1225			355			234				
Approach Delay, s/veh		6.2			8.7			12.6				
Approach LOS		A			A			B				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		10.0		19.3			7.1	12.1				
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0				
Max Green Setting (Gmax), s		23.0		29.0			7.0	18.0				
Max Q Clear Time (g_c+I1), s		5.5		8.3			3.9	4.3				
Green Ext Time (p_c), s		0.6		7.0			0.1	1.6				

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX D -

OPENING YEAR 2024 CONDITIONS PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	264	5	15	119	210	5	36	37	135	24	49
Future Volume (veh/h)	96	264	5	15	119	210	5	36	37	135	24	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	281	5	16	127	223	5	38	39	144	26	52
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	307	973	17	37	725	492	12	131	135	367	476	404
Arrive On Green	0.09	0.27	0.27	0.02	0.20	0.20	0.01	0.16	0.16	0.11	0.25	0.25
Sat Flow, veh/h	3456	3572	63	1781	3554	1585	1781	846	868	3456	1870	1585
Grp Volume(v), veh/h	102	140	146	16	127	223	5	0	77	144	26	52
Grp Sat Flow(s),veh/h/ln	1728	1777	1859	1781	1777	1585	1781	0	1714	1728	1870	1585
Q Serve(g_s), s	1.0	2.2	2.2	0.3	1.1	4.1	0.1	0.0	1.4	1.4	0.4	0.9
Cycle Q Clear(g_c), s	1.0	2.2	2.2	0.3	1.1	4.1	0.1	0.0	1.4	1.4	0.4	0.9
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	307	484	507	37	725	492	12	0	266	367	476	404
V/C Ratio(X)	0.33	0.29	0.29	0.44	0.18	0.45	0.41	0.00	0.29	0.39	0.05	0.13
Avail Cap(c_a), veh/h	481	1286	1346	248	2572	1316	248	0	1241	673	1458	1236
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	10.3	10.3	17.4	11.8	9.9	17.8	0.0	13.4	15.0	10.1	10.3
Incr Delay (d2), s/veh	0.6	0.3	0.3	8.0	0.1	0.7	21.1	0.0	0.6	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.6	0.2	0.3	0.8	0.1	0.0	0.4	0.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	10.6	10.6	25.4	11.9	10.6	38.9	0.0	14.0	15.7	10.2	10.5
LnGrp LOS	B	B	B	C	B	B	D	A	B	B	B	B
Approach Vol, veh/h		388			366			82			222	
Approach Delay, s/veh		12.0			11.7			15.5			13.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	9.6	4.7	13.8	4.2	13.1	7.2	11.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	5.0	26.0	5.0	28.0	5.0	26.0
Max Q Clear Time (g_c+I1), s	3.4	3.4	2.3	4.2	2.1	2.9	3.0	6.1
Green Ext Time (p_c), s	0.1	0.3	0.0	1.3	0.0	0.2	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	435	9	18	345	7	19
Future Vol, veh/h	435	9	18	345	7	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	453	9	19	359	7	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	462	0	676	231
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1095	-	387	771
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	797	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1095	-	380	771
Mov Cap-2 Maneuver	-	-	-	-	380	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	783	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	380	771	-	-	1095	-
HCM Lane V/C Ratio	0.019	0.026	-	-	0.017	-
HCM Control Delay (s)	14.7	9.8	-	-	8.3	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	278	174	292	255	0	0	0	0	338	0	70
Future Volume (veh/h)	0	278	174	292	255	0	0	0	0	338	0	70
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	302	0	317	277	0				367	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	741		414	1047	0				697	0	
Arrive On Green	0.00	0.21	0.00	0.23	0.56	0.00				0.20	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	1870	0				3456	0	1585
Grp Volume(v), veh/h	0	302	0	317	277	0				367	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1728	0	1585
Q Serve(g_s), s	0.0	2.5	0.0	5.6	2.6	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.5	0.0	5.6	2.6	0.0				3.2	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	741		414	1047	0				697	0	
V/C Ratio(X)	0.00	0.41		0.77	0.26	0.00				0.53	0.00	
Avail Cap(c_a), veh/h	0	953		955	1727	0				2161	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.5	0.0	12.0	3.8	0.0				12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	3.0	0.1	0.0				0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.0	1.5	0.1	0.0				1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.9	0.0	15.0	3.9	0.0				12.6	0.0	0.0
LnGrp LOS	A	B		B	A	A				B	A	
Approach Vol, veh/h		302			594						367	
Approach Delay, s/veh		11.9			9.9						12.6	
Approach LOS		B			A						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		11.8	11.0		10.8		22.8					
Change Period (Y+Rc), s		4.0	4.0		4.0		4.0					
Max Green Setting (Gmax), s		18.0	9.0		21.0		31.0					
Max Q Clear Time (g_c+I1), s		7.6	4.5		5.2		4.6					
Green Ext Time (p_c), s		0.7	0.6		1.1		1.3					

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	458	0	0	472	807	80	0	66	0	0	0
Future Volume (veh/h)	156	458	0	0	472	807	80	0	66	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	1870			
Adj Flow Rate, veh/h	177	520	0	0	536	0	91	0	0			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	239	2078	0	0	1089		227	0				
Arrive On Green	0.13	0.58	0.00	0.00	0.31	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1781	0	1585			
Grp Volume(v), veh/h	177	520	0	0	536	0	91	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1781	0	1585			
Q Serve(g_s), s	2.7	2.0	0.0	0.0	3.4	0.0	1.3	0.0	0.0			
Cycle Q Clear(g_c), s	2.7	2.0	0.0	0.0	3.4	0.0	1.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	239	2078	0	0	1089		227	0				
V/C Ratio(X)	0.74	0.25	0.00	0.00	0.49		0.40	0.00				
Avail Cap(c_a), veh/h	577	5505	0	0	3840		577	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.6	2.8	0.0	0.0	7.9	0.0	11.1	0.0	0.0			
Incr Delay (d2), s/veh	4.5	0.1	0.0	0.0	0.3	0.0	1.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.0	0.5	0.0	0.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	2.9	0.0	0.0	8.2	0.0	12.3	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		697			536			91				
Approach Delay, s/veh		6.2			8.2			12.3				
Approach LOS		A			A			B				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		7.5		20.2			7.7	12.5				
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0				
Max Green Setting (Gmax), s		9.0		43.0			9.0	30.0				
Max Q Clear Time (g_c+I1), s		3.3		4.0			4.7	5.4				
Green Ext Time (p_c), s		0.1		3.2			0.2	3.1				

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	176	5	37	337	352	10	41	24	205	51	157
Future Volume (veh/h)	114	176	5	37	337	352	10	41	24	205	51	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	191	5	40	366	383	11	45	26	223	55	171
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	302	1219	32	78	1068	642	25	169	98	360	453	384
Arrive On Green	0.09	0.34	0.34	0.04	0.30	0.30	0.01	0.15	0.15	0.10	0.24	0.24
Sat Flow, veh/h	3456	3538	92	1781	3554	1585	1781	1112	643	3456	1870	1585
Grp Volume(v), veh/h	124	96	100	40	366	383	11	0	71	223	55	171
Grp Sat Flow(s),veh/h/ln	1728	1777	1854	1781	1777	1585	1781	0	1755	1728	1870	1585
Q Serve(g_s), s	1.5	1.7	1.7	1.0	3.6	8.5	0.3	0.0	1.6	2.8	1.0	4.1
Cycle Q Clear(g_c), s	1.5	1.7	1.7	1.0	3.6	8.5	0.3	0.0	1.6	2.8	1.0	4.1
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	302	612	639	78	1068	642	25	0	267	360	453	384
V/C Ratio(X)	0.41	0.16	0.16	0.51	0.34	0.60	0.43	0.00	0.27	0.62	0.12	0.45
Avail Cap(c_a), veh/h	384	1026	1071	198	2052	1081	198	0	1013	537	1163	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	10.2	10.2	21.1	12.3	10.5	22.0	0.0	16.9	19.3	13.3	14.5
Incr Delay (d2), s/veh	0.9	0.1	0.1	5.2	0.2	0.9	11.2	0.0	0.5	1.7	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.4	0.5	0.4	1.0	1.9	0.2	0.0	0.5	0.9	0.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	10.3	10.3	26.2	12.5	11.4	33.2	0.0	17.4	21.0	13.4	15.3
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	B	B
Approach Vol, veh/h		320			789			82			449	
Approach Delay, s/veh		14.2			12.6			19.5			17.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	10.9	6.0	19.5	4.6	14.9	7.9	17.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	5.0	26.0	5.0	28.0	5.0	26.0
Max Q Clear Time (g_c+I1), s	4.8	3.6	3.0	3.7	2.3	6.1	3.5	10.5
Green Ext Time (p_c), s	0.1	0.2	0.0	0.8	0.0	0.7	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	399	32	38	680	26	42
Future Vol, veh/h	399	32	38	680	26	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	424	34	40	723	28	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	458	0	883	229
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	442	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1099	-	285	774
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	615	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1099	-	275	774
Mov Cap-2 Maneuver	-	-	-	-	275	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	593	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	275	774	-	-	1099	-
HCM Lane V/C Ratio	0.101	0.058	-	-	0.037	-
HCM Control Delay (s)	19.6	9.9	-	-	8.4	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	357	85	96	477	0	0	0	0	866	0	239
Future Volume (veh/h)	0	357	85	96	477	0	0	0	0	866	0	239
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	388	0	104	518	0				941	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	693		160	741	0				1316	0	
Arrive On Green	0.00	0.19	0.00	0.09	0.40	0.00				0.38	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	1870	0				3456	0	1585
Grp Volume(v), veh/h	0	388	0	104	518	0				941	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1728	0	1585
Q Serve(g_s), s	0.0	3.5	0.0	2.0	8.3	0.0				8.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.5	0.0	2.0	8.3	0.0				8.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	693		160	741	0				1316	0	
V/C Ratio(X)	0.00	0.56		0.65	0.70	0.00				0.71	0.00	
Avail Cap(c_a), veh/h	0	1386		447	1407	0				2406	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.1	0.0	15.8	9.0	0.0				9.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	4.4	1.2	0.0				0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.0	0.8	1.7	0.0				2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.8	0.0	20.2	10.3	0.0				10.2	0.0	0.0
LnGrp LOS	A	B		C	B	A				B	A	
Approach Vol, veh/h		388			622						941	
Approach Delay, s/veh		13.8			11.9						10.2	
Approach LOS		B			B						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		7.2	11.0		17.7		18.2					
Change Period (Y+Rc), s		4.0	4.0		4.0		4.0					
Max Green Setting (Gmax), s		9.0	14.0		25.0		27.0					
Max Q Clear Time (g_c+I1), s		4.0	5.5		10.3		10.3					
Green Ext Time (p_c), s		0.1	1.3		3.4		2.5					

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1091	0	0	352	532	232	0	422	0	0	0
Future Volume (veh/h)	121	1091	0	0	352	532	232	0	422	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	1870			
Adj Flow Rate, veh/h	126	1136	0	0	367	0	242	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	194	1873	0	0	1008		363	0				
Arrive On Green	0.11	0.53	0.00	0.00	0.28	0.00	0.20	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1781	0	1585			
Grp Volume(v), veh/h	126	1136	0	0	367	0	242	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1781	0	1585			
Q Serve(g_s), s	2.0	6.6	0.0	0.0	2.5	0.0	3.7	0.0	0.0			
Cycle Q Clear(g_c), s	2.0	6.6	0.0	0.0	2.5	0.0	3.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	194	1873	0	0	1008		363	0				
V/C Ratio(X)	0.65	0.61	0.00	0.00	0.36		0.67	0.00				
Avail Cap(c_a), veh/h	420	3349	0	0	2033		1439	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	12.7	4.9	0.0	0.0	8.5	0.0	10.9	0.0	0.0			
Incr Delay (d2), s/veh	3.6	0.3	0.0	0.0	0.2	0.0	2.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.0	0.0	0.4	0.0	1.2	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	5.2	0.0	0.0	8.7	0.0	13.0	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		1262			367			242				
Approach Delay, s/veh		6.3			8.7			13.0				
Approach LOS		A			A			B				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		10.1		19.7			7.2	12.4				
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0				
Max Green Setting (Gmax), s		24.0		28.0			7.0	17.0				
Max Q Clear Time (g_c+I1), s		5.7		8.6			4.0	4.5				
Green Ext Time (p_c), s		0.6		7.1			0.1	1.6				

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX E -

OPENING YEAR 2024 WITH PROJECT CONDITIONS

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	280	5	19	135	218	5	36	41	143	24	49
Future Volume (veh/h)	96	280	5	19	135	218	5	36	41	143	24	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	298	5	20	144	232	5	38	44	152	26	52
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	977	16	45	746	503	12	123	143	372	480	407
Arrive On Green	0.09	0.27	0.27	0.03	0.21	0.21	0.01	0.16	0.16	0.11	0.26	0.26
Sat Flow, veh/h	3456	3576	60	1781	3554	1585	1781	790	915	3456	1870	1585
Grp Volume(v), veh/h	102	148	155	20	144	232	5	0	82	152	26	52
Grp Sat Flow(s),veh/h/ln	1728	1777	1860	1781	1777	1585	1781	0	1706	1728	1870	1585
Q Serve(g_s), s	1.0	2.4	2.4	0.4	1.2	4.3	0.1	0.0	1.6	1.5	0.4	0.9
Cycle Q Clear(g_c), s	1.0	2.4	2.4	0.4	1.2	4.3	0.1	0.0	1.6	1.5	0.4	0.9
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	305	485	508	45	746	503	12	0	266	372	480	407
V/C Ratio(X)	0.33	0.30	0.31	0.45	0.19	0.46	0.41	0.00	0.31	0.41	0.05	0.13
Avail Cap(c_a), veh/h	473	1266	1325	244	2531	1300	244	0	1215	663	1435	1216
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	10.5	10.5	17.5	11.9	10.0	18.1	0.0	13.7	15.2	10.2	10.4
Incr Delay (d2), s/veh	0.6	0.4	0.3	6.8	0.1	0.7	21.1	0.0	0.7	0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.6	0.6	0.2	0.3	0.9	0.1	0.0	0.4	0.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	10.9	10.9	24.4	12.0	10.6	39.2	0.0	14.3	15.9	10.3	10.6
LnGrp LOS	B	B	B	C	B	B	D	A	B	B	B	B
Approach Vol, veh/h		405			396			87			230	
Approach Delay, s/veh		12.2			11.8			15.7			14.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	9.7	4.9	14.0	4.2	13.4	7.2	11.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	5.0	26.0	5.0	28.0	5.0	26.0
Max Q Clear Time (g_c+I1), s	3.5	3.6	2.4	4.4	2.1	2.9	3.0	6.3
Green Ext Time (p_c), s	0.1	0.3	0.0	1.3	0.0	0.2	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	18.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	113	349	9	18	300	65	7	0	19	211	0	97
Future Vol, veh/h	113	349	9	18	300	65	7	0	19	211	0	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	50	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	96	96	92	96	92	96	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	123	364	9	19	313	71	7	0	20	229	0	105

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	384	0	0	373	0	0	810	1037	187	815	1006	192
Stage 1	-	-	-	-	-	-	615	615	-	387	387	-
Stage 2	-	-	-	-	-	-	195	422	-	428	619	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1171	-	-	1182	-	-	271	230	823	269	240	817
Stage 1	-	-	-	-	-	-	445	480	-	608	608	-
Stage 2	-	-	-	-	-	-	788	587	-	575	478	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1171	-	-	1182	-	-	214	203	823	239	211	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	214	203	-	239	211	-
Stage 1	-	-	-	-	-	-	398	430	-	544	598	-
Stage 2	-	-	-	-	-	-	675	578	-	502	428	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.4	13	66.3
HCM LOS			B	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	214	823	1171	-	-	1182	-	-	239	817
HCM Lane V/C Ratio	0.034	0.024	0.105	-	-	0.016	-	-	0.96	0.129
HCM Control Delay (s)	22.4	9.5	8.4	-	-	8.1	-	-	92.1	10.1
HCM Lane LOS	C	A	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.1	0.1	0.4	-	-	0	-	-	8.7	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	309	194	292	290	0	0	0	0	338	0	86
Future Volume (veh/h)	0	309	194	292	290	0	0	0	0	338	0	86
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	336	0	317	315	0				367	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	741		414	1047	0				697	0	
Arrive On Green	0.00	0.21	0.00	0.23	0.56	0.00				0.20	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	1870	0				3456	0	1585
Grp Volume(v), veh/h	0	336	0	317	315	0				367	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1728	0	1585
Q Serve(g_s), s	0.0	2.8	0.0	5.6	3.0	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.8	0.0	5.6	3.0	0.0				3.2	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	741		414	1047	0				697	0	
V/C Ratio(X)	0.00	0.45		0.77	0.30	0.00				0.53	0.00	
Avail Cap(c_a), veh/h	0	953		955	1727	0				2161	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.6	0.0	12.0	3.9	0.0				12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	3.0	0.2	0.0				0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.0	1.5	0.1	0.0				1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.0	0.0	15.0	4.1	0.0				12.6	0.0	0.0
LnGrp LOS	A	B		B	A	A				B	A	
Approach Vol, veh/h		336			632						367	
Approach Delay, s/veh		12.0			9.6						12.6	
Approach LOS		B			A						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		11.8	11.0		10.8		22.8					
Change Period (Y+Rc), s		4.0	4.0		4.0		4.0					
Max Green Setting (Gmax), s		18.0	9.0		21.0		31.0					
Max Q Clear Time (g_c+I1), s		7.6	4.8		5.2		5.0					
Green Ext Time (p_c), s		0.7	0.7		1.1		1.5					

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	474	0	0	488	807	100	0	66	0	0	0
Future Volume (veh/h)	172	474	0	0	488	807	100	0	66	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	1870			
Adj Flow Rate, veh/h	195	539	0	0	555	0	114	0	0			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	254	2076	0	0	1085		257	0				
Arrive On Green	0.14	0.58	0.00	0.00	0.31	0.00	0.14	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1781	0	1585			
Grp Volume(v), veh/h	195	539	0	0	555	0	114	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1781	0	1585			
Q Serve(g_s), s	3.1	2.2	0.0	0.0	3.8	0.0	1.7	0.0	0.0			
Cycle Q Clear(g_c), s	3.1	2.2	0.0	0.0	3.8	0.0	1.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	254	2076	0	0	1085		257	0				
V/C Ratio(X)	0.77	0.26	0.00	0.00	0.51		0.44	0.00				
Avail Cap(c_a), veh/h	545	5191	0	0	3622		545	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	12.1	3.0	0.0	0.0	8.4	0.0	11.5	0.0	0.0			
Incr Delay (d2), s/veh	4.8	0.1	0.0	0.0	0.4	0.0	1.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	3.1	0.0	0.0	8.8	0.0	12.7	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		734			555			114				
Approach Delay, s/veh		6.8			8.8			12.7				
Approach LOS		A			A			B				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		8.2		21.2			8.2	13.0				
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0				
Max Green Setting (Gmax), s		9.0		43.0			9.0	30.0				
Max Q Clear Time (g_c+I1), s		3.7		4.2			5.1	5.8				
Green Ext Time (p_c), s		0.1		3.3			0.2	3.2				

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	190	5	40	351	359	10	41	27	212	51	157
Future Volume (veh/h)	114	190	5	40	351	359	10	41	27	212	51	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	207	5	43	382	390	11	45	29	230	55	171
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	1226	30	82	1083	650	25	160	103	363	452	383
Arrive On Green	0.09	0.35	0.35	0.05	0.30	0.30	0.01	0.15	0.15	0.11	0.24	0.24
Sat Flow, veh/h	3456	3546	85	1781	3554	1585	1781	1062	685	3456	1870	1585
Grp Volume(v), veh/h	124	103	109	43	382	390	11	0	74	230	55	171
Grp Sat Flow(s),veh/h/ln	1728	1777	1855	1781	1777	1585	1781	0	1747	1728	1870	1585
Q Serve(g_s), s	1.5	1.8	1.8	1.1	3.8	8.8	0.3	0.0	1.7	2.9	1.0	4.2
Cycle Q Clear(g_c), s	1.5	1.8	1.8	1.1	3.8	8.8	0.3	0.0	1.7	2.9	1.0	4.2
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	301	614	641	82	1083	650	25	0	264	363	452	383
V/C Ratio(X)	0.41	0.17	0.17	0.52	0.35	0.60	0.43	0.00	0.28	0.63	0.12	0.45
Avail Cap(c_a), veh/h	380	1017	1061	196	2033	1073	196	0	1000	532	1153	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	10.3	10.3	21.2	12.3	10.5	22.2	0.0	17.1	19.5	13.5	14.6
Incr Delay (d2), s/veh	0.9	0.1	0.1	5.1	0.2	0.9	11.2	0.0	0.6	1.8	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.5	0.5	1.0	1.9	0.2	0.0	0.6	1.0	0.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	10.5	10.5	26.3	12.5	11.4	33.4	0.0	17.7	21.3	13.6	15.5
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	B	B
Approach Vol, veh/h		336			815			85			456	
Approach Delay, s/veh		14.2			12.7			19.7			18.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	10.9	6.1	19.7	4.6	15.0	8.0	17.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	26.0	5.0	26.0	5.0	28.0	5.0	26.0
Max Q Clear Time (g_c+I1), s	4.9	3.7	3.1	3.8	2.3	6.2	3.5	10.8
Green Ext Time (p_c), s	0.1	0.3	0.0	0.9	0.0	0.7	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	44.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	327	32	38	642	55	26	0	42	177	0	82
Future Vol, veh/h	96	327	32	38	642	55	26	0	42	177	0	82
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	50	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	94	94	94	94	92	94	92	94	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	348	34	40	683	60	28	0	45	192	0	89

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	743	0	0	382	0	0	995	1396	191	1175	1383	372
Stage 1	-	-	-	-	-	-	573	573	-	793	793	-
Stage 2	-	-	-	-	-	-	422	823	-	382	590	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	860	-	-	1173	-	-	199	140	818	~ 147	143	625
Stage 1	-	-	-	-	-	-	472	502	-	348	398	-
Stage 2	-	-	-	-	-	-	580	386	-	612	493	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	860	-	-	1173	-	-	151	119	818	~ 123	121	625
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	119	-	~ 123	121	-
Stage 1	-	-	-	-	-	-	415	441	-	306	384	-
Stage 2	-	-	-	-	-	-	480	373	-	509	433	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.4	19	244.8
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	818	860	-	-	1173	-	-	123	625
HCM Lane V/C Ratio	0.183	0.055	0.121	-	-	0.034	-	-	1.564	0.143
HCM Control Delay (s)	34.1	9.7	9.8	-	-	8.2	-	-	$ 352.8	11.7
HCM Lane LOS	D	A	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.6	0.2	0.4	-	-	0.1	-	-	13.9	0.5

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	384	102	96	508	0	0	0	0	866	0	253
Future Volume (veh/h)	0	384	102	96	508	0	0	0	0	866	0	253
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	0	1870
Adj Flow Rate, veh/h	0	417	0	104	552	0				941	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	722		159	753	0				1305	0	
Arrive On Green	0.00	0.20	0.00	0.09	0.40	0.00				0.38	0.00	0.00
Sat Flow, veh/h	0	3647	1585	1781	1870	0				3456	0	1585
Grp Volume(v), veh/h	0	417	0	104	552	0				941	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1728	0	1585
Q Serve(g_s), s	0.0	3.9	0.0	2.1	9.1	0.0				8.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.9	0.0	2.1	9.1	0.0				8.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	722		159	753	0				1305	0	
V/C Ratio(X)	0.00	0.58		0.65	0.73	0.00				0.72	0.00	
Avail Cap(c_a), veh/h	0	1466		441	1440	0				2281	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.1	0.0	16.0	9.2	0.0				9.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	4.5	1.4	0.0				0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.0	0.8	1.9	0.0				2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.8	0.0	20.5	10.6	0.0				10.4	0.0	0.0
LnGrp LOS	A	B		C	B	A				B	A	
Approach Vol, veh/h		417			656						941	
Approach Delay, s/veh		13.8			12.2						10.4	
Approach LOS		B			B						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		7.3	11.4		17.7		18.6					
Change Period (Y+Rc), s		4.0	4.0		4.0		4.0					
Max Green Setting (Gmax), s		9.0	15.0		24.0		28.0					
Max Q Clear Time (g_c+I1), s		4.1	5.9		10.5		11.1					
Green Ext Time (p_c), s		0.1	1.5		3.3		2.8					

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	1105	0	0	366	532	249	0	422	0	0	0
Future Volume (veh/h)	135	1105	0	0	366	532	249	0	422	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	1870			
Adj Flow Rate, veh/h	141	1151	0	0	381	0	259	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	2			
Cap, veh/h	204	1888	0	0	1012		365	0				
Arrive On Green	0.11	0.53	0.00	0.00	0.28	0.00	0.20	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	3647	1585	1781	0	1585			
Grp Volume(v), veh/h	141	1151	0	0	381	0	259	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1585	1781	0	1585			
Q Serve(g_s), s	2.3	6.8	0.0	0.0	2.6	0.0	4.1	0.0	0.0			
Cycle Q Clear(g_c), s	2.3	6.8	0.0	0.0	2.6	0.0	4.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	204	1888	0	0	1012		365	0				
V/C Ratio(X)	0.69	0.61	0.00	0.00	0.38		0.71	0.00				
Avail Cap(c_a), veh/h	470	3399	0	0	1992		1351	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	12.9	4.9	0.0	0.0	8.7	0.0	11.2	0.0	0.0			
Incr Delay (d2), s/veh	4.1	0.3	0.0	0.0	0.2	0.0	2.6	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	0.1	0.0	0.0	0.5	0.0	1.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	5.2	0.0	0.0	8.9	0.0	13.8	0.0	0.0			
LnGrp LOS	B	A	A	A	A		B	A				
Approach Vol, veh/h		1292			381			259				
Approach Delay, s/veh		6.5			8.9			13.8				
Approach LOS		A			A			B				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		10.2		20.1			7.5	12.6				
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0				
Max Green Setting (Gmax), s		23.0		29.0			8.0	17.0				
Max Q Clear Time (g_c+I1), s		6.1		8.8			4.3	4.6				
Green Ext Time (p_c), s		0.7		7.3			0.1	1.6				

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX F -

OPENING YEAR 2024 WITH PROJECT AND IMPROVEMENT CONDITIONS

ANALYSIS WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	349	9	18	300	65	7	0	19	211	0	97
Future Volume (veh/h)	113	349	9	18	300	65	7	0	19	211	0	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	118	364	9	19	312	68	7	0	20	220	0	101
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1157	29	44	712	153	408	0	363	618	0	363
Arrive On Green	0.11	0.33	0.33	0.02	0.24	0.24	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1781	3544	87	1781	2909	625	681	0	1585	1597	0	1585
Grp Volume(v), veh/h	118	182	191	19	189	191	7	0	20	220	0	101
Grp Sat Flow(s),veh/h/ln	1781	1777	1855	1781	1777	1758	681	0	1585	1597	0	1585
Q Serve(g_s), s	1.8	2.2	2.2	0.3	2.6	2.6	0.1	0.0	0.3	0.0	0.0	1.5
Cycle Q Clear(g_c), s	1.8	2.2	2.2	0.3	2.6	2.6	3.2	0.0	0.3	3.1	0.0	1.5
Prop In Lane	1.00		0.05	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	189	580	606	44	435	430	408	0	363	618	0	363
V/C Ratio(X)	0.62	0.31	0.31	0.44	0.43	0.44	0.02	0.00	0.06	0.36	0.00	0.28
Avail Cap(c_a), veh/h	561	1243	1297	311	994	983	1152	0	1275	1433	0	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.2	7.2	7.2	13.8	9.1	9.2	11.1	0.0	8.6	9.7	0.0	9.1
Incr Delay (d2), s/veh	3.3	0.3	0.3	6.7	0.7	0.7	0.0	0.0	0.1	0.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.3	0.2	0.5	0.5	0.0	0.0	0.0	0.9	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	7.5	7.5	20.5	9.8	9.9	11.1	0.0	8.7	10.0	0.0	9.5
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		491			399			27			321	
Approach Delay, s/veh		9.5			10.3			9.3			9.9	
Approach LOS		A			B			A			A	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		10.6	4.7	13.3		10.6	7.0	11.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	5.0	20.0		23.0	9.0	16.0
Max Q Clear Time (g_c+I1), s		5.2	2.3	4.2		5.1	3.8	4.6
Green Ext Time (p_c), s		0.0	0.0	1.6		1.5	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

WARRANT 3 - PEAK HOUR

(Part A or Part B must be satisfied) SATISFIED ☑ YES ☐ NO

Part A

SATISFIED ☐ YES ☑ NO

(All parts 1, 2, and 3 below must be satisfied for the same

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for one-lane approach, or five vehicle-hours for a two-lane approach; AND	☐ YES ☑ NO
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	☑ YES ☐ NO
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches	☑ YES ☐ NO

SATISFIED ☐ YES ☑ NO

Part B

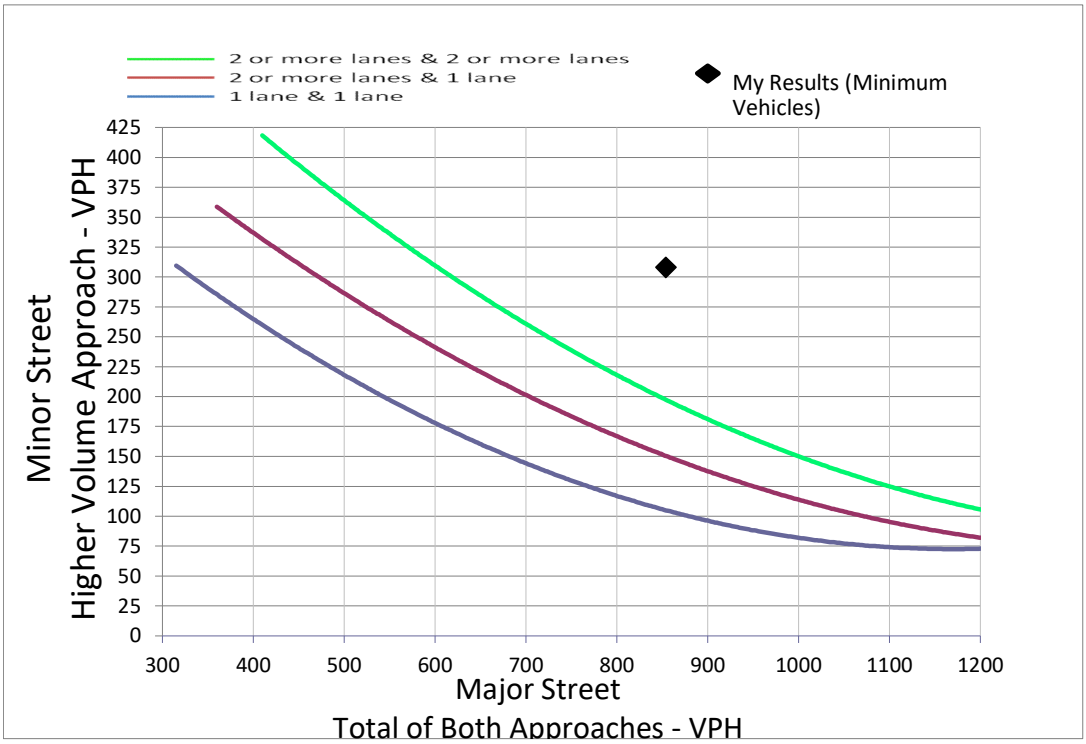
APPROACH LANES	One	Two or More	
Both Approaches - Major Street	☐	☑	854
Higher Approach - Minor Street	☑	☐	308

← ENTER CORRECT HOURS

ENTER PEAK HOUR VOL.

The plotted point falls above the applicable curve in Figure 4C-3 (Urban Areas)	☐ YES ☐ NO
OR The plotted point falls above the applicable curve in Figure 4C-4 (Rural Areas)	☐ YES ☑ NO

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Intersection: 2: Guyon Ave/Project Driveway 1 & W Ave S

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LT	R	LT	R
Maximum Queue (ft)	103	72	78	50	88	145	34	38	142	64
Average Queue (ft)	45	22	29	12	25	53	5	13	70	31
95th Queue (ft)	83	52	63	36	62	111	24	38	118	56
Link Distance (ft)		1574	1574		682	682	608		212	212
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	100			50				50		
Storage Blk Time (%)	0	0		1	2		0	0		
Queuing Penalty (veh)	1	0		2	0		0	0		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	327	32	38	642	55	26	0	42	177	0	82
Future Volume (veh/h)	96	327	32	38	642	55	26	0	42	177	0	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	348	34	40	683	59	28	0	45	188	0	87
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1007	98	77	904	78	151	0	631	151	0	631
Arrive On Green	0.08	0.31	0.31	0.04	0.27	0.27	0.40	0.00	0.40	0.40	0.00	0.40
Sat Flow, veh/h	1781	3272	318	1781	3310	286	0	0	1585	0	0	1585
Grp Volume(v), veh/h	102	188	194	40	366	376	28	0	45	188	0	87
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1819	0	0	1585	0	0	1585
Q Serve(g_s), s	2.7	3.9	4.0	1.0	9.0	9.0	0.0	0.0	0.8	0.0	0.0	1.7
Cycle Q Clear(g_c), s	2.7	3.9	4.0	1.0	9.0	9.0	19.0	0.0	0.8	19.0	0.0	1.7
Prop In Lane	1.00		0.18	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	547	558	77	486	497	151	0	631	151	0	631
V/C Ratio(X)	0.74	0.34	0.35	0.52	0.75	0.76	0.19	0.00	0.07	1.25	0.00	0.14
Avail Cap(c_a), veh/h	261	707	721	186	633	647	151	0	631	151	0	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	12.8	12.8	22.4	15.9	15.9	23.9	0.0	8.9	23.9	0.0	9.2
Incr Delay (d2), s/veh	7.4	0.4	0.4	5.4	3.8	3.7	0.6	0.0	0.0	154.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.1	1.2	0.5	3.1	3.2	0.3	0.0	0.2	8.0	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	13.2	13.2	27.7	19.6	19.6	24.5	0.0	9.0	178.4	0.0	9.3
LnGrp LOS	C	B	B	C	B	B	C	A	A	F	A	A
Approach Vol, veh/h		484			782			73			275	
Approach Delay, s/veh		16.5			20.0			14.9			124.9	
Approach LOS		B			C			B			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.0	6.1	18.7		23.0	7.7	17.0				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		19.0	5.0	19.0		19.0	7.0	17.0				
Max Q Clear Time (g_c+I1), s		21.0	3.0	6.0		21.0	4.7	11.0				
Green Ext Time (p_c), s		0.0	0.0	1.5		0.0	0.0	2.0				

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

WARRANT 3 - PEAK HOUR

(Part A or Part B must be satisfied) SATISFIED ☑ YES ☐ NO

Part A

SATISFIED ☑ YES ☐ NO

(All parts 1, 2, and 3 below must be satisfied for the same

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for one-lane approach, or five vehicle-hours for a two-lane approach; AND	☑ YES ☐ NO
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	☑ YES ☐ NO
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches	☑ YES ☐ NO

SATISFIED ☑ YES ☐ NO

Part B

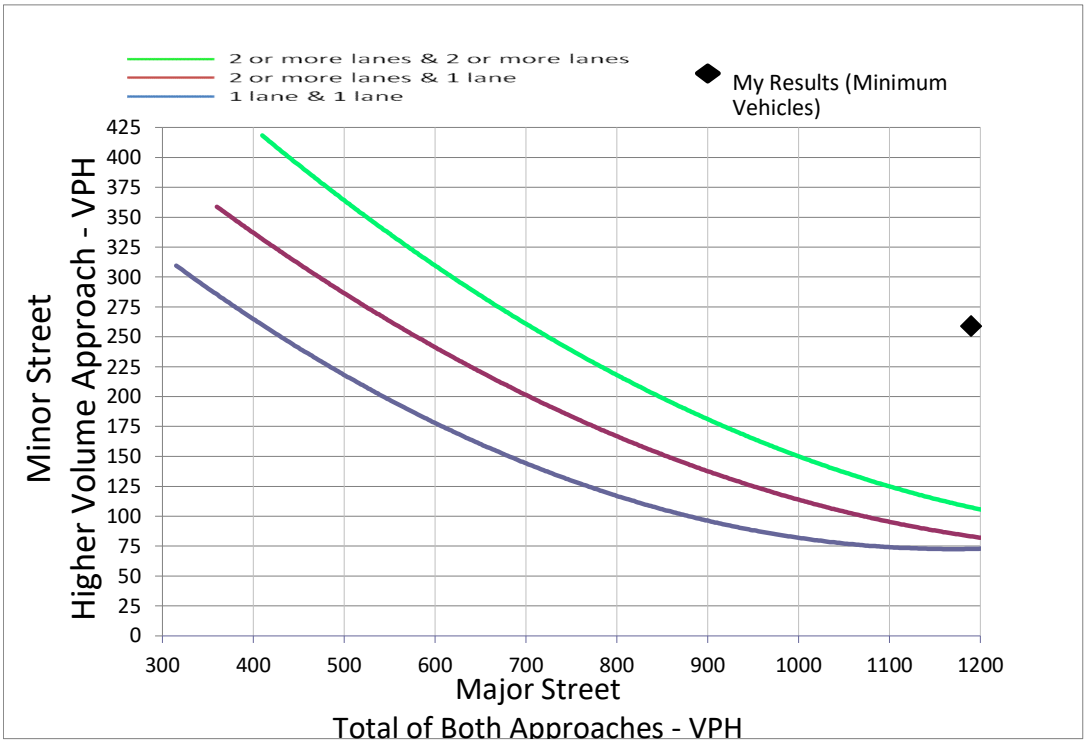
APPROACH LANES	One	Two or More	
Both Approaches - Major Street	☐	☑	1190
Higher Approach - Minor Street	☑	☐	259

← ENTER CORRECT HOURS

ENTER PEAK HOUR VOL.

The plotted point falls above the applicable curve in Figure 4C-3 (Urban Areas)	☐ YES ☐ NO
OR The plotted point falls above the applicable curve in Figure 4C-4 (Rural Areas)	☐ YES ☑ NO

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Intersection: 2: Guyon Ave/Project Driveway 1 & W Ave S

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LT	R	LT	R
Maximum Queue (ft)	104	78	92	70	138	208	47	58	166	81
Average Queue (ft)	46	25	37	25	53	101	14	22	76	35
95th Queue (ft)	86	57	74	55	106	174	41	50	135	66
Link Distance (ft)		1574	1574		682	682	608		212	212
Upstream Blk Time (%)									0	
Queuing Penalty (veh)									0	
Storage Bay Dist (ft)	100			50				50		
Storage Blk Time (%)	0	0		4	8		1	0		
Queuing Penalty (veh)	1	0		13	3		0	0		

APPENDIX G -

TRANSIT ROUTE INFORMATION

3

PM times in bold

Westbound to AV Mall via Avenue S

Depart South Valley Transit Center Stop # 1007	Ave S & 47th St. E Stop # 0308	Ave. S & 25th St. E. Stop # 0121	10th St. E. & Ave R Stop # 0134	Palmdale Transportation Center Stop # 1008	Arrive Antelope Valley Mall Stop # 0028
5:15	5:21	5:27	5:34	5:43	5:59
5:45	5:51	5:57	6:04	6:13	6:29
6:15	6:21	6:27	6:34	6:43	6:59
6:45	6:51	6:57	7:04	7:13	7:29
7:15	7:21	7:27	7:34	7:43	7:59
7:45	7:51	7:57	8:04	8:13	8:29
8:15	8:21	8:27	8:34	8:45	9:01
8:45	8:52	8:59	9:06	9:17	9:34
9:15	9:22	9:29	9:36	9:47	10:04
9:45	9:52	9:59	10:06	10:17	10:34
10:15	10:22	10:29	10:36	10:47	11:04
10:45	10:52	10:59	11:06	11:17	11:34
11:15	11:22	11:29	11:36	11:47	**12:04**
11:45	11:52	11:59	**12:06**	**12:17**	**12:34**
12:15	**12:22**	**12:29**	**12:36**	**12:47**	**1:04**
12:45	**12:52**	**12:59**	**1:06**	**1:17**	**1:34**
1:15	**1:22**	**1:29**	**1:36**	**1:47**	**2:04**
1:45	**1:52**	**1:59**	**2:06**	**2:17**	**2:34**
2:15	**2:22**	**2:29**	**2:36**	**2:47**	**3:04**
2:45	**2:52**	**2:59**	**3:06**	**3:17**	**3:34**
3:15	**3:22**	**3:29**	**3:36**	**3:47**	**4:04**
3:45	**3:52**	**3:59**	**4:06**	**4:17**	**4:34**
4:15	**4:22**	**4:29**	**4:36**	**4:47**	**5:04**
4:45	**4:52**	**4:59**	**5:06**	**5:17**	**5:34**
5:15	**5:22**	**5:29**	**5:36**	**5:47**	**6:04**
5:45	**5:52**	**5:59**	**6:06**	**6:17**	**6:34**
6:45	**6:52**	**6:59**	**7:06**	**7:17**	**7:34**
7:45	**7:52**	**7:59**	**8:06**	**8:17**	**8:34**
8:45	**8:52**	**8:59**	**9:06**	**9:17**	**9:34**
9:45	**9:52**	**9:59**	**10:06**	**10:16**	**10:33**
Saturday / Sábado					
7:00	7:06	7:13	7:20	7:29	7:45
8:00	8:06	8:13	8:20	8:29	8:45
9:00	9:06	9:13	9:20	9:29	9:45
10:00	10:06	10:13	10:20	10:31	10:48
11:00	11:06	11:13	11:20	11:31	11:48
12:00	**12:06**	**12:13**	**12:20**	**12:31**	**12:48**
1:00	**1:06**	**1:13**	**1:20**	**1:31**	**1:48**
2:00	**2:06**	**2:13**	**2:20**	**2:31**	**2:48**
3:00	**3:06**	**3:13**	**3:20**	**3:31**	**3:48**
4:00	**4:06**	**4:13**	**4:20**	**4:31**	**4:48**
5:00	**5:06**	**5:13**	**5:20**	**5:30**	**5:46**
6:00	**6:06**	**6:13**	**6:20**	**6:30**	**6:46**
7:00	**7:06**	**7:13**	**7:20**	**7:30**	**7:46**
8:00	**8:06**	**8:13**	**8:20**	**8:30**	**8:46**
Sunday / Domingo					
7:00	7:06	7:13	7:20	7:29	7:45
8:00	8:06	8:13	8:20	8:29	8:45
9:00	9:06	9:13	9:20	9:29	9:45
10:00	10:06	10:13	10:20	10:31	10:48
11:00	11:06	11:13	11:20	11:31	11:48
12:00	**12:06**	**12:13**	**12:20**	**12:31**	**12:48**
1:00	**1:06**	**1:13**	**1:20**	**1:31**	**1:48**
2:00	**2:06**	**2:13**	**2:20**	**2:31**	**2:48**
3:00	**3:06**	**3:13**	**3:20**	**3:31**	**3:48**
4:00	**4:06**	**4:13**	**4:20**	**4:31**	**4:48**
5:00	**5:06**	**5:13**	**5:20**	**5:30**	**5:46**
6:00	**6:06**	**6:13**	**6:20**	**6:30**	**6:46**
7:00	**7:06**	**7:13**	**7:20**	**7:30**	**7:46**

Eastbound to South Valley Transit Center

Depart Antelope Valley Mall Stop # 0028	Palmdale Transportation Center Stop # 1008	10th St. E & Ave R Stop # 0091	Ave. S & 25th St. E Stop # 0284	47th St. E & Ave. S Stop # 0902	Arrive South Valley Transit Center Stop # 1007
5:45	6:01	6:10	6:17	6:24	6:32
6:15	6:31	6:40	6:47	6:54	7:02
6:45	7:01	7:10	7:17	7:24	7:32
7:15	7:31	7:40	7:47	7:54	8:02
7:45	8:01	8:10	8:17	8:24	8:32
8:15	8:31	8:40	8:47	8:54	9:02
8:45	9:01	9:10	9:17	9:25	9:34
9:15	9:34	9:43	9:50	9:58	10:07
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10:45	11:04	11:13	11:20	11:28	11:37
11:15	11:34	11:43	11:50	11:58	**12:07**
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9:45	**10:02**	**10:11**	**10:18**	**10:25**	**10:33**
Saturday / Sábado					
7:00	7:16	7:25	7:32	7:39	7:47
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Sunday / Domingo					
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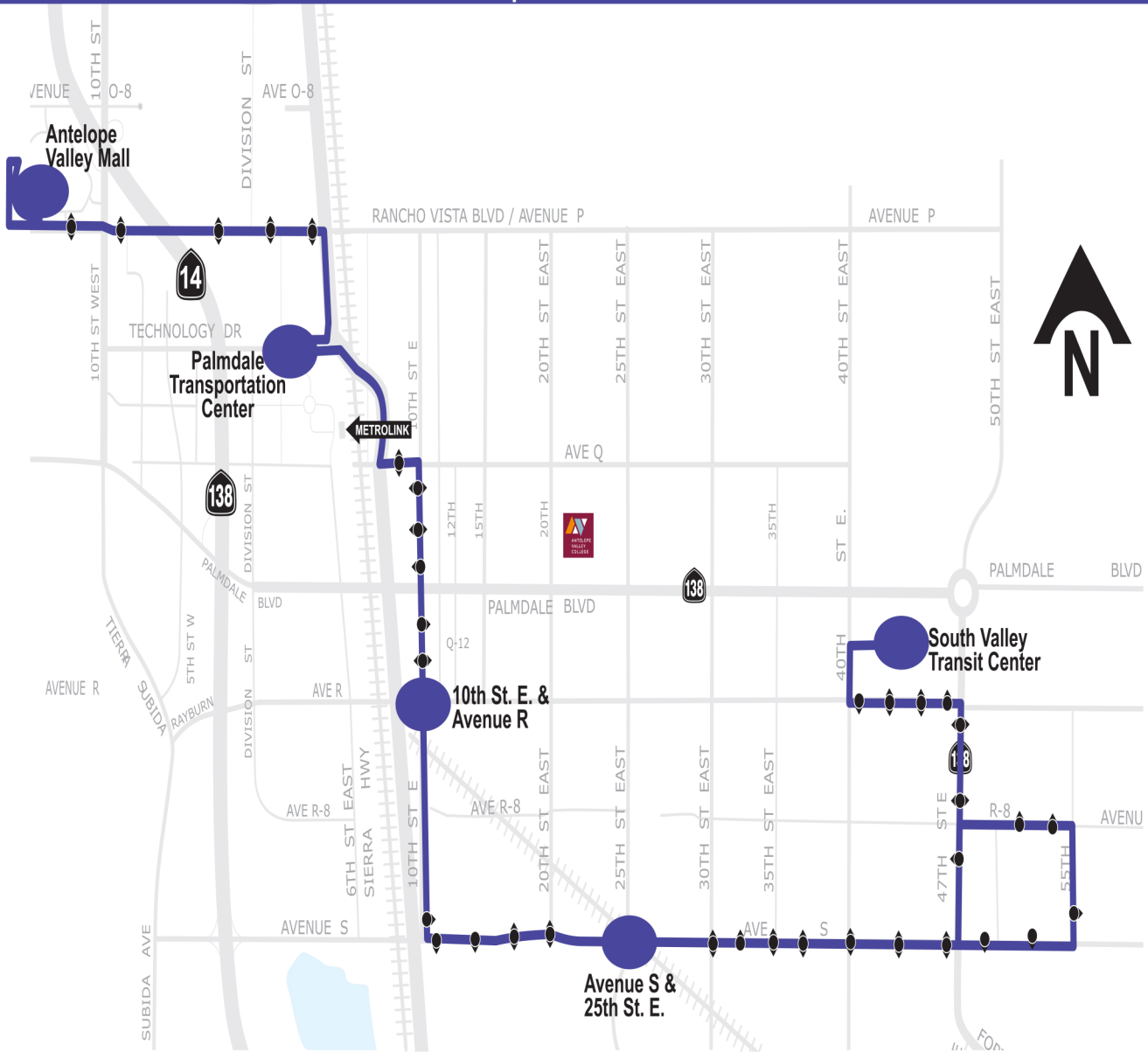
7:00	**7:17**	**7:27**	**7:37**	**7:45**	**7:54**

3

Westbound to AV Mall via Avenue S

Eastbound to South Valley Transit Center via Avenue S



Maverik Gas Station
Vehicle Miles Traveled (VMT) Analysis

Prepared for:

The Altum Group
Strive Higher

44-600 Village Court, Suite 100
Palm Desert CA, 92260

Prepared by:

INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING AND ENGINEERING

23905 Clinton Keith Road 114-280
Wildomar, CA 92595

August 2023

1.0 PROJECT INTRODUCTION

The purpose of this report is to evaluate the project's VMT analysis requirements and compliance with Senate Bill 743 (SB 743) and The California Environmental Quality Act (CEQA).

1.1 PROJECT DESCRIPTION

The Project is proposing the construction of a service station with 24 vehicle fueling positions and 5,637 square feet (sf) of convenience store.

Access to the Project site will be provided via one (1) proposed right-in/right-out only driveway along W Avenue S that will be restricted by the construction of a raised median and one (1) proposed driveway that would result as the north leg of the existing W Avenue S and Guyon Avenue intersection.

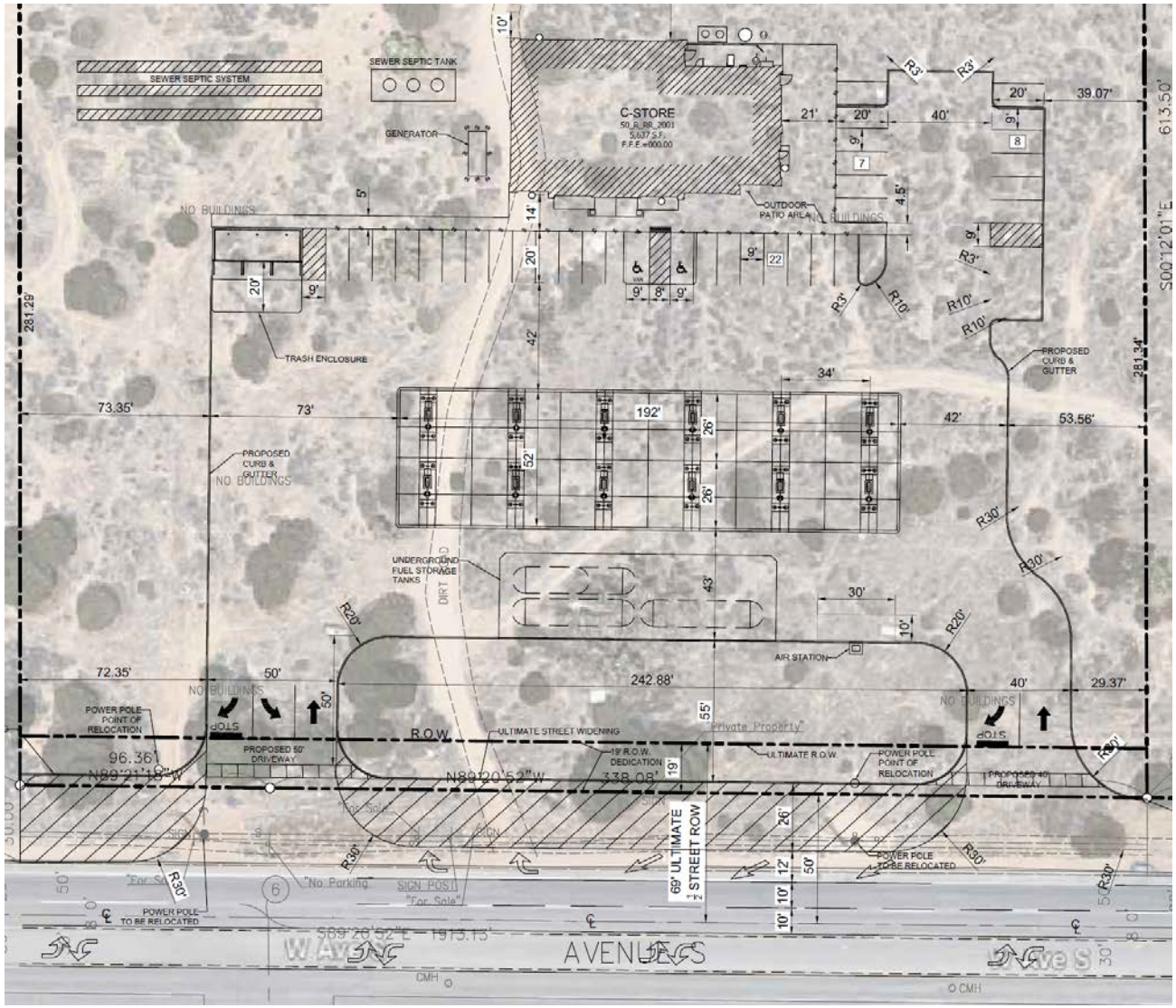
Figure 1-1 shows the Project site plan.

1.2 SENATE BILL 743

On September 27, 2013, SB 743 was signed into State law and started a process intended to fundamentally change transportation impact analysis as part of the CEQA compliance. The California Natural Resource Agency updated the CEQA transportation analysis guidelines in 2018. In this update automobile delay and LOS metrics are no longer to be used in determining transportation impacts. Instead VMT metrics will serve as the basis in determining impacts. Furthermore, the guidelines stated that after July 1, 2020, transportation analysis under CEQA must use VMT to determine impacts for land use projects.

1.3 GUIDANCE DOCUMENTS

The project is located in the City of Palmdale and within the jurisdiction of Los Angeles County. The County has adopted guidance on evaluating VMT for transportation impacts under CEQA. For this project the County of Los Angeles', "Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report", June 2020, hereafter referred to as Guidelines.


SEWER SEPTIC SYSTEM
SEWER SEPTIC TANK
GENERATOR
C-STORE
NO BUILDINGS
TRASH ENCLOSURE
OUTDOOR PATIO AREA
PROPOSED CURB & GUTTER
UNDERGROUND FUEL STORAGE TANKS
DIRT ROAD
AIR STATION
POWER POLE POINT OF RELOCATION
PROPOSED 50' DRIVEWAY
R.O.W.
ULTIMATE STREET WIDENING
19' R.O.W. DEDICATION
ULTIMATE R.O.W.
"Private Property"
69' ULTIMATE STREET ROW
POWER POLE TO BE RELOCATED
"No Parking"
SIGN POST
"For Sale"
W Avenue
AVENUE
Avenue S
613.50'
281.29'
281.34'
S00°12'01"E
N89°21'18"W
N89°20'52"W
S89°20'52"E 1915.15'
338.08'
96.361

2.0 ANALYSIS METHODOLGY

The Guidelines adopted by Los Angeles County require a 4-step process for implementing SB 743 and VMT analysis:

1. Baseline VMT – Describes the process for determining the County Baseline VMT and describes the analysis methodology and VMT metrics for Los Angeles County.
2. VMT Screening – Provides the options for project screening to determine if a VMT analysis is required and summarizes the VMT analysis process for projects that do not meet the screening criteria.
3. VMT Impact Thresholds – Based on the required VMT Measure the project will need to identify the appropriate VMT Measure threshold as required in the Guidelines.
4. VMT Mitigation Strategies – If the project would have a VMT impact under CEQA the project would need to mitigate the impact to the extent feasible and disclose whether the project would fully mitigate its impact or require additional analysis to reduce VMT and meet the County's thresholds are provided.

2.1 SCREENING CRITERIA

2.1.1 Los Angeles County Transportation Analysis Guidelines Screening Criteria

The Guidelines recognize that certain projects based on type, location, size and other contexts could lead to a *presumption of less than significance* (i.e. the project's VMT would not cause a transportation impact) and would not need additional VMT analysis. The Guidelines provide the following screening criteria:

1. *Project Size*: A project that generates 110 or fewer daily trips.
2. *Locally Serving Retail*: A project that has locally serving retail uses that are 50,000 square feet or less, including specialty retail, shopping center, grocery store, pharmacy, financial services/banks, fitness center or health club, restaurant, and café. If the project contains other land uses, those uses need to be considered under other applicable screening criteria.
3. *Transit Proximity*: A project that is located within a ½ mile of a major transit stop or within a ½ mile of a bus stop on a high-quality transit corridor (HQTC). A major transit stop is a rail station or a stop with two or more intersecting bus routes with service frequency of 15 minutes or less during commute periods. A HQTC is a corridor with fixed route bus service with frequency of 15 minutes or less during peak commute periods. In addition, the project should have the following characteristics:
   - A floor Area Ratio (FAR) of 0.75 or greater
   - Is consistent with the applicable SCAG Sustainable Communities Strategy (as determined by the County)
   - Does not provide more parking than required by the County
   - Does not replacing affordable housing units
4. *Affordable Housing:* A residential project that provides affordable housing units.
5. *Transportation Facilities*: Transportation projects that promote non-auto travel, improve safety, or improve traffic operations at current bottlenecks, such as transit, bicycle and pedestrian facilities, intersection traffic control (e.g., traffic signals or roundabouts), or widening at intersections to provide new turn lanes (see Attachment C for detailed list).

2.2 VMT ANALYSIS

Projects that do not meet any of the screening criteria identified would need to perform a VMT analysis per the Guidelines. The project would need evaluate the appropriate VMT metrics and compare them to thresholds to determine significance as defined by the Guidelines.

2.2.1 VMT Measures

The Guidelines assign the appropriate VMT Measure for land use projects based on land use type. Residential and Non-Residential land uses are required to use the relevant VMT efficiency metric, VMT per Capita and Work VMT per Employee, respectively. Retail and similar uses are required to use a total VMT metric to measure the net change in VMT a project would create due to the "customer component" of the project.

2.3 VMT THRESHOLDS

Once a project identifies the appropriate VMT measures for the proposed land uses it would need to be compared to thresholds for those metrics to determine significance under CEQA. The County has chosen to base its thresholds on the county and county-wide averages.

The thresholds as defined by the Guidelines provides are as follows:

- Residential Project: Project exceeds 16.8% below the North or South County Baseline VMT for home-based VMT per capita
- Employment (Commercial or Industrial) Project: Project exceeds 16.8% below the North or South County Baseline VMT for home-based work VMT per employee
- Regional Retail Project: Project results in a net increase in total VMT per service population in comparison to the North or South County Baseline VMT
- Mixed-Use Projects: Evaluate each project land use component separately using the criteria above
- Land Use Plans (Community Plan, Specific Plan): Total VMT per service population generated by the Plan exceeds 16.8% below the North or South County Baseline VMT
- Other land use types: Project exceeds 16.8% below the North or South County Baseline VMT. For land use types not listed above, the County can determine the appropriate VMT metric depending on the project characteristics. For projects that are generally producing job-related travel, the employment generating VMT (home-based work VMT per employee) can be compared to the applicable County baseline. For other projects, the total VMT per service population can be compared to the County baseline, or the net change in VMT can be compared within the study area.
- Transportation Projects or Plans: Project results in an increase in VMT in comparison to the baseline VMT in the study area

3.0 PROJECT ANALYSIS

The Project is proposing the construction of a service station with 24 vehicle fueling positions and 5,637 square feet (sf) of convenience store.

3.1 EMPLOYMENT USE ASSESSMENT

3.1.1 Screening Criteria Assessment

Screening Criteria Locally Serving Retail

Based on the Guidelines, Retail buildings with area less than or equal to 50,000 square feet would be presumed to cause a less-than-significant impact, the project would potentially have a total of 5,637 square feet of retail space. **The project's retail component does qualify Locally Serving Retail screening**.

3.1.2 VMT Analysis

As described in Section 3.3.1, the project's employment component would qualify for screening for being a *Locally Serving Retail* project. **For this reason, the project's employment component would be presumed to be less than significant for VMT impacts.**

3.2 VMT IMPACT ASSESSMENT AND CONCLUSION

The proposed project is presumed to be less than significant for VMT impacts due to all the proposed use meeting at least one of the County's screening criteria outlined in Section 2.1. The project's VMT impact assessment for the proposed uses is summarized in Table 1:

Table 1: Summary of VMT Impacts

Land Use Type	Proposed Uses	Impact	Commentary
Retail	Fueling Station	Presumed to be less than significant	Meets County's Screening Criteria for Local-Serving Retail.

Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
4.4 Biological Resources			
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 Wildlife 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 Wildlife or U.S. Fish and Wildlife Service? d) 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 sites?	**Mitigation Measure:** **BIO-1:** A desert vegetation preservation plan be prepared and submitted to the City of Palmdale by the Project Applicant as part of the proposed Project development application in order to maximize the amount of native desert vegetation that can be preserved throughout development. This plan shall include: •A written report and site plan which depicts the location of each California juniper, discusses their age and health, and identifies and locates all trees and shrubs which can be saved in place or located; •A site landscaping plan showing the proposed locations of all Western Joshua trees, California junipers, and any other native desert vegetation that will remain on-site; •A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee, in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured;	**Responsibility:** Applicant **Action:** Development of Bird Survey with Emphasis on Burrowing Owls. **Timing:** 3 days prior to any permit involving the following: vegetation removal or ground disturbing activities,.	Less than Significant

Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
	•Such other and further information as the Director of Planning may deem necessary to fulfill the purposes and intent of this chapter in a particular case. **BIO-2:** An Incidental Take Permit for the removal of western Joshua trees shall be obtained from CDFW in compliance with CDFW regulations and requirements prior to the removal of western Joshua trees and the issuance of any grading or construction permit. In addition, all applicable fees as established in the Western Joshua Tree Conservation Act shall be paid by the Project developer prior to the removal of any western Joshua trees. BIO-3: A minimum standard of preservation for California juniper shall be met by the Project Applicant in accordance with PMC Chapter 14.04.070 of the City of Palmdale municipal code. If this standard cannot be met, the developer shall pay all associated in-lieu fees as required by the City. **BIO-4:** No more than 14 days prior to the commencement of construction activities, a qualified biologist shall survey in compliance with CDFW standards and regulations the Project site to determine whether burrowing owl or on-site burrows suitable for owls are present on the site. If burrowing owl is found to be present on the Project site, CDFW shall be consulted, and all		

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
	applicable protocols, as established by CDFW, shall be adhered to prior the commencement of construction activities. **BIO-5:** Construction-related activities shall be conducted outside of the nesting bird season (February 1 through August 31). If construction must occur during the nesting bird season from to February 1 through August 31, a qualified biologist shall conduct a nesting bird survey of the Project site no more than 72 hours prior to the commencement of vegetation removal activities. If no active nests or breeding activities are found, construction activities may begin. If an active nest and/or breeding activities are determined to be present, the nest site/breeding habitat shall be delineated ground disturbing and flagged by a biological monitor, and a buffer of no less than 300 feet (500 feet for raptors) shall be established and avoided in which no construction activities are permitted until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the Project. The buffer may be modified for other needs proposed or determine appropriate by the Biology Monitor to minimize impacts. BIO-6: Prior to the commencement of ground disturbing activities, a floristic		

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
	survey shall be conducted for short-joint beavertail. If detected, each individual shall be flagged or fenced for avoidance prior to the commencement of construction activities. If avoidance is not feasible, a qualified biologist shall develop a short-join beavertail removal and reintroduction plan for any impacted plants. This plan must be approved by CDFW and the City prior to the issuance of grading permits. **BIO-7:** Prior to the commencement of ground disturbing activities, a qualified biologist shall conduct clearance surveys for desert tortoises on the Project site. Clearance surveys shall follow the United States Fish and Wildlife Services (USFWS) Clearance Survey Protocol for the Mojave Desert Tortoise (May 2019). If desert tortoise is determined to be present on the Project site, the Project developer shall develop and implement a mitigation and monitoring plan in consultation with USFWS and CDFW and the City shall be notified. **BIO-8:** Prior to the commencement of ground disturbing activities, a qualified biologist shall conduct a survey for Crotch's bumblebee during the species' active period (March to July). This survey shall include a search for Crotch's bumblebee activity and the presence of ground nests. If a ground nest is observed, the nest shall remain in place		

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
	until it is determined to be no longer active by a qualified biologist. If Crotch's bumblebee is present on the Project site and may occur during Project activities, the Project Applicant shall consult with CDFW regarding the implementation of avoidance measures, or the issuance of an Incidental Take Permit. **BIO-9:** Prior to the commencement of ground disturbing activities, a qualified biologist shall conduct surveys for Mohave ground squirrel in accordance with the California Department of Fish and Wildlife Mohave Ground Squirrel Survey Guidelines (January 2003). Surveys for Mohave ground squirrels are performed between March 15 and July 15 using standard live trapping techniques. A total of three rounds of trapping are required during this time, although trapping shall cease once a Mohave ground squirrel is captured or observed. If these surveys obtain positive results for Mohave ground squirrel, or if Mohave ground squirrel presence is assumed within the Project site, the Project developer shall obtain Incidental Take Permit from CDFW prior to the commencement of construction activities. **BIO-10:** No more than 72 hours prior to the commencement of construction activities, a qualified biologist shall conduct a survey for California glossy		

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
	snake, coast horned lizard, and Northern California legless lizard. If any of these species are found to be present on the Project site, no construction activities shall commence until the individuals have left the area or have been relocated by a qualified biologist in accordance with CDFW protocols. **BIO-11:** Prior to the fill, alteration, or other impacts to the bed or bank of the existing onsite ephemeral drainage, a jurisdictional delineation of this drainage shall be carried out to determine which jurisdiction(s) this drainage falls under. Dependent upon the results of the jurisdictional delineation a CDFW Notification of Streambed Alteration or Water Discharge Requirement pursuant to the Porter-Cologne Water Quality Act may be required. The applicable permit shall be obtained prior to the fill, alteration, or other impacts to the bed or bank of this ephemeral drainage.		
4.5 Cultural Resources			
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 dedicated cemeteries?	**Mitigation Measure:** **CUL-1:** In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area	**Responsibility:** Applicant **Action:** Contact the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN), if cultural resources are discovered.	Less than Significant

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
	may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. **CUL-2:** If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly. **CUL-3:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.	**Timing:** During implementation of the project if cultural resources are discovered.	

Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
4.7 Geology and Soils			
b) Result in substantial soil erosion or the loss of topsoil?	**Mitigation Measure:** **GEO-1:** Prior to issuance of grading permit, the applicant shall confirm that grading and construction plans incorporate recommendations provided in the Geotechnic report the design recommendations shall address the earth work all vegetation, rocks, topsoil, loose and disturbed soils shall be stripped from the site during clearing and grubbing activities. Prior to site grading fill, a certified geologist shall be consulted to determine the depth and amount of topsoil that is to be removed. **GEO-2:** All soil excavations shall be conducted under the Occupation Safety and Hazard Administration (OSHA)'s safety guideline and shall be inspected by a qualified geologist. If any signs of instability or excessive sloughing are noted, immediate remedial action shall be initiated by the geologist or geotechnical engineer on site. **GEO-3:** All site grading fill material shall be approved by a geotechnical engineer prior to soil placement.	**Responsibility:** Applicant **Action:** Apply for grading permits, Have a certified geologist on contract. **Timing:** Prior to the issuance of any Permits.	Less than Significant
4.17 Transportation and Traffic			

Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
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)?	**Mitigation Measure:** **TRAN-1:** Project will signalize the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S to the satisfaction of the City Engineer. **TRAN-2:** Project will construct required improvements along the property frontage including curb, gutter, sidewalk and exclusive right turn lane at Guyon Avenue/Project Driveway 1 and W Avenue S to the satisfaction of the City Engineer. **TRAN-3:** Project will construct a raised median along the property frontage including an eastbound left turn lane at the intersection of Guyon Avenue/Project Driveway 1 and W Avenue S with a recommended length of 100 feet minimum with the appropriate transition to the satisfaction of the City Engineer.	**Responsibility:** Applicant **Action:** Preparation of plans detailing improvements. **Timing:** Approval by the Engineering Department of the City of Palmdale before any permits are issued for the first phase of the project.	Less than Significant
4.18 Tribal Cultural Resources			

Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measure	Action ,Responsibility and Timing	Impact after Mitigation
ai) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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: **aii)** 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; **aiii)** 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	**TCR-1:** The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site. **TCR-2:** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.	**Responsibility:** Applicant **Action:** Contact the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN). **Timing:** During project implementation, If an cultural resources are found	Less than Significant

City Council Staff Report

DATE: **MARCH 18, 2025**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
ENGINEERING DIVISION

DISTRICT: **1**

SUBJECT: **ADOPT RESOLUTION NO. CC 2025-023, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE ORDERING THE VACATION OF PORTIONS OF 8TH STREET EAST SOUTH OF RANCHO VISTA BOULEVARD, NORTH OF EAST AVENUE P-8 AND THE RESERVATION OF UTILITY EASEMENTS THEREIN**

RECOMMENDATION

Staff recommend that the City Council:

1. Adopt Resolution No. CC 2025-023, a Resolution of the City Council of the City of Palmdale ordering the vacation of portions of 8th Street East south of Rancho Vista Boulevard, north of East Avenue P-8 and the reservation of utility easements therein; and,

2. Authorize the Mayor to execute Resolution No. CC 2025-023, ordering the vacation of portions of 8th Street East south of Rancho Vista Boulevard, north of East Avenue P-8 and the reservation of utility easements therein.

BACKGROUND

In March 2024, Covington Development Partners, LLC, applied for a street vacation as part of their new commercial development located along 8th Street East. They have requested the vacation of portions of the existing right-of-way along the property frontage as the improvements were never constructed and are not necessary to serve their development. This request is linked to the approval of the Covington project improvement plans and as a condition of approval for Site Plan Review No. SPR22-012. The property for the current Covington commercial building project was previously part of an auto storage development. As such, it was conditioned to dedicate right-of-way to serve their land use specifically. The right-of-way dedication included multiple driveway locations and a right-turn pocket. However, the auto storage development was never completed, and no new public improvements were ever built.

DISCUSSION

During the entitlement process for the Covington development, off-site improvements and site access were reviewed. It was determined that the previously dedicated right turn lane, one driveway, and several expanded entry curb radii along 8th Street East were no longer necessary. As a result, the right-of-way previously dedicated is the subject of this proposed street vacation.

According to the Streets and Highway Code (SHC), Section 8320, the local agency (City) processing the street vacation under the General Vacation Procedure shall initiate the vacation proceedings by setting the date, hour, and place for a public hearing. This action is followed by the notification of public utility providers, posting notices at the property, and publication of the vacation information and public hearing schedule in the local newspaper. The requirement timelines are outlined below for reference.

On February 18, 2025, the City Council of the City of Palmdale adopted Resolution No. CC 2025-009 declaring its intent to conduct a public hearing on the proposed street vacation and set the date, time, and location for said hearing as March 18, 2025.

On November 6, 2024, Public Works staff mailed public utility providers to notify them of the proposed street vacation in accordance with SHC Section 8347.

On March 04, 2025, notices were posted along the property frontage of 8th Street East in accordance with SHC section 8323.

According to SHC section 8322(a), notices of the public hearing were published in the Antelope Valley Press for two successive weeks (March 04 and March 11) before the public hearing.

Following the public hearing, the Council will consider ordering the vacation of portions of 8th Street East south of Rancho Vista and north of East Avenue P-8 with the reservation of all existing utility easements therein. If so ordered, the vacation will include the areas described in Exhibit “A” and shown in Exhibit “B” of Resolution No. CC 2025-023.

The vacation proceedings will be finalized once Resolution No. CC 2025-023 has been adopted and then recorded with the Los Angeles County Registrar-Recorder’s Office in accordance with section 8325 of the SHC.

FISCAL IMPACT

$0; There is no fiscal impact to the City as a result of this action.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

A. Seek innovative, cost effective, customer focused methods of service delivery

Prepared by:	Leonardo Torres, P.E., Director of Public Works
Certified as to availability of Funds:	Janelle Samson, Director of Operations
Approved by:	Ronda Perez, City Manager
Approved as to form:	William P. Curley, III, City Attorney

ATTACHMENTS

Reso. No. CC 2025-023

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2025-023

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE ORDERING THE VACATION OF PORTIONS OF 8TH STREET EAST SOUTH OF RANCHO VISTA BOULEVARD, NORTH OF EAST AVENUE P-8 AND THE RESERVATION OF THE UTILITY EASEMENTS THEREIN.

WHEREAS, the Engineering Division received an application from the property owner of parcel number 3022-001-027 located on the west side of 8th Street East, south of Rancho Vista Boulevard, north of East Avenue P-8 requesting the City move forward with proceedings to vacate portions of 8th Street East no longer deemed necessary; and

WHEREAS, the proposed vacation has been examined and determined to not negatively impact the general public and has been found to be consistent with the Circulation and Mobility Element of the City's General Plan; and

WHEREAS, the improvements within the right of way to be vacated were never constructed and are not necessary for a new commercial development; and

WHEREAS, the new development was approved through Site Plan Review (SPR) 22-012 and Environmental Impact Report (EIR) 23-002 (SCH No. 2022080663) and was adopted by the Planning Commission on August 10, 2023 (Resolution No. PC-2023-017); and

WHEREAS, the new project was determined not to have any adverse or significant impacts on the environment following the implementation of specific mitigation measures.

WHEREAS, The City Council of the City of Palmdale has adopted Resolution No. CC 2025-009 declaring its intent to conduct a public hearing on the proposed vacation, setting the date, time, and location for said hearing for March 18, 2025; and

WHEREAS, Notices of the proposed vacation were sent to utility providers and published in accordance with Street and Highway Code Section 8322, 8323, and 8347.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE, AND ORDER AS FOLLOWS:

SECTION 1. The City Council of the City of Palmdale hereby orders the vacation of portions of 8th Street East south of Rancho Vista Boulevard and north of East Avenue P-8, located within the City of Palmdale, as described in Exhibit "A" and shown in Exhibit "B".

SECTION 2. The City Council of the City of Palmdale, in vacating the portions of said street described in Exhibit "A", elects to proceed under and in accordance with the provisions of the Public Streets, Highways, and Service Easements Vacation Law Division 9, Part 3, Chapter 3 of the Streets and Highway Code of the State of California.

SECTION 3. Nothing in this Resolution shall in any way affect or disturb any existing easement for public utility purposes belonging to either the City of Palmdale or any other public entity and as specifically identified below:

A. There is hereby specifically reserved for the CITY OF PALMDALE, an easement and right at any time, or from time to time, to construct, maintain, operate, replace, remove, and renew sanitary sewers and storm drains and appurtenant structures in, upon, over, and across the entire area proposed to be vacated and, pursuant to any existing franchise or renewals thereof, or otherwise, to construct, maintain, operate, replace, remove, renew, and enlarge lines of pipe, conduits, cables, wires, poles, and other convenient structures, equipment, and fixtures for the operation of gas pipelines, telegraphic, and telephone lines, railroad lines, and for the transportation or distribution of electric energy, petroleum and its products, water, and for incidental purposes, including access to protect these works from all hazards in, upon, and over across the entire area proposed to be vacated, including the right of ingress and egress thereto.

SECTION 4. The City Council finds the vacation of portions of 8th Street East south of Rancho Vista Boulevard and north of East Avenue P-8 is consistent with the City of Palmdale General Plan as it conforms to the goals, objectives, and policies of that Plan. More specifically, the proposed new development improvements are consistent with Circulation and Mobility Element Policy CM-2.8 Growth Management: Ensure that the cumulative and regional impacts of new development on the circulation system are mitigated to the extent feasible, concurrent with development.

SECTION 6. The City Clerk shall certify the adoption of this resolution. The City Clerk is also authorized to cause a certified copy of this Resolution to be filed with the Los Angeles County Registrar-Recorder's office to finalize the vacation process.

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

_____
Richard J. Loa, Mayor

Approved as to form:

ATTEST:

_____
William P. Curley III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 18th day of March 2025 by the following roll call vote:

AYES: _____

NOES:_____

ABSTAIN:_____ABSENT:_____

Date: _____ _____
Rochelle Scott, City Clerk