PALMDALE SELF STORAGE FACILITY

Initial Study and Mitigated Negative Declaration (IS/MND)

CEQA Analysis Prepared for:

City of Palmdale
Economic and Community Development - Planning
38250 Sierra Highway
Palmdale, CA 93550

Prepared by:

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April 2026

Project No. 7321

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PROJECT INFORMATION SHEET

1. Project Title	Brixx Development Mini Storage Facility
2. CEQA Lead Agency	**City of Palmdale** Planning Division Development Services Building 38250 Sierra Highway Palmdale, CA 93550 Phone Number: (661) 267-5200 Email Address: planningdiv@cityofpalmdale.org
3. Project Applicant	Brett McDonough, Developer **Brixx Development** 2680 East Seychelles Court Salt Lake City, UT 84121 Phone Number: (801) 792-1540 Email Address: brett@brixxdevelopment.com
4. Project Location	58th St E & E Palmdale Blvd Palmdale, CA 93552
5. Assessor's Parcel Numbers	APN 3023-001-084
6. Project Site General Plan Designation(s)	Current: Employment Flex (EMPFX)
7. Project Site Zoning Designation(s)	Current: Light Industrial (LI)
8. Surrounding Land Uses and Setting	Multifamily residences are located to the south of the project site. To the north of the project site is vacant/undeveloped land. The project site is located at East Palmdale Blvd and 60th Street to the west.
9. Description of Project	The proposed project entails the construction and operation of a mini-storage facility consisting of nine buildings totaling 97,333 sq. ft., including 900 sq. ft. of office space on an approximately 5-acre project site in the City of Palmdale, California.
11. Selected Agencies whose Approval is Required	City of Palmdale
12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code §	Letters were sent by the City of Palmdale (the Lead Agency), to local Native American tribes asking if they wished to participate in AB 52 consultation concerning the proposed project in the City of Palmdale on September 23, 2025. Tribes have up to 30 days in which to respond to notification of the project. For the proposed project, those tribe(s) that

21080.3.1? If so, has consultation begun?	requested consultation will be contacted by the City per Public Resources Code § 21074. The Fernandeno Tataviam Band of Mission Indians responded on October 31, 2025 and provided mitigation measures to include in the Tribal Cultural Resources section. The Tribe requested to review these again before consultation is concluded.
13. Other Public Agencies	Agencies that will review the proposed project include the following: • Antelope Valley Air Quality Management District (AVAQMD) • California Air Resources Board (ARB) • U.S. Environmental Protection Agency (USEPA) • Native American Heritage Commission (NAHC) • U.S. Army Corps of Engineers (USACE) • California Department of Fish and Wildlife (CDFW)

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Term
AAQS	ambient air quality standards
AB 32	California Global Warming Solutions Act of 2006 (Assembly Bill 32)
AB 52	Assembly Bill 52
ACM(s)	Asbestos-Containing Material(s)
ADA	Americans with Disabilities Act
AFY	Acre-feet per year
AIA	Airport Influence Area
AMI	Area Median Income
amsl	above mean sea level
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQA	Air Quality Analysis
AQMP	Air Quality Management Plan
AR4	Fourth Assessment Report
ARB	California Air Resources Board
BAU	business as usual
BIOS	Biogeographic Information and Observation System
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CAL Green	California Green Building Standards
Caltrans	California Department of Transportation
CAO(s)	Cleanup and Abatement Order(s)
CAPCOA	California Air Pollution Control Officers Association
CASGEM	California Statewide Groundwater Elevation Monitoring
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDO(s)	Cease and Desist Order(s)
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CHRIS	California Historic Resources Inventory System
City	City of Palmdale
CMP	Congestion Management Program
CMP	corrugated metal pipe

Acronym/Abbreviation	Term
CMPHS	CMP Highway System
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRC	California Residential Code
CWA	Clean Water Act
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibel scale
DOC	California Department of Conservation
DOSH	California Division of Safety and Health
DTSC	Department of Toxic Substances Control
du/ac	Dwellling units per acre
DWR	Department of Water Resources
EIR	Environmental Impact Report
EMS	Emergency Medical Services
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA	Environmental Site Assessment
ESRL	Earth System Research Laboratory
EV	electric vehicle
EVCS	electric vehicle charging station
°F	degrees Fahrenheit
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gases
GIS	Geographic Information System
GPCD	gallons per capita per day
gpd	gallons per day
GSWC	Golden State Water Company
GWP	global warming potential
HABS	Historic American Building Survey
HCP	Habitat Conservation Plan
HFCs	hydroflourocarbons
HU	Hydrologic Unit
HVAC	heating, ventiliation and air conditioning
IPCC	Intergovernmental Panel on Climate Change
ISA	International Society of Arboriculture
IS/MND	Initial Study/Mitigated Negative Declaration
LACoSD	Los Angeles County Sheriff's Department

Acronym/Abbreviation	Term
LACoFD	Los Angeles County Fire Department
L_{90}	noise level that is exceeded 90% of the time
L_{eq}	equivalent noise level
LBP	Lead-Based Paint
LID	Low Impact Development
L_{max}	root mean square maximum noise level
LOS	Level of Service
LRA	Local Responsibility Area
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MLD	Most Likely Descendant
MM(s)	mitigation measure(s)
MMRP	Mitigation Monitoring and Reporting Program
$MMTCO_2e$	million metric tons of CO2e
MND	Mitigated Negative Declaration
MPAH	Master Plan of Arterial Highways
MRLA	Major Land Resource Area
MRZ	Mineral Resource Zone
MS4	Municiple Separate Storm Sewer permit
MT	Metric tons
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Core	National Community Renaissance
NASA	National Aeronautics and Space Administration
NCCP	Natural Communities Conservation Plan
ND	Negative Declaration
NO	nitric oxide
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
O_3	Ozone
OPR	Governor's Office of Planning and Research (now LCI)
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinated biphenyl
PFCs	perfluorocarbons
PFLSD	Placentia Fire and Life Safety Department
PM	particulate matter
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
ppm	parts per million
PPV	peak particle velocity

Acronym/Abbreviation	Term
PWD	Palmdale Water District
PWRP	Palmdale Water Reclamation Plant
R-1	Single-family Residential zoning designation
R-3	High Density Residential zoning designation
RCRA	Resource Conservation and Recovery Act
RECs	Recognized Environmental Condition(s)
R-G	Medium Density Residential zoning designation
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROG	Reactive organic gases
ROW	Right-of-way
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
§	section
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SR-2	State Route 2
SRA	State Responsibility Area
SRAs	source receptor areas
SRRE	Source Reduction and Recycling Element
STIP	Statewide Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAPs	Transportation Assembly Points
T-C	Town Center zoning designation
TCRs	Tribal Cultural Resources
TMP	Traffic Management Plan
UFPO	Urban Forest Protection Ordinance
UEI	Ultrasystems Environmental, Inc.
U.S.	United States
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
VdB	vibration decibels
VCP	vitrified clay pipe
VHFHSZ(s)	very high fire hazard severity zone(s)

Acronym/Abbreviation	Term
VMT	vehicle miles traveled
VOC	volatile organic compound
WEG	wind erodibility group
WM	Waste Management
WQMP	Water Quality Management Plan
WRI	World Resources Institute
ybp	years before present

1.0 INTRODUCTION

1.1 Proposed Project

The City of Palmdale (City) is processing a request to implement a series of discretionary actions that would ultimately allow for the development of a mini-storage facility.

1.1.1 Project Components

- The proposed project would consist of: Construction of a mini-storage facility would be located on the north side of Palmdale Boulevard and east of 58th Street East, within the City of Palmdale.

- The Facility would include eight buildings totaling 97,333 sq. ft, including 900 sq. ft. office space, on an approximately 5.0-acre project site.

1.1.2 Estimated Construction Schedule

Project construction is expected to extend nine months from September 2026 through May 2027. Table 3.5-1, *Project Description* details the project's construction schedule and equipment per phase.

1.2 Lead Agencies – Environmental Review Implementation

The City of Palmdale is the Lead Agency for the proposed project. Pursuant to the California Environmental Quality Act (CEQA) and its implementing regulations,[1] the Lead Agency has the principal responsibility for implementing and approving a project that may have a significant effect on the environment.

1.3 CEQA Overview

1.3.1 Purpose of CEQA

All discretionary projects within California are required to undergo environmental review under CEQA. A Project is defined in CEQA Guidelines § 15378 as the whole of the action having the potential to result in a direct physical change or a reasonably foreseeable indirect change to the environment and is any of the following:

- An activity directly undertaken by any public agency including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements.
- An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

1 Public Resources Code §§ 21000 - 21177 and California Code of Regulations Title 14, Division 6, Chapter 3.

CEQA Guidelines § 15002 lists the basic purposes of CEQA as follows:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects using alternatives or mitigation measures (MMs) when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.3.2 Authority to Mitigate under CEQA

CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. Under CEQA Guidelines § 15041 a Lead Agency for a project has authority to require feasible changes in any or all activities involved in the project to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the "nexus"[2] and "rough proportionality"[3] standards.

CEQA allows a Lead Agency to approve a project even though the project will cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that there is no feasible way to lessen or avoid the significant effect. In such cases, the Lead Agency must specifically identify expected benefits and other overriding considerations from the project that outweigh the policy of reducing or avoiding significant environmental impacts of the project.

1.4 Purpose of Initial Study

The CEQA process begins with a public agency deciding as to whether the project is subject to CEQA at all. If the project is exempt, the process does not need to proceed any further. If the project is not exempt, the Lead Agency takes the second step and conducts an Initial Study to determine whether the project may have a significant effect on the environment.

The purposes of an Initial Study as listed in § 15063(c) of the CEQA Guidelines are to:

- Provide the Lead Agency with information necessary to decide if an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) should be prepared.
- Enable a Lead Agency to modify a project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND or MND.
- Assist in the preparation of an EIR, if required, by focusing the EIR on adverse effects determined to be significant, identifying the adverse effects determined not to be significant, explaining the reasons for determining that potentially significant adverse effects would not be significant, and identifying whether a program EIR, or other process, can be used to analyze adverse environmental effects of the project.
- Facilitate an environmental assessment early during project design.

2 A nexus (i.e., connection) must be established between the mitigation measure and a legitimate governmental interest.

3 The mitigation measure must be "roughly proportional" to the impacts of the Project.

- Provide documentation in the ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine if a previously prepared EIR could be used for the Project.

In cases where no potentially significant impacts are identified, the Lead Agency may issue an ND, and no MMs would be needed. Where potentially significant impacts are identified, the Lead Agency may determine that MMs would adequately reduce these impacts to less than significant levels. The Lead Agency would then prepare an MND for the proposed project. If the Lead Agency determines that individual or cumulative effects of the proposed project would cause a significant adverse environmental effect that cannot be mitigated to less than significant levels, then the Lead Agency would require an EIR to further analyze these impacts.

1.5 Review and Comment by Other Agencies

Other public agencies are provided with the opportunity to review and comment on the IS/MND. Each of these agencies is described briefly below.

- A Responsible Agency (14 CCR § 15381) is a public agency, other than the Lead Agency, that has discretionary approval power over the Project, such as permit issuance or plan approval authority.
- A Trustee Agency[4] (14 CCR § 15386) is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.
- Agencies with Jurisdiction by Law (14 CCR § 15366) are any public agencies who have authority (1) to grant a permit or other entitlement for use; (2) to provide funding for the project in question; or (3) to exercise authority over resources which may be affected by the project. Furthermore, a city or county will have jurisdiction by law with respect to a project when the city or county having primary jurisdiction over the area involved is: (1) the site of the project; (2) the area in which the major environmental effects will occur; and/or (3) the area in which reside those citizens most directly concerned by any such environmental effects.

1.6 Impact Terminology

The following terminology is used to describe the level of significance of potential impacts:

- A finding of ***no impact*** is appropriate if the analysis concludes that the project would not affect the environmental threshold in any way.
- An impact is considered ***less than significant*** if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered ***less than significant with mitigation incorporated*** if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments, or other enforceable measures, that would be adopted by the lead agency.

4 The four Trustee Agencies in California listed in CEQA Guidelines § 15386 are California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California.

- An impact is considered potentially significant if the analysis concludes that the project could have a substantial adverse effect on the environment.

An EIR is required if an impact is identified as ***potentially significant***.

1.7 Organization of Initial Study

This document is organized to satisfy CEQA Guidelines § 15063(d), and includes the following sections:

- **Section 1.0 - Introduction**, which identifies the purpose and scope of the IS/MND.
- **Section 2.0 - Environmental Setting**, which describes location, existing site conditions, land uses, zoning designations, topography, and vegetation associated with the project site and surroundings.
- **Section 3.0 - Project Description**, which provides an overview of the project, a description of the proposed development, project phasing during construction, and discretionary actions for project approval.
- **Section 4.0 - Environmental Checklist**, which presents checklist responses for each resource topic to identify and assess impacts associated with the proposed project, and proposes MMs, as needed, to reduce potential environmental impacts to less than significant.
- **Section 5.0 - References**, which includes a list of documents cited in the IS/MND.
- **Section 6.0 - List of Preparers**, which identifies the primary authors and technical experts that prepared the IS/MND.

Technical studies and other documents, which include supporting information or analyses used to prepare the IS/MND, are included in the following appendices:

- Appendix A Project Plans
- Appendix B1 CalEEMod Input and Results For Air Quality Analysis
- Appendix B2 CalEEMod Input and Results For Greenhouse Gas Emissions Analysis
- Appendix C1 Biological Resources Evaluation
- Appendix C2 Arborist Report
- Appendix C3 Jurisdictional Delineation
- Appendix D1 Cultural Resources Report
- Appendix D2 Paleontological Records Search
- Appendix E Geotechnical Report
- Appendix F1 Methane Report
- Appendix F2 Phase I Environmental Site Assessment
- Appendix F3 Pesticide Sampling Report
- Appendix G Percolation Test
- Appendix H1 Water Quality Management Plan
- Appendix H2 Preliminary Hydrology Report
- Appendix H3 Sewer Analysis Report
- Appendix I Noise Data
- Appendix J VMT Memo
- Appendix K Information Request Letters
- Appendix L Trip Generation Assessment

1.8 Findings from the Initial Study

1.8.1 No Impact or Impacts Considered Less than Significant

Based on IS findings, the project would have no impact or a less than significant impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

1.8.2 Impacts Considered Less than Significant with Mitigation Measures

Based on IS findings, the project would have a less than significant impact on the following environmental categories listed in Appendix G of the CEQA Guidelines when proposed MMs are implemented.

- Biological Resources
- Cultural Resources
- Geology and Soils
- Tribal Cultural Resources
- Mandatory Findings of Significance

2.0 ENVIRONMENTAL SETTING

Project Location

The proposed project site spans five acres northeast of the intersection of 58th Street and Palmdale Boulevard in the city of Palmdale in northern Los Angeles County. The Assessor's Parcel Number is 3023-001-084. **Figure 2.2-1** shows the project's regional location. **Figure 2.2-2** is an aerial view of the project site and the surrounding land.

2.1 Project Setting

The project site is vacant and vegetated with Joshua tree woodland. The site is surrounded by single-family residences to the south opposite Palmdale Boulevard, and vacant land to the west, north, and east. The project site has a north-facing slope of about one percent grade. **Figure 2.2-3** depicts the topography of the site and surrounding area. Site photographs are provided in **Figure 2.2-4**.

2.1.1 Land Use and Zoning

The land use and zoning designations of the project site and its immediate vicinity are listed in **Table 2.2-1**. The project site has a General Plan land use designation of Employment Flex (EMPFX), as shown on **Figure 2.2-**5, and a zoning designation of Light Industrial (LI), as shown on **Figure 2.2-6** (City of Palmdale, 2025; City of Palmdale, 2023).

Table 2.2-1
SUMMARY OF EXISTING LAND USE, ZONING AND SPECIFIC PLAN DESIGNATIONS

Location	General Plan Designation	Zoning Designation	Existing Development
Project Site	Employment Flex (EMPFX)	Light Industrial (LI)	Vacant land
North	Employment Flex (EMPFX)	Light Industrial (LI)	Vacant land
South	Single Family Residential 3 (R-SF)	Single Family 3 (SFR-3)	Single Family Houses
East	Employment Flex (EMPFX)	Light Industrial (LI)	Vacant
West	Employment Flex (EMPFX)	Light Industrial (LI)	Vacant

Source: City of Palmdale, 2025; City of Palmdale, 2023; Google Earth Pro, 2025

Figure 2.2-1
REGIONAL LOCATION

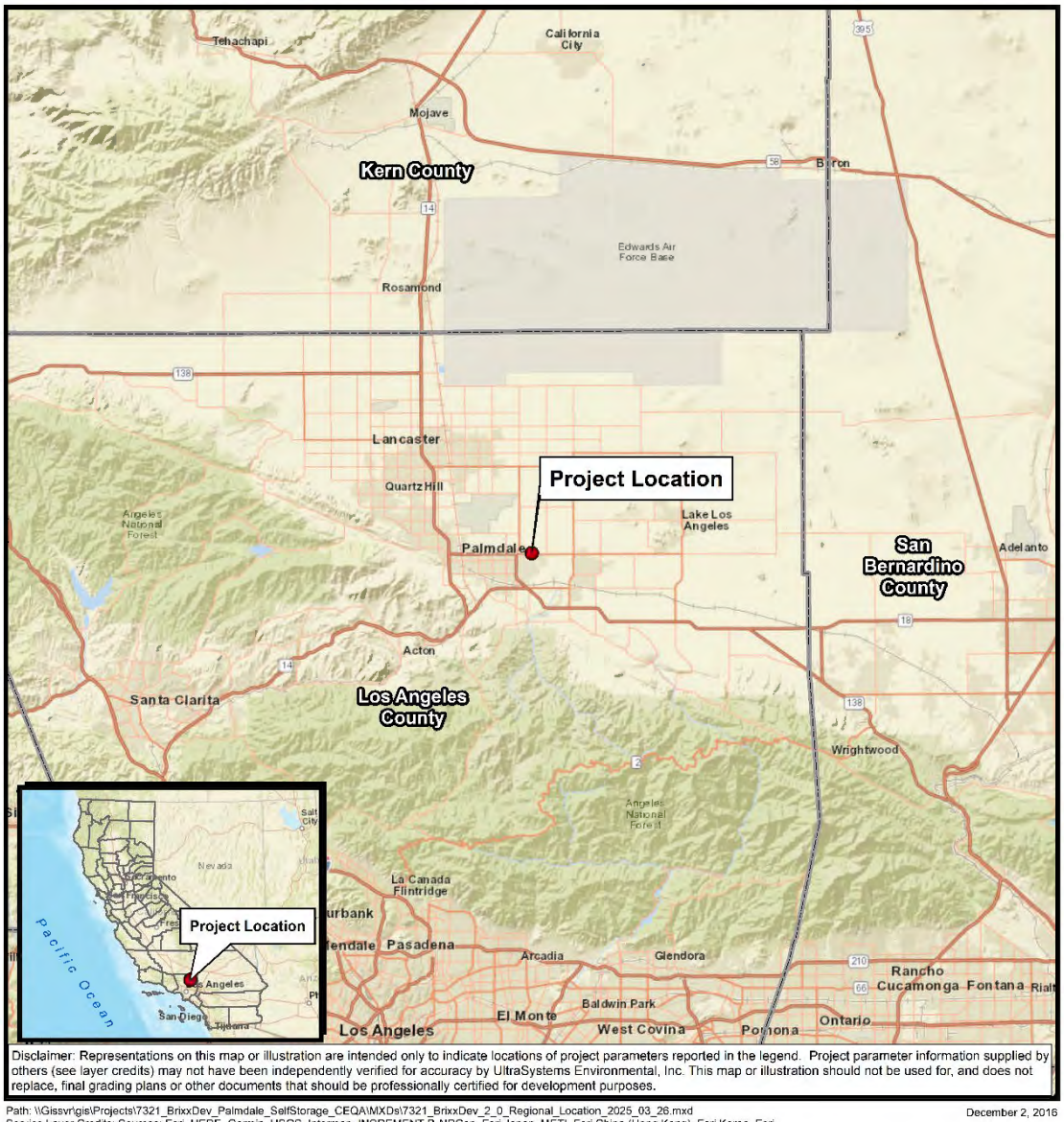

Figure 2.2-2
PROJECT LOCATION

Path: \\Gissvr\gis\Projects\7321_BrixxDev_Palmdale_SelfStorage_CEQA\MXDs\7321_BrixxDev_3_0_Project_Location_APN_2025_04_09.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community; Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2024.

April 09, 2025

Scale: 1:2,400

N

0 100 200 Feet

0 25 50 Meters

Legend

Project Boundary

Parcel Boundary

Palmdale Self-Storage Development

Project Location and Parcel

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Figure 2.2-3
TOPOGRAPHIC MAP

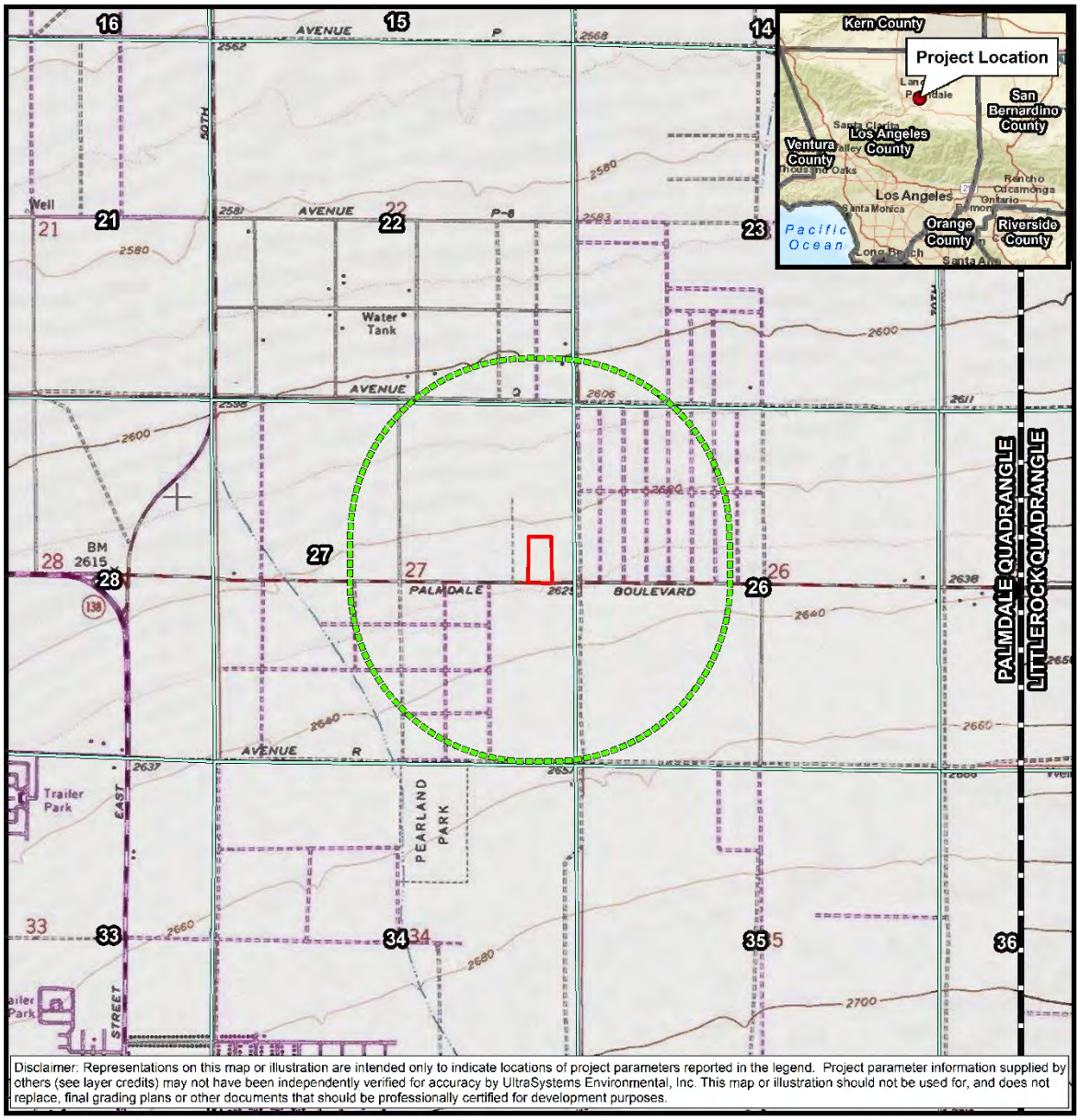


Figure 2.2-4
GENERAL PLAN LAND USE DESIGNATIONS

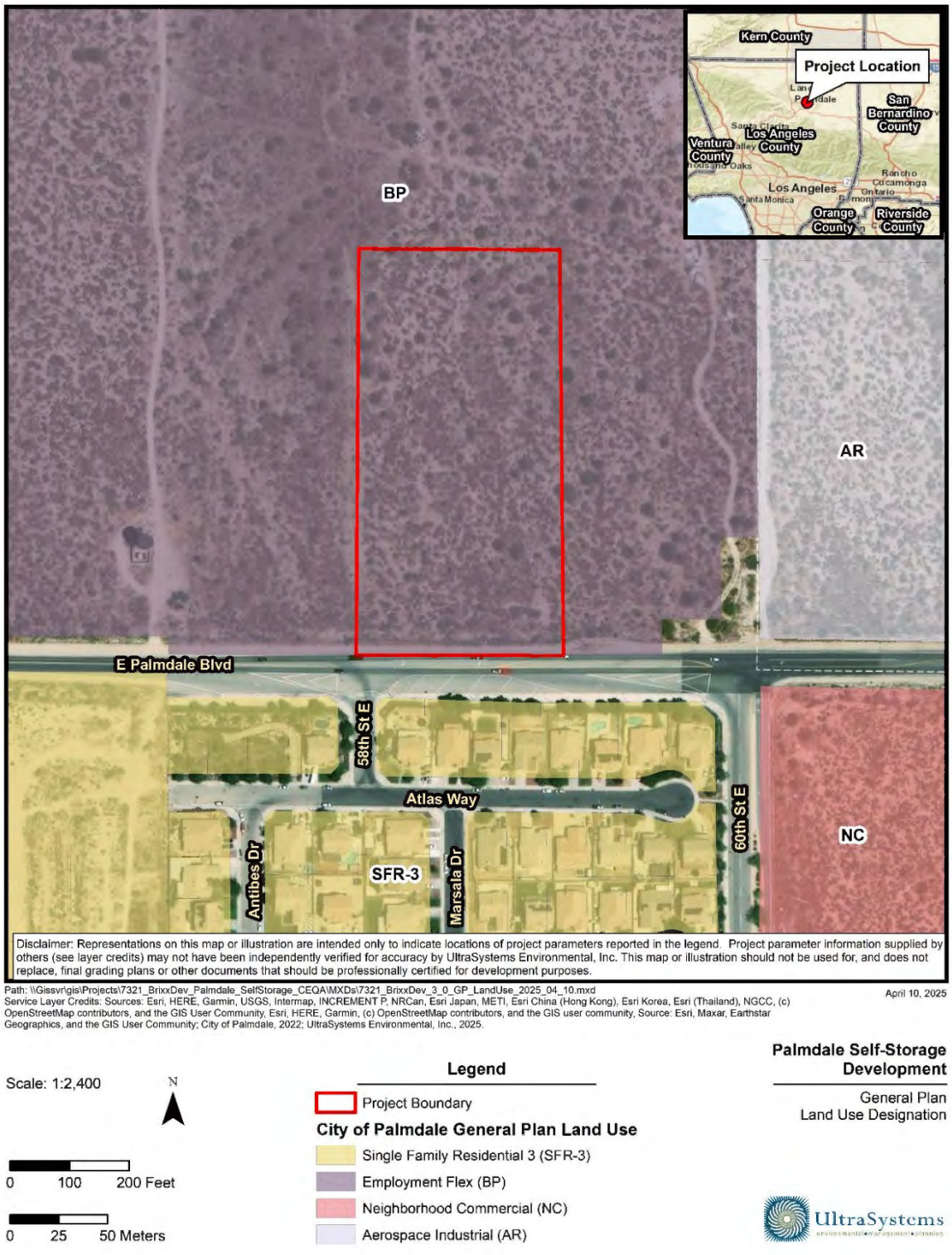


Figure 2.2-5
PROJECT SITE PHOTOGRAPHS

PHOTO 1: View looking northwest across the project site from the southeast corner of the site.

PHOTO 2: View looking northeast across the project site from the southwest corner of the site.

PHOTO 3: View looking southeast from the northwest corner of the project site.

PHOTO 4: View looking southeast of single-family residences south of the project site opposite Palmdale Boulevard

2.2 Existing Characteristics of the Site

2.2.1 Climate and Air Quality

The project site is in the Mojave Desert Air Basin (MDAB), which includes desert portions of Kern, Los Angeles, Riverside and San Bernardino counties. The MDAB has a dry-hot desert climate, with some areas classified as dry-very hot desert where the average maximum temperatures exceed 100.4 degrees Fahrenheit (°F) for at least three months of the year. In summer, a Pacific Subtropical High pressure system typically remains offshore, reducing cloud cover and increasing daytime solar heating. Annual precipitation in the MDAB ranges from three to seven inches. The region is geographically isolated from Southern California's coastal areas and the Central Valley by the San Gabriel Mountains to the south and the Tehachapi Mountains to the northwest (AVAQMD, 2016).

The project region is in non-attainment of California Ambient Air Quality Standards (AAQS) for ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$).

2.2.2 Geology and Soils

The project site is underlain by unconsolidated to weakly consolidated gravel, sand, and silt (Olson and Hernandez, 2013). The project site has a north-facing slope of about one percent grade.

2.2.3 Hydrology

The project site is in the Rosamond Lake watershed, which spans about 156 square miles in the western Mojave Desert (CDFW, 2025). The project site is over the Antelope Valley groundwater basin (DWR, 2025). The project site is within Zone X, which is an area of minimal flood hazard (FEMA, 2025). The groundwater level at a well about two miles southeast of the project site, the nearest well for which data are available, in Spring 2024 was about 106 feet below ground surface (bgs; DWR, 2025).

2.2.4 Biology

The project site is vacant and vegetated with Joshua tree woodland. Developed areas are located in the area south of the project site, including the roadway of Palmdale Boulevard and residences south of Palmdale Boulevard. Ornamental vegetation is present on residential properties south of the site.

2.2.5 Public Services

Fire Protection and Emergency Medical Services: the Los Angeles County Fire Department (LACoFD) fire protection and emergency medical services to the City of Palmdale. LAFD operates 176 fire stations. The nearest existing fire station to the project site is Station 93 at 5624 East Avenue R, approximately 1.1 miles to the south (LACoFD,2025).

Police Protection: Los Angeles County Sheriff's Department, based the Palmdale Sheriff's Station at 750 E Avenue Q, about 6.1 miles northeast of the project site (LASD, 2025).

Schools: the Palmdale Elementary School District and Antelope Valley Union High School District serve the project site (CDT, 2025).

Parks: The City of Palmdale Parks and Recreation Department provides recreation services and programs in Palmdale city parks, and the City Public Works Department maintains city parks (City of Palmdale, 2025a).

Library: The Palmdale City Library provides library services to the city (City of Palmdale, 2025b).

2.2.6 Utilities

Water: The project site is in the Palmdale Water District's service area.

Sewers: The City of Palmdale Public Works Department and Los Angeles County Sanitation District (District 20) provide sewer services to the city.

Wastewater Treatment: Los Angeles County Sanitation Districts (District 20) provides wastewater treatment to the portions of the city of Palmdale with sewer service.

Stormwater Drainage: Drainage is via surface flow downgradient to the north.

Solid Waste Collection: WM collects solid waste from residents and businesses in Palmdale.

Landfills: In 2023 about 97 percent of the solid waste landfilled from Palmdale was disposed of at two landfills: Antelope Valley Recycling & Disposal Facility; and Simi Valley Landfill and Recycling Center near the city of Simi Valley in Ventura County (CalRecycle, 2025a).

Electricity: Southern California Edison provides electricity in the city of Palmdale.

Natural Gas: The Southern California Gas Company provides natural gas in the city of Palmdale.

Telecommunications: AT&T, Level 3 Communications, and Spectrum provide telecommunications services near the project site (digalert.com, 2025).

3.0 PROJECT DESCRIPTION

3.1 Project Background

The City of Palmdale (City) is processing an application for the development of a self-storage facility (project) northeast of the intersection of Palmdale Boulevard and 58th Street in the City of Palmdale in Los Angeles County, California (Parcel 0240-011-17). The proposed project entails the construction and operation of a self-storage facility with 673 units in six one-story buildings totaling 97,333 square feet on an approximately 5.0-acre site. The City is the Lead Agency for the purposes of the California Environmental Quality Act (CEQA).

The City's General Plan Land Use designation for the site is Employment Flex (EMPFX). The City's zoning district for the site is LI, Light Industrial. The proposed self-storage use would conform with the General Plan land use designation and zoning district for the site.

3.2 Project Overview

The project consists of nine one-story buildings (Buildings A – J) comprising 673 self-storage units ranging from 5 by 5 feet to 10 by 30 feet; there are 422 climate-controlled units in Building A and 251 non-climate-controlled units in all nine buildings. Units are detailed by size and building in **Table 3.2-1**. Office space, which comprises 900 square feet, would be located at the southwest corner of Building A. The total building area of the 673 units would be 84,9500 square feet; the total remaining building area (office space and hallways, both in Building A) would be 12,383 square feet, and the grand total building area would be 97,333 square feet. **Figure 3.2-1** shows the project site plan. Wall and roof insulation, compliant with the 2025 California Energy Code, would be used in the climate-controlled portion of Building A to limit energy use for air conditioning. The anticipated operating hours (of both the facility and the office) are 9:30 a.m. to 6:00 p.m., seven days per week. **Figures 3.2-2** through **3.2-4** show elevations of buildings A, B, and C, respectively.

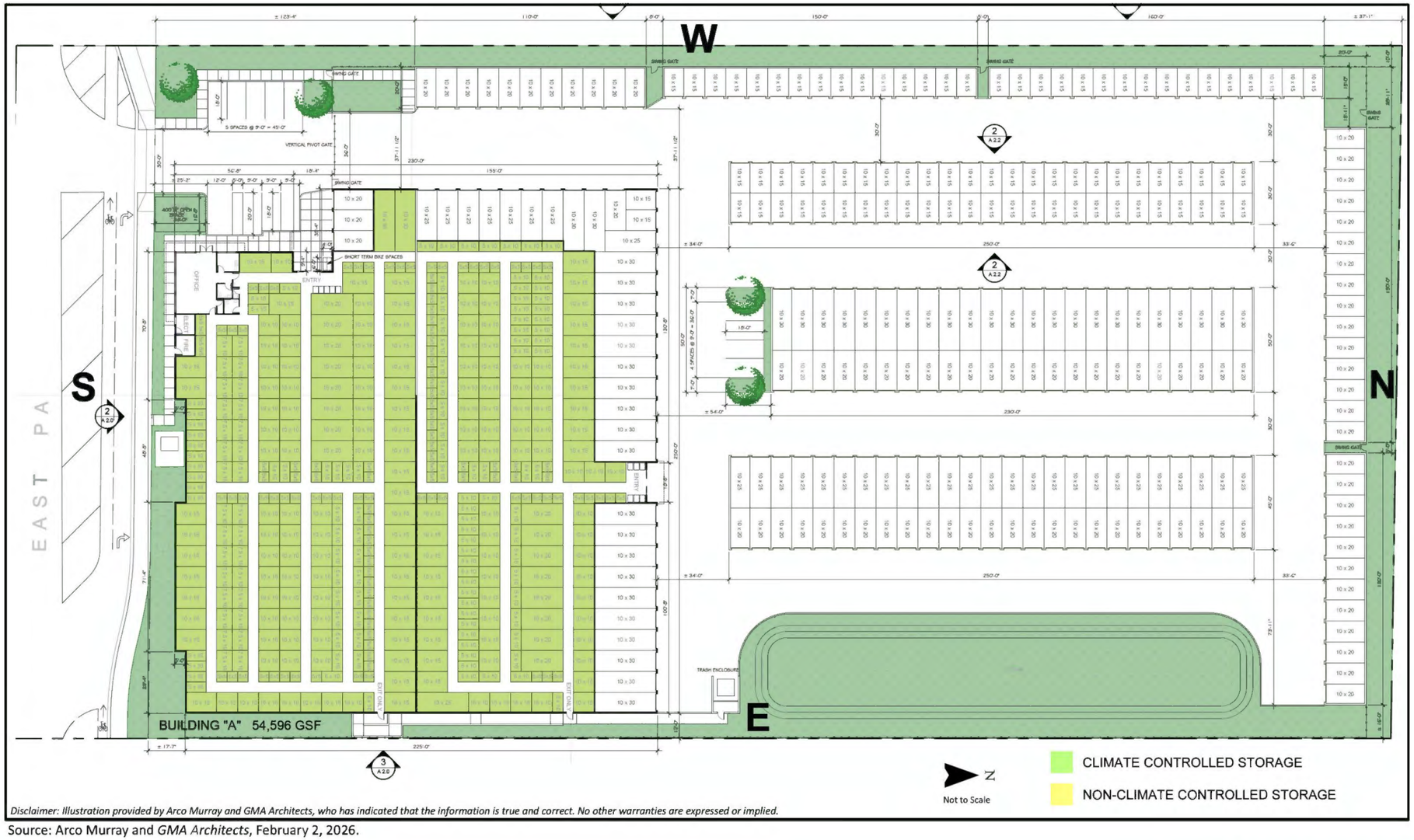
Table 3.2-1
PROJECT SUMMARY

Building	Unit Sizes, feet	Number of Units	Total square feet (units)
A	Office	Not applicable	900
A	Hallways and electrical and fire rooms	Not applicable	11,483
Climate-Controlled Storage Units			
A	5x5	114	2,850
	5x10	99	4,950
	7.5x10	30	2,250
	10x10	107	10,700
	10x15	53	7,950
	10x20	16	3,200

Building	Unit Sizes, feet	Number of Units	Total square feet (units)
	10x25	1	250
	10x30	2	600
	Subtotal	*422*	*32,750*
Non-Climate-Controlled Units			
A	10x30	22	300
	10x25	8	800
	10x20	4	2,000
	10x15	2	6,600
	Subtotal	*36*	*9,700*
	Total, Building A	*458*	*42,450*
B	10x20	11	2,200
C	10x15	15	2,250
D	10x15	16	2,400
E	10x15	50	7,500
F	10x20	23	4,600
	10x30	23	6,900
	Subtotal	*46*	*11,500*
G	10x25	25	6,250
	10x20	25	5,000
	Subtotal	*50*	*11,250*
H	10x20	15	3,000
J	10x20	12	2,400
Subtotal	*Not applicable*	*251*	***52,200***
Total (Units)	Not applicable	673	**84,950**
Grand Total		Not Applicable	**97,333**

Source: GMA Architects, 2025.

Figure 3.2-1
SITE PLAN



Disclaimer: Illustration provided by Arco Murray and GMA Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Arco Murray and *GMA Architects*, February 2, 2026.

Palmdale Self-Storage Development
Proposed Site Plan

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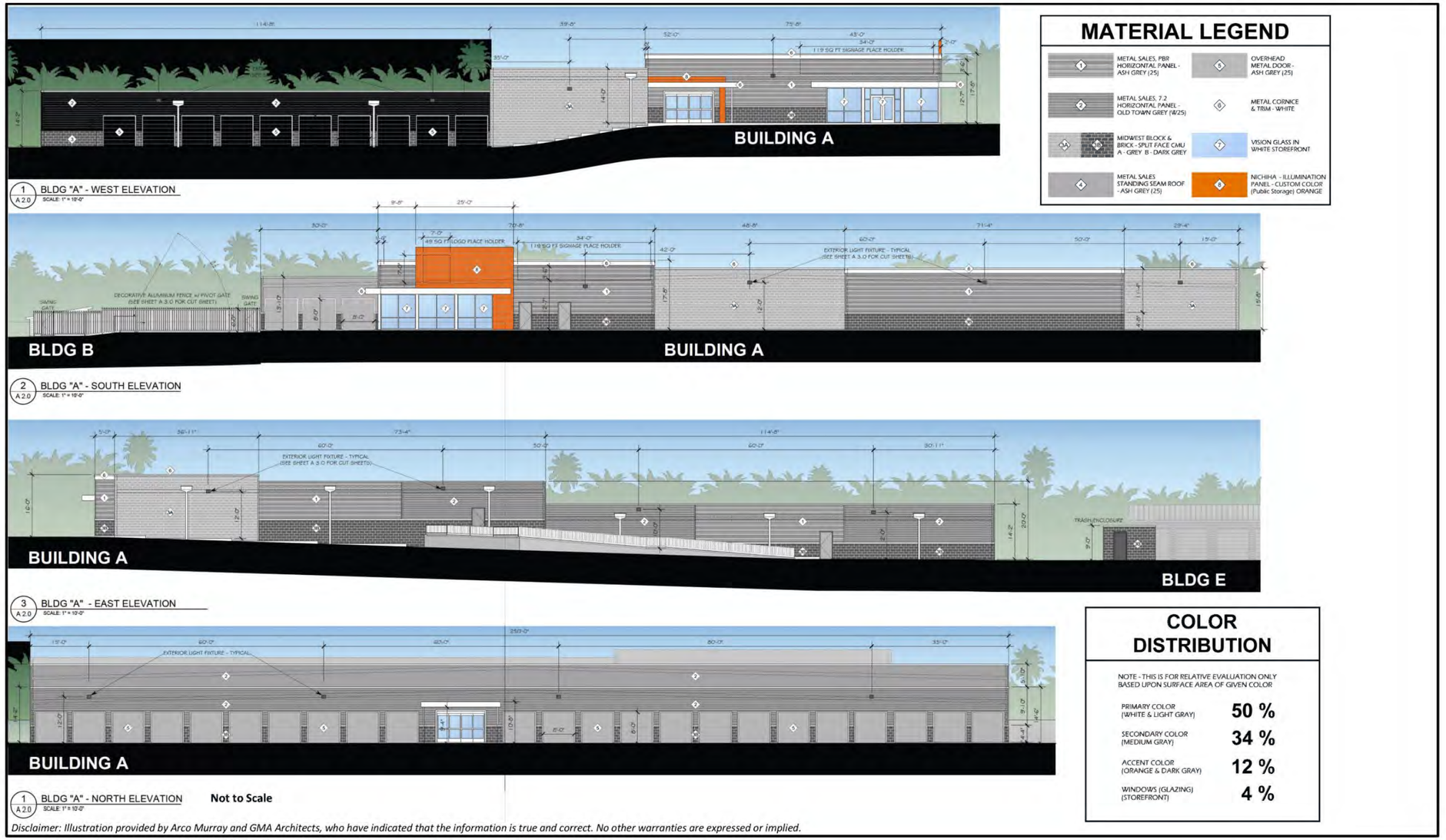
Figure 3.2-2
BUILDING A ELEVATIONS

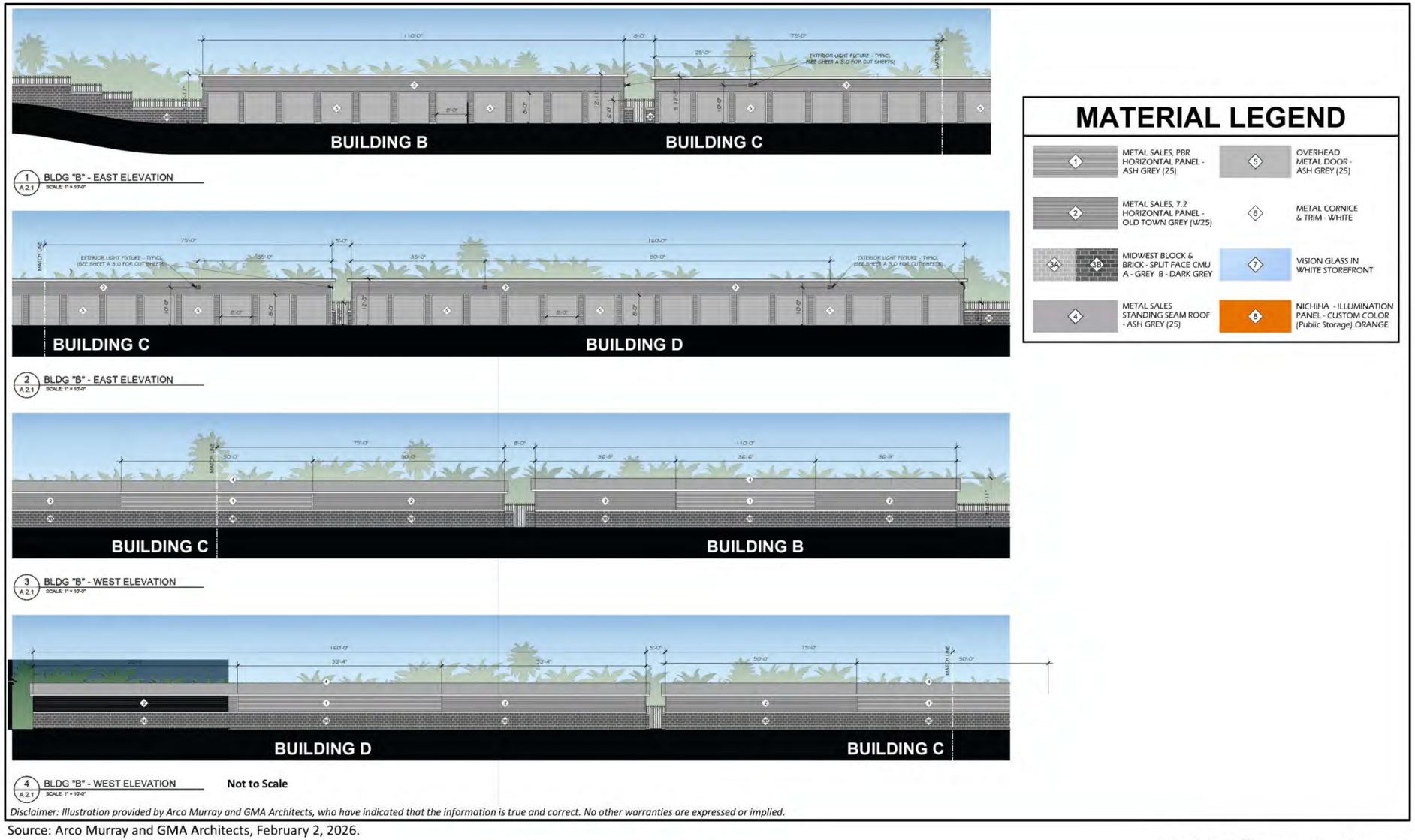


Source: Arco Murray and GMA Architects, February 2, 2026.

Palmdale Self-Storage Development

Elevations: Building A

Figure 3.2-3
BUILDINGS B AND C ELEVATIONS

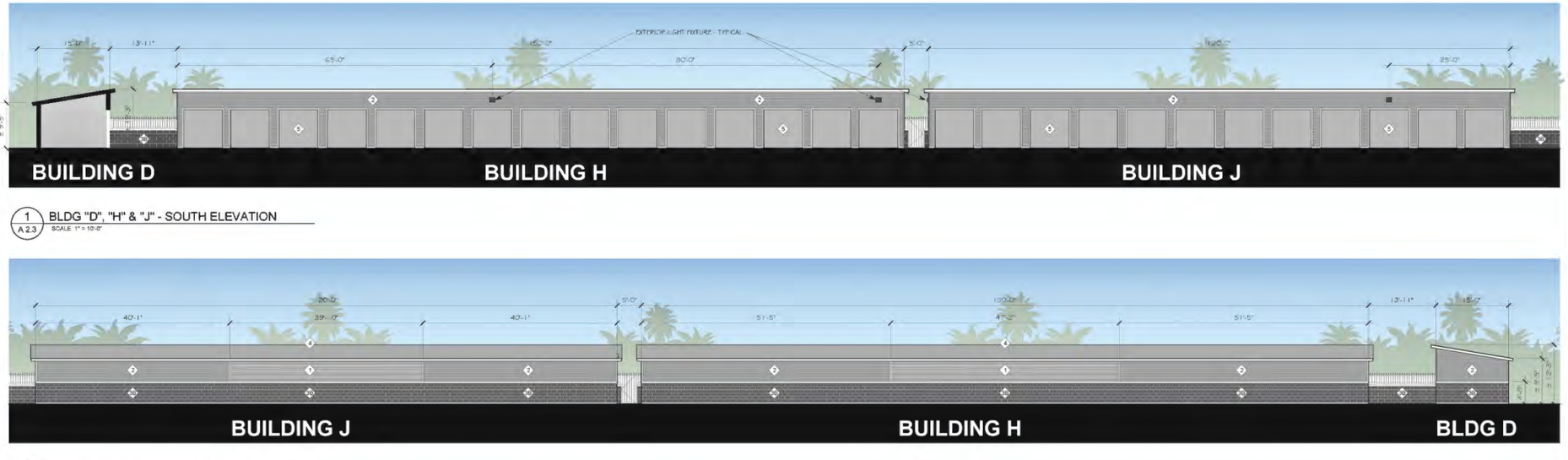


Source: Arco Murray and GMA Architects, February 2, 2026.

Palmdale Self-Storage Development

Elevations: Building B and C

Figure 3.2-4
BUILDINGS D, H, J ELEVATIONS



Not to Scale

Disclaimer: Illustration provided by Arco Murray and GMA Architects, who have indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Arco Murray and GMA Architects, February 2, 2026.

Palmdale Self-Storage Development

Elevations: Buildings D, H, and J

3.3 Proposed Project Features

3.3.1 Trash Enclosures

The proposed project includes one trash enclosure in the west-central part of the project site.

3.3.2 Landscaping

Landscaping, including a proposed infiltration basin, would comprise 18 percent of the site, or about 39,262 square feet, and would be along the site perimeter, as shown on **Figure 3.3-1,** *Proposed Hydrology Plan*. Landscaping would consist of drought-tolerant vegetation complying with Chapter 14.05, *Water Efficient Landscape*, of the City of Palmdale Municipal Code (codepublishing.com, 2025).

3.3.3 Site Access, Circulation and Parking

Site ingress and egress would be provided by one 40-foot-wide driveway from Palmdale Boulevard. The project entrance driveway would be secured by a motorized gate activated by a keypad.

The proposed project includes 12 parking spaces, six on the west side of the main driveway and six on the east, near the proposed office; and four additional parking spaces in the interior of the facility next to the south end of Building D.

3.3.4 Exterior Lighting

The proposed project would include installation of exterior lighting fixtures ("wall packs") for safety and security. Lighting for the project would comply with the requirements of the City's Municipal Code. Specifically, the project would be required to comply with City of Palmdale Municipal Code § 17.86.030, Outdoor Lighting, which states, "All outdoor lighting shall be designed, located, installed, directed downward or toward structures, fully shielded, and maintained in order to prevent glare, light trespass, and light pollution and away from adjoining properties and public rights-of-way, so that no light fixture directly illuminates an area outside of the project site intended to be illuminated." (municode.com, 2025). In addition, the color temperature of outdoor lights shall not exceed 3,000 Kelvins in accordance with recommendations of the International Dark-Sky Association (Palmdale Municipal Code Section 17.86.030; municode.com, 2025).

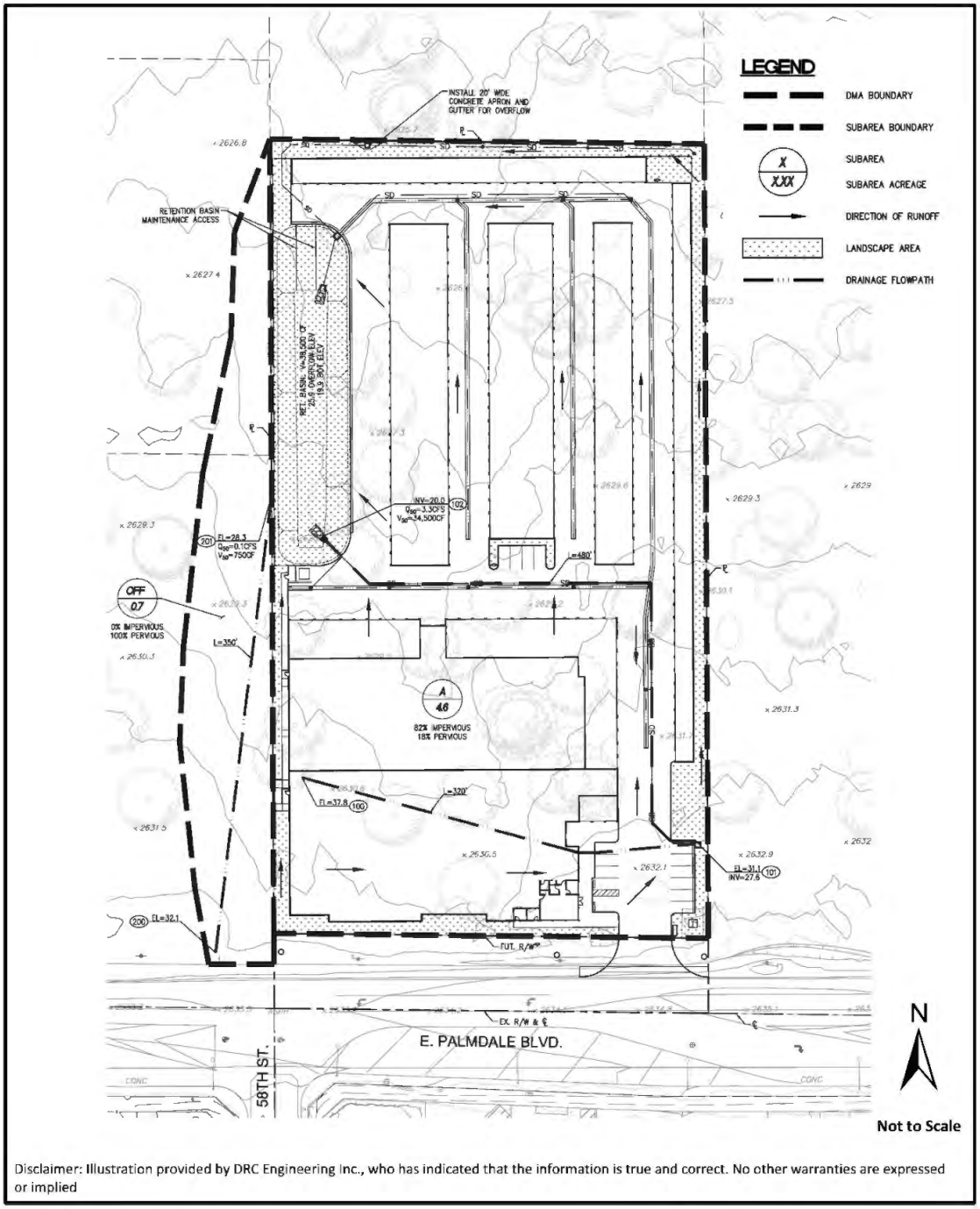
3.3.5 Project Entry Signage

The proposed project includes signage at the main project driveway.

3.3.6 Perimeter Fencing and Exterior Walls

The project proposes construction of a 6-foot-high perimeter wall, consisting of a four-foot-high concrete masonry unit wall with two-foot-high decorative fencing on top.

Figure 3.3-4
PROPOSED HYDROLOGY PLAN



Disclaimer: Illustration provided by DRC Engineering Inc., who has indicated that the information is true and correct. No other warranties are expressed or implied

Source: DRC Engineering Inc., 2025

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Palmdale Self-Storage Development
Proposed Landscape Plan

3.3.7 Utilities

The project would include installation of a proposed sewer main, at least eight inches diameter, which would discharge into an existing 18-inch City of Palmdale sewer in Palmdale Boulevard which, in turn, discharges into an existing 15-inch Los Angeles County Sanitation Districts sewer in 58th Street (DRC Engineering, 2024, p. 12). No sewer is present in Palmdale Boulevard along the project site frontage, so the proposed sewer main would need to extend westward to connect to the nearest existing main.

The Palmdale Water District (PWD) would provide water for the project. The proposed project includes the installation of a water lateral connecting to an existing main in Palmdale Boulevard.

Project plans include an infiltration basin in the northwest part of the project site with capacity of 38,500 cubic feet, the estimated net increase in runoff from the site from a 50-year, 24-hour storm. An emergency overflow would be provided from the infiltration basin to the north site boundary, where the overflow would discharge to the ground surface.

Trash Service – Waste Management, Inc. (WM) collects solid waste from residents and businesses in Palmdale (City of Palmdale, 2025).

3.3.8 Security Features

The project entrance driveway would be secured by a motorized gate activated by a keypad. Sliding glass doors on Building A would have access controlled by keypad.

3.3.9 Sustainability

Wall and roof insulation, compliant with the 2025 California Energy Code, would be used in the climate-controlled portion of Building A to limit energy use for air conditioning.

3.4 Offsite Improvements

Construction would need to occur in Palmdale Boulevard to connect the utility laterals for the proposed project to the existing main lines. An existing 18-inch sewer main is present in the south half (eastbound lane) of Palmdale Boulevard; thus, project plans include construction of a new sewer lateral connecting to the main (DRC, 2024).

3.5 Construction Activities

For safety reasons, temporary barricades would be used to limit access to the site during project construction and maintain safe access for construction workers. Construction would occur during daylight and during regular business hours. Lighting for the construction site would be limited to the minimum amount of light needed for safety and security.

Site grading would involve raw cut of 7,500 cubic yards (cy); raw fill of 4,500 cy; and net export of approximately 600 cy of soil.[5] After site preparation is completed, infrastructure such as sewer laterals and storm drains would be installed and/or connected to existing facilities. The building foundations would be poured and framing of the buildings would begin. The final steps of construction would involve interior furnishings, detail work, and completion of common areas and landscaping.

[5] The project grading quantities estimate includes 2,900 cy shrinkage and 500 cy of spoils.

The 218,124-square-foot (5.01-acre) site is currently undeveloped pervious surface. The building footprint would be 97,333 square feet, and hardscape (driveways and paved entry area) would be 84,762 square feet. Therefore, the project would result in the conversion of 178,862 square feet (82 percent) to impervious surface on the project site.

The only offsite improvements would be installation of utility laterals and connections of laterals to mains. The construction contractor would use heavy equipment during six phases of construction; estimated numbers and types of equipment per construction phase are identified below in **Table 3.5-1**. Construction staging would be limited to the project site; no offsite areas would be used.

Table 3.5-1
CONSTRUCTION SCHEDULE, EQUIPMENT, AND STAFF

	Schedule (months)			Construction Equipment		Construction Workers, Number
	Beginning	Ending	Duration	Types	Numbers	
Site Clearance	September 2026	October 2026	1	Excavators, Skidsteers	1 to 3	5
Grading	September 2026	January 2027	4	Excavators, Skidsteers	1 to 3	5
Utilities Installation	November 2026	January 2027	3	Excavators, Skidsteers	1 to 3	5
Buildings construction	December 2026	April 2027	4	Scissor lift, Boom lift	1 to 3	15
Paving	May 2027	May 2027	1	Paving equipment	1 to 3	5
Landscaping	May 2027	May 2027	1	Excavators, Skidsteers	1 to 3	5

Source:

3.6 Discretionary Actions

The proposed project includes applications for a Site Plan Review by the City of Palmdale.

3.6.1 Other Permits and Approvals

Following the City's approval of the Initial Study/Mitigated Negative Declaration, the following permits/approvals, as shown in **Table 3.6-1,** would be required prior to construction.

Table 3.6-1
PERMITS AND APPROVALS

Agency	Permit or Approval
City of Palmdale Building & Safety Division	Site Plan review and approval and Grading and Building Permits
City of Palmdale Planning Division	Site Plan Review
Palmdale Fire Protection District	Building plan check and approval. Review for compliance with the current California Fire Code, current California Building Code, California Health & Safety Code and City of Palmdale Municipal Code. Plans for fire detection and alarm systems, and automatic sprinklers.
Lahontan Regional Water Quality Control Board	Water quality permits

4.0 ENVIRONMENTAL CHECKLIST

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 as a "Potentially Significant Unless Mitigation Incorporated," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forest Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & 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 (To Be Completed by the Lead Agency)

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 described 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.

Signature	Date
Printed Name	City of Palmdale

Evaluation of Environmental Impacts

(1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

(2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

(3) Once the lead agency has determined that a particular physical impact may occur then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

(4) "Negative Declaration: Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to less than significant level.

(5) Earlier analyses may be use where, pursuant to the tiering, Program EIR, or other CEQA process, an affect has been adequately analyzed in an earlier EIR or negative declaration. (See Section 15063(c)(3)(D) of the CEQA Guidelines. In this case, a brief discussion should identify the following:

(a) Earlier Analyses Used. Identify and state where the earlier analysis available for review.

(b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

(c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

(6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference

to the page or pages where the statement is substantiated. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.

(7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

(8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

(9) The explanation of each issue should identify:

(a) The significance criteria or threshold, if any, used to evaluate each question; and

(b) The mitigation measure identified, if any, to reduce the impact to less than significant.

4.1 Aesthetics

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

A "visual environment" includes the built environment (development patterns, buildings, parking areas, and circulation elements) and natural environment features such as hills, vegetation, rock outcroppings, drainage pathways, and soils.

Views are characterized by visual quality, viewer groups and sensitivity, duration, and visual resources.

- Visual quality refers to the general aesthetic quality of a view, such as vividness, intactness, and unity.
- Viewer groups identify who is most likely to experience the view.
- High sensitivity land uses include residences, schools, playgrounds, religious institutions, and passive outdoor spaces such as parks, playgrounds, and recreation areas.
- The duration of a view is the amount of time that a particular view can be seen by a specific viewer group.
- Visual resources refer to unique views, and views identified in local plans, from scenic highways, or of specific unique structures or landscape features.

a) Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features, for which the field of view can be wide and extend into the distance, and views that focus on a particular object, scene or feature of interest.

The proposed development would not have a substantial adverse effect on a scenic vista; therefore, the project would have a less than significant impact.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact

The California Department of Transportation (Caltrans) provides information regarding officially designated or eligible state scenic highways designated as part of the California Scenic Highway Program. According to Caltrans, the nearest designated scenic highway to the project site is 16 miles south of State Route 2 (SR-2) as shown in **Figure 4.1-2**, *Scenic Highways*. Therefore, due to the distance topography between the project site and the nearest state scenic highway, the project would have no impact on trees, rock outcroppings and historic buildings within a state scenic highway.

c) In non-urbanized areas, would the project 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 project site is surrounded by vacant land to the east, north, and west, and by single-family residences opposite Palmdale Boulevard to the south. Views of the existing streetscape are characterized by low height (one-story to two-story) buildings, utilities (including utility lines, poles, and streetlights) and landscaping.

Refer to **Table 4.1-1**, which describes the existing visual character in the vicinity of the project site. **Figure 4.1-3** includes photographs of the project vicinity. **Table 4.1-2** below provides the applicable policies from the City of Palmdale Community Design Element that pertain to aesthetics, along with a description of how the proposed project would comply.

Figure 4.1-1
PROJECT SITE PHOTOGRAPHS

PHOTO 1: View looking northwest across the project site from the southeast corner of the site.

PHOTO 2: View looking northeast across the project site from the southwest corner of the site.

PHOTO 3: View looking southeast from the northwest corner of the project site.

PHOTO 4: View looking southeast of single-family residences south of the project site opposite Palmdale Boulevard

Figure 4.1-2
SCENIC HIGHWAYS

Table 4.1-1
EXISTING VISUAL CHARACTER AND LAND USES IN THE PROJECT AREA

Location	General Characteristics	Existing Lighting	Building Height and Design	Landscaping
Project Site	Vacant land	none	Non-existent	Grasses, dirt
Surrounding Areas				
North	Vacant land	none	none	Ornamental vegetation consisting of trees, grasses, and shrubs.
South	One- and two-story single-family homes.	Exterior lighting is associated with residential developments and street lighting.	Single- to two-story buildings with two car garages, tiled sloping roofs and stucco exterior walls painted in varying colors.	Ornamental landscaping includes a few trees and ornamental vegetation.
East	Vacant land	none	vacant land	grasses and dirt
West	Vacant	none	none	Ornamental landscaping includes a few trees and ornamental vegetation.

Source: UltraSystems, 2025 and Google Earth, 2025.

Further, the proposed project would adhere to the City's regulations and policies regarding aesthetics. **Table 4.1-2**, *Project Compliance with Applicable City of Palmdale Community Design Element Regarding Scenic Quality*, details the applicable aesthetics policies from the City Community Design Element and how the project would adhere to them.

Table 4.1-2
PROJECT COMPLIANCE WITH APPLICABLE CITY OF PALMDALE COMMUNITY DESIGN ELEMENT POLICIES REGARDING SCENIC QUALITY

Community Design Element	Project Compliance
Community Design Element Goal CD-10: **Facilitate creation and expansion of industrial uses within the City to accommodate manufacturing, distribution, and complementary office and support uses in order to expand the City's employment and economic base and improve the jobs/housing balance, while ensuring that such areas are compatible with adjacent uses and minimizing adverse impacts on more restrictive use districts.**	
Policy CD-10.3.2: **Industrial developments should establish a uniform and cohesive design theme which is carried through all portions of the project, including architecture, materials, landscaping, lighting and other site characteristics. Multi-building projects, including**	**The buildings in this project would have a consistent architectural style.**

Community Design Element	Project Compliance
accessory structures, should use a consistent architectural style.	
Policy CD-10.3.8: **The use of high-quality building materials is encouraged, particularly in structures visible from arterial streets, freeways, and less intensive land use districts.**	**The exterior of the building would be constructed of masonry block, corrugated metal panels, metal panels. stucco, and aluminum and glass storefront. The proposed project would not conflict with this policy.**

As analyzed above, the proposed project would adhere to applicable aesthetic and scenic quality regulations and policies mandated by the City of Palmdale Community Design Element. Additionally, the proposed project would adhere to the city's Municipal Code regarding building height, setbacks, building design, parking stalls and screening. Therefore, impacts would be less than significant.

d) Would the project 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 project site is in a sparsely urbanized area of the City of Palmdale and is characterized by medium nighttime ambient light levels. Streetlights, parking lot lights, traffic on local streets and exterior lighting in nearby developments are the primary sources of light that contribute to the ambient light levels in the project area. The project area is surrounded by vacant land.

The new project lighting would be visible from the surrounding area. Therefore, the project's proposed exterior lighting is expected to contribute to ambient nighttime illumination in the project vicinity. However, the proposed project would comply with City of Palmdale Municipal Code § 17.86.030, Outdoor Lighting, which requires that all outdoor lighting shall be designed, located, installed, directed downward or toward structures, fully shielded, and maintained in order to prevent glare, light trespass, and light pollution and be directed away from adjoining properties and public rights-of-way, so that no light fixture directly illuminates an area outside of the project site intended to be illuminated (City of Palmdale Municipal Code, 2024). As shown in the proposed plans identified in Appendix A, none of the proposed materials would have a mirror finish or would be highly reflective; thus, project development would not create a new source of substantial daytime or nighttime glare affecting views in the area.

Therefore, impacts from a new source of substantial light or glare would be less than significant.

4.2 Agriculture and Forestry Resources

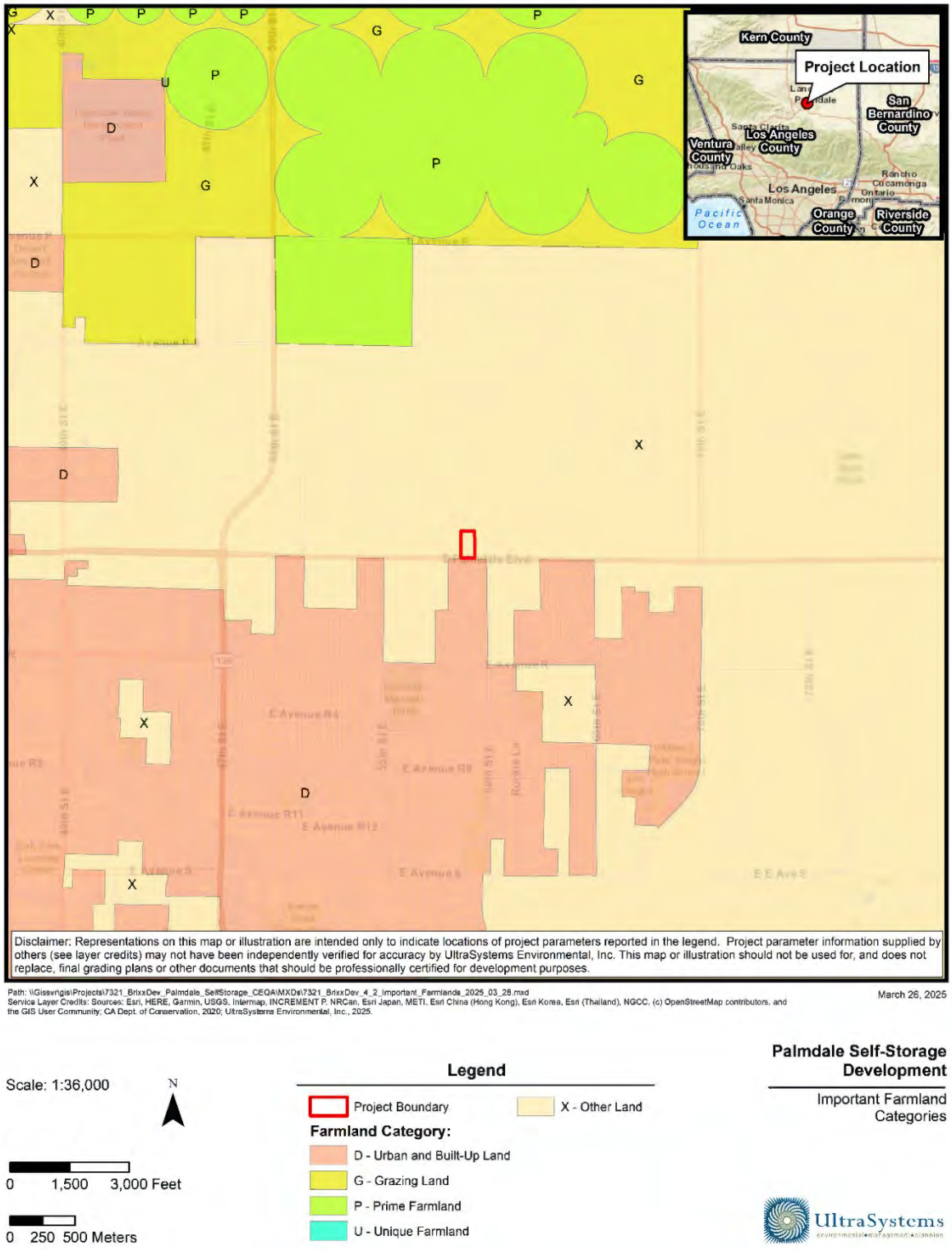
Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
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?				**X**

a) Would the project 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 project site and surrounding uses are designated by the Division of Land Resource Protection (DLRP) as "Other Lands" (see **Figure 4.2-1** below), which is land that is not mapped important farmland and is not included in any other mapping category. (DOC, 2016). Therefore, no farmland would be converted to non-agricultural use and no impacts would occur.

Figure 4.2-1
IMPORTANT FARMLAND CATEGORIES



b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact

The project site is zoned Single Family Residential 3 (SFR-3) and is not zoned for agricultural use. Williamson Act contracts restrict the use of privately-owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value. The project site is not subject to a Williamson Act contract (DLRP, 2025). Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and no impact would occur.

c) Would the project (c) conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

No Impact

The project site is zoned Single Family Residential 3 (SFR-3); the site is not zoned for forest, timberland, or timberland production use. Therefore, project development would not conflict with zoning for forest land or timberland, and no impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact

The project site and surroundings are not cultivated for forest resources. Therefore, project development would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

e) Would the project 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 project site is vacant and is surrounded by residences to the east, south and west. No important farmland is near the project site; the nearest mapped farmland is Prime Farmland approximately 2.3 miles to the north. No forest land is present on or near the project site.

Therefore, project development would not indirectly cause conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, and no impacts would occur.

4.3 Air Quality

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?			**X**	
c) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	

4.3.1 Pollutants of Concern

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (USEPA) and/or the California Air Resources Board (ARB). The criteria air pollutants of concern are nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), lead (Pb), and ozone, and their precursors, such as reactive organic gases (ROG) (which are ozone precursors). Since the proposed project would not generate appreciable SO_2 or Pb emissions,[6] it is not necessary for the analysis to include those two pollutants. Presented below is a description of the air pollutants of concern and their known health effects.

The project is in the Los Angeles County portion of the Mojave Desert Air Basin (MDAB), for whose air pollution control the Antelope Valley Air Quality Management District (AVAQMD) is substantially responsible. **Table 4.3-1** shows the attainment status of the MDAB for each criteria pollutant for both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). Presented below is a description of the air pollutants of concern and their known health effects.

Nitrogen oxides (NO_X) serve as integral participant in the process of photochemical smog production and are precursors for certain particulate compounds that are formed in the atmosphere and for ozone. A precursor is a directly emitted air contaminant that, when released into the atmosphere, forms, causes to be formed, or contributes to the formation of a secondary air contaminant for which an ambient air quality standard (AAQS) has been adopted, or whose presence in the atmosphere will

6 Sulfur dioxide emissions will be below 0.09 pound per day during construction and operations.

contribute to the violation of one or more AAQSs. When NO_X and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone. The two major forms of NO_X are nitric oxide (NO) and NO_2. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown pungent gas formed by the combination of NO and oxygen. NO_2 acts as an acute respiratory irritant and eye irritant and increases susceptibility to respiratory pathogens (USEPA, 2011).

Table 4.3-1
FEDERAL AND STATE ATTAINMENT STATUS

Pollutants	Federal Classification	State Classification
Ozone (O_3)	Nonattainment (Severe-15)	Nonattainment
Particulate Matter (PM_{10})	Nonattainment (Moderate)	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Unclassified	Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO_2)	Unclassified	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Sulfates	No Federal Standards	Attainment
Lead (Pb)	Attainment	Attainment
Hydrogen Sulfide (H_2S)	No Federal Standards	Unclassified
Visibility Reducing Particles	No Federal Standards	Unclassified

Sources: ARB, 2024, USEPA, 2025.

Carbon monoxide (CO) is a colorless, odorless non-reactive pollutant produced by incomplete combustion of fossil fuels. It is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for most CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions: primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions. High concentrations are lethal (USEPA, 2010).

Particulate matter (PM) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes and mists. Primary PM is emitted directly into the atmosphere from activities such as agricultural operations, industrial processes, construction and demolition activities, and

Particle size is a critical characteristic of PM that primarily determines the location of PM deposition along the respiratory system (and associated health effects) as well as the degradation of visibility through light scattering. In the United States, federal and state agencies have focused on two types of PM. PM_{10} corresponds to the fraction of PM no greater than 10 micrometers in aerodynamic diameter and is commonly called respirable particulate matter, while $PM_{2.5}$ refers to the subset of PM_{10} of aerodynamic diameter smaller than 2.5 micrometers, which is commonly called fine particulate matter.

PM_{10} and $PM_{2.5}$ deposition in the lungs results in irritation that triggers a range of inflammation responses, such as mucus secretion and bronchoconstriction, and exacerbates pulmonary dysfunctions, such as asthma, emphysema, and chronic bronchitis. Sufficiently small particles may penetrate the bloodstream and impact functions such as blood coagulation, cardiac autonomic control, and mobilization of inflammatory cells from the bone marrow. Individuals susceptible to higher health risks from exposure to PM_{10} airborne pollution include children, the elderly, smokers, and people of all ages with low pulmonary/cardiovascular function. For these individuals, adverse health effects of PM_{10} pollution include coughing, wheezing, shortness of breath, phlegm, bronchitis, and aggravation of lung or heart disease, leading, for example, to increased risks of hospitalization and mortality from asthma attacks and heart attacks (USEPA, 2019a).

Reactive organic gases (ROG) are defined as any compound of carbon, excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there are no state or national ambient air quality standards for ROG because ROGs are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formation of ozone. ROGs are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility. The term "ROG" is used by the ARB for this air quality analysis and is defined the same as the federal term "volatile organic compound" (VOC).

Ozone is a secondary pollutant produced through a series of photochemical reactions involving ROG and NO_X. Ozone creation requires ROG and NO_X to be available for approximately three hours in a stable atmosphere with strong sunlight. Because of the long reaction time, peak ozone concentrations frequently occur downwind of the sites where the precursor pollutants are emitted. Thus, ozone is considered a regional, rather than a local, pollutant. The health effects of ozone include eye and respiratory irritation, reduction of resistance to lung infection and possible aggravation of pulmonary conditions in persons with lung disease. Ozone is also damaging to vegetation and untreated rubber (USEPA, 2020f).

4.3.2 Climate/Meteorology

Air quality is affected by both the rate and location of pollutant emissions, and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.

The project site would be located wholly within the MDAB, which includes desert portions of Kern, Los Angeles, Riverside and San Bernardino counties. The distinctive climate of the MDAB is determined by its terrain and geographical location. The MDAB is characterized by a dry-hot desert climate, with some areas classified as dry-very hot desert where the average maximum temperatures exceed 100.4 degrees Fahrenheit (°F) for at least three months of the year. In summer, a Pacific

subtropical high pressure system typically remains offshore, reducing cloud cover and increasing daytime solar heating. Annual precipitation in the MDAB ranges from three to seven inches. The region is geographically isolated from Southern California's coastal areas and the Central Valley by the San Gabriel Mountains to the south and the Tehachapi Mountains to the northwest (AVAQMD, 2016).

The mean annual maximum and minimum temperatures in the project area, as determined from the nearest weather station (in the City of Palmdale), which has a period of record from 1903 to 2016, are 77.2°F and 47.2°F, respectively (WRCC, 2016). The hottest month is July, with an average maximum temperature of 97.6°F and the coldest month is January, with an average minimum temperature of 32.4°F.

During the period of record, the average total annual rainfall measures 7.61 inches, which occurs mostly during the winter and relatively infrequently during the summer. Monthly precipitation averages approximately 1.45 inches during the winter (December, January, and February), approximately 0.62 inches during the spring (March, April, and May), approximately 0.39 inch during the fall (September, October, and November), and approximately 0.08 inch during the summer (June, July, and August).

4.3.3 Local Air Quality

The project site is served by AVAQMD's air monitoring station in Lancaster, 8.6 miles northeast of the project at 43301 Division Street. This station monitors ozone, PM_{10}, $PM_{2.5}$ and NO_2. The ambient air quality data in the project vicinity as recorded from 2021 through 2023, along with applicable standards, are shown in **Table 4.3-2**.

Table 4.3-2

AMBIENT AIR QUALITY MONITORING DATA

Air Pollutant	Standard/Exceedance	2021	2022	2023
Ozone	Max. 1-hour Concentration (ppm)	0.086	0.098	0.112
	Max. 8-hour Concentration (ppm)	**0.080**	**0.083**	**0.089**
	# Days > Federal 8-hour Std. of 0.070 ppm	3	33	6
	# Days > California 1-hour Std. of 0.09 ppm	0	3	1
	# Days > California 8-hour Std. of 0.070 ppm	4	36	6
PM_{10}	Max. 24-hour Concentration (µg/m³)	**411.2**	76.2	121.1
	Est. # Days > Fed. 24-hour Std. of 150 µg/m³	1	0	0
	Federal Annual Arithmetic Mean (12 µg/m³)	**29.6**	**26.0**	**18.2**
$PM_{2.5}$	Max. 24-hour Concentration (µg/m³)	**35.7**	15.1	12.4
	# Days > Fed. 24-hour Std. of 35 µg/m³	1	0	0
	State Annual Average (12 µg/m³)	8.0	ND	3.3
NO_2	Max. 1-hour Concentration (ppm)	0.046	0.044	ND
	State Annual Average (0.030 ppm)	0.008	0.008	ND
	# Days > California 1-hour Std. of 0.18 ppm	0	0	0

Source: ARB, 2023.
ND - There were insufficient (or no) data available to determine the value.
Bold - exceedance

4.3.4 Air Quality Management Plans (AQMP)

The responsibility for the ambient air quality in the project area was legislated to the AVAQMD in 1997, when it was separated from the South Coast Air Quality Management District. The AVAQMD is the local agency with the primary responsibility for the control of non-vehicular sources of air pollution throughout the Antelope Valley. In 2004, the AVAQMD published the 2004 Ozone Attainment Plan (AVAQMD, 2004) in response to a designation of nonattainment for the 1-hour ozone NAAQS and the ozone CAAQS. The 2004 Plan demonstrated that the AVAQMD would attain the NAAQS by 2007 and presents progress toward the CAAQS. The 2004 Plan also discusses the 8-hour ozone NAAQS, which subsequently led to the publication of the Federal 8-Hour Ozone Attainment Plan (AVAQMD, 2008). The 2008 Plan was for the entire Western Mojave Desert Ozone Nonattainment Area, which includes part of the San Bernardino County portion of the Mojave Desert Air Quality Management District as well as the Antelope Valley portion of Los Angeles County. The 2008 Plan demonstrates that the AVAQMD will attain the NAAQS by June 2021. Both plans established that the AVAQMD had already adopted all reasonably available control measures.

Both the 2004 Plan and the 2008 Plan recognized that the Antelope Valley 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 Antelope Valley during the summer ozone season. These transport couplings have been officially recognized by the ARB. Local Antelope Valley emissions contribute to exceedances of both the NAAQS and CAAQS for ozone, but the Antelope Valley would be in attainment of both standards without the influence of this transported air pollution from upwind regions. The AVAQMD's most recently developed and updated plans, pursuant to State Implementation Plan (SIP) and California Clean Air Act (CCAA) requirements, include:

- AVAQMD CEQA & Federal Conformity Guidelines (2016).
- AVAQMD 2015 Reasonably Available Control Technology (RACT) SIP Analysis.
- AVAQMD 2015 8-hr Ozone Federal Negative Declaration for 20 Control Techniques Guideline (CTG) Source Categories.
- AVAQMD 2016 8-hr Ozone Federal Negative Declaration for 7 CTG Source Categories.
- AVAQMD 2017 Federal 75 parts per billion (ppb) Ozone Attainment Plan.
- AVAQMD 2020 Federal 70 ppb Ozone Evaluation: RACT SIP Analysis.
- AVAQMD 2023 Federal 70 ppb Ozone Attainment Plan.

4.3.5 Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. For the purposes of a CEQA analysis, the AVAQMD considers sensitive receptors to be residences, schools, daycare centers, playgrounds and medical facilities (AVAQMD, 2016, p.6). Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for shorter periods of time, such as eight hours. Therefore, applying a 24-hour standard for PM_{10} is appropriate not only because the averaging period for the state standard is 24 hours, but because the sensitive receptor would be present at the location for the full 24 hours.

The following project types must evaluate if the project will expose sensitive receptors to substantial pollutant concentrations:

- Any industrial project within 1,000 feet.
- A distribution center (40 or more trucks per day) within 1,000 feet.
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet.
- A dry cleaner using perchloroethylene within 500 feet.
- A gasoline dispensing facility within 300 feet.

The nearest sensitive receptors to the project site are single-family residences south of the project site, across East Palmdale Boulevard.

4.3.6 Applicable Antelope Valley Air Quality Management District Rules

Rule 403 (Fugitive Dust Rule)

During construction, the project would be subject to AVAQMD Rule 403 (fugitive dust). AVAQMD Rule 403 does not require a permit for construction activities, per se; rather, it sets forth general and specific requirements for all construction sites (as well as other fugitive dust sources) in the MDAB. The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust source) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source. AVAQMD Rule 403 also prohibits construction activity from causing an incremental PM_{10} concentration impact, as the difference between upwind and downwind samples, at the property line of more than 50 micrograms per cubic meter as determined through PM_{10} high-volume sampling. The concentration standard and associated PM_{10} sampling do not apply if specific measures identified in the rules are implemented and appropriately documented.

Other requirements of Rule 403 include not causing or allowing emissions of fugitive dust that would remain visible beyond the property line; no track-out extending 25 feet or more in cumulative length and all track-out to be removed at conclusion of each workday; and using the applicable best available control measures included Rule 403.

Rule 1113 (Architectural Coatings)

Construction of this project will include the application of architectural coatings and be subject to AVAQMD Rule 1113 (Architectural Coatings). Among other applicable entities, Rule 1113 requires anyone who applies, stores at a worksite, or solicits the application of architectural coatings to use coatings that contain VOC less than or equal to the VOC limits specified in Table 1 of the rule.

4.3.7 Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than significant Impact

CEQA requires that projects be consistent with the applicable AQMP. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision-makers of the environmental efforts of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed.

AVAQMD's CEQA Guidelines (AVAQMD, 2016) state that a project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. As mentioned in **Section 4.11**, the City's General Plan land use designation for the site is Employment Flex (EMPFX); and the zoning district is Light Industrial (LI). Storage uses are permitted on the project site and would be consistent with the General Plan designated land use and the zoning district for the site. The project is estimated to generate new traffic but the increase in VMT will not have a significant impact under CEQA (Pringle, 2025).

Additionally, to help the implement the AQMP, projects must not create regionally significant emissions of regulated pollutants from either short-term construction or long-term operations. The AVAQMD has developed criteria in the form of emissions thresholds for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project is in conformity with plans to achieve attainment. AVAQMD's significance thresholds for criteria pollutant emissions during construction activities and project operation are summarized in **Table 4.3-3**. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

Table 4.3-3
AVAQMD THRESHOLDS OF SIGNIFICANCE

Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Volatile Organic Compounds (VOC)	25	137
Nitrogen Oxides (NO_x)	25	137
Carbon Monoxide (CO)	100	548
Sulfur Oxides (SO_x)	25	137
Particulate Matter (PM_{10})	15	82
Fine Particulate Matter ($PM_{2.5}$)	12	65

Source: AVAQMD, 2016.

Regional Construction Emissions

Construction activities for the project are anticipated to begin in January 2026 and end in September 2026. **Table 4.3-4** shows the project schedule used for air quality, GHG emissions, and noise analyses in this IS/MND.

Table 4.3-4
CONSTRUCTION SCHEDULE

Construction Phase	Start	End
Site Preparation	September 1, 2026	October 1, 2026
Grading	September 1, 2026	January 1, 2027
Trenching	November 1, 2026	January 31, 2027

Construction Phase	Start	End
Building Construction	December 31, 2026	April 30, 2027
Paving	May 1, 2027	May 31, 2027
Architectural Coating	May 21, 2027	May 31, 2027

These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. Mobile sources (such as diesel-fueled equipment onsite and traveling to and from the project site) would primarily generate NO_X emissions. The quantity of emissions generated daily would vary, depending on the amount and types of construction activities occurring at the same time.

Estimated criteria pollutant emissions from the project's onsite and offsite project construction activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.29 (CAPCOA, 2017). CalEEMod is a planning tool for estimating emissions related to land use projects. Model-predicted project emissions are compared with applicable thresholds to assess regional air quality impacts. Offroad construction equipment information was supplied by the client, but CalEEMod defaults were used for onroad construction traffic inputs.

As shown in **Table 4.3-5**, construction emissions would not exceed AVAQMD regional thresholds. Therefore, the project's short-term regional air quality impacts would be less than significant. Refer to **Appendix A** of this document for air quality calculations.

Table 4.3-5
MAXIMUM DAILY AND ANNUAL REGIONAL CONSTRUCTION EMISSIONS

Construction Activity	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum Emissions, 2026 **(lbs/day)**	71.79	17.56	24.89	**0.94**	**0.60**
Annual Emissions (tons/year)	0.39	1.00	1.43	0.05	0.03
AVAQMD Daily Significance Thresholds	*137*	*137*	*548*	*82*	*65*
AVAQMD Annual Significance Thresholds	*25*	*25*	*100*	*15*	*12*
Significant? (Yes or No)	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

Regional Operational Emissions

The project consists of nine one-story buildings (Buildings A- H and J) comprising673 self-storage units ranging from 5 by 5 feet to 10 by 30 feet: 422 climate-controlled units in Building A and 251 non-climate-controlled units in all nine buildings. A 900-square-foot office would be located at the southwest corner of Building A. Wall and roof insulation, compliant with the 2025 California Energy Code, would be used in the climate-controlled portion of Building A to limit energy use for building heating and cooling. The anticipated operating hours (of both the facility and the office) are 9:30 a.m. to 6:00 p.m., seven days per week. Operational emissions generated by area sources, motor vehicles and energy demand would result from normal day-to-day activities of the project. Note that

operational emissions were estimated with both phases in operation. Trip rates were adjusted to match data supplied by the Trip Generation Assessment Memorandum (Pringle, 2025). The results of these calculations are presented in **Table 4.3-6**. As seen in the table, for each criteria pollutant, operational emissions would be below the pollutant's AVAQMD significance threshold. Therefore, regional operational emissions would be less than significant**.**

Table 4.3-6
MAXIMUM DAILY AND ANNUAL PROJECT OPERATIONAL EMISSIONS

Emission Source	Pollutant (lbs/day)					Pollutant (tons/year)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Mobile Source Emissions	0.79	0.87	8.36	1.54	0.40	0.131	0.162	1.262	0.278	0.072
Area Source Emissions	2.85	0.03	4.09	0.01	0.01	0.458	0.003	0.368	0.001	0.000
Energy Source Emissions	0.05	0.92	0.78	0.07	0.07	0.009	0.169	0.142	0.013	0.013
Total Operational Emissions	**3.69**	**1.82**	**13.23**	**1.62**	**0.48**	**0.598**	**0.334**	**1.772**	**0.292**	**0.085**
AVAQMD Significance Thresholds	*137*	*137*	*548*	*82*	*65*	*25*	*25*	*100*	*15*	*12*
Significant? (Yes or No)	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

b) Would the project 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

Since the MDAB is currently in nonattainment for ozone and PM_{10}, related projects may exceed an air quality standard or contribute to an existing or projected air quality exceedance. The AVAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the District recommends that a project's potential contribution to cumulative impacts be assessed by utilizing the same significance criteria as those for project-specific, direct and indirect impacts (AVAQMD, 2016, p.5). Furthermore, the AVAQMD suggests that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed above, the mass daily construction and operational emissions generated by the project would not exceed any of the AVAQMD's significance thresholds. Therefore, the project would not contribute to a cumulatively considerable increase in emissions for the pollutants which the MDAB

is in nonattainment. Thus, cumulative air quality impacts associated with the project would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact

According to the AVAQMD CEQA Guidelines (AVAQMD, 2016), residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated:

- Any industrial project within 1,000 feet.
- A distribution center (40 or more trucks per day) within 1,000 feet.
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet.
- A dry cleaner using perchloroethylene within 500 feet.
- A gasoline dispensing facility within 300 feet.

The proposed project is not considered one of the project types that the AVAQMD CEQA Guidelines require to be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations. Therefore, the proposed project was not evaluated for potential health risks to sensitive receptors.

The project would develop self-storage buildings and would not include activities that would generate substantial pollutant concentrations. Impacts would be less than significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact

A project-related significant adverse effect could occur if construction or operation of the proposed project would result in generation of odors that would be perceptible in adjacent sensitive areas. Construction-related sources of odors will come from construction equipment ranging from exhaust fumes to grease and oils. Impacts from construction-generated odors can depend upon the source, frequency of the generation of the odor, intensity, wind direction, and receptor sensitivity. The impacts from odors would be temporary and will occur only during construction. The short-term odors that would be generated by the equipment would dissipate. Land uses and industrial operations that are typically associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not include any of those types of land uses. Therefore, impacts would be less than significant.

4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?		**X**		
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 US Fish and Wildlife Service?		**X**		
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?		**X**		
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 nursery sites?			**X**	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		**X**		
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?				**X**

4.4.1 Methodology

UltraSystems biologists researched readily available information, including relevant literature, databases, agency websites, various previously completed reports and management plans, GIS data, maps, aerial imagery from public domain sources, and in-house records to identify the following: 1) habitats, special-status plant and wildlife species, jurisdictional waters, critical habitats, and wildlife corridors that may occur in and near the project site; and 2) local or regional plans, policies, and regulations that may apply to the project. Sources accessed by UltraSystems for analysis include:

- Biological Resources Evaluation for the Palmdale Boulevard Self-Storage Facility Project (UltraSystems, 2025a; see **Appendix C**); referred to as the *BRE* in this section;

- Western Joshua Tree Census Report (UltraSystems 2025b; appended to the BRE in **Appendix C**) and the

- Focused Rare Plant Survey (UltraSystems 2023c; appended to the BRE in **Appendix C**); referred to as the *Small Mammal Survey Report* in this section;

- Sensitive Biological Species Assessment for APN 3023-001-084 (Hagan, 2025; appended to the BRE in **Appendix C**). Mr Hagan is an independent consultant retained by the project applicant.

Additional sources are cited in the text.

Plant and wildlife species protected by the federal Endangered Species Act (ESA) or by the California Endangered Species Act (CESA) are referred to as listed species in this section. Plant and wildlife species not protected under ESA or CESA but still protected by federal agencies, state agencies, local or regional plans and/or nonprofit resource organizations, such as the California Native Plant Society (CNPS), are referred to as sensitive species in this section. The term special-status species is used when collectively referring to both listed and sensitive species.

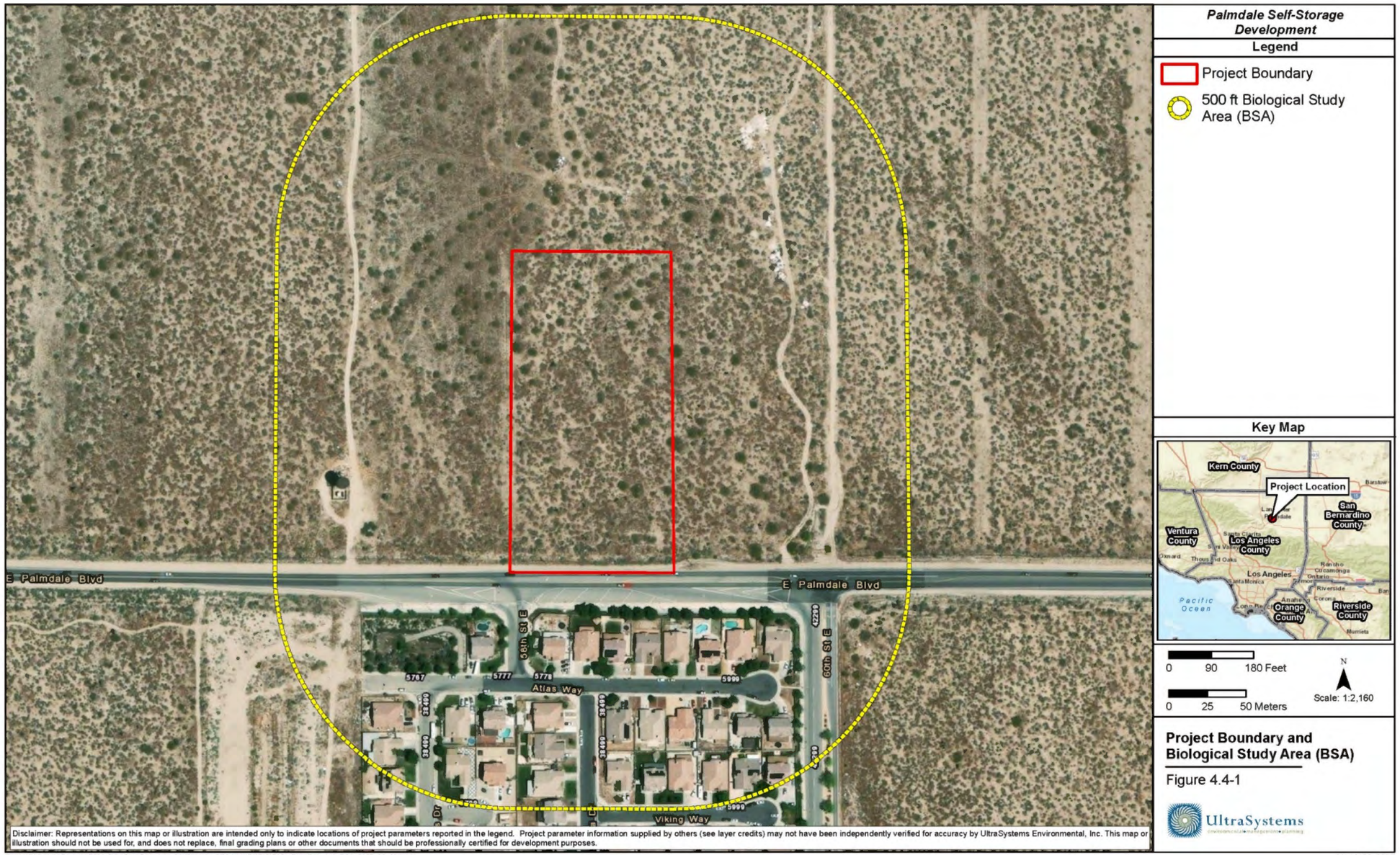
An analysis was conducted to inventory existing biological resources and determine whether the project would potentially result in impacts to biological resources per CEQA guidelines. A Biological Study Area (BSA) was defined for the project and includes the project site and a 500-foot buffer zone around its perimeter (refer to **Figure 4.4-1** *Project Boundary and Biological Study Area [BSA]*).

4.4.1.1 Environmental Setting

The topography of the biological study area (BSA) and project site are relatively flat, with slight inclines on the south to north plane. The north end of the BSA reaches approximately 2,620 feet above mean sea level (amsl), whereas the southern portion of the BSA reaches approximately 2,637 feet amsl (see **Figure 4.4-1**, *Project Boundary and Biological Study Area [BSA]*). The project is situated north of East Palmdale Boulevard, running northwest to the intersection of East Palmdale Boulevard and 60th Street East. The project site is primarily surrounded by open space, though residential developments are immediately south of East Palmdale Boulevard. The Angeles National Forest is approximately four miles south of the project site. (UltraSystems, 2025a).

The project site and BSA are in the Mojave Basin and Range Major Land Resource Area (MRLA) of the Western Range and Irrigated Region of the U.S. is the transition from the hot Sonoran Desert in the south to the cool Great Basin Desert in the north. This area contains both high and low deserts, often within short distances of one another (USDA NRCS, 2022, pp. 100-102). A strong orographic effect limits the amount of coastal humidity and precipitation entering the Mojave Basin. Precipitation occurs primarily in winter and early spring. Drought years are common, and high amounts of annual precipitation often occur in single storm events. Summers are hot and dry with irregular and sparse, high-intensity, convective thunderstorms (USDA NRCS 2022, pp. 100-102).

Figure 4.4–1
PROJECT LOCATION AND BIOLOGICAL STUDY AREA (BSA)



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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, UltraSystems Environmental, Inc., 2025.

The intermingling of hot and cold deserts adds to the diverse bio-geographics of the Mojave Basin and Range. The Mojave supports a wide variety of plant communities and ecological systems, from rare subalpine mesic meadows and isolate mesquite bosques to widespread creosote bush-white bursage desert scrub, patches of desert pavement, and Joshua tree woodlands. Typical wildlife species include coyote, kit fox, jackrabbit, cottontail, squirrel, roadrunner, Gambel's quail, mourning dove, burrowing owls, snakes (including sidewinders and other rattlesnakes), tarantulas, and tortoise. Some water bodies contain various species of pupfish (USDA NRCS 2022, pp. 100-102).

4.4.1.2 Discussion of Impacts

a) Would the project 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?

Less Than Significant with Mitigation Incorporated

Special Status Plants

Based on a literature review and query from publicly available databases (plant inventory)for reported occurrences within a 10-mile radius of the BSA, 2 listed and 50 sensitive plant species (i.e., *special-status species*) were recorded within the 10-mile radius by one of the following means: reported in the plant inventory; recognized as occurring based on knowledge of the area; or observed during other surveys (see **Figure 4.4-2**, *CNDDB Known Occurrences: Plant Species and Habitats*).

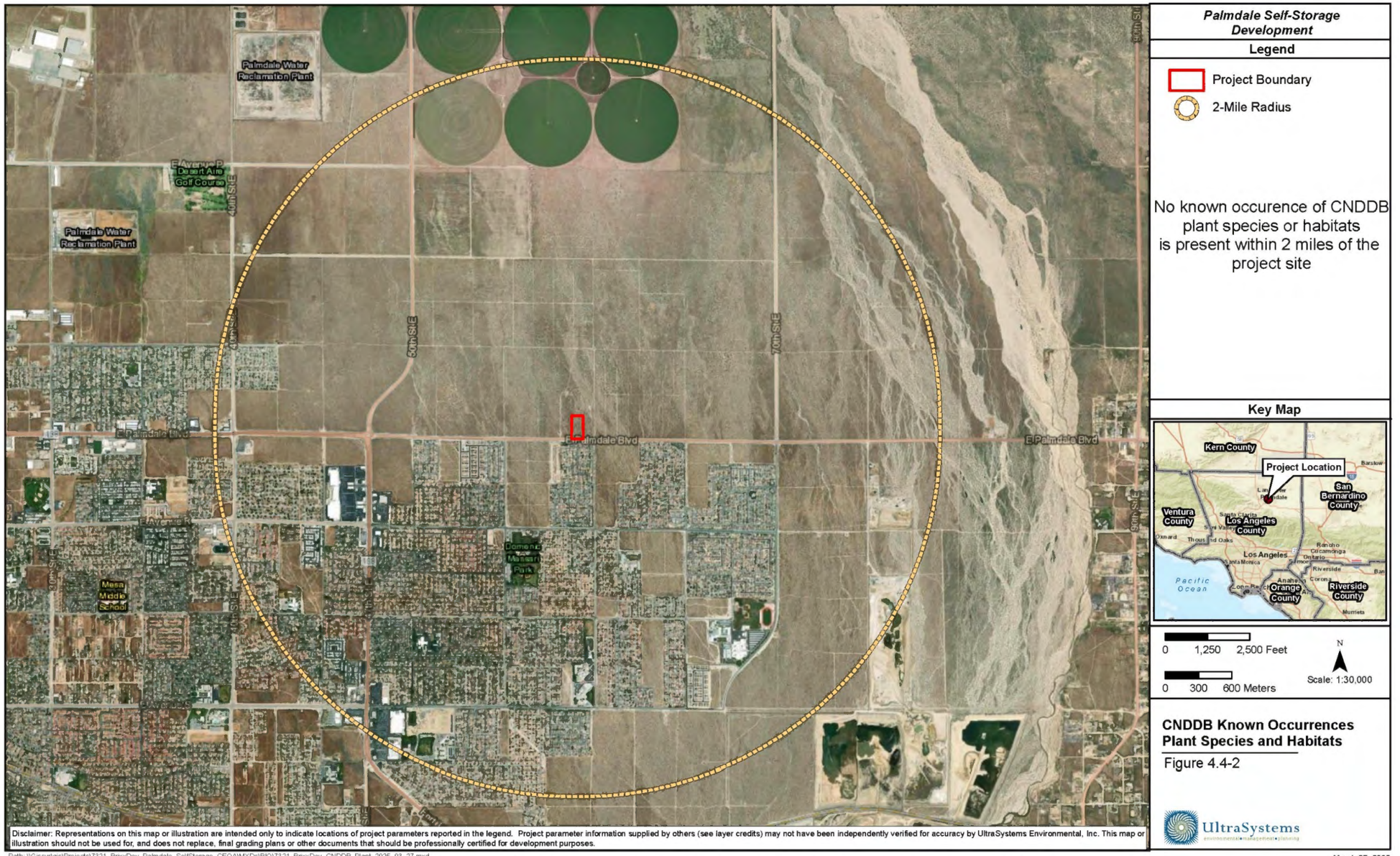
It is important to note that the 2025 focused rare plant surveys followed a below average rainfall season (UltraSystems 2025a, 2025c). Therefore, the focused rare plant survey results may be limited by lack of data concerning certain plant taxa, especially for annual or biennial plant species. Although surveys were conducted during the general peak bloom period for the species of interest, the lack of precipitation preceding the 2025 survey season precludes an optimal floristic inventory.

The literature review and field surveys determined that the listed plant species Mt. Gleason paintbrush (*Castilleja gleasoni*) was not expected to occur within the BSA due to a lack of suitable habitats to support them. One state Candidate Threatened species, western Joshua tree (*Yucca brevifolia*) was observed during the surveys and is considered to be present on the project site and within the BSA (UltraSystems 2025a, 2025b).

One sensitive plant species, silver cholla (*Cylindropuntia echinocarpa*[7]) was observed within the BSA, outside of the project site, during field surveys (UltraSystems 2025b; and **Figure 4.4-3**, *Rare Plants*). No additional sensitive plant species was observed within the BSA during the April and May 2025 surveys. Nine sensitive plant species were determined to have a moderate or high potential to occur, but none were observed within the BSA during the surveys. Much of the BSA lacks suitable biological and physical features that are needed to support 42 of the 54 special-status species in the plant inventory. The species determined as *not expected to occur* within the BSA are not anticipated to be affected by the project and were eliminated from further evaluation.

[7] Silver cholla is protected by the Palmdale Native Desert Vegetation Ordinance and the California Desert Native Plants Act.

Figure 4.4-2
CNDDB KNOWN OCCURRENCES: PLANT SPECIES AND HABITATS



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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; CDFW, March 2025; UltraSystems Environmental, Inc., 2025.

Figure 4.4-3
RARE PLANTS

These species are not discussed further in this report, but are provided in **Appendix C**, *Biological Resources Evaluation* (UltraSystems 2025a). Sixty-one plant species were observed within the BSA (UltraSystems 2025a).

In his biological assessment, Hagan (2025) did not observe any sensitive or special status plant species other than western Joshua tree (see **Appendix C,** *Biological Resources Evaluation*). However, UltraSystems biologists observed silver cholla in the BSA during their surveys and mapped their locations (UltraSystems 2025a; see **Figure 4.4-3**, *Rare Plants*).

Western Joshua Tree

Joshua tree (*Yucca brevifolia*) is a State Candidate Threatened species that is native to California. The Joshua tree is an evergreen tree that typically grows to heights of between 16 to 65 feet. Trees exceeding 33 feet are rare. Tree size and growth form vary with site and climate conditions. Joshua trees typically have one main stout stem or trunk that measures 1 to 3.2 feet in diameter and have an expanded base. Older plants generally have extensive branching. Young trees typically lack branches and are covered with persistent reflexed leaves. Trees normally reach 3 to 10 feet tall before branching. Joshua trees occur in desert grasslands and shrublands in hot, dry sites on flats, mesas, bajadas, and gentle slopes in the Mojave Desert. Joshua tree populations are characterized as discontinuous and reach their highest density on the well-drained sandy to gravelly alluvial fans adjacent to desert mountain ranges (UltraSystems 2025a).

UltraSystems biologists recorded 131 trees; 96 of these were inside the project site and 35 were within the 50-foot buffer (UltraSystems 2025c). **Table 4.4-1** provides the number of surveyed Joshua trees by size class and reproduction type and **Figure 4.4-4**, *Joshua Tree Locations*, provides the locations of each tree.

Unless otherwise noted, the project applicant does not plan to transplant or retain any of the Joshua trees on the project site. All impacts to this parcel will be permanent, as no remaining undeveloped land is proposed by this project.

Silver cholla

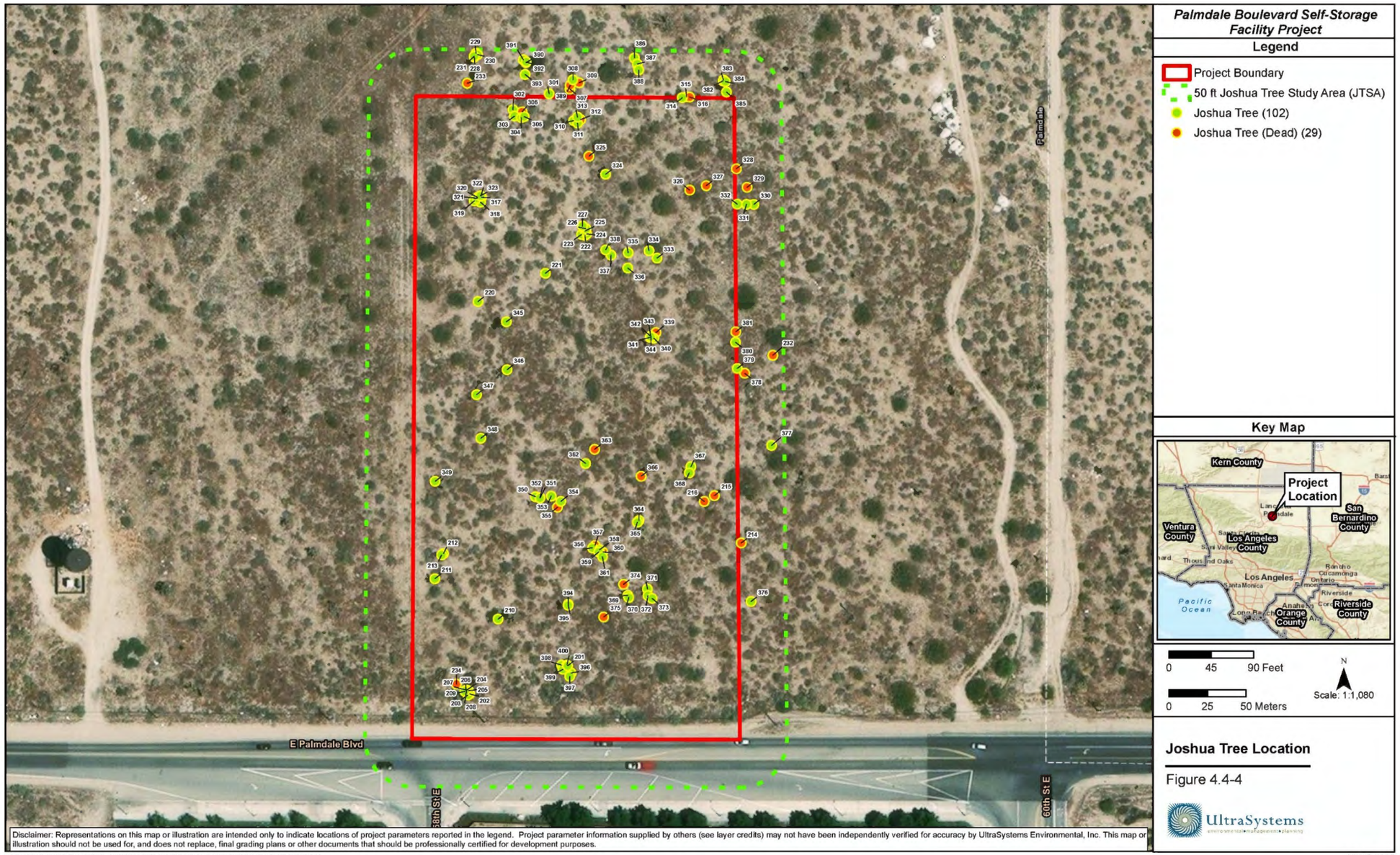
Silver cholla (*Cylindropuntia echinocarpa*) is a perennial stem succulent stem that is found in the Mojave and Sonoran deserts, desert grasslands, juniper and oak-juniper woodlands, flats, bajadas, canyons, sandy, loam, alluvial to gravelly substrates. Silver cholla often is a common component of desert vegetation communities on well-drained sandy, gravelly, and rocky soils, and moderate slopes into the lower mountains in the lower Sonoran (creosote-bursage flats) and upper Sonoran (Mojavean desert scrub and pinyon and juniper woodlands) life zones. This sensitive plant flowers from April to May (UltraSystems 2025a).

Table 4.4-1
WESTERN JOSHUA TREES BY SIZE CLASS AND REPRODUCTION TYPE

Western Joshua Trees	Number of Trees	HEIGHT CLASSES			NON-CLONAL		CLONAL			Dead	Nests[1]
		Class A	Class B	Class C							
		<1m tall	*1m to 5m tall*	*>5m tall*	Mature (Single tree, non-clonal)	Immature (non-clonal)	Mature (parent tree, clonal)	Mature (clonal)	Immature (clonal)		
Project Site	96	26	63	7	13	1	15	15	34	18	17
50-foot Buffer	35	6	26	3	6	0	6	4	8	11	3
Total Trees	**131**	**32**	**89**	**10**	**19**	**1**	**21**	**19**	**42**	**29**	**20**
Project Site (%)	73%	81%	71%	70%	68%	100%	71%	79%	81%	62%	85%
50-foot Buffer (%)	27%	19%	29%	30%	32%	0%	29%	21%	19%	38%	15%

1. Four additional nests were recorded, but were not associated with western Joshua tree locations.

Figure 4.4-4
JOSHUA TREE LOCATIONS



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Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, Maxar, Microsoft, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri, HERE, Garmin, iPC, Esri, HERE, Garmin, NGA, USGS, NPS; UltraSystems Environmental, Inc., 2025.

Special-Status Plant Species with a High Potential to Occur in the BSA

Five sensitive plant species were determined to have a high potential to occur within the BSA (UltraSystems 2025a).

Crowned muilla

Crowned muilla is a California native but also found in Nevada. This species is considered moderately threatened because of its limited distribution in California. Crowned muilla is found in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland; on loam, sandy loam, loamy sand, and sandy soils. The blooming period for crowned muilla is from March through April.

Lemmons syntrichopappus

Lemmon's syntrichopappus is both native and endemic to California. This species is considered limited in its distribution but not very threatened in California. Lemmon's syntrichopappus is found in chaparral, Joshua tree woodland, pinyon and juniper woodland, open areas; on sandy soils and gravelly soils. The blooming period for Lemmon's syntrichopappus is from April through June.

Mojave monardella

Mojave monardella is both native and endemic to California. This species is considered limited in its distribution and moderately threatened in California. Mojave monardella is found in chenopod scrub, desert dunes, Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, Mojavean desert scrub, pinyon and juniper woodland; on sandy soils. The blooming period for Mojave monardella is April through September.

Short-joint beavertail

Short-joint beavertail is a California endemic, entirely restricted to the Transverse Ranges, occurring in Los Angeles and San Bernardino counties, and known from only about 200 populations. It occurs along the boundary of the Mojave Desert and Southern California Mountains and Valleys MRLA. This species is considered vulnerable because of its narrow geographic range. Short-joint beavertail is found in chaparral, Joshua tree woodlands, Mojavean desert scrub, riparian woodlands, and pinyon and juniper woodlands; on sandy soils or coarse granitic soils ranging from loam, sandy, to rocky. The blooming period for short-joint beaver tail is April through August.

White pygmy poppy

White pygmy poppy is both native and endemic to California. This species is considered limited in its distribution and moderately threatened in California. Mojavean desert scrub, Joshua tree woodlands, and pinyon and juniper woodlands; on sandy soils. The blooming period for this species is March through June.

Sensitive Plant Species with a Moderate Potential to Occur

- Golden goodmania (*Goodmania luteola*) CRPR: 4.2[8], G3S3[9];
- Lancaster milk-vetch (*Astragalus preussii* var. *laxiflorus*) CRPR: 1B.1[10]
- Mojave paintbrush (*Castilleja plagiotoma*) CRPR: 4.3[11];
- Mojave spineflower (*Chorizanthe spinosa*) CRPR: 4.2, G4S4[12].

Because western Joshua trees are protected under the Western Joshua Tree Conservation Act, any impacts to this species will require a Western Joshua Tree Conservation Act Incidental Take Permit (UltraSystems 2025a, 2025b).

Project impacts to Joshua trees will be mitigated through payment into the Joshua Tree Conservation Act Fund or through offsite mitigation via Incidental Take Permitting process under consultation with CDFW and the City of Palmdale. The project will result in substantial adverse effects, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. With implementation of measures **BIO-1** through **BIO-9**, described below, impacts would be less than significant.

Special-Status Wildlife

Based on a literature review and query from publicly available databases (hereafter, wildlife inventory) for reported occurrences within a 10-mile radius of the project site, 10 listed and 15 sensitive wildlife species were identified as potentially occurring within the 10-mile radius by one of the following means: reported in the wildlife inventory; recognized as occurring based on knowledge of the area; or observed during other surveys. Refer to **Figure 4.4-5** *CNDDB Known Occurrences: Wildlife Species,* which displays three species identified in the CNDDB wildlife inventory within a two-mile radius of the BSA.

Of those 25 species, four listed and 11 sensitive wildlife species were determined to have at least a moderate or high potential to occur (UltraSystems 2025a; see **Appendix C,** *Biological Resources Evaluation*). Much of the BSA lacks suitable biological and physical features that are needed to support 10 of the 25 special-status species in the wildlife inventory. The species determined as *not expected to occur* within the BSA are not anticipated to be affected by the project and were eliminated from further evaluation. These species are not discussed further in this report, but are provided in **Appendix C,** *Biological Resources Evaluation*.

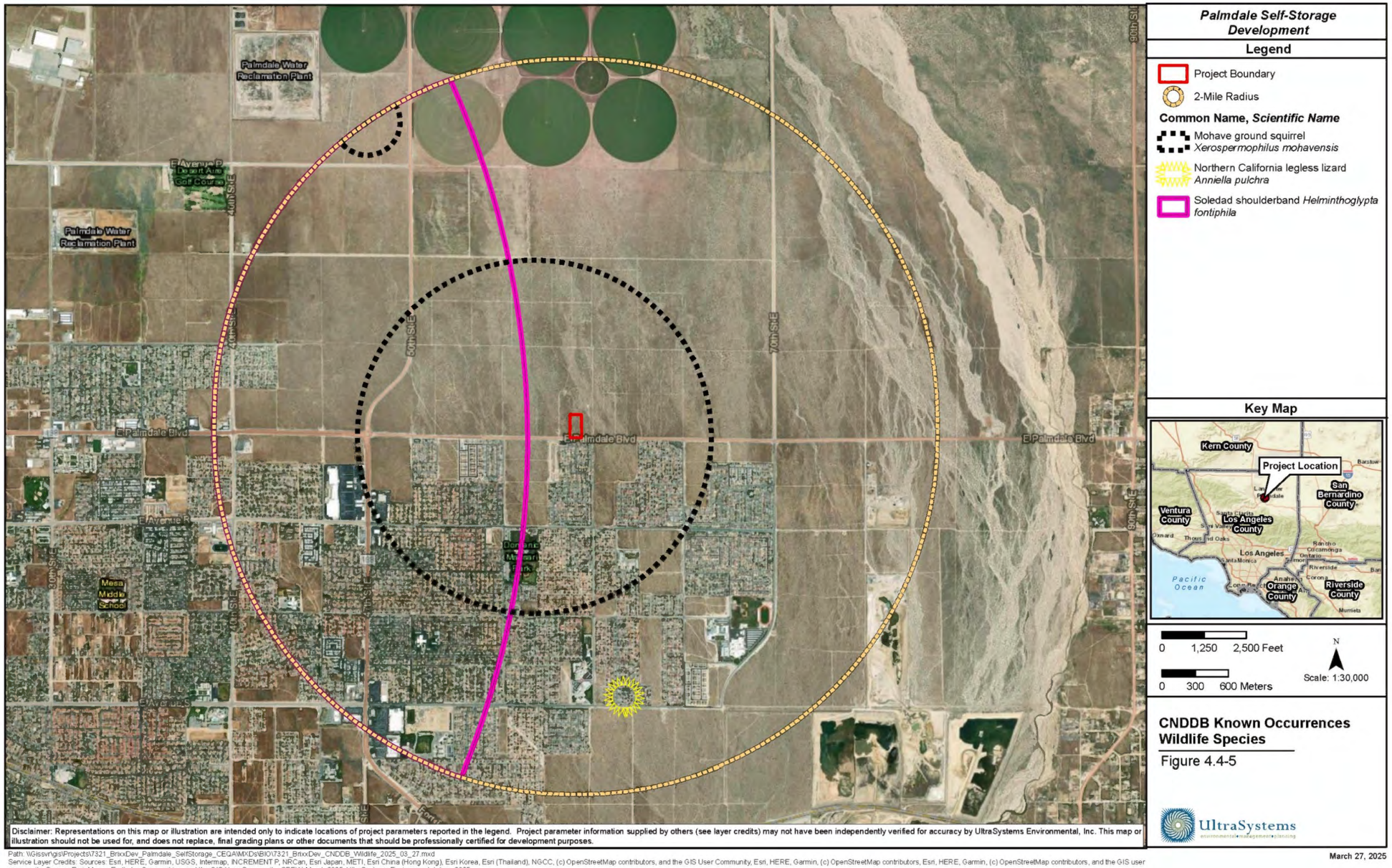
CNDDB Record Within Two Miles from the Project

The following special-status wildlife species have been recorded by the CNDDB within a two-mile radius from the project (CNDDB, 2025; see **Figure 4.4-5**, *CNDDB Known Occurrences: Wildlife*).

- Mohave ground squirrel (*Xerospermophilus mohavensis*) ST[13]

[2] CRPR 4.2 = California Rare Plant Rank, 4 - plants of limited distribution, .2 = moderately threatened in California
[9] G3S3 = G = Global, 3 = vulnerable, S = State, 3 = vulnerable
[10] CRPR 1B.1 = 1B = rare, threatened, or endangered in California and elsewhere, .1 = seriously threatened in California
[11] CRPR 4.3 = = California Rare Plant Rank, 4 - plants of limited distribution, .3 = not very threatened in California
[12] G4S4 = Global, 4 = apparently secure, State, 4 = apparently secure
[13] ST = State threatened

Figure 4.4-5
CNDDB KNOWN OCCURRENCES: WILDLIFE SPECIES



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- Northern California legless lizard (*Anniella pulchra*) SSC[14]
- Soledad shoulderband (*Helminhoglypta fontiphila*) Special Animals List[15], G1S1[16]

Wildlife Species Observed During the Field Surveys

Approximately 26 wildlife species were observed within the BSA. A list of wildlife species recorded within the BSA during the field surveys is provided in the BRE, located in **Appendix C**.

Multiple nests and burrows were observed on the project site (see **Figures 4.4-6**, *Burrow Assessment*, and **4.4-7**, *Special-Status Species*). It was not determined to what species most of the nests and burrows belonged because nesting bird surveys and focused small mammal surveys were not within the scope of the biological field surveys. However, during surveys the following nests were able to be identified to species via observations: common raven, approximately 365 feet west and northern mockingbird, 45 feet east, of the project site, respectively.

One special-status wildlife species – the coastal cactus wren (*Camphylorhynchus brunneicapillus*; BCC[17]) – was observed within the BSA (approximately 450 feet east of the project boundary) during the surveys. Given that this species is mobile and the site is likely within the home range for this animal, the site is considered occupied by coastal cactus wren.

Coastal Cactus Wren (*Campylorhynchus brunneicapillus*)

The coastal cactus wren is an obligate, non-migratory resident of the coastal sage scrub vegetation community in which cacti are prominent. The key habitat element is thickets of chollas (*Opuntia prolifera*) or prickly-pear cacti (*Opuntia littoralis, Opuntia oricola*) tall enough to support and protect the birds' nests. Coastal cholla is preferred, but prickly pear will do. Wrens are usually absent from areas where only low, sprawling cacti grow.

Species with a High Potential to Occur in the BSA

No listed wildlife species under CESA or ESA were observed within the BSA. Suitable habitat conditions create moderate-to-high potential for four listed wildlife species to occur within the BSA due to the presence of potential suitable breeding and/or foraging habitat. desert tortoise (*Gopherus agassizii*) FT[18], ST; Mohave ground squirrel (*Xerospermophilus ohavensis*; ST); burrowing owl (*Athene cunicularia*; SCT[19], BCC); Crotch's bumble bee (*Bombus crotchii*; SCE[20], S2[21], IUCN: EN[22]).

Six sensitive wildlife species, American badger (*Taxidea taxus*) SSC, S3, IUCN: LC[23]; Blainville's horned lizard (*Phrynosoma blainvillii*) SSC, S3, IUCN: LC; Cooper's hawk (*Astur cooperi*) WL[24], S4, IUCN: LC; Le Conte's thrasher (*Toxostoma lecontei*) SSC, BCC; Loggerhead shrike (*Lanius ludovicianus*) SSC,

[14] SSC = California Department of Fish and Wildlife (CDFW) species of special concern
[15] Special animals list = CDFW, California Natural Diversity Database (CNDDB)
[16] G1S1 = Critically imperiled: at high risk of extinction, extremely rare.
[17] BCC = United States Fish and Wildlife Seice (USFWS) bird of conservation concern
[18] FT = Federal Endangered Species Act (ESA) threatened
[19] SCT = California Endangered Species Act (CESA) state candidate threatened
[20] SCE = CESA state candidate endangered
[21] S2 = State imperiled
[22] IUCN: EN = International Union for Conservation of Nature (IUCN), EN = endangered
[23] IUCN: LC = IUCN least concern
[24] WL = CDFW watch list

Figure 4.4-6
BURROW ASSESSMENT

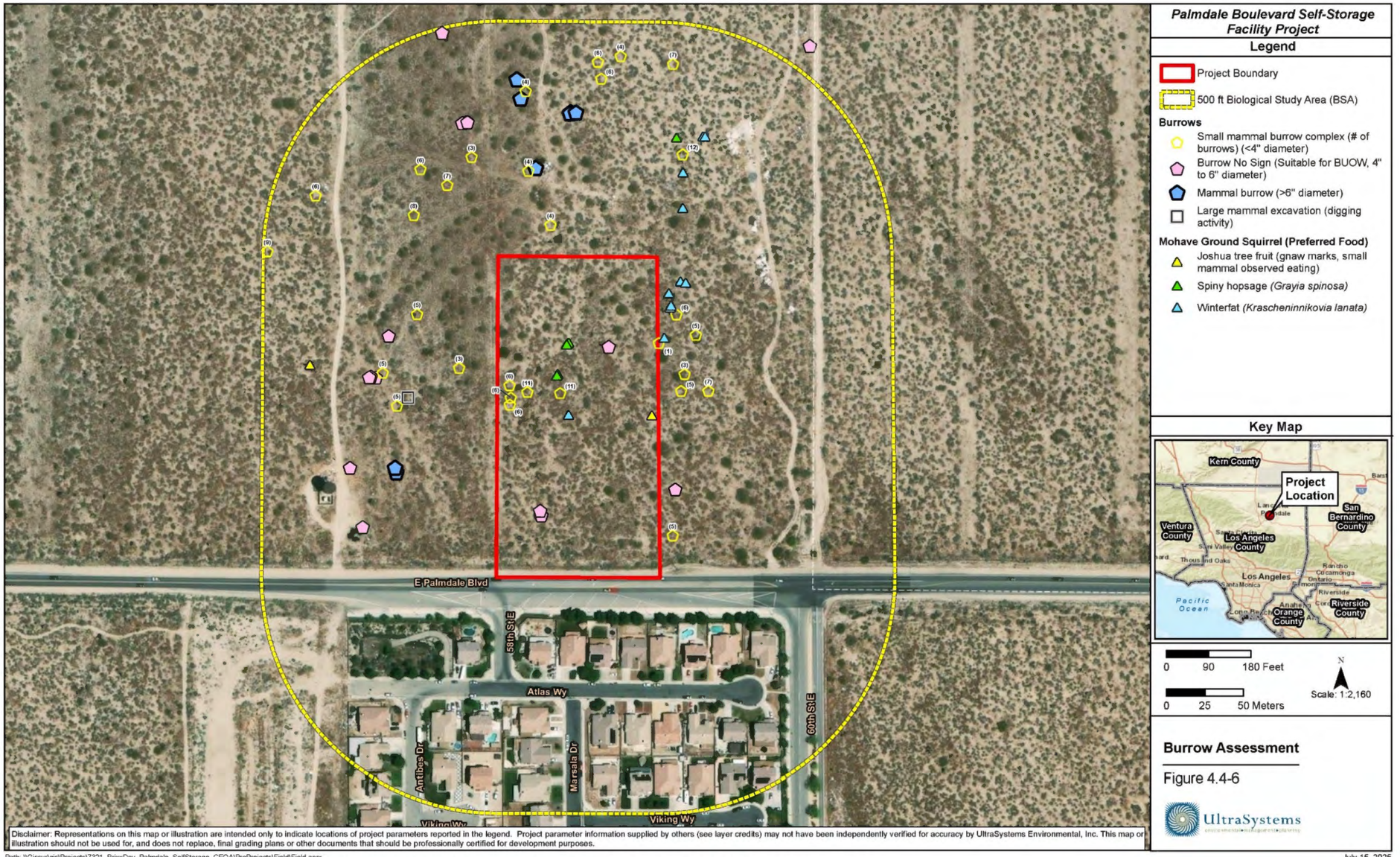
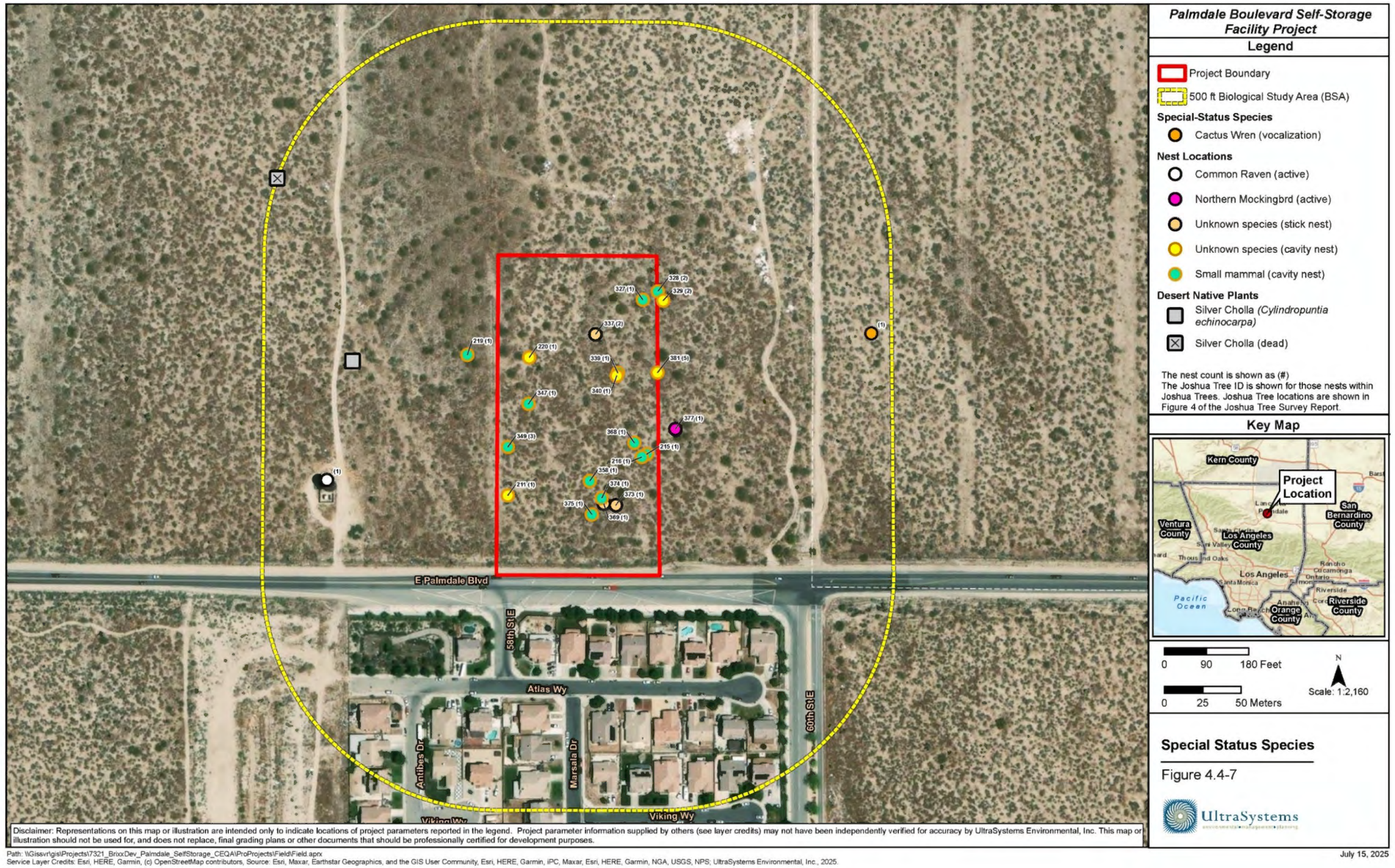


Figure 4.4-7



SPECIAL STATUS SPECIES

G4S4, IUCN: NT[25]; and Northern California legless lizard (*Anniella pulchra*) SSC, G3, S2S3[26] were determined to have a high potential to occur within the BSA.

Desert tortoise (*Gopherus agassizii*)

The desert tortoise occurs in the Mojave and Sonoran deserts in southern California, southern Nevada, Arizona, and the southwestern tip of Utah in the U.S., as well as Sonora and northern Sinaloa in Mexico. The designated Mojave population of the desert tortoise is listed as federally and State Threatened and includes those animals living north and west of the Colorado River in the Mojave Desert of California, Nevada, Arizona, and southwestern Utah, and in the Sonoran (Colorado) Desert in California. The project site is located in the Western Mojave Recovery Unit.

Within the western Mojave range, tortoises typically occur in creosote bush, cactus (Opuntia spp.), shadscale (*Atriplex confertifolia*) scrub habitats, and Joshua tree (*Yucca brevifolia*) woodland below 4,000 feet above mean sea level. Soils must be friable (easily crumbled) enough for digging burrows, but firm enough so that burrows do not collapse. During the winter, tortoises will opportunistically use burrows of various lengths, deep caves, rock and caliche crevices, or overhangs for cover. During the winter, tortoises will opportunistically use burrows of various lengths, deep caves, rock and caliche crevices, or overhangs for cover (UltraSystems 2025a).

No direct observations of desert tortoise were made by wildlife biologist Hagan or UltraSystems biologists. Neither Hagan (2025) nor UltraSystems biologists observed conditions that may be suitable for desert tortoise. Therefore, surveys are not recommended at this time.

Mohave Ground Squirrel (Xerospermophilus mohavensis)

The Mohave ground squirrel (MGS) is a small ground squirrel, approximately nine inches long, that inhabits the Mojave Desert in parts of Inyo, Kern, Los Angeles and San Bernardino counties. MGS consume leaves, forbs, shrubs, and grasses of several species and genera, including creosote (*Larrea tridentata*), winter fat (*Krascheninnikovia lanata*), spiny hop-sage (*Grayia spinosa*), saltbush (*Atriplex* spp.), golden linanthus (*Linanthus aureus*), Mediterranean grass (*Schismus arabicus*), box thorn (*Lycium* spp.), and several other plant species. MGS dig burrows in sandy and gravelly soils on flat to moderately sloping terrain (UltraSystems 2025a).

No direct observations of Mohave ground squirrel were made by Hagan or UltraSystems biologists, although UltraSystems biologists observed conditions that may be suitable for Mohave ground squirrel, such as (1) observations of known food sources, and (2) observations of small mammal burrows with potential to suit Mohave ground squirrel. In his biological assessment, Hagan did not observe spiny hopsage (*Grayia spinosa*) or winterfat (*Krascheninnikovia lanata*). However, UltraSystems biologists observed multiple hopsage individuals within the project site and one outside of the project site within the BSA. One winter fat was observed within the project site and multiple within 50 feet of the project site (see **Figure 4.4-6**, *Burrow Assessment*). Spiny hopsage and winterfat are shrubs native to California; although not a special-status species, both of these species represent a food source of the special-status Mojave ground squirrel (UltraSystems 2025a).

[25] IUCN: NT = IUCN near threatened
[26] S2S3 = State imperiled/vulnerable

Hagan provided his opinion that MGS is not expected onsite and stated that MGS are likely extirpated from southwestern area of the City of Palmdale (Hagan 2025). UltraSystems agrees that MGS are not expected to occur, therefore, surveys are not recommended at this time.

Burrowing Owl (Athene cunicularia)

The burrowing owl (BUOW) is a small, ground-inhabiting owl. The species is a grassland specialist distributed throughout western North America. Western burrowing owls depend upon the presence of burrowing mammals whose burrows are used for roosting and nesting. The presence or absence of colonial mammal burrows is often a factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts (UltraSystems 2025a).

No direct observations of burrowing owl were made by Hagan or UltraSystems biologists, although UltraSystems biologists found conditions with suitable potential for burrowing owl (see **Figure 4.4-6**, *Burrow Assessment*). Hagan provided his opinion that BUOW is not expected onsite (Hagan, 2025). UltraSystems' Biologists concur that the site lacked BUOW presence at the time of the surveys. Therefore, focused surveys are not recommended currently. However, given that the project vicinity supports burrowing owl, there is a low potential that a burrowing owl may inhabit the site at a future date (UltraSystems 2025a).

Crotch's bumble bee (*Bombus crotchii*)

Crotch's bumble bee inhabits open grassland and scrub habitats. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. Bumble bees, including *Bombus crotchii*, are generalist foragers and have been reported visiting a wide variety of flowering plants. Plants in the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* have been recorded as example food plants. Note that these floral associations do not necessarily represent this species' preference for these plants over other flowering plants but rather may represent the prevalence of these flowers in the landscape where this Crotch's bumble bee occurs. In southern California, Crotch's bumble bee has been observed predominantly in arid grassland and scrub habitats (UltraSystems 2025a).

Neither Hagan nor UltraSystems biologists directly observed Crotch's bumblebee within the BSA. However, the species has moderate potential to occur due to suitable hostplants onsite.

Hagan provided his opinion that CBB is not expected onsite (Hagan, 2025). Through the literature review and field surveys, UltraSystems found this species to have a moderate potential to occur. Therefore, focused surveys are not recommended at this time. However, given that this region is at the edge of the known range for Crotch's bumble bee, there is still low potential that a CBB may inhabit the site at a future date after a high rainfall year during peak bloom season.

American badger

The California Department of Fish and Wildlife (CDFW) considers American badger (*Taxidea taxus*) to be a Species of Special Concern (SSC). The American badger is found in a dry, open stages of a variety of habitats throughout California including woodlands, shrublands, and grasslands. The American badger is a fossorial carnivore and feeds primarily on small fossorial mammals including mice, chipmunks, rats, and particularly ground squirrels and pocket gophers. This species is fossorial

and digs its dens in loose, friable soil. American badger is active year-round and has been observed to be diurnal at times or nocturnal (UltraSystems 2025a).

Blainville's horned lizard

This species is found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat created by disturbance (e.g., floods, fire, roads, grazed areas, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge (UltraSystems 2025a).

Cooper's hawk

Cooper's hawk (*Accipiter cooperii*) are medium-sized hawks of the woodlands. These raptors are commonly sighted in parks, neighborhoods, over fields, and even along busy streets if there are large trees nearby for perching and adequate prey species such as other birds and small mammals. They prefer to breed in more densely wooded areas than occur in the BSA, such as woodland openings and edges of riparian and oak habitat. Cooper's hawks build nests in pines, oaks, Douglas-firs, beeches, spruces, and other trees. Males typically build the nest over a period of about two weeks, with just the slightest help from the female. Nests are piles of sticks roughly 27 inches in diameter and 6-17 inches high with a cup-shaped depression in the middle, 8 inches across and 4 inches deep. The cup is lined with bark flakes and, sometimes, green twigs (UltraSystems 2025a).

Le Conte's thrasher

LeConte's thrasher is a passerine in the family Mimidae. This species occurs in the deserts of southeastern California, southern Nevada, extreme southwestern Utah south into west-central and southwestern Arizona, northeastern Baja California, and northwestern Sonora, with recent range extensions into the Carrizo Plain and Cuyama Valley, much of the San Joaquin Valley, and the Panoche Hills. Occupied habitats are generally moderately to sparsely vegetated by saltbush scrub with bare ground or patches of sparse grasses. Habitat loss and degradation, particularly conversion of habitat to agriculture, are the major threats to populations. They are considered a Species of Special Concern by the CDFW and a Bird of Conservation Concern by the USFWS. Their nests are protected by the MBTA and Fish and Game codes pertaining to native nesting avian species (UltraSystems 2025a).

Loggerhead shrike

The loggerhead shrike is a large, predatory songbird. They are known to inhabit and forage over open country within areas of short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures with fence rows, old orchards, savannas, prairies mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs. They prefer tall shrubs or trees (also fences or power lines) for hunting perches and territorial advertisement; open areas of short grasses, forbs, or bare ground for hunting; and large shrubs or trees for nest placement. In California, loggerhead shrikes breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground. They often nest in isolated trees or large shrubs (UltraSystems 2025a).

Northern California legless lizard

The Northern California legless lizard is a lizard in the family Anniellidae. This species occurs in moist, loose soil in a variety of coastal and interior habitats, including sandy washes and alluvial fans. It is typically found in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. This species may often be found under surface objects such as rocks, boards, driftwood, and logs. This species is considered a Special Species of Concern by CDFW (UltraSystems 2025a).

Sensitive Species with a Moderate Potential to Occur within the BSA

- California glossy snake (*Arizona elegans occidentalis*) SSC, S2;
- Desert kit fox (*Vulpes macrotis arsipus)* 14 CCR § 460[27] San Joaquin pocket mouse (*Perognathus inornatus*);
- Prairie falcon (*Falco mexicanus*) WL, BCC;
- Ferruginous hawk (*Buteo regalis*) WL, BCC;

Desert Kit Fox (Vulpes macrotis arsipus)

Desert kit foxes are carnivorous species living in open deserts, creosote bush flats, and amongst the sand dunes. They prey on Merriam's kangaroo rat (*Dipodomys merriami)*, black-tailed jackrabbits (*Lepus californicus)*, desert cottontails (*Sylvilagus auduboni)* and other mammal, bird, or reptile species. Desert kit foxes reside in dens and birth February-March; the vixen rarely leave the dens during the nursing period, leaving males to hunt for the family (National Park Service, 2025).

No direct observations of desert kit foxes were observed by Hagan or UltraSystems biologists; however, several medium-to-large size burrows were observed throughout the BSA. Both parties agree the project site has potential to support desert kit foxes (UltraSystems 2025a, Hagan 2025), which are protected by California Code of Regulations (CCR) Title 14, § 460, which states "*Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time*."

Potential direct impacts to common and special-status wildlife occupying the project site could occur from construction-related mortality, injury, or harassment of individuals as a result of permanent development of the project site, and from the removal and direct loss of breeding, foraging, and/or sheltering habitats. These impacts could be considered significant. Project development could diminish the habitat available to common and special-status wildlife species by removing onsite habitats. Direct permanent impacts include all areas within the limits of grading in the project footprint. Construction related direct impacts are considered potentially significant impacts.

Indirect impacts are more subtle than direct impacts. Indirect impacts may either be short-term (related to construction) or long-term, affecting populations and habitat quality over an extended period of time long after construction activities have been completed.

[27] 14 CCR § 460. Fisher, Marten, River Otter, Desert Kit Fox and Red Fox states Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time.

Construction of the project could result in indirect impacts to special status wildlife located adjacent to the project work site. Numerous special-status wildlife species were determined to have moderate to high potential to occur within the BSA and could be indirectly impacted by the project.

The permanent loss of habitat and physical features on the project site could indirectly impact wildlife species in the BSA through the disturbance within adjacent foraging, roosting, denning, and/or breeding habitat. Ground-disturbing and construction activities could result in temporarily increased ambient noise levels, vibration, lighting and/or human intrusion in and near wildlife habitat. This could disrupt natural foraging, roosting, denning, and/or breeding behavior of wildlife species. Wildlife species stressed by these factors may disperse from habitat near a project site or project vicinity. In addition, increased noise levels could interfere with territorial and mating vocalizations, thereby interfering with wildlife reproduction.

Ground-disturbing and construction activities could increase fugitive dust, pollution, runoff, siltation, sedimentation, and erosion. This could result in degradation and alteration of habitat and soils. Consequently, the ability of onsite and adjacent vegetation communities to support wildlife populations may decrease.

A temporary increase and continuation of human activities within and adjacent to the project site could lead to mortality, injury, or harassment of wildlife species by providing food in the form of trash and litter or water which attracts predators such as the common raven (*Corvus corax*) and coyote (*Canis latrans*).

Construction of the project would potentially result in direct and indirect impacts to special-status wildlife species determined to have a moderate and high potentials to occur (see **Appendix C,** *Biological Resources Evaluation* because the BSA supports suitable foraging, nesting, and burrowing habitat for these species within and immediately surrounding the project site. Implementation of **BIO-1** through **BIO-14, BIO-16** and **BIO-17** described below, will minimize or avoid impacts to special-status wildlife species. Potential impacts of construction to special-status wildlife species would be less than significant.

Impacts to Breeding and Nesting Birds (Migratory Bird Treaty Act)

The BSA supports trees, shrubs, and other vegetation (including landscaping/ornamental vegetation), and a water tower that could potentially provide foraging, nesting, and cover habitats to support a diverse assortment of bird species (year-round residents, seasonal residents, and migrants). A majority of the birds observed during the field surveys and those birds that could potentially breed and nest within the project site and BSA are protected by the MBTA, and by Fish and Game Code § 3503, § 3503.5, and § 3513. Multiple nests were observed within the project site and BSA (UltraSystems 2025a; see **Figure 4.4-7,** *Special-Status Species*).

Activities which are most likely to result in take of migratory birds during the breeding bird season and when eggs or young are likely to be present include, but are not limited to, clearing or grubbing of bird nesting habitat; excavations and ground movement; or vegetation trimming or clearing. The project site contains multiple nests and the project has a potential to directly take individual breeding birds, their nests, young, or eggs; therefore, avoidance and minimization are required. Indirect impacts to breeding birds could occur from increased noise, vibration, lighting and dust during construction, which could adversely affect the breeding behavior of some birds and lead to the loss (take) of eggs and chicks, or nest abandonment.

Project construction is not expected to cause impacts to bird species that only forage at the site or occur as transient visitors. However, direct and indirect impacts to breeding birds, their nests, young, or eggs could potentially occur as a result of construction of the project. Given the relatively small size of the project footprint; the minor reduction of suitable nesting habitat; the nature of the disturbance; and the availability of other habitats within the immediate project vicinity, the potential impacts to breeding birds, their nests, young, or eggs would likely be minor.

It is anticipated that the project may cause direct and indirect impact to breeding birds, their nests, young, or eggs. Implementing the recommended avoidance and minimization **BIO-1** through **BIO-5** and **BIO-11** through **BIO-14**, described below, will minimize or avoid potential impacts to breeding birds, their nests, young, or eggs to less than significant levels; therefore, impacts would be less than significant.

Mitigation Measures

BIO-1: Worker Environmental Awareness Program

Worker Environmental Awareness Program (WEAP) for construction personnel shall be conducted and documented prior to onsite disturbances. The training shall include a discussion of the sensitive biological resources within the project site and the potential presence of special-status species. The WEAP shall also include a discussion of special-status species' habitats, protection measures to ensure species are not impacted by project activities, project boundaries, penalties for non-compliance, and biological conditions outlined in the project permits. All new employees shall be trained before they access the work site. New employees shall be trained and certified by the Construction Supervisor with the approval of the Project Biologist as approved by CDFW. Each trained individual shall be given a distinctive helmet sticker that will identify those who have received training, signed the training log, and demonstrated the required level of environmental awareness.

BIO-2: Biological Monitor

a) A biological monitor will be onsite to monitor activities that result in the clearing or grading of areas known to contain sensitive biological resources, such as western Joshua tree habitat, as well as ground-disturbing activities that impacts do not exceed the limits of construction and to minimize the likelihood of inadvertent impacts to special-status plant and wildlife species. The biological monitor will conduct pre-construction nesting bird surveys and nesting bird monitoring when/if construction occurs during the nesting bird season (between January 1 through September 15) and will set up and enforce avoidance and buffer zones for nesting birds.

b) The biological monitor will ensure that all biological mitigation measures, best management practices (BMPs), avoidance and protection measures described in the relevant project permits and reports are in place and are adhered to. Monitoring will cease when the sensitive habitats and jurisdictional areas have been cleared or impacted. The biological monitor will take photographs throughout the construction process. Observations of special-status species will be recorded in monitoring logs, mapped, and special-status species records will be submitted to the California Natural

Diversity Database (CNDDB) within five working days of the sightings, and CDFW will be provided with copies of the CNDDB forms and survey maps. Monitoring logs will be completed for each day of monitoring.

c) The biological monitor will have the authority to halt all construction activities and all non-emergency actions if listed species are identified on the project site and will be directly impacted. The monitor will notify the appropriate resource agency and consult if needed. If needed, and if authorized by the resource agencies, the monitoring biologist will relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the City of Palmdale and the consulted resource agency determine that the activity will not result in impacts to the species.

BIO-3: Project Limits and Designated Areas

To avoid impacts to sensitive biological resources, the following measures will be implemented by the project proponent, contractors, and biological monitor prior to project staging, and commencement of any ground-disturbing activities or vegetation removal.

d) Project boundary would be set at the minimum size to accomplish necessary work, resulting in minimal impacts to sensitive biological resources and jurisdictional areas.

e) Specifications for the project boundary, limits of construction, project-related parking, storage areas, laydown sites, and equipment storage areas will be mapped and clearly marked in the field with temporary fencing, signs, stakes, flags, rope, cord, or other appropriate markers. All markers will be maintained until the completion of activities in that area.

f) To minimize the amount of disturbance, the construction/laydown areas, parking areas, staging areas, storage areas, spoil areas, and equipment access areas will be restricted to designated areas. To the extent possible, designated areas will comprise existing disturbed areas (parking lots, access roads, graded areas, etc.).

g) Project related work limits will be defined and work crews will be restricted to designated work areas. Disturbance beyond the actual construction zone is prohibited without site-specific surveys.

h) Project related vehicle traffic will be restricted to established roads, staging areas, and parking areas. Travel outside construction zones will be prohibited.

i) If sensitive biological resources are detected in an area to be impacted, then appropriate measures will be implemented to avoid impacts (i.e., flag and avoid, erect orange snow fencing, biological monitor present during work, etc.). However, if avoidance is not possible and the sensitive biological resources will be directly impacted by project activities, the biological monitor will mark and/or stake the site(s) and map the individuals on an

aerial map and with a GPS unit. The biologist will then contact the appropriate resource agencies to develop additional mitigation measures prior to commencing project activities.

j) The construction crew will inspect excavated areas daily to detect the presence of trapped wildlife. See **BIO-11** and **BIO-5**.

BIO-4: Protective Fencing of No Work Areas

Protective fencing shall be installed around the perimeter of ecologically sensitive areas, which will be designated as No Work Areas, including around the perimeter of western Joshua trees scheduled to be transplanted, and native vegetation communities adjacent to work areas, before commencement of staging, fencing, clearing, grading, or other construction activities. The installation of fencing and protection measures around trees and vegetation will comply with the City of Palmdale's (City's) Native Desert Vegetation Ordinance. The tree protection zone for Joshua tree is a 40-foot radius around the trunk of the tree. Fencing shall be maintained in place during all construction. No construction, grading, staging, or material storage will be allowed within the fence exclusion areas, or within the protected zones of any onsite native trees.

BIO-5: Construction Best Management Practices

Project work crews will use CASQA (or similar) stormwater BMPs as directed by the project's Storm Water Pollution Prevention Plan (SWPPP). These measures will be identified prior to construction and incorporated into construction operations. The project's Qualified SWPPP Practitioner will ensure that construction activities will incorporate all applicable BMPs specified in the SWPPP to prevent erosion from water or wind, sedimentation of receiving waters, and introduction of other pollutants, including non-stormwater pollutants, into drainages crossed by or adjacent to the project site, accidental spills in the project site, including laydown yards and parking areas. BMPs will be maintained on a regular basis pursuant to the requirements of the SWPPP.

BIO-6: Preconstruction Botanical Surveys

To avoid impacts to special-status plant species, a qualified biologist will survey the project site for the presence of special-status plant species that are likely to occur based on habitat, soils, elevation, climate, and other conditions of the project site. The surveys will be conducted at appropriate times of the year, as feasible, to coincide with the growing season and different blooming periods and when optimum conditions for identification (generally blooms, fruits, and leaves) are present. Surveys will be conducted 14 days prior to construction. Biologists will pay special attention to those habitat areas where listed species have been observed and habitat areas that appear to provide suitable habitat for special-status species. Special-status plant species that are known to occur onsite, and special-status plant species that may have colonized the project site prior to the initiation of project activities, will be mapped and marked for avoidance.

BIO-7: Desert Vegetation Preservation Plan

The BSA contains Joshua trees that qualify for protection under the City of Palmdale's Native Desert Vegetation Ordinance. The project proponent and their contractors will implement the following avoidance and protection measures to protect these trees to the extent practical.

The project proponent will submit a desert vegetation preservation plan that will be submitted with the development application in accordance with the City's Native Desert Vegetation Ordinance. The desert vegetation preservation plan will contain the following components: 1) a written report depicting locations of native desert vegetation identified pursuant to the California Desert Native Plants Act as protected or designated on any state or federal rare and endangered species list; 2) a site landscaping plan showing locations of native vegetation occurring within the project site; and, 3) a long-term maintenance program and other protection measures for any desert vegetation preserved on the site. The City may defer to a CESA Incidental Take Permit (see **BIO-7**), with no additional requirements, if one is issued for the project.

BIO-8: Western Joshua Tree Conservation Act

Prior to the initiation of Joshua trees encroachment, trimming, pruning, or any activity that may result in take of Joshua trees (including removal of live and dead Joshua trees), the project proponent should obtain a California Endangered Species Act (CESA) ITP under § 2081b of the CESA, or under the Western Joshua Tree Conservation Act (WJTCA) of Fish and Game Code (§§ 1927-1927.12). California Fish and Game Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill". Mitigation for CESA will occur at a minimum 1:1 or per the stem count per the WJTCA census in lieu fee, or as required by the ITP and WJTCA.

BIO-9: California Desert Native Plants Act

a) Because species of the family Agavaceae (e.g., Western Joshua Tree), which have been observed throughout the project site, are covered under § 80073(b) of the California Desert Native Plants Act, any impacts will require a permit issued by the commissioner of the sheriff in Los Angeles County pursuant to Chapter 4 § 80101. Prior to commencement of construction activities, including but not limited to mobilization, fencing, staging, vegetation trimming or removal, or ground-disturbing activities, the project proponent will acquire a permit pursuant to Chapter 4 § 80101 and § 80073 of the California Desert Native Plants Act if any of the following species are observed on the project site during the Preconstruction Botanical Surveys (BIO - 6):

b) All species of the family Agavaceae (century plants, nolinas, yuccas)

c) 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

d) All species of the family Fouquieriaceae (ocotillo, candlewood)

e) All species of the genus Prosopis (mesquites)

f) All species of the genus Cercidium (palos verdes)

g) Acacia greggii (catclaw)

h) Atriplex hymenelytra (desert-holly)

i) Dalea spinosa (smoke tree)

j) Olneya tesota (desert ironwood), including both dead and live desert ironwood.

BIO-10: Preconstruction Wildlife Surveys

To comply with California Fish and Game Code §§2050-2089, §3511, §4700, §5050, and §5515, the following measures will be implemented to minimize impacts to sensitive species which include, but are not limited to: American badger, Blainville's horned lizard, California glossy snake, Cooper's hawk, ferruginous hawk, Le Conte's thrasher, loggerhead shrike, northern California legless lizard, prairie falcon, San Joaquin pocket mouse. The measures below will minimize or avoid direct and indirect impacts caused by project implementation to sensitive species.

a) The project applicant will retain a qualified biologist to conduct pre-construction wildlife surveys within the project site and associated parking, staging, and laydown areas.

b) The survey will be conducted no more than seven (7) days prior to the onset of scheduled activities, (e.g., staging and stockpiling, structure removal, clear and grub, grading, fill, etc.).

c) Pre-construction surveys for special-status wildlife species will pay special attention to areas that support habitat for protected species, or where their nests or indicators of presence (i.e., tracks, middens, fur, pellets, claw marks, scat, burrows, and/or vocalizations) have been recorded/observed. Observations of special-status species and/or sign will be recorded and mapped. During the surveys, the biologist will also record incidental observations of non-special-status (i.e., common) wildlife species and/or their sign.

d) Upon completion of the pre-construction wildlife surveys, the qualified biologist will prepare a brief letter report summarizing methods, results, and recommendations for project commencement. If construction lapses for seven (7) or more days, an additional pre-construction survey is required.

e) If it is determined that a federally-listed and/or state-listed or sensitive plant/wildlife species will be directly impacted by the project, the qualified biologist will consult with the USFWS in accordance with the Endangered

Species Act § 7 and the CDFW in accordance with CESA under California Fish and Game Code § 2081(b), respectively. However, if the qualified biologist conducts thorough pre-construction surveys and determines there is no threat to special-status species, then construction may commence.

f) Sensitive wildlife species and/or potential nesting sites will not be disturbed, captured, handled or moved.

BIO-11: General Wildlife Avoidance and Protection Measures

The project proponent would implement the following general avoidance and protection measures to protect wildlife.

a) To minimize construction-related mortalities of nocturnally active wildlife species, it is recommended that all non-emergency work be conducted during daylight hours. All unnecessary lights shall be turned off at night to avoid attracting wildlife. Nighttime work (and use of artificial lighting) would not be permitted unless specifically authorized;

b) If any wildlife is encountered during project activities, it will be allowed to freely leave the area unharmed or the biological monitor will capture the animal, if authorized, and relocate it outside of the construction work limits out of harm's way;

c) Listed wildlife species will not be captured, handled, or relocated without specific written authorization from CDFW and/or USFWS;

d) Wildlife would not be disturbed, captured, harassed, or handled, unless to relocate the animal out of imminent threat of injury or death. Animal nests, burrows and dens would not be disturbed without prior survey and authorization from the biological monitor;

e) Active and inactive nests cannot be removed or disturbed;

f) Contractors, subcontractors, employees, and site visitors would be prohibited from feeding or collecting wildlife;

g) To avoid the potential for mortality and harassment of wildlife, all non-security related firearms, weapons, and domestic dogs would be prohibited from the project site;

h) Contractors, subcontractors, employees, and site visitors shall inspect their vehicles and equipment for the presence of wildlife prior to moving their vehicles and equipment. The biological monitor shall be contacted if a special-status species is detected and is in danger of being harmed;

i) All steep-walled pitfalls (trenches, holes, bores, and other excavations) greater than two feet deep used during the project would be completely covered at all times except when being actively used, to prevent wildlife entrapment (i.e. reptiles and small mammals). If trenches cannot be covered,

escape ramps (maximum slope of 2:1) will be provided to allow trapped animals to escape. Exclusion fencing shall be installed around the trench or excavation. Trenches shall be inspected and wildlife removed immediately before backfilling;

j) All onsite project workers shall look under their vehicles and equipment before movement. If wildlife is observed, no vehicles or equipment shall be moved until the animal has left the area voluntarily or can be legally relocated;

k) Equipment maintenance, lighting, and staging will occur only in designated areas, and shall not block or impede wildlife movement.

BIO-12: Pre-Construction Burrowing Owl Surveys

A qualified biologist shall conduct a pre-construction BUOW survey in accordance with the Staff Report on Burrowing Owl Mitigation (CDFW, 2012) or current CDFW guidance/protocol if changes to the aforementioned 2012 guidance have occurred. A pre-construction BUOW survey (Take Avoidance Survey) shall be required no more than 14 days and again 24 hours prior to ground disturbing activities.

Although BUOW was not detected on site during the reconnaissance-level surveys, the BSA contains suitable habitat to potentially support BUOW. Suitable burrows were also observed in the BSA. Biologists shall identify, record, and map with a global positioning system (GPS) unit BUOWs and their sign. Detailed notes and wildlife species encountered during the surveys shall be recorded in field notes.

If no BUOWs or signs of BUOWs are observed during the preconstruction surveys and concurrence is received from CDFW, project activities may begin and no further mitigation shall be required.

If BUOWs or signs of BUOWs are observed during the surveys, the site shall be considered occupied and the BUOWs may need to be relocated. The qualified biologist will contact CDFW to assist in the preparation of an Incidental Take Permit (ITP), and development of avoidance, minimization, and mitigation measures, prior to commencing project activities. A relocation program may be necessary and shall be approved by CDFW prior to commencing project activities.

BIO-13: Pre-Construction Breeding Bird Survey

a) If the project activities occurs between January 1 through September 15, a nesting bird and raptor survey should be conducted within a 500-foot radius of the construction site, prior to any construction activities (e.g., staging, mobilization, fencing, ground disturbance, and vegetation trimming or clearing) as well as prior to any vegetation removal within the project site. The nesting bird surveys should be conducted at appropriate nesting times and concentrate on potential nesting or perch sites.

b) Surveys must be conducted by a qualified biologist no more than seven (7) days prior to the beginning of any project-related activity likely to impact raptors and migratory songbirds, for the entire project site. If project

activities are delayed or suspended for more than seven (7) days during the breeding season, repeat the surveys.

c) If nesting raptors and migratory songbirds are identified, the following minimum no disturbance buffers be implemented: 300 feet around active passerine (perching birds and songbirds) nests, and 500 feet around active non-listed raptor nests. These buffers should be maintained until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

d) The temporary halt of project activities within nesting buffers during nesting season does not constitute an effective minimization or avoidance for the purposes of offsetting project impacts associated with loss of nesting birds or nesting habitat.

e) Additional measures will be necessary to compensate for the removal of nesting habitat within the project site based on acreage of impact and vegetation composition.

f) CDFW shall be consulted to determine proper mitigation for impacts to occupied habitat, depending on the status of the bird species.

BIO-14: Protection of Non-listed Special-Status Species and other Vertebrates

a) The biological monitor shall be present during work near western Joshua trees or other vegetation areas during vegetation-removal and rough grading activities to monitor for non-listed, special-status, and/or common ground-dwelling vertebrates encountered in the path of project-related activities.

b) The biological monitor shall make every effort to move the species out of harm's way to the extent feasible by doing one of the following: (1) Utilize shovel, rake, or similar hand tool to gently re-direct the animal out of work area; (2) Install silt fence or other exclusionary fencing to prevent species from re-entering disturbance area; and (3) If the biological monitor has the appropriate handling permits, capture/move species to appropriate habitat outside the disturbance area. The biological monitor shall have the authority to temporarily stop construction activities until the species is determined to be out of harm's way.

c) Should CDFW personnel visit the site during vegetation removal and they observe rough grading activities occurring near western Joshua trees or within vegetation and no biological monitor is available, construction activities near Joshua trees and other vegetation shall be halted.

NOTE: Mitigation Measure **BIO-15** is included under **Threshold c)** discussion.

BIO-16 Preconstruction Crotch's Bumble Bee Surveys

The applicant shall have a qualified entomologist familiar with the species behavior and life history conduct a survey for Crotch's bumble bee (CBB) within 30 days prior to the start of any construction-related activities. Ideally, surveys should be conducted during the species peak detection season from April to August, although surveys may be constrained to the month prior to construction. Surveys should include meandering transects through suitable habitat (e.g. open grasslands, scrub areas, with blooming native vegetation), with particular attention to floral resources and potential nesting sites (e.g. rodent burrows or dense thatch). Survey results, including negative findings, shall include coordinates of floral resources (known host plants, and other potential food plants), nest burrows, figures, and photo documentation, shall be submitted to CDFW within 10 days of completion, with approvals received by CDFW, prior to initiation of ground disturbing project activities. If CESA-protected bumble bees are observed, project proponents shall propose site-specific measures to avoid take through consultation with CDFW to obtain an Incidental Take Permit (ITP), if take of CESA-protected bumble bees may occur during project activities (CDFW, 2023).

- Time of Year – Ideally, pre-construction surveys would be conducted during the peak flight period from May through July, for the highest detection probability.

- Weather – Ideally, preconstruction surveys shall take place when temperatures range from 65 to 90 degrees Fahrenheit on warm, but not hot, sunny days, with low wind (less than 8 miles per hour). Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling). Wait at least 1 hour after rain subsides before conducting a survey. Sunny days with low wind speeds (less than 8 mph) are optimal. Partially cloudy days or overcast conditions are permissible if a person's shadow is visible.

- Result Expiration - Focused survey results are only valid for one year and shall be repeated if the survey results expire.

- Note: In June 2019, the CBB, a California near-endemic, became a candidate species for listing under the California Endangered Species Act (CESA; CDFW 2019). At the time of this writing, a formal vote by the California Fish and Game Commission has not occurred. If the status of the CBB is downgraded to non-status, then this survey requirement may be omitted prior to survey, unless required by the regulatory agencies as a condition of approval.

BIO-17 Pre-Construction Desert Kit Fox and American Badger Surveys

Desert kit fox is a protected species under CCR Title 14, § 460. No more than 14 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall conduct pre-construction surveys to determine if potential desert kit fox burrows/dens are present in the project area. Pre-construction surveys should include transect surveys at a 20-meter transect distance to ensure 100 percent visual coverage of the project area. Surveys may be combined for similar fossorial mammals,

such as American badger; combined, concurrent surveys for dissimilar taxa (e.g. plants or birds) shall be prohibited.

Use of wildlife camera monitoring to determine presence/absence and burrow/den use is strongly encouraged, in accordance with CDFW approved methods, including *Remote Camera Trap Installation and Servicing Protocol Citizen Wildlife Monitoring Project 2017 Field Season* (Moskowitz and Huyett, 2017) and *Camera-trapping for conservation: a guide to best-practices* (Oliver R. Wearn & Paul Glover-Kapfer, 2017).

Ideally, the pre-construction survey reports will include: (1) the number, location, and status determination of potential desert kit fox and/or badger dens identified during the reporting period, (2) occupancy monitoring status, (3) species present, and (4) estimated number of individuals and associated behaviors observed. Desert kit fox and badger images will additionally be stored on a cloud-based server and additional relevant data will be made available to CDFW upon request.

If the pre-construction surveys confirm occupied desert kit fox habitat, project activities shall be immediately halted, and the qualified biologist shall notify CDFW to develop avoidance, minimization, and mitigation measures within a Desert Wildlife Management Plan.

No disturbance of active dens shall take place when juvenile desert kit fox may be present and dependent on parental care. Sick or injured animals will be reported to CDFW within 24 hours of discovery.

Level of Significance After Mitigation

With the implementation of mitigation measures **BIO-1** through **BIO-14, BIO-16,** and **BIO-17,** the proposed project would result in less significant impact to special-status plant and wildlife species.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated

Land Cover Type Mapping

Four different land cover types were observed and mapped within the BSA; **Figure 4.4-8,** *Land Cover Types,* depicts the location of each land cover type. Non-vegetated features (e.g., roads, houses, and other artificial structures) are not vegetation communities, but are delineated and are discussed in this report as Developed/Ornamental. Generally, classifications of habitat types or vegetation communities were based on *Preliminary Descriptions of the Terrestrial Communities of California*, and *A Manual of California Vegetation Online Edition*, with modifications to better represent existing site conditions (Holland 1986). The classifications were then checked against the CDFW *Natural Communities List* (UltraSystems 2025a).

Figure 4.4–8
LAND COVER TYPES

Yucca brevifolia Woodland Alliance (Joshua tree woodland)

Yucca brevifolia Woodland Alliance (Joshua tree woodland) occurs on gentle alluvial fans, ridges, gentle to moderate slopes. Soils are coarse sands, very fine silts, gravel, or sandy loams. Many sites have bimodal soils with both coarse sands and fine silts. Dominant shrub species within the shrub layer of this community that were observed in the BSA include cheesebush (*Ambrosia Salsola*), Nevada ephedra (*Ephedra nevadensis*), creosote *(Larrea tridentata*) and Anderson thornbush (*Lycium andersonii*). This is the case on the project site, as the areas mapped as this land cover type are dominated by these three species (UltraSystems 2025a).

Approximately 29.50 acres of Joshua tree woodland were mapped within the BSA; the project site is vegetated almost entirely with Joshua tree woodland (approximately 5.30 acres). Joshua tree woodland has been designated by CDFW as between vulnerable and threatened (S3.2) natural community. Of the three mapped land cover types, this land cover type occupies the most area in the BSA. *Preliminary Descriptions of the Terrestrial Communities of California* classifies this species assemblage as Mojave mixed woody scrub and Mojave mixed steppe (Holland 1986 and UltraSystems 2025a).

Mark Hagan also characterized the project area as a Joshua tree woodland (Hagan 2025).

Developed/Ornamental

Developed/ornamental areas consist of residential areas, water tanks, flood control channels, roads, and ornamental landscaping consisting of exotic or non-native plant species that occur in parks, gardens, buildings, and parking lots. The project site does not contain developed/ornamental land cover type; however, approximately 11.40 acres of developed/ornamental areas were mapped in the BSA, south of East Palmdale Road. The developed/ornamental land cover type does not fit any classification described in *Preliminary Descriptions of the Terrestrial Communities of California* or *A Manual of California Vegetation Online Edition* (Holland 1986 and CNPS 2025b). Although developed/ornamental areas can support wildlife, this land cover type is not considered a sensitive natural community (UltraSystems 2025a).

Disturbed

Disturbed lands consist of exposed soils created by disturbances such as vehicle traffic, mowing, disking, excavation or other type of alteration of the soil surface. These disturbances often result in compaction of the substrates. Disturbed areas are often dominated by weedy, non-native vegetation, lacking shrubs or trees. Plants found in disturbed areas include cheatgrass (*Bromus tectorum),* coastal heron's bill (*Erodium* cicutarium), common mediterranean grass (*Schismus barbatus*), great brome (*Bromus diandrus*), and Russian thistle (*Salsola tragus*). Disturbed areas do not fit any classification described in *A Manual of California Vegetation Online Edition* (CNPS, 2025) or *Preliminary Descriptions of the Terrestrial Communities of California*. Disturbed habitats are not considered a sensitive vegetation community. Approximately 6.08 acres of this land cover were mapped in the BSA; approximately 0.10 acre was mapped within the project site (UltraSystems 2025a).

Unconsolidated Streambed

Ephemeral streams flow in direct response to precipitation; Unconsolidated Bottoms are characterized by the lack of large stable surfaces for plant and animal attachment. They are usually found in areas with lower energy and may be very unstable. The unconsolidated particles smaller than stones are predominantly sand, although finer or coarser sediments may be intermixed (adapted from FGDC, 2013). One ephemeral unconsolidated streambed was observed approximately 275 feet east of the project boundary, north of the intersection of East Palmdale Boulevard and 60th Street East. Development of the project is not anticipated to result in impacts to the unconsolidated streambed.

Development of the project would result in direct, permanent impacts to Joshua tree woodland, *Yucca brevifolia* Woodland Alliance (Joshua tree woodland) a sensitive natural community determined by CDFW (UltraSystems 2025a). The remaining vegetation communities and land cover types are not considered sensitive because they do not meet the sensitivity criteria used by the CDFW. Direct impacts to developed/ornamental and disturbed areas are considered less than significant because these land cover types are not considered sensitive and therefore do not require mitigation.

Direct and indirect impacts to sensitive vegetation communities (i.e., Joshua tree woodland) would occur as a result of construction of the project. Indirect impacts to vegetation communities result in secondary consequences and are likely to be temporary. Indirect impacts could occur to vegetation communities within areas adjacent to the limits of grading in the project footprint.

Level of Significance After Mitigation

In regard to the threshold of significance, the project is not anticipated to have substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS. Impacts to individual western Joshua trees would be mitigated through the implementation of Mitigation Measure **BIO-8** as described in **Section 4.4(a)**; additionally, implementing the recommended avoidance and minimization Mitigation Measures **BIO-1** through **BIO-9** would minimize or avoid impacts to sensitive vegetation communities to less than significant.

c) Would the project 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?

Less Than Significant Impact with Mitigation

The project site does not contain waters of the U.S. or State, including wetlands, and would not directly impact jurisdictional waters One ephemeral drainage (Unconsolidated Bottom) was observed near the southeastern edge of the BSA (see **Figure 4.4-8,** *Land Cover Types*); however, this drainage is approximately 275 feet east of the project boundary, the intersection of East Palmdale Boulevard and 60th Street East, and would be avoided during construction activities.

Direct, permanent impacts to jurisdictional waters are not anticipated as a result of the project. Project construction could result in indirect impacts to receiving waters through incorrect litter disposal or the generation of fugitive dust. Implementation of avoidance and minimization measure **BIO-15,** it will require this drainage to be designated as an Environmentally Sensitive Area (ESA),

buffered, and flagged off during construction. These buffers will remain in place to protect the functions and values of the drainage by protecting it from physical disturbance during construction activities. Additionally, **BIO-15** requires the project to implement all required best management practices (BMPs) designated in the project's Storm Water Pollution Protection Plan (SWPPP) to prevent sedimentation, siltation, and run-on of polluted stormwater and non-stormwater pollutants.

Mitigation Measure

BIO-15: Protection of Waters and Water Quality

Prior to any ground disturbing activities buffers will be delineated 50 feet around all drainages and wetlands in the project site, as appropriate (with exception of portions of drainages and wetlands that are in the grading areas and cannot be avoided); these drainages and wetlands will be designated as Environmentally Sensitive Areas (ESAs). These buffers will remain in place to protect the functions and values of drainages and adjacent wetland by reducing physical disturbance from construction noise and activity and domestic animals and protect the transition zone where one habitat phases into another. These buffers will also protect other functions and values of these areas, including absorption and slowing of flood waters for flood and erosion control, sediment filtration, water purification, ground water recharge, and the need for upland transitional habitat.

Level of Significance After Mitigation

The project is not anticipated to have substantial indirect adverse effects to waters of the State through direct removal, filling, hydrological interruption, or other means. With implementation of measure **BIO-15**, impacts would be less than significant.

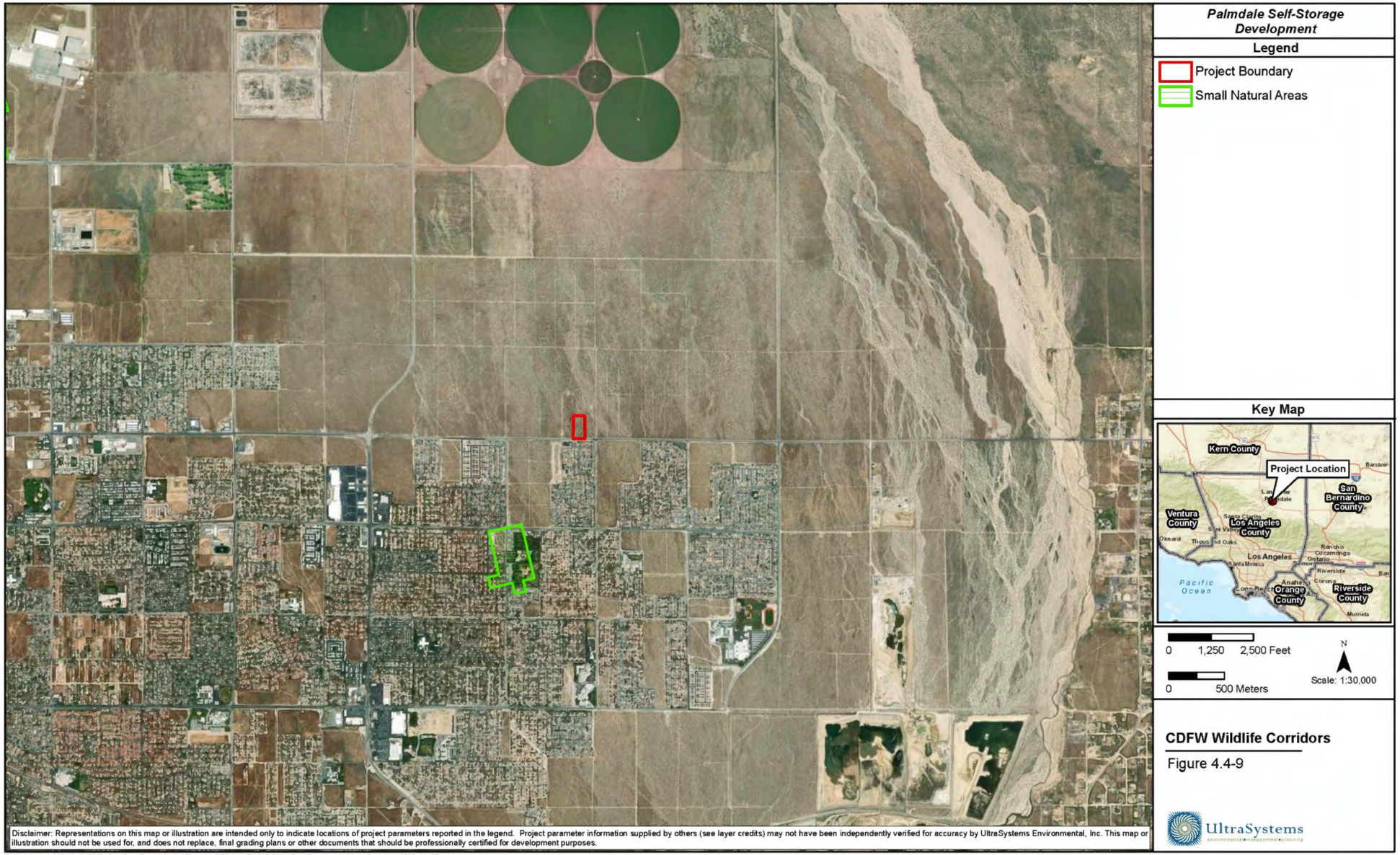
d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact

The results of the literature review determined that the BSA is not located within CDFW-designated Large Natural Habitat Area or within a Terrestrial Connectivity Area. Located outside of the BSA to the southwest approximately 2,500 feet away is a Small Natural Area (UltraSystems, 2025a; see **Figure 4.4-9**, *CDFW Wildlife Corridors*). Although the BSA does not overlap with CDFW Essential Connectivity Areas, Natural Landscape Blocks, or Small Natural Areas as mapped by CDFW, the large amount of open space within and surrounding the BSA serves as a wildlife corridor because this area supports habitat and species that would be used as shelter, foraging, or prey by wildlife species moving from west to east toward the Little Rock Wash riparian corridor, the Big Rock Wash Wildlife Sanctuary, the Alpine Buttes Wildlife Sanctuary, and to areas further east into the open desert.

No direct impacts to wildlife movement corridors or native wildlife nursery sites are anticipated as a result of construction of the project. Project construction could result in temporary, indirect impacts to wildlife movement within areas located adjacent to the project work sites. Temporary indirect impacts would be considered less than significant because they would be temporary and would cease when construction is complete. During project operation, permanent indirect impacts may occur due to increased lighting and human activity; however, wildlife using the open space adjacent to East Palmdale Boulevard would either be acclimated to low levels of human activities and

Figure 4.4-9
CDFW WILDLIFE CORRIDORS



lighting, or they would shift to the north, away from the project site. For this reason, permanent indirect impacts are anticipated to be less than significant.

Direct and indirect impacts to wildlife corridors would be either temporary in nature or would not significantly affect use of the area by wildlife for movement, shelter, foraging, or feeding due to the presence of large areas of open space and agricultural fields west, north, and east of the project site. Avoidance and minimization measures would not be required.

The project is not anticipated to have significant direct or indirect impacts to wildlife movement corridors or native wildlife nursery sites, and it is anticipated that the project will not adversely modify them. Impacts would be less than significant, and mitigation is not required.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant with Mitigation Incorporated

Palmdale Native Desert Preservation Ordinance

The BSA contains Joshua trees which qualify for protection under the Palmdale Native Desert Vegetation Preservation Ordinance (see **Appendix C,** *Biological Resources Evaluation*). Impacts to these native plants are anticipated to be significant. Mitigation in accordance with the ordinance is required.

Western Joshua tree is a State Candidate Threatened species that is endemic to the Mojave Desert. Joshua tree woodlands is a sensitive natural community as designated by CDFW and the primary land cover type mapped within the BSA. This land cover type meets the state rank of vulnerable and threatened (S3.2; UltraSystems 2025a), which is defined as vegetation communities that are at moderate risk of extinction or collapse due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. Joshua tree woodland, the only sensitive vegetation community to be impacted by construction of the project is protected by the Palmdale Native Desert Vegetation Preservation Ordinance, which prohibits any action which may cause injury, death, or disfigurement to desert vegetation (§ 14.04.030[A]), including by grading or any other method likely to cause the death of protected vegetation (§ 14.04.030[J]), unless a native desert vegetation removal permit is obtained from the City's landscape architect or the director of public works, prior to the removal of any native desert vegetation defined in Chapter 14.04 (§ 14.04.040).

Development of the project would result in direct, permanent impacts (i.e., *damage*) to Joshua trees and Joshua tree woodlands. *Damage*, as defined in Chapter 14 § 14.04.030, is any action which may cause injury, death, or disfigurement to desert vegetation. This includes, but is not limited to, "*cutting, mutilating, harvesting, overwatering and excavating*."

Indirect impacts may occur to those plants covered under the Palmdale Native Desert Preservation Ordinance during project activities. Indirect impacts include effects of fugitive dust, mud splatter, and airborne dispersal of seed created by construction activities. Construction-generated fugitive dust and mud splatter can adversely affect vegetation by settling on plant surfaces and inhibiting metabolic processes such as photosynthesis and respiration. Construction-related erosion, runoff, siltation, sedimentation, and soil compaction could affect native desert plant species by altering conditions within the BSA such that they become unsuitable for survival of these plants.

The project site is located in the City of Palmdale and is subject to the requirements of the City's Native Desert Vegetation Ordinance. To minimize or avoid potential impacts to native desert plant species, mitigation measures **BIO-1** through **BIO-9** will be implemented. Specifically, mitigation measure **BIO-8,** requires that the project proponent obtain an Incidental Take Permit for Joshua trees, either under § 2081b of the CESA, or under the Western Joshua Tree Conservation Act (WJTCA) of Fish and Game Code (§§ 1927-1927.12; UltraSystems 2025a, UltraSystems 2025b) prior to relocating or removing a Joshua tree. Mitigation measure **BIO-9** will require the project proponent to obtain a permit issued by the commissioner of the sheriff in Los Angeles County pursuant to Chapter 4 § 80101 for plant species in certain plant families and genera.

Level of Significance After Mitigation

With implementation of measure **BIO-1** through **BIO-9**, conflicts with local policies or ordinances would be considered less than significant.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

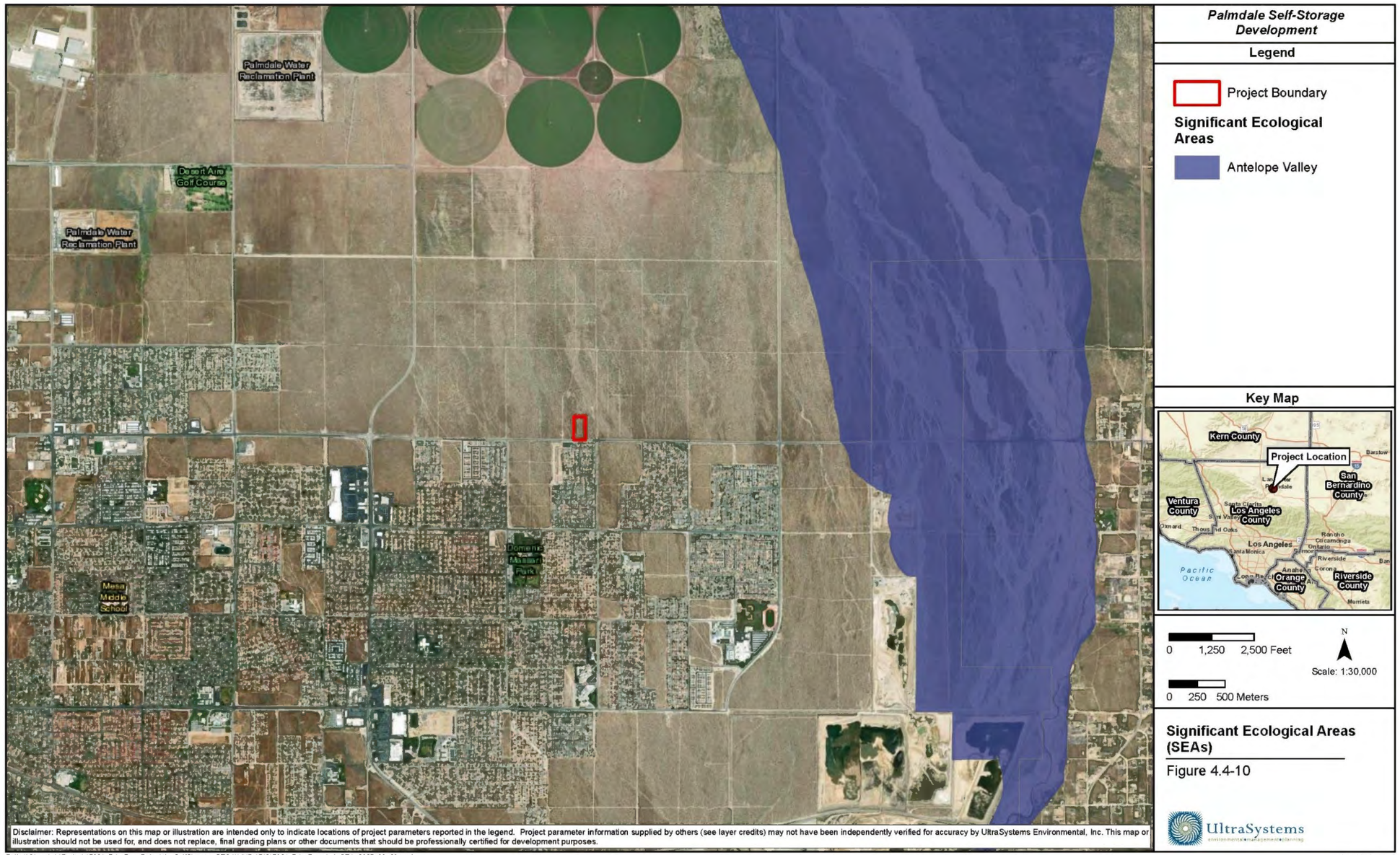
No Impact

The literature review determined that the project site is not located within an HCP or NCCP.

The nearest Los Angeles County Significant Ecological Area (SEA) is the Antelope Valley SEA, located approximately 1.32 miles to the east of the BSA. The Antelope Valley SEA is located in the south-central portion of the Antelope Valley. The extent of the SEA run from Little Rock and Big Rock Creeks downstream to the valley and north to the historic floodplain to Rosamond, Buckhorn, and Rogers Dry Lakes, on the Los Angeles County/Kern County boundary. Outside of Los Angeles County jurisdiction, the functional area of the SEA extends into the Angeles National Forest along the southern margin and into Kern County to encompass the remainder of the dry lake playas and their watersheds (LACDRP, 2000; see **Figure 4.4-10**, *Significant Ecological Areas [SEAs]*).

No direct or indirect impacts to HCPs, NCCPs or Los Angeles County SEAs are anticipated as a result of the project. No impact would occur, and mitigation is not required.

Figure 4.4-10
SIGNIFICANT ECOLOGICAL AREAS (SEAS)



Path: \\Gissvr\gis\Projects\7321_BrixxDev_Palmdale_SelfStorage_CEQA\MXDs\BIO\7321_BrixxDev_4.4_SEA_2025_03_26.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; Los Angeles County, 2019; UltraSystems Environmental, Inc., 2025.

4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?				**X**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		**X**		
c) Disturb any human remains, including those interred outside of formal cemeteries?		**X**		

Information from UltraSystems' Cultural Resources Inventory Report, dated June 12, 2025 (see **Appendix D1**), prepared for the Palmdale Self Storage Project, City of Palmdale has been included within this section.

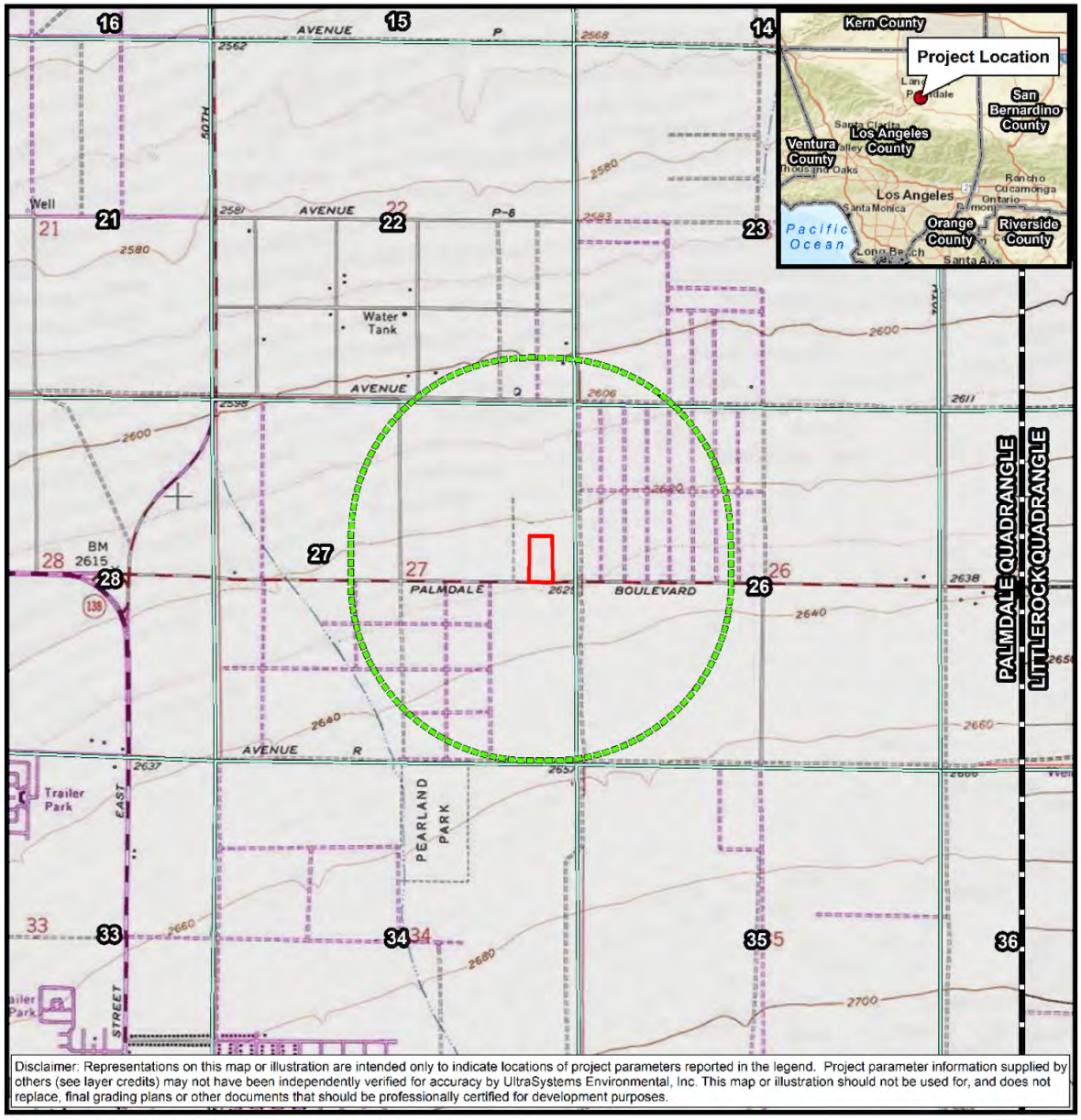
4.5.1 Methodology

As part of this analysis, a cultural resources inventory was requested on December 19, 2024 for the Palmdale Self Storage Project site (**Figure 4.5-1,** *Topographic Map*) that would include a California Historic Resources Inventory System (CHRIS) records and literature search at the South Central Coastal Information Center (SCCIC) located at California State University Fullerton. Additionally, a request was made to the Native American Heritage Commission (NAHC) to conduct a search of its Sacred Lands File (SLF) for potential traditional cultural properties as well as to provide a list of local Native American tribes and tribal representatives to contact. Finally, a pedestrian survey of the project site was completed. The SCCIC records search was conducted on March 27, 2025. The NAHC request was made on March 24, 2025, and a reply was received on April 7, 2025; letters were sent to the listed tribes on April 11, 2025, and follow-up telephone calls were conducted June 10, 2025. The pedestrian field survey was conducted on May 7, 2025.

4.5.2 Existing Conditions

Based on the cultural resources records search, it was determined that no prehistoric or historic cultural resources have been previously recorded within the project site boundary. The pedestrian field survey undertaken for this project noted the presence of two historic era can isolates (see **Section 4.3** in **Appendix D1**) but was negative for prehistoric resources.

Figure 4.5-1
TOPOGRAPHIC MAP



4.5.3 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

No Impact

A historical resource is defined in § 15064.5(a)(3) of the *CEQA Guidelines* as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered as historical resources under CEQA.

Similarly, the National Register criteria (contained in Code of Federal Regulations Title 36 Section 60.4) are used to evaluate resources when complying with Section 106 of the National Historic Preservation Act. Specifically, the National Register criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important to history or prehistory.

A substantial adverse change in the significance of an historical resource, as a result of a project or development, is considered a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historic property. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historic property, such that the significance of a historical resource would be materially impaired.

There are no known historic cultural resources within the project site boundary or immediately adjacent, based on findings of the CHRIS records search, research conducted on the project site's history and the pedestrian survey. Therefore, it is determined there is a low potential for the presence of historic resources. While there is always the potential for unanticipated historic resource discoveries being made during ground disturbing activities, it is anticipated there would be no impacts on historic resources associated with the development of the project.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant Impact with Mitigation Incorporated

An archaeological resource is defined in § 15064.5(c) of the CEQA Guidelines as a site, area or place determined to be historically significant as defined in § 15064(a) of the CEQA Guidelines, or as a

unique archaeological resource defined in § 21083.2 of the Public Resources Code as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically-recognized important prehistoric or historic event or person.

The cultural resources investigation conducted by UltraSystems which included a CHRIS records search of the project site and buffer zone, a search of the SLF by the NAHC, and pedestrian field survey, suggests there is a medium potential for undisturbed unique archeological resources to exist on the project site.

Based on the SCCIC cultural resources records search, it was determined that there are no prehistoric or historic cultural resource previously recorded within the project site boundary. Within the half-mile buffer zone, there have been 1 recorded historic-era resource. **Table 4.1-1** in **Appendix D1** summarizes these resources.

The single historic-era resource consists of one poured concrete subterranean septic box with a 5-inch diameter terra cotta pipe and large concrete fragments of another building foundation dating to post 1945 (19-004185; Chmiel et al. 2009). The concrete box is reinforced in rebar and measures 4 feet wide, seven feet long, 2.5 feet high and is located 6 inches below grade. The site measures 150 feet (North/South) by 200 feet (east/west). Four ornamental trees are located in the vicinity of the foundation. The area has been heavily disturbed with the demolition of the structure and repeated modern dumping episodes. No temporally diagnostic artifacts were identified. Chimiel et al. indicated that this site may be evidence of a jackrabbit" homestead. These homesteads were established after the 1938 Small Tract Act was enacted giving World War II servicemen an opportunity to purchase property in the desert.

There have been 22 previous cultural resource studies within the one-half-mile buffer of the project (**Table 4.1-2** in **Appendix D1**). None of these surveys intersect the current project boundary.

The cultural resource surveys investigated various aspects of the landscape in the project area. To the north of the project boundary, five studies occurred for the High Desert Corridor Freeway Project. These reports include a Paleontology Evaluation report (LA-12871), Archaeological Survey Report (LA-12873), Historic Property Treatment Plan (LA-12875), Historic Property Survey Report (LA-12876), Historical Resources Evaluation Report (LA-12877). Also to the north of the project boundary are two Archaeological Investigation of the proposed Palmdale Airport (LA-00703 and LA-06706). To the west of the project boundary are two Cultural Resources records searches and site visits occurred for potential cell phone towers (LA-12426 and LA-12739) and a Historical/Archaeological Resources Survey took place at Parcel Number 3023-001-075 (LA-07474).

A Cultural Study and a Draft Environmental Impact Report were conducted for the Eastside General Plan and Amendment covering the area to the south of the East Palmdale Boulevard (LA-01837 and LA-02767). A Cultural Resources Report was prepared for the Bakersfield-Rialto Fiberoptic Line Project along East Palmdale Boulevard to the south of the project boundary (LA-04141). Three additional Cultural Resources Studies took place on properties to the south of the project boundary (LA-09003, LA-02329, LA-09013). (see **Table 4.1-2** in **Appendix D1**).

A NAHC SLF search was conducted on and within a half-mile buffer around the project site. The NAHC letter of April 7, 2025 indicated that there is the presence of traditional cultural property within this area. Nine representatives of six Native American tribes were contacted requesting a reply if they

have knowledge of cultural resources in the area that they wished to share and asking if they had any questions or concerns regarding the project. 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

There have been three direct responses to date (see **Attachment C; Appendix D1**). Jill McCormick, Historic Preservation Officer with the Quechan Indian Tribe of the Fort Yuma Reservation, on behalf of Jordan Joaquin, President, Quechan Tribal Council, responded by email on April 12, 2025 indicating that the tribe does not wish to comment on this project. We defer to the local Tribes and support their determinations on this matter.

Donna Yocum, Chairperson of the San Fernando Band of Mission Indians responded by email on May 1, 2025 indicating that the project falls within the ancestral and traditional homelands of the tribe and requested a phone call to discuss the cultural report being prepared. Ms. Doukakis responded on May 6, 2025 and provided dates and times for a call. Ms. Yocum attempted to call Ms. Doukakis, and a message was left. Ms. Yocum called Ms. Doukakis on May 7, 2025 and in that call indicated that the City of Palmdale is sensitive and a major trade route. The tribe recommends tribal monitoring and requests that their tribe be involved in that monitoring.

Raylene Borrego, Cultural Resources Technician of the San Manuel Band of Mission Indians on behalf of Alexandra McCleary, Senior Manager of Cultural Resources Management responded by email on April 15, 2025 indicating that the proposed project site is considered culturally sensitive by the Tribe and the Tribe will wish to engage in government-to-government consultation pursuant to AB 52 with the Lead Agency for the project.

Following up on the initial letter and email contacts, telephone calls were conducted by Assistant Project Archaeologist Megan Doukakis on June 10, 2025 to the five tribal contact who had not already responded to UltraSystems' mailing and email. Three telephone calls were placed with no answer and so messages were left describing the project and requesting a response. These were to Ann Brierty, Tribal Historic Preservation Officer for the Morongo Band of Mission Indians; Robert Martin, Chairperson for the Morongo Band of Mission Indians; and Wayne Walker, Co-Chairperson for the Serrano Nation of Mission Indians. In a call to Mark Cochrane, Co-Chairperson with the Serrano Nation of Mission Indians, the phone line was disconnected so no message was left. In a call to Sarah Brunzell, CRM Manager with the Fernandeño Tataviam Band of Mission Indians, Ms. Brunzell could not be reached. The phone number provided was for an automated system and the Cultural Preservation Department could not be accessed. Also, Sarah Brunzell was not provided as an option to speak with on the automated systems. No response has been received to date. (See **Attachment C; Appendix D1**).

A pedestrian survey was conducted on May 7, 2025 by Ms. Araceli Robles, M.A. The survey consisted of walking over, visually inspecting, and photographing the exposed ground surface of the project site using standard archaeological procedures and techniques. Survey of the ground surface was conducted by walking east/west transects 10 meters apart. The surface was open, natural terrain and flat, approximately 391 feet long east/west and 680 feet wide north/south. The total project boundary measures 6.1 acres. The entire parcel's surface appeared to be original, native surface,

consisting of compact and poorly sorted sand, and small rocks with most of the surface soil being visible. This is consistent with the Cajon Loamy Sand alluvium designation for soils in this area

Vegetation consisted of dry native trees and grasses. Several western Joshua trees (*Yucca brevifolia*), which are native and endemic to the region are located throughout the project boundary. There was also native creosote bush (*Larrea tridentata*) and native shrubs consisting of Nevada Jointfir (*Ephedra nevadensis*) spaced throughout the project boundary. A number of native California harvester ants (*Pogonomyrmex californicus*) were observed along with many of their nests, and a few native northern mockingbirds (*Mimus polyglottos*), perched in Joshua trees. No other animals were observed during the survey. There were signs of, most likely, desert cottontail rabbit (*Sylvilagus audubonii*) in the form of fecal scats. Modern garbage debris was found throughout the project boundary with large piles in the south, near the road, and along the northwestern boundary. This modern debris includes plastic car parts, plastic and metal debris, plastic bags, toilet paper, plastic water bottles, plastic food trays, discarded cardboard boxes, an old shirt, and carpet.

In the southeast quarter of the project boundary there are the remains of two historic aluminum can discards. The first can was flattened, empty, rusted from sun weathering, and had a pull tab opening. It measured 6 inches long and 3 inches and a half wide. The top of the can had a relief of the brand name, "<BEER BUSCH, INC.>". This vintage can is dated to the 1970's and is a typical 12 oz "Busch" beer can from that time period. During this time, the brand was operated by the larger company, Anheuser-Busch Inc. There was another isolated discarded historic can in the same southeast quarter of the project boundary. This can was empty, intact and not flattened, rusted from sun weathering and had two church key openings in the top. It measures 5 inches long and 3 and a half inches wide. No other markings were observed on the can. These two cans are isolated finds, as there is considerable distance between them; 128 feet (38.9 meters) away from each other. There were no other can scatter deposits nearby, thus confirming these are isolated finds. These two isolated finds were recorded, and Department of Parks and Recreation Isolate forms were prepared (UEI SR Isolate #1 and UEI SR Isolate #2). Given the location in which they were found, not too far from the paved road, these cans may have been thrown out of a vehicle and the occasional winds may have pushed them further into the project area over time.

During the survey, the project site was inspected for any indication of human activities dating to the prehistoric or historic periods (i.e., 50 years or older). Ground surface visibility was 80%. The result of the pedestrian survey was positive for historic cultural resources; two isolates were recorded in the project boundary. Given the extent of the nearby main paved roads, and large residential neighborhoods to the south, and the partially developed fenced lot to the west, evidence for any pre contact or historic cultural resources was looked for during the survey. Ultimately, only these two unsignificant and common historic can discards were observed. (see **Appendix C**, **Section 4.3**).

While the APE may have been utilized by Native Americans, it is unlikely they settled in the immediate area for long periods of time due to lack of reliable water resources; therefore, it is unlikely a significant archaeological site developed in this area. No historic buildings or structures are known to have existed within the APE, which was in an undeveloped area of desert that could be reached via East Palmdale Boulevard in the early part of the twentieth century. These isolated historic cans, along with other modern debris were likely dumped on the APE or blown in from the road to the south. There is no evidence that the APE was intensively used either in the prehistoric or the historic period.

The characteristics of the isolated historic cans (UEI SR Isolate #1 and UEI SR Isolate #2) have been thoroughly documented in the site record, exhausting the resource's data potential. The resource has

not yielded significant data important to national, state, or local history or prehistory, nor is it likely to (Criterion D/4). No further work is deemed necessary. Beyond these two known historic-period resources it is not anticipated that the project will impact any further prehistoric or historic era cultural resources and due to this it is not recommended that an archaeological monitor be present during ground-disturbing activities throughout the project site (except as noted below).

However, the possibility exists for the project to encounter unanticipated archaeological resources in the course of project construction excavation. Site grading, sewer and storm drain installation in the project sites and in the road would involve ground disturbance into native soils where unkown resources could be uncovered. If cultural resources are exposed during subsurface construction excavation, all work will be halted in the vicinity of the archaeological discovery until a Secretary of the Interior qualified archaeologist and Native American monitor should be brought in to visit the site of discovery, assess the significance of the archaeological resource and prepare a treatment plan approved by the City of Palmdale.

Due to concerns presented by the San Fernando Band of Mission Indians that Tribal Cultural Resources may be impacted by ground disturbing work, tribal monitoring is recommended to take place on this project with the San Fernando Band of Mission Indians being involved in that monitoring.

Grading activities would cause new subsurface disturbance and may result in the unanticipated discovery of prehistoric and/or historic archeological resources. In the unlikely event of an unexpected discovery, implementation of mitigation measures **CUL-1**and **CUL-2** would ensure that impacts related to discovery of archaeological resources would be less than significant.

Mitigation Measure

MM CUL-1 If archaeological resources are discovered during construction activities, the contractor will halt construction activities in the immediate area and notify the City of Palmdale. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology who will be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist will recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area. A local Native American monitor will also be contacted and retained to conduct monitoring on the remainder of the ground disturbing work. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the Eastern Information Center. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.

MM CUL-2 Prior to the issuance of a grading permit, the Developer shall secure agreements with the tribes requesting monitoring through the consultation process. The Developer is also required to provide a minimum of 30 days advance notice to the tribes of all mass grading and trenching activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. If the Native American Tribal Representatives suspect that an archaeological resource may have been unearthed, the Project Archaeologist or the Tribal Representatives shall immediately redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the

Native American Tribal Representatives, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM CUL-1 and MM-CUL-2** above, the project would result in less than significant impacts to archeological resources.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact with Mitigation Incorporated

As previously discussed in **Section 4.5.b** above**,** the project would be built on relatively undisturbed land that has not been previously graded and is in a suburban area. No human remains have been previously identified or recorded onsite.

The proposed project includes grading activities for the installation of infrastructure including water, sewer, and utility lines; and for construction of the proposed buildings. Grading would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of mitigation measure **CUL-2** would ensure that impacts related to the accidental discovery of human remains would be less than significant.

California Health and Safety Code § 7050.5 specifies the procedures to follow during the unlikely discovery of human remains. CEQA § 15064.5 describes determining the significance of impacts on archeological and historical resources. California Public Resources Code § 5097.98 stipulates the notification process during the discovery of Native American human remains, descendants, disposition of human remains, and associated grave goods.

Mitigation Measure

MM CUL-3 If human remains are encountered during excavations associated with this project, all work will stop within a 30-foot radius of the discovery and the Los Angeles County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

Level of Significance After Mitigation

With adherence to applicable codes and regulations protecting cultural resources and with implementation of Mitigation Measure **MM CUL-3** above, the proposed project would result in less than significant impacts to human remains.

4.6 Energy

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

a) Would the project 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

According to CEQA Guidelines § 15126.2(d), "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Both construction and operation of the project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The new development would require the commitment of resources that include (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the project.

Electricity

Construction Use

The City of Palmdale provides electricity through the locally managed community choice aggregation (CCA)[28] program, Energy for Palmdale's Independent Choice (EPIC), while Southern California Edison (SCE) provides transmission distribution services (EPIC, 2025). Temporary electric power for

[28] CCA programs give local governments the ability to procure power for businesses and residents from an alternative supplier while still receiving transmission and distribution services from their existing utility provider (U.S. EPA, 2025).

as-necessary lighting and electronic equipment would be provided by EPIC and SCE. Lighting would be used in compliance with applicable City of Palmdale Municipal Code requirements to create enough light for safety.

Operational Use

Project operation would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Additionally, the supply, conveyance, treatment, and distribution of water used by the project would require electricity. As part of the air quality and greenhouse gas emissions analyses (refer to **Sections 4.3** and **4.8**), the California Emissions Estimator Model (CalEEMod) was used to estimate the electricity demand for the proposed project.

Natural Gas

Construction Use

Southern California Gas Company (SoCalGas) will provide natural gas for the proposed project. Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible.

Operational Use

Natural gas consumption during operation would be required for various purposes, including building heating and cooling. As part of the aforementioned air quality and greenhouse gas emissions analyses CalEEMod was used to estimate natural gas demand for the proposed project.

Petroleum

Construction Use

Petroleum-based fuel consumed by construction equipment would be the primary energy resource expended during construction. Transportation of construction materials and construction workers would also result in petroleum consumption. Heavy-duty construction equipment, vendor trucks, and haul trucks would use diesel fuel. Construction workers would likely travel to and from the project area in gasoline-powered vehicles. California's daily total use of petroleum is approximately 1.8 million barrels (California Policy Center, 2024); petroleum use during construction would be negligible.

During project construction, trucks and construction equipment would be required to comply with the California Air Resources Board's (ARB's) anti-idling regulations. ARB's In-Use Off-Road Diesel Fueled Fleets regulation would also apply (ARB, 2023).

Operational Use

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site. Annual project operation petroleum usage from on-road motor vehicle fuel consumption was estimated using the California Air Resources Board's Emission Factor model (EMFAC2021). CalEEMod) was used to estimate the project's vehicle

miles travelled (VMT), which was included in the EMFAC analysis to predict annual diesel and gasoline fuel consumption.

Impact Analysis

Less than Significant Impact

Construction Phase

The amount of electricity used during construction would be temporary and minimal, as demand would primarily stem from use of electrically powered hand tools. Therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity, and impacts would be less than significant.

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible and would not have an adverse effect; therefore, construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas. Therefore, impacts would be less than significant.

Construction for the proposed project is expected to take nine months, from January 2026 to September 2026. Because of the short-term nature of construction and relatively small scale of the project, the project's petroleum consumption would be negligible when compared to California's daily total use of approximately 1.8 million barrels of petroleum. Vehicles driven to or from the project site (delivery trucks, construction employee vehicles, etc.) are subject to fuel efficiency standards established by the federal government, the ARB's anti-idling regulations and the ARB's In-Use Off-Road Diesel Fueled Fleets regulation. Therefore, project construction activities regarding fuel use would not result in wasteful, inefficient, or unnecessary consumption, and impacts would be less than significant.

Operational Phase

Project operation energy usage, which was estimated by the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.29 (CAPCOA, 2022) as part of the air quality and greenhouse gas emissions analyses (refer to **Section 4.3**), is shown in **Table 4.6-1**.

Table 4.6-1
ESTIMATED PROJECT OPERATIONAL ENERGY USE

Energy Type	Units	Value
Onroad Motor Vehicle Travel (Fuel)[a]	Gallons gasoline/year	30,037
	Gallons diesel/year	3,461
Electricity Use	Kilowatt-hours per year	1,300,960.05

Energy Type	Units	Value
Natural Gas Use	1,000 BTU per year	3,437,545.05

[a] Onroad Motor Vehicle Fuel Consumption calculated by UltraSystems using EMFAC2021(v1.0.2) emissions inventory web platform tool (ARB, 2022) and CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022); see Appendix B1.
Electricity and Natural Gas use calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

As shown in **Table 4.6-1**, the project would consume approximately 33,498 gallons of petroleum-based fuel per year during operation. By comparison, approximately 27 billion gallons of petroleum were consumed in California in 2023 (EIA, 2024). The anticipated increase in consumption associated during one year of project operation is 0.00013 percent of statewide use, which is negligible. Although implementation of the project would result in an increase in petroleum use during operation, over time, vehicles would use less petroleum due to advances in fuel economy. Therefore, petroleum consumption due to the project's operations would not be wasteful, inefficient, or unnecessary, and impacts would be less than significant.

The project would consume approximately 1,300,960 kilowatt-hours (kWh) of electricity per year and 3,437,545 thousand British thermal units (kBTU) of natural gas per year. By comparison, in 2023, the latest year for which data are available, the Los Angeles County non-residential sector consumed approximately 42,978 gigawatt-hours (GWh) of electricity and approximately 174,120,000,000 kBTU of natural gas (CEC, 2024). The increase in electricity and natural gas demand at the project site would be negligible relative to the countywide electricity and natural gas usage. Therefore, electricity and natural gas consumption due to the project's operations would not be wasteful, inefficient, or unnecessary, and impacts would be less than significant.

Continued use of energy resources is consistent with the anticipated growth within the city and the general vicinity and would not result in energy consumption that would require a significant increase in energy production for the energy provider. Based on the information provided above, the proposed project would have a less than significant impact regarding wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact

Title 24 Building Energy Efficiency Standards

The initial Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the California Code of Regulations) were 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. Compliance with Title 24 will result in a decrease in GHG emissions.

The Title 24 standards are updated on a three-year schedule, with the most current 2022 standards adopted on August 11, 2021 and effective January 1, 2023. In December 2021, the 2022 standards were approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The Building Energy Efficiency Standards (Energy Code) apply to newly

constructed buildings, additions, and alterations. They are a vital pillar of California's climate action plan. The 2022 Energy Code will produce benefits to support the state's public health, climate, and clean energy goals by encouraging implementation of efficient electric heat pumps, establishing electric-ready requirements for new homes, expanding solar photovoltaic and battery storage standards, strengthening ventilation standards, and more. Buildings with permit applications applied for on or after January 1, 2023, must comply with the 2022 Energy Code. Public Resources Code §§ 25402 subdivisions (a)-(b) and § 25402.1 emphasize the importance of building design and construction flexibility by requiring the California Energy Commission (CEC) to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space (CEC, 2022).

Title 24 California Green Building Standards Code

The California Green Building Standards Code (Title 24, Part 11 code), commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics.

The provisions of Title 24, Part 6 apply to all buildings for which an application for a building permit or renewal of an existing permit is required by law. They regulate design and construction of the building envelope, space-conditioning and water-heating systems, indoor and outdoor lighting systems of buildings, and signs located either indoors or outdoors. Title 24, Part 6 specifies mandatory, prescriptive and performance measures, all designed to optimize energy use in buildings and decrease overall consumption of energy to construct and operate residential and nonresidential buildings. Mandatory measures establish requirements for manufacturing, construction, and installation of certain systems, equipment, and building components that are installed in buildings.

City of Palmdale General Plan and Climate Action Plan

The City of Palmdale adopted its General Plan, Envision Palmdale 2045, on October 22, 2022, and most recently updated it on April 4, 2025. In chapter 14 of the General Plan, the Sustainability, Climate Action, and Resilience section serves as the city's Climate Action Plan (CAP) and a framework for implementing greenhouse gas reduction and sustainability strategies. Its goal for clean energy is in line with SB 100, to achieve an energy system free of fossil fuels. To reach this goal, the CAP aims to direct the City's EPIC[29] to supply 75 percent of its energy to residents and businesses from carbon-free or renewable electricity by 2030, and 100 percent carbon-free by 2045. The CAP pushes the community to develop solar projects and microgrids, along with a streamlined process of approval for battery storage (City of Palmdale, 2022e).

The proposed project would adhere to applicable federal, state, and local requirements for energy efficiency, including Title 24 standards, the General Plan, and the City of Palmdale Climate Action Plan. Therefore, impacts would be less than significant.

[29] EPIC is defined above.

4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?				**X**
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
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?			**X**	
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?			**X**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				**X**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		**X**		

The information in this section is based on the following two technical reports:

- Planning-Level Geotechnical Evaluation, Proposed Self-Storage Facility, East Palmdale Blvd. and 58th Street East, Palmdale, California, prepared by Geotechnical Professionals Inc. dated October 21, 2024; a complete copy of this report is included as **Appendix E1** to this IS/MND.

- Paleontological Records Search for the proposed Palmdale Self Storage Project (Project No. 7321). Prepared by Natural History Museum of Los Angeles County, dated April 6, 2025. A complete copy of this report is included as **Appendix D2** to this IS/MND.

g) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact

The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. As shown in **Figure 4.7-1**, **t**he project site is not within an Alquist-Priolo Earthquake Fault Zone; and the nearest such Zone is one along the San Andreas Fault Zone 3.2 miles to the southwest. Figure 4.7-2 shows the nearest known active fault to the project site, the San Andreas Fault Zone, about 3.3 miles to the southwest.[30] No known active fault passes through or next to the project site, and project development would not exacerbate risks from surface rupture of a known fault. No impact would occur.

ii) Strong seismic ground shaking?

Less than Significant Impact

As shown in **Figure 4.7-2**, the project is located within a seismically active region of Southern California, and all structures in the region are susceptible to collapse, buckling of walls, and damage to foundations from strong seismic ground shaking. The San Andreas Fault Zone has been segmented into the northern, middle and southern segments; the southern segment is present in the project region. No major earthquakes have occurred in historic time on the southern segment. Slip rates on the fault have been estimated between 1.5 to 2.5 inches per year, and earthquake magnitudes, should an earthquake occur, are estimated between 7 and 8 (GPI, 2024, p. 5). Project design would comply with the 2022 California Building Code (California Code of Regulations, Title 24, Part 2), and American Society of Civil Engineers (ASCE) Standard 7-16, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures* (GPI, 2024, p. 8).

The CBC, adopted as sections 8.04.200 et. seq. of the City's Municipal Code, provides minimum standards to protect property and for public welfare by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for

[30] The slight difference in distances from the project site to the San Andreas Fault Zone and the Alquist-Priolo Earthquake Fault Zone reflects the width of the latter.

Figure 4.7-1
ALQUIST PRIOLO FAULT ZONES

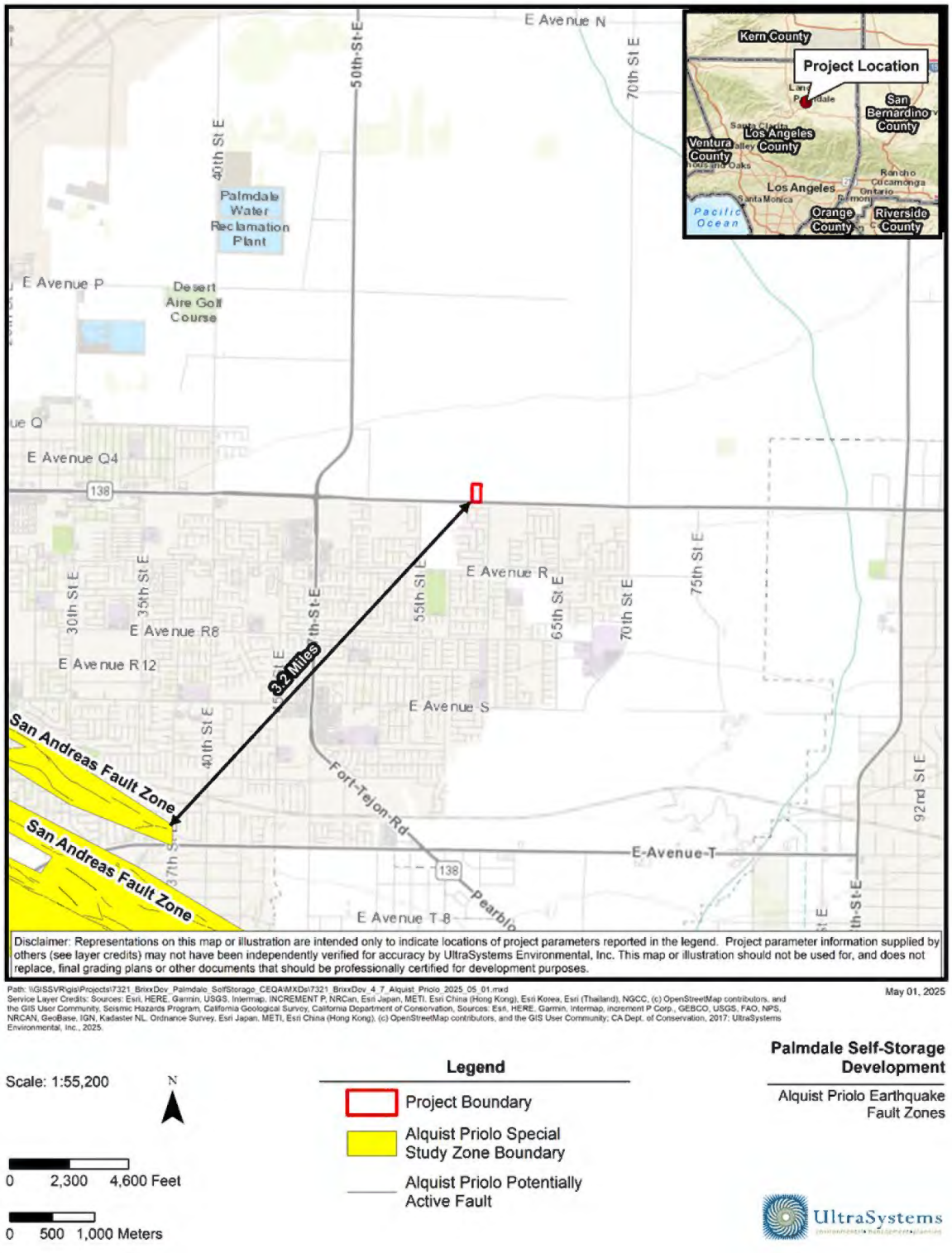
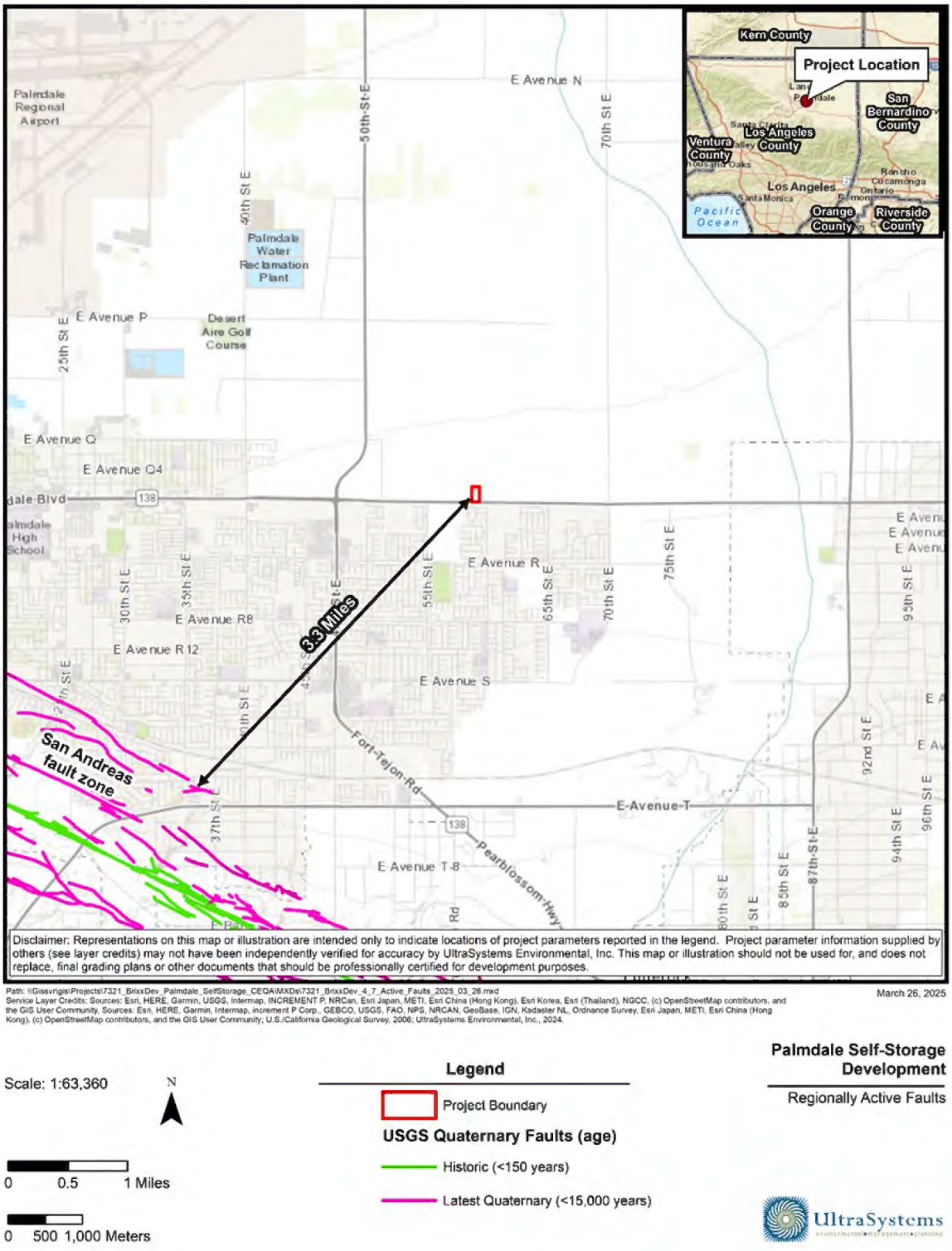


Figure 4.7-2
REGIONALLY ACTIVE FAULTS



earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site. The geotechnical evaluation report includes seismic code values (often referred to as seismic design parameters) to be used in project design and construction (GPI, 2024, p. 8).

Although the project site is susceptible to occasional strong ground shaking, design and construction in accordance with the CBC would minimize risks related to potential ground shaking at the site. For these reasons, impacts from strong seismic ground shaking would be less than significant and mitigation is not proposed.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact

General types of ground failures that might occur as a consequence of severe ground shaking typically include landslides, ground subsidence, ground lurching and shallow ground rupture. The probability of occurrence of each type of ground failure depends on factors including the severity of the earthquake, distance from the faults, topography, subsoils and relatively shallow groundwater tables (approximately 50 feet or less below ground surface), in addition to other factors.

The shallowest historical groundwater depth in the nearest well to the project site for which data are available is 145 feet below ground surface (bgs) in a well about 0.5 mile to the east. The project site is not in a zone of required investigation for liquefaction mapped by the California Geological Survey, or in a Seismic Hazard Liquefaction Zone mapped in the City of Palmdale General Plan. The potential for liquefaction to adversely affect the project is considered negligible (GPI, 2024, pp. 6-7). Impacts would be less than significant.

iv) Landslides?

No Impact

The project site and surroundings have a north-facing slope of about 1 percent grade. Thus, no existing landslide hazard is present onsite and project development would not exacerbate landslide hazards. No impact would occur.

h) Would the project result in substantial soil erosion or the loss of topsoil?

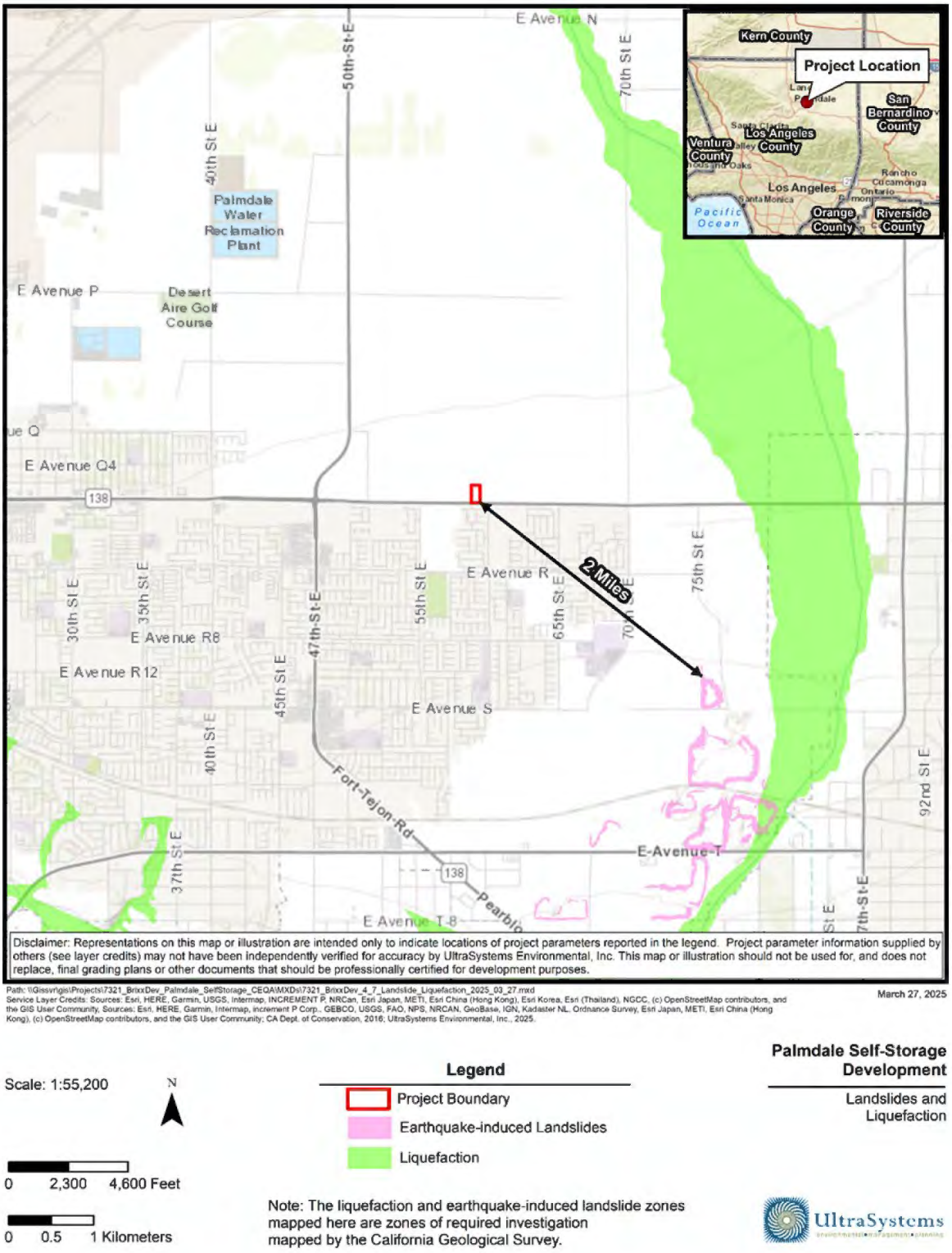
Less than Significant Impact

The site is underlain by alluvial sediments mapped as alluvial gravels, sands, and silts associated with valley and canyon floodplain areas (GPI, 2024, p. 3).

Construction

The project site would be most susceptible to erosion during the construction phase, when soil is exposed, and before landscaped areas have been installed. To minimize the potential for water and wind erosion, the project would be required to obtain coverage under the Statewide General Construction Permit issued by the State Water Resources Control Board (Order No. 2022-0057-DWQ). Projects obtain coverage by developing and implementing a Stormwater Pollution Prevention Plan (SWPPP) estimating sediment risk from construction activities to receiving waters and

Figure 4.7-3
LANDSLIDES AND LIQUEFACTION



specifying Best Management Practices (BMPs) that would be used by the project to minimize pollution of stormwater.

Construction BMPs are grouped in six categories: erosion control (prevents soil particles from being detached from soil surface), sediment control (prevents soil particles from being transported offsite by water and being deposited elsewhere), wind erosion control, tracking control (prevents soil from being tracked offsite by vehicles), non-stormwater management controls (prohibits discharges other than stormwater, such as those from cleaning, maintenance, and fueling of vehicles and equipment), and waste management and controls (good housekeeping practices) (CASQA, 2023). Construction impacts regarding soil erosion would be less than significant after preparation and implementation of a SWPPP for the proposed project.

Operation

As designed, the project would be developed with a mix of impervious surfaces such as concrete and pavement and landscaped areas, including landscaping along the site boundary. This combination of impervious surfaces and landscaped areas would reduce the potential of the project for soil erosion to a negligible level during project operations. Impacts would be less than significant.

i) Would the project 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?

Less than Significant Impact with Mitigation Incorporated

Impacts related to liquefaction would be less than significant, and no impact related to landslides would occur, as substantiated above in Sections 4.7.a.iii and -iv, respectively.

Lateral Spreading

Lateral spreading is the rapid downslope movement of surface sediment, in a fluid-like flow, due to liquefaction in a subsurface layer. Risks associated with lateral spreading would be minimal due to the negligible potential for liquefaction in sediments underlying the site.

Collapsible Soils

Collapsible soils shrink upon being wetted and/or being subject to a load. Collapse typically occurs in young, unconsolidated, low-density, loose, dry soils common in arid to semi-arid regions. Collapsible soils are usually composed of granular particles cemented together by clay bonds. When such soils become saturated the clay bonds dissolve, causing substantial shrinkage (NRCS, 2004, p. 60). The geotechnical evaluation determined that the uppermost few feet of site soils are unsuitable for supporting the proposed structures, and recommends removal of such soils; and replacement of the soils back onsite as compacted, moistened fill soil. A design-level geotechnical investigation, required for the project by the CBC, will recommend the depth of removal of soils under the proposed buildings and other improvements (GPI, 2024, p. 10). Project development would not exacerbate hazards arising from collapsible soils.

Subsidence

The major cause of ground subsidence is the excessive withdrawal of groundwater. Soils with high silt or clay content are particularly susceptible to subsidence. The project site is not in an area of subsidence mapped by the U.S. Geological Survey (GPI, 2024, p. 7). Project development would not exacerbate hazards related to ground subsidence. Impacts would be less than significant.

j) Would the project 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 with Mitigation Incorporated

Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall, and utility leakage. The geotechnical evaluation stated that near-surface soils are anticipated to be relatively non-expansive (GPI, 2024, p. 6). A design-level geotechnical investigation, required for the project by the CBC, will include testing of sample(s) of subsurface site soils for expansion potential and provide recommendations for grading and for foundation and subdrain design to minimize risks from expansive soils. Impacts would be less than significant after implementation of recommendations to be provided in the design-level geotechnical investigation report.

k) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact

The project site would connect to the City of Palmdale's existing sewer system; therefore, the project would not use septic tanks or alternative wastewater disposal systems. Therefore, no impacts associated with septic tanks or alternative waste water disposal systems would occur.

l) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated

The project site is underlain by alluvial fan deposits of Holocene age consisting of gravel, sand, and silt (Olson and Hernandez, 2013). The Holocene Epoch extends from approximately 11,700 years before present to the present (ICS, 2024).

Several fossil localities have been discovered in the region. While no localities have been recorded within the project boundary itself, there are "potentially fossil-bearing units are present in the project area, either at surface or at depth" (Bell, 2025, p. 2).

TABLE 4.7-1
FOSSIL LOCALITIES IN THE PROJECT REGION

Locality Number	Location	Formation	Taxa	Depth
LACM VP 5946	E Avenue S & 90th St E	Unknown formation (Holocene)	Lizard (*Gambelia wislizenii*)	0-3 m bgs
LACM VP CIT451	Near intersection of E Barrel Springs Rd & 47th St E (Palmdale Quad)	Harold Formation	Mastodon (Mammutidae), horse family (Equidae)	Unknown
LACM VP 5947	E avenue S between 115 St E and 121 St E	Unknown formation (Holocene)	Pocket gopher (*Thomomys*)	0-3 m bgs
LACM VP 7884	Near the intersection of East 3rd Street & East Avenue H-13	Unknown formation (Pleistocene; fluvial brown clayey silt)	Camel (Camelops hesternus)	4 feet bgs
LACM VP 7853	Waste Management of North America Lancaster Landfill	Unknown formation (Pleistocene; sandy loess under a dune deposit strand, sandy siltstone, siltstone to clayey siltstone)	Rabbit (Sylvagus), camel family (Camelidae), antelope squirrel (Ammospermophilus), kangaroo rat (Dipodymus), pocket mouse (Perognathus), pack rat (Neotoma), deer mouse (Peromyscus), vole family (Microtinae), iguana (Dipsosaurus), pocket gopher (Thomomys), spiny lizard (Sceloporus), side blotched lizard (Uta), colubrid snakes (Trimorphodon, Masticophis, Phyllorhynchus), night lizard (Xantusia), western alligator lizard (Elgaria), toothy skinks (Plestiodon), whiptail lizard (Aspidocelis), spiny lizards (Phrynosomatidae), smelt (Osmeridae)	3-11 feet bgs
			Rabbit (Sylvilagus); pocket nouse	

Locality Number	Location	Formation	Taxa	Depth
LACM VP	Between 180th &	Unknown formation	(Chaetodippus); kangaroo rat (Dipodomys)	0-9 feet bgs

Source: Bell, 2025

Excavations or grading that extend into the uppermost layers of soil and deeper excavation into the sediments in the proposed project area may encounter significant fossil remains. Any substantial excavations below the uppermost layers should be closely monitored to quickly and professionally collect any specimens. Grading and excavation activities associated with development of the proposed project would cause new subsurface disturbance and could result in the unanticipated discovery of paleontological resources, for which mitigation is required.

Mitigation Measure

MM GEO-1 Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Palmdale Planning Department from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist perform periodic paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

Level of Significance After Mitigation

With implementation of **MM GEO-1**, potential impacts to paleontological resources would be reduced to a less than significant level.

4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

4.8.1 Background Information on Greenhouse Gas Emissions

4.8.1.1 Introduction

Life on earth depends on energy coming from the sun. About half the light reaching Earth's atmosphere passes through the air and clouds to the surface, where it is absorbed and then radiated upward in the form of infrared heat. About 90 percent of this heat is then absorbed by carbon dioxide (CO_2) and other greenhouse gases (GHG) and radiated back toward the surface, which is warmed to a life supporting average of 59 degrees Fahrenheit (°F) (NASA, 2023).

Human activities are changing the natural greenhouse. Over the last century, the burning of fossil fuels such as coal and oil has increased the concentration of atmospheric CO_2. This happens because the coal or oil burning process combines carbon in the fuel with oxygen in the air to make CO_2. To a lesser extent, the clearing of land for agriculture, industry, and other human activities has increased concentrations of GHGs (NASA, 2023).

GHGs are defined under the California Global Warming Solutions Act of 2006 (AB 32) as CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6). Associated with each GHG species is a "global warming potential" (GWP), which is a value used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the heat absorbing ability of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). The GWPs of CH_4 and N_2O are 25 and 298, respectively (GMI, 2023). "Carbon dioxide equivalent" (CO_2e) emissions are calculated by weighting each GHG compound's emissions by its GWP and then summing the products. HFCs, PFCs, and SF_6 would not be emitted in significant amounts by the Palmdale Mini Self Storage Facility project sources, so they are not discussed further.

Carbon Dioxide (CO_2). Carbon dioxide is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. It is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. Since the industrial revolution began in the mid-1700s, industrial activities have increased in scale and distribution. Prior to the industrial revolution, CO_2 concentrations were stable at a range of 275 to 285 ppm (IPCC, 2007). The National Oceanic and Atmospheric Administration's Earth System Research Laboratory indicates that the global monthly mean concentration of CO_2 was

426.13 parts per million (ppm) in February 2025 (ESRL, 2025). These concentrations of CO_2 exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

Methane (CH_4). Methane is a colorless, odorless nontoxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH_4 is combustible, and is the main constituent of natural gas, a fossil fuel. It is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Anthropogenic sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH_4. Other anthropogenic sources include fossil fuel combustion and biomass burning.

Nitrous Oxide (N_2O). Nitrous oxide is a colorless, nonflammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anesthetic. N_2O is naturally produced in the oceans and in rainforests (USEPA, 2011). Manmade sources of N_2O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of N_2O also began to rise at the beginning of the industrial revolution.

4.8.2 Regulatory Setting

GHGs are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level, the California Air Resources Board (ARB) regulates at the state level, and the Antelope Valley Air Quality Management District (AVAQMD) regulates at the air basin level in the Palmdale Mini Self Storage Facility project area.

4.8.1.2 Federal Regulations

The USEPA collects several types of GHG emissions data. These data help policy makers, businesses, and the USEPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. The USEPA has been maintaining a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

The EPA is also achieving GHG reductions through partnerships and initiatives, evaluating policy options, costs, and benefits, advancing the science, partnering internationally and with states, localities, and tribes, and helping communities adapt.

Corporate Average Fuel Economy (CAFE) Standards

The National Highway Traffic Safety Administration's (NHTSA) Corporate Average Fuel Economy (CAFE) standards regulate the distance vehicles must cover per gallon of fuel. The agency establishes CAFE standards for passenger cars and light trucks (referred to as light-duty vehicles), as well as separate guidelines for fuel consumption by medium- and heavy-duty trucks and engines. The latest CAFE standards were proposed by the NHTSA in July 2023 and finalized in June 2024 (NHTSA, 2023). Effective August 23, 2024, passenger cars and light trucks will see an increase of two percent annually for passenger cars in model years 2027–2031. For light trucks, the increase will be zero percent per year for model years 2027–2028 and two percent per year for model years 2029–31. Additionally, NHTSA is setting final fuel efficiency standards for heavy-duty pickup trucks and vans (HDPUVs) with

a 10 percent annual increase for model years 2030–32 and further increases for model years 2033–35.

Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

On March 31, 2020, the USEPA and the NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program, revoked California's authority to set its own GHG emissions standards and set zero emission vehicle (ZEV) mandates in California. The loss of the ZEV sales requirements would likely result in additional gasoline-fueled vehicles being sold in the State and increased criteria pollutant emissions. On April 30, 2020, during the first Trump administration, USEPA and NHTSA issued the Final SAFE Rule (NHTSA, 2020), which relaxed the federal GHG emissions and CAFE standards and would probably have resulted in increased CO_2 emissions. However, this regulation was repealed on December 21, 2021 by the Biden administration (USEPA, 2024).

4.8.1.3 State Regulations

Executive Order (EO) S 305

On June 1, 2005, the governor issued EO S 305, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

To meet these targets, the Climate Action Team (CAT) prepared a report to the Governor in 2006 that contained recommendations and strategies to help ensure that the targets in EO S305 are met.

Assembly Bill 32 (AB 32)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. It required that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming. AB 32 also required that by January 1, 2008, the ARB determine what the statewide GHG emissions level was in 1990, and that it approve a statewide GHG emissions limit, so it may be applied to the 2020 benchmark. The ARB approved a 1990 GHG emissions level of 427 million metric tons of CO2e (MMTCO2e), on December 6, 2007, in its Staff Report. Therefore, in 2020, emissions in California were required to be at or below 427 MMTCO2e.

Under the "business as usual or (BAU)" scenario established in 2008, statewide emissions were increasing at a rate of approximately one percent per year, as noted below. It was determined that the 2020 estimated BAU of 596 MMTCO2e would have required a 28 percent reduction to reach the 1990 level of 427 MMTCO2e.

As part of the 2013 update, the ARB revised the 2020 Statewide limit to 431 million MT of CO2e, an approximately one percent increase from the original estimate. The 2020 business-as-usual forecast in the update is 509 million MT of CO2e. The state would need to reduce those emissions by 15.3 percent to meet the 431 million MT of CO_2e 2020 limit. The state met this goal years earlier than

intended and efforts are now focused on achieving goals set by the 2022 Scoping Plan update discussed below.

Climate Change Scoping Plan

The first AB 32 Scoping Plan (ARB, 2008) contained the main strategies to achieve the 2020 emissions cap. These included direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

In December 2022, the ARB approved its Final 2022 Scoping Plan Update (ARB, 2022), which adds carbon neutrality to the former Scoping Plan and identifies a technologically feasible, cost-effective path to reduce GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 or earlier. The 2022 Plan focuses on efforts to shift away from fossil fuels; this would result in a 94 percent decrease in liquid petroleum demand, a 71 percent decrease in smog-related pollutants, a job increase of four million, and $200 billion of health cost savings for Californians (ARB, 2022).

Renewables Portfolio Standard (Scoping Action E3)

The California Energy Commission estimates that in 2000 about 12 percent of California's retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. California's current RPS is intended to increase that share to 44 percent by 2024. Increased use of renewables will decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. Governor Brown signed Senate Bill (SB) 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030**.**

Senate Bill 375 (SB 375)

Senate Bill (SB) 375 passed the Senate on August 30, 2008, and was signed by the governor on September 30, 2008. Per SB 375, the transportation sector is the largest contributor of GHG emissions and contributes approximately 45 percent of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30 percent. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions; (2) aligns planning for transportation and housing; and (3) creates specified incentives for the implementation of the strategies.

Executive Order B-30-15

On April 29, 2015, the governor issued Executive Order B-30-15, which added an interim target of GHG emissions reductions to help ensure the State meets its 80 percent reduction by 2050, as set in EO S-3-05. The interim target is to reduce GHG emissions by 40 percent by 2030. It also directs state agencies to update the Scoping Plan, update an Adaptation Strategy every three years, and take climate change into account in their planning and investment strategies. Additionally, it requires the

state's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects**.**

Title 24

Although not originally intended to reduce GHGs, California Code of Regulations Title 24 Part 6: California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted 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-efficient technologies and methods. The California Energy Commission updates the standards every three years. The 2025 standard, which will go into effect effective January 1, 2026, encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more (CEC, 2025).

4.8.1.4 Local Regulations

City of Palmdale

Envision Palmdale 2045, the City of Palmdale's General Plan adopted in 2022, outlines greenhouse gas reduction and sustainability strategies within Chapter 14: Sustainability, Climate Action, and Resilience, which serves as the city's Climate Action Plan (CAP) (City of Palmdale, 2022e). A description of climate vulnerability findings, along with the city's climate adaptation goals, policies, and actions, are provided in this element. This chapter discusses maintaining and implementing a CAP with the goal of achieving GHG reduction targets of 40 percent below 1990 levels by 2030, consistent with SB 32, and carbon neutrality by 2045, in line with executive order B-55-18. Strategies aimed at reaching this goal include:

- Regularly updating the CAP.
- Tracking progress by conducting GHG inventories every 3 to 5 years.
- Seeking funds to support the implementation of GHG reduction projects.
- Engaging the community in educational outreach, issue-specific awareness campaigns, and technical assistance.

Other goals included in Palmdale's CAP include providing 100 percent carbon free electricity by 2045 consistent with SB 100, decarbonizing buildings and new construction, reducing GHG emissions from transportation, increasing resource capture while reducing landfill waste, increasing water safety and security, improving open spaces, and advancing community climate knowledge and resilience.

4.8.3 Impact Analysis

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact

Impact Thresholds

As discussed earlier, California has enacted several pieces of legislation that relate to GHG emissions and climate change, many of which set aggressive goals for GHG reductions within the state. Per Senate Bill 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines that address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment. However, neither a numerical threshold of significance nor any specific mitigations are provided in these CEQA Guideline amendments.

The following thresholds of significance are based on criteria in Appendix G of the State CEQA Guidelines. A project has the potential to create a significant environmental impact if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHG.

GHG Significance Threshold

The City of Palmdale does not have quantitative GHG significance thresholds, however the AVAQMD does in its *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines* dated August 2016 (AVAQMD, 2016). This document indicates that a project's greenhouse gas emissions, or CO_2e, are considered significant if they meet or surpass an annual threshold of 100,000 tons or a daily threshold of 548,000 pounds.

Construction GHG Emissions

Construction is an episodic, temporary source of GHG emissions. Emissions are generally associated with the operation of construction equipment, import or export of soil, and the disposal of construction waste. To be consistent with the guidance from the AVAQMD for calculating criteria pollutants from construction activities, only GHG emissions from onsite construction activities and offsite hauling and construction worker commuting are considered as project generated. As explained by the California Air Pollution Control Officers Association (CAPCOA) in its 2008 white paper (CAPCOA, 2008), the information needed to characterize GHG emissions from manufacture, transport, and end of life of construction materials would be speculative at the CEQA analysis level; CEQA does not require an evaluation of speculative impacts (CEQA Guidelines § 15145). Therefore, the construction analysis does not consider such GHG emissions but does consider non speculative ones.

GHG emissions from the Palmdale Mini Self Storage Facility project were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.29 (CAPCOA, 2022), which is described in **Section 4.3.7**of this IS/MND. The results of this analysis are presented in **Table 4.8-1**.

The total annual construction GHG emissions would be **266.9 tons of CO_2e,** and the maximum daily emissions will be **4,775.97 pounds of CO_2e.** Although the AVAQMD does not discuss amortization, the South Coast AQMD (SCAQMD) recommends amortizing construction emissions over the life of the project, typically 30 years, and including this value in the operational emissions analysis to account for GHG reduction measures. Thus, consistent with SCAQMD recommendations (SCAQMD, 2008, p. 3-10), annual construction GHG emissions have been amortized over a 30-year period and included with the operational GHG emissions. For each construction year, annual GHG emissions for the proposed project would be far below the AVAQMD threshold of 100,000 tons CO_2e per year, and 548,000 pounds per day and therefore would be less than significant.

Table 4.8-1
PROJECT CONSTRUCTION RELATED GHG EMISSIONS

Units	2026 Emissions			
	CO_2	CH_4	N_2O	CO_2e
Annual (tons/year)	264.9	0.009	0.005	266.9
Maximum Daily (lb/day)	4,737.30	0.175	0.108	4,775.97

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

Operational GHG Emissions

The proposed Palmdale Mini Self Storage Facility Project consists of six one-story buildings (Buildings A- F) comprising 673 self-storage units ranging from 5 by 5 feet to 10 by 30 feet: 422 climate-controlled units in Building A and 251 non-climate-controlled units in all nine buildings. Operational emissions would result from area sources, motor vehicles, and energy demand, as presented in **Table 4.8-2**. Amortized annual construction emissions are also included in the operational calculations because some GHG pollutants emitted during construction remain in the atmosphere for long periods of time, and subsequently their impacts occur in the future years during operation after construction is complete.

Table 4.8-2
PROJECT OPERATIONAL GHG EMISSIONS

Emission Source	Estimated Project Generated CO_2e Emissions	
	Annual (tons/year)	Maximum Daily (lb/day)
Mobile (Motor Vehicles)	305.9	1,797.3
Area Sources	1.5	16.9
Energy Demand (Electricity & Natural Gas)	548.9	3,008.1
Water Demand	66.8	366.1
Solid Waste Generation	36.7	201.2
Construction Emissions[a]	8.9	159.2
Total	**968.79**	**5,548.8**

[a] Total construction GHG emissions were amortized over 30 years and added to those resulting from the operation of the project.

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

The amortized values of 8.9 tons CO_2e per year (266.9 tons CO_2e divided by 30) and 159.2 $lbCO_2e$ per day (4775.97 $lbCO_2e$ divided by 30) from the construction emissions calculations have been added to the proposed project's annual operational GHG emissions. For a reasonable maximum emissions case, it was assumed that the base current GHG emissions at the project site are zero. The operational GHG emissions calculated by CalEEMod Version 2022.1.1.29 (CAPCOA, 2022) are shown in

Table 4.8-2. Total annual unmitigated emissions from the Palmdale Mini Self Storage Facility project, including the amortized construction emissions, would be **968.79 tons CO_2e per year** and **5,548.8 lbCO_2e per day**. This is far below the AVAQMD thresholds of 100,000 tons CO_2e per year and 548,000 pounds per day. Under the first significance criterion, therefore, operational GHG emissions would be less than significant.

Therefore, under the first significance criterion, GHG emissions would be less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?

Less than Significant Impact

As mentioned in **Section 4.8.2,** the City of Palmdale adopted its Climate Action Plan (CAP), incorporated within the Envision Palmdale 2045 General Plan, in 2022. This CAP includes actions such as increasing GHG reduction efforts to reach carbon neutrality by 2045, promoting energy efficiency, and enhancing transportation systems to reduce emissions (City of Palmdale, 2022e).

The proposed project would not conflict with the goals or strategies outlined in the Palmdale CAP. It aligns with the city's climate goals, as it includes sustainable features such as complying with the 2025 Energy Code for wall and roof insulation in the climate-controlled storage areas. In addition the proposed storage facility is an allowable use under the City of Palmdale's General Plan Land Use designation and Zoning for the project site. Thus, the project would not result in a conflict with the city's GHG reduction plans, policies, or regulations. Therefore, project impacts would be less than significant.

The proposed project would also be designed and built in compliance with the California Green Building Standards (CAL Green) Code (California Code of Regulations, Title 24, Part 11). It would not conflict with any of the applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHG, as discussed in **Section 4.8.2**, and thus impacts would be less than significant.

4.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?				**X**
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?				**X**
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 or excessive noise for people residing or working in the project area?				**X**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				**X**

The analysis in this section is derived in part from the Environmental Radius Report (ERR) provided by Nationwide Environmental Title Research (NETROnline), dated April 3, 2025, and included as **Appendix I** of this IS/MND.

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact

The transportation of hazardous materials and waste is regulated by the California Code of Regulations (CCR) Title 26. The enforcement of both federal and state regulations is carried out by the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans), particularly in response to emergencies involving hazardous materials transportation. Emergency responses are coordinated among federal, state, and local governmental authorities, as well as

private entities, through a state-mandated Emergency Response Plan. Given the significant short-term risks to public health and the environment associated with hazardous waste management during transportation, specific Commercial Hazardous Waste Shipping Routes have been established to minimize the distance that wastes are transported and their proximity to sensitive locations.

Construction

The proposed construction of a self-storage facility would involve temporary transport, storage, and utilization of chemical agents, solvents, paints, and other hazardous materials typically associated with construction activities. All chemical transport, storage, and usage will be conducted in compliance with the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Occupational Safety and Health Administration (OSHA), California hazardous waste control law, the California Division of Safety and Health (DOSH), the South Coast Air Quality Management District (SCAQMD), and the Los Angeles County Fire Department (LACoFD) requirements.[31] The proposed project will adhere to all applicable laws and regulations, ensuring that construction impacts related to hazardous materials are minimized to a level that is less than significant.

Operation

The operation of the self-storage facility is not expected to involve the storage of substantial quantities of hazardous materials. Self-storage operators will bear the costs associated with the removal of hazardous materials discovered on their premises. The self-storage business will be required to comply with existing regulations, standards, and guidelines established by the US Environmental Protection Agency, the State of California, and LACoFD regarding the storage, use, and disposal of hazardous materials, thereby abating the potential risk of hazardous materials exposure to a level that is less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact

Construction

The construction project will involve transportation, storage, and utilization of chemical agents, solvents, paints, and other hazardous materials commonly associated with construction activities. The contractor will ensure that all necessary equipment and supplies are readily available on-site to effectively contain and remediate minor spills of hazardous materials. In the event of the release of hazardous materials that surpasses the safe containment and cleanup capacity for on-site personnel, the contractor will promptly notify the Los Angeles County Fire Department (LACoFD). Therefore, strict adherence to applicable laws and regulations throughout the construction process will significantly reduce the risk of accidental hazardous material releases, thereby resulting in construction hazards that would be classified as less than significant impacts.

[31] The Los Angeles County Fire Department is the Certified Unified Program Agency (CUPA) for the city of Palmdale; the Certified Unified Program coordinates and makes consistent enforcement of several state and federal regulations governing hazardous materials.

Operation

Operation of the proposed self-storage facility would involve the use of small amounts of hazardous materials, such as cleansers, paints, pesticides, and fertilizers, for cleaning and maintenance purposes. The use, storage, transport, and disposal of hazardous materials during project operation would be conducted in compliance with the regulations identified above. Impacts would be less than significant after such regulatory compliance.

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

The project site is situated more than 0.25 miles away from any school. The nearest educational institution, Los Amigos Dual Immersion School, is located approximately 1.4 miles south of the project site. Consequently, there will be no impact on 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?

No Impact

Government Code § 65962.5 requires the Department of Toxic Substances Control (DTSC) to compile and update, at least annually, lists of the following:

- Hazardous waste and substances sites from the DTSC EnviroStor database.
- Leaking Underground Storage Tank (LUST) sites by county and fiscal year in the State Water Resources Control Board (SWRCB) GeoTracker database.
- Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside waste management units.
- SWRCB Cease and Desist Orders (CDOs), and Cleanup and Abatement Orders (CAOs).
- Hazardous waste facilities subject to corrective action pursuant to § 25187.5 of the Health and Safety Code, identified by DTSC.

Collectively referred to as the "*Cortese List*." Consequently, the project site is not registered on the Cortese List.

The Environmental Radius Report (ERR), produced by Nationwide Environmental Title Research for the proposed project site identifies hazardous materials sites listed in federal, state, and tribal databases within one mile of the project site.[32]

The ERR examines various potential environmental hazards in the vicinity, including:

- Superfund sites: Locations listed on the EPA's National Priorities List.
- Hazardous waste sites: Designated for the storage, treatment, or disposal of hazardous materials.
- Landfill/Solid waste disposal sites: Locations allocated for solid waste disposal.
- Brownfield sites: Properties that may be contaminated with environmental hazards.
- Emergency release reports: Documentation of accidental releases of hazardous substances.

[32] The search radii varied from one mile to just the target property, depending on the type of site.

- EPA regulated facilities: Those associated with air pollution, hazardous waste, and Superfund sites.

The primary objective of an ERR is to provide a comprehensive overview of potential environmental risks that may impact a property, thereby facilitating due diligence and risk assessment (NETROnline, 2025). The ERR for the proposed project site concluded that no hazardous sites were identified within a one-mile radius of the proposed location, indicating an absence of environmental concern as shown in **Figure 4.9-1** below.[33] Therefore, there would be no impact regarding hazardous materials sites.

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 or excessive noise for people residing or working in the project area?

No Impact

The nearest public-use airport to the project site is Palmdale Regional Airport, located approximately 4.4 miles to the northwest. The project site lies outside the Palmdale Regional Airport Influence Area, where land uses are regulated to reduce aviation-related hazards to individuals on the ground (Los Angeles County, 2003). As a result, project development is not expected to produce airport-related hazards or excessive noise for individuals at the project site. Therefore, no impact is anticipated, and no mitigation measures are required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact

Construction

The Palmdale Local Hazard Mitigation Plan (LHMP) was officially adopted on September 30, 2021. As outlined in **Section 4.17**, construction activities near the project site may temporarily disrupt street traffic by reducing the number of available lanes. The City of Palmdale mandates that any construction work conducted within public rights of way must obtain an Encroachment Grading Landscape Permit approved by the City Engineering Department. By complying with the conditions of the permit approval, the project is expected to have a less than significant impact.

Operation

The operation of the project would not block or restrict traffic on the surrounding streets. Therefore, the impacts would be less than significant.

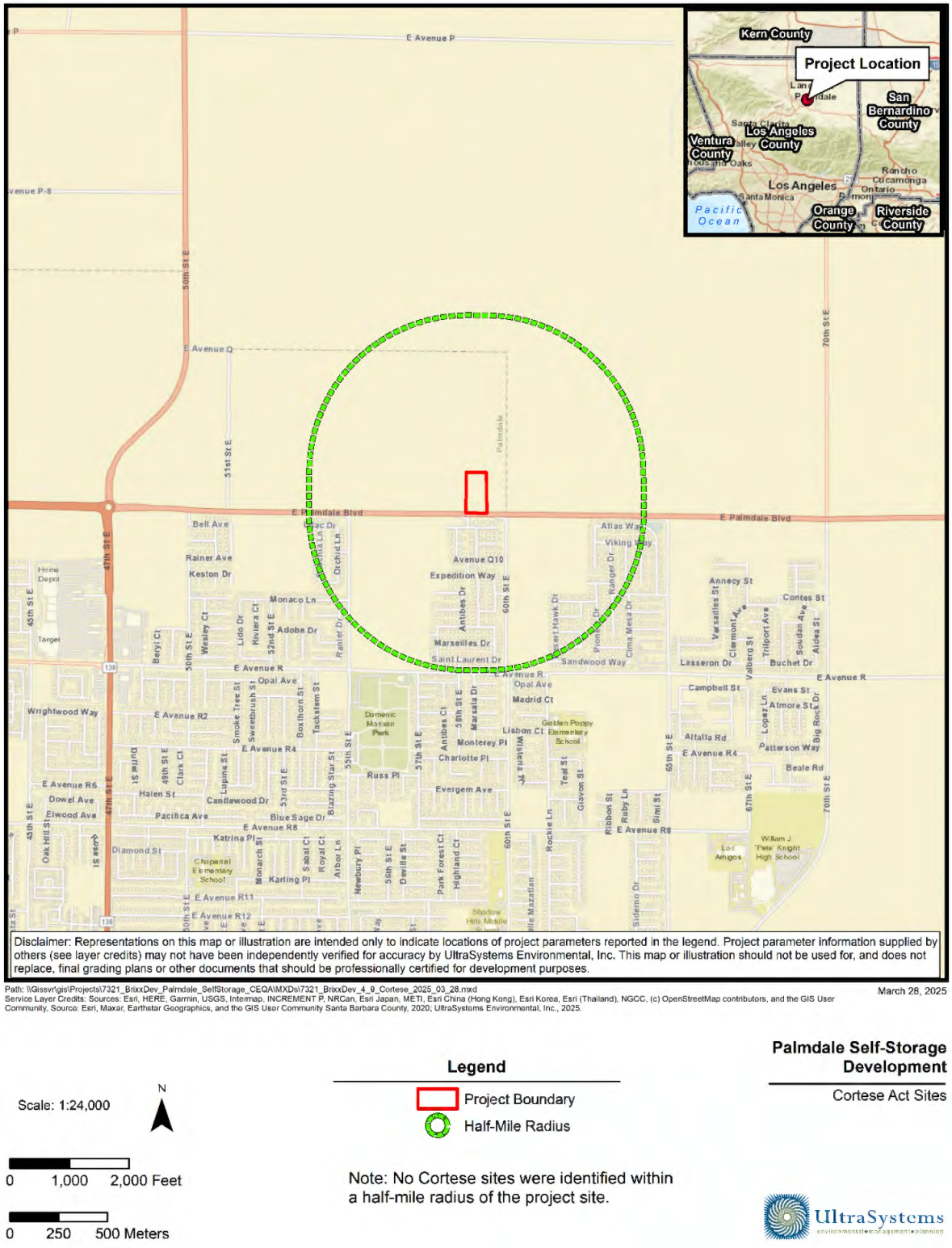
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact

[33] The ERR identified two hazardous waste transporters 400 feet south, and upgradient, from the project site: Henriquez Trucking and Santana Transportation are listed on the Resource Conservation and Recovery Act (RCRA) RCRAInfo database (NETR, 2025). The listings are not Cortese List sites; do not indicate any hazardous materials release; and are not an environmental concern for the project site.

The California Department of Transportation (Caltrans) has identified Very High Fire Hazard Severity Zones (VHFHSZ) for Local Responsibility Areas (LRA) and State Responsibility Areas (SRA). The project site is neither located within nor adjacent to a VHFHSZ, as outlined in **Section 4.20**. Therefore, the project is not expected to pose a significant risk to individuals or structures due to wildland fires and no impact would occur.

Figure 4.9-1
CORTESE LIST SITES



4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			**X**	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			**X**	
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:			**X**	
i) result in substantial erosion or siltation on or offsite;			**X**	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			**X**	
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			**X**	
iv) impede or redirect flood flows?				**X**
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				**X**
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				**X**

The information in this Section is based partly on the Preliminary Hydrology StudyFor Brixx Development Self-Storage, Palmdale Blvd. & 58th Street, Palmdale, CA prepared by DRC Engineering, Inc. and dated February 17, 2025; a complete copy of this Report is included as **Appendix G**.

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact

The California State Water Resources Control Board requires its nine Regional Water Quality Control Boards (RWQCBs) to develop water quality control plans (Basin Plans) designed to preserve and enhance water quality and protect the beneficial uses of all Regional waters. Specifically, Basin Plans designate beneficial uses for surface waters and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and describe implementation programs to protect all waters in the Regions (RWQCB 1995). In addition, Basin Plans incorporate by reference all applicable State and Regional Board plans and policies, and other pertinent water quality policies and regulations. The proposed project is under the jurisdiction of the Lahontan (Region 6) RWQCB.

The project site is in the Antelope-Fremont Valleys Subbasin, which spans about 3,372 square miles in the western Mojave Desert (CDFW, 2025). The project site is in the Rosamond Lake watershed, which spans about 156 square miles in the western Mojave Desert within the Antelope-Fremont Valleys Subbasin (CDFW, 2025). Streams in the Antelope-Fremont Valleys subbasin meander across alluvial fans to dry lake beds in the valley floors, and don't reach the ocean (LACPW, 2019, p. 2-16). Drainage onsite is via surface flow downgradient to the north.

The site is over the Antelope Valley Groundwater Basin, which spans approximately 1,580 square miles in the western Mojave Desert (DWR, 2025).

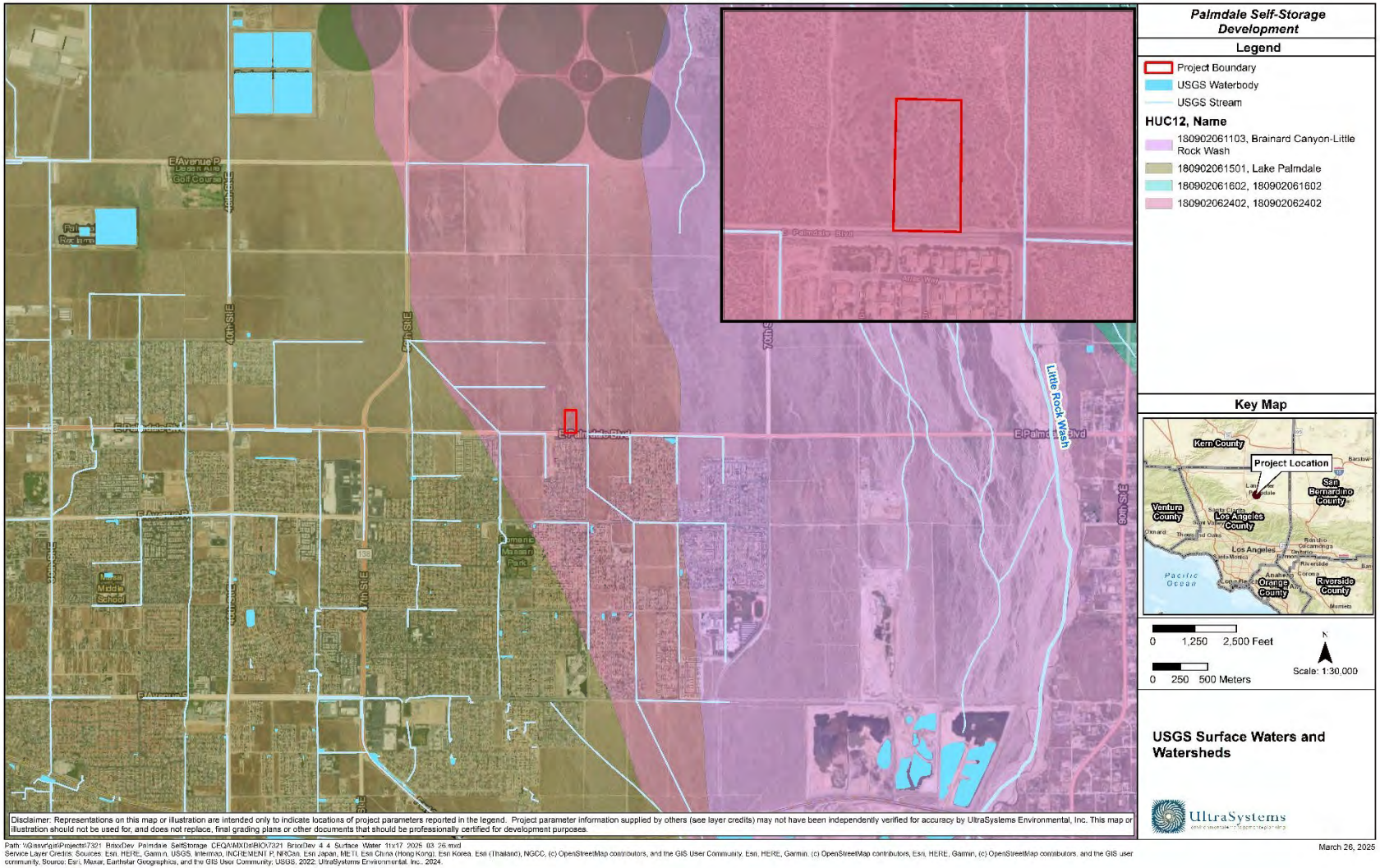
Development of the project has the potential to result in two types of water quality impacts: (1) short-term impacts due to construction-related discharges; and (2) long-term impacts from operation.

Construction

Temporary soil disturbance would occur during project construction, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area. Erosion and sedimentation affect water quality of receiving waters through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction of aquatic species. Runoff from construction sites may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be carried by stormwater into storm drains which discharge eventually to the Pacific Ocean.

Spills and mishandling of construction materials and waste may also potentially leave the project site and negatively impact water quality. The use of construction equipment and machinery may potentially result in contamination from petroleum products, hydraulic fluids, and heavy metals. Contamination from building preparation materials such as paints and solvents, and landscaping materials such as fertilizers, pesticides, and herbicides may also potentially degrade water quality during project construction. Trash and demolition debris may also be carried into storm drains and discharged into receiving waters.

Figure 4.10-1
USGS SURFACE WATERS AND WATERSHEDS



The project proponent is required by the California State Water Resources Control Board (SWRCB) to obtain coverage under a General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2022-0057-DWQ for projects which will disturb one or more acres of soil during construction). The Construction General Permit requires potential dischargers of pollutants to prepare a site-specific Stormwater Pollution Prevention Plan (SWPPP), which establishes enforceable limits on discharges, requires effluent monitoring, designates reporting requirements, and requires construction BMPs to reduce or eliminate point and non-point source discharges of pollutants. Additionally, BMPs must be maintained and inspected before and after each precipitation event, and repaired or replaced as necessary.

Construction BMPs are grouped in six categories: erosion control (prevents soil particles from being detached from soil surface), sediment control (prevents soil particles from being transported offsite by water and being deposited elsewhere), wind erosion control, tracking control (prevents soil from being tracked offsite by vehicles), non-stormwater management controls (prohibits discharges other than stormwater, such as those from cleaning, maintenance, and fueling of vehicles and equipment), and waste management and controls (good housekeeping practices) (CASQA, 2023).

Because the project is required by the SWRCB to comply with all applicable conditions of Construction General Permit Order 2022-0057-DWQ prior to final approval, potential violations of water quality standards or waste discharge requirements during project construction would be less than significant.

Operational Pollutant Controls

Project operation could generate the same types of stormwater pollutants that construction could.

Post-construction discharges of stormwater from development projects in the project area are regulated under the *General Permit for Waste Discharge Requirements (WDRs) for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)* (Phase II General Permit), issued by the State Water Resources Control Board (SWRCB) in 2013. The Phase II General Permit requires implementation of site design, source control, and low-impact development design (LID) best management practices (BMPs) (SWRCB, 2019). Site design BMPs reduce or eliminate post-project runoff; examples include minimizing impervious areas and including infiltration basins and detention or retention basins in project designs. Source control BMPs reduce the potential for pollutants resulting from activities onsite to enter runoff; examples include education of owners and employees; activity restrictions, such as requiring that trash can lids be always closed and prohibiting outdoor cooking; and periodic inspections of water quality features such as catch basins and filters.

LID is a decentralized approach to stormwater management that works to mimic the natural hydrology of the site by retaining precipitation on-site to the maximum extent practicable. Stormwater quality control measures that incorporate LID principles are placed throughout the site in small, discrete units and distributed near the source of impacts. LID strategies are designed to protect surface and groundwater quality, maintain the integrity of ecosystems, and preserve the physical integrity of receiving waters by managing stormwater runoff at or close to the source. LID strategies include use of bioretention/infiltration landscape areas, disconnected hydrologic flow paths, reduced impervious areas, functional landscaping, and grading to maintain natural hydrologic functions that existed prior to development (LACPW, 2014, p. 1-5).

The proposed project includes a network of storm drains with catch basins; and filter inserts—consisting of a fabric filter bag within a wire mesh box—within each catch basin (DRC, 2025, p. 2;

CASQA, 2003). Filter inserts are effective at removing sediment, trash, and debris from stormwater; other targeted pollutants are nutrients, metals, oil and grease, and organics (DRC, 2025, p. 2; CASQA, 2003). The storm drains would discharge to a proposed 38,500-cubic-foot infiltration basin along the northwest edge of the project site. The filter inserts and infiltration basin combined would meet BMP requirements of the Low Impact Standards Manual issued by Los Angeles County Public Works in 2014 (DRC, 2025, p. 2).

The water quality design capture volume for the project is 9,400 cubic feet, which would be contained within the 38,500-cubic-foot infiltration basin (DRC, 2025, p. 2). With the implementation of construction and operational BMPs, potential impacts to water quality would be less than significant and mitigation is not proposed.

b) Would the project 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

The project site is in the Antelope Valley Groundwater Basin (AVGWB), which spans approximately 1,580 square miles in the western Mojave Desert (DWR, 2025). The project site is within the service area of the Palmdale Water District (PWD). Groundwater from the AVGWB comprised about 50 percent of PWD's water supplies in 2020 and is forecast to be about 37 percent of PWD's supplies in 2045 (PWD, 2021, p. 4-2). The balance of PWD's water supplies consists of surface water from Littlerock Dam Reservoir and imported water from northern California via the State Water Project (PWD, 2021, p. 4-1). PWD forecasts that it will have adequate water supplies to meet demands in its service area over the 2025-2045 period in normal, single-dry-year, and multiple-dry-year conditions (PWD, 2021, pp. 7-4 through 7-6). PWD water supply reliability is discussed in further detail in **Section 4.19**, *Utilities and Service Systems*. PWD water demand forecasts are based on Southern California Association of Governments (SCAG) population projections (PWD, 2021, p. 1-11), which in turn are based on General Plan buildout projections. The proposed project conforms with the General Plan land use designation for the project site and thus is accounted for in SCAG population projections and, therefore, in PWD water demand forecasts.

Project water demands are estimated at about 2,580 gallons per day (gpd), as shown below **in Table 4.10-1**. PWD has adequate forecast water supplies to meet project water demands. Project development would not decrease groundwater supplies or interfere with groundwater recharge, and impacts would be less than significant.

Table 4.10-1
ESTIMATED PROJECT WATER DEMAND

Land Use	Quantity	Units	Water Demand, gallons per day	
			Per square foot	
Self-Storage	96,433	square feet	0.025	2,411
Office	900	square feet	0.188	169
Total	97,333	square feet	Not applicable	2,580

Source: City of Los Angeles, 2006. Water demand factors shown here are 125 percent of wastewater generation factors.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on or offsite;

Less Than Significant Impact

The project site has a north-facing slope of about 1 percent grade. No streams are mapped within the project site either on a U.S.G.S. topographic map or the National Wetlands Mapper maintained by the US Fish and Wildlife Service (USGS, 2025; USFWS, 2025). The nearest stream to the project site shown on a USGS topographic map is about 330 mile to the east (USGS, 2025).

Construction

Project construction would involve extensive disturbance and exposure of soil (approximately 7,500 cubic yards (cy) of cut grading and 4,500 cy of fill grading; Arco Murray 2025). Soil disturbance could cause extensive soil erosion if effective erosion control measures were not used. As detailed in Section **4.10 a),** the project owner would be required to develop a SWPPP by a certified qualified SWPPP developer. Potential impacts resulting in substantial erosion or siltation on- or offsite would thus be minimized or avoided, and impacts would be less than significant. No mitigation is proposed.

Operation

Stormwater contamination during project operation would be minimized through implementation of BMPs required under the Phase II General Permit described above in Section 4.10.a. Impacts would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact

Drainage

Runoff from approximately 0.7 acres within two parcels abutting the west project site boundary runs onto the project site. The runoff volume from a 50-year storm that the project would need to retain and infiltrate is 34,500 cubic feet (cf) from the project site and 750 cf from the offsite parcels, totaling 35,250 cf. The proposed infiltration basin would have 38,500 cf capacity, sufficient for the required volume. An emergency overflow would be provided from the infiltration basin to the north site boundary, where the overflow would discharge to the ground surface.

Flooding

Project development would not cause a net increase in flooding from a 50-year, 24-hour storm, after infiltration of runoff in the proposed basin. Development would not cause or exacerbate flooding.

Polluted Runoff

Project water quality impacts, and BMPs that would be used during project design, construction, and operation to minimize stormwater pollution, are addressed above in Section 4.10.a. Impacts would be less than significant.

iv) Impede or redirect flood flows?

No Impact

The project site is mapped in Zone X, that is, outside of 100-year and 500-year flood zones (FEMA, 2025). The nearest 100-year flood zone (zone AE) to the project site is about 1.4 miles to the east in the Little Rock Wash (FEMA, 2025). The project site is located outside the nearest floodplain and the proposed project would not impede or redirect flood flows. No impact would occur, and mitigation is not required.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact

The project site is not in a flood hazard zone, as described above.

Seiche

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. Two dams are north and upgradient from the project site: Little Rock Dam about 6.5 miles to the

south; and Harold Reservoir about 5.5 miles to the southwest (DWR, 2025b). The project site is not in the dam inundation area of either dam (DWR, 2025b).

Tsunami

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. No tsunami flood risk is present onsite due to the inland location of the site (about 48 miles inland from the Pacific Ocean) and its elevation (about 2,635 to 2,626 feet above mean sea level [amsl]). No impact would occur.

c) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact

The water quality control plan (WQCP) in effect for the project region was issued in 1995, and amended in 2021, by the Lahontan Regional Water Quality Control Board (LRWQCB, 2021). Unauthorized waste discharges to Waters of the State are prohibited. Such waste discharges may be authorized under an Individual Permit (Los Angeles County, 2014). Examples of source control BMPs for stormwater problems include control of air pollutants, enforcement of anti-litter ordinances, educational programs (to limit fertilizer and pesticide use by home gardeners and dumping of waste motor oil in storm drains), street and storm drain maintenance practices, spill prevention and cleanup, and BMPs for erosion control (LRWQCB, 2021, p. 4.3-2). The project includes an infiltration basin as a treatment control BMP (that is, a BMP that removes pollutants that have entered stormwater).

Groundwater management in the Antelope Valley Groundwater Basin is conducted by the Antelope Valley Watermaster pursuant to court judgment. The AVGWB is exempt from requirements for a sustainable groundwater management plan due to the court judgment (PWD, 2021, p. 4-9). Therefore, no adverse impact would occur.

4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?				**X**
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				**X**

a) Would the project physically divide an established community?

No Impact

The designated project site is bordered by single-family homes to the south, adjacent to East Palmdale Boulevard, while it is surrounded by undeveloped vacant land on the northern, western, and eastern borders. The site does not serve as access for any nearby areas. The development of the project will not result in the physical division of an established community. Therefore, no impact would occur.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact

The proposed project involves the development of a self-storage facility located northeast of the intersection of Palmdale Boulevard and 58th Street, within the City of Palmdale. The planned facility will encompass the construction and management of 673 units distributed over nine one-story buildings, collectively spanning 97,333 square feet on a roughly 5.0 acre site.

The City's General Plan Land Use designation for the site is Employment Flex (EMPFX); and the zoning district is Light Industrial (LI). The LI zone facilitates a range of light industrial activities, including warehousing, distribution, sound stage/film production, storage, and research and development. This zone primarily supports lower intensity industrial operations, featuring a diverse array of uses and variations in building sizes that generally align well with adjacent properties. According to Palmdale Municipal Code § 17.61.010, this zone implements the General Plan EMPFX land use designation.

The EMPFX designation is designed to facilitate mixed use developments, incorporating lighter industrial activities alongside more intensive services, retail, and commercial enterprises. The zoning district serves as a transitional area, promoting various businesses that stimulate employment through various sectors such as office spaces, light manufacturing, research and development, and ancillary commercial services. The uses allowed in this designation will support the generation of jobs, focusing on fabrication, research, distribution, and similar operations conducted primarily indoors.

Storage uses are permitted on the project site and would be consistent with the General Plan designated land use and the zoning district for the site. Additionally, the required analysis and approval of a Site Plan Review by the City's Economic & Community Development would ensure

compliance with applicable development standards and land use regulations. Therefore, no impact would occur.

4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				**X**
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?				**X**

a) Would the project 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?

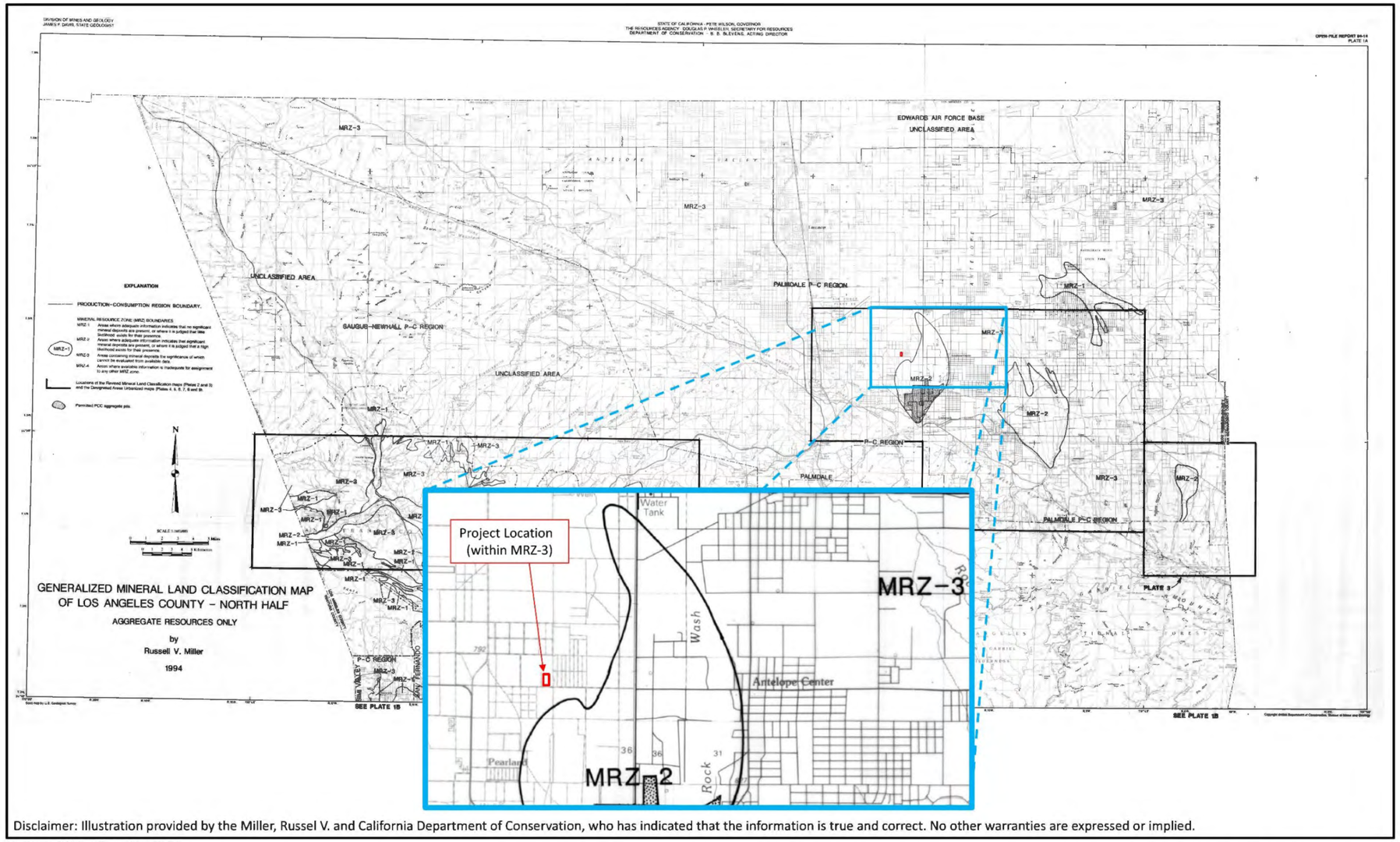
The project site, located northeast of the intersection of Palmdale Boulevard and 58th Street East in the City of Palmdale, is designated as Mineral Resource Zone 3 (MRZ-3) by the California Geological Survey, as depicted in **Figure 4.12-1**. The MRZ-3 classification identifies areas where mineral deposits are likely to exist but where available data is insufficient to determine their economic value. Although the site may contain mineral resources, there are currently no active or proposed mineral extraction activities associated with the project. Therefore, no impact would occur related to the availability of a known mineral resource.

b) Would the project 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

The project site is not identified as a Mineral Resource Extraction area in the City of Palmdale General Plan Land Use Map, nor is it designated for mineral resource use in any specific plan or other applicable land use plans. As such, implementation of the project would not result in the loss of availability of any known or locally designated mineral resources. Therefore, the project would have no impact related to a locally important mineral resource recovery site.

Figure 4.12-1
DESIGNATED MINERAL RESOURCE ZONE



Disclaimer: Illustration provided by the Miller, Russel V. and California Department of Conservation, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Miller, Russel V. 1994.

UltraSystems
environmental•management•planning

Palmdale Self-Storage Development

Mineral Land Classification

4.13 Noise

Would the project result in:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?			**X**	
b) Generation of excessive groundborne vibration or groundborne noise levels?			**X**	
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?			**X**	

4.13.1 Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micropascals (zero dBA). The scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

4.13.2 Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq}, the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.

- L_{90} is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of "background" noise.
- L_{max} is the root mean square (RMS) maximum noise level during the measurement interval. This measurement is calculated by taking the RMS of all peak noise levels within the sampling interval. Lmax is distinct from the peak noise level, which only includes the single highest measurement within a measurement interval.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average Leq with a 4.77-dBA "penalty" added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime (Caltrans, 2013). The logarithmic effect of these additions is that a 60-dBA 24-hour L_{eq} would result in a calculation of 66.7 dBA CNEL.
- L_{dn}, the day-night average noise, is a 24-hour average Leq with an additional 10-dBA "penalty" added to noise that occurs between 10 p.m. and 7 a.m. The L_{dn} metric yields values within 1 dBA of the CNEL metric. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

4.13.3 Existing Noise

The Palmdale General Plan defines sensitive receptors[34] as land uses such as residences, schools, libraries, hospitals, medical facilities, and assisted living facilities. The only sensitive receptors in the project vicinity are the residential land uses to the south, southwest, and southeast of the project site. **These areas are shown in Figure 4.13-1. Table 4.13-1 summarizes information about selected individual sensitive receivers. The nearest sensitive receiver to the Proposed Project site is located approximately 119 feet from the project boundary.**

UltraSystems conducted ambient noise sampling on May 5, 2025 at three selected locations in the vicinity of the project site, as shown in **Figure 4.13-2**. **Table 4.13-2** lists the measurement points, sampling locations, and measurement results. Details of the ambient sampling methods and results are provided in **Appendix I**.

Table 4.13-1
SENSITIVE RECEIVERS

Description	Location	Distance From Site Boundary (feet)[a]
Single-Family Residence	5809 Atlas Way	119.4
Single-Family Residence	6201 Atlas Way	1,745.9
Single-Family Residence	5491 Lilac Drive	2,179.3

[a]These distances are from the site boundary to the property lines of sensitive receivers and are included to give a general idea of the receivers' locations. Each type of noise calculation (see below) has its own conventions for defining source and receptor points .

[34] As used in in this document, a sensitive noise *receptor* is a person or a place potentially affected by noise, while a sensitive noise *receiver* is a location that represents a group of sensitive receptors.

Figure 4.13-1
SENSITIVE RECEPTORS NEAR PROJECT SITE

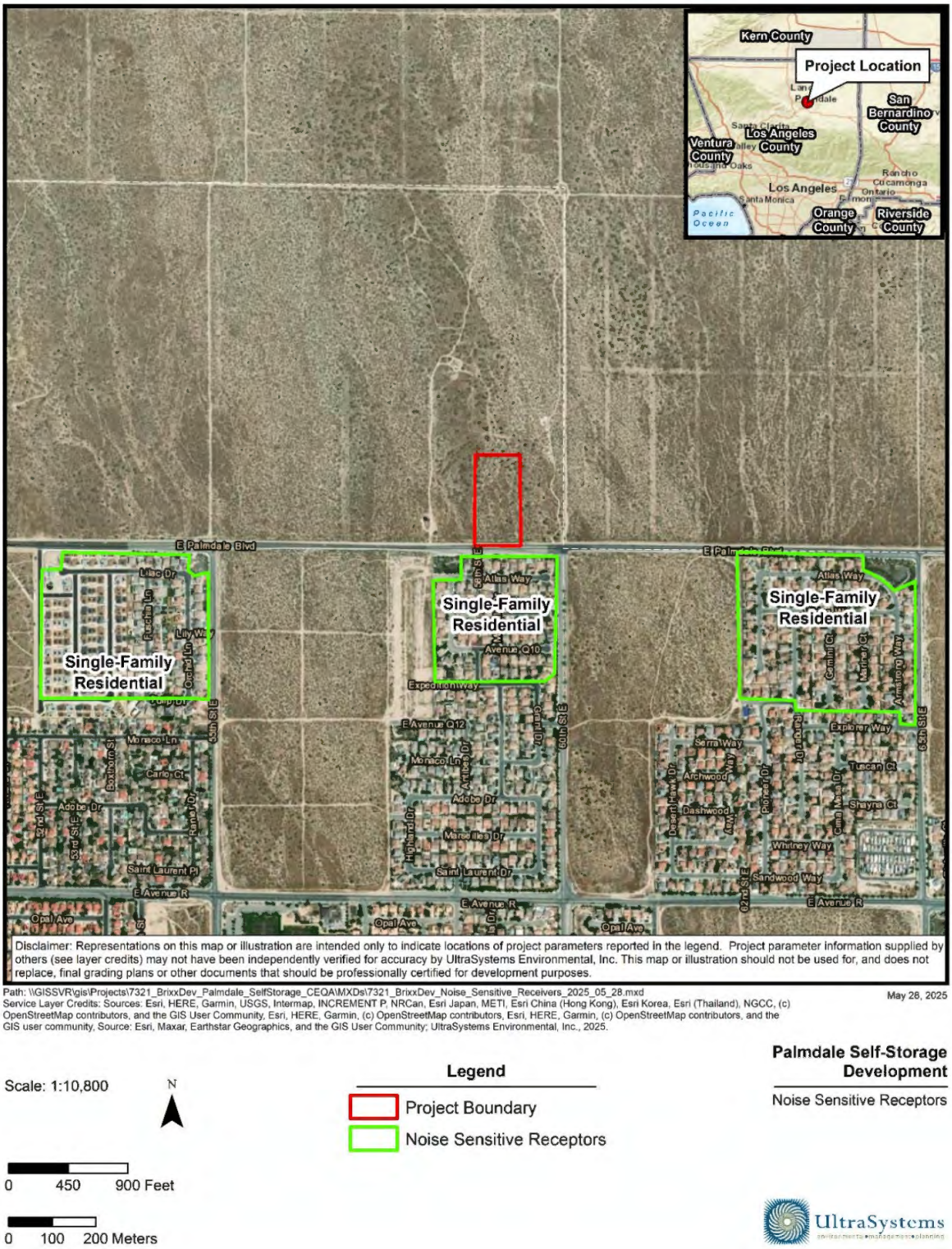
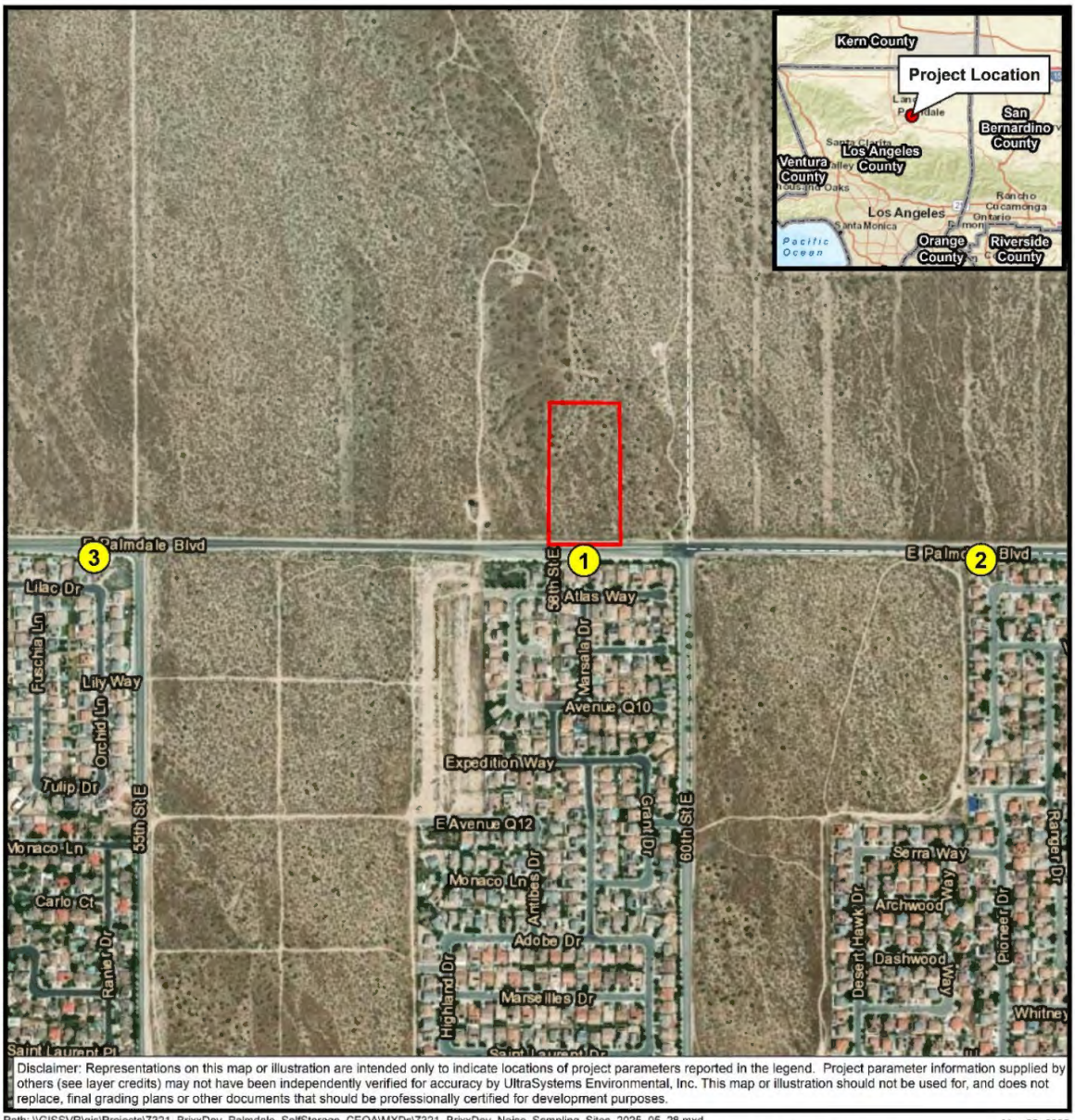


Figure 4.13-2

AMBIENT NOISE MEASUREMENT LOCATIONS



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: \\GISSVR\gis\Projects\7321_BrixxDev_Palmdale_SelfStorage_CEQA\MXDs\7321_BrixxDev_Noise_Sampling_Sites_2025_05_28.mxd

May 28, 2025

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2025.

Scale: 1:7,800

N

0 325 650 Feet

0 62.5 125 Meters

Legend

Project Boundary

1 Noise Sampling Location

Palmdale Self-Storage Development

Ambient Noise Measurement Location

UltraSystems

Table 4.13-2
AMBIENT NOISE MEASUREMENT RESULTS

Point	Data Set	Sampling Time	Address	Sound Level (dBA)			Notes
				L_{eq}	L_{max}	L_{90}	
1	S011	1236-1251	5809 Atlas Way	72.3	81.2	62.0	Single-family home directly south from the project site.
2	S012	1320-1325	6201 Atlas Way	71.2	81.5	57.0	Single-family home east of the project site.
3	S005	1136-1151	5491 Lilac Drive	71.0	78.8	60.5	Single-family home west of the project site.
1	S014	1413-1428	5809 Atlas Way	72.3	82.6	61.1	Single-family home directly south from the project site.
2	S015	1438-1453	6201 Atlas Way	71.9	82.1	60.8	Single-family home east of the project site.
3	S013	1344-1359	5491 Lilac Drive	71.8	86.2	61.3	Single-family home west of the project site.

Source: UltraSystems, 2025.

4.13.4 Regulatory Setting

State of California

The most current guidelines prepared by the state noise officer are contained in Appendix D of the General Plan Guidelines issued by the Governor's Office of Planning and Research (OPR) in 2017 (OPR, 2017). These guidelines establish four categories for judging the severity of noise intrusion on specified land uses:

- **Normally Acceptable**: Is generally acceptable, with no mitigation necessary.
- **Conditionally Acceptable**: May require some mitigation, as established through a noise study.
- **Normally Unacceptable**: Requires substantial mitigation.
- **Clearly unacceptable**: Probably cannot be mitigated to a less-than-significant level.

The OPR noise compatibility guidelines assign ranges of CNEL values to each of these categories. The ranges differ for different types of sensitive receptors and are shown in **Table 4.13-3**.

Table 4.13-3

CALIFORNIA LAND USE COMPATIBILITY FOR COMMUNITY NOISE SOURCES

Land Use Category	Noise Exposure (dBA, CNEL) 55 60 65 70 75 80
Residential – Low-Density Single-Family, Duplex, Mobile Homes	
Residential – Multiple Family	
Transient Lodging – Motel, Hotels	
Schools, Libraries, Churches, Hospitals, Nursing Homes	
Auditoriums, Concert Halls, Amphitheaters	
Sports Arena, Outdoor Spectator Sports	
Playgrounds, Neighborhood Parks	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	
Office Buildings, Business Commercial and Professional	
Industrial, Manufacturing, Utilities, Agriculture	

	Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.
	Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Governor's Office of Planning and Research, 2017.

City of Palmdale

City of Palmdale General Plan

The City of Palmdale General Plan has the following goals, policies and actions that apply to the proposed project (City of Palmdale, 2022d, pp. 416 – 417):

Goal N-1: Minimize resident exposure to excessive noise.

Policies

N-1.1 Future Noise Levels. Use the state-recommended noise level guidelines shown in Figure 16.1 to determine the compatibility of proposed land uses with the existing and future noise environment of each proposed development site.

N-1.2 Restrict Land Uses. Restrict noise sensitive land uses near existing or future air, rail, or highway transportation noise sources unless mitigation measures have been incorporated into the design of the project to reduce the noise levels at the noise sensitive land use to less than 65 dBA CNEL at all exterior living spaces including but not limited to, single-family yards and multi-family patios, balconies, pool areas, cook-out areas and related private recreation areas.

N-1.3 Acoustical Analysis for Stationary Noise Sources. When proposed stationary noise sources could exceed an exterior noise level of 65 dBA CNEL at the property line or could impact future noise sensitive land uses, require preparation of an acoustical analysis and mitigation measures to reduce exterior noise levels to no more than 65 dBA CNEL at the property line.

N-1.4 Noise Abatement Strategies. Explore the use of noise abatement strategies such as natural barriers, sound walls, and other buffers to mitigate excessive noise.

Goal N-2: Maintain acceptable noise environments throughout the City.

Policies

N-2.1 Extreme Noise Sources. Avoid locating new extreme noise sources adjacent to noise sensitive land uses unless mitigation measures can mitigate noise impacts to the sensitive uses.

N-2.2 Restrict Construction Activities. Restrict construction activities in the vicinity of sensitive receptors during the evening, early morning, and weekends and holidays.

N-2.3 Maintain Acceptable Noise Environments. Utilize any or all the following measures to maintain acceptable noise environments throughout the city:

- Control of noise at its source, including noise barriers and other muffling devices built into the noise source.
- Provision of buffer areas and/or wide setbacks between the noise source and other development.
- Reduction of densities, where practical, adjacent to the noise source (freeway, airport, railroad).

- Use of sound insulation, blank walls, double paned windows and other design or architectural techniques to reduce interior noise levels.

- Designation of appropriate land uses adjacent to known noise sources.

N-2.4 Acoustical Analysis for Noise Sensitive Land Uses. Where deemed appropriate based upon available information, require acoustical analysis and appropriate mitigation for noise-sensitive land uses proposed in areas that may be adversely impacted by significant intermittent noise sources. Such noise sources may include but not be limited to railroads, racetracks, stadiums, aircraft overflights and similar uses.

City of Palmdale Municipal Code

The City of Palmdale Municipal Code contains several provisions potentially related to construction and operation of the proposed project (City of Palmdale, 1986).

Chapter 8.28 Building Construction Hours of Operation and Noise Control

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.

(Ord. 1335 § 1, 2007; Ord. 584 § 1, 1986)

8.28.040 Exceptions.

The provisions of PMC 8.28.030 (Construction Noise Prohibited in Residential Zones) do not apply to any person who performs the construction, repair, excavation or earth moving work involved pursuant to the express written permission of the City Engineer to perform such work at times prohibited in PMC 8.28.030. Upon receipt of an application in writing therefor, stating the reasons for the request and the facts upon which such reasons are based, the City Engineer may grant such permission if he finds that:

(A) The work proposed to be done is effected with public interest; or

(B) Hardship, injustice or unreasonable delay would result from the interruption thereof during the hours and days specified in PMC 8.28.030; or

(C) The building or structure involved is devoted or intended to be devoted to an immediate use incidental to public defense.

(Ord. 584 § 1, 1986)

8.28.060 Exemptions – Generally.

The provisions of PMC 8.28.030 do not apply to the construction, repair, or excavation during prohibited hours as may be necessary for the preservation of life or property when such necessity arises during such hours as the offices of the City are closed, or where such necessity requires immediate action prior to the time at which it would be possible to obtain a permit pursuant to PMC 8.28.040, if the person doing such construction, repair or excavation obtains a permit therefor within one day after the office of the City Engineer is first opened subsequent to the making of such construction, repair or excavation.

(Ord. 584 § 1, 1986)

4.13.5 Significance Thresholds

Two criteria were used in this analysis for evaluating noise impacts. First, noise levels generated by the proposed project must comply with all relevant federal, state, and local standards and regulations. Noise impacts on the surrounding community are limited by local noise ordinances, which are implemented through investigations in response to nuisance complaints. It is assumed that all existing applicable regulations for the construction and operation of the proposed project would be enforced. In addition, the proposed project should not produce noise levels that are incompatible with adjacent noise-sensitive land uses.

The second measure of noise impact used in this analysis is a significant increase in noise levels above existing ambient noise levels as a result of the introduction of a new noise source. An increase in noise level due to a new noise source has a potential to adversely impact people. The proposed project would have a significant noise impact if it would do any of the following:

- Expose persons to or generate noise levels in excess of standards recommended in the Palmdale General Plan Noise Element.
- Generate construction noise exceeding 80 dBA L_{eq} (FTA, 2018, p. 179).
- Include construction activities in or within 500 feet of residential areas between 6:00 p.m. of one day and 7:00 a.m. of the next day, without a permit.
- Contribute, with other local construction projects, to a significant cumulative noise impact.
- Increase operational exposures at sensitive receivers (mainly because of an increase in traffic flow) by 5 dBA CNEL or more.

4.13.6 Impact Analysis

a) Would the project result in 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

The proposed project includes the construction and operation of a self-storage facility with 673 units in nine one-story buildings totaling 97,333 square feet on an approximately 5.01-acre site located

northeast of the intersection of Palmdale Boulevard and 58th Street in the City of Palmdale. Construction activities, especially with heavy equipment operation, would create noise effects on and adjacent to the construction site. Long-term noise impacts include project-generated onsite and offsite operational noise sources. Onsite noise sources from the operation of the storage facility would include the use of mechanical equipment such as air conditioners, and landscaping and building maintenance activities. Offsite noise would be attributable to project-induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity. Each is described below.

Short-Term Construction Noise

Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and onroad delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities. The nearest sensitive receivers to the center of the proposed project site include the residential neighborhood located 119.4 feet south of the project site and a residential neighborhood located approximately 1,745.9 feet to the east and a residential neighborhood located 2,179.3 feet west of the project site..

For the purpose of this analysis, it was estimated that the proposed project would be built in the six phases listed in **Table 4.13-4**. Construction is anticipated to run from early January 2026 to May 2026.

The types and numbers of pieces of equipment to be deployed during construction were determined as part of the air quality and greenhouse gas emissions analyses for this project (see **Section 4.3** and **Section 4.8**). For each equipment type, the table shows an average noise emission level (in dBA at 50 feet, unless otherwise specified) and a "usage factor," which is an estimated fraction of operating time that the equipment would be producing noise at the stated level. Equipment characteristics are shown in **Table 4.13-4**.

Table 4.13-4
CONSTRUCTION EQUIPMENT NOISE CHARACTERISTICS

Construction Phase	Equipment Type	Horse-power	No. of Pieces	Usage Factor	dBA @ 50 Feet	Composite dBA
1 – Site Preparation	Skid Steer Loaders	71	1	0.37	80	**83.80**
	Excavators	36	1	0.38	80	
2 – Grading	Skid Steer Loaders	71	1	0.37	80	**83.80**
	Excavators	36	1	0.38	80	
3 – Building Construction	Forklifts	82	3	0.30	67	**85.94**
	Generator Sets	14	1	0.50	73	
	Welders	46	1	0.45	74	
	Tractor/Loader/Backhoes	84	3	0.37	85	
	Cranes	367	1	0.08	83	
	Aerial Lift	46	3	0.20	75	
4 - Paving	Cement/Mortar Mixer	84	2	0.5	73	**88.62**
	Paving Equipment	81	3	0.42	77	

Construction Phase	Equipment Type	Horse-power	No. of Pieces	Usage Factor	dBA @ 50 Feet	Composite dBA
5 – Architectural Coating	Air Compressors	71	1	0.48	81	**77.81**
6 – Utilities Installation	Skid Steer Loaders	71	1	0.37	80	**83.80**
	Excavators	36	1	0.38	80	

Sources: Calculated by UltraSystems with CalEEMod (2022.1.1.21) (CAPCOA, 2024).

Using calculation methods published by the Federal Transportation Administration (FTA, 2018), UltraSystems estimated the average hourly exposures at the three sensitive receiver locations, as shown in **Figure 4.13-1**. The distances used for the calculation were measured from outdoor areas of sensitive receivers' properties to the approximate center of activity of each construction phase, since that would be the average location of construction equipment most of the time. **Table 4.13-5** below shows construction subphases corresponding to each major construction phase, and the approximate schedule.

Table 4.13-5
NOISE ANALYTICAL FRAMEWORK

Phase	Dates	Construction Subphase(s)
1	September 2026	Site Clearance
2	October 2026	Site Preparation
		Grading
3	November 2026	Grading, Utilities Installation
4	December 2026	Grading
		Utilities Installation
		Building Construction
5	January 2027	Grading
		Building Construction
		Utilities Installation
6	February 2027 – April 2027	Building Construction
7	May 2027	Paving
		Landscaping

Table 4.13-6 summarizes the maximum estimated construction-related short-term noise exposures at the nearest sensitive receiver for each construction subphase. Paving and architectural coating are the activity producing the maximum exposures. Short-term noise exposures due to construction activities would be about 55.3 to 69.7 dBA L_{eq}. Actual exposures would be somewhat lower than those presented here, because noise attenuation by intervening structures was not accounted for.

Table 4.13-6
CONSTRUCTION NOISE RESULTS AT NEAREST SENSITIVE RECEIVERS

Receiver No.	Location	Period of Maximum Exposure	Activity for Maximum Exposure	Exposure (dBA L_{eq})
1	5809 Atlas Way	September 2026	Paving Architectural	69.7
2	3201 Atlas Way	September 2026	Paving Architectural	57.2
3	5491 Lilac Drive	September 2026	Paving Architectural	55.3

Noise exposure from construction of the proposed project would not exceed the FTA's 80 dBA threshold. Impacts would be less than significant.

Operational Noise

Onsite

Onsite noise sources from the proposed storage facility would include operation of rooftop mechanical equipment such as air conditioners, parking lot activities, and truck deliveries. Noise levels from these sources are generally lower than those from the traffic on streets bordering the project site. Onsite noise from the proposed project would not significantly impact ambient noise levels in the vicinity. Impacts would be less than significant.

Mobile Sources

According to the VMT analysis prepared for this project (Pringle, Weston P.E., 2025) the development will generate 125 trips per day in the operational phase. The average daily traffic (ADT) was obtained from data provided by the City of Palmdale in a traffic count summary (City of Palmdale, 2016). The average daily traffic on Palmdale Boulevard between 55th Street East and 60th Street East was 14,147 vehicles in 2016. This would constitute an increase of 0.9%. Given the logarithmic nature of the decibel, traffic volume needs to be doubled in order for the noise level to increase by 3 dBA (ICF Jones & Stokes, 2009), the minimum level perceived by the average human ear. A doubling is equivalent to a 100% increase. Because the maximum increase in traffic on any road segment would be far below 100%, the increase in roadway noise experienced at sensitive receivers would not be perceptible to the human ear. Therefore, roadway noise associated with project operation would not expose a land use to noise levels that are considered incompatible with or in excess of adopted standards, and impacts would be less than significant.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) that causes the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This

effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the root-mean-square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response (FTA, 2018, pp. 110-111).

The background vibration velocity level in residential areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings (FTA, 2018, p. 120).

Construction Vibration

Construction activities for the project have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate though the ground and diminish in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels. The construction activities associated with the project could have an adverse impact on both sensitive structures (i.e., building damage) and populations (i.e., annoyance).

Pile drivers or other major vibration sources will not be used for construction of the proposed storage project. The question is whether the equipment that will be deployed will have significant vibration impacts. The FTA (2018) has published standard vibration levels for construction equipment operations, at a distance of 25 feet. The construction related vibration levels for the nearest sensitive receivers for major construction phases are shown in **Table 4.13-7**. These calculations were based on the distances from the construction activity to the closest sensitive receivers.

Table 4.13-7
VIBRATION LEVELS OF TYPICAL CONSTRUCTION EQUIPMENT

Equipment	PPV at 25 feet (in/sec)	Vibration Decibels at 25 feet (VdB)	PPV at 513 feet (in/sec)	Vibration Decibels at 513 feet (VdB)	PPV at 130 feet (in/sec)	Vibration Decibels at 130 feet (VdB)
Loaded trucks	0.076	86			0.012	65
Jackhammer	0.035	79	0.0013	40		
Small bulldozer	0.003	58	0.00011	19		
Large bulldozer	0.089	87	0.0032	48		

Sources: Data at 25 feet from (FTA, 2006, p. 12-12); calculations by UltraSystems.

As shown in **Table 4.13-7**, the PPV of construction equipment at the nearest sensitive receiver (130 feet away) is at most 0.012 inch per second, which is less than the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings. The maximum VdB are 65 VdB, which are below the FTA threshold for human annoyance of 80 VdB. Unmitigated vibration impacts would therefore be less than significant.

Operational Vibration

Groundborne vibration at the project site and immediate vicinity currently results from heavy-duty vehicular travel (e.g., freight trucks) on the nearby local roadways, and the project would not result in a substantial increase of these heavy-duty vehicles on the public roadways. Therefore, vibration impacts associated with operation of the 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?

Less Than Significant Impact

The closest public airport to the project is the Palmdale Regional Airport, located approximately 4.4 miles northwest of the project site. The project site is located outside of the airport's influence area boundary and noise contours (Los Angeles County ALUC, 2003). Therefore, no impact related to the exposure of people residing or working in the proposed project area to excessive airport-related noise levels is anticipated.

4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact

The proposed project includes the development of a self-storage facility located northeast of Palmdale Boulevard and the intersection of 58th Street, within the City of Palmdale. The project would create limited employment opportunities during both the construction and operational phases. Employment in the city of Palmdale in 2022, the latest year for which data are available, was 37,278 (USCB, 2025); and employment in the city is estimated to increase to 51,000 in 2050, an increase of 13,722 or about 37 percent (SCAG, 2024). The unemployment rate in Los Angeles County in February 2025 was estimated at 5.9 percent; therefore, the proposed project is not anticipated to induce significant unplanned population growth in the region, either directly or indirectly. The project does not encompass the development of new residential development or large-scale commercial facilities that would attract new residents. Furthermore, while the project may create employment opportunities during both the construction and operational phases, the number of jobs generated is expected to be limited, with positions likely to be filled predominantly by existing residents in the region. The scale and scope of the project are not expected to promote in-migration or necessitate an expansion of housing or infrastructure capacity. Therefore, the project would not have an impact on unplanned growth.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact

The proposed project site is currently vacant, undeveloped parcel of land, which is surrounded by additional vacant, undeveloped tracts to the north, west and east. Project implementation does not require the removal or displacement of existing residential structures, as none are present. The site is not designated for residential development and the project does not include the incorporation of residential features. Therefore, the project will not require the displacement of any inhabitants or housing, nor will it require the construction of alternative housing facilities, and no impact would occur.

4.15 Public Services

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, 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:				
a) Fire protection?			**X**	
b) Police protection?			**X**	
c) Schools?				**X**
d) Parks?				**X**
e) Other public facilities?				**X**

a) Fire protection?

Less than Significant Impact

The Los Angeles County Fire Department (LACoFD) fire protection and emergency medical services to the City of Palmdale. LACoFD operates 176 fire stations. The nearest existing fire station to the project site is Station 93 at 5624 East Avenue R, approximately 1.1 miles to the south (LAFD, 2025).

Demands for fire protection are generated by the population and the total building area in a fire agency's service area. Project development would not add population to the project region. While development would add building area in the City, self-storage use differs from many other types of non-residential uses in that individual occupants are typically only on-site for brief durations. Therefore, construction and operation of the proposed self-storage facility is not expected to substantially increase demands for fire protection or emergency medical services. The project would not require the construction or expansion of fire protection facilities. In addition, the project site is already located in an existing fire service area. Therefore, impacts on fire protection services would be less than significant, and no mitigation measures are required.

b) Police protection?

Less than Significant Impact

The Los Angeles County Sherrif's Department (LACoSD) provides police protection to the City. LAD officers serving the City of Palmdale are based at the Palmdale Sheriff's Station located at 750 E Avenue Q, about 6.1 miles northeast of the project site (LACD, 2025).

c) Schools?

No Impact

Demands for school facilities are generated by the number of households in the schools' attendance boundaries. The project does not propose any new residential uses. Therefore, no impact on schools would occur.

d) Parks?

No Impact

Demands for parks are generated by the population in the parks' service areas. The proposed project does not include residential land uses and thus is not anticipated to add new residents to the city. No impact would occur.

e) Other Public Facilities?

No Impact

Impacts on libraries are based on the population increase the project would create. As a storage development, the project would not induce a population increase. Therefore, there would be no impact on other public facilities such as libraries.

4.16 Recreation

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?			X	
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?				X

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?

Less than Significant Impact

The City of Palmdale operates 19 parks and recreational facilities totaling 370 acres, including community centers, public pools, an outdoor amphitheater, playhouse, and waterpark. The City of Palmdale has a parkland-to-population goal of 5.0 acres per 1,000 residents. The City's 2020 population of 169,450 and existing parkland of 370 acres result in approximately 45 percent of the current target for public parks (City of Palmdale, 2024. p. 16). The nearest park to the project site is the 40-acre Domenic Massari Park approximately 4,000 feet to the south.

The effects on recreational activities are dependent on whether the project leads to an increase in population within the city after completion. According to the analysis provided in **Section 4.14**, the proposed project is not anticipated to contribute to an increase in the local population. The workforce required for the project is expected to be recruited locally. Although it is possible that these employees might utilize local parks and recreational facilities, any impact arising from this use would be less than significant.

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?

No Impact

As outlined in the preceding discussion, the proposed project does not include new or improved recreational facilities that could potentially result in detrimental environmental impacts. Therefore, no adverse impacts are expected to occur as a result of this project.

4.17 Transportation

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			**X**	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d) Result in inadequate emergency access?			**X**	

The evaluation is based on the Technical Analysis and Vehicle Miles Traveled (VMT) Screening conducted by Weston Pringle, P.E., Transportation Engineering Consultant, dated March 29, 2025, for the proposed project. The complete technical analysis is included as **Appendix J** to this Initial Study (Pringle, 2025).

Would the project:

a) Conflict with a program plan, ordinance or policy addressing circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact

Roadway

East Palmdale Boulevard is designated as a Crosstown street in the Circulation and Mobility Element of the General Plan and classified as a Major Arterial by the Federal Highway Administration (City of Palmdale, 2022b, p. 149). Crosstown streets serve as primary network for citywide travel, including walking, bicycling, public transit, and automobiles (City of Palmdale, 2022b, pp. 155-156).

Transit

Palmdale public transportation services are administered by the Antelope Valley Transit Authority (AVTA). The bus routes closest to the project site include Route 58 and Route 91, which transect at the intersection of Palmdale Boulevard and 50th Street E, located approximately 4,000 feet to the west. Additionally, Palmdale Boulevard is designated as a Proposed High-Frequency Transit Corridor, primarily situated on Crosstown streets, and currently supports a higher frequency transit service with headways of 30 minutes or less (City of Palmdale, 2022b, p. 165).

Bicycle and Pedestrian

East Palmdale Boulevard is devoid of pedestrian and bicycle facilities near the proposed project site.

City of Palmdale General Plan - Circulation and Mobility Element

The City of Palmdale General Plan, Circulation and Mobility Element, provides a framework for a safe, accessible, and sustainable transportation system. It accommodates future growth while ensuring the efficiency of multimodal networks. The Element promotes equitable access to employment and services, fostering environmental justice and regional connectivity. It aims to improve quality of life and public health by encouraging active transportation and reducing vehicle dependence. Key priorities include downtown vibrancy, minimizing environmental impacts, and leveraging the natural setting of the city. It also advocates resilience through innovative transportation solutions and alignment with regional infrastructure. Maintaining the core functions of the transportation system is a fundamental objective, in accordance with the California Environmental Quality Act (CEQA), to minimize impacts and support sustainable land use.

Access to the proposed project would be via a driveway that has ingress/egress to and from East Palmdale Boulevard. Plans for the project driveway to access East Palmdale Boulevard would require an encroachment permit from the City of Palmdale. The Palmdale Engineering Division would review any encroachment permit applications to ensure that such development would not conflict with a program plan, ordinance, or policy addressing the circulation system.

A review of the plan by the City and subsequent project conformance with all conditions set forth in an encroachment permit would ensure the project complies with the relevant policies outlined in the City of Palmdale General Plan - Circulation and Mobility Element. This includes considerations for transit, roadways, bicycle and pedestrian facilities, as well as potential future transit developments. Therefore, the project would have a less than significant impact in this regard.

City of Palmdale Municipal Code

The City of Palmdale Municipal Code Chapter 3.40 requires that a Traffic Impact Fee (TIF) for a nonresidential development be paid in an amount established by resolution of the City Council prior to issuance of the certificate of occupancy for that development. Additionally, new non-residential developments pay other taxes to the city . Through the required compliance with the aforementioned municipal code sections, the proposed project would not conflict with an applicable plan, ordinance, or policy addressing the circulation system. Therefore, project impacts would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)

Less than Significant Impact

Project Trip Generation

The project is designated as a self-storage (ITE Code 151). Using this rate for the 86,450 square foot project results in 125 daily trips, with eight AM peak hour trips, and 13 PM peak hour trips, as shown **Table 4.17-1**.

Table 4.17-1
PROJECT TRIP GENERATION

Land Use	Size	ADT[1]	AM Peak Hour[1]			PM Peak Hour[1]		
			In	Out	Total	In	Out	Total
Self-Storage (151)		1.45	0.05	0.04	0.09	0.07	0.08	0.15

Land Use	Size	ADT[1]	AM Peak Hour[1]			PM Peak Hour[1]		
			In	Out	Total	In	Out	Total
Self-Storage (proposed)	86.450 KSF	125	5	3	8	6	7	13
Net Total Trips		125	5	3	8	6	7	13

[1]KSF = 1,000 square feet
Source: Pringle, P.E., 2025

Vehicle Miles Traveled (VMT)

The State of California implemented a revised version of the California Environmental Quality Act (CEQA) following the enactment of Senate Bill (SB) 743 in January 2014. This legislation required the Office of Planning and Research (OPR) to develop updated guidelines to assess the impacts of transportation under CEQA, shifting the focus away from traditional metrics such as automobile delay and level of service (LOS). Furthermore, SB 743 required lead agencies to amend their transportation assessment protocols to incorporate a performance metric aimed at promoting the reduction of greenhouse gas emissions, the establishment of multimodal transportation networks, and ensuring access to a variety of land uses.

The Los Angeles County Transportation Impact Assessment Guidelines (TIA Guidelines) identify several screening criteria for VMT analysis. Since a self-storage facility is essentially a retail use, the appropriate VMT metric is Home Based Work VMT. If a project is in a low VMT generating area, it can be excluded from further analysis. The Palmdale Sustainable Transportation Plan identifies this area as having a Work VMT per employee below the threshold of 15.8 (Pringle, P.E., 2025).

The proposed project will construct a new 97,096 square foot self-storage facility and ancillary office on a site that is currently vacant. Project access will be provided by a full-service driveway on East Palmdale Boulevard. The project will provide 12 customer parking spaces. The VMT screening assessment determined the following:

- The project trips are below the threshold to require a TIA.
- The project is located in an area with a work VMT per employee below the threshold for a significant VMT impact.
- The project will have a less than significant VMT impact and further VMT analysis is not required (Pringle, 2025).

Therefore, given that the proposed project would not cause a substantial increase in VMT and would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) there would be a less than significant impacts under this category.

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

The proposed project would not alter the surrounding roadways. Vehicular access to the project would be provided by a driveway to and from East Palmdale Boulevard. The intersection of the proposed driveway with Palmdale Boulevard would be perpendicular and would not cause hazards due to a geometric design feature. The project's circulation system, including driveways and parking areas, would be designed to meet city development standards and would not produce uses or design

features that would create traffic hazards. Therefore, the impacts with respect to increases in hazards due to geometric design features or incompatible uses would be less than significant.

d) Result in inadequate emergency access?

Less than Significant Impacts

Construction

Construction of the project may necessitate the temporary closure of a lane, section on East Palmdale Boulevard or even the entire roadway segment. Any construction plans on the public right-of-way must obtain an encroachment permit from the City of Palmdale. Upon submission, encroachment permit applications would undergo a thorough review by the Palmdale Engineering Division to confirm that the proposed construction will not obstruct emergency responses to the project site or adjacent areas and will not pose traffic hazards. Adherence to the stipulated conditions within an encroachment permit is mandatory for permit approval. Upon satisfactory review by the city and compliance with the encroachment permit conditions, the anticipated impacts of the construction would be less than significant.

Operation

The project would comply with applicable city regulations, such as the requirement to comply with the city's fire code to provide adequate emergency access. Prior to the issuance of building permits, the City of Palmdale would review the site plans of the project, including the location of all buildings, fences, access driveways, and other features that may affect emergency access. The design of the site includes access and fire lanes that would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. The city's review process and compliance with applicable regulations and standards would ensure adequate emergency access. Therefore, the project would not result in inadequate emergency access and there would be a less than significant impact.

4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) 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				**X**
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance resource to a California Native American tribe.		**X**		

Information from UltraSystems' Phase I Cultural Resources Inventory, dated June 12, 2025 for the proposed project (refer to **Appendix D1**) is included in the analysis below.

i) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is 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 § 5020.1(k)?

No Impact

No traditional cultural site within a half-mile buffer of the project boundary is documented in the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF) search. No resources as defined by Public Resources Code § 21074 have been identified (refer to **Attachment C**: "Native

American Heritage Commission Records Search and Native American Contacts" in **Appendix C** to this IS/MND). Additionally, the project site has not been recommended for historic designation for prehistoric and tribal cultural resources (TCRs). No specific tribal resources have been identified by local tribes responding to inquiries for the Cultural Resources Inventory.

According to the cultural resource records search at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, it was determined that no prehistoric cultural resources were previously recorded within the project site boundary or within the 0.5-mile buffer zone.

No prehistoric archaeological resources were observed during the archaeological field survey conducted May 7, 2025 by Araceli Robles, M.A., as part of the cultural resources investigation (**Section 4.3**, **Appendix C**). The results of the pedestrian assessment indicate that it is unlikely that prehistoric resources will be adversely affected by construction of the project. (Refer to Appendix D).

No tribal cultural resources onsite are 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 § 5020.1(k). Therefore, the project would have no impact in this regard.

ii) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?

Less than Significant Impact with Mitigation Incorporated

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts on TCRs, as defined in Public Resources Code § 21074. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (CNRA, 2007).

As part of the AB 52 process, Native American tribes must submit a written request to the lead agency to be notified of projects within their traditionally and culturally affiliated area. The lead agency must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either (1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

The City of Palmdale (the lead agency) initiated AB 52 outreach to local tribes for the Palmdale Self Storage project 14 days after receiving the project submittal. The City Economic and Community Development and Planning Department prepared and sent letters to the several tribes on their list for AB 52 contact, informing them of the project. The letters were sent via certified mail on September 23, 2025. The letters conveyed that the recipient has 30 days from the receipt of the letter to request AB 52 consultation regarding the project. The letters were sent to the following tribes:

- Fernandeno Tataviam Band of Mission Indians (FTBMI);
- San Fernando Band of Mission Indians;
- Morongo Band of Mission Indians;

- Quechan Tribe of the Fort Yuma Reservation
- Serrano Nation of Mission Indians;
- Yuhaaviatam of San Manuel Nation.

A single response was received by the Lead Agency. The FTBMI responded on October 31, 2025 and provided Mitigation Measures to include in the Tribal Cultural Resources section. These are included as **TCR-MM-1**, **MM-2**, and **MM-3**. The Tribe indicated that they will review the Mitigation Measures included in this document and can provide further comments if necessary. Consultation will be concluded after the FTBMI have done a final review of this document.

No sites have been documented in the Native American Heritage Commission's SLF search. No resources as defined by Public Resources Code § 21074 have been identified (refer to **Attachment C**: "Native American Heritage Commission Records Search and Native American Contacts" in **Appendix D1** to this IS/MND). Additionally, the project site has not been recommended for historic designation for prehistoric and TCRs. No specific tribal resources have been identified.

No prehistoric archaeological resources were observed during the field survey. The pedestrian survey located and recorded two historic can isolates (UEI SR Isolate #1 and UEI SR Isolate #2).

The project APE has a low sensitivity for cultural resources. While the APE may have been utilized by Native Americans, it is unlikely they settled in the immediate area for long periods of time due to lack of reliable water resources; therefore, it is unlikely a significant archaeological site developed in this area. Land at the project site has remained undisturbed desert that could be reached via East Palmdale Boulevard since the early part of the twentieth century. No human remains have been previously identified or recorded onsite.

The project proposes grading. Grading activities associated with development of the project would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries.

Mitigation Measures

MM TCR-1: Tribal Monitoring, First 5 Days

The Project Applicant shall retain a professional Tribal Monitor procured by the Fernandeño Tataviam Band of Mission Indians to observe the first (5) days of ground-disturbing activities which include excavating, digging and/or trenching. Tribal Monitoring Services will continue until all (5) days, consecutive or non-consecutive, of ground-disturbing activities are completed. If the Project's scheduled activities require the Tribal Monitor(s) to leave the Project for a period of time and return, confirmation shall be submitted to the Tribe by project applicant, in writing, upon completion of each set of scheduled activities and a minimum of 48 hours' notice shall be submitted to the Tribe by Client, in writing, prior to recommencement. If cultural resources are encountered, the Tribal Monitor will have the authority to request ground disturbing activities cease within 60-feet of the discovery to assess and document potential finds in real time. A qualified archaeologist meeting Secretary of Interior standards shall also assess the find.

a. Should the find be deemed significant, as defined by CEQA (as amended, 2015), the Project applicant shall retain a professional Tribal Monitor procured by the FTBMI to observe all remaining ground-disturbing activities including, but not limited to, clearing, grading,

excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, auguring, blasting, stripping topsoil or similar activity, and archaeological work.

MM TCR-2: Disposition and Treatment of Inadvertent Discoveries

The Lead Agency and/or applicant shall, in good faith, consult with the FTBMI on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.

MM TCR-3: In the Event of Inadvertent Discovery, Human Remains

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 shall be enforced for the duration of the Project.

Inadvertent discoveries of human remains and/or funerary object(s) are subject to California State Health and Safety Code Section 7050.5, and the subsequent disposition of those discoveries shall be decided by the Most Likely Descendant (MLD), as determined by the Native American Heritage Commission (NAHC), should those findings be determined as Native American in origin.

Level of Significance After Mitigation

With implementation of **MM TCR-1** and **MM TCR-2,** potential project impacts on TCRs would be less than significant. With implementation of Mitigation Measure **MM TCR-3** above, the proposed project would result in less than significant impacts to human remains and associated funerary objects.

4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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 whi1ch could cause significant environmental effects?			**X**	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			**X**	
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?			**X**	
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?			**X**	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

a) Would the project 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

As discussed in **Section 3.0** the proposed project would require offsite improvements including sewer, water, irrigation, and dry utilities connections to existing utility infrastructure for the self-storage development project.

Wastewater Treatment and Conveyance – The Palmdale Water Reclamation Plant (PWRP) provides tertiary water treatment to portions of the City of Palmdale including the project site. The treatment plant has 12 million gallons per day (mgd) capacity; average wastewater flows through

the facility are flow of 9.52 mgd (LACSD, 2024a; LACSD 2024b). The project at completion is estimated to generate 2,353 gallons per day (gpd) of wastewater (LACSD, 2024b). Sufficient wastewater treatment capacity is available in the region for project wastewater generation and future planned developments. The project development would not require construction of a new or expanded wastewater treatment facility, thus impacts would be less than significant.

The project would include installation of a proposed sewer main, at least 8 inches diameter, which would discharge into an existing 18-inch City of Palmdale sewer in Palmdale Boulevard, which, in turn, discharges into an existing 15-inch Los Angeles County Sanitation Districts sewer in 58th Street (DRC Engineering, 2024, p. 12). No sewer is present in Palmdale Boulevard along the project site frontage, so the proposed sewer main would need to extend westward to connect to the nearest existing main.

Domestic Water – The Palmdale Water District (PWD) would provide water for the project (PWD, 2020). As detailed in Threshold 4.19 b) below, water supplies for the Palmdale Water District consist of three sources: imported from northern California via the State Water Project (SWP), local surface water, and local groundwater. The project would result in a nominal increase in water demand compared to existing conditions and therefore, the project would have a less than significant impact regarding domestic water supplies.

Water - The proposed project includes the installation of a water lateral connecting to an existing main in Palmdale Boulevard. The project may propose installation of new fire hydrants. As analyzed in Section 4.19 b), the project would result in a nominal increase in water demand compared to existing conditions and therefore, the project would have a less than significant impact regarding fire water supplies.

Water Treatment Facilities: PWD's Leslie Carter Water Treatment Plant, with 35 mgd capacity, treats both raw imported water from the SWP and local surface water from the Little Rock Reservoir (PWD, 2021, p. 4-1).

Stormwater – PWD does not currently, nor does it have plans to use stormwater, thus no impacts on stormwater infrastructure would occur (PWD, 2020). Refer to **Section 4.10** of this document for a discussion of the proposed project impacts regarding hydrology and water quality.

Electric Power: Southern California Edison (SCE) provides electricity to the City of Palmdale. SCE's service area spans much of southern California from Orange and Riverside counties on the south to Santa Barbara County on the west to Mono County on the north (CEC 2023). Total electricity consumption in SCE's service area is forecast to be 93,449 GWh in 2025 and 122,247 GWh in 2050 (CEC 2025); one GWH is equivalent to one million kilowatt-hours. The project would be constructed in accordance with applicable Title 24 regulations and would not necessitate the construction or relocation of electric power facilities. Therefore, a less than significant impact would occur.

Natural Gas: The Southern California Gas Company (SCGC) provides natural gas to the City of Palmdale. SCGC's service area spans much of the southern half of California. The proposed development would be all-electric and no impacts on natural gas supplies or natural gas distribution infrastructure would occur.

Telecommunications Facilities: AT&T, Level 3 Communications, and Spectrum provide telecommunications services on and/or near the project site (digalert.org, 2025). The proposed

project does not include alterations to roadways that would interfere with telecommunications services, and no impact would occur

b) Would the project have sufficient water supplies available to serve the and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact

Water Supplies and Demands

The project would have sufficient water supplies available to meet demands during normal, single-dry, and multiple-dry years. PWD receives water from a combination of local surface water, adjudicated groundwater, and imported supplies from the SWP in northern California. Over the last decade, PWD has received between 13 percent and 78 percent of its State Water Project (SWP) contract for 21,300 afy. Since 2011, imported water has accounted for between 13 and 66 percent of PWD's water supply. Local surface water supply is sourced from Littlerock Dam Reservoir and local groundwater is sourced from the Antelope Valley Groundwater Basin.

Table 4.19-1
PWD WATER SUPPLIES – NORMAL WATER YEAR

	2025	2030	2035	2040	2045
Groundwater[1]	14,545	13,095	13,095	13,095	13,095
Local Surface Water	4,000	4,000	4,000	4,000	4,000
Imported SWP Water	17,680	17,220	16,750	16,280	16,280
Recycled Water	500	1000	1500	2000	2000
Total	**36,725**	**35,315**	**35,345**	**35,375**	**35,375**

[1] 5,325 AF of groundwater (in each of the years listed) shown above is Groundwater or Surface Water Augmentation; which is partly groundwater and partly surface water and is considered as entirely groundwater in this table.

Source: Palmdale Water District, 2020

PWD forecasts that its water supplies will be sufficient to meet demands in normal water year, single-dry-year, and multiple-dry-year conditions over the 2020-2040 period (PWD, 2020).

The project is consistent with the General Plan land use designation and, thus, its water demand has been incorporated into the Palmdale Water District's (PWD) long-term demand projections. PWD is expected to have sufficient water supplies to meet projected demands from 2025 through 2045, including those of the proposed project. As shown in **Table 4.19-2** residual water supplies in 2030 are estimated at approximately 14 million gallons per day (mgd), while the project's estimated water demand is approximately 2,799 gallons per day (gpd) (see **Table 4.19-23**). Therefore, adequate supply exists to meet the project's needs, and impacts related to water supply availability would be less than significant.

Table 4.19-2
ESTIMATED PWD WATER SUPPLIES AND DEMANDS (AF)

Supply Source	2025	2030	2035	2040	2045
Total Supplies	36,725	35,315	35,345	35,375	35,375
Total Demand	20,220	21,310	22,980	24,780	26,250
Residual Water Supplies	16,505	14,005	12,365	10,595	9,125

Source: PWD, 2020

Table 4.19-3
ESTIMATED PROJECT WATER DEMAND

Land Use	Quantity (square feet)	Water Demand, gallons per day	
		Per unit[1]	total
Self-storage	96,433	0.028	2,700
office	900	0.21	189
Total	97,333	Not applicable	2,889

[1] Source: City of Los Angeles 2006

c) Would the project 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

As described under Threshold 4.19a above, there would be sufficient capacity available at PWD to meet the wastewater treatment demands of the project. Therefore, the project would have a less than significant impact in this regard and no mitigation is necessary.

d) Would the project 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

Solid waste disposal services in the City of Palmdale are provided by Waste Management, Inc (WM). As of 2024, the primary landfill facilities serving the City include the Antelope Valley, Lancaster, and Simi Valley landfills, as summarized in **Table 4.19-4**.

Table 4.19-4
LANDFILLS SERVING PAMLDALE

Facility and Nearest City/Community	Remaining Capacity, cubic yards	Daily Permitted Disposal Capacity, tons	Actual Daily Disposal, tons[1]	Residual Daily Disposal Capacity, tons	Estimated Closing Date
Antelope Valley Recycling and Disposal	12,194,026	5,548	2,372	3,176	2044
Lancaster Landfill and Recycling Center	13,017,160	5,100	486	4,614	2044
Simi Valley Landfill and Recycling Center	79,783,835	9,250	4,872	4,378	2063
Total	**104,995,021**	**19,898**	**7,730**	**12,168**	N/A

[1] Daily disposal calculated based on annual disposal tonnage assuming 300 operating days per year: that is, six days per week less certain holidays.
Sources: CalRecycle, 2024a; CalRecycle, 2024b; CalRecycle, 2024c; CalRecycle, 2025a. CalRecycle, 2025b,

Construction

Project construction would generate solid waste requiring disposal at local landfills. Materials generated during construction of the project would include paper, cardboard, metal, plastics, glass, concrete, lumber scraps and other materials. Section 4.408 of the 2022 California Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) requires that at least 65 percent of the nonhazardous construction and demolition waste from residential construction operations be recycled and/or salvaged for reuse. Project construction would include recycling and/or salvaging at least 65 percent of construction and demolition waste in accordance with the 2022 CALGreen. Sufficient disposal capacity is available at landfills serving the city of Palmdaleto accommodate solid waste generated by project construction. Impacts would be less than significant.

Operation

The project is anticipated to generate an average of 584 pounds of solid waste per day, or 107 tons per year as shown below in **Table 4.19-4** (CalRecycle, 2006). The three landfills accepting most of the solid waste from the City of Palmdale have a residual daily capacity of 12,168 tons (CalRecycle 2024 a,b,c; CalRecycle 2025 a, b). Sufficient landfill capacity is available in the region for estimated project solid waste generation, and project impacts on solid waste disposal capacity would be less than significant.

Table 4.19-5
ESTIMATED PROJECT-GENERATED SOLID WASTE

Land Use	Quantity	Solid Waste Generation		
		Per unit (pounds per day)	Total (pounds/day)	Total (tons/year)
Self-Storage	97,333 square feet	0.006	584	107

*(CalRecycle, 2006).

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact

Assembly Bill 341 (AB 341; Chapter 476, Statutes of 2011) increases the statewide waste diversion

Senate Bill 1383 (SB 1383; California Health and Safety Code Sections 39730.5 et seq.) set targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law is intended to reduce emissions of methane, a short-lived climate pollutant, from decomposition of organic waste in landfills, for the protection of people in at-risk communities as well as to reduce GHG emissions.

Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the 2022 California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations, Part 11) requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. The proposed project would comply with applicable local, state and federal solid waste disposal standards; therefore, impacts would be less than significant.

4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				**X**
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?				**X**
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?				**X**
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?				**X**

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?

No Impact

The project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) within a Local Responsibility Area (LRA) where cities or counties are responsible for the costs of preventing and suppressing wildfires, as shown in **Figure 4.20-1**. The nearest VHFHSZ in LRA to the project site is about 2.6 miles to the south of the project site. The project site is not located in a State Responsibility Area (SRA) where the State is responsible for the costs of wildfire prevention and suppression. The nearest SRA to the project site is in unincorporated Los Angeles County approximately 2.9 miles to the south, as delineated in **Figure 4.20-2**. Therefore, the project would have no impact in regarding an 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?

No Impact

As explained above, the project site is not located within or adjacent to a VHFHSZ located within an LRA or an SRA. Furthermore, the proposed project is not located on or near a slope where prevailing winds or other factors could exacerbate the risks of wildfires. Therefore, the project would not

expose the occupants to increased levels of pollutant from a wildfire or the hazards of an uncontrolled spread of wildfire, resulting in no impact to these risks.

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?

No Impact

As detailed above, the location of the project site neither falls within nor adjoins a VHFHSZ within a LRA or an SRA. Furthermore, the project will not require the installation or maintenance of infrastructure likely to raise fire hazard levels or result in impacts on the environment. Therefore, there would be no impact in this regard.

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 project site is not located within or adjacent to a Very High Fire Hazard Severity Zone (VHFHSZ) in a Local Responsibility Area (LRA) or a State Responsibility Area (SRA). As a result, the project would not expose people or structures to significant risks related to downslope or downstream flooding, landslides, runoff, post-fire slope instability, or drainage changes. The site is characterized by flat terrain, stable ground conditions, and the absence of steep slopes or landslide risk zones. Therefore, the proposed project would have no impact related to these hazards.

Figure 4.20-1
FIRE HAZARD SEVERITY ZONE - LRA

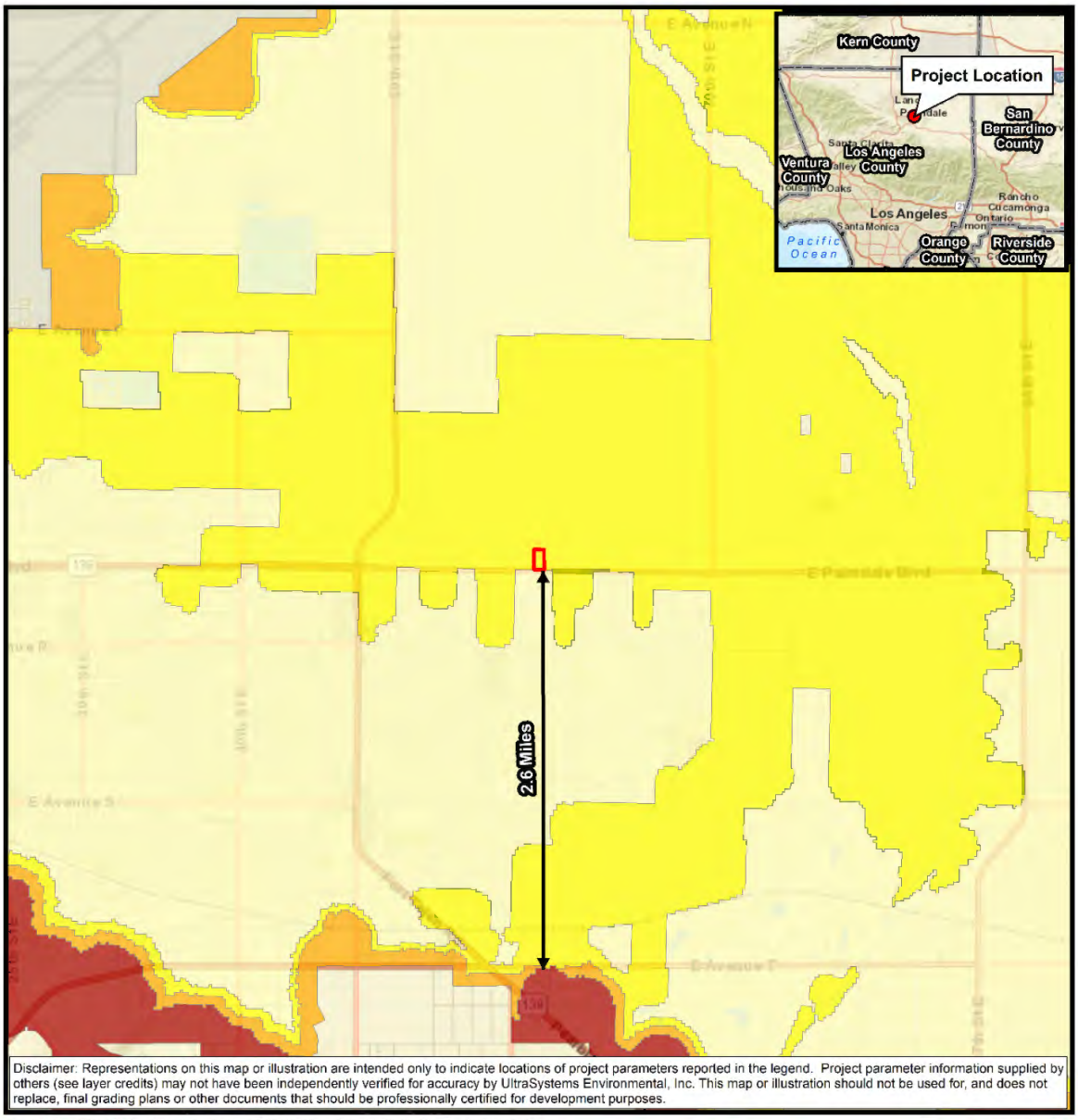
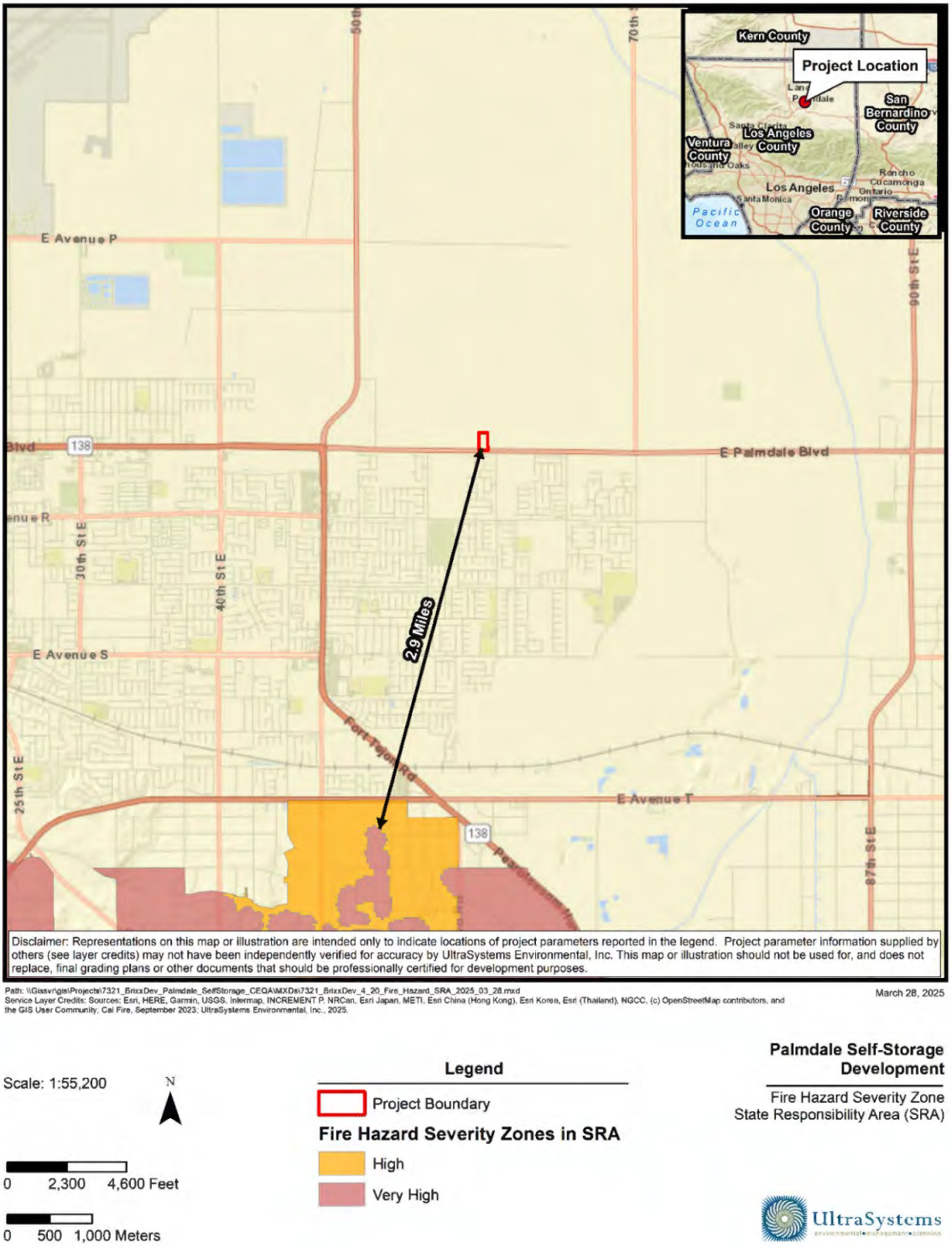


Figure 4.20-2
FIRE HAZARD SEVERITY ZONE - SRA



4.21 Mandatory Findings of Significance

Does the project have:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?		**X**		
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)?			**X**	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		**X**		

a) Would 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 Impact with Mitigation Incorporated

The proposed project would not result in substantial degradation of environmental quality or significant adverse effects to sensitive biological or cultural resources with implementation of the recommended mitigation measures.

As reviewed in **Section 4.4** of this Initial Study, the project site and surrounding Biological Study Area (BSA) support habitat that has the potential to accommodate special-status plant and wildlife species, including western Joshua tree, burrowing owl, nesting birds, and other sensitive species. Without mitigation, project activities such as grading, vegetation removal, and construction could result in direct or indirect impacts to sensitive resources. Implementation of mitigation measures **MM BIO-1** through **MM BIO-17** would require pre-construction surveys, worker environmental awareness training, biological monitoring, protective fencing, adherence to the Western Joshua Tree

Conservation Act, and compliance with the California Desert Native Plants Act, among other measures. These requirements would avoid or minimize potential impacts to special-status species, sensitive natural communities, and regulated desert vegetation. With implementation of the specified mitigation, project impacts plant or animal communities would be reduced to a less than significant level.

Although no paleontological resources have been recorded within the project site, geologic mapping indicates that fossil-bearing units may be present at depth. **MM GEO-1** requires monitoring during ground-disturbing activities and appropriate treatment of any inadvertent discoveries as specified in **Section 4.7** of this Initial Study. These measures would ensure that any paleontological resources encountered are preserved in accordance with accepted professional standards, reducing impacts to a less than significant level.

No known archaeological or historic resources have been identified on the site. However, ground-disturbing activities may result in the inadvertent discovery of previously unknown cultural or tribal cultural resources. In accordance with CEQA Guidelines §15064.5 and Public Resources Code §§21083.2 and 21074, mitigation measures **MM CUL-1** through **MM CUL-3**, and **MM TCR-1** require immediate work stoppage and evaluation by qualified professionals if such resources are encountered. *(TCR mitigation measures may be modified following the outcome of consultation conducted under Assembly Bill 52).* These measures would reduce potential impacts to cultural and tribal cultural resources to a less than significant level.

Therefore, with implementation of the aforementioned mitigation measures, the project would not substantially degrade the environment, reduce habitat or species viability, threaten plant or animal communities, or eliminate important examples of California history or prehistory. Impacts would be less than significant with the implementation of the recommended mitigation measures.

b) Would 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

The proposed project does not have impacts that are individually limited but cumulatively considerable. As analyzed throughout this Initial Study, all potential project impacts—biological, cultural and tribal cultural, and paleontological resources—would be reduced to less than significant levels with the implementation of the recommended mitigation measures.

Cumulative development in the Antelope Valley region has the potential to result in ongoing habitat loss, fragmentation, and disturbance to special-status species, including western Joshua tree, burrowing owl, nesting birds, and other sensitive desert flora and fauna. Incremental contributions from individual projects, such as vegetation removal, grading, and increased human activity, could combine to reduce available habitat or stress wildlife populations.

The proposed project would result in temporary and permanent disturbances to onsite vegetation and habitat. However, the project incorporates extensive avoidance, minimization, and mitigation measures (**BIO-1** through **BIO-17**) requiring pre-construction botanical and wildlife surveys, biological monitoring, worker environmental awareness training, protective fencing, compliance

with the City of Palmdale's Native Desert Vegetation Ordinance, adherence to the Western Joshua Tree Conservation Act, and permitting under the California Desert Native Plants Act. These measures will ensure that project-related impacts to sensitive species and habitats are avoided or reduced to a less than significant level.

Similarly, while the region contains geologic units with paleontological sensitivity and potential for undiscovered cultural or tribal cultural resources, the project's incremental contribution to cumulative impacts on these resources would be mitigated through monitoring, avoidance, and treatment procedures required under **MM GEO-1, MM CUL-1** through **MM CUL-3**, and **MM TCR-1**. These measures ensure compliance with CEQA Guidelines §15064.5 and Public Resources Code §§21083.2 and 21074, preventing any significant cumulative degradation of the historical, cultural, or scientific record.

Therefore, with implementation of the aforementioned sectional mitigation measures, when considered in conjunction with other past, present, and reasonably foreseeable future projects in the region, the proposed project's incremental impacts would not result in cumulative effects that are cumulatively considerable. Therefore, cumulative impacts would be less than significant.

c) Would 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 project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Potential short-term construction-related impacts such as noise, dust, and air pollutant emissions would be minimized through compliance with applicable state and local regulations and implementation of standard best management practices (BMPs). These may include, but are not limited to, watering of disturbed soils, equipment maintenance to reduce exhaust emissions, and limiting construction to hours permitted under the City of Palmdale Municipal Code to avoid excessive noise and disruption to nearby sensitive receptors.

In particular, the project would be required to comply with Palmdale Municipal Code Chapter 14.04 (Joshua Tree and Native Desert Vegetation Preservation Ordinance), which regulates the removal and mitigation of native desert vegetation, including Western Joshua tree (Yucca brevifolia) and other sensitive plant species. The ordinance requires preparation and approval of a Desert Vegetation Preservation Plan and outlines performance standards for avoidance, relocation, or compensation, thereby helping to preserve the natural desert environment and prevent associated indirect effects on the local community (City of Palmdale, PMC §14.04.020–14.04.050).

Additionally, with the implementation of mitigation measures identified in this Initial Study—particularly **MM BIO-1** through **MM BIO-17**, **MM GEO-1**, **MM CUL-1** through **MM CUL-3** and **MM TCR-1**—the project would avoid or substantially reduce potential environmental effects that could indirectly affect public health or quality of life.

Therefore, the project would not cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be less than significant with the implementation of the recommended mitigation measures.

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7.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been developed in accordance with Public Resources Code § 21081.6 and CEQA Guidelines § 15097, which require all state and local agencies to adopt a monitoring or reporting program whenever project approval is based on a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR). The MMRP is intended to ensure that mitigation measures (MM) identified during the environmental review process are effectively implemented, thereby reducing or avoiding the project's significant environmental impacts.

Monitoring refers to the systematic, ongoing, or periodic review of project activities to verify compliance with applicable mitigation measures. Reporting involves the submission of written documentation to the decision-making body or authorized staff to confirm that mitigation requirements have been fulfilled.

The primary objectives of this MMRP are to:

1. Provide a structured framework for documenting the implementation of all required mitigation measures;
2. Clearly identify the parties responsible for monitoring and reporting;
3. Maintain a verifiable record of compliance efforts throughout the duration of the project; and
4. Ensure that all mitigation measures within the purview of the City of Palmdale and/or the Applicant are fully implemented and enforced.

Table 7.0-1 below presents the MMRP in tabular form, summarizing:

- The environmental topic/impact area;
- The adopted mitigation measures;
- The responsible implementing party;
- Specific monitoring actions;
- The enforcement agency(ies); and
- The project phase (e.g., pre-construction, construction, or operation) during which each measure is to be carried out.

This MMRP includes only those environmental topics for which mitigation is required. Topics not listed were found to result in *no impact* or a *less than significant impact* pursuant to Public Resources Code § 21081.6 and CEQA Guidelines § 15097 and therefore do not require further mitigation or monitoring.

Table 7.0-1

MITIGATION MONITORING AND REPORTING PROGRAM

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
4.4 Biological Resources				
Threshold 4.4 a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	**MM BIO-1:** Worker Environmental Awareness Program (WEAP)for construction personnel shall be conducted and documented prior to onsite disturbances. The training shall include a discussion of the sensitive biological resources within the project site and the potential presence of special-status species. The WEAP shall also include a discussion of special-status species' habitats, protection measures to ensure species are not impacted by project activities, project boundaries, penalties for non-compliance, and biological conditions outlined in the project permits. All new employees shall be trained before they access the work site. New employees shall be trained and certified by the Construction Supervisor with the approval of the Project Biologist as approved by CDFW. Each trained individual shall be given a distinctive helmet sticker that will identify those who have received training, signed the training log, and demonstrated the required level of environmental awareness.	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Before Construction
Threshold 4.4 b) **(BIO-1**through **BIO-9)** Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in	**MM BIO-2:** a) A biological monitor will be onsite to monitor activities that result in the clearing or grading of areas known to contain sensitive biological resources, such as western Joshua tree habitat, as well as ground-disturbing activities that impacts do not exceed the limits of construction and to minimize the likelihood of inadvertent impacts to special-status plant and wildlife species. The biological	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Before Construction

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local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? **Threshold 4.4 b)** **(BIO-15)** Would the project 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? **Threshold 4.4 b)** **(BIO-1**through **BIO-9)** Would the project conflict with any local policies or ordinances protecting biological resources, such as a	monitor will conduct pre-construction nesting bird surveys and nesting bird monitoring when/if construction occurs during the nesting bird season (between January 1 through September 15) and will set up and enforce avoidance and buffer zones for nesting birds. b) The biological monitor will ensure that all biological mitigation measures, best management practices (BMPs), avoidance and protection measures described in the relevant project permits and reports are in place and are adhered to. Monitoring will cease when the sensitive habitats and jurisdictional areas have been cleared or impacted. The biological monitor will take photographs throughout the construction process. Observations of special-status species will be recorded in monitoring logs, mapped, and special-status species records will be submitted to the California Natural Diversity Database (CNDDB) within five working days of the sightings, and CDFW will be provided with copies of the CNDDB forms and survey maps. Monitoring logs will be completed for each day of monitoring. c) The biological monitor will have the authority to halt all construction activities and all non-emergency actions if listed species are identified on the project site and will be directly impacted. The monitor will notify the appropriate resource agency and consult if needed. If needed, and if authorized by the resource agencies, the monitoring biologist will relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the City of Palmdale and the consulted resource			

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tree preservation policy or ordinance?	agency determine that the activity will not result in impacts to the species.			
	MM BIO-3: To avoid impacts to sensitive biological resources, the following measures will be implemented by the project proponent, contractors, and biological monitor prior to project staging, and commencement of any ground-disturbing activities or vegetation removal. a) Project boundary would be set at the minimum size to accomplish necessary work, resulting in minimal impacts to sensitive biological resources and jurisdictional areas. b) Specifications for the project boundary, limits of construction, project-related parking, storage areas, laydown sites, and equipment storage areas will be mapped and clearly marked in the field with temporary fencing, signs, stakes, flags, rope, cord, or other appropriate markers. All markers will be maintained until the completion of activities in that area. c) To minimize the amount of disturbance, the construction/laydown areas, parking areas, staging areas, storage areas, spoil areas, and equipment access areas will be restricted to designated areas. To the extent possible, designated areas will comprise existing disturbed areas (parking lots, access roads, graded areas, etc.). d) Project related work limits will be defined, and work crews will be restricted to designated work areas. Disturbance beyond the actual construction zone is prohibited without site-specific surveys.	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Before Construction

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	e) Project related vehicle traffic will be restricted to established roads, staging areas, and parking areas. Travel outside construction zones will be prohibited. f) If sensitive biological resources are detected in an area to be impacted, then appropriate measures will be implemented to avoid impacts (i.e., flag and avoid, erect orange snow fencing, biological monitor present during work, etc.). However, if avoidance is not possible and the sensitive biological resources will be directly impacted by project activities, the biological monitor will mark and/or stake the site(s) and map the individuals on an aerial map and with a GPS unit. The biologist will then contact the appropriate resource agencies to develop additional mitigation measures prior to commencing project activities. g) The construction crew will inspect excavated areas daily to detect the presence of trapped wildlife. See **BIO-11** and **BIO-5**.			
	MM BIO-4: Protective fencing shall be installed around the perimeter of ecologically sensitive areas, which will be designated as No Work Areas, including around the perimeter of western Joshua trees scheduled to be transplanted, and native vegetation communities adjacent to work areas, before commencement of staging, fencing, clearing, grading, or other construction activities. The installation of fencing and protection measures around trees and vegetation will comply with the City of Palmdale's (City's) Native Desert Vegetation Ordinance. The tree protection zone for Joshua tree is a 40-foot radius around the trunk of the tree. Fencing shall be maintained in place during all construction. No construction, grading, staging, or material storage will be allowed within the	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

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	fence exclusion areas, or within the protected zones of any onsite native trees.			
	MM BIO-5: Project work crews will use CASQA (or similar) stormwater BMPs as directed by the project's Storm Water Pollution Prevention Plan (SWPPP). These measures will be identified prior to construction and incorporated into construction operations. The project's Qualified SWPPP Practitioner will ensure that construction activities will incorporate all applicable BMPs specified in the SWPPP to prevent erosion from water or wind, sedimentation of receiving waters, and introduction of other pollutants, including non-stormwater pollutants, into drainages crossed by or adjacent to the project site, accidental spills in the project site, including laydown yards and parking areas. BMPs will be maintained on a regular basis pursuant to the requirements of the SWPPP.	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to Construction
	MM BIO-6: To avoid impacts to special-status plant species, a qualified biologist will survey the project site for the presence of special-status plant species that are likely to occur based on habitat, soils, elevation, climate, and other conditions of the project site. The surveys will be conducted at appropriate times of the year, as feasible, to coincide with the growing season and different blooming periods and when optimum conditions for identification (generally blooms, fruits, and leaves) are present. Surveys will be conducted 14 days prior to construction. Biologists will pay special attention to those habitat areas where listed species have been observed and habitat areas that appear to provide suitable habitat for special-status species. Special-status plant species that are	City of Palmdale Construction Contractor	Field Verification	1. City of Palmdale 2. City of Palmdale 3. During Construction

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	known to occur onsite, and special-status plant species that may have colonized the project site prior to the initiation of project activities, will be mapped and marked for avoidance.			
	MM BIO-7 The BSA contains Joshua trees that qualify for protection under the City of Palmdale's Native Desert Vegetation Ordinance. The project proponent and their contractors will implement the following avoidance and protection measures to protect these trees to the extent practical. The project proponent will submit a desert vegetation preservation plan that will be submitted with the development application in accordance with the City's Native Desert Vegetation Ordinance. The desert vegetation preservation plan will contain the following components: 1) a written report depicting locations of native desert vegetation identified pursuant to the California Desert Native Plants Act as protected or designated on any state or federal rare and endangered species list; 2) a site landscaping plan showing locations of native vegetation occurring within the project site; and, 3) a long-term maintenance program and other protection measures for any desert vegetation preserved on the site. The City may defer to a CESA Incidental Take Permit (see **BIO-7**), with no additional requirements, if one is issued for the project.	City of Palmdale Construction Contractor	Field Verification	1. City of Palmdale 2. City of Palmdale 3. During Construction
	MM BIO-8: Western Joshua Tree Conservation Act Prior to the initiation of Joshua trees encroachment, trimming, pruning, or any activity that may result in take of Joshua trees (including removal of live and dead Joshua trees), the project proponent should obtain a California Endangered Species Act (CESA) ITP under § 2081b of the CESA, or under the Western	City of Palmdale	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	Joshua Tree Conservation Act (WJTCA) of Fish and Game Code (§§ 1927-1927.12). California Fish and Game Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill". Mitigation for CESA will occur at a minimum 1:1 or per the stem count per the WJTCA census in lieu fee, or as required by the ITP and WJTCA.			Construction
	MM BIO 9: a. Because species of the family Agavaceae (e.g., Western Joshua Tree), which have been observed throughout the project site, are covered under § 80073(b) of the California Desert Native Plants Act, any impacts will require a permit issued by the commissioner of the sheriff in Los Angeles County pursuant to Chapter 4 § 80101. Prior to commencement of construction activities, including but not limited to mobilization, fencing, staging, vegetation trimming or removal, or ground-disturbing activities, the project proponent will acquire a permit pursuant to Chapter 4 § 80101 and § 80073 of the California Desert Native Plants Act if any of the following species are observed on the project site during the *Preconstruction Botanical Surveys* (**BIO - 6**): b. All species of the family Agavaceae (century plants, nolinas, yuccas) c. 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 d. All species of the family Fouquieriaceae (ocotillo, candlewood) e. All species of the genus Prosopis (mesquites)	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. During Construction

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	f. All species of the genus Cercidium (palos verdes) g. Acacia greggii (catclaw) h. Atriplex hymenelytra (desert-holly) i. Dalea spinosa (smoke tree) j. Olneya tesota (desert ironwood), including both dead and live desert ironwood.			
	MM BIO-10 To comply with California Fish and Game Code §§2050-2089, §3511, §4700, §5050, and §5515, the following measures will be implemented to minimize impacts to sensitive species which include, but are not limited to: American badger, Blainville's horned lizard, California glossy snake, Cooper's hawk, ferruginous hawk, Le Conte's thrasher, loggerhead shrike, northern California legless lizard, prairie falcon, San Joaquin pocket mouse. The measures below will minimize or avoid direct, and indirect impacts caused by project implementation to sensitive species. a) The project applicant will retain a qualified biologist to conduct pre-construction wildlife surveys within the project site and associated parking, staging, and laydown areas. b) The survey will be conducted no more than seven (7) days prior to the onset of scheduled activities, (e.g., staging and stockpiling, structure removal, clear and grub, grading, fill, etc.). c) Pre-construction surveys for special-status wildlife species will pay special attention to areas that support habitat for protected species, or where their nests or indicators of presence (i.e., tracks, middens, fur, pellets, claw marks, scat,	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

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	burrows, and/or vocalizations) have been recorded/observed. Observations of special-status species and/or sign will be recorded and mapped. During the surveys, the biologist will also record incidental observations of non-special-status (i.e., common) wildlife species and/or their sign. d) Upon completion of the pre-construction wildlife surveys, the qualified biologist will prepare a brief letter report summarizing methods, results, and recommendations for project commencement. If construction lapses for seven (7) or more days, an additional pre-construction survey is required. e) If it is determined that a federally-listed and/or state-listed or sensitive plant/wildlife species will be directly impacted by the project, the qualified biologist will consult with the USFWS in accordance with the Endangered Species Act § 7 and the CDFW in accordance with CESA under California Fish and Game Code § 2081(b), respectively. However, if the qualified biologist conducts thorough pre-construction surveys and determines there is no threat to special-status species, then construction may commence. f) Sensitive wildlife species and/or potential nesting sites will not be disturbed, captured, handled or moved.			
	MM BIO 11: The project proponent would implement the following general avoidance and protection measures to protect wildlife. a) To minimize construction-related mortalities of nocturnally active wildlife species, it is recommended that all non-emergency work be conducted during daylight hours. All unnecessary lights shall be turned off at night to avoid	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during

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	attracting wildlife. Nighttime work (and use of artificial lighting) would not be permitted unless specifically authorized; b) If any wildlife is encountered during project activities, it will be allowed to freely leave the area unharmed or the biological monitor will capture the animal, if authorized, and relocate it outside of the construction work limits out of harm's way; c) Listed wildlife species will not be captured, handled, or relocated without specific written authorization from CDFW and/or USFWS; d) Wildlife would not be disturbed, captured, harassed, or handled, unless to relocate the animal out of imminent threat of injury or death. Animal nests, burrows and dens would not be disturbed without prior survey and authorization from the biological monitor; e) Active and inactive nests cannot be removed or disturbed; f) Contractors, subcontractors, employees, and site visitors would be prohibited from feeding or collecting wildlife; g) To avoid the potential for mortality and harassment of wildlife, all non-security related firearms, weapons, and domestic dogs would be prohibited from the project site; h) Contractors, subcontractors, employees, and site visitors shall inspect their vehicles and equipment for the presence of wildlife prior to moving their vehicles and equipment. The biological monitor shall be contacted if a special-status species is detected and is in danger of being harmed; i) All steep-walled pitfalls (trenches, holes, bores, and other			Construction

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	excavations) greater than two feet deep used during the project would be completely covered at all times except when being actively used, to prevent wildlife entrapment (i.e. reptiles and small mammals). If trenches cannot be covered, escape ramps (maximum slope of 2:1) will be provided to allow trapped animals to escape. Exclusion fencing shall be installed around the trench or excavation. Trenches shall be inspected and wildlife removed immediately before backfilling; j) All onsite project workers shall look under their vehicles and equipment before movement. If wildlife is observed, no vehicles or equipment shall be moved until the animal has left the area voluntarily or can be legally relocated; k) Equipment maintenance, lighting, and staging will occur only in designated areas, and shall not block or impede wildlife movement.			
	MM BIO 12: A qualified biologist shall conduct a pre-construction BUOW survey in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW, 2012) or current CDFW guidance/protocol if changes to the aforementioned 2012 guidance have occurred. A pre-construction BUOW survey (Take Avoidance Survey) shall be required no more than 14 days and again 24 hours prior to ground disturbing activities. Although BUOW was not detected on site during the reconnaissance-level surveys, the BSA contains suitable habitat to potentially support BUOW. Suitable burrows were also observed in the BSA. Biologists shall identify, record, and map with a global positioning system (GPS) unit BUOWs and their sign. Detailed notes and wildlife species encountered during the surveys shall be recorded in field notes.	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	If no BUOWs or signs of BUOWs are observed during the preconstruction surveys and concurrence is received from CDFW, project activities may begin and no further mitigation shall be required. If BUOWs or signs of BUOWs are observed during the surveys, the site shall be considered occupied and the BUOWs may need to be relocated. The qualified biologist will contact CDFW to assist in the preparation of an Incidental Take Permit (ITP), and development of avoidance, minimization, and mitigation measures, prior to commencing project activities. A relocation program may be necessary and shall be approved by CDFW prior to commencing project activities.			
	MM BIO 13: a) If the project activities occurs between January 1 through September 15, a nesting bird and raptor survey should be conducted within a 500-foot radius of the construction site, prior to any construction activities (e.g., staging, mobilization, fencing, ground disturbance, and vegetation trimming or clearing) as well as prior to any vegetation removal within the project site. The nesting bird surveys should be conducted at appropriate nesting times and concentrate on potential nesting or perch sites. b) Surveys must be conducted by a qualified biologist no more than seven (7) days prior to the beginning of any project-related activity likely to impact raptors and migratory songbirds, for the entire project site. If project activities are delayed or suspended for more than seven (7) days during the breeding season, repeat the surveys. c) If nesting raptors and migratory songbirds are identified, the following minimum no disturbance buffers be implemented:	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	300 feet around active passerine (perching birds and songbirds) nests, and 500 feet around active non-listed raptor nests. These buffers should be maintained until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. d) The temporary halt of project activities within nesting buffers during nesting season does not constitute an effective minimization or avoidance for the purposes of offsetting project impacts associated with loss of nesting birds or nesting habitat. e) Additional measures will be necessary to compensate for the removal of nesting habitat within the project site based on acreage of impact and vegetation composition. f) CDFW shall be consulted to determine proper mitigation for impacts to occupied habitat, depending on the status of the bird species.			
	MM BIO 14: a) The biological monitor shall be present during work near western Joshua trees or other vegetation areas during vegetation-removal and rough grading activities to monitor for non-listed, special-status, and/or common ground-dwelling vertebrates encountered in the path of project-related activities. b) The biological monitor shall make every effort to move the species out of harm's way to the extent feasible by doing one of the following: (1) Utilize shovel, rake, or similar hand tool to gently re-direct the animal out of work area; (2) Install silt	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	fence or other exclusionary fencing to prevent species from re-entering disturbance area; and (3) If the biological monitor has the appropriate handling permits, capture/move species to appropriate habitat outside the disturbance area. The biological monitor shall have the authority to temporarily stop construction activities until the species is determined to be out of harm's way. c) Should CDFW personnel visit the site during vegetation removal, and they observe rough grading activities occurring near western Joshua trees or within vegetation and no biological monitor is available, construction activities near Joshua trees and other vegetation shall be halted.			
	MM BIO 15: Prior to any ground disturbing activities buffers will be delineated 50 feet around all drainages and wetlands in the project site, as appropriate (with exception of portions of drainages and wetlands that are in the grading areas and cannot be avoided); these drainages and wetlands will be designated as Environmentally Sensitive Areas (ESAs). These buffers will remain in place to protect the functions and values of drainages and adjacent wetland by reducing physical disturbance from construction noise and activity and domestic animals and protect the transition zone where one habitat phases into another. These buffers will also protect other functions and values of these areas, including absorption and slowing of flood waters for flood and erosion control, sediment filtration, water purification, ground water recharge, and the need for upland transitional habitat.	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	MM BIO 16: The applicant shall have a qualified entomologist familiar with the species behavior and life history conduct a survey for Crotch's bumble bee (CBB) within 30 days prior to the start of any construction-related activities. Ideally, surveys should be conducted during the species peak detection season from April to August, although surveys may be constrained to the month prior to construction. Surveys should include meandering transects through suitable habitat (e.g. open grasslands, scrub areas, with blooming native vegetation), with particular attention to floral resources and potential nesting sites (e.g. rodent burrows or dense thatch). Survey results, including negative findings, shall include coordinates of floral resources (known host plants, and other potential food plants), nest burrows, figures, and photo documentation, shall be submitted to CDFW within 10 days of completion, with approvals received by CDFW, prior to initiation of ground disturbing project activities. If CESA-protected bumble bees are observed, project proponents shall propose site-specific measures to avoid take through consultation with CDFW to obtain an Incidental Take Permit (ITP), if take of CESA-protected bumble bees may occur during project activities (CDFW, 2023). • Time of Year – Ideally, pre-construction surveys would be conducted during the peak flight period from May through July, for the highest detection probability. • Weather – Ideally, preconstruction surveys shall take place when temperatures range from 65 to 90 degrees Fahrenheit on warm, but not hot, sunny days, with low wind (less than 8 miles per hour). Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling). Wait at least 1	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

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	hour after rain subsides before conducting a survey. Sunny days with low wind speeds (less than 8 mph) are optimal. Partially cloudy days or overcast conditions are permissible if a person's shadow is visible. • Result Expiration - Focused survey results are only valid for one year and shall be repeated if the survey results expire. • Note: In June 2019, the CBB, a California near-endemic, became a candidate species for listing under the California Endangered Species Act (CESA; CDFW 2019). At the time of this writing, a formal vote by the California Fish and Game Commission has not occurred. If the status of the CBB is downgraded to non-status, then this survey requirement may be omitted prior to survey, unless required by the regulatory agencies as a condition of approval.			
	MM BIO 17: Desert kit fox is a protected species under CCR Title 14, § 460. No more than 14 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall conduct pre-construction surveys to determine if potential desert kit fox burrows/dens are present in the project area. Pre-construction surveys should include transect surveys at a 20-meter transect distance to ensure 100 percent visual coverage of the project area. Surveys may be combined for similar fossorial mammals, such as American badger; combined, concurrent surveys for dissimilar taxa (e.g. plants or birds) shall be prohibited. Use of wildlife camera monitoring to determine presence/absence and burrow/den use is strongly encouraged, in accordance with CDFW approved methods, including Remote Camera Trap	City of Palmdale Qualified Biologist	Field Verification	1. City of Palmdale 2. City of Palmdale 3. Prior to and during Construction

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	Installation and Servicing Protocol Citizen Wildlife Monitoring Project 2017 Field Season (Moskowitz and Huyett, 2017) and Camera-trapping for conservation: a guide to best-practices (Oliver R. Wearn & Paul Glover-Kapfer, 2017). Ideally, the pre-construction survey reports will include: (1) the number, location, and status determination of potential desert kit fox and/or badger dens identified during the reporting period, (2) occupancy monitoring status, (3) species present, and (4) estimated number of individuals and associated behaviors observed. Desert kit fox and badger images will additionally be stored on a cloud-based server and additional relevant data will be made available to CDFW upon request. If the pre-construction surveys confirm occupied desert kit fox habitat, project activities shall be immediately halted, and the qualified biologist shall notify CDFW to develop avoidance, minimization, and mitigation measures within a Desert Wildlife Management Plan. No disturbance of active dens shall take place when juvenile desert kit fox may be present and dependent on parental care. Sick or injured animals will be reported to CDFW within 24 hours of discovery.			

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4.5 Cultural Resources				
Threshold 4.5 b): Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.	**MM CUL-1** If archaeological resources are discovered during construction activities, the contractor will halt construction activities in the immediate area and notify the City of Palmdale. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology who will be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist will recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area. A local Native American monitor will also be contacted and retained to conduct monitoring on the remainder of the ground disturbing work. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the Eastern Information Center. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.	Qualified Archaeologist Construction Contractor	Field Verification	1. City of Palmdale Planning Department 2. City of Palmdale Planning Department 3. During construction activities

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	MM CUL-2 Prior to the issuance of a grading permit, the Developer shall secure agreements with the tribes requesting monitoring through the consultation process. The Developer is also required to provide a minimum of 30 days advance notice to the tribes of all mass grading and trenching activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. If the Native American Tribal Representatives suspect that an archaeological resource may have been unearthed, the Project Archaeologist or the Tribal Representatives shall immediately redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. In consultation with the Native American Tribal Representatives, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2.	Qualified Archaeologist Construction Contractor	Field Verification	1. City of Palmdale Planning Department 2. City of Palmdale Planning Department 3. During construction activities
Threshold 4.5 c): Would the project disturb any human remains, including those interred outside of formal cemeteries.	**MM CUL-3** If human remains are encountered during excavations associated with this project, all work will stop within a 100-foot radius of the discovery and the Los Angeles County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American	Construction Contractor Los Angeles County Coroner	Field Verification	1. City of Palmdale Planning Department 2. City of Palmdale Planning Department 3. During project construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	burials (§ 7050.5 of the Health and Safety Code).			
4.7 Geology and Soils				
Threshold 4.7 f): Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**MM GEO-1** Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Palmdale Planning Department from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist perform periodic paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of	City of Palmdale Qualified Paleontologist Construction Contractor	Monitoring, Assessment, Recovery, and Curation	1. City of Palmdale Planning Department 2. City of Palmdale Planning Department 3. During project construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.			
4.18 Tribal Cultural Resources				
Threshold 4.18 b): Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is 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 § 5020.1(k)?	**MM TCR-1: Tribal Monitoring, First (5) Days** The Project Applicant shall retain a professional Tribal Monitor procured by the Fernandeño Tataviam Band of Mission Indians to observe the first (5) days of ground-disturbing activities which include excavating, digging and/or trenching. Tribal Monitoring Services will continue until all (5) days, consecutive or non-consecutive, of ground-disturbing activities are completed. If the Project's scheduled activities require the Tribal Monitor(s) to leave the Project for a period of time and return, confirmation shall be submitted to the Tribe by project applicant, in writing, upon completion of each set of scheduled activities and a minimum of 48 hours' notice shall be submitted to the Tribe by Client, in writing, prior to recommencement. If cultural resources are encountered, the Tribal Monitor will have the authority to request ground disturbing activities cease within 60-feet of the discovery to assess and document potential finds in real time. A qualified archaeologist meeting Secretary of Interior standards shall also assess the find. a. Should the find be deemed significant, as defined by CEQA (as amended, 2015), the Project applicant shall retain a	FTBMI Construction Contractor Los Angeles County Coroner	Monitoring, Assessment, Recovery, and Curation	1. City of Palmdale Planning Department 2. FTBMI 3. During project construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	professional Tribal Monitor procured by the FTBMI to observe all remaining ground-disturbing activities including, but not limited to, clearing, grading, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, auguring, blasting, stripping topsoil or similar activity, and archaeological work. **MM TCR-2: Disposition and Treatment of Inadvertent Discoveries** The Lead Agency and/or applicant shall, in good faith, consult with the FTBMI on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities. **MM TCR-3: In the Event of Inadvertent Discovery, Human Remains** 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 shall be enforced for the duration of the Project. Inadvertent discoveries of human remains and/or funerary object(s) are subject to California State Health and Safety Code Section 7050.5, and the subsequent disposition of those discoveries shall be decided by the Most Likely Descendant (MLD), as determined by the Native American Heritage Commission (NAHC), should those findings be determined as Native American in origin.			