DRAFT ENVIRONMENTAL IMPACT REPORT 25-002
SCH NO. 2025020362



PACIFIC PALMDALE PROJECT
TENTATIVE PARCEL MAP 84510
SITE PLAN REVIEW NO 24-0021
CONDITIONAL USE PERMIT 25-0006

City of Palmdale, California

Lead Agency

City of Palmdale

Department of Economic and Community Development
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December 2025

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Tentative Parcel Map 84510
Site Plan Review 24-0021
Conditional Use Permit 25-0006

December 2025

TABLE OF CONTENTS

Section Name and Number

S.0 Executive Summary S-1
S.1 Introduction S-1
S.2 Project Site Location and Regional Setting S-3
S.3 Project Objectives S-3
S.4 Areas of Controversy and Issues to be Resolved S-4
S.5 Project Alternatives S-4
S.6 EIR Process S-5
S.7 Summary of Impacts, Mitigation Measures and Conclusions S-6
1.0 Introduction 1-1
1.1 Purposes of CEQA and This EIR 1-1
1.2 Summary of the Project Evaluated by this EIR 1-2
1.3 CEQA Compliance Process 1-2
1.4 Responsible and Trustee Agencies 1-14
1.5 Areas of Controversy 1-15
1.6 Issues to be Resolved by the Decision-Making Body 1-15
2.0 Environmental Setting 2-1
2.1 Regional Setting and Location 2-1
2.2 Local Setting and Location 2-1
2.3 Surrounding Land Use and Development 2-2
2.4 Local Planning Context 2-2
2.5 Existing Physical Site Conditions 2-7
3.0 Project Description 3-1
3.1 Summary of the Proposed Project 3-1
3.2 Regional Setting 3-1
3.3 Project Location and Setting 3-1
3.4 Statement of Objectives 3-2
3.5 Project's Component Parts and Discretionary Approvals 3-3
3.6 Scope of Environmental Analysis 3-7
3.7 Summary of Requested Actions 3-10
3.8 Related Environmental Review and Consultation Requirements 3-10
4.0 Environmental Analysis 4-1
4.1 Aesthetics 4.1-1
4.2 Air Quality 4.2-1
4.3 Biological Resources 4.3-1
4.4 Cultural Resources 4.4-1
4.5 Energy 4.5-1
4.6 Geology and Soils 4.6-1

4.7 Greenhouse Gas Emissions....4.7-1
4.8 Hazards and Hazardous Materials....4.8-1
4.9 Hydrology and Water Quality....4.9-1
4.10 Land Use and Planning....4.10-1
4.11 Noise....4.11-1
4.12 Public Services....4.12-1
4.13 Transportation....4.13-1
4.14 Tribal Cultural Resources....4.14-1
4.15 Utilities and Service Systems....4.15-1
4.16 Wildfire....4.16-1
5.0 Other California Environmental Quality Act Considerations....5-1
5.1 Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented....5-1
5.2 Significant Irreversible Environmental Changes Which Cannot be avoided if the Proposed Project is Implemented....5-2
5.3 Growth-Inducing Impact of the Proposed Project....5-2
5.4 Effects Not Found to be Significant During the EIR Scoping Process....5-8
6.0 Alternatives....6-1
6.1 Alternatives Under Consideration....6-2
6.2 Alternatives Considered and Rejected....6-4
6.3 Alternative Analysis....6-5
6.4 Environmentally Superior Alternative....6-24
7.0 References....7-1
7.1 Persons Contributing to EIR Preparation....7-1
7.2 Documents Appended to this EIR....7-1
7.3 Documents Incorporated by Reference....7-2
7.4 Documents, Websites and Persons consulted....7-2

LIST OF FIGURES

Figure Number and Name
Page

Figure 2-1 Regional Map....2-14
Figure 2-2 Vicinity Map....2-15
Figure 2-3 Surrounding Land Uses and Development....2-16
Figure 2-4 Existing General Plan Land Use Designations....2-17
Figure 2-5 Existing Zoning Classifications....2-18
Figure 2-6 Aerial Photograph....2-19
Figure 2-7 USGS Topographic Map....2-20
Figure 2-8 FEMA Flood Insurance Rate Map....2-21
Figure 3-1 Tentative Parcel Map 84510 – Existing Conditions....3-12
Figure 3-2 Tentative Parcel Map 84510 – Proposed Conditions....3-13
Figure 3-3 Roadway Cross Sections....3-14
Figure 3-4 Conceptual Site Plan....3-15
Figure 3-5 Fire Apparatus Circulation Plan....3-16
Figure 3-6 Conceptual Elevations....3-17
Figure 3-7 Conceptual Site Sections – Sheet 1....3-18
Figure 3-8 Conceptual Site Sections – Sheet 2....3-19
Figure 3-9 Wall and Gate Plan and Details....3-20
Figure 3-10 Trash Enclosure Plans and Elevations....3-21
Figure 3-11 Site Lighting Plans and Details....3-22
Figure 3-12 Conceptual Grading Plan....3-23
Figure 4.1-1 Public Viewpoint Key Map....4.1-17
Figure 4.1-2 Viewpoints 1 & 2....4.1-18
Figure 4.1-3 Viewpoints 3 & 4....4.1-19
Figure 4.1-4 Viewpoints 5 & 6....4.1-20
Figure 4.1-5 Project Rendering....4.1-21
Figure 4.3-1 Vegetation Communities and Land Covers....4.3-41
Figure 4.3-2 Impacts to Western Joshua Tree....4.3-42
Figure 4.9-1 Existing Conditions - Hydrology....4.9-22
Figure 4.9-2 Proposed Conditions - Hydrology....4.9-23
Figure 4.11-1 Noise Measurement Locations....4.11-25
Figure 4.11-2 Offsite Traffic Noise Model Receiver Locations....4.11-26
Figure 4.11-3 Predicted On-Site Operational Noise Contours....4.11-27
Figure 4.13-1 Study Area Intersections....4.13-21
Figure 4.13-2 Designated Truck Route Network....4.13-22
Figure 4.13-3 Existing Transit and Pedestrian Facilities....4.13-23
Figure 4.13-4 Existing and Planned Bicycle Network Map....4.13-24

LIST OF TABLES

Table Number and Name		Page
Table S-1	Summary of Impacts, Mitigation Measures and Conclusions	S-8
Table 1-1	Summary of NOP Comments	1-3
Table 1-2	Location of CEQA Required Topics	1-11
Table 3-1	Expected Construction Schedule	3-8
Table 3-2	Construction Equipment Assumptions	3-8
Table 3-3	Matrix of Project Approvals/Permits	3-11
Table 4.2-1	Los Angeles County Portion of Mojave Desert Air Basin - Attainment	4.2-10
Table 4.2-2	State 1-Hour and 8-Hour Ozone Concentration Trend in Mojave Desert Air Basin	4.2-11
Table 4.2-3	National and State 3-Year Average PM_{10} Statistics in Mojave Desert Air Basin	4.2-12
Table 4.2-4	Local Ambient Air Quality Data	4.2-13
Table 4.2-5	Ambient Air Quality Standards	4.2-16
Table 4.2-6	AVAQMD Maximum Regional Daily Emissions Thresholds	4.2-26
Table 4.2-7	Significance Thresholds for Neighboring Air Districts	4.2-28
Table 4.2-8	Truck Activity by Air District	4.2-28
Table 4.2-9	Emissions Summary of Construction (Without Mitigation)	4.2-30
Table 4.2-10	Summary of Peak Operational Emissions (Without Mitigation)	4.2-31
Table 4.2-11	Estimated Truck Mobile Source Criteria Air Pollutant Emissions by Air District	4.2-32
Table 4.2-12	Health Risk Assessment Results (Without Mitigation)	4.2-35
Table 4.2-13	Emissions Summary of Construction (With Mitigation)	4.2-45
Table 4.2-14	Summary of Peak Operational Emissions (With Mitigation)	4.2-46
Table 4.2-15	Health Risk Assessment Results (With Mitigation)	4.2-47
Table 4.3-1	Special-Status Wildlife Species Present or with a Moderate Potential to Occur in the Study Area	4.3-5
Table 4.5-1	Construction Petroleum Demand	4.5-10
Table 4.5-2	Operational Petroleum Demand	4.5-12
Table 4.6-1	Summary of On-Site Soils	4.6-4
Table 4.7-1	Top GHG Producing Countries and the European Union	4.7-5
Table 4.7-2	Greenhouse Gas Emissions Sources in California	4.7-6
Table 4.7-3	City of Palmdale GHG Emissions by Sectors	4.7-7
Table 4.7-4	Amortized Annual Construction Emissions	4.7-31
Table 4.7-5	Project GHG Emissions Summary (Without Mitigation)	4.7-33
Table 4.7-6	Project Potential to Conflict with 2017 Scoping Plan	4.7-37
Table 4.7-7	Project Potential to Conflict with 2022 Scoping Plan	4.7-40
Table 4.7-8	Project GHG Emissions Summary (With Mitigation)	4.7-47
Table 4.9-1	Peak Flow Rates Under Existing Conditions	4.9-2

Table 4.10-1 General Plan Consistency Analysis 4.10-11
Table 4.11-1 Measured Baseline Outdoor Ambient Noise Levels 4.11-3
Table 4.11-2 Land Use Noise Compatibility Criteria 4.11-7
Table 4.11-3 Significance Criteria Summary 4.11-9
Table 4.11-4 Construction Reference Noise Levels 4.11-14
Table 4.11-5 Construction Equipment Noise Level Compliance 4.11-15
Table 4.11-6 Predicted Future Year Traffic Noise Levels 4.11-18
Table 4.13-1 Project Trip Generation 4.13-11
Table 4.13-2 Analysis of Consistency with Connect SoCal Goals 4.13-14
Table 4.13-3 Project Generated VMT 4.13-18
Table 4.15-1 LACWD Summary of Projected Supplies (AFY) 4.15-3
Table 4.15-2 LACWD Projected Water Deliveries 4.15-3
Table 4.15-3 Existing Landfill Maximum Permit Capacity and Maximum Permitted Throughput 4.15-6
Table 4.15-4 Estimated Construction Solid Waste Generation 4.15-20
Table 4.15-5 Comparison of Project-Generated Construction Waste to Permitted Capacities at Each Landfill 4.15-21
Table 4.15-6 Estimated Operational Solid Waste Generation 4.15-22
Table 4.15-7 Comparison of Project-Generated Operational Waste to Maximum Permitted Throughput at Each Landfill 4.15-23
Table 6-1 RBSTLA Trip Generation 6-17
Table 6-2 TLA Trip Generation 6-22
Table 6-3 Alternatives to the Project – Comparison of Environmental Impacts 6-25

APPENDICES (BOUND SEPARATELY)

A. Notice of Preparation (NOP) and Written Comments on the NOP
B. Air Quality, Greenhouse Gas Emissions, and Energy Technical Report
C. Biological Resources Technical Report
D. Cultural Resource Assessment
E1. Geotechnical Investigation
E2. Paleontological Resources Review
F1. Phase I Environmental Site Assessment
F2. FAA Determination of No Hazard Letters
G. Preliminary Drainage Report
H. Noise Technical Report
I1. Traffic Impact Analysis
I2. Vehicle Miles Traveled Analysis
J. Sewer Area Study
K. Water Supply Assessment

ACRONYMS AND ABBREVIATIONS

Acronym	Definition
§	Section
§§	Sections
>	greater than
≥	greater than or equal to
a.m.	Ante Meridiem (between the hours of midnight and noon)
AB	Assembly Bill
AB 32	California Global Warming Solutions Act of 2006
AB 52	Assembly Bill 52, Native Americans: California Environmental Quality Act
AB 341	Assembly Bill 341, Mandatory Commercial Recycling Program
AB 939	Assembly Bill 939, Integrated Waste Management Act of 1989
AB 1279	Assembly Bill 1279, California Climate Crisis Act
AB 1327	California Solid Waste Reuse and Recycling Act
AB 1358	Assembly Bill 1358, Complete Streets Act
AB 1493	Pavley Fuel Efficiency Standards
AC	Acres
AC or A/C	air conditioning
ACM	Alternative Calculation Method
ADT	Average Daily Traffic
AF	acre-feet
AFY	Acre Feet per Year
AGL	above ground level
AI	Aerospace Industrial
AIA	Airport Influence Area
AICUZ	Air Installation Compatible Use Zone
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
ALUP	Airport Land Use Plan
amsl	Above Mean Sea Level
ANSI	American National Standards Institute
AOC	areas of concern
A-P Act	Alquist-Priolo Earthquake Fault Zoning Act
APS	Alternative Planning Strategy
APSA	Aboveground Petroleum Storage Act
APN	Assessor Parcel Number
APY	Acre feet per year
APZ	Accident Potential Zone

AQIA	Air Quality Impact Analysis
AQMIS	Air Quality and Meteorological Information System
AQMP	Air Quality Management Plan
ASTM	American Society of Testing and Materials
AV	autonomous vehicle
AVAQMD	Antelope Valley Air Quality Management District
AVEK	Antelope Valley-East Kern Water Agency
AVTA	Antelope Valley Transit Authority
AVUHSD	Antelope Valley Union High School District
BACM	Best Available Control Measure
BAU	Business as Usual
BER	business environmental risk
BERD	Built Environmental Resources Directory
BFFP	Board of Forestry and Fire Protection
bgs	Below ground surface
BLM	Bureau of Land Management
BMP	Best Management Practice
B.P.	Before Present
BTU	British thermal unit
C_2Cl_4	perchloroethylene
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
C_2H_4O	acetaldehyde
C_4H_6	1,3-butadiene
C_6H_6	benzene
CA	California
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAB	California Architects Board
CadnaA	Computer Aided Noise Abatement
cal	calibrated
CalARP	California Accidental Release Prevention
CalEnviroScreen	California Communities Environmental Health Screening Tool Version 3.0
CalEPA	California Environmental Protection Agency
CalFire/CAL FIRE	California Department of Forestry and Fire Protection
Cal-IPC	California Invasive Plant Council
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CALGreen Code	California Green Building Standards Code
Cal OES	Governor's Office of Emergency Services

CalRecycle	California Department of Resources Recycling and Recovery
CalSTA	California State Transportation Agency
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPP	Community Air Protection Program
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBECC	California Building Energy Code Compliance
CBSC	California Building Standards Code
CBSC	California Building Standards Commission
CCAA	California Clear Air Act
CCR	California Code of Regulations
CCRUS	Carbon Capture, Removal, Utilization and Storage
CCUS	carbon capture, utilization, or storage
CDC	California Department of Conservation
CDCA	California Desert Conservation Area
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CDNPA	California Desert Native Plants Act
CDR	carbon dioxide removal
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFCs	Chlorofluorocarbons
CF_4	Tetraflouromethane
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGC	California Government Code
CGS	California Geologic Survey
CH_4	Methane
CH_2O	formaldehyde
CH_3CF_2	1,1-difluoroethane
CH_2FCF	1,1,1,2-tetrafluoroethane
CHF_3	fluoroform
CHP	California Highway Patrol
CHSRA	California High-Speed Rail Authority
CII	commercial, industrial and institutional
City	City of Palmdale
CIWMB	California Integrated Waste Management Board

CIWMP	Countywide Integrated Waste Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COG	Council of Governments
COH	coefficient of haze
COHb	carboxyhemoglobin
COPSM	County of Palmdale Public Works, Sewer Maintenance Division
CPEP	Clean Power and Electrification Pathway
CPUC	California Public Utilities Commission
CREC	controlled recognized environmental condition
CRHR	California Register of Historical Resources
CRI	Cultural Resources Investigation
CRNA	California Natural Resources Agency
CRPR	California Rare Plant Rank
Cr(VI)	hexavalent chromium
CTC	California Transportation Commission
CTP	Clean Truck Program
CTR	California Toxics Rule
CUPA	California Unified Program Agency
CWA	Clean Water Act
CWC	California Water Code
cy	Cubic Yards
CZ	Clear Zone
dB	Decibel
dBA	A-weighted Decibels
DF	Design Features
DIF	Development Impact Fee
DIVCA	Digital Infrastructure and Video Competition Act
DMM	Demand Measurement Measures
DMV	Department of Motor Vehicles
DNL	day-night average A-weighted sound level
DOE	Determination of Eligibility
DOE	United States Department of Energy
DOF	Department of Finance
DOSH	Division of Occupational Safety and Health
DPM	Diesel Particulate Matter

DRRP	Diesel Risk Reduction Plan
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EC	elemental carbon
EDD	Employment Development Department
EI	Expansion Index
EIA	Energy Information Administration
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMFAC	Emission Factor Model
EMPFX	Employment Flex
EO	Executive Order
EO S-01-07	Executive Order S-01-07, Low Carbon Fuel Standard
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-To-Know Act
EPS	Emission Performance Standard
ERO	Electric Reliability Organization
ESA	Endangered Species Act
ESA	Phase I Environmental Site Assessment
ESFR	Early Suppression, Fast Response (fire sprinkler system)
et seq.	*et sequentia*, meaning "and the following"
ETW	equivalent test weight
EV	Electric Vehicle
F	Fahrenheit
FAA	Federal Aviation Administration
FAR	floor area ratio
FAUNMAP	The Quaternary Faunal Mapping Project
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FGC	Fish and Game Code
FHWA	Federal Highway Administration
FIMA	Federal Insurance and Mitigation Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FRA	Federal Responsibility Area
ft	feet
ft^3/s	cubic feet per second
FTA	Federal Transit Administration

FY	Fiscal Year
FYI	For Your Information
GCC	Global Climate Change
Gg	Gigagram
GHG	Greenhouse Gas
GHGA	Greenhouse Gas Analysis
GOBiz	Governor's Office of Business and Economic Development
GPA	General Plan Amendment
gpd	Gallons per Day
gpm	Gallons per minute
GSA	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
GVWR	Gross Vehicle Weight Rating
GWh	gigawatt hours
GWP	Global Warming Potential
GWTS	Groundwater Treatment System
HAPs	hazardous air pollutants
HBW	home-based work
HCD	Department of Housing and Community Development
HCP	Habitat Conservation Plan
HDC	High Desert Corridor
HDT	heavy duty truck
HFCs	Hydrofluorocarbons
HFC	Hydrofluorocarbons
HFC-23	Fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
HHD	heavy-heavy duty trucks
HHDT	heavy-heavy duty trucks
HI	Hazard Index
HMBEP	Hazardous Materials Business Emergency Plan
HMIS	Hazardous Materials Inventory Statements
HMMD	Hazardous Materials Management Division
HMMP	Hazardous Materials Management Plan
HMTA	Hazardous Materials Transportation Act
HMTUSA	Hazardous Materials Transportation Uniform Safety Act
Hp	horsepower
Hp-hr-gal	horsepower hour per gallon
HRA	Health Risk Assessment
HREC	historical recognized environmental condition

HSC	Health and Safety Code
HSR	High-Speed Rail
HSWA	Hazardous and Solid Waste Amendments
HWCL	Hazardous Waste Control Law
I	Interstate
i.e.	that is
IBank	California Infrastructure and Economic Development Bank
IEPR	Integrated Energy Policy Report
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Planning
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
IRP	Installation Restoration Program
ITIP	Interregional Transportation Improvement Plan
ITP	incidental take permit
ITS	intelligent transportation systems
IWMA	Integrated Waste Management Act of 1989
IWMP	Integrated Waste Management Plan
JPA	Joint Powers Authority
KEC	KEC Engineers, Inc.
kWh	kilowatt-hour
LACC	Los Angeles County Code
LACFD	Los Angeles County Fire Department
LACM VP	LA County Museum Vertebrate Paleontology
LACPW	Los Angeles County Public Works
LACSD	Los Angeles County Sanitation District
LACSD	Los Angeles County Sheriff Department
LACWD	Los Angeles County Waterworks District
LACWD 40	Los Angeles County Waterworks District No. 40
LADWP	Los Angeles Department of Water and Power
LBNL	Lawrence Berkley National Laboratory
lbs	pounds
lbs/day	pounds per day
LCD	liquid crystal display
LCFS	low carbon fuel standard
LDA	Light duty autos

LDT1	light duty trucks 1
LDT2	light duty trucks 2
Leq	equivalent continuous noise level
LHDT1	light-heavy duty trucks 1
LHDT2	light-heavy duty trucks 2
LHMP	Local Hazard Mitigation Plan
LI	Light Industrial
LID	Low Impact Development
LOS	Level of Service
LRA	local responsibility area
LRWQCB	Lahontan Regional Water Quality Control Board
LSA	Lake and Streambed Alteration
LSD	Lancaster School District
LTF	Local Transportation Fund
Lw	sound power level
LWRP	Lancaster Water Reclamation Plant
M^3	Cubic Meter
M-2	General Industrial zone
MBTA	Migratory Bird Treaty Act
MCY	motorcycle
MDAB	Mojave Desert Air Basin
MDP	Master Drainage Plan
MDV	medium duty vehicles
MEISC	maximally exposed individual school child
MEIR	maximally exposed individual receptor
MEIW	maximally exposed individual worker
MEP	maximum extent practicable
Metro	Los Angeles County Metropolitan Transportation Authority
mg	milligrams
MG	million gallons
mgd	million gallons per day
MGS	Mohave ground squirrel
MHD	medium-heavy duty truck
MHDT	medium-heavy duty truck
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMTs	million metric tons
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
mpg	miles per gallon
Mph	Miles per hour

MPO	Metropolitan Planning Organization
MPO/RTPA	Metropolitan Planning Organizations/Regional Transportation Planning Agencies
MRZ	Mineral Resource Zone
MRR	Mandatory Reporting Rule
MS4	Municipal Separate Storm Sewer System
MT	metric ton
MT/yr	metric ton per year
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalent
MWELO	Model Water Efficient Landscape Ordinance
N/A	Not Applicable
N_2	Nitrogen
n.d.	no date
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
NDA	No Development Alternative
NDC	nationally determined contributions
NERC	North American Electric Reliability Corporation
NESHAP	National Emission Standards for Hazardous Air Pollutants
NF_3	nitrogen trifluoride
NF_6	sulfur hexafluoride
NFIP	National Flood Insurance Program
NHL	National Historic Landmark
NHMLAC	National History Museum of Los Angeles County
NIOSH	National Institute for Occupational Safety and Health
No.	Number
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
N_2	Nitrogen
N_2O	Nitrous Oxide
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
n.p.	No page
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NPS	Non-point source
NRHP	National Register of Historic Places
NTR	National Toxics Rule
NVIA	Noise and Vibration Impact Assessment

O_2	Oxygen
O_3	Ozone
OBD-II	On-Board Diagnostic
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OFX	Office Flex
OHWM	Ordinary High Water Mark
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
Ord.	Ordinance
OSHA	Occupational Safety and Health Act
OSHA	Occupational Safety and Health Administration
PA	Program Agency
Pb	Lead
PBDB	Paleobiology Database
PCBs	Polychlorinated biphenyls
PCEs	Passenger Car Equivalents
PFCs	Perfluorocarbons
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (2.5 microns or smaller)
PM_{10}	Fine Particulate Matter (10 microns or smaller)
PMC	Palmdale Municipal Code
POLA	Port of Los Angeles
POLB	Port of Long Beach
ppb	parts per billion
ppm	parts per million
pp.	pages
ppt	parts per trillion
PPV	peak particle velocity
PRC	Public Resources Code
PRMMP	Paleontological Resources Mitigation and Monitoring Plan
PRPA	Paleontological Resources Preservation Act
PRWAP	Palmdale Regional Water Augmentation Project
PSD	Palmdale School District
psi	per square inch
PV	photovoltaic
PWD	Palmdale Water District
PWL	Power Level
PWRP	Palmdale Water Reclamation Plant

Qa	surficial sediments
R&D	research and development
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
Rd.	Road
REC	Recognized environmental condition
REL	Reference Exposure Level
RFG-2	Reformulated Gasoline Regulation
RHNA	The SCAG Regional Housing Needs Assessment
RMP	Risk Management Plan
ROG	reactive organic gases
ROW	Right-of-Way
RPS	Renewable Portfolio Standards
RPZ	Runway Protection Zone
RR	Regulatory Requirement
RTIP	regional transportation improvement plan
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SB 1	Senate Bill 1, Road Repair and Accountability Act of 2017
SB 18	Senate Bill 18, Traditional Tribal Cultural Places Act, 2004
SB 50	Senate Bill 50, Leroy F. Greene School Facilities Act
SB 325	Senate Bill 325, Mills-Alquist-Deddeh Act
SB 350	Senate Bill 350, Clean Energy and Pollution Reduction Act of 2015
SB 375	California Senate Bill 375, Sustainable Communities and Climate Protection Act of 2008
SB 535	Senate Bill 53, Disadvantaged Communities
SB 1000	California Senate Bill 1000, Environmental Justice in Local Land Use Planning of 2016
SB 1020	Senate Bill 1020, Clean Energy, Jobs and Affordability Act of 2022
SB 1078	Senate Bill 1078, Renewable Portfolio Standards
SB 1374	Senate Bill 1374, Construction and Demolition Waste Materials Diversion Requirements
SB 2095	Senate Bill 2095, Water Recycling Landscaping Act
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center

SCE	Southern California Edison
SCG	Southern California Geotechnical
SCH	California State Clearinghouse (Office of Planning and Research)
SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SDNHM	San Diego Natural History Museum
SDWA	Safe Drinking Water Act
SED	socio-economic data
SF_6	Sulfur Hexafluoride
SF/s.f.	square foot or square feet
SFP	School Facilities Program
SGC	Strategic Growth Council
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Office
SHRC	State Historical Resources Commission
SIP	State Implementation Plan
SLCP	Short-Lived Climate Pollutants
SLF	Sacred Lands File
SLPS	Short-Lived Climate Pollutant Strategy
SNUR	Significant New Use Rule
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SOC	Statement of Overriding Considerations
SoCalGas	Southern California Gas Company
SORE	small off-road engines
SP	service population
SP	Specific Plan
sp	species
spp	multiple species
SPR	Site Plan Review
SPRR	Southern Pacific Railroad
SR	State Route
SRA	State responsibility area
SSC	species of special concern
SSMP	Sewer System Management Plan
STA	State Transit Assistance
STIP	Statewide Transportation Improvement Plan
SUSMP	Standard Urban Stormwater Management Plan
SVP	Society of Vertebrate Paleontology
SWITRS	Statewide Integrated Traffic Records System

SWMP	Stormwater Management Plan
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWRCC	Southwest Regional Council of Carpenters
TAC	Toxic Air Contaminants
TBD	To be determined
TCRs	Tribal Cultural Resources
TDA	Transportation Development Act
TDM	transportation demand management
TEA-21	Transportation Equality Act for 21st Century
tpd	tons per day
TPM	tentative parcel map
tpy	tons per year
TRUs	Transportation Refrigeration Units
TSCA	Toxic Substances Control Act
TSF	Thousand Square Feet
µg	microgram
µg/m^3	microgram per cubic meter
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology
UPA	Unified Program Agency
UPL	Upland
UPRR	Union Pacific Railroad
U.S.	United States
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USCB	United States Census Bureau
USDA	U.S. Department of Agriculture
U.S. DOE	United States Department of Energy
U.S DOT	United States Department of Transportation
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United Stated Geological Survey
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Plan Act
VCP	vitrified clay pipe
VdB	vibration decibel notation
VDE	visible dust emissions

VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VPH	Vehicles per Hour
WAIRE	Warehouse Actions and Investments to Reduce Emissions
WDR	Water discharge report
WDRs	Waste Discharge Requirements
WestLAND	WestLand Group, Inc.
WMI	Watershed Management Initiative
WOTUS	Waters of the United States
WRI	World Resources Institute
WRP	Water Reclamation Plant
WRRA	Water Reuse and Recycle Act
WSA	Water Supply Assessment
WUCOLS	Water Use Classification of Landscape Species
yr	year
ZC	Zone Change
ZE/NZE	zero and near-zero emission
ZEV	zero-emission vehicles
ZORI	Zones of Required Investigation

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000, *et seq.* requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment. This Executive Summary complies with CEQA Guidelines Section 15123, "Summary." Included are a concise description of the proposed Pacific Palmdale Project, a summary of the physical environmental effects that could result from its implementation, a list of the mitigation measures that would be imposed by the City of Palmdale with resulting significance conclusions regarding environmental effects, and a summary of alternatives to the Project that would avoid or lessen the significant environmental effects.

This Environmental Impact Report (EIR), having California State Clearinghouse (SCH) No. 2025020362 was prepared in accordance with CEQA Guidelines Article 9, Sections 15120-15132 to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Project. The Project entails the proposed development of approximately 67 gross acres of vacant land located directly north of West Rancho Vista Boulevard / East Avenue P; directly east of Division Street; approximately 0.75-mile south of East Avenue O; and approximately 0.01-mile west of Sierra Highway. The Project site is located approximately 0.03-mile east of Sierra Highway and approximately 0.51 miles east of State Route 14 (SR-14). The Project site is located approximately 1.8-miles (9,504 feet) southwest of Runway 7 of USAF Plant 42.

The entitlement applications filed by the Project Applicant with the City of Palmdale pertaining to the proposed Project include the following:

- **Tentative Parcel Map 84510** to consolidate the Project site into one parcel to facilitate its development;

- **Site Plan Review 24-0021** pertaining to the development of a proposed industrial warehouse distribution building and supporting infrastructure; and

- **Conditional Use Permit CUP 25-0006** to allow the proposed building to exceed 50 feet in height per Palmdale Municipal Code Table 17.65.020-1. The maximum height of the proposed building's roofline is approximately 59 feet 8 inches**.**.

These actions and the physical and operational aspects of the Project's construction and operation are more fully described in Section 3.0, *Project Description.*

The warehouse distribution building would have a total of 148 docking doors for trucks, with 74 doors on the northern side of the building and 74 doors on the southern side of the building. Access to the building would be accommodated via two driveways along Division Street, one driveway along West Rancho Vista Boulevard/East Avenue P, and two driveways along proposed Avenue O-12.

As part of the Project, a drainage basin is proposed in the southeastern portion of the Project site. Other site features include landscaping, lighting, and paved areas for vehicle movement and parking.

The City of Palmdale determined that the scope of this EIR should cover 16 subject areas. The scope includes all of the subject areas listed in Appendix G to the CEQA Guidelines that the City determined could be significantly and adversely affected by the Project, taking into consideration public comment received by the City in response to this EIR's Notice of Preparation (NOP) and comments made at the EIR's Scoping Meeting. The 16 environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

1. Aesthetics
2. Air Quality
3. Biological Resources
4. Cultural Resources
5. Energy
6. Geology / Soils
7. Greenhouse Gas Emissions
8. Hazards and Hazardous Materials
9. Hydrology / Water Quality
10. Land Use and Planning
11. Noise
12. Public Services
13. Transportation
14. Tribal Cultural Resources
15. Utilities / Service Systems
16. Wildfire

Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. For each of the aforementioned subject areas, this EIR: 1) describes the physical conditions that existed at the approximate time this EIR's NOP was filed with the California State Clearinghouse (February 2025); 2) discloses the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that would reduce or avoid significant adverse environmental impacts that the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures that the City of Palmdale would impose on the Project to lessen or avoid those impacts is included in this Executive Summary as Table S-1. The City of Palmdale applies mitigation measures that it determines: 1) are feasible and practical for project applicants to implement; 2) are feasible and practical for the City of Palmdale to monitor and enforce; 3) are legal for the City of Palmdale to impose; 4) have an essential nexus to the Project's impacts; and 5) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to impose mitigation measures that are duplicative of project design features or mandatory regulatory requirements.

S.2 PROJECT SITE LOCATION AND REGIONAL SETTING

The Project site encompasses approximately 67 gross acres of vacant land and is located within the City of Palmdale, California, which is located within the Antelope Valley portion of Los Angeles County. Los Angeles County abuts Ventura County to the west, Kern County to the north, San Bernardino County to the east, and Orange County to the south. The Antelope Valley is located in the northern portion of Los Angeles County and is disconnected from the Southern California coastal and Central California valley regions by the Tehachapi Mountains to the northwest and by the San Gabriel Mountains to the south.

The vacant 67-acre Project site is located within the central portion of the City of Palmdale. Communities surrounding the City include the City of Lancaster and the unincorporated community of Quartz Hill to the north, as well as other unincorporated communities such as Lake Los Angeles to the east; Sun Village, Littlerock, and Pearblossom to the southeast; Acton to the south; Agua Dulce to the southwest; and Leona Valley to the west. The Project site is located approximately 0.01-mile west of Sierra Highway and 0.71-mile east of State Route 14 (SR-14).

The census tract containing the Project site (Census Tract 6037910201) is reported by CalEPA's Office of Environmental Health Hazard Assessment (OEHHA) using the OEHHA's California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0), and ranks in the 67th percentile of communities that are disproportionately burdened by multiple sources of pollution (OEHHA, 2023). The Project site is not located in a SB 535 Disadvantaged Community identified by the CalEPA.

S.3 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires a statement of project objectives. The underlying purpose and goal of the proposed Project is to accomplish the development of vacant property with an economically viable, employment-generating use that is compatible with the property's General Plan designation and zoning classification. This underlying goal aligns with various aspects of the SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); also referred to as "Connect SoCal"), particularly the facilitation of goods movement industries and the generation of local employment opportunities that can reduce the need for long commutes to and from work. The following objectives are intended to achieve these underlying purposes:

A. To develop a cross-dock industrial warehouse that attracts industrial users to the City of Palmdale;

B. To diversify the mix of developed land uses in the City of Palmdale to support the growing goods movement supply chain;

C. To develop supply chain uses in close proximity to designated truck routes and the State highway system to avoid or shorten vehicular trip lengths on other roadways;

D. To expand economic development, facilitate job creation, and increase the tax base for the City of Palmdale by accommodating and diversifying facilities needed to support the goods movement supply chain;

E. To attract new employment-generating businesses in the City of Palmdale, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment; and

F. To develop a property that has access to available infrastructure, including roads and utilities.

S.4 Areas of Controversy and Issues to be Resolved

CEQA Guidelines Section 15123(b)(2) requires the Lead Agency (City of Palmdale) to identify any known issues of controversy in the Executive Summary. The Lead Agency has not identified any issues of controversy. Notwithstanding, the Lead Agency has identified several issues of local concern including impacts to greenhouse gas emissions among others listed in Table 1-1 in Section 1.0, *Introduction.*

S.5 Project Alternatives

S.5.1 No Development Alternative

The No Development Alternative (NDA), which serves as the "No Project Alternative" considers no development on the Project site beyond what occurs on the site under existing conditions. Under this Alternative, the 67 gross-acre vacant undeveloped site would remain undeveloped for the foreseeable future and would be subject to routine maintenance for weed abatement. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

S.5.2 Reduced Building size and Trailer Lot Alternative

The Reduced Building Size and Trailer Lot Alternative (RBSTLA) considers a scenario where the Project site would be developed with two uses: one non-refrigerated high-cube fulfillment warehouse and a trailer parking lot. Under this alternative, a 500,000 s.f. warehouse building (including related site improvements such as paved areas for vehicle movement and parking, landscaping, and public utility connections, as described in EIR Section 3.0, Project Description) would be developed on the western portion of the Project site and a trailer parking lot would be developed on the eastern portion of the Project site. The building would include 490,000 s.f. of warehouse space and 10,000 s.f. of office space for a total of 500,000 s.f. of building area. One detention basin would be provided near the southeastern corner of the site, north of the future grade separator. A 28-foot fire lane would be provided around the perimeter of the building. The building would have a total of 74 dock and 314 parking stalls for passenger vehicles, electric vehicles, and accessible parking and a total of 733 truck trailer parking stalls. Access to the Project site would be accommodated by five driveways; two driveways connecting with Division Street, two driveways connecting with Avenue O-12, and one

driveway connecting with West Rancho Vista Boulevard / East Avenue P. The central driveway on Division Street would accommodate access for passenger vehicles only. All other driveways would accommodate access for both passenger vehicles and trucks. The driveway on West Rancho Vista Boulevard / East Avenue P and the proposed southern driveway on Division Street would be restricted access (right-in/right-out only) because medians restricting left turns would be installed as part of the Project along West Rancho Vista Boulevard / East Avenue P and Division Street. Under this alternative, the proposed building would be reduced in size and a truck trailer parking yard to service the building would be developed. This alternative was selected to evaluate a scenario that would reduce the total building area on the Project site relative to the proposed Project but still allow industrial use of the entire Project site and accommodate a building user that requires a substantial amount of on-site truck trailer storage space.

S.5.3 Trailer Lot Alternative

The Trailer Lot Alternative (TLA) considers a scenario where the Project site is developed as a truck and trailer parking lot, accommodating approximately 1,326 truck trailer parking spaces. The entire Project site would be developed for parking, and landscaping would occur around the perimeter of the site for screening purposes. This alternative was selected to evaluate a scenario that would allow productive industrial use of the entire site while not developing a building structure other than security booths at the entrance and exit gates.

S.6 EIR Process

This EIR has been prepared as a Project EIR pursuant to CEQA Guidelines Section 15161. As described by CEQA Guidelines Section 15161, a Project EIR is the most common type of EIR that: 1) examines the environmental impacts of a specific development project; 2) focuses primarily on the changes in the environment that would result from the development of the project; and 3) examines all phases of the project, including planning, construction, and operation.

This Draft EIR will be available for public review and comment for a minimum of 45 days. Following public review, the City of Palmdale will prepare responses to written comments concerning environmental topics and publish a Final EIR. Before taking action to approve the Project, the City of Palmdale (serving as the CEQA Lead Agency) has the obligation to: 1) ensure this EIR has been completed in accordance with CEQA; 2) review and consider the information contained in this EIR as part of its decision-making processes; 3) make a statement that this EIR reflects the City of Palmdale's independent judgment; 4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary 5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines Sections 15090-15093).

S.7 SUMMARY OF IMPACTS, MITIGATION MEASURES AND CONCLUSIONS

S.7.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

The scope of detailed analysis in this EIR includes 16 subject areas prepared pursuant to CEQA Guidelines Section 15063 and CEQA Statute Section 21002(e). An Initial Study was not prepared for the proposed Project because the City determined that an EIR was required, although the Project's NOP did scope out certain issue areas from detailed environmental review. The NOP and public comments received in response to the NOP and scoping meetings, are attached to this EIR as *Technical Appendix A*. Subject areas for which the City concluded that impacts clearly would be less than significant and that do not warrant detailed analysis in this EIR include agriculture and forestry resources; mineral resources; population and housing; and recreation. This EIR addresses these four topics in EIR Section 5.0, *Other CEQA Considerations*.

S.7.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS OF THE PROPOSED PROJECT

Table S-1, *Summary of Impacts, Mitigation Measures*, *and Conclusions*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines Section 15123(a). Also presented are the mitigation measures recommended by the City of Palmdale to further avoid adverse environmental impacts or to reduce their level of significance. After the application of all feasible mitigation measures within the City of Palmdale's jurisdictional authority, the Project would result in the following significant and unavoidable environmental effects.

- Greenhouse Gas Emissions (Threshold a): Significant Unavoidable Cumulatively Considerable Impact. Mitigation measures are required to minimize operational-related GHG impacts. Most GHGs associated with the Project are generated by on-road vehicles, diesel-fueled off-road forklifts, and energy sources. Mitigation Measure AQ MM-4 requires measures to minimize on-road vehicle emissions, including the provision of EV charging stations and electrical hookups for TRUs. Mitigation Measure AQ MM-5 includes the requirement for all off-road forklifts and landscaping equipment to be zero emission, which would reduce the long-term criteria air pollutant emissions substantially. Mitigation Measure AQ MM-7 requires the warehouse building to be all-electric (i.e., no natural gas). Finally, implementation of Mitigation Measure GHG MM-1 through Mitigation Measure GHG MM-3 would reduce GHG emissions associated with renewable/energy efficiency, solid waste disposal, and water conservation. As shown previously on Table 4.7-8, *Project GHG Emissions Summary (With Mitigation),* after implementation of feasible mitigation measures, the Project's greenhouse gas emissions are calculated to be 13,990.65 MT CO_2e per yr. Thus, the proposed Project's GHG emissions would exceed the SCAQMD screening threshold of 3,000 MTCO_2e per year after mitigation. Although mobile vehicles (82 percent) are the main source of GHG emissions associated with Project operations, neither the Project Applicant nor the City can substantively or materially affect reductions in the Project's on-road mobile source emissions beyond what is already required by federal and State regulation. No feasible mitigation measures beyond those already identified exist that would reduce these emissions to levels that are less than significant. Therefore, even with the incorporation of mitigation measures, long-term

impacts associated with a cumulatively considerable increase in GHG emissions would be significant and unavoidable.

Table S-1 Summary of Impacts, Mitigation Measures and Conclusions

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.1 Aesthetics					
Summary of Impacts					
Threshold a: The Project site does not comprise a scenic vista and no unique views to scenic vistas are visible from the property that are not also visible from other areas surrounding the site. The Project would not substantially change a scenic vista or substantially block or obscure a scenic vista; therefore, because the Project would not have a substantial adverse effect on a scenic vista, no impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold b: Because the Project site is not located within a State scenic highway, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; therefore, no impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold c: The Project site is located within an urbanized area. Because the Project would not conflict with applicable zoning and other regulations governing scenic quality either during short-term construction or long-term operation of the Project, impacts would be less than significant, and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold d: Project-related development would not create substantial light or glare. Compliance with the PMC would ensure that implementation of the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Impacts would be less than significant and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.2 Air Quality					
Summary of Impacts					
Threshold a: During construction of the Project, prior to mitigation, the Project's daily construction emissions would exceed the AVAQMD thresholds for VOC and NO_X. Project operations, prior to mitigation, would exceed the AVAQMD daily threshold for NO_X. Therefore, prior to mitigation, the Project has the potential to conflict with the AVAQMD AQMP during both construction and operational activities, resulting in a significant direct and cumulatively considerable impact. As shown in Table 4.2-13, Emissions Summary of Construction (With Mitigation), with the implementation of Mitigation Measures, emissions resulting from construction of the Project would be reduced and would not exceed criteria pollutant thresholds established by the AVAQMD for emissions of any criteria pollutant. Accordingly, direct and cumulative impacts would be less than significant. Therefore, with implementation of the mitigation measures, construction activities associated with the Project would not result in a cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard. As shown in Table 4.2-14, Summary of Peak Operational Emissions (With Mitigation), with the implementation of Mitigation Measures, NOx emissions resulting from operation of the Project	**AIR MM-1** The Project shall utilize "Super-Compliant" low-volatile organic compound (VOC) paints that have been reformulated to exceed the regulatory VOC limits put forth by Antelope Valley Air Quality Management District's (AVAQMD's) Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the Project Applicant shall utilize tilt-up concrete buildings that do not require the use of architectural coatings or limit the volume of Rule 1113 compliant interior and exterior building coatings to 126 gallons per day and 42 gallons per day, respectively. **AIR MM-2** The following measures shall be implemented to reduce off-road equipment exhaust during construction: • During construction of the Project, all internal combustion engines/construction equipment greater than 75 horsepower operating on the Project site shall meet U.S. Environmental Protection Agency (EPA)-compliant Tier 4 Final emissions standards. The Project Applicant or successor in interest shall include this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. Successful contractors must demonstrate the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. An exemption from these requirements may be granted by the City of Palmdale if the Project Applicant or successor in interest documents that equipment with the required tier is not reasonably available	Project Applicant; Construction Contractor(s) Project Applicant or successor in interest	City of Palmdale or its designee City of Palmdale or its designee	During Project construction activities During Project construction activities	Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
would be reduced and would not exceed the threshold established by the AVAQMD. Therefore, impacts would be less than significant with incorporation of mitigation measures.	and corresponding reductions in criteria air pollutant emissions and diesel particulate matter emissions are achieved from other means, such as using construction equipment with a combination of different tier ratings and/or by making adjustments in the number of pieces of simultaneously operating equipment or the duration of daily use, to ensure that AVAPCD daily emission thresholds are not exceeded. Before an exemption may be considered by the City of Palmdale, the Project Applicant or successor in interest shall be required to demonstrate that at least two construction fleet owners/operators in the air basin were contacted and that those owners/operators confirmed Tier 4 Final compliant equipment could not be feasibly obtained within the air basin for use on the Project site. • After the grading phase of Project construction, and pursuant to permission from the utility provider, the Project Applicant or successor in interest shall provide temporary electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors. The use of diesel-fueled generators for on-site construction activities shall be prohibited unless electrical infrastructure to power an electric generator is not yet available on the Project site. Diesel-fueled generators may be used for off-site construction work. All off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during Project construction must be electric-powered.				

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	The Project Applicant or successor in interest shall include these requirements in applicable bid documents, purchase orders, and contracts with successful contractors. • The idling of heavy construction equipment for more than 5 minutes shall be prohibited. Signage shall be posted throughout the construction site informing construction personnel of the idling time limit. Idling time limits shall be noted in construction specifications.				
	AIR MM-3 In compliance with all applicable Rules and Regulations of the AVAQMD, including, but not limited to Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust). To ensure compliance with these Rules and Regulations, the Project Applicant or successor in interest shall prepare and submit a Dust Control Plan to the AVAQMD for approval. The Dust Control Plan shall document the best management practices (BMPs) that will be implemented during project construction to prevent, to the maximum extent practicable, wind and soil erosion. BMPs that will be included in the Dust Control Plan shall include, but are not limited to, covering soil stockpiles when not in use, application of water or soil stabilizers to all disturbed areas so that no visible fugitive dust leaves the property line, and limiting vehicle speeds on unpaved roads to 25 miles per hour or less. On days when the hourly average wind speed for the Project site exceeds 20 miles per hour, additional dust control measures shall be implemented, such as increased surface watering. Grading and excavation shall be prohibited when sustained wind speed exceeds 30 miles per hour.	Project Applicant or successor in interest	City of Palmdale or its designee	Prior to issuance of a grading permit or any permit that authorizes ground disturbance; During Project construction activities	
	AIR MM-4 The Project shall implement the following measures in order to reduce operational mobile source air pollutant emissions to the extent feasible:	Project Applicant or successor in interest;	City of Palmdale or its designee	Prior to the issuance of an occupancy permit; Prior to	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	• Prior to issuance of a Certificate of Occupancy, Level 2 (or faster) electric vehicle (EV) charging stations shall be installed on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit application. In addition, the building shall include accommodations for electrical infrastructure sufficiently sized to facilitate the potential installation of additional auto and truck EV charging stations in the future. • Conduit shall be installed to tractor trailer parking areas in logical locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations. • All loading docks serving cold and/or refrigerated space shall have electrical hook-ups for transport refrigeration units (TRUs). • Provide tenants with information regarding funding opportunities that provide incentives for using cleaner-than-required engines and equipment, such as the Carl Moyer Program and Voucher Incentive Program, as well as the EPA SmartWay Program, which assists freight shippers, carriers, logistics companies, and other stakeholder partner with the EPA to measure, benchmark, and improve logistics operations and reduce air pollutant emissions from the transport of cargo. • For occupants with more than 250 employees, a Transportation Demand	Future Building Tenant(s)		tenant occupancy; During operation of the Project	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	management (TDM) Program to reduce employee commute vehicle emissions shall be established, subject to review and approval by the City of Palmdale. The Transportation Demand Management Plan shall apply to project tenants through tenant leases. The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. • Upon commencement of operation of the Project, the tenant/operator of the building shall be required to post signs restricting truck idling onsite to a maximum of three (3) minutes, subject to exceptions defined by the California Air Resources Board's (CARB) commercial vehicle idling requirements. The building manager or their designee shall be responsible for enforcing this requirement.				
	AIR MM-5 The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of the Project are informed of the following operational responsibility: • All equipment and appliances operating on the Project site other than emergency generators and pumps shall be zero-emission equipment. This requirement shall apply to indoor and outdoor equipment such as forklifts, handheld landscaping equipment, yard trucks, and office appliances. The building shall include the necessary charging stations or other necessary infrastructure for cargo handling equipment and shall be equipped	Project Applicant; Future Building Tenant(s)	City of Palmdale or its designee	Prior to issuance of certificate of occupancy	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	with outdoor electric outlets in appropriate locations to facilitate use of electrical lawn and garden equipment. The building manager or their designee shall be responsible for enforcing these requirements.				
	AIR MM-6 Any diesel-fueled emergency generators and fire pumps to be installed at the Project site shall be equipped with Tier 4 Final compliant engines.	Project Applicant	City of Palmdale or its designee	During Project construction activities	
	AIR MM-7 The building shall be 100% electric powered and the use of natural gas for building operations shall be prohibited.	Project Applicant; Future Building Tenant(s)	City of Palmdale or its designee	During operation of the Project	
	AIR DF-1 Water Conservation. To reduce water demands and associated energy use, the Project would implement a Water Conservation Strategy and demonstrate a minimum 20 percent (%) reduction in indoor and outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Prior to the issuance of a building permit for the Project, the Project Applicant shall provide building plans that include the following water conservation measures: • Install low-water use appliances and fixtures • Use low water use plant material to minimize irrigation needs • Limit the use of water for cleaning outdoor surfaces • Install rainwater collection systems where feasible.	Project Applicant	City of Palmdale or its designee	Prior to the issuance of building permits	
	AIR DF-2 Solid Waste Reduction. In order to reduce the amount of waste disposed at landfills, the Project would implement a 75 percent waste diversion program. Prior to the issuance of a building permits f,	Project Applicant	City of Palmdale or its designee	Prior to the issuance of building permits	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	the Project Applicant shall provide building plans that include the following solid waste reduction measures: • Provide storage areas for recyclables and green waste in new construction, and food waste storage, if a pick-up service is available. • Evaluate the potential for onsite composting.				
	AIR RR-1 The Project shall comply with the provisions of AVAQMD Rule 401, Visible Emissions, which requires that a person shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is: a. As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or **b.** Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (b)(1)(A) of Rule 401.	Project Applicant; Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	AIR RR-2 The Project shall comply with the provisions of AVAQMD Rule 402, Nuisance, which requires that a person shall not discharge air contaminants or other materials that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.	Project Applicant; Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	AIR RR-3 The Project shall comply with the provisions of AVAQMD Rule 403, Fugitive Dust, including the submission of the required Dust Control	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	Prior to issuance of a grading permit or any permit that authorizes	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	Plan and Construction Excavation Fee, by implementing the following dust control measures during construction activities, such as earth-moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the following notes shall be included on the grading plans. Project contractors shall be required to ensure compliance with the notes. The notes also shall be specified in bid documents issued to prospective construction contractors. • All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per AVAQMD guidelines in order to limit fugitive dust emissions, or water shall be applied to the soil not more than 15 minutes prior to moving such soil to limit Visible Dust Emissions (VDE) to 20 percent opacity. • The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered or subject to the application of dust suppressants sufficient to limit VDE to 20 percent opacity. • The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 mph or less.			ground disturbance; During Project construction activities	
	AIR RR-4 The Project shall comply with AVAQMD rules related to sulfur content in fuels, including Rule 431.1, Sulfur Content of Gaseous Fuels; Rule 431.2, Sulfur Content of Liquid Fuels; and Rule 431.3, Sulfur Content of Fossil Fuels.	Project Applicant; Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
Threshold b: During construction of the Project, prior to mitigation, the Project's daily construction emissions would exceed the AVAQMD thresholds for VOC and NO_X. Project operations, prior to	**AIR MM-1** through **AIR MM-7** shall apply.				Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
mitigation, would exceed the AVAQMD daily threshold for NO_X. Therefore, prior to mitigation, the Project has the potential to result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, resulting in a significant direct and cumulatively considerable impact. As shown in Table 4.2-13, Emissions Summary of Construction (With Mitigation), with the implementation of Mitigation Measures, emissions resulting from construction of the Project would be reduced and would not exceed criteria pollutant thresholds established by the AVAQMD for emissions of any criteria pollutant. Accordingly, direct and cumulative impacts would be less than significant. Therefore, with implementation of the mitigation measures, construction activities associated with the Project would not result in a cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard. As shown in Table 4.2-14, Summary of Peak Operational Emissions (With Mitigation), with the implementation of Mitigation Measures, NOx emissions resulting from operation of the Project would be reduced and would not exceed the threshold established by the AVAQMD. Therefore, impacts would be less than					

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
significant with incorporation of mitigation measures.					
Threshold c: The Project would not produce the volume of traffic required to generate a CO "hot spot" or result in a significant impact attributable to valley fever exposure. The Project would not result in a significant impact attributable to valley fever exposure based on its geographic location and compliance with the applicable regulatory standards. The DPM emissions from short-term construction plus long-term operations of the Project would result a Chronic Hazard Index below the 1.0 significance threshold; however, the Project would exceed the cancer risk threshold of 10 in one million; resulting in a significant direct and cumulatively considerable impact. Mitigation measures are required to minimize construction and operational health risk impacts. These mitigation measures would reduce DPM to the extent feasible, by requiring Tier 4 Final compliant engines for off-road equipment greater than 75 hp during construction (Mitigation Measure AIR MM-2), all operational cargo handling equipment to be zero-emission (Mitigation Measure AIR MM-5), and Tier 4 Final compliant engines for any emergency generators and fire pumps during operations (Mitigation Measure AIR MM-6). In addition, although not quantified, Mitigation Measure AIR MM-4 would also reduce DPM by requiring the installation of TRU electrical hook-ups at all cold storage loading docks, as well as supporting the future installation	**AIR MM-2** and **AIR MM-4** through **AIR MM-6** shall apply.				Less than Significant Impact with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
of heavy-duty truck charging stations. (Dudek, 2025a, p. 54) As shown in Table 4.2-15, Health Risk Assessment Results (With Mitigation), DPM emissions from short-term construction plus long-term operations of the Project would result in a Maximum Individual Cancer Risk of about 4.41 in 1 million and a Chronic Hazard Index of 0.0030 at the MEIR, which would not exceed the respective AVAQMD thresholds of significance. Therefore, impacts would be less than significant with incorporation of mitigation measures.					
Threshold d: The Project does not propose land uses typically associated with emitting objectionable odors. The proposed Project would be required to comply with AVAQMD Rule 402, Nuisance, to prevent occurrences of public nuisances. Therefore, odors associated with the construction and operation of the Project would be less than significant and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.3 Biological Resources					
Summary of Impacts					
Threshold a: The Project would result in significant, direct impacts to one listed special-status plant species (western Joshua Tree) and four special-status wildlife species (northern California legless lizard, California legless lizard, Blainville's horned lizard, and loggerhead shrike) that were observed or have a moderate potential to occur within the Study Area. Additionally, the Project would result in potentially significant impacts two special-status species that have a low potential to	**BIO MM-1 Western Joshua Tree Incidental Take Permit.** Mitigation for direct impacts to 543 western Joshua trees will be fulfilled through attainment of a Western Joshua Tree Conservation Act (WJTCA) Incidental Take Permit and a payment of the elected fees as described in Section 1927.3 of the WJTCA. In conformance with the reduced fee schedule prescribed for the Project area, mitigation will consist of payment of $1,000 for each western Joshua tree five meters or greater in height, $200 for each western Joshua tree less than five meters but greater than 1 meter in height; and $150 for each western Joshua tree less than one	Project Applicant	California Department of Fish and Wildlife (CDFW)	Prior to issuance of a grading or building permits or any permit that authorizes ground disturbance	Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
occur, Crotch's bumble bee and burrowing owl. With implementation of Mitigation Measures BIO MM-1 through BIO MM-9, direct and indirect impacts to the western Joshua tree would be reduced to less than significant. With implementation of Mitigation Measures BIO MM-2 through BIO MM-11, BIO MM-13, and BIO MM-14, the direct and indirect impacts of the Project to sensitive wildlife species would be reduced to less than significant.	meter in height. California Department of Fish and Wildlife (CDFW) determines the final fee. **BIO MM-2** Designated Biologist Authority. A qualified biologist (the "designated biologist") shall be retained by the Project applicant to monitor construction activities. The designated biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures recommended in the Project's Biological Resources Technical Report (Technical Appendix C) and/or to order any reasonable measure to avoid the unauthorized take of an individual western Joshua tree or other sensitive biological resources.	Project Applicant	City of Palmdale or its designee	During Project construction activities	
	BIO MM-3 Compliance Monitoring. The designated biologist shall be on site daily during construction activities that entail the removal of vegetation and ground disturbance activities. The designated biologist shall conduct compliance inspections to minimize incidental take of western Joshua trees and impacts to other sensitive biological resources; prevent unlawful take of western Joshua trees; ensure that signs, stakes, and fencing of the construction footprint are intact; and ensure that impacts are only occurring within the direct impact footprint. Weekly written observation and inspection records that summarize oversight activities, compliance inspections, and monitoring activities required by the CDFW-issued Joshua tree Incidental Take Permit shall be prepared.	Project Applicant; qualified professional biologist retained by the Project Applicant	CDFW	During Project construction activities	
	BIO MM-4 Education Program. A construction worker education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working in the Project site during vegetation removal and grading shall be administered before ground-disturbing impacts occur.	Construction Contractor(s) Supervisors; qualified biologist retained by the Project Applicant and	City of Palmdale or its designee	Prior to the initiation of ground-disturbing construction activities	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	The WEAP shall consist of a presentation from the designated biologist that includes a discussion of the biology and status of western Joshua tree, northern California legless lizard, California legless lizard, and Blainville's horned and loggerhead shrike, along with other relevant sensitive biological resources and the mitigation measures described in the Project's California Environmental Quality Act (CEQA) compliance document. Interpretation for non-English-speaking workers shall be provided, and the same instruction shall be provided to any new workers before they are authorized to perform vegetation removal and ground-disturbing work in the Project area. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for construction employees who will be conducting Project-related construction work.	Construction Contractors			
	BIO MM-5 Construction Monitoring Notebook. The designated biologist shall maintain a construction monitoring notebook on site throughout the construction period, which shall include a copy of the biological resources mitigation measures, permits, and a list of signatures of all personnel who have successfully completed the education program. The notebook will include a sign-off date page for the designated biologist to sign and date each construction date for which the Project is in compliance. The Project applicant or its successor in interest shall ensure that a copy of the construction monitoring notebook is available for review at the Project site upon request by the CDFW.	Project Applicant; qualified professional biologist retained by the Project Applicant	CDFW	During Project construction activities	
	BIO MM-6 Delineation of Property Boundaries. Before beginning activities that would cause vegetation removal or other ground-disturbing impacts, the contractor shall, in consultation with the	Qualified biologist retained by the Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	Prior to initiation of vegetation clearing/ground-disturbing activities	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	designated biologist, clearly delineate the boundaries of approved ground disturbance with fencing, stakes, or flags, consistent with the grading plan. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area.				
	BIO MM-7 Invasive Plant Management. To reduce the spread of invasive plant species, landscape plants within 200 feet of native vegetation communities shall not be on the most recent version of the Cal-IPC California Invasive Plant Inventory (http://www.cal-ipc.org/ip/inventory/index.php). Prior to the installation of landscaping, the City of Palmdale shall review and approve the Project's landscaping plan and verify that the prohibited plants will not be installed within 200 feet of native communities, and the City also shall conduct a site inspection after the landscaping has been installed and prior to issuance of a building occupancy permit to verify that the prohibited plants were not installed. Post-construction, the applicant, its successor in interest, or the building occupant shall be responsible for annual removal of invasive plant species on site by hand or mechanical methods, as feasible.	Project Applicant or Successor in interest; qualified professional biologist; Building Tenant(s)	City of Palmdale or its designee	Prior to City approval of landscaping plan; Prior to issuance of a building occupancy permit	
	BIO MM-8 Hazardous Waste. Construction contractors shall immediately stop work and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Post-construction, the building user shall be responsible for compliance with the same requirements.	Construction Contractor(s); State and Federal entities; Building Tenant(s)	City of Palmdale or its designee	Immediately following any occurrence of hazardous waste spills on the site	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	BIO MM-9 Herbicides. Herbicide use on the site for invasive plant species control shall be limited and herbicides should only be used if it has been determined that hand or mechanical efforts are infeasible. To prevent drift, herbicides shall only be applied when wind speeds are less than 7 miles per hour. These requirements shall be made provisions of the Project's construction contracts, landscape installation, and maintenance contracts, and building occupant leases, subject to verification by the City of Palmdale upon request. All herbicide application shall be performed by a licensed applicator and in accordance with all applicable federal, State, and local laws and regulations.	Project Applicant or Successor in interest; qualified professional biologist; Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	BIO MM-10 Pre-Construction Crotch's Bumble Bee Survey and Potential Incidental Take Permit. If Crotch's bumble bee is still a candidate for listing under the California Endangered Species Act or has been listed, a pre-construction survey for the species shall be conducted within the construction footprint prior to the start of initial vegetation removal or initial grading activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area. The pre-construction survey shall include 1) a habitat assessment and 2) focused surveys, both of which will be based on recommendations described in the "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species," released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The habitat assessment and focused surveys will be performed by a biologist with a California Department of Fish and Wildlife-issued Scientific Collecting Permit for handling Crotch's bumble bee.	Project Applicant; professional qualified biologist retained by the Project Applicant	City of Palmdale or its designee	During the Crotch's bumble bee nesting period; Prior to initiation of ground clearing or grading activities	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat onsite including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and man-made structures that may support bumble bee colonies such as rock walls, rubble, and furniture. If nesting resources are present in the impact area, focused surveys will be conducted. The focused survey will include at least three (3) survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys shall coincide with the Colony Active Period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys will not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors will wait at least 1 hour following rain. Optimal survey conditions are when there are sunny to partly sunny skies with temperatures that are greater than 60° Fahrenheit. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). The qualified biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the qualified biologist shall watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. The qualified biologist should be able to view several				

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the qualified biologist regarding the actual survey viewshed limits from the chosen vantage point which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). Identification will include the qualified biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographically documented. The bee will be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container will be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, bees become active shortly after removal from the cold environment, so photography must be performed quickly. If Crotch's bumble bee nests are not detected, no further mitigation shall be required, and no additional surveys shall be needed if construction begins within 14 days of the last survey for a given phase area. If				

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	construction in a given phase area does not start within 14 days of the last survey, or if construction in a given phase area stops for 14 days or longer, surveys shall be repeated if construction re-commences between February 1 and October 31. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a City-approved qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources. A written survey report will be submitted to the City within 30 days of the pre-construction survey and shall be reviewed and approved by the City before the start of grading and construction activities. The survey report shall also be submitted to CDFW within the same timeframe for its consideration and action in accordance with applicable laws and regulations. The report will include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report will include the				

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	qualifications/resumes of the surveyor(s) and the qualified biologist(s), detailed habitat assessment, and photo vouchers. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information will be submitted to the California Natural Diversity Database (CNDDB) at the time of, or prior to, submittal of the survey report. If a Crotch's bumble bee nest is found, the Project applicant will consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this CEQA document and shall be incorporated into a habitat mitigation and monitoring plan. In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	Property Analysis Record will take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development. **BIO MM-11 Special-Status Wildlife Relocation Plan.** Prior to commencement of any earthmoving activities or the pre-construction staging of equipment on the Project site, the Project Applicant shall contract with a City-approved biologist to develop a Preconstruction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the northern California legless lizard, California legless lizard, and Blainville's horned lizard. The Applicant will work with the City to identify potential relocation sites that have suitable habitat for the species. The Preconstruction Wildlife Survey and Relocation Plan shall be submitted to City for review prior to any ground-disturbing activities within potentially occupied habitat. The Plan shall include at a minimum, the following: (1) Protocols for pre-construction surveys to flush out and/or move identified special status wildlife within the Project site, as feasible. (2) The timing, frequency, and locations where surveys should be conducted. • Surveys will be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity. • Surveys shall be conducted in all areas anticipated to be subject to vegetation clearing. (3) The habitat and conditions in the proposed relocation site(s).	Project Applicant; Construction Contractor(s); qualified professional biologist retained by Project Applicant	City of Palmdale or its designee	Prior to the issuance of a grading permit or staging of construction equipment; during ground disturbing construction activities	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	(4) The methods that would be used for trapping and relocating identified species. • All equipment used in the effort will be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens. (5) Protocols for documentation/recordation of the species and number of animals relocated. • Relocations shall be logged and made available to the City, if requested. (6) The timing and frequency of reports documenting the results of the surveys.				
	BIO MM-12 Pre-Construction Burrowing Owl Survey and Potential Incidental Take Permit. Burrowing owl has the potential to occur as a transient during wintering, dispersal, and migration. Focused preconstruction surveys for burrowing owl shall be conducted beginning 30 days prior to the commencement of Project activities with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused preconstruction surveys, or during the monitoring of construction activities, a 500-foot no-work buffer shall be established around the location of the burrow(s), and the City and California Department of Fish and Wildlife (CDFW) shall be notified. No Project activities will be allowed and CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and Game Code 2081. In the event an Incidental Take Permit is needed, mitigation for direct impacts will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and	Project Applicant; professional qualified biologist retained by the Project Applicant	City of Palmdale or its designee	No more than 30 days prior the initiation of ground disturbance/construction activities	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will consider all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.				
	BIO MM-13 Pre-Construction Nesting Bird Survey and Avoidance. Vegetation removal activities shall occur between September 1 and January 31 to avoid the migratory bird nesting season (typically February 1 through August 31), to reduce any potential significant impact to birds that may be nesting on the Project site. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the Project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act and California Fish and Game Code	Project Applicant; Construction Contractor(s); qualified professional biologist retained by Project Applicant	City of Palmdale or its designee	During the non-breeding nesting season; 3 days prior to the clearing of vegetation if scheduled during the nesting season; During construction of the Project; Prior to the initiation of construction activities	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when construction occurs near an active nest buffer. No Project activities may encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined the nestlings have fledged and the nest is no longer considered active.				
	BIO MM-14 Trash and Debris. The following avoidance and minimization measures shall be implemented during project construction: a. Fully covered trash receptacles that are animal-proof shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles shall be removed at least once a week from the Project site. b. Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the Project site on a daily basis.	Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities	
	BIO MM-15 Desert Native Plants Removal Permit. Prior to the commencement of Project activities, the Project applicant shall apply for a permit with the County of Los Angeles for removal of protected native	Project Applicant	County of Los Angeles	Prior to issuance of a grading permit	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	desert plants as required under California Desert Native Plants Act (Food and Agricultural Code, Division 23). The Project shall comply with any conditions of approval imposed by the applicable review authority upon issuance of the permit. The permit application form shall specify information outlined in the California Desert Native Plant Act Section 80114, which includes but is not limited to, the number and species of native plants to be removed, a description of the real property from which the plants are to be removed, and in the case that relocation is required, the destination of the native plants and the manner in which the plants are to be salvaged. Pursuant to the California Desert Native Plants Act, tags or seals issued by the County must be attached to the native plants at the time of harvesting and before transporting to their permanent relocation site(s) and must remain attached to the plant until transplanted into its ultimate destination. Transport of salvaged plants will occur as prescribed by the County.				
	BIO RR-1 National Pollutant Discharge Elimination System (NPDES) Compliance. The Project Applicant or its designee shall incorporate Best Management Practices (BMPs) during Project construction, including applicable measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of water runoff discharged by Project activities does not adversely affect biological resources. BMPs shall be designed to prevent, to the extent feasible, the runoff of toxins, chemicals, petroleum products, or other elements that might degrade water quality. Additionally, BMPs shall be used to minimize erosion.	Project Applicant or its designee; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	BIO RR-2 Clean Up Requirements for Accidental Hazardous Waste Spills. Construction contractors	Construction Contractor(s); State and	City of Palmdale or its designee	Immediately during construction of the	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	shall immediately stop work and, pursuant to pertinent State and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so, to minimize impacts to biological resources.	Federal entities		Project should any hazardous waste spills occur on the site	
	BIO DF-1 Landscaping. The Project Applicant or its designee shall retain a qualified biologist to review the landscaping plan to ensure that any landscaping component of the Project does not include the planting of exotic, invasive species that would potentially degrade the quality of the surrounding natural open space. A list of potential landscaping plant species shall be submitted to the qualified biologist for review; the qualified biologist shall ensure that exotic plant species known to be invasive (e.g., those on the California Invasive Plant Council's (Cal-IPC's) invasive plant inventory)) are not included on the list. The qualified biologist shall make recommendations for more suitable plant species if necessary. The qualified biologist shall sign the landscaping plan as approved prior to City approval of the landscaping plan. Once a final plant palette is prepared and approved by the City, landscaping installed in the development area shall include only species on the approved palette.	Project Applicant; qualified professional biologist retained by Project Applicant	City of Palmdale or its designee	Prior to City approval of landscaping plan	
	BIO DF-2 Stockpiling. During Project construction, areas where stockpiling can occur shall be selected in consultation with a qualified biologist. Spoils shall be stockpiled in disturbed areas lacking native vegetation. The construction contractor in coordination with a qualified biologist shall clearly mark stockpile areas in the field to define the limits where stockpiling can occur.	Qualified professional biologist retained by the Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	BIO DF-3 Designation of Construction Vehicle Maintenance Area. The construction contractor shall	Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	designate an area for vehicle maintenance that is not within or adjacent to any drainage area or native vegetation. Fueling and maintenance of equipment shall take place within the vehicle maintenance area. Impervious ground surfaces or plastic covering shall be used to prevent spillage or leakage onto the ground surface. Any spilled hazardous materials shall be immediately cleaned and hazardous materials properly disposed of. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.				
	BIO DF-4 Prevention of the Spread of Weed Seeds. The introduction of exotic plant species shall be avoided and minimized to the extent practicable. Weed seeds entering the construction area via vehicles shall be minimized by requiring construction vehicles to be washed prior to delivery to the Project site. Track-clean or other methods of vehicle cleaning shall be used by the construction contractor to prevent weed seeds from entering/exiting the construction areas on vehicles. Additionally, wattles used for erosion control shall be certified as weed-free.	Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	BIO DF-5 Lighting. Lighting for construction activities and operations shall be directed inward toward the Project site and lighting shall not be directed toward adjacent undeveloped areas.	Project Applicant; Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
Threshold b: There are no riparian habits within the Study Area; therefore, no impact would occur. However, the Project would result in potential significant impacts to Joshua tree woodland and Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub. With implementation of Mitigation Measures BIO MM-1 through BIO MM-9, direct and indirect impacts to sensitive	**BIO MM-1** through **BIO MM-9** shall apply.	N/A	N/A	N/A	Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
natural communities would be reduced to less than significant.					
Threshold c: Because no wetland conditions occur on the Project site, there is no direct potential for the Project to 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. Therefore, no direct impact would occur and no mitigation is required. However, there is potential for indirect (short-term and long-term) impacts to jurisdictional aquatic resources. With implementation of Mitigation Measures BIO MM-2 through BIO MM-6, and BIO MM-8, indirect impacts to jurisdictional aquatic resources would be reduced to less than significant.	**BIO MM-2** through **BIO MM-6**, and **BIO MM-8** shall apply.	N/A	N/A	N/A	Less than Significant with Mitigation Incorporated
Threshold d: Direct or indirect impacts to wildlife corridors and habitat connectivity are not anticipated since the Project site does not function as a wildlife corridor or habitat linkage. However, the Project has the potential to impact nesting birds if active nests are disturbed during the nesting season (February 1 through September 15). With implementation of Mitigation Measure BIO MM-13, the direct and cumulatively considerable impacts of the Project on migratory birds protected by the MBTA would be reduced to less than significant.	**BIO MM-13** shall apply.				Less than Significant with Mitigation Incorporated
Threshold e: The Project would result in significant impacts to Wiggin's cholla and western Joshua trees, which are protected	**BIO MM-1** through **BIO MM-15** shall apply.				Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
under the California Desert Native Plant Protection Act and PMC Chapter 14.04, respectively. With implementation of Mitigation Measures BIO MM-1 and BIO MM-15, direct impacts to the Wiggin's cholla and western Joshua tree would be reduced to less than significant.					
Threshold f: Implementation of the Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	No mitigation is required.	N/A	N/A	N/A	No Impact
4.4 Cultural Resources					
Summary of Impacts					
Threshold a: No known significant historic resources are present on the Project site and there is a low potential for historical resources to be buried beneath the site's surface.	No mitigation is required. **CUL RR-1** If human remains are encountered during ground-disturbing construction activities, compliance with California Health and Safety Code § 7050.5 and Public Resources Code § 5097 et. seq. shall be required. State Health and Safety Code § 7050.5 states that no further disturbance shall occur until the Los Angeles County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code § 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Los Angeles County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code § 5097.98. Evidence of compliance with this mitigation	N/A Construction Contractor(s); Los Angeles County Coroner; Native American Heritage Commission	N/A Los Angeles County Coroner; City of Palmdale Economic and Community Development Department	N/A If human remains are encountered during ground-disturbing construction activities	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	measure, if human remains are found, shall be provided to the City of Palmdale Economic and Community Development Department upon the completion of a treatment plan and final report detailing the significance and treatment finding.				
Threshold b: No known significant archaeological resources are present on the Project site and there is a low potential for archaeological resources to be buried beneath the site's surface. Although unlikely, there is a potential that significant archaeological resources could be uncovered during excavation activities including grading and trenching associated with the Project's construction. If significant archaeological resources are encountered and not properly identified and treated, the Project would have a significant direct and cumulatively considerable impact for which mitigation would be required. Implementation of Mitigation Measures CUL MM-1 through CUL MM-4 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important historical and archaeological resources would be mitigated to less than significant.	**CUL MM-1:** Cultural Resource Sensitivity Training. Prior to construction and as needed throughout the construction period involving ground-disturbing construction activities, a construction worker Cultural Resource Sensitivity Training program shall be provided to all construction workers involved in ground-disturbing activities prior to employment at the Project site. The training shall be prepared and conducted by a qualified professional that meets the Secretary of Interior's Professional Qualification Standards in conjunction with a Tribal Historic Preservation Officer or a designated Tribal Representative from one of the consulting Native American tribes, retained by the construction contractor or by the Project Applicant. The training session shall focus on the historic, archaeological, and tribal cultural resources that may be encountered during ground-disturbing activities, as well as the procedures to be followed in such an event. Workers attending the training shall sign a form that shall be kept by the construction contractor or Project Applicant and made available to the City upon request.	Professional cultural resources specialist retained by the Project Applicant or the Construction Contractor(s); Tribal Historic Preservation Officer or a designated Tribal Representative from one of the consulting Native American tribe	City of Palmdale or its designee	Prior to construction and as needed throughout the construction period involving ground-disturbing activities	Less than Significant with Mitigation Incorporated
	CUL MM-2 Tribal Monitoring Agreement. Prior to the issuance of grading permits, the Project Applicant shall enter into an Tribal Monitoring Agreement with the consulting tribe(s) for a Tribal Monitor. The designated Tribal Monitor(s) shall be on-site during all initial ground-disturbing activities, including but not	Project Applicant; Construction Contractor(s); qualified cultural resource specialist that meets the Secretary of Interior's	City of Palmdale or its designee	Prior to the issuance of grading permits	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	limited to, clearing, grubbing, tree and bush removal, grading, trenching, fence post replacement, construction excavation for all utility and irrigation lines, and landscaping of any kind. In conjunction with a qualified professional that meets the Secretary of Interior's Professional Qualification Standards, the designated Tribal Monitor(s) shall have the authority to temporarily divert, redirect, or halt the ground-disturbing activities to allow identification, evaluation, and potential recovery of cultural resources. The Project Applicant shall submit a fully executed copy of agreement(s) to the City of Palmdale to ensure compliance with this requirement. Upon verification, the City shall clear this condition. The agreement(s) shall not modify any condition of approval or mitigation measure.	Professional Qualification Standards; Tribal Monitor(s)			
	CUL MM-3 Cultural Resource Management Plan. Prior to any ground-disturbing activities the qualified professional that meets the Secretary of Interior's Professional Qualification Standards shall develop a Cultural Resource Management Plan (CRMP) and/or Archaeological Monitoring and Treatment Plan (AMTP) to address the details, timing, and responsibilities of all archaeological and cultural resource activities that occur on the Project site. This Plan shall be written in consultation with the consulting tribe(s).	Qualified professional that meets the Secretary of Interior's Professional Qualification Standards; Native American consulting tribe	City of Palmdale or its designee	Prior to any ground-disturbing activities	
	CUL MM-4 On-Site Monitoring. During all ground-disturbing activities the qualified professional that meets the Secretary of Interior's Professional Qualification Standards and the Tribal Monitor(s) shall be on-site full-time. The frequency of inspections shall depend on the rate of excavation, the materials excavated, and any discoveries of Tribal Cultural Resources (TCRs) as defined in California Public Resources Code Section 21074. Archaeological and tribal monitoring shall be discontinued when the depth of grading and the soil conditions no longer retain the	Qualified cultural resource specialist that meets the Secretary of Interior's Professional Qualification Standards; Tribal Monitor(s); Construction Contractor(s); Native American consulting tribe	City of Palmdale or its designee	During all ground-disturbing activities	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	potential to contain cultural deposits. The qualified professional that meets the Secretary of Interior's Professional Qualification Standards, in consultation with the Tribal Monitor(s) shall have the authority to temporarily divert and/or temporarily halt ground-disturbance operations in the area of discovery to allow for the evaluation of potentially significant cultural resources. Isolates and clearly non-significant deposits shall be minimally documented in the field and collected so that the monitored grading can proceed. If a potentially significant cultural resource(s) is discovered, work shall stop within a 100-foot perimeter of the discovery and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. All work shall be diverted away from the vicinity of the find, so that the find can be evaluated by the qualified professional that meets the Secretary of Interior's Professional Qualification Standards and Tribal Monitor(s). The archaeologist shall notify the Lead Agency (City of Palmdale) and consulting Tribe(s) of said discovery. The qualified professional that meets the Secretary of Interior's Professional Qualification Standards, in consultation with the Lead Agency, the consulting Tribe[s], and the Tribal Monitor, shall determine the significance of the discovered resource. A recommendation for the treatment and disposition of the Tribal Cultural Resource (TCR) shall be made by the qualified professional that meets the Secretary of Interior's Professional Qualification Standards in consultation with the Tribe(s) and the Tribal Monitor(s) and be submitted to the Lead Agency for review and approval. Below are the possible treatments and dispositions of significant cultural resources in order of CEQA preference: a. Full avoidance. b. If avoidance is not feasible, preservation in place.				

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	c. If preservation is not feasible, all items shall be reburied in an area away from any future Project impacts and reside in a permanent conservation easement or Deed Restriction. d. If all other options are proven infeasible, data recovery through excavation and then in a curation facility that meets Federal Curation Standards (CFR 79.1).				
Threshold c: In the unlikely event that human remains are discovered during Project grading, trenching, or other ground disturbing activities, the Project's contractors would be required to comply with the applicable provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 et seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.5 Energy					
Summary of Impacts					
Threshold a: The amount of energy and fuel estimated to be consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems.	No mitigation is required; however, mitigation measures **AIR MM-1** through **AIR MM-7,** design features **AIR DF-1** and **AIR DF-2,** and regulatory requirements **AIR RR-1** through **AIR RR-4** shall be implemented.	N/A	N/A	N/A	Less than Significant Impact
Threshold b: The Project would not cause or result in the need for additional energy production or transmission facilities. The Project would not conflict with or obstruct the achievement of energy conservation goals within the State of California	No mitigation is required; however, mitigation measures **AIR MM-1** through **AIR MM-7,** design features **AIR DF-1** and **AIR DF-2,** and regulatory requirements **AIR RR-1** through **AIR RR-4** shall be implemented.	N/A	N/A	N/A	Less than Significant Impact

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
identified in State and local plans for renewable energy and energy efficiency.					
4.6 Geology and Soils					
Summary of Impacts					
Threshold a: The Project site is not located within an Alquist-Priolo Earthquake Fault Zone or within a fault zone depicted on the City's Fault Map and thus the risk of fault rupture to occur on the site is less than significant. Although the Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project, mandatory compliance with the California Building Standards Code (CBSC), the City Building Code, and the recommendations of the site-specific Geotechnical Investigation would ensure that potential effects associated with strong seismic ground shaking would be less than significant. Based on the lack of a historic high ground water table within the upper approximately 50 feet of the ground surface, and the mapping performed by the California Geological Survey (CGS), the Project would not be subject to seismic-related ground failure, including liquefaction, and impacts would be less than significant. The Project site and areas immediately surrounding the Project site do not contain steep slopes capable of producing landslide hazards that could affect future development on site, and there are no components of the proposed Project that would result in the potential for landslide hazards; thus, no impact would occur.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold b: The Project site contains soils that have a slight susceptibility to erosion. However, the Project would not result in substantial soil erosion or loss of topsoil as the Project would implement the recommendations provided in the Project's Geotechnical Investigation to reduce soil erosion and the potential for water and/or wind erosion impacts to soils during Project construction would be reduced to less than significant levels. Additionally, the Project Applicant would be required to obtain an NPDES permit for construction activities and adhere to a Stormwater Pollution Prevention Plan (SWPPP) and the City's Stormwater Management Plan (SWMP), as well as the PMC, and AVAQMD Rule 403. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, wind and water erosion on the Project site would be minimized, because the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Furthermore, because all runoff generated on-site would be retained on site and allowed to infiltrate into site soils, the Project has no potential to result in or contribute to erosion hazards downstream. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold c: No large slopes are located near the Project site and no large slopes would be created by the Project; thus, there is no potential for impacts to occur associated with landslide hazards. Based on the site's soil and geologic conditions, the	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
potential for lateral spreading is low and less than significant. During Project construction, there is a potential for approximately 0.1 feet of soil subsidence to occur due to settlement and machinery working and for surface soils within the upper approximately 3 to 6 feet of the site's surface to be subject to collapse when exposed to moisture infiltration. However, mandatory compliance with the CBSC, the City Building Code, and the recommendations of the site-specific Geotechnical Investigation would ensure that potential effects associated with soil subsidence and collapse would be less than significant. Based on geologic mapping and the lack of a historic high ground water table, the Project would have no potential for impacts associated with seismic-related ground failure, including liquefaction.					
Threshold d: The Project site's soils are non-expansive, with an Expansion Index (EI) of 0. Therefore, the Project would not be located on expansive soil, as defined in Section 1803.5.3. of the California Building Code (2022) and would not create substantial direct or indirect risks to life or property associated with expansion soils, and no impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold e: Sewer service to the Project site would be provided by the City of Palmdale Public Works, Sewer Maintenance Division (COPSM). No septic tanks or alternative wastewater disposal systems are proposed or allowed as part of the Project. Accordingly, no impact related to septic systems would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold f: The Project's ground disturbing excavation activities including	**GEO MM-1** Prior to commencement of any grading activity on site, the applicant shall retain a qualified	Project Applicant; qualified paleontologist	City of Palmdale or its designee	Prior to the commencement of grading activities	Less than Significant with Mitigation Incorporated

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
grading and trenching would affect Pleistocene age alluvium, which has a high sensitivity to contain paleontological resources. Earthwork activities in Pleistocene age deposits may therefore result in significant impacts to paleontological resources, such as destruction, damage, or loss of scientifically important paleontological resources. This is considered a potentially significant impact for which mitigation would be required.	paleontologist meeting the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program for the Project. The Paleontological Resources Impact Mitigation Program shall be consistent with the guidelines of the SVP (2010) and include the following elements at a minimum: project description, requirements for preconstruction worker environmental awareness training, frequency of monitoring, salvage protocols, reporting, and collections management. The qualified paleontologist or a qualified monitor meeting the SVP (2010) guidelines shall be on site during rough grading and other significant ground-disturbing activities below a depth of 5 feet below the existing ground surface in previously undisturbed older Holocene and Pleistocene-age deposits. If excavations below 5 feet are not impacting previously undisturbed deposits, as determined by the qualified paleontologist, spot-check monitoring shall ensue. The paleontologist will re-evaluate the need for continued monitoring, and will determine whether to reduce monitoring, to spot-check, or to suspend monitoring altogether, as appropriate. No monitoring is required during excavations within artificial fill or previously disturbed alluvium. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activity to allow recovery of the paleontological resources. The area of discovery shall be roped off with a 50-foot-radius buffer to document and collect the fossils. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Any costs associated with laboratory processing of sediments and fossils and curation fees are the responsibility of the applicant.	approved by the City; Construction Contractor(s); all field personnel			

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	GEO RR-1 Prior to issuance of grading or building permits, the City of Palmdale Building and Safety Division shall verify that all of the recommendations provided in the Project's Geotechnical Investigation prepared by Southern California Geotechnical and included as Technical Appendix E1 to the Project's EIR, are incorporated into the Project's grading and building plans and implemented by the construction contractors. Recommendations are made for, but are not limited to: 1) Seismic Design Considerations; 2) Geotechnical Design Considerations: all grading activities shall be completed in accordance with the Grading Guide Specifications included as Appendix D of the Geotechnical Investigation; 3) Site Grading Recommendations; 4) Construction Considerations; 5) Foundation Design and Construction; 6) Floor Slab Design and Construction; 7) Retaining Wall Design and Construction; and 8) Pavement Design Parameters.	Project Applicant	City of Palmdale Building and Safety Division	Prior to issuance of grading or building permits	
	GEO RR-2 The Project is required to comply with the provisions of PMC Chapter 8.04, Adoption of Health, Safety and Technical Construction Codes, which generally require that all projects comply with California Building Codes and the International Building Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public, and include requirements related to erosion.	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	GEO RR-3 The Project is required to comply with the provisions of AVAQMD Rule 403 by addressing blowing dust from the Project's construction activities.	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	GEO RR-4 The Project is required to comply with the provisions of the Project's NPDES permit, the Project's SWPPP as well as the City's SWMP.	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	Compliance would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from stormwater and non-stormwater discharges.				
4.7 Greenhouse Gas Emissions					
Summary of Impacts					
Threshold a: The Project would generate approximately 19,723.20 MT CO2e per year from construction and operational activities, which is above the SCAQMD screening threshold of 3,000 MTCO2e per year. Accordingly, prior to mitigation, the Project's GHG emissions represent a significant cumulatively considerable impact on the environment. Mitigation measures are required to minimize operational-related GHG impacts. Most GHGs associated with the Project are generated by on-road vehicles, diesel-fueled off-road forklifts, and energy sources. Mitigation Measure AQ MM-4 requires measures to minimize on-road vehicle emissions, including the provision of EV charging stations and electrical hookups for TRUs. Mitigation Measure AQ MM-5 includes the requirement for all off-road forklifts and landscaping equipment to be zero emission, which would reduce the long-term criteria air pollutant emissions substantially. Mitigation Measure AQ MM-7 requires the warehouse building to be all-electric (i.e., no natural gas). Finally, implementation of Mitigation Measure GHG MM-1 through Mitigation Measure GHG MM-3 would reduce GHG emissions associated with renewable/energy	**AIR MM-4, AIR MM-6,** and **AIR MM-7** shall apply. **GHG MM-1** The Project shall implement the following measure to reduce operational energy source GHG emissions to the extent feasible: • The proposed building shall offset at least 75 percent of its operational energy demand within the building envelope through renewable energy generation, demonstrated to the City of Palmdale prior to issuance of a Certificate of Occupancy. To achieve all or part of this requirement, the roof of the building shall be outfitted with a solar photovoltaic system of the maximum size feasible given building tenant electrical demands, applicable Building Code requirements, clearance requirements around skylights and roof-mounted equipment, utility company interconnection regulations, transformer capacity, and other applicable code compliance constraints. Prior to issuance of a certificate of occupancy for the tenant, the City shall verify that the roof-mounted solar photovoltaic systems are either installed, or that the systems have been ordered and are scheduled to be installed within 12 months of tenant occupancy. The number of solar panels shall not exceed the	Project Applicant	City of Palmdale or its designee	Prior to issuance of Certificate of Occupancy; During operation of the Project	Significant Unavoidable Cumulatively-Considerable Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
efficiency, solid waste disposal, and water conservation. (Dudek, 2025a, p. 85) As shown on Table 4.7-8, *Project GHG Emissions Summary (With Mitigation)*, after implementation of feasible mitigation measures, the Project's greenhouse gas emissions are calculated to be 13,990.65 MT CO_2e per yr. Thus, the proposed Project's GHG emissions would exceed the SCAQMD screening threshold of 3,000 $MTCO_2e$ per year after mitigation. Although mobile vehicles (82 percent) are the main source of GHG emissions associated with Project operations, neither the Project Applicant nor the City can substantively or materially affect reductions in the Project's on-road mobile source emissions beyond what is already required by federal and State regulation. No feasible mitigation measures beyond those already identified exist that would reduce these emissions to levels that are less than significant. Therefore, even with the incorporation of mitigation measures, long-term impacts associated with a cumulatively considerable increase in GHG emissions would be significant and unavoidable. (Dudek, 2025a, p. 86)	total available roof space and the available total Kilovolt-Amperes (kVA) used to service the building by a Southern California Edison (SCE) final approved drawing showing the transformer size and capacity. • All heating, cooling, lighting, and appliance fixtures shall be Energy Star-rated. **GHG MM-2** To reduce the amount of waste disposed at landfills, the Project shall implement solid waste program that would divert at least 50 percent of the Project's solid waste. Prior to the issuance of building permits for the Project, the Project Applicant shall provide building plans that include the following solid waste reduction measures: • Provide storage areas for recyclables and green waste in new construction, and food waste storage, if a pick-up service is available. • Evaluate the potential for on-site composting and implement composting if it is determined to be feasible. **GHG MM-3** To reduce water demands and associated energy use, a Water Conservation Strategy shall be implemented that achieves a minimum 20 percent reduction in indoor and outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Prior to the issuance of building permits for the Project, the Project Applicant shall provide building plans that include, but not limited to, the following water conservation measures: • The Project's landscape plan shall emphasize drought-tolerant plants and use water-efficient irrigation techniques.	Project Applicant; Construction Contractor(s); Building Tenant(s) Project Applicant; Construction Contractor(s); Future Building Tenant(s)	City of Palmdale or its designee City of Palmdale or its designee	During Project construction activities and during Project operation; Prior to issuance of building permits During Project construction activities and during operation of the Project; Prior to issuance of building permits	

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	• All fixtures installed in restrooms and employee break areas would be U.S. Environmental Protection Agency WaterSense Certified or equivalent. • Install dual-flush toilets. • Install rainwater collection systems where feasible.				
	GHG DF-1 Cargo handling equipment shall be non-diesel. If more than one piece of cargo handling equipment is required by the building user, the equipment shall be zero-emission.	Building Tenant(s)	City of Palmdale or its designee	During operation of the Project	
	GHG RR-1 The Project is required to comply with the PMC Chapter 14.05, Water Efficient Landscape. Efficient water use lowers GHG emissions by reducing the consumption of energy resource required to treat and deliver water.	Project Applicant; Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	GHG RR-2 The Project is required to directly or indirectly comply with all applicable GHG reduction mandates imposed by the State of California and the AVAQMD. Those that are applicable to the Project either directly or indirectly and that would reduce GHG emissions are: a) Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles. b) Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction. c) Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances. d) Title 17 California Code of Regulations (Low Carbon Fuel Standard). Regulates	Project Applicant; Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee; AVAQMD	During Project construction activities and during operation of the Project	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	the carbon content of fuel sold in California. e) Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions. **f)** Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources. **g)**				
Threshold b: The Project would not conflict with any of the CARB Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Additionally, the Project would not conflict with the GHG reduction goals of the City's General Plan, and impacts would therefore be less than significant. The Project's mitigation measures, design features, and regulatory requirements specified below in 4.7.7 and 4.7.8 would further ensure that the Project does not conflict with the GHG reduction policies of the City's General Plan. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.8 Hazards and Hazardous Materials					
Summary of Impacts					
Thresholds a and b: With mandatory compliance with applicable hazardous materials regulations, the Project would result in less than significant impacts due to the creation of a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. Additionally, with mandatory regulatory compliance, potential hazardous materials	No mitigation is required. **HAZ RR 4-1** All construction contractors and employers that occupy the Project site are required to comply with all applicable regulations and requirements promulgated by the federal Occupational Safety and Health Administration (OSHA) and the California Division of Occupational Safety and Health (Cal/OSHA).	N/A Construction Contractor(s)	N/A City of Palmdale or its designee	N/A During Project construction activities	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
impacts associated with long-term operation of the Project would be less than significant; thus no mitigation is required.	**HAZ RR 4-2** The Project is required to comply with Title 22, Division 4.5 of the California Code of Regulations, which requires residents and employees to dispose of household hazardous waste, including pesticides, batteries, old paint, solvents, used oil, antifreeze, and other chemicals, at a Household Hazardous Waste Collection Facility.	Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	HAZ RR 4-3 The Project is required to comply with Title 22, Division 4.5, Chapter 11 of the California Code of Regulations which requires fluorescent lamps, batteries, and mercury thermostats be recycled or taken to a Household Hazardous Waste Collection Facility.	Construction Contractor(s); Building Tenant(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	HAZ RR 4-4 In accordance with the Hazardous Materials Business Plan (HMBP) Law and the California Accidental Release Prevention (CalARP) program, if any businesses occupies the Project site that handles more than a specific threshold quantity of a regulated substance listed in the CalARP regulations, the business is required to prepare and submit a Hazardous Materials Business Plan (HMBP) (sometimes also called a Hazardous Materials Emergency Business Plan (HMEBP)) to their local Certified Unified Program Agency (CUPA) detailing the potential accident factors present and the measures that will be implemented to reduce accident potential. The HMBP must include, but not be limited to, safety information, a hazard review, operating procedures, training requirements, maintenance requirements, compliance audits, and incident investigation procedures. The CalARP program requirements are implemented and enforced at the local government level by California Unified Program Agencies (CUPAs), such as the Los Angeles County Fire Department. The CUPAs determine the level of detail needed in the RMPs, review the RMPs, conduct	Building Tenant(s)	Unified Program Agencies (UPAs), such as the Los Angeles County Fire Department	If any businesses occupies the Project site that handles more than a specific threshold quantity of a regulated substance listed in the CalARP regulations; During occupation of the building	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	facility inspections, and provide public access to most of the relevant information.				
Threshold c: Because there are no existing schools located within 0.25-mile of the Project site, there is no potential for the Project to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, no impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold d: Because the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, no impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold e: Because the Project's would be consistent with FAA regulations, the ALUC, and the AICUZ Final Report, implementation of the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area; therefore, impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold f: The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route, and there are no components of the Project with the potential to conflict with or interfere with the City's Emergency Operation Plan (EOP). Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan. Therefore, impacts would be less than significant and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold g: Because the Project site is not located in close proximity to wildlands or areas with high fire hazards, development of the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires significant wildfire risk.	No mitigation is required.	N/A	N/A	N/A	No Impact
4.9 Hydrology and Water Quality					
Summary of Impacts					
Threshold a: In accordance with the Hazardous Materials Business Plan (HMBP) Law and the California Accidental Release Prevention (CalARP) program, if any businesses occupies the Project site that handles more than a specific threshold quantity of a regulated substance listed in the CalARP regulations, the business is required to prepare and submit a Hazardous Materials Business Plan (HMBP) (sometimes also called a Hazardous Materials Emergency Business Plan (HMEBP)) to their local Certified Unified Program Agency (CUPA) detailing the potential accident factors present and the measures that will be implemented to reduce accident potential. The HMBP must include, but not be limited to, safety information, a hazard review, operating procedures, training requirements, maintenance requirements, compliance audits, and incident investigation procedures. The CalARP program requirements are implemented and enforced at the local government level by California Unified Program Agencies (CUPAs), such as the Los Angeles County Fire Department. The CUPAs determine the level of detail needed in the RMPs,	No mitigation is required. **HYDRO RR-1** As required by the provisions of the NPDES permit, the Project Applicant would be required to obtain an NPDES permit for construction activities, which includes the preparation and implementation of a Stormwater Pollution Prevention Plan. The Project's construction contractors will be required to follow the requirements outlined in the SWPPP. Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from storm water and non-stormwater discharges during construction activities. **HYDRO DF-1** As part of the Project's development, two detention basins shall be installed on the site in substantial conformance to the Project's Preliminary Drainage Study, at the sizes and water holding capacities determined by a Final Drainage Study to be approved by the City of Palmdale prior to issuance of a building permit. The basins shall be owned and maintained by the property owner for the life of the Project.	N/A Project Applicant; Construction Contractor(s) Property Owner	N/A Regional Water Quality Control Board (RWQCB) City of Palmdale or its designee	N/A During Project construction activities Prior to issuance of a building permit	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
review the RMPs, conduct facility inspections, and provide public access to most of the relevant information.					
Threshold b: The Project would not substantially interfere with groundwater recharge. The Project does not propose to directly extract water from the groundwater table and groundwater that would extracted by Los Angeles County Waterworks District (LACWD) District 40 to serve the site with domestic water is accounted for by the LACWD 2020 Urban Water Management Plan (UWMP), which demonstrates that the LACWD has sufficient water supply to meet projected demand through 2045 during normal, dry and multiple dry years. In addition, the Project design includes two detention basins that are designed to filter and infiltrate water into the groundwater basin to facilitate groundwater recharge. Accordingly, buildout of the Project with these design features would not interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold c: The Project Applicant would be required to obtain an NPDES permit, which involves the preparation and implementation of a SWPPP to address	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
erosion and siltation hazards during Project construction. The potential for erosion hazards on the site would be substantially decreased as compared to existing conditions with buildout of the Project. The Project includes an on-site stormwater drainage system that includes two detention basins that would filter pollutants including sediment and infiltrate water into the groundwater table; as such, the Project has no potential to contribute runoff to off-site areas that may increase erosion hazards off-site. The Project also has no potential to substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site, and no water quality impacts related to flooding would occur. Additionally, the Project has no potential to exceed the capacity of any existing or proposed stormwater drainage systems, and no impact would occur. Furthermore, the Project would not impede or redirect flood flows, and impacts would be less than significant.					
Threshold d: The Project site is not subject to inundation by flood hazards, seiches, or tsunamis. As such, the Project has no potential to risk release of pollutants due to site inundation. Therefore, no impact would occur as result of implementation of the Project.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold e: The Antelope Valley Groundwater Basin is adjudicated and exempt from the requirements of the Sustainable Groundwater Management Act (SGMA); LACWD District 40 has not adopted a groundwater management plan, and no regional groundwater management plan currently exists for the Antelope	No mitigation is required.	N/A	N/A	N/A	No Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Valley Groundwater Basin. As such, the Project has no potential to conflict with or obstruct implementation of a sustainable groundwater management plan, and no impact would occur. Furthermore, the Project has no potential to conflict with or obstruct implementation of a water quality control plan. Therefore, no impact would occur as result of the Project.					
4.10 Land Use and Planning					
Summary of Impacts					
Threshold a: The Project would not disrupt or divide the physical arrangement of an established community. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold b: Implementation of the Project would be consistent with Federal Aviation Administration (FAA) regulations, the Los Angeles County Airport Land Use Plan (ALUP), and the USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report. No General Plan Amendment or zone change would be required as part of the Project. Finally, the Project would not conflict with the Palmdale Municipal Code (PMC) or any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Additionally, there are no impacts due to land use incompatibility that have not already been evaluated and mitigated to the maximum feasible extent in other relevant sections of this EIR.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.11 Noise					
Summary of Impacts					
Threshold a: Noise levels generated by short-term construction of the Project	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

Threshold	Mitigation Measures (MM) Design Features (DF) and Regulatory Requirements (RR)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
would be less than significant at the nearest receptors. On-site operational noise levels would be less than significant at the nearest receptors. In addition, the off-site traffic noise levels generated by the Project would be less than significant. Therefore, the Project would not generate 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. Impacts would be less than significant and no mitigation is required.	**NOI DF-1** As part of the Project's development, the Project would include twelve 12-foot-tall concrete screen walls along the northern, eastern, and western sides of the northern truck court and along the southern, eastern, and western sides of the southern truck court. Screen walls also would be provided around the trash enclosures.	Project Applicant	City of Palmdale or its designee	During Project construction	
	NOI RR-1 All construction activities shall adhere to PMC Section 8.28.030, limiting construction-activities to the hours of 6:00 AM and 6:00 PM, prohibiting earth excavating and similar activities between 8:00 PM and 6:30 AM and on Sundays in any residential zone or within 500 feet of any residence, hotel, motel, or recreational vehicle park. This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	NOI RR-2 The Project contractor shall, to the extent feasible, schedule construction activities to avoid concurrent operation of several pieces of construction equipment close to an offsite noise-sensitive receptor.	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	NOI RR-3 All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	NOI RR-4 Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and nearby residences, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	
	NOI RR-5 Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners to contact the job	Project Applicant; Construction Contractor(s)	City of Palmdale or its designee	During Project construction activities	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	superintendent if necessary. In the event the City receives a complaint, appropriate corrective actions shall be implemented by the contractor, and a report of the action provided to the reporting party.				
Threshold b: The vibration impacts of the Project are considered less than significant during construction activities and operational activities at the Project site. The Project would not result in a perceptible groundborne vibration or noise that exceeds thresholds of significance. Impacts would be less than significant, and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold c: Although a small portion of the northeastern corner of the Project site is located within the 60-65 dBA CNEL noise level contour boundary of the USAF Plant 42 airport operations, the Project's industrial land uses are considered normally acceptable within the 60-65 CNEL range of exposure; therefore, because the Project would not expose people residing or working in the Project area to excessive noise levels related to a private airstrip, airport land use plan or public airport our public use airport, impacts would be less than significant and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.12 Public Services					
Summary of Impacts					
Threshold a.i: The Project would place demand on fire protection services but would not result in the need for new or physically altered fire protection facilities. No impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
	PS DF-1 As a condition of the Project's tenant improvement building permit, an Early Suppression Fast Response (ESFR) fire sprinkler system or equivalent shall be installed in the warehouse portion of the building.	Future Building Tenant(s)	City of Palmdale or its designee	Prior to issuance of tenant improvement building permits	
	PS RR-1 As a condition of Project approval, the proposed Project shall conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety. Among other items, these requirements include conformance with the Uniform Building Code Section 1503, which requires that all buildings be constructed with fire retardant roofing material. Access routes in the Project area would be required to be maintained throughout construction and buildout of the proposed Project.	Project Applicant, Construction Contractors; Building Tenants	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	PS RR- 2 The Project shall adhere to PMC Chapter 3.45, Public Facility Development Impact Fee Requirements, which requires payment of a Development Impact Fee to assist the City in providing for fire protection facilities, including fire stations; providing for police protection facilities; and providing for other public services and facilities. Payment of the Development Impact Fees would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction.	Project Applicant	City of Palmdale or its designee	Prior to issuance of building permits	
	PS RR-3 Prior to issuance of occupancy permits, the Project Applicant shall contribute appropriate school	Project Applicant	City of Palmdale or its designee	Prior to issuance of occupancy permits	

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	impact fees to the Palmdale School District (PSD) and the Antelope Valley Unified School District (AVUHSD) at the rates established by the PSD and the AVUHSD, as required by Public Education Code § 17072.10-18.				
Threshold a.ii: The Project would place demand on sheriff's services but would not result in the need for new or physically altered sheriff station facilities. No impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold a.iii: The Project would not directly generate a residential population; therefore, the Project would not directly or indirectly impact school services in the local area or cause the need for new or physically altered school facilities. No impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold a.iv: The Project would not directly generate a residential population; therefore, the Project would not directly or indirectly impact park services in the local area such that they would experience physical change or cause the need to construct or physically alter a public facility. No impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold a.v: The Project would not directly generate a residential population; therefore, the Project would not directly or indirectly impact other public facilities in the local area such that they would experience physical change or cause the need to construct or physically alter a public facility. No impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
4.13 Transportation					
Summary of Impacts					
Threshold a: The Project is consistent with the RTP/SCS, the City's General Plan,	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
including the goals and policies of the General Plan Circulation and Mobility Element, and also would be required to comply with all applicable requirements of the PMC. As there are no other applicable programs, plans, ordinances, or policies addressing the circulation system, Project impacts due to a conflict with a program, plan, ordinance or policy addressing the circulation system would be less than significant.					
Threshold b: Based on the VMT analysis for the proposed Project, the proposed Project falls in a low VMT area and Project generated Work VMT per Employee would be less than the City's threshold. Therefore, the Project's VMT would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold c: With mandatory compliance with City roadway and private driveway design standards, the Project would not substantially increase hazards due to a geometric design feature. Additionally, due to the short distance between the Project site and the designated truck routes, the Project would not result in increased hazards to transportation as a result of incompatible uses.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold d: Adequate emergency access is required to be maintained during both construction and long-term operation of the Project, in accordance with City and Fire Department requirements. Accordingly, the Project would not result in inadequate emergency access, and impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.14 Tribal Cultural Resources					
Summary of Impacts					

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold a: The Project site does not contain any known TCRs. If TCRs are unearthed during the Project's excavation activities, a potentially significant impact could occur if the resources are not properly identified and treated. Implementation of Mitigation Measures CUL MM-1 and CUL RR-1 would ensure the proper identification and subsequent treatment of any TCRs that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important subsurface TCRs (if such resources are unearthed during Project construction) would be reduced to less than significant levels.	**CUL MM-1** and **CUL RR-1** shall apply.	N/A	N/A	N/A	Less than Significant with Mitigation Incorporated
4.15 Utilities and Service Systems					
Summary of Impacts					
Threshold a: The Project's wet and dry utility infrastructure facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). There are no significant environmental impacts that would occur specifically related to the Project's proposed water, sewer, drainage, and dry improvements that have not already been addressed.	No mitigation is required. **UTIL RR-1** Project construction contractors are required to comply with the requirements of the California Green Building Standards Code (CalGreen, Part 11 of Title 24, California Code of Regulations), which requires among other items the installation of low water-use appliances and the diversion of a certain amount of construction waste from landfills. **UTIL RR -2** The Project design is required to comply with the provisions of the California Solid Waste Reuse and Recycling Act (AB 1327), which requires that an adequate area for collecting and loading recyclable materials over the lifetime of the Project must be provided. The City of Palmdale shall ensure the Project applicant has met this requirement prior to the issuance of building permits.	N/A Construction Contractor(s) Project Applicant	N/A City of Palmdale or its designee City of Palmdale or its designee	N/A During Project construction activities Prior to issuance of building permits	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	UTIL RR-3 The Project applicant, construction contractors, and operators, shall comply with all applicable provisions of PMC Chapter 5.52, Solid Waste Handling and Recycling Services.	Project Applicant; Construction Contactor(s); Building Operator(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	UTIL RR-4 The Project applicant, construction contractors, and operators, shall comply with all applicable provisions of PMC Title 13, Sanitary Sewers and Industrial Waste.	Project Applicant; Construction Contactor(s); Building Operator(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
	UTIL RR-5 The Project applicant, construction contractors, and operators, shall comply with all applicable provisions of PMC Chapter 14.05, Water Efficient Landscape.	Project Applicant; Construction Contactor(s); Building Operator(s)	City of Palmdale or its designee	During Project construction activities and during operation of the Project	
Threshold b: Existing water supplies in combination with identified future and potential water supply opportunities and demand reduction responses would enable Los Angeles County Waterworks District (LACWD) District 40 to meet all future water demands under all hydrologic conditions through 2045. Additionally, because the Project's proposed land uses are accounted for by the LACWD 2020 UWMP, and because the UWMP demonstrates that the LACWD would have sufficient supplies to meet projected demands, it is determined that the LACWD will have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. Thus, Project impacts to water supply would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold c: The Project's wastewater generation would represent approximately 0.14 percent of the daily design capacity at the Lancaster Water Reclamation Plant	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
(LWRP). Because the Project's individual wastewater treatment capacity need represents only 1.25 percent of the total treatment capacity of the LWRP, impacts due to implementation of the Project would be less than significant.					
Threshold d: Solid waste generated by construction and operation of the Project would represent less than one percent of the disposal capacities at landfills that service the area. Existing landfills have a sufficient capacity to accept the Project's solid waste for disposal and the Project would not 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. Therefore, impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
Threshold e: There is no potential for the Project to conflict with applicable federal, State, and local statutes and regulations related to the management and reduction of solid waste and pertaining to waste disposal, reduction, and recycling. Impacts would be less than significant.	No mitigation is required.	N/A	N/A	N/A	Less than Significant Impact
4.16 Wildfire					
Summary of Impacts					
Threshold a: Because the Project site is not located in or near SRAs or lands classified as very high fire severity zones, implementation of the Project would not substantially impair an adopted emergency response plan or an emergency evacuation plan; therefore, no impact would occur and no mitigation is required.	No mitigation is required. **WF DF-1** As a condition of the Project's tenant improvement building permit, an Early Suppression Fast Response (ESFR) fire sprinkler system or equivalent shall be installed in the warehouse portion of the building. **WF RR-1** Prior to issuance of building permits, the City shall assure that the Project's building plans comply with required fire protection ratings specified	N/A Project Applicant Project Applicant	N/A City of Palmdale or its designee City of Palmdale or its designee	N/A Prior to issuance of building permits Prior to issuance of building permits	No Impact

THRESHOLD	MITIGATION MEASURES (MM) DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	in the applicable California Code of Regulations Title 24 requirements.				
Threshold b: Because the Project is not located in or near SRAs or lands classified as very high fire severity zones, the Project, due to slope, prevailing winds, and other factors, would not exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impact would occur and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold c: The Project is not located in or near SRAs or lands classified as very high fire severity zones. Therefore, due to the lack of wildfire susceptibility in the areas surrounding the Project site, the Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Accordingly, no impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold d: Because the Project site is not located in or near an SRA or lands classified as very high fire severity zones, the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no impact would occur and no mitigation is required.	No mitigation is required.	N/A	N/A	N/A	No Impact

1.0 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that all public agencies within the State of California having land use approval authority over activities with the potential to adversely affect the quality of the environment, regulate such activities so that impacts to the environment can be prevented to the extent feasible. Such activities are reviewed and monitored through the CEQA compliance process, as provided in the CEQA Statute (Public Resources Code Sections 21000 - 21177, as amended) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387, as amended).

Under CEQA, if there is substantial evidence that a project may have a significant effect on the physical environment, an Environmental Impact Report (EIR) must be prepared (CEQA Guidelines Section 15064(a)(1)). This document serves as an EIR for the proposed Pacific Palmdale Project (Tentative Parcel Map (TPM 84510), Site Plan Review (SPR 24-0021), and Conditional Use Permit (CUP 25-0006). For purposes of this EIR, the term "Project" refers to all actions associated with implementing the Pacific Palmdale Project (TPM 84510, SPR 24-0021, and CUP 25-0006), including planning, construction, and ongoing operations. The term "Project Applicant" used herein refers to PI Palmdale Owner, LLC, which is the entity that submitted proposed TPM 84510, SPR 24-0021, and CUP 25-0006) to the City of Palmdale (City) to entitle the Project. The term "Project site" refers to the property upon which the Project is proposed. The public agency with the principal responsibility for carrying out or approving a project or the first public agency to make a discretionary decision to proceed with a proposed project should ordinarily act as the Lead Agency pursuant to CEQA Guidelines Sections 15050-15051. The term "Lead Agency" used herein refers to the City of Palmdale. Throughout this document, the terms "Draft EIR" and "Final EIR" may be used interchangeably since both are part of the ultimate EIR record; however, "Draft EIR" may be used specifically when referring to information provided in the volume made available for the CEQA-required 45-day public review period.

1.1 PURPOSES OF CEQA AND THIS EIR

As stated by CEQA Guidelines Section 15002(a), the basic purposes of CEQA are to:

- 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 through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- 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.

The purposes of this EIR are to inform public agency decision-makers and the general public about the potentially significant environmental effects of the Project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects (CEQA Guidelines Section 15121(a)). This EIR is an informational document that represents the independent judgment of the City. The City reviewed and, as necessary, directed revisions to all submitted drafts, technical studies, and reports supporting this EIR for consistency with City policies and requirements to ensure that this EIR reflects the City's independent judgment.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS EIR

The Project site encompasses approximately 67 acres of vacant land and is located within the City of Palmdale, Los Angeles County, California. The Project site is located directly north of West Rancho Vista Boulevard / East Avenue P; directly east of Division Street; approximately 0.75-mile south of East Avenue O; and approximately 0.01-mile west of Sierra Highway. State Route 14 (SR-14) is located approximately 0.51-mile to the west of the Project site and Runway 7 of United States Air Force (USAF) Plant 42 is located approximately 1.8 miles (9,504 feet) to the northeast of the Project site.

The Project Applicant proposes to entitle and develop one industrial warehouse building having a building footprint of 1,000,000 square feet (s.f.). The building would have a total of 148 dock doors for trucks, with 74 dock-high doors and 2 grade-level doors each along the northern and southern façade of the building. Two aboveground water infiltration basins are proposed, one in the northeastern corner of the Project site, and one in the southeastern corner of the Project site. Other associated improvements to the Project site would include, but are not limited to, frontage road improvements, drive aisles, passenger vehicle parking areas, truck and trailer parking areas, loading dock truck courts, utility infrastructure, landscaping, signage, lighting, screen walls, security gates, and fencing, including perimeter fencing. Development details are described in Section 3.0, *Project Description.* This EIR analyzes the physical environmental effects associated with all components of the Project, including planning, grading, construction, and on-going operation. The Project includes the above-described development and all required entitlements to implement that development.

Refer to Section 3.0, *Project Description*, for a detailed description of proposed TPM 84510 and SPR 24-0021 and the physical and operational characteristics of the Project. Other related discretionary and administrative actions required of the City of Palmdale and other agencies to authorize construction and operation of the Project also are listed in Section 3.0.

1.3 CEQA COMPLIANCE PROCESS

As a first step in the CEQA compliance process and pursuant to the procedural requirements of CEQA, on February 11, 2025, the City filed a Notice of Preparation (NOP) with the State Clearinghouse (SCH), a division of the Governor's Office of Planning and Research (OPR), to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP also was distributed to potential responsible and trustee agencies and other interested parties for a local 30-day

public review period that commenced on February 3, 2025. The NOP was subsequently filed with the Los Angeles County Clerk on March 25, 2025. The purpose of distributing the NOP was to solicit responses to assist the City in identifying the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR.

In addition, the City held a publicly noticed EIR Scoping Meeting on February 19, 2025, using an internet-based virtual platform (Zoom). At the Scoping Meeting, the City provided information about the proposed Project, the intended scope of the EIR, and provided opportunity for agencies and members of the general public to comment on the scope of environmental issues to be addressed in this EIR. There were no attendees at the Scoping Meeting other than City staff, the CEQA compliance consultant, and the Project Applicant. The City posted a video of the Scoping Meeting on its website following the meeting.

An Initial Study was not prepared for the proposed Project because the City determined that an EIR was required, although the Project's NOP did scope out certain issue areas from detailed environmental review. The NOP, public review distribution list, and written comments received by the City during the NOP public review period are provided in *Technical Appendix A* to this EIR. Please refer to Table 1-1, *Summary of NOP Comments*, for summarized comments received during the NOP public review period. The purpose of this table is to present a summary of the environmental topics that were expressed by public agencies and interested parties to be of primary interest. Table 1-1 is a summary and does not list every comment received by the City during the NOP review period. Regardless of whether or not an environmental or CEQA-related comment is listed in the table, all relevant comments received in response to the NOP are addressed in this EIR.

Table 1-1 Summary of NOP Comments

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
State			
California Department of Fish and Wildlife (CDFW)	February 26, 2025	• States that western Joshua trees occur throughout the Project site. Provides information, survey requirements, avoidance measures, compensatory mitigation information, and guidance for treatment of impacts to western Joshua Tree.	*4.3, Biological Resources*
		• Recommends the EIR to provide a discussion on impacts to western Joshua trees and whether the Project intends to obtain an Incidental Take Permit (ITP) or any other appropriate take authorization under California Endangered Species Act (CESA) or obtain permit under the Western	*4.3, Biological Resources*

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
		Joshua Tree Conservation Act (WJTCA).	
		• States that there has been a historical observation of Crotch's bumble bee within a mile of the Project site. Recommends focused surveys and disclosure of impacts within the Draft EIR.	*4.3, Biological Resources*
		• Provides information on survey requirements and mitigation such as ITP or a Consistency Determination in certain circumstances, among other options.	*4.3, Biological Resources*
		• Provides information regarding two reptile species of special concern (SSC): the coast horned lizard and the Northern California legless lizard, survey requirements, avoidance information, and guidance for treatment of impacts to these reptile species. States that both species have been observed and recorded within a mile of the Project site.	*4.3, Biological Resources*
		• Suggests that the EIR discuss potential impacts to SCC and include measures to mitigate for those impacts.	*4.3, Biological Resources*
		• Recommends that measures be taken to avoid impacts on nesting birds and raptors. Recommends that the EIR include a measure to avoid ground disturbing activities and vegetation removal during the avian breeding season from February 15 through September 15 (as early as January 1 for some raptors) to avoid take of birds, raptors, or their eggs.	*4.3, Biological Resources*
		• Recommends evaluation of lighting impacts on wildlife species within the Project site and preparation of a lighting plan. Provides methods for minimizing effects of artificial night lighting.	*4.3, Biological Resources*
		• Recommends that the Project include a native plant palette as part of the Project's landscaping plan.	*3.0, Project Description*

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
		Recommends avoiding non-native, invasive species for landscaping and restoration.	
		• Recommends a complete project description, a range of feasible alternatives to avoid or minimize impacts on sensitive biological resources, wildlife movement areas, and aquatic and riparian resources, and include meaningful evaluation of project alternatives.	*3.0, Project Description* *6.0, Alternatives*
		• Recommends that an adequate biological resources assessment provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area and where the Project may result in ground disturbance. Recommends that emphasis be placed on identifying endangered, threatened, rare, and sensitive species; regionally and locally unique species; and sensitive habitats.	*3.0, Project Description*
		• Recommends that the EIR include information on the regional setting and on resources that are rare or unique to the region.	*4.3, Biological Resources*
		• Recommends a thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's protocols.	*4.3, Biological Resources*
		• Recommends floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at a Project site and within the neighboring vicinity. Adjoining habitat areas should be included in this assessment as the Project could lead to direct or indirect impacts off site.	*4.3, Biological Resources*
		• Recommends a complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by a Project. California Natural Diversity Database (CNDDB) should be contacted to	*4.3, Biological Resources*

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
		obtain current information on any previously reported sensitive species and habitat.	
		• Recommends a complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California Species of Special Concern and California Fully Protected Species.	*4.3, Biological Resources*
		• Requests a recent wildlife and rare plant survey.	*4.3, Biological Resources*
		• Requests analysis of direct and indirect impacts on biological resources including impacts to resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands, wildlife corridors, alterations of the ecosystem, and potential impacts related to the Project's lighting, noise, human activities, introduction of exotic species, drainage pattern changes, soil erosion, potential water extraction activities, and changes to land use designations that could change wildlife-human interactions.	*4.3, Biological Resources*
		• Requests analysis of cumulative effects from general and specific plans, as well as past, present, and anticipated future projects, relative to their impacts on similar plant and wildlife species, habitat, and vegetation communities	*4.3, Biological Resources*
		• States that public agencies have a duty to prevent significant, avoidable damage to the environment by requiring changes in a project through the use of feasible alternatives or mitigation measures and provides suggestions for mitigation of direct and indirect impacts.	*4.3, Biological Resources*
		• States that mitigation measures must be feasible, effective, implemented,	*4.3, Biological Resources*

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
		and fully enforceable/imposed by the Lead Agency. Recommends the City provide mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location) in order for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program.	
		• States that if a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the Project as proposed, the EIR should include a discussion of the effects of proposed mitigation measures.	*4.3, Biological Resources*
		• States that the EIR should include compensatory mitigation measures for adverse direct or indirect impacts to sensitive plants, animals, and habitats.	*4.3, Biological Resources*
		• Provides criteria for the long-term management of mitigation lands to be preserved in perpetuity.	*4.3, Biological Resources*
		• States that CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to endangered, rare, or threatened plants and animals.	*4.3, Biological Resources*
		• States that qualified biologist(s) must obtain appropriate handling permits to capture, temporarily possess, and relocated wildlife to avoid harm or mortality in connection with Project related activities.	*4.3, Biological Resources*
		• Provides information on the Wetlands Resources policy and states that CDFW encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands.	*4.3, Biological Resources*
		• States that CDFW recommends avoidance of water practices and structures that use excessive amounts	*4.3, Biological Resources*

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
		of water, and minimization of impacts that negatively affect water quality, to the extent feasible.	
		• Requests reporting of any special status species and natural communities detected during Project surveys to the CNDDB.	*4.3, Biological Resources*
		• Provides information on filing fees to CDFW	*4.3, Biological Resources*
California Department of Justice's Bureau of Environmental Justice	February 21, 2025	• Provides information on environmental impacts from warehouses and diesel trucks	*4.2, Air Quality*
		• Recommends consideration of measures to reduce emissions associated with the Project to help the State meet its air quality goals	*4.2, Air Quality*
		• Provides a copy of the Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act for consideration.	*4.2, Air Quality*
Local			
Los Angeles County Waterworks Districts	March 3, 2025	• States that the EIR should include discussion of water supply sources and availability and evaluate the Project's demand and impacts to water supply.	*4.9, Hydrology and Water Quality* *4.15, Utilities and Service Systems*
		• States that the Project owner should coordinate with Los Angeles County Waterworks District 40, Antelope Valley, and address impacts of new water infrastructure to be constructed as a condition of water service.	*4.15, Utilities and Service Systems*
Interested Parties			
Coalition for Responsible Equitable Economic Development ("CREED LA")		• Requests a complete analysis of impacts in the subject areas identified in the NOP, imposition of all feasible mitigation, and study of a reasonable range of alternatives to the Project.	*4.0, Environmental Analysis* *6.0, Alternatives*
		• States that a reasonable worst-case scenario (i.e., most impactful) should be analyzed so that a broad and diverse range of environmental impacts are included in the analysis of the EIR.	*4.0, Environmental Analysis*

Commenter	Date	Comments	Location in EIR Where Comment(s) Addressed
		• States that the EIR should make all effort to minimize air quality effects to the extent feasible and urge the City to adopt a quantitative GHG threshold.	*4.2, Air Quality* *4.7 Greenhouse Gas Emissions*
		• Encourages the incorporation of modern technology in the mitigation measures and that mitigation measures must be effective and enforceable.	*4.0, Environmental Analysis*

In consideration of public comments made on the NOP (see *Technical Appendix A*), the City of Palmdale determined that the proposed Project would result in no impacts or less than significant impacts to the following environmental topics: Agriculture and Forestry Resources; Mineral Resources; Population and Housing; and Recreation. Potential effects associated with these environmental topics and an analysis of the Project's potential to be growth-inducing are summarized in Section 5.0, *Other CEQA Considerations*. Based on Appendix G to the CEQA Guidelines, and in consideration of all comments received by the City of Palmdale on the NOP, Section 4.0, *Environmental Analysis*, of this EIR evaluates the Project's potential to cause adverse impacts under the following environmental topics:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

As stated in CEQA Guidelines Section 15161, a Project EIR should "…focus primarily on the changes in the environment that would result from the development project" and "…examine all phases of the project including planning, construction, and operation." Acting as Lead Agency, the City will consider the following items regarding the proposed Project and this EIR: a) evaluation of this EIR to determine if the physical environmental impacts of the Project are adequately disclosed; b) assessment of the adequacy and feasibility of identified mitigation measures; c) consideration of alternatives to the Project that could reduce or eliminate significant environmental effects of the Project; and, if necessary, d) consideration of Project benefits that override the Project's unavoidable and unmitigable significant effects on the environment.

The City will release the Draft EIR for a minimum 45-day public review period and make the Draft EIR and its supporting technical appendices available for review in electronic format on the City's

website; in paper copy at the City's Department of Economic and Community Development, Planning Division, 38250 Sierra Highway, Palmdale, CA 93550, during the City's regular business hours; and in paper copy at the Palmdale City Library, 700 E. Palmdale Boulevard, Palmdale, CA 93550, during the library's regular business hours; as well as at the City's Department of Parks and Recreation at 827 East Avenue Q9, Palmdale, California 93350; and at City Hall at 38300 Sierra Highway Suite A, Palmdale, California 93550.

During the 45-day review period, comments on the content of the Draft EIR can be submitted to:

City of Palmdale
Department of Economic and Community Development
Attn: Brenda Magaña, Planning Manager
38250 Sierra Highway
Palmdale, CA 93550
Email: bmagana@cityofpalmdaleca.gov

Public comments should be focused "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated" (CEQA Guidelines Section 152049(a)).

Following the Draft EIR's 45-day public review period, the City will then respond in writing to all submitted comments pertaining to an environmental effect and publish a Final EIR. Before taking action to approve the Project, the City will: 1) ensure this EIR has been completed in accordance with CEQA; 2) review and consider the information contained in this EIR as part of its decision making process; 3) make a statement that this EIR reflects the independent judgment of the City; 4) ensure that all significant effects on the environment are avoided or substantially lessened where feasible; and, if necessary 5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible, and citing the specific benefits of the proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines Sections 15090-15093).

A public hearing will be held before the City's Planning Commission to consider information contained in the Project's EIR and the EIR's Administrative Record in its decision-making process and the Planning Commission will determine whether to certify this EIR and whether to approve, approve with changes, or deny proposed TPM 84510 and SPR 24-0021.

During the decision-making process, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project's administrative record, will be considered by the City. If the Final EIR is certified and the Project is approved by the Planning Commission, the City and other public agencies with permitting authority over all, or portions of, the Project would be able to rely on the Final EIR as part of their permitting and approval processes to evaluate the environmental effects of the Project as they pertain

to the approval or denial of applicable permits. City staff would also rely on the certified Final EIR to subsequently conduct administrative level reviews for implementing permits and approvals.

1.3.2 CONTENT AND ORGANIZATION OF THIS EIR

CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a quick reference in locating the CEQA-required sections within this document.

Table 1-2 Location of CEQA Required Topics

CEQA Required Topic	CEQA Guidelines Reference	Location in this EIR
Table of Contents	Section 15122	Table of Contents
Summary	Section 15123	Section S.0
Project Description	Section 15124	Section 3.0
Environmental Setting	Section 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	Section 15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	Section 15126.2(b)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Impacts Which Would be Involved in the Proposed Action Should it be Implemented	Section 15126.2(c)	Subsection 5.2
Growth-Inducing Impact of the Proposed Project	Section 15126.2(d)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	Section 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	Section 15126.6	Section 6.0
Effects Not Found to be Significant	Section 15128	Subsection 5.4
Organizations and Persons Consulted	Section 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	Section 15130	Section 4.0
Energy Conservation	Appendices F and G	Subsection 4.5

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statute and Guidelines (California Public Resources Code, Section 21000 et. seq. and California Code of Regulations, Title 14, Chapter 5). This EIR is organized in the following manner:

- **Section S.0, Executive Summary**, provides an overview of the EIR document and CEQA process. The Project, including its objectives, is described, and the location and regional setting of the Project site is documented. In addition, the Executive Summary discloses potential areas of controversy related to the Project, including those issues identified by other agencies and the public, and identifies potential alternatives to the proposed Project that would reduce or avoid significant impacts, as required by CEQA. Finally, the Executive Summary provides a

summary of the Project's impacts, mitigation measures, and conclusions, in a table that forms the basis of the EIR's Mitigation Monitoring and Reporting Program (MMRP).

- **Section 1.0, Introduction**, provides introductory information about the CEQA process and the responsibilities of the City of Palmdale serving as the Lead Agency for this EIR; a brief description of the Project; the purpose of this EIR; proposed TPM 84510 and SPR 24-0021, that would require discretionary City approvals; permits and approvals required by other agencies; and an overview of the EIR format.

- **Section 2.0, Environmental Setting.** In compliance with CEQA Guidelines Section 15125, Section 2.0 includes a description of the physical environmental conditions in the vicinity of the Project site, including an overview of the regional and local setting, as well as descriptions of the Project site's physical conditions and surrounding context. The existing setting is defined as the condition of the Project site and surrounding area at the approximate date this EIR's NOP was filed with the Los Angeles County Clerk on March 25, 2025. The setting discussion also addresses the relevant regional planning documents that apply to the Project site and vicinity.

- **Section 3.0, Project Description**, serves as the EIR's Project Description for purposes of CEQA Guidelines Section 15124 and contains a level of specificity commensurate with the level of detail proposed by the Project. This Section provides a detailed description of the Project, including its purpose and main objectives; design features; landscaping; site drainage; utilities; grading and construction characteristics; and operational characteristics expected over the Project's lifetime. In addition, the discretionary actions required of the City of Palmdale and other government agencies to implement the Project are discussed.

- **Section 4.0, Environmental Analysis**, provides an analysis of the potential direct, indirect, and cumulative impacts that may occur from implementing the proposed Project. The topics analyzed in this section include the topics summarized above under Section 1.3. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as "effects" or "impacts" interchangeably. The CEQA Guidelines also describe the terms "effects" and "impacts" as being synonymous (CEQA Guidelines Section 15358).

  In the environmental analysis subsections of Section 4.0, the existing conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementing the proposed Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the proposed Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in CEQA Guidelines Section 15355 as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

The analyses in Section 4.0 are based in part upon technical reports that are appended to this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the proposed Project and that are cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation measures are recommended to reduce or avoid the significant effect. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be "roughly proportional" to the impacts of the Project. The discussion then indicates whether the identified mitigation measures would reduce impacts to below a level of significance. In most cases, implementation of the mitigation measures would reduce the adverse environmental impacts to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations (SOC) would need to be adopted by the City pursuant to CEQA Guidelines Section 15093.

- **Section 5.0, Other CEQA Considerations**, includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, potential growth-inducing impacts of the proposed Project, and a summary of effects determined to be less than significant as part of the Project's NOP process.

- **Section 6.0, Project Alternatives**, describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project's adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives that will foster informed decision making and public participation. A range of three (3) alternatives is presented in Section 6.0.

- **Section 7.0, References**, cites all reference sources used in preparing this EIR and lists the agencies and persons that were consulted during preparation of this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

1.3.3 INCORPORATION BY REFERENCE

CEQA Guidelines Section 15147 states that the "information contained in an EIR shall include summarized… information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public," and that the "placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided." CEQA Guidelines Section 15150 allows for the incorporation "by reference all or portions of another document… [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate

section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR.

The detailed technical studies, reports, and supporting documentation that were used in preparing this EIR are bound separately as Technical Appendices. The Technical Appendices are available for review at the City of Palmdale, 38300 Sierra Highway, Palmdale, CA 93550, during the City's regular business hours or can be requested in electronic form by contacting the City's Planning Division. The technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

A. Notice of Preparation (NOP) and Written Comments on the NOP
B. Air Quality, Greenhouse Gas Emissions, and Energy Technical Report
C. Biological Resources Technical Report
D. Cultural Resource Assessment
E1. Geotechnical Investigation
E2. Paleontological Resources Review
F1 Phase I Environmental Site Assessment
F2. FAA Determination of No Hazard Letters
G. Preliminary Drainage Report
H. Noise Technical Report
I1. Traffic Impact Analysis
I2. Vehicle Miles Traveled Analysis
J. Sewer Area Study
K. Water Supply Assessment

Other reference sources that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. In most cases, documents or websites not included in the EIR's Technical Appendices are cited by a link to the online location where the document/website can be viewed by the public for convenience. All references relied upon by this EIR are included as part of the City's Administrative Record pertaining to the proposed Project.

1.4 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resource Code (Section 21104) requires that all EIRs be reviewed by responsible and trustee agencies (see also CEQA Guidelines Section 15082 and Section 15086(a)). As defined by CEQA Guidelines Section 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency which have discretionary approval power over the project." A Trustee Agency is defined in CEQA Guidelines Section 15386 as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California." The known Responsible and Trustee Agencies for the Project are listed below. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether identified in this EIR or not, as part of their decision-making processes in relation to the proposed Project.

- **California Department of Fish and Wildlife (CDFW)** is a Trustee Agency responsible for issuance of an Incidental Take Permit (ITP).

- **Lahontan Regional Water Quality Control Board (LRWQCB)** is a Responsible Agency and would be responsible for issuing a Construction Activity General Construction Permit, ensuring compliance with the National Pollutant Discharge Elimination System (NPDES) Permit, and issuing a Waste Discharge Requirements (WDR) permit.

- **Los Angeles County Waterworks District (LACWD) No. 40** is a Responsible Agency in charge of reviewing and approving the Project's proposed water connections and improvements.

- **Los Angeles County Sanitation District (LACSD)** is a Responsible Agency in charge of approving the Project's wastewater infrastructure and connections.

- **Antelope Valley Air Quality Management District (AVAQMD)** is a potential Responsible Agency should the proposed user(s) of the Project's building use equipment that requires an AVAQMD permit.

1.5 AREAS OF CONTROVERSY

Substantive issues raised in response to the NOP were previously summarized in Table 1-1. The purpose of this table is to present the primary environmental issues of concern raised by public agencies and interested parties during the NOP review period. The table is not intended to list every comment received by the City during the NOP review period. Regardless of whether or not a comment is listed in the table, all applicable comments received in responses to the NOP are addressed in this EIR. Based on comments received during the NOP review period, concerns were raised regarding potential impacts to air quality, biological resources, greenhouse gas emissions, and utilities and service systems. No areas of controversy were identified as part of the NOP process, beyond comments regarding the Project's potential environmental effects.

1.6 ISSUES TO BE RESOLVED BY THE DECISION-MAKING BODY

The decision-making body for the proposed Project is the City's Planning Commission. The decision of the Planning Commission is appealable to the City Council. The primary issues to be resolved by the decision-making body for the proposed Project involve the Project's significant and unavoidable impacts to the environmental topic areas of greenhouse gas emissions and transportation (vehicle miles traveled for trucks). The decision-making body will evaluate whether the mitigation measures presented in this EIR reduce the Project's unavoidable greenhouse gas emission impact and transportation impact to the maximum feasible extent. The decision-making body also will make a determination as to whether the Project's benefits outweigh the adverse environmental effects in support of adopting a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093. Finally, the decision-making body will decide whether to approve one of the Project alternatives

in lieu of the proposed Project, if it is determined that one of the alternatives is feasible, meets the Project's objectives, and its approval will substantially reduce or avoid the Project's significant environmental effects.

2.0 ENVIRONMENTAL SETTING

This section complies with CEQA Guidelines Section 15125(a) and includes a description of the proposed Project's environmental setting as it existed at the approximate time the Notice of Preparation (NOP) was published for this EIR with the Los Angeles County Clerk (March 25, 2025). Additional detail regarding existing conditions for individual environmental issue topics (e.g., biology, geology, etc.) is provided within the appropriate subsection headings within Section 4.0, *Environmental Analysis*, of this EIR.

2.1 REGIONAL SETTING AND LOCATION

The Project site is comprised of approximately 67 acres of vacant land and is located within the City of Palmdale, California, which is located within the Antelope Valley portion of Los Angeles County. Figure 2-1, *Regional Map*, depicts the Project site's location within the regional vicinity. As shown on Figure 2-1, Los Angeles County abuts Ventura County to the west, Kern County to the north, San Bernardino County to the east, and Orange County to the south. The Antelope Valley is in the northern portion of Los Angeles County and is disconnected from the Southern California coastal and Central California valley regions by the Tehachapi Mountains to the northwest and by the San Gabriel Mountains to the south.

2.2 LOCAL SETTING AND LOCATION

As depicted on Figure 2-2, *Vicinity Map*, the vacant 67-acre Project site is located within the central portion of the City of Palmdale. Communities surrounding the City include the City of Lancaster and the unincorporated community of Quartz Hill to the north, as well as other unincorporated communities such as Lake Los Angeles to the east; Sun Village, Littlerock, and Pearblossom to the southeast; Acton to the south; Agua Dulce to the southwest; and Leona Valley to the west.

The Project site encompasses Assessor Parcel Numbers (APNs) 3006-027-001, -002, -003, -004, and -005 and is located in Section 14, Township 6 North, Range 12 West, San Bernardino Baseline and Meridian. The Project site is located directly north of West Rancho Vista Boulevard / East Avenue P; directly east of Division Street; approximately 0.75-mile south of East Avenue O; and approximately 0.01-mile west of Sierra Highway. State Route 14 (SR-14) is located approximately 0.51-mile to the west of the Project site and Runway 7 of United States Air Force (USAF) Plant 42 is located approximately 1.8 miles (9,504 feet) to the northeast of the Project site.

As background on existing pollution burden, the California Environmental Protection Agency (CalEPA) reports census tract demographic and socioeconomic data across the State of California and correlates that data with community health indicators. Even though the data is several years old and air quality has improved since the data was reported, for informational reporting purposes, the census tract containing the Project site (Census Tract 6037910201) is reported by CalEPA's Office of Environmental Health Hazard Assessment (OEHHA) using the OEHHA's California Communities

Environmental Health Screening Tool (CalEnviroScreen 4.0) and ranks in the 67th percentile of communities that are disproportionately burdened by multiple sources of pollution (OEHHA, 2021).

The Project site is not located in an SB 535 Disadvantaged Community identified by the CalEPA. The State provides California Climate Investment funding appropriated by the State Legislature from the proceeds of the State's Cap-and-Trade Program for investment in SB 535 disadvantaged communities. The funding is used for programs that reduce emissions of greenhouse gases with at least 25 percent of the funding going to projects that provide a benefit to disadvantaged communities and at least 5 percent of the funding going to projects located within those communities (CalEPA, 2022).

2.3 SURROUNDING LAND USE AND DEVELOPMENT

Land uses in the immediate vicinity of the Project site are illustrated on Figure 2-3, *Surrounding Land Uses and Development*, and described below.

- North: To the immediate north of the Project site is vacant land. Farther north are two business parks (Sierra Gateway), which contain various commercial uses, as well as single-family residences. To the northwest are additional residential uses, beyond which are industrial uses and a business park. To the northeast is Sierra Highway, the Sierra Highway Bike Trail, and the Union Pacific Railroad (UPRR) mainline tracks and easement, beyond which are vacant land and USAF Plant 42.

- South: West Rancho Vista Boulevard / Avenue P forms the southern boundary of the Project site. Beyond West Rancho Vista Boulevard is vacant land; single-family residential uses; a commercial plaza containing various uses, including a restaurant, dry cleaners, air conditioning service, and swimming pool contractor; and an industrial park (Winnell Industrial Park), which contains various industrial uses. Farther south is Technology Drive, an east-west roadway, beyond which are Desert Sands Park and the Palmdale Transit Center.

- East: To the east of the Project site is Sierra Highway and directly east of Sierra Highway is the Sierra Highway Bike Trail and the Union Pacific Railroad (UPRR) mainline tracks and easement. East of the UPRR is vacant land. To the southeast of the Project site, east of the UPRR, is a commercial plaza, and farther southeast are additional vacant land, a self-storage facility (AV Self Storage), and Palmdale School District offices.

- West: Division Street forms the western boundary of the Project site. Beyond Division Street is vacant land, beyond which are residential uses of varying densities. To the southwest is additional vacant land, beyond which are retail/commercial uses and the Palmdale Auto Mall.

2.4 LOCAL PLANNING CONTEXT

CEQA Guidelines Section 15125(d) requires that EIRs identify the general plans and regional plans that are applicable to the project under evaluation and recognize potential inconsistencies. All plans

that are applicable to the Project and evaluated in this EIR are summarized below, with additional information provided in the applicable environmental issue topics in Section 4.0, *Environmental Analysis*.

2.4.1 CITY OF PALMDALE GENERAL PLAN (PALMDALE 2045)

The City of Palmdale adopted an update to its General Plan (Palmdale 2045) on October 22, 2022; amended on March 23, 2023. As shown on Figure 2-4, *Existing General Plan Land Use Designations*, under existing conditions, the General Plan designates the Project site for Employment Flex (EMPFX) land uses. The Employment Flex (EMPFX) land use designation is a transition zone intended to permit mixed development of lighter industrial uses and more intensive service, retail, and commercial uses, with a floor area ratio (FAR) of up to 1.0. (City of Palmdale, 2023, Table 5.4 and Figure 5.5). As also shown on Figure 2-4, lands to the north of the site are designated EMPFX and Neighborhood Residential 1; lands located south of the site and south of West Rancho Vista Boulevard / Avenue P are designated EMPFX and Neighborhood Commercial; lands located east of the site and east of Sierra Highway are designated Utilities and Industrial; and lands located west of the site and west of Division Street are designated Neighborhood Commercial and Neighborhood Residential 2.

2.4.2 ZONING

Title 17 of the Palmdale Municipal Code (PMC) establishes zoning classifications within the City. Pursuant to the PMC, as shown previously on Figure 2-5, the Project site is zoned Light Industrial (LI). The Light Industrial zone is intended to allow a range of medium to high intensity industrial uses such as manufacturing, assembly, warehousing, distribution, and similar uses, which provide employment and services for residents and businesses. Some of these uses, such as heavy manufacturing, may not be suitable adjacent to sensitive uses or housing, and should be physically separated from residential areas by natural or manmade barriers. This zone implements the Industrial and EMPFX General Plan land use designations. (City of Palmdale, 2023) (PMC, 2023). As also shown on Figure 2-5, lands located north of the site are zoned Light Industrial (LI) and Residential Neighborhood 1; lands located south of the site and south of Rancho Vista Boulevard / Avenue P are zoned Office Flex and Neighborhood Commercial; lands located east of the site and east of Sierra Highway are zoned Utilities, Light Industrial, and Heavy Industrial; and lands located west of Division Street are zoned Neighborhood Commercial and Residential Neighborhood 2.

2.4.3 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (RTP/SCS)

The Southern California Association of Governments (SCAG) was formed in 1965 is the nation's largest metropolitan planning organization and council of governments, encompassing six counties and 191 cities. In addition to conducting research and developing long-range transportation plans, SCAG convenes local governments and agencies to address regional transportation, land use and other issues of mutual concern. (SCAG, 2024a, n.p.) The Project site is within SCAG's regional authority.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is required by federal and State regulations. The most recent RTP/SCS was approved by SCAG's Regional Council in April 2024. According to the most recent RTP/SCS,

> *"As the Metropolitan Planning Organization (MPO) for the region, SCAG is required by federal law (23 U.S.C. Section 134 et seq.) to prepare and update a long-range Regional Transportation Plan (RTP) every four years. The Plan must provide for the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the Plan takes into account all modes of transportation, federal planning factors and goals and objectives of the California Transportation Plan (CTP 2050)—and is accomplished by a "continuing, cooperative and comprehensive" planning approach, which is also performance-driven and outcome-based. In addition, because most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants under the federal Clean Air Act (42 U.S.C. Section 7401 et seq.), the Plan must conform to the applicable State Implementation Plan (SIP). The passage of California Senate Bill 375 (SB 375) in 2008 requires that SCAG prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the California Air Resources Board (Govt. Code Section 65080(b)(2)(B)). In addition, the focus on equity in this Plan supports compliance with Title VI of the Civil Rights Act of 1964 and Environmental Justice guidance at the state and federal levels".* (SCAG, 2024a, p. 7)

According to the RTP/SCS, the goals for Connect SoCal fall into the following four core categories: 1) Mobility: Build and maintain an integrated multimodal transportation network; 2) Communities: Develop, connect, and sustain communities that are livable and thriving; 3) Environment: Create a healthy region for the people of today and tomorrow; 4) Economy: Support a sustainable, efficient, and productive regional economic environment that provides opportunities for all residents. (SCAG, 2024a, p. 12)

As the region's MPO, SCAG seeks to optimize the goods movement network (FreightWorks) through increases in economic efficiency, congestion mitigation, safety and air quality improvements, and enhancements to system security. There are numerous SCAG studies related to goods movement in Southern California that provided input to the RTP/SCS. A few include the Industrial Warehousing Study, the Comprehensive Regional Goods Movement Plan and Implementation Strategy, and the Regional Warehousing Needs Assessment. (SCAG, 2024b)

2.4.4 Antelope Valley Air Quality Management District Rules and Plans

The Project site is located within the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD). Currently, the National

Ambient Air Quality Standards (NAAQS) within the MDAB are exceeded for ozone (O_3) (8-hour standard) and the California Ambient Air Quality Standards (CAAQS) are exceeded in the MDAB for O_3 (1-hour and 8-hour standards) and particulate matter smaller than 10 microns (PM_{10}). Pursuant to the Federal Clean Air Act, the AVAQMD has adopted a series of rules and plans for O_3 and PM_{10} demonstrating how the AVAQMD intends to ensure compliance with the NAAQS and CAAQS for these pollutants. A complete list of the rules and plans is available from the AVAQMD located at 2551 W Avenue H, Lancaster, CA 93536, or on their website at: https://avaqmd.ca.gov/rules-plans.
Refer to EIR Subsection 4.2, *Air Quality* for an analysis of the Project's potential impacts and consistency with the AVAQMD.

2.4.5 Los Angeles County Airport Land Use Plan

According to the City's General Plan EIR, the Airport Land Use Commission (ALUC) provides for orderly growth of an airport and the area surrounding the airport within the jurisdiction of the ALUC, excluding existing land uses. Its primary function is to safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. Cities and/or counties have a responsibility to ensure the orderly development of the airports within their local jurisdiction and make sure all applicable planning documents and building regulations are consistent with the Airport Land Use Compatibility Plan (ALUCP). (City of Palmdale, 2022a, p. 4.9-12)

The Los Angeles County ALUC is responsible for establishing land use policy to mitigate potential noise and safety hazards regarding the fifteen airports in its jurisdiction (Los Angeles County ALUC, 2004). According to the Los Angeles County ALUC's Airport Land Use Plan's (ALUP) Palmdale Airport/USAF Plant 42 Airport Influence Area map, the Project site does not occur within the Planning Boundary/AIA of the Palmdale Airport/USAF. An AIA is an airport planning area boundary that consists of all areas in which current or future airport-related noise, over flight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those areas. According to the ALUP AIA map, the Project site is not located within a runway protection zone (RPZ). (Los Angeles County ALUC, 2004, Palmdale Airport/USAF Plant 42 AIA Map)

The Palmdale Regional Airport is a 9,000-square foot commercial airport within the City limits owned by the City of Los Angeles Department of Airports and operated under a joint agreement with USAF Plant 42. USAF Plant 42 employs thousands of military personnel and aerospace workers and hosts manufacturing and flight test facilities for Northrop Grumman, Boeing, and Lockheed Martin. Under the City's General Plan, there is potential that residential, commercial, and industrial uses could be constructed in proximity to the Palmdale Regional Airport and future development of the airport. However, the General Plan does not change the height limits that currently apply to both existing and new uses in these areas. According to the Federal Code of Regulations (CFR), 14 CFR 77 would require the proponent of any planned development to file notice with the Federal Aviation Administration (FAA) for any construction or alteration that exceeds an imaginary surface extending outward and upward at a slope of 25 to one (25:1) for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of a heliport described in 14 CFR 77.9(d). However, if future development in the vicinity of the Palmdale Regional Airport were "shielded by existing structures of

a permanent and substantial nature of equal or greater height," a notice to the FAA under 14 CFR 77 would not be required. (City of Palmdale, 2022a, p. 4.9-23) The Project site is located approximately 1.8 miles (9,504 feet) southwest of Runway 7 of Palmdale Regional Airport/USAF Plant 42.

All development projects located in the Palmdale Airport/USAF Plant 42 Airport Influence Area would be required to comply with existing regulations, including the CFR and ALUCP policies. Refer to EIR Subsection 4.8, *Hazards and Hazardous Materials* and EIR Subsection 4.11, *Noise*, for an analysis of the Project's potential impacts and consistency with the Los Angeles County ALUP.

2.4.6 USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report

The Department of the Air Force's USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report (December 2011) documents aircraft operations at USAF Plant 42 and reaffirms the Air Force's policy of assisting federal, state, regional, and local officials in planning for the areas surrounding military installations. The AICUZ Final Report promotes compatible development within the AICUZ area of influence with the goal of protecting community health and Air Force operational capacity from the negative effects of incompatible land uses. The AICUZ Final Report provides compatible use guidelines for land use areas surrounding the installation as well as identifies noise contours. (City of Palmdale, 2023, p. 203)

According to the AICUZ Final Report, the Project site occurs within the USAF Plant 42 AICUZ area of influence (Department of the Air Force, 2011, p. 3-17). The area of influence for airfield planning is concerned with three primary aircraft operational/land use determinants: 1) accident potential to occupants on the ground; 2) aircraft noise; and 3) hazards to flight operations from land uses (height obstructions, increased potential for bird-aircraft strike hazards, operations such as factories that emit smoke, dust, or light that adversely affect flight operations) (Department of the Air Force, 2011, p.2-17).

As shown in the AICUZ Final Report's Figure 3-6, Plant 42 CZs and APZs, the southeastern corner of the Project site is located within an Accident Potential Zone II (APZ II). (Department of the Air Force, 2011, pp. 3-20 to 3-23) As shown in the AICUZ's Final Report's Figure 3-3, Air Force Plant 42 – Community Noise Equivalent Level (CNEL), a small portion of the northeastern corner of the Project site consisting of industrial land uses is located within the 60-65 dBA CNEL aircraft noise level contour boundaries. Therefore, according to the City of Palmdale General Plan Noise Element Noise Land Use Compatibility Criteria, the Project's land uses are considered *normally acceptable*. (City of Palmdale, 2023, p. 405)

Refer to EIR Subsection 4.8, *Hazards and Hazardous Materials* and EIR Subsection 4.11, *Noise*, for an analysis of the Project's potential impacts and consistency with the AICUZ Final Report.

2.4.7 West Mojave Coordinated Management Plan

The West Mojave Coordinated Management Plan (Conservation Plan) is a habitat conservation plan (HCP) that acts as a comprehensive strategy to conserve the desert tortoise, Mohave ground squirrel,

and over 100 sensitive plants, animals, and natural communities. The Plan provides for a streamlined program for complying with the requirements of the California and federal Endangered Species Acts. (City of Palmdale, 2022a, p. 4.4-17) The planning area encompassed approximately 9.3 million acres in Inyo, Kern, Los Angeles, and San Bernardino Counties, including approximately 3.3 million acres of public lands administered by the Bureau of Land Management (BLM), approximately three million acres of private lands, and approximately 102,000 acres administered by the State of California. The remaining land is military land administered by the Department of Defense. However, only the BLM elements of the West Mojave Plan were adopted. (Dudek, 2025b, p. 7)

As disclosed in EIR Subsection 4.3, *Biological Resources,* although the Project site is located within the geographic boundaries of the West Mojave Plan, the Project would not be processed under the West Mojave Plan because it is a private project and the West Mojave Plan can only be used for projects on federal land. Even though the Project's construction and operational activities are not required to comply with the West Mojave Plan, it is noted that the proposed Project would not interfere with any conservation areas designed by the West Mojave Plan (Dudek, 2025b, p. 31).

2.5 EXISTING PHYSICAL SITE CONDITIONS

Pursuant to CEQA Guidelines Section 15125, the physical environmental condition for purposes of establishing the setting of an EIR is the environment as it existed at the time the EIR's NOP was published. The NOP for this EIR was published with the Los Angeles County Clerk on March 25, 2025. The following subsections provide a description of the Project site's physical environmental condition ("existing conditions") as of that approximate date. The physical conditions of the Project site and immediate surrounding areas are shown on Figure 2-6, *Aerial Photograph*. More detailed information regarding the Project's site's environmental setting as it relates to specific environmental issue topics is provided in the various subsections of EIR Section 4.0, *Environmental Analysis*.

2.5.1 LAND USE

As shown on Figure 2-6, the Project site is vacant. A dirt access road running north-south bisects the Project site. The access road forks in the northern portion of the Project site, with one road continuing north beyond the boundaries of the Project site, and the other road running northwest beyond the boundaries of the Project site. The majority of the Project site, other than the dirt access roads, is undisturbed.

2.5.2 AESTHETICS AND TOPOGRAPHIC FEATURES

As shown on Figure 2-7, *USGS Topographic Map*, the Project site is relatively flat with an elevation of approximately 2,625 feet above mean sea level (amsl) with a regional slope to the northeast. (HMC, 2024, p. 1) The topography generally drops downward to the east, with a maximum elevation differential of about 17± feet. (SCG, 2024, p. 4)

2.5.3 Air Quality and Climate

Palmdale is within the Mojave Desert Air Basin (MDAB), which is under the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD). The AVAQMD is the local air quality management agency responsible for monitoring the local air pollutant levels to ensure that state and federal air quality standards are met. The MDAB is characterized by mountain ranges and valleys, with frequent prevailing winds originating from coastal and central regions. Palmdale is in the northeast Los Angeles County portion of the AVAQMD's authority.

Temperatures in the area average lows and highs of 71 degrees Fahrenheit (°F) and 95°F, respectively, in the summer months and 36°F and 58°F, respectively, in the winter months. Average annual precipitation is eight inches. This pattern is broken only by occasional winter storms and infrequent Santa Ana winds from the mountains west of the MDAB. Usually warm, dry, and dusty, Santa Ana winds are particularly strong in passes and at the mouths of canyons. Sustained winds of 60 miles per hour with higher gusts are common for these conditions. On average, Santa Ana wind conditions occur five to 10 times per year, with each event lasting up to a few days. Palmdale is sheltered from import of inter-basin pollution by mountain barriers extending to the north and south. Air quality is generally good; however, the City receives windborne air pollutants from the greater Los Angeles area via canyons, such as the Newhall Pass and Soledad Canyon, which lie to the south of the City. (City of Palmdale, 2022a, p. 4.3-1)

2.5.4 Biological Resources

The Project site is located within an area referred to as "the high desert." Vegetation types on the site consist of Joshua Tree Woodland, Rubber Rabbitbrush Scrub, Nevada Joint Fir-Anderson's Boxthorn-Spiny Hop Sage Scrub, Disturbed Habitat, and Urban/Developed. (Dudek, 2025b, pp. 21-24)

The Project site does not occur within any designated wildlife corridors or habitat linkages identified in the South Coast Missing Linkages analysis conducted by South Coast Wildlands or CDFW's California Essential Habitat Connectivity Project, as shown in the CDFW Biogeographic Information and Observation System (BIOS). The Project site does not have any streams that would provide fish passage and it provides limited connectivity for terrestrial wildlife movement due to the developed lands to the south and west, and due to Sierra Highway and the railroad tracks that parallel it on the east, the fenced Palmdale Regional Airport, and active agricultural fields to the north and east. (Dudek, 2025b, p. 30)

2.5.5 Geology and Soils

Palmdale is located in the southern part of the Mojave geomorphic province, which is a broad interior region of isolated mountain ranges separated by stretches of desert plains. Although the site is located in a seismically active region, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Southern California Geotechnical (SoCalGeo) conducted subsurface excavation at the Project site consisting of 17 borings (identified as Boring Nos. B-1 through B-17) advanced to depths of approximately 10 to 30 feet below the existing site grades. The approximate locations of the borings

are indicated on the Boring Location Plan, included as Plate 2 in Appendix A to the Geotechnical Investigation (EIR *Technical Appendix E*). Based on the results of the analysis, the Project site contains the following geotechnical conditions: (SCG, 2024, pp. 5, 9)

- Younger Alluvium. Younger alluvial soils were encountered at the ground surface at all of the boring locations, extending to depths of approximately 2.5 to 17 feet below existing site grades. The borings encountered loose to very dense silty fine to medium sands, fine to coarse sands, with varying amounts of silt, clay, sand, and gravel content. (SCG, 2024, p. 5)

- Older Alluvium. Native older alluvial soils were encountered beneath the younger alluvium at Boring Nos. B-1, B-3, B-4, B-5, B-8, B-9, and B-10, extending to at least the maximum depth explored of approximately 30 feet. The older alluvium generally consists of medium dense to very dense silty fine to coarse sands, fine to coarse sands, and clayey fine to coarse sands, with varying amounts of clay, silt, sand, and gravel content. The older alluvium possesses some calcareous nodules and veining, with some slightly cemented samples. (SCG, 2024, p. 5)

Documented Pleistocene fossil localities are present in the vicinity of the Project site and Pleistocene age alluvium is anticipated to occur at relatively shallow depths beneath the surface of the Project site (approximately 2.5 feet below the surface within some portions of the Project site). Therefore, the Pleistocene deposits beneath the surface of site are considered to have High Sensitivity for paleontological resources. (Dudek, 2025c, p. 1)

2.5.6 HYDROLOGY

As shown on Figure 2-8, *FEMA Flood Insurance Rate Map*, according to the Federal Emergency Management Agency (FEMA) the Project site is mapped on two Flood Insurance Rate Maps (FIRMs). The majority of the Project site is located within FIRM No. 06037C0657F, mapped within Zone X (Unshaded), which are areas determined to be outside the 0.2 percent annual chance floodplain. The eastern side of the Project site is located within FIRM No. 06037C0700F. In this portion of the Project site, the Project site is also mapped within Zone X (Unshaded). (FEMA, 2008)

2.5.7 NOISE AND VIBRATION

Primary sources of noise and vibration in the Project site's vicinity include traffic noise from vehicles traveling along Sierra Highway, West Rancho Vista Boulevard / East Avenue P, and Division Street, and railroad noise and vibration from the UPRR tracks located east of Sierra Highway. To assess the existing noise level environment, short-term noise level measurements were collected at four locations by the Project's noise consultant, Dudek, on Wednesday, January 29, 2025. Measured daytime noise levels in the area ranged from 70.8 A-weighted decibels (dBA) equivalent continuous (average) sound level (L_{eq}) to 72.2 dBA $L_{eq.}$ (Dudek, 2025c, p. 14)

2.5.8 TRANSPORTATION

West Rancho Vista Boulevard is located along the southern frontage of the Project site and Division Street is located along the western frontage of the Project site. Both roads are classified as crosstown roadways by the City's General Plan Circulation and Mobility Element. Access to West Rancho Vista Boulevard / East Avenue P and Division Street is provided from Sierra Highway to the east of the site and SR-14 to the west of the site. West Rancho Vista Boulevard / East Avenue P and Sierra Highway are designated truck routes. East of Sierra Highway is the Sierra Highway Bike Trail that runs along Sierra Highway continuing north into the City of Lancaster. While the path provides a regional link, the facility is disconnected from communities outside of central Palmdale. (City of Palmdale, 2022a, pp. 150, 167)

Regional access to the Project site is provided by SR 14, which is located 0.51-mile to the west. Local access is provided by the following roadways (Translutions, 2025b, p. 22):

- **Division Street** is a two-lane roadway oriented in a north-south direction and abuts the Project site to the west. Division Street is classified as a Crosstown Street in the City's General Plan.

- **West Rancho Vista Boulevard / East Avenue P** is a four-lane roadway oriented in an east-west direction and abuts the Project site to the south. West Rancho Vista Boulevard / East Avenue P has a raised center median east of Sierra Highway, and a two-way left turn lane median west of Sierra Highway. West Rancho Vista Boulevard / East Avenue P is classified as a Crosstown Street in the City's General Plan.

- **Sierra Highway** is a four-lane roadway oriented in a north-south direction located approximately 0.1 mile east of the Project site to the east. Sierra Highway has a raised center median in the Project vicinity. Sierra Highway is classified as a Regional Street in the City's General Plan.

- **8th Street** is oriented in a north-south direction. It is a five-lane roadway between Lockheed Way and West Rancho Vista Boulevard/East Avenue P. 8th Street is classified as a Connector Street in the City's General Plan. (Translutions, 2025b)

The Project is served by the Antelope Valley Transit Authority (AVTA), a public transit agency serving various jurisdictions within Los Angeles County. Based on a review of the existing transit routes within the vicinity of the Project site, AVTA Routes 3 and 8 run along West Rancho Vista Boulevard / East Avenue P and Sierra Highway within the vicinity of the Project site. (AVTA, 2025) Bus stops for Route 3 are located on either side of West Rancho Vista Boulevard / East Avenue P near 3rd Street and Sierra Highway, along the Project's southern boundary. Route 8 is an express route and travels along Sierra Highway, but it does not have a stop in the Project vicinity. (Translutions, 2025a, p. 22)

2.5.9 PUBLIC FACILITIES

The City contracts fire protection and first response emergency and medical services through Los Angeles County Fire Department (LACFD). The nearest fire station to the Project site is LACFD Station No. 24, located approximately 1.1 miles to the west of the Project site. The next closest fire station is LACFD Station No. 37, located approximately 1.7 miles to the southeast. LACFD maintains a response time for emergency fire protection services of four to six minutes. (City of Palmdale, 2022a, p. 4.15-1) (Google Earth, n.d.)

The City contracts with Los Angeles County for police services. The Los Angeles County Sheriff's Department (LACSD) patrols 770 square miles and serves a population of approximately 200,000 people in and around the City of Palmdale. The LACSD operates a sheriff station at 750 East Avenue Q that serves the City of Palmdale and surrounding communities, including the Project site. The sheriff's station includes a 47,000 square-foot main building, 7,800 square-foot jail, and an 8,400 square-foot motor pool and storage building. (City of Palmdale, 2022a, p. 4.15-2)

The Project site is located within the service area of the Palmdale School District (PSD) for elementary and middle school services. Summerwind Elementary School is located approximately 1.6 miles southwest of the Project site and David G. Millen Intermediate School is located approximately 2.3 miles southwest of the Project site (Google Earth, n.d.). For high school services, the Project site is in the Antelope Valley Union High School District (AVUHSD). Highland High School is located approximately 2.6 miles southwest of the Project site (AVSD, n.d.) (Google Earth, n.d.). The nearest school to the Project site is R. Rex Parris High School, located approximately 0.92-mile south of the Project site (Google Earth, n.d.).

Desert Sands Park is located approximately 0.5-mile south of the Project site. The approximately 20-acre park includes a variety of recreational uses including a recreation building, two tennis and basketball courts, two softball fields, volleyball and tetherball courts, playground and picnic areas, and a tot lot. Marie Kerr Park is located approximately 2.7 miles west of the Project site. The approximately 57-acre park includes the Palmdale Amphitheater, the Best of the West Softball Complex, a recreation center, a skate park, basketball and tennis courts, soccer and softball fields, playgrounds, picnic areas, and a tot lot. (Google Earth, n.d.) (City of Palmdale, n.d.)

The Palmdale City Library is located at 700 East Palmdale Boulevard, approximately 1.6 miles southwest of the Project site. The library is currently open Monday through Saturday, along with limited hours on Sunday (Google Earth, n.d.; City of Palmdale, 2022a, p. 4.15-5). Palmdale City Library is the closest library to the Project site.

2.5.10 UTILITIES AND SERVICE SYSTEMS

A. Water Service

The Project site is located within the service area of the Los Angeles County Waterworks District 40 (LACWD). LACWD 40 encompasses eight different regions over a total of 232 square miles. The

District served a population of 205,000 people in 2020 and is expected to increase to 263,000 people by 2045 with an assumed 1.0 percent growth rate. Region 4 and Region 34 of District 40 were consolidated to serve the City of Lancaster and the City of Palmdale. (Akel, 2025, pp. 5-6)

B. Sewer Service

Public sewer systems located in the vicinity of the Project site are owned and maintained by the City of Palmdale Public Works, Sewer Maintenance Division (COPSM). The COPSM prepared a Sewer System Management Plan (SSMP) in 2014 to comply with the State Water Resources Control Board (SWRCB) Order 2006-0003: *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (City of Palmdale, 2014). COPSM manages a wastewater collection system of public sewer mainlines within the City's service area, which encompasses approximately 105 square miles. Most of the collected wastewater flows that are conveyed through public sewer mainlines discharge to Los Angeles County Sanitation District (LACSD) trunk mainlines, which ultimately direct flows to the Palmdale Water Reclamation Plant (WRP), which is managed in Los Angeles County Sanitation District No. 20 and can reclaim up to 12 million gallons per day (mgd). Some wastewater is sent to the Lancaster Water Reclamation Plant (LWRP). (City of Palmdale, 2022a, pp. 4.19-3 through 4.19-4) Wastewater generated by the Project would be treated at the LWRP.

Existing sewer facilities in the Project area include a sanitary sewer line located within the Sierra Highway right-of way to the northeast of the Project site boundary. (City of Palmdale, 2014, Figure 1)

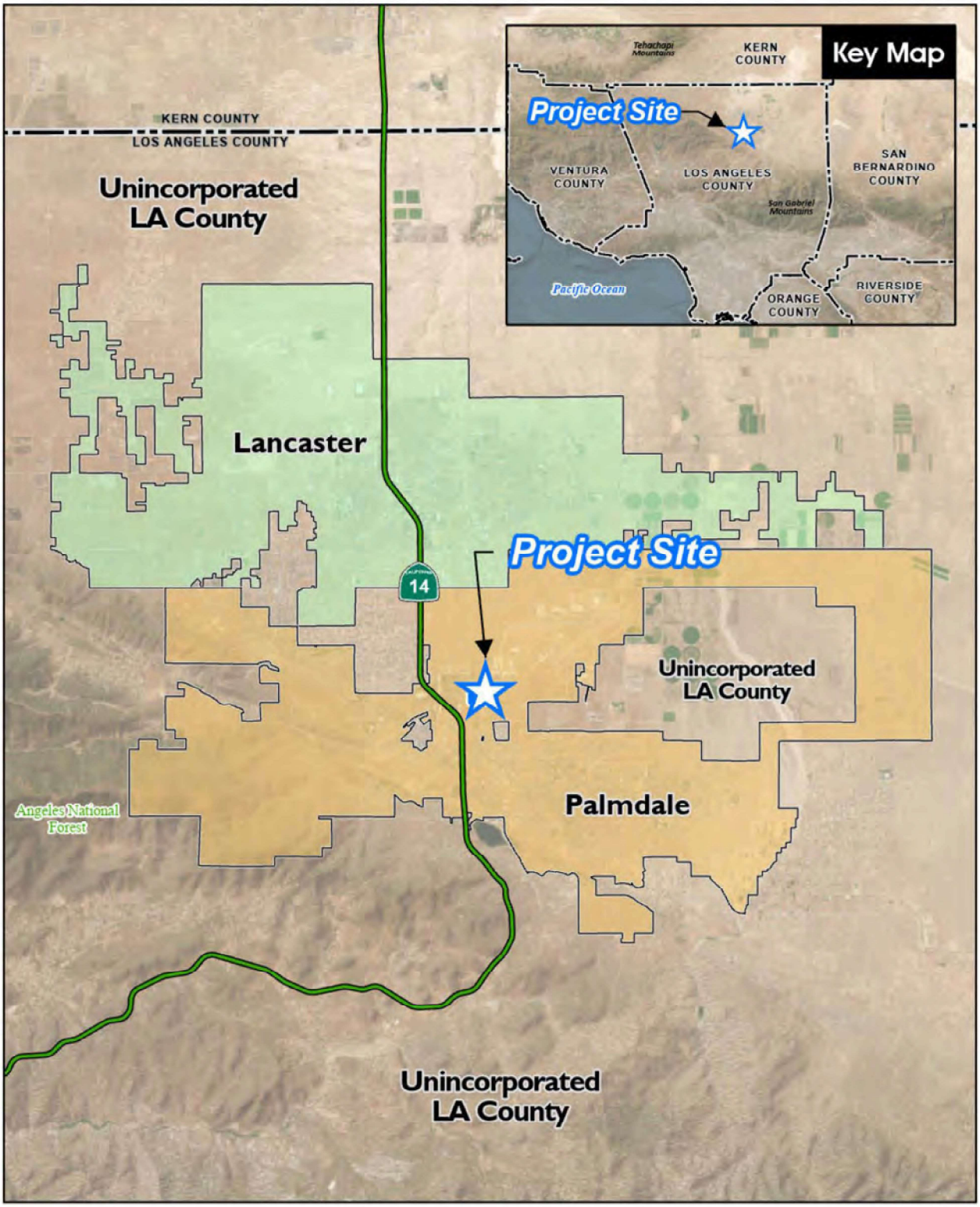
C. Solid Waste Services

The City contracts with Waste Management to provide residential and commercial trash, organic waste processing, and recycling services, including residential curbside trash, recycling, and yard waste collection, pick up of bulky items, and electronic waste pickup, for all single and multi-family homes, as well as businesses. Like all municipalities, the City of Palmdale must meet the solid waste diversion mandates established by the California Integrated Waste Management Act under State Assembly Bill 939 (AB 939) in 1989. AB 939 mandates that all cities reduce annual waste per capita by 50 percent. The City of Palmdale is working toward compliance with all state recycling requirements, including legislation that imposes Mandatory Commercial Recycling on all businesses that generate at least four cubic yards of trash per week and all multi-family dwellings that have five units or more. City waste haulers send all residential and commercial solid waste to the Antelope Valley Recycling and Disposal Facility, located at 1200 West City Ranch Road, approximately one mile from State Route 14 (SR-14).

The City also complies with Assembly Bill (AB) 1826, California's Mandatory Commercial Organics Recycling law, which requires businesses and multi-family dwellings to recycle their organic waste. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled waste that is mixed with food waste. Through the City of Palmdale, Waste Management offers organic waste recycling services for both businesses and multi-family dwellings. (City of Palmdale, 2022a, P. 4.19-4)

2.5.11 RARE AND UNIQUE RESOURCES

Pursuant to CEQA Guidelines Section 15125(c), special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by a project. Although the western Joshua Tree may not be considered rare, the area of the Project site is unique from other regions of Southern California because it is an area where western Joshua Tree are known to occur. Refer to EIR Subsection 4.3, *Biological Resources* for a detailed analysis of the Project's potential to impact Joshua Trees.

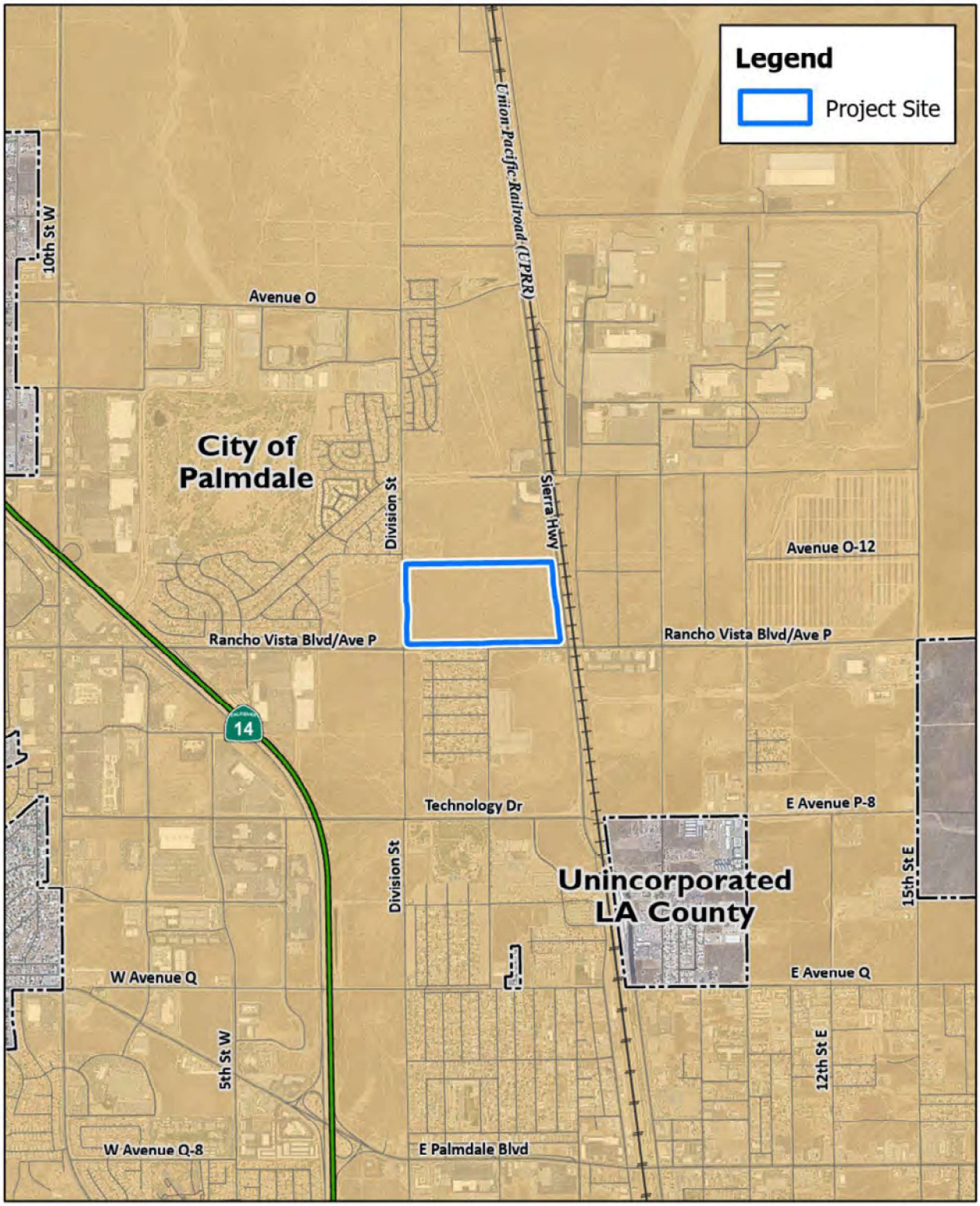


Source(s): Esri, LA County (2025)

Figure 2-1

0 1 2 4 Miles

Regional Map

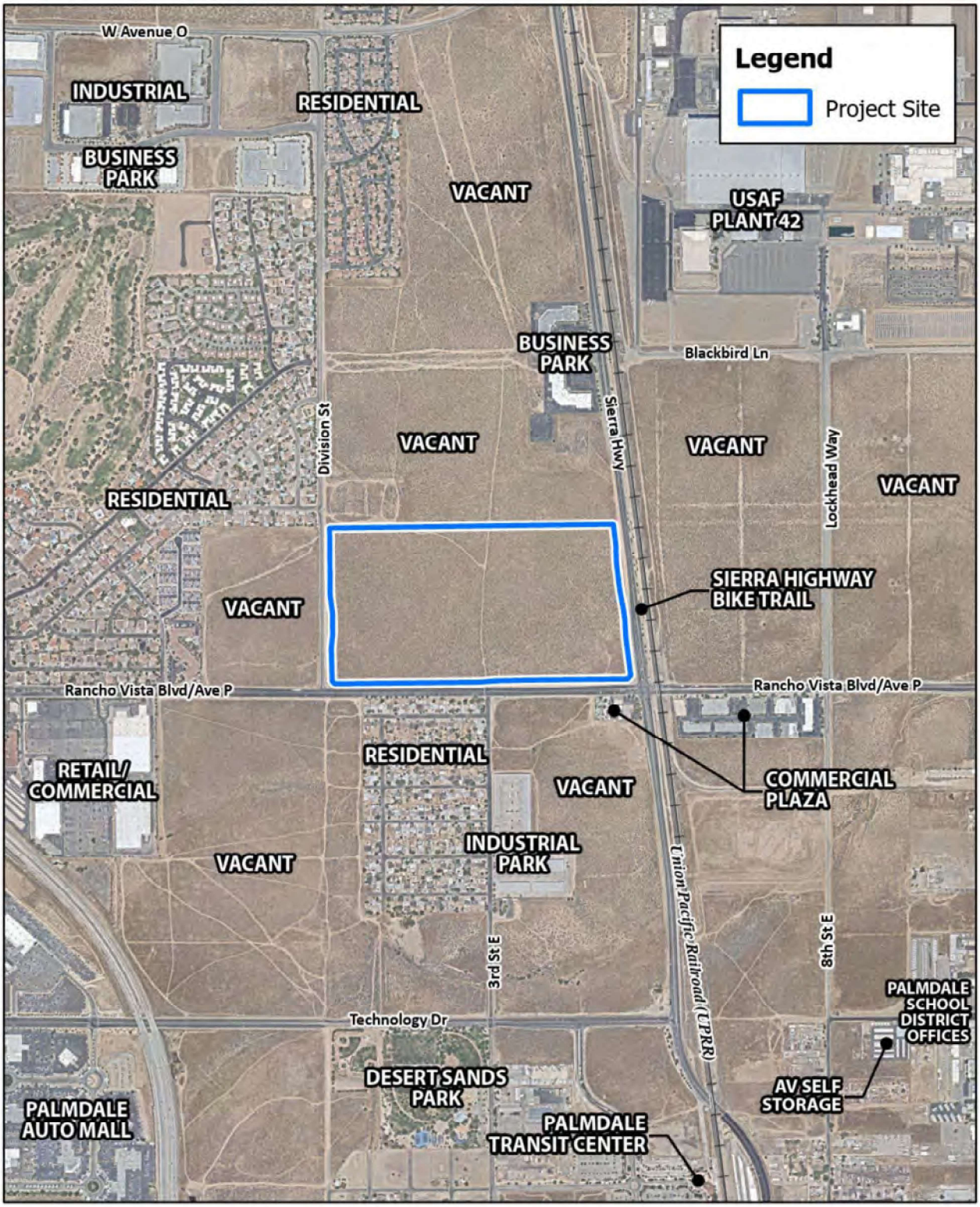


Source(s): Esri, LA County (2025)

Figure 2-2

0 550 1,100 2,200 Feet

Vicinity Map

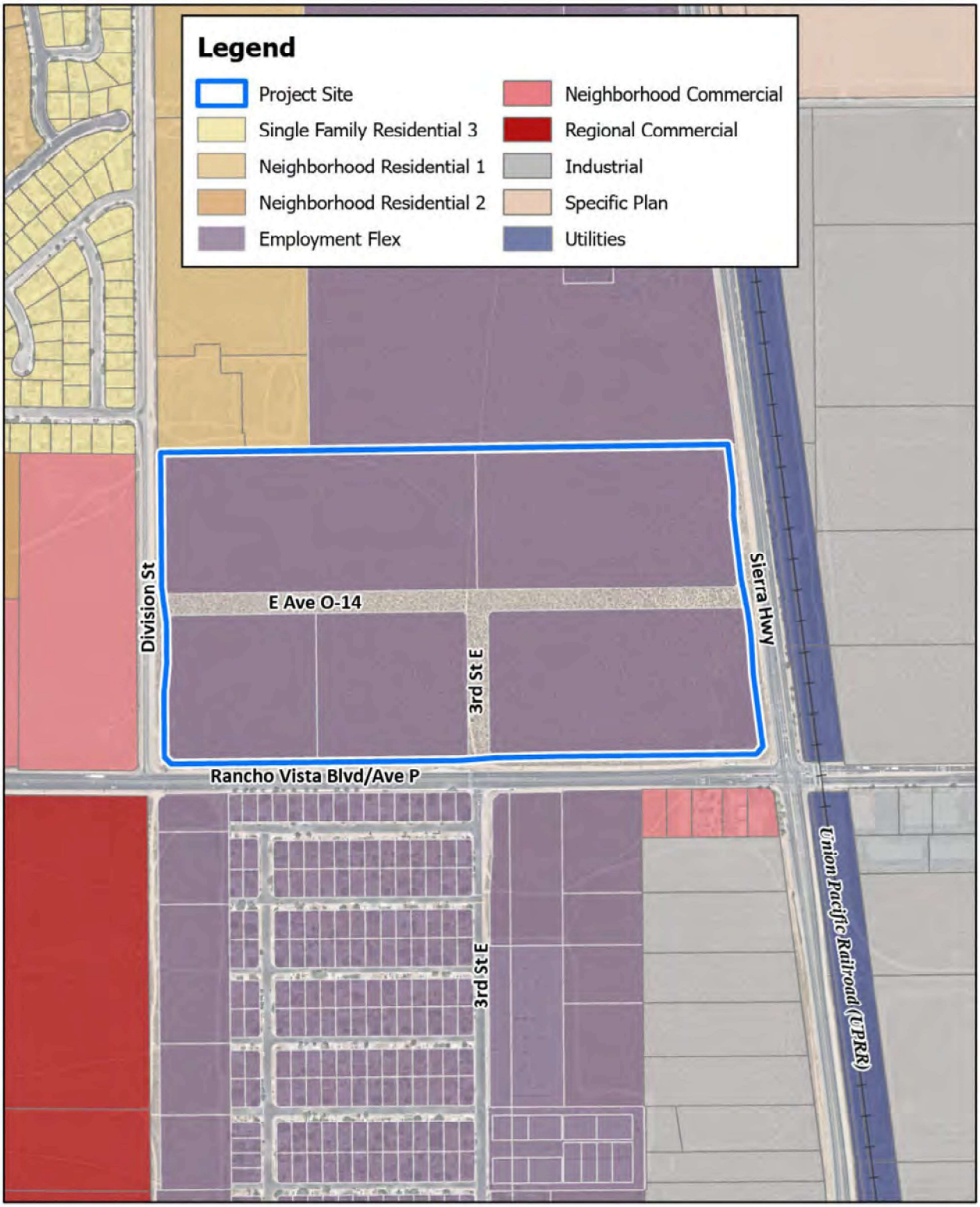


Source(s): Esri, LA County (2025), Nearmap Imagery (July 2024)

Figure 2-3

0 300 600 1,200 Feet

Surrounding Land Uses and Development

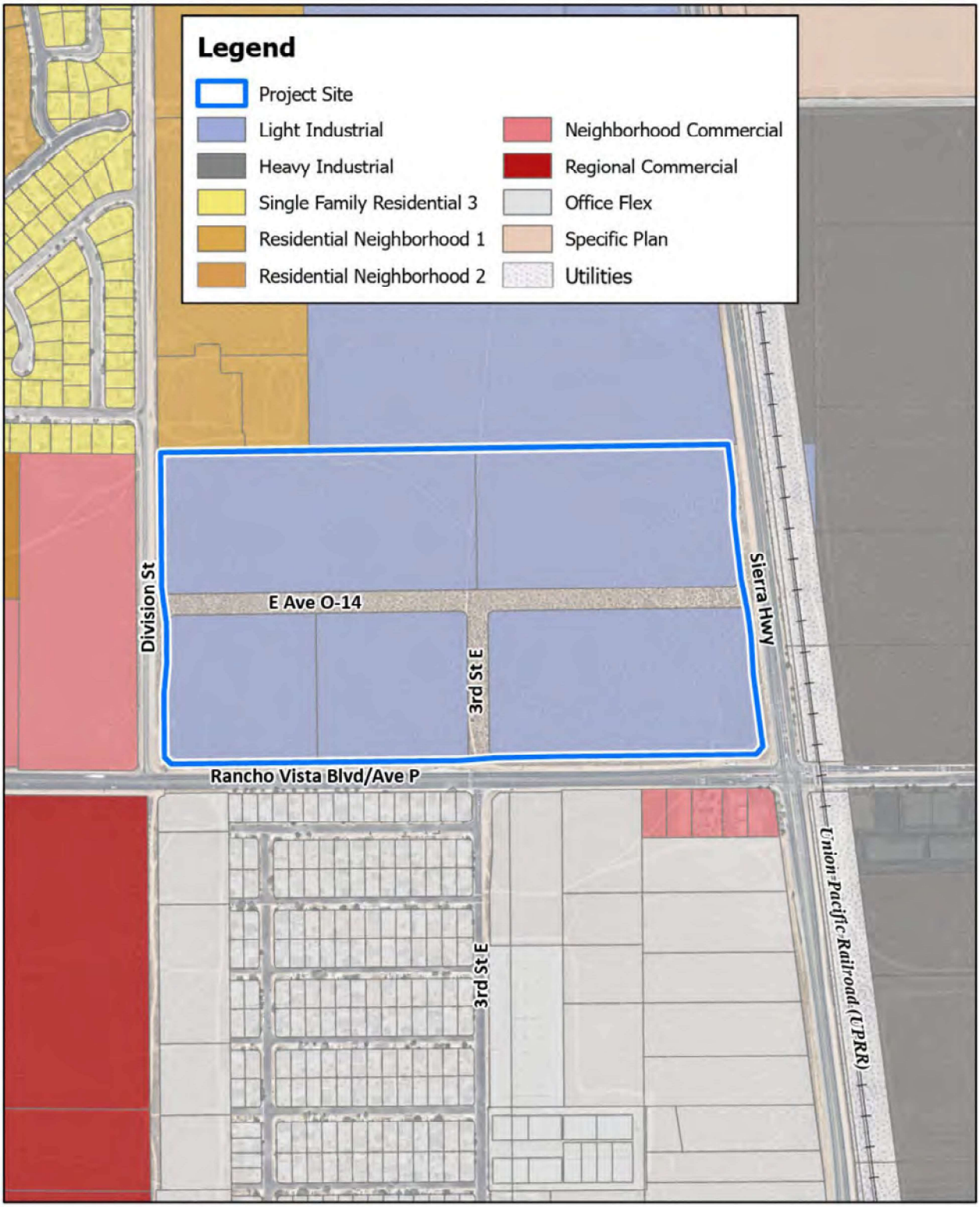


Source(s): City of Palmdale (2025), Esri, LA County (2025), Nearmap Imagery (July 2025)

Figure 2-4

0 150 300 600 Feet

Existing General Plan Land Use Designations



Source(s): City of Palmdale (2023), Esri, LA County (2025), Nearmap Imagery (July 2024)

Figure 2-5

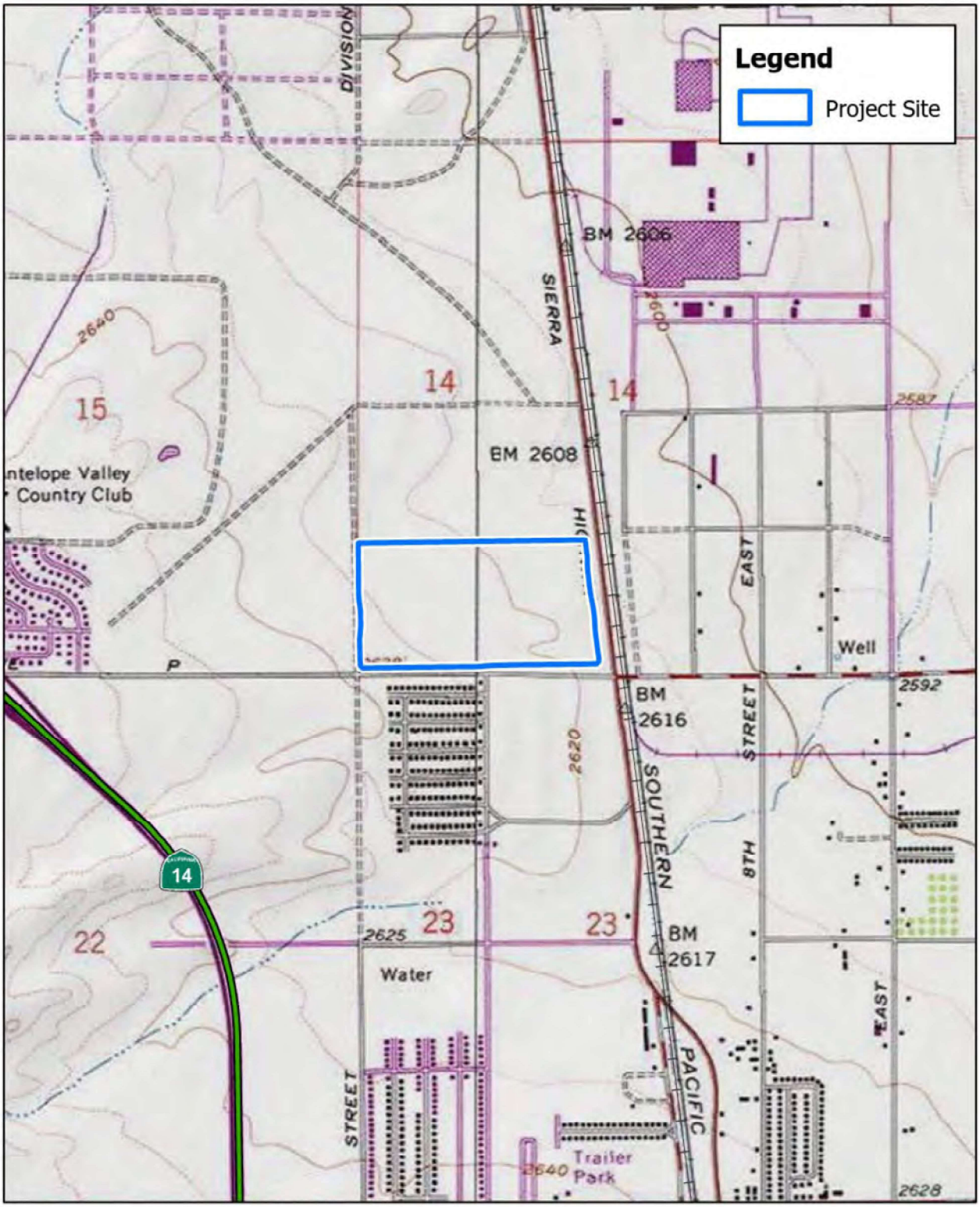
Existing Zoning Classifications



Source(s): Esri, LA County (2025), Nearmap Imagery (July 2024)

Figure 2-6

Aerial Photograph

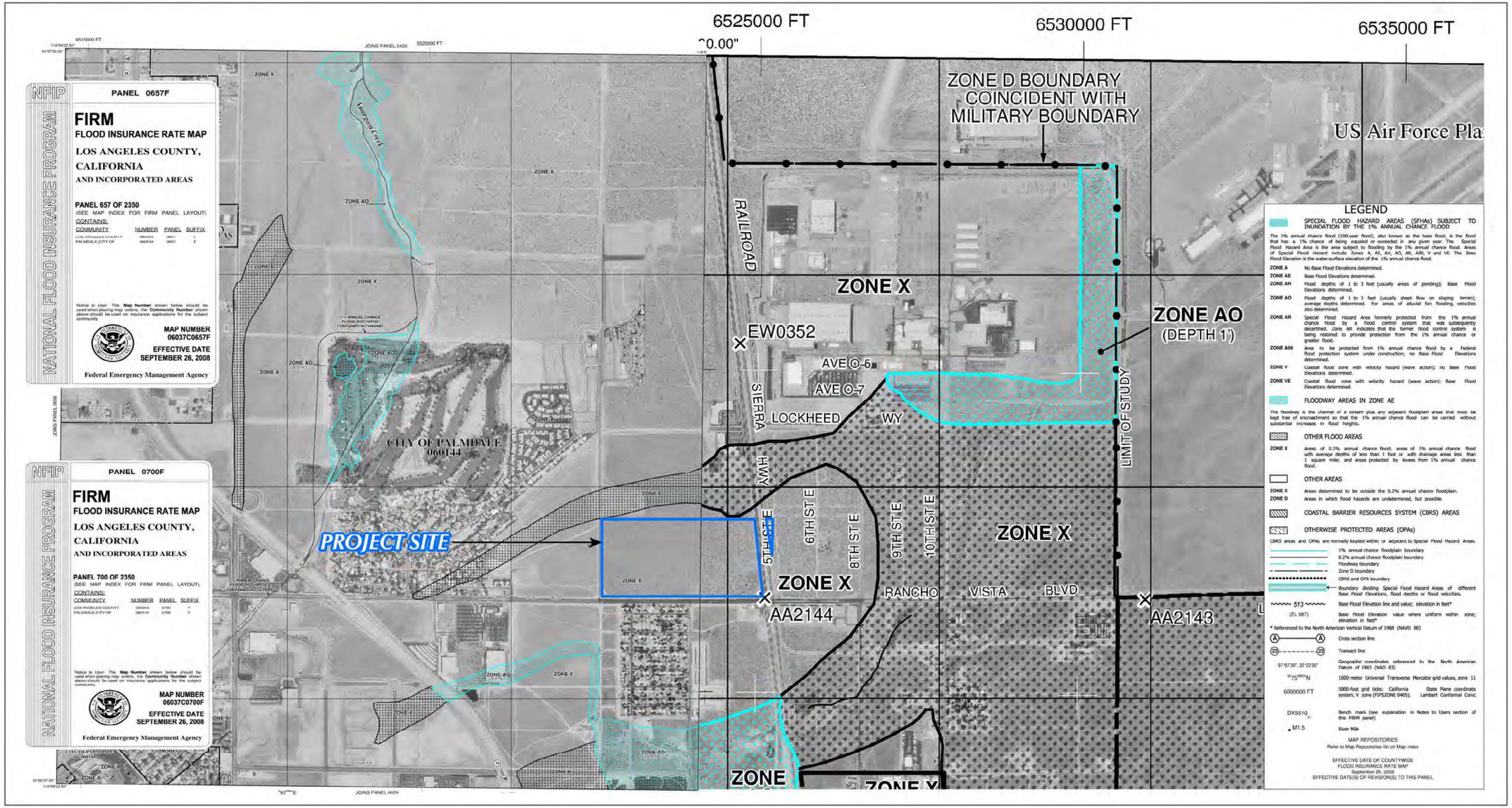


Source(s): Esri, USGS (2013)

Figure 2-7

0 375 750 1,500 Feet

USGS Topographic Map



Source(s): FEMA (09-26-2008)

Figure 2-8

Not to Scale

FEMA Flood Insurance Rate Map

3.0 PROJECT DESCRIPTION

This section provides all of the information required of an EIR Project Description by California Environmental Quality Act (CEQA) Guidelines Section 15124, including a description of the precise location and boundaries of the Project site; a statement of the Project objectives; a description of the technical, economic, and environmental characteristics of the Project; and a description of the intended uses of this EIR, including a list of the governmental agencies that are expected to use this EIR in their decision-making processes, a list of the permits and approvals that are required to implement the Project, and a list of related environmental review and consultation requirements.

3.1 SUMMARY OF THE PROPOSED PROJECT

The Project Applicant, PI Palmdale Owner, LLC proposes to entitle and develop the Pacific Palmdale Project (herein, "Project") on a 67 gross-acre undeveloped site located in the City of Palmdale, Los Angeles County, California. As shown on Figure 3-1, *Tentative Parcel Map 84510 – Existing Conditions, Figure 3-2, Tentative Parcel Map 84510 – Proposed Conditions*, Figure 3-3, *Roadway Cross Sections*, and Figure 3-4, *Conceptual Site Plan*, the Project would allow for a maximum of 1,000,000 square feet (s.f.) of building footprint to be comprised of industrial uses. The building would have a total of 148 dock doors for trucks, including 74 dock-high doors and 2 grade-level doors at both the northern and the southern façade of the building. One detention basin would be provided near the southeastern corner of the site, north of the future grade separator. A second smaller detention basin would be provided near the northeastern corner of the site. Other associated improvements to the Project site would include, but are not limited to, frontage road improvements, drive aisles, passenger vehicle parking areas, truck and trailer parking areas, loading dock truck courts, utility infrastructure, landscaping, signage, lighting, screen walls, security gates, and fencing, including perimeter fencing.

3.2 REGIONAL SETTING

The Project site encompasses approximately 67 acres of vacant land and is located within the City of Palmdale, California, which is located within the Antelope Valley portion of Los Angeles County. As previously shown on Figure 2-1, *Regional Map,* in EIR Section 2.0, Los Angeles County abuts Ventura County to the west, Kern County to the north, San Bernardino County to the east, and Orange County to the south. The Antelope Valley is located in the northern portion of Los Angeles County and is disconnected from the Southern California coastal and Central California valley regions by the Tehachapi Mountains to the northwest and by the San Gabriel Mountains to the south.

3.3 PROJECT LOCATION AND SETTING

As previously shown on Figure 2-2, *Vicinity Map,* in EIR Section 2.0, the Project site that is the subject of this EIR is located in the central northern portion of the City of Palmdale. Communities surrounding the City include the City of Lancaster to the north, as well as other unincorporated communities such as Lake Los Angeles to the east; Sun Village, Littlerock, and Pearblossom to the southeast; Acton to the south; Agua Dulce to the southwest; and Quartz Hill and Leona Valley to the west.

The Project site encompasses Assessor Parcel Numbers (APNs) 3006-027-001, -002, -003, -004, and -005 and is located in Section 14, Township 6 North, Range 12 West, San Bernardino Baseline and Meridian. The Project site is located directly north of West Rancho Vista Boulevard / East Avenue P; directly east of Division Street; approximately 0.75-mile south of East Avenue O; and approximately 0.01-mile west of Sierra Highway. State Route 14 (SR-14) is located approximately 0.51-mile to the west of the Project site and Runway 7 of United States Air Force (USAF) Plant 42 is located approximately 1.8 miles (9,504 feet) to the northeast of the Project site.

As previously shown on Figure 2-6, *Aerial Photograph,* in EIR Section 2.0, under existing conditions, the Project site is vacant. A dirt access road running north-south bisects the Project site. The access road forks in the northern portion of the Project site, with one road continuing north beyond the boundaries of the Project site, and the other road running northwest beyond the boundaries of the Project site. The majority of the Project site, other than the dirt access roads, is undisturbed.

Refer to EIR Section 2.0, *Environmental Setting*, for a detailed description of the local setting and surrounding land uses.

3.4 STATEMENT OF OBJECTIVES

The underlying purpose and goal of the proposed Project is to accomplish the development of vacant property with an economically viable, employment-generating use that is compatible with the property's General Plan designation and zoning classification. This underlying goal aligns with various aspects of the SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); also referred to as "Connect SoCal"), particularly the facilitation of goods movement industries and the generation of local employment opportunities that can reduce the need for long commutes to and from work. The following objectives are intended to achieve these underlying purposes:

A. To develop a cross-dock industrial warehouse that attracts industrial users to the City of Palmdale;

B. To diversify the mix of developed land uses in the City of Palmdale to support the growing goods movement supply chain;

C. To develop supply chain uses in close proximity to designated truck routes and the State highway system to avoid or shorten vehicular trip lengths on other roadways;

D. To expand economic development, facilitate job creation, and increase the tax base for the City of Palmdale by accommodating and diversifying facilities needed to support the goods movement supply chain;

E. To attract new employment-generating businesses in the City of Palmdale, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment;

F. To develop a property that has access to available infrastructure, including roads and utilities.

3.5 PROJECT'S COMPONENT PARTS AND DISCRETIONARY APPROVALS

A detailed description of the proposed Project is provided below. Additional discretionary and administrative actions that would be necessary to implement the proposed Project are listed in Table 3-3, *Matrix of Project Approvals/Permits*, at the end of this section.

This EIR analyzes the physical environmental effects associated with all components of the Project, including planning, grading, construction, and on-going operation. The Project includes the above-described development of a 1,000,000 s.f. industrial warehouse building and associated site improvements, and all required entitlements to implement that development including the following:

- **Tentative Parcel Map 84510** to consolidate the Project site into one parcel to facilitate its development;

- **Site Plan Review 24-0021** pertaining to the development of a proposed industrial warehouse distribution building and supporting infrastructure; and

- **Conditional Use Permit CUP 25-0006** to allow the proposed building to exceed 50 feet in height per Palmdale Municipal Code Table 17.65.020-1. The maximum height of the proposed building's roofline is approximately 59 feet 8 inches.

These entitlements and associated applications, as submitted to the City of Palmdale by the Project Applicant, are herein incorporated by reference pursuant to CEQA Guidelines Section 15150. Each of the required entitlements are described in detail below and the applications and associated documents are available for review at the City's Department of Economic and Community Development, Planning Division, 38250 Sierra Highway, Palmdale, CA 93550.

Access to the Project site would occur from existing east-west oriented West Rancho Boulevard / East Avenue P that abuts the Project site to the south and north-south oriented Division Street that abuts the Project site to the west, in addition to east-west oriented Avenue O-12 that is proposed to be constructed along the northern boundary of the Project site.

3.5.1 TENTATIVE PARCEL MAP 84510

Tentative Parcel Map 84510 would consolidate the Project site into one parcel to facilitate its development. As shown on Figure 3-1, the right-of-way reserved for Avenue O-14 to extend through the site east/west is proposed to be vacated and this road segment would not be built. Similarly, the

right-of-way reserved for 3rd Street East to extend through the site north/south between Rancho Vista Boulevard and Avenue O-14 is proposed to be vacated and this road segment would not be built. TTM 84510 also shows a remainder parcel (APN 3006-027-005) on 0.27 acres located east of the Project site, east of Sierra Highway and east of the UPRR. The remainder parcel is not proposed to be developed or used for any purpose as part of the Project and would remain in its existing condition.

3.5.2 CONCEPTUAL SITE PLAN

Figure 3-4, *Conceptual Site Plan* depicts the overall site plan for the Project. Figure 3-5, *Fire Apparatus Circulation Plan* shows the fire access plan for the Project; elevations for the building are shown on Figure 3-6, *Conceptual Elevations*, and Figure 3-7, *Conceptual Design - Corner View*, the site sections are depicted on Figure 3-8, and Figure 3-9, *Conceptual Site Sections – Sheet 2*; details for the walls and gates are shown on Figure 3-10, *Wall and Gate Plan and Details*; trash enclosures are shown on Figure 3-11 *Trash Enclosure Plans and Elevations;* and site lighting is shown on Figure 3-12, *Site Lighting Plans and Details*.

As shown on Figure 3-4, the building would be developed in the central portion of the Project site and would include 990,000 s.f. of warehouse space and 10,000 s.f. of office space for a total of 1,000,000 s.f. of building area. Office space would be provided at the northeastern and southwestern corners of the building. The building would have a total of 148 dock doors for trucks, including 74 dock-high doors and 2 grade-level doors at both the northern and the southern façades of the building.

A total of 628 parking stalls for passenger vehicles, electric vehicles, and accessible parking would be provided on the northeastern and western sides of the building. Approximately 126 EV capable spaces, 31 EVCS spaces, 2 short-term bicycle spaces, and 30 long-term bicycle spaces would be provided. Truck trailer stalls would be provided in the secure service yards and in the truck trailer parking that is designed for the northwest corner of the Project site. Specifically, 85 trailer stalls would be provided in the northern service yard, 125 trailer stalls would be provided in the southern service yard, and 129 trailer stalls would be provided in the northwest corner of the Project site. A detention basin would be provided near the southwestern corner of the site, north of the future grade separator.

Access to the building site would be accommodated by five driveways; two driveways connecting with Division Street, two driveways connecting with Avenue O-12, and one driveway connecting with West Rancho Vista Boulevard / East Avenue P. The central driveway on Division Street would accommodate access for passenger vehicles only. All other driveways would accommodate access for both passenger vehicles and trucks. The proposed driveway on West Rancho Vista Boulevard / East Avenue P and the proposed southern driveway on Division Street would be restricted access (right-in/right-out only) because medians restricting left turns would be installed as part of the Project along West Rancho Vista Boulevard / East Avenue P and Division Street.

As shown on Figure 3-5, a 28-foot fire lane would be provided around the perimeter of the building that would provide access and circulation for fire apparatus.

A. Architectural Design

1. Conditional Use Permit CUP 25-0006

The Project Applicant filed a CUP 25-0006 to allow the proposed building to exceed 50 feet in height per Palmdale Municipal Code Table 17.65.020-1. Pursuant to PMC 17.65.010 *the land use is allowed in the designated zone upon issuance of a CUP from the designated Review Authority, subject to compliance with all applicable provisions. PMC Table 17.65.020-1. Allowed Uses - Industrial Zones cites that a land use shown with "CUP" indicates that the land use is allowed in the designated zone upon issuance of a conditional use permit from the designated Review Authority, subject to compliance with all applicable provisions of this Title (e.g., development standards) as well as State and Federal law*.
As identified in PMC Table 17.65.020-1. Allowed Uses - Industrial Zones, 50 feet/4 stories is the allowed height of structures in the LI zone and as noted above, additional height is allowed through approval of a CUP. Therefore, the architectural elevations for the proposed building provide a variable roofline with a maximum height of approximately 56 feet. With architectural projections, the maximum height of the roofline is 59 feet 8 inches.

The roof would be solar ready; the Project Applicant is proposing to cover the roof with solar panels to a maximum 2,000 amps in compliance with applicable Building Code requirements, clearance requirements around roof-mounted equipment, utility company interconnection regulations, transformer capacity, and other code compliance constraints.

The walls of the building would be constructed of concrete tilt-up panels. The building would be painted a mixture of white, blue, and tan colors, with the office locations being treated with tempered glass with clear anodized mullions and metal canopies. Several metal doors would be provided along the truck dock doors to provide employee access into the building. Visitor entrances are provided in the location of the office areas.

B. Lighting, Screening and Walls

Lighting would be provided at the Project site in compliance with PMC Section 17.86.030, Outdoor Lighting Requirements. As shown on Figure 3-12, ancillary lighting would include light fixtures in the parking and loading dock areas and downward-directed lighting affixed to the exterior of the buildings. Decorative lighting, appropriate for the architecture of the buildings, is proposed. Submittal of a photometric plan for City approval that depicts light coverage in compliance with PMC Section 17.86.030 is required and would be a condition of the Project's approval.

Twelve-foot-tall concrete screen walls would be provided along the northern, eastern, and western sides of the northern truck court and along the southern, eastern, and western sides of the southern truck court. Screen walls would also be provided around the trash enclosures. Vehicular access into the loading dock area truck courts would be controlled by eight-foot-tall telescoping tube steel gates at each entrance to the truck courts.

C. Grading and Site Work

Figure 3-12, *Conceptual Grading Plan*, shows that the site would be graded in a manner that is generally level with the existing grade; earthwork would balance on the site.

D. Water, Sewer, and Drainage

A description of the Project's proposed water, sewer, and drainage facilities is provided below.

1. Water Service

Water service to the Project site would be provided by the LACWD District 40. Water service for the building would be provided by an existing LACWD water line located within the Sierra Highway ROW.

Pursuant to the Cooperative Agreement between LACWD District 40 and the Project Applicant, as a condition of Project approval, in order to provide additional water service infrastructure to the area surrounding the Project site, and to provide the customary level of potable water service to the proposed warehouse building, the following water service facilities would be constructed as part of the Project: 1) approximately 2,500 feet of 12-inch-diameter watermain along West Rancho Vista Boulevard / East Avenue P, from Division Street to Sierra Highway; 2) approximately 2,200 feet of 16-inch-diameter watermain along Sierra Highway, from approximately 450 feet south of East Avenue O-8 to West Rancho Vista Boulevard/East Avenue P; 3) 22 public fire hydrants; and 4) two 10-inch Reduced Pressure Principle Detector Assemblies, new pressure regulating station to regulate flow from the 2980 pressure zone to 2911 pressure zone, and associated interconnections.

In addition, fire hydrants and fire service water lines also would be constructed around the building.

2. Sewer Service

Sewer service would be provided by the City of Palmdale. Sewer service for the building would be accommodated by a proposed sewer lateral that would extend eastward from the northeastern corner of the warehouse building to a proposed sewer main beneath Sierra Highway. The proposed sewer main located within Sierra Highway would extend north and connect to an existing 12-inch-diameter sewer main beneath Sierra Highway, which ultimately conveys flows to an existing 12-inch-diamter trunk sewer beneath Avenue O-8. The sewer discharge would then be conveyed to the Palmdale Water Reclamation Plant (PWRP) for treatment, located approximately 2.6 miles east of the Project site.

3. Drainage

The City of Palmdale Department of Public Works maintains the City's public stormwater system. On-site stormwater would be captured through a proposed storm drain system, consisting of a network of catch basins and underground storm drain pipes, and would ultimately flow to the proposed aboveground water infiltration basins located at the northeastern and southeastern corners of the Project site.

E. Public Art

To promote the goals established in the City of Palmdale's Public Art Master Plan, the Project would incorporate public art elements within the Project site and/or contribute to the City's Public Arts Fund. The art would be provided in compliance with PMC Chapter 15.01, Public Art Commission and Public Art in Private and Municipal Development.

3.6 SCOPE OF ENVIRONMENTAL ANALYSIS

3.6.1 CONSTRUCTION CHARACTERISTICS

A. Proposed Physical Disturbances

The site would be graded and/or disturbed to accommodate the proposed development, including the offsite roadway improvements and the installation of water and sewer lines in rights-of ways.

B. Construction Activities Schedule and Equipment Fleet

Construction of the Project is anticipated to begin in January 2026 and end in June 2027, as shown in Table 3-1, *Expected Construction Schedule*. The typical construction sequence entails site preparation followed by grading, followed by construction of the building shell, installation of infrastructure and utilities, paving, landscaping, and then painting and other architectural coatings. Tenant improvements inside the building and the installation of rooftop solar panels and exterior signage would typically occur after user(s)/tenant(s) are identified and enter into a lease agreement. Construction is assumed to occur Monday through Friday with occasional work on weekends, with the exception of federal holidays. To control noise associated with construction activities, PMC Section 8.28.030 establishes limits to the hours that construction activities can occur in any residential zone or within 500 feet of any residence, hotel, motel or recreational vehicle park. Because the Project site is located within 500 feet of noise-sensitive uses, construction activities within 500 feet of these uses would not occur on any Sunday, or any other day after 8:00 p.m. or before 6:30 a.m.; however, most construction crews typically work eight hours per day from approximately 6:30 AM to 3:30 PM with a lunch break included within that time frame. During limited periods when concrete is poured, construction activity may occur at night when cooler air temperatures are most conducive to curing (hardening) concrete.

As identified in Table 3-2, *Construction Equipment Assumptions*, the types of construction equipment expected on the site during development would include rubber-tired bulldozers, tractors, excavators, graders, scrapers, trenchers, cranes, forklifts, generator sets, welders, pavers, paving equipment, rollers, aerial lifts, cement and mortar mixers, air compressors, hand tools and other miscellaneous equipment. The construction equipment is not usually in continuous use and some pieces of equipment are utilized only periodically throughout a typical day of construction. Thus, eight hours of daily use per piece of equipment is an overly conservative and reasonable assumption for purposes of analysis in this EIR. The Project specific construction fleet may vary due to specific Project needs at the time of construction. The duration of construction represents a reasonable approximation of the expected construction fleet as required by the CEQA Guidelines.

Table 3-1 Expected Construction Schedule

Construction Phase	Start Date	End Date	Work Days
Site Preparation	1/1/2026	1/31/2026	22
Grading	2/1/2026	4/30/2026	64
Off-Site Improvements	4/1/2026	5/12/2026	30
Building Construction	5/1/2026	3/31/2027	239
On-Site Concrete	4/1/2027	5/31/2027	43
Architectural Coating	6/1/2027	6/30/2027	22

Source: Project Applicant

Table 3-2 Construction Equipment Assumptions

Phase Name	Equipment[1]	Number	Hours Per
Site Preparation	Rubber Tired Dozers	3	8
	Tractors/Loaders/Backhoes	4	8
Grading	Excavators	2	8
	Graders	2	8
	Rubber Tired Dozers	2	8
	Scrapers	16	8
	Tractors/Loaders/Backhoes	2	8
	Trenchers	2	8
Off-Site Improvements	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
	Trenchers	1	8
Building Construction	Cranes	1	8
	Forklifts	15	8
	Generator Sets	20	8
	Tractors/Loaders/Backhoes	2	8
	Welders	1	8
	Aerial Lifts	20	8
	Cement and Mortar Mixers	4	8
On-Site Concrete	Pavers	2	8
	Paving Equipment	2	8

	Rollers	2	8
	Other Construction Equipment	1	8
	Surfacing Equipment	1	8
	Cement and Mortar Mixers	2	8
Architectural Coating	Air Compressors	2	8
	Aerial Lifts	2	8

Source: Project Applicant

3.6.2 OPERATIONAL CHARACTERISTICS

At the time this EIR was prepared, the future user(s)/occupant(s) of the proposed building were unknown. Based on the design of the building, the building user is expected to operate as 750,000 s.f. of high-cube fulfillment center (non-sort) warehouse use (75 percent of the total square footage) and 250,000 s.f. of high-cube cold storage warehouse use (25 percent of the total square footage).

For the purposes of analysis in this EIR, the industrial warehouse is assumed to be operational 24 hours per day, seven days per week, with exterior loading and parking areas illuminated at night. Using an employment generation rate for industrial buildings of 1.18 employees per 1,000 s.f. of building space[1], the 1,000,000 s.f. of total building space is anticipated to generate approximately 1,180 new, recurring jobs (1,000,000 s.f. x 1.18 employees = 1,180,000 /1,000 s.f. = 1,180 employees).

The proposed building is designed such that business operations would be conducted within the enclosed building, with the exception of traffic movement, parking, and the loading and unloading of tractor trailers at designated loading bays. As a practical matter, dock doors on warehouse buildings are not occupied by a truck or trailer at all times of the day. There are typically many more dock door positions on warehouse buildings than are needed for receiving and shipping volumes. The dock doors that are in use at any given time are usually selected based on interior building operation efficiencies. In other words, trucks ideally dock in the position closest to where the goods carried by its trailer are stored inside the building. As a result, a number of dock door positions are frequently inactive throughout the day.

During operational activities, employees, visitors, and vehicles hauling goods would travel to and from the Project site on a daily basis. The proposed project is forecast to generate 122 PCE trips in the a.m. peak hour, 131 PCE trips in the p.m. peak hour, and 2,093 PCE daily trips (Translutions, 2025). Pursuant to State law, on-road diesel-fueled trucks are required to comply with various air quality and greenhouse gas emission standards, including, but not limited to, the type of fuel used, engine model year stipulations, aerodynamic features, and idling time restrictions. Compliance with State law is

[1] According to Table 2-4 of the City of Palmdale 2045 General Plan Update Final EIR (SCH No. 2021060494), the City projects that between 2016 and 2045 there would be approximately 11,820 new jobs associated with 10,046,865 s.f. of industrial space, which results in a ratio of approximately 1.18 employees per 1,000 s.f. of building area.

mandatory and inspections of on-road diesel trucks subject to applicable State laws are conducted by the California Air Resources Board (CARB).

3.7 SUMMARY OF REQUESTED ACTIONS

The City of Palmdale has primary approval responsibility for the proposed Project. As such, the City serves as the Lead Agency for this EIR pursuant to CEQA Guidelines Section 15050. The role of the Lead Agency was previously described in EIR Section 1.0, *Introduction*. The City's Planning Commission will determine whether to certify this EIR and whether to approve, approve with changes, or deny TPM 84015 and SPR 24-0021.

3.8 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION REQUIREMENTS

Following approval of implementing discretionary actions, ministerial actions would be necessary to implement the proposed Project. These include, but are not limited to, grading permits, building permits, encroachment permits/road improvements, drainage infrastructure improvements, water and sewer infrastructure improvements, stormwater permit(s) (NPDES), and State and federal resource agency permits.

Table 3-3, *Matrix of Project Approvals/Permits*, lists the agencies that are expected to use this EIR as part of their decision-making processes and provides a summary of the subsequent actions that will or may be associated with the Project. This EIR covers all federal, State, and local government and quasi-governmental approvals which may be needed to construct and implement the Project, whether or not they are explicitly listed in Table 3-3 or elsewhere in this EIR (CEQA Guidelines § 15124(d)).

Table 3-3 Matrix of Project Approvals/Permits

Public Agency	Approvals and Decisions
City of Palmdale Discretionary Approvals (Proposed Project)	
Planning Commission	• Approve, conditionally approve, or not approve TPM 84510, SPR 24-0021, and CUP 25-0006. • Certify or reject Final EIR 25-002 along with appropriate CEQA Findings.
Subsequent City of Palmdale Approvals	
City of Palmdale Subsequent Implementing Approvals:	• Issue Grading Permits. • Issue Building Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Accept public right-of-way vacations/dedications. • Authorize nighttime construction activities.
Other Agencies – Subsequent Approvals and Permits	
California Department of Fish and Wildlife (CDFW)	• Issuance of a California Department of Fish and Wildlife (CDFW) western Joshua Tree Incidental Take Permit ITP.
Lahontan Regional Water Quality Control Board (LRWQCB)	• Issuance of a Construction Activity General Construction Permit. • Compliance with National Pollutant Discharge Elimination System (NPDES) Permit.
Los Angeles County Waterworks District (LACWD)	• Approval of proposed water connections and improvements.
City of Palmdale Public Works, Sewer Maintenance Division (COPSM)	• Approval of proposed sewer connections and improvements.
Antelope Valley Air Quality Management District (AVAQMD)	• Potential issuance of permits for equipment that is not exempted by Rule 219, the California Health and Safety Code or by Antelope Valley Air Quality Management District (AVAQMD) policy/precedent.

THE FOLLOWING ITEMS ARE BASED ON CHICAGO TITLE COMPANY PRELIMINARY REPORT ORDER NO. 00201299-993-SD2-CFU DATED JANUARY 26, 2024:

(2) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY
PURPOSE: POLES AND CONDUITS
RECORDING DATE: SEPTEMBER 4, 1957
RECORDING NO: AS INSTRUMENT NO. 3902, OFFICIAL RECORDS

(6) EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: ANTELOPE VALLEY -EAST KERN WATER AGENCY
PURPOSE: UNDERGROUND WATER PIPELINE AND RELATED APPURTENANCES
RECORDING DATE: AUGUST 10, 1966
RECORDING NO: AS INSTRUMENT NO. 86-1061309, OFFICIAL RECORDS

VESTING TENTATIVE PARCEL MAP NO. 84510

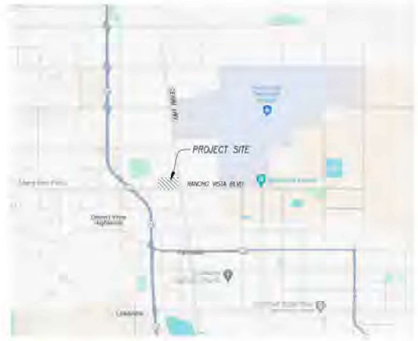


CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C1	90°12'25"	25.00'	39.36'
C2	89°47'35"	25.00'	39.18'

LINE TABLE

LINE	DIRECTION	LENGTH
L1	N42°08'41"E	36.75'
L2	N46°36'51"E	36.79'
L3	N45°32'13"W	36.24'
L4	N43°49'09"W	36.87'
L5	N40°58'02"E	40.48'
L6	N7°31'30"W	159.99'
L7	N51°35'15"W	34.96'
L8	N43°09'03"E	38.49'
L9	N1°10'31"W	120.78'
L10	N47°46'57"W	36.90'



PROJECT DATA:

NO. OF EXISTING PARCELS:	6
NO. OF PROPOSED PARCELS:	2
EXISTING LAND USE:	VACANT
PROPOSED LAND USE:	INDUSTRIAL
EXISTING/PROPOSED ZONING:	LI-LIGHT INDUSTRIAL
EXISTING/PROPOSED GENERAL PLAN:	LI-LIGHT INDUSTRIAL
GROSS AREA:	67.06 ACRES

EARTHWORK QUANTITY ESTIMATE:

CUT	162,000 CY
FILL	182,000 CY
IMPORT	20,000 CY

ASSESSOR'S PARCEL NUMBER:

3006-027-001, 3006-027-002, 3006-027-003, 3006-027-004 AND 3006-027-005

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF PALMDALE IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THE SOUTH HALF OF THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 6 NORTH, RANGE 12 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND APPROVED BY THE SURVEYOR GENERAL, SEPTEMBER 3, 1855.

EXCEPT THEREFROM THE PORTION OF SAID LAND WITHIN THE 200 FOOT RIGHT OF WAY GRANTED TO PACIFIC RAILROAD, BY AN ACT OF CONGRESS APPROVED MARCH 3, 1871, SUCH RIGHTS, TITLES AND INTERESTS THEREIN AS WERE NOT ACTUALLY CONVEYED TO THE PATENTEE BY THE PATENT DATED SEPTEMBER 21, 1901, EXECUTED BY THE STATE OF CALIFORNIA, RECORDED IN BOOK 9 PAGE 173 OF PATENTS.

SAID LAND IS ALSO KNOWN AS LOTS 1, 2, 3, 4 AND REMAINDER OF PARCEL MAP NO. 60223, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP FILED IN BOOK 331, PAGES 38 THROUGH 41 INCLUSIVE OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 3006-027-001, 3006-027-002, 3006-027-003, 3006-027-004 AND 3006-027-005

BASIS OF BEARINGS:

THE BEARING OF NORTH 89°19'02" EAST SHOWN ON THE CENTERLINE OF RACHO VISTA BOULEVARD AS SHOWN ON PARCEL MAP 60223 FILED IN BOOK 331 PAGES 38 AND 41, OF PARCEL MAPS, RECORDS OF LOS ANGELES COUNTY, WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY.

BENCHMARK:

BENCH MARK NUMBER: UL 5494
DATUM: NAVD 1988
YEAR OF RECORD: 2010
ELEVATION (FEET): 2621.025'
DESCRIPTION: DEPARTMENT OF PUBLIC WORKS BENCHMARK TAG IN NORTHEAST CURB RETURN 2' WEST OF BCR SIERRA HIGHWAY & RANCHO VISTA BOULEVARD (AVENEU P)

ENGINEER'S/SURVEYOR'S STATEMENT:

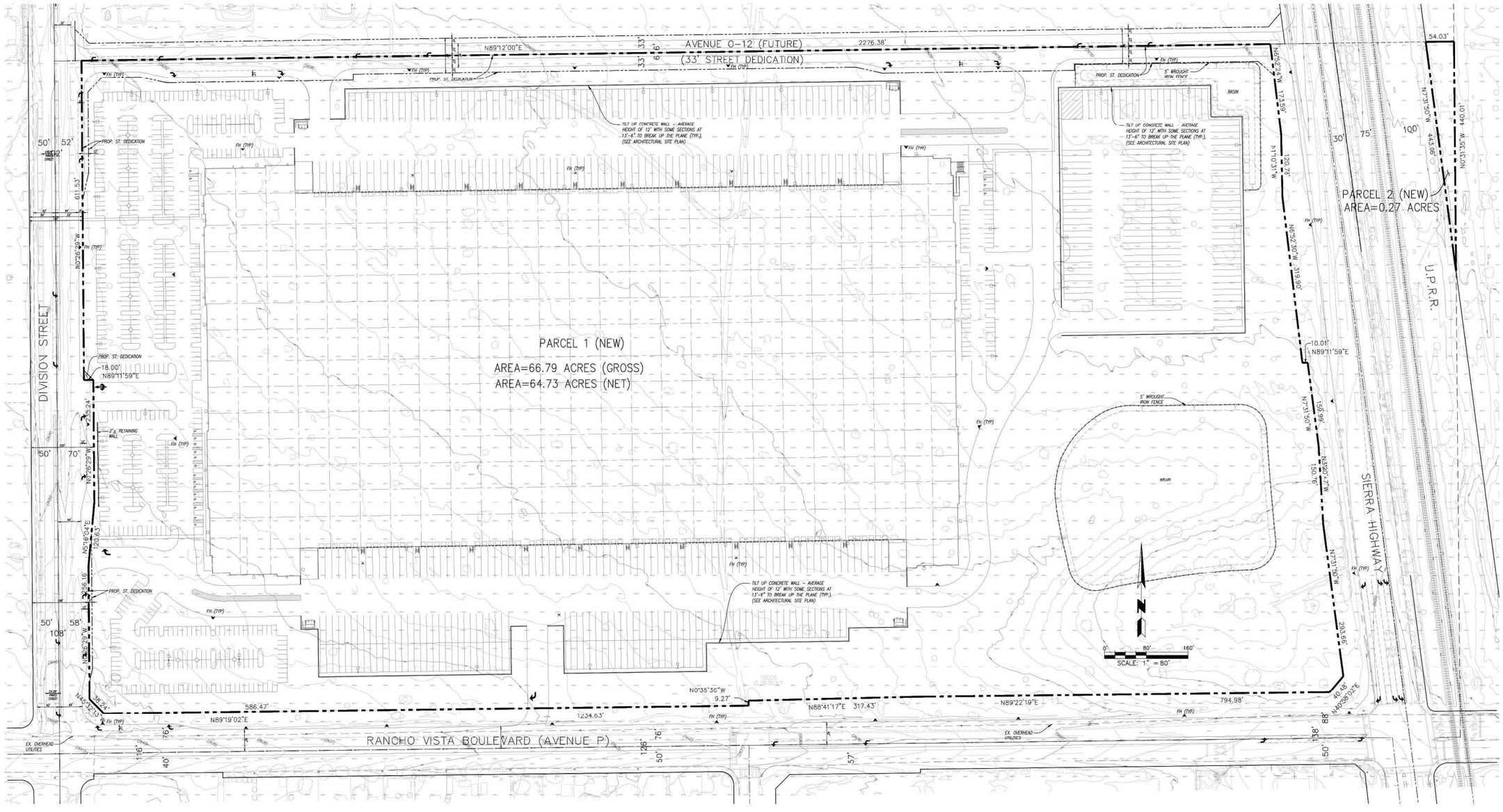
ENGINEER'S/SURVEYOR'S STATEMENT OF SIGNATURE, INDICATING THAT THE TENTATIVE MAP HAS BEEN PREPARED BY THE ENGINEER/SURVEYOR OR UNDER HIS DIRECTION AND IS TRUE AND CORRECT TO THE BEST OF HIS KNOWLEDGE, AND THAT ALL EASEMENTS OF RECORD ARE SHOWN PER TITLE REPORT.

Source(s): Sikand (10-30-2025)

Figure 3-1

Not to Scale

Tentative Parcel Map 84510 - Existing Conditions

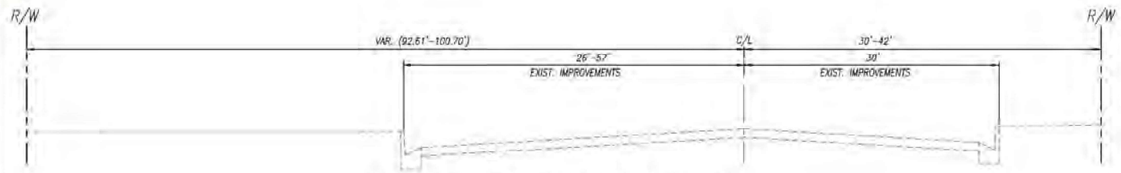


Source(s): Sikand (10-30-2025)

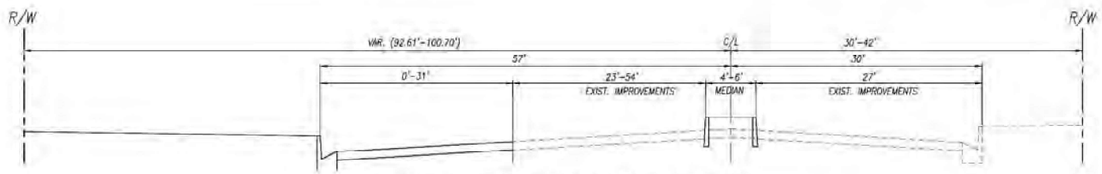
Figure 3-2

Not to Scale

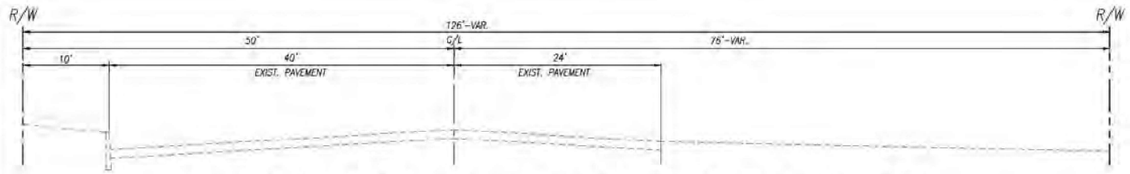
Tentative Parcel Map 84510 - Proposed Conditions



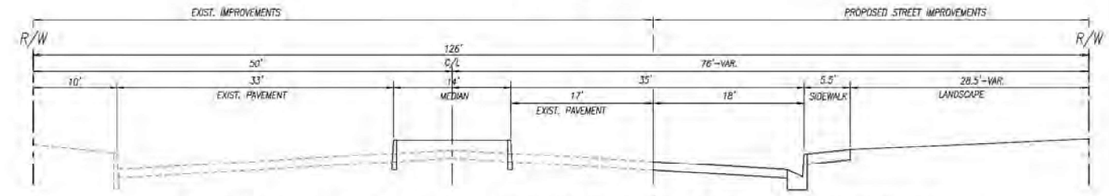
SIERRA HIGHWAY (EXISTING)
REGIONAL ARTERIAL
(142.7' ROW)



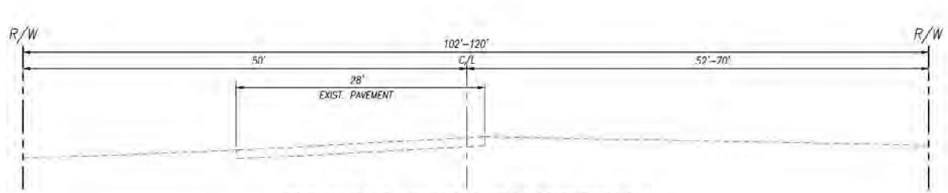
SIERRA HIGHWAY (PROPOSED)
REGIONAL ARTERIAL
(107' ROW)



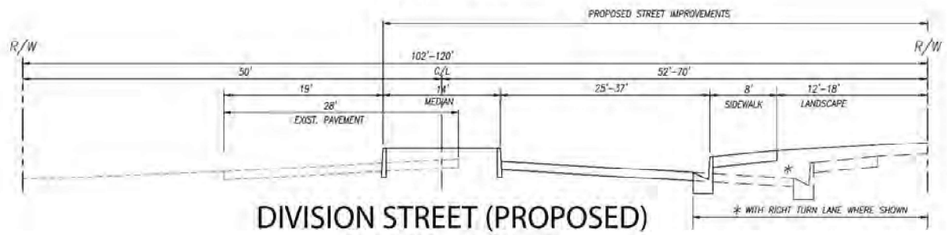
RANCHO VISTA BOULEVARD/ EAST AVENUE P. (EXISTING)
CROSSTOWN STREET - 5-LANE
(126' ROW)



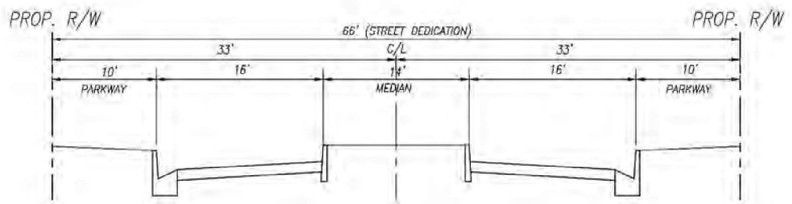
RANCHO VISTA BOULEVARD/ EAST AVENUE P. (PROPOSED)
CROSSTOWN STREET
(126' ROW)



DIVISION STREET (EXISTING)
CROSSTOWN STREET
(120' ROW)



DIVISION STREET (PROPOSED)
CROSSTOWN STREET
(120' ROW)



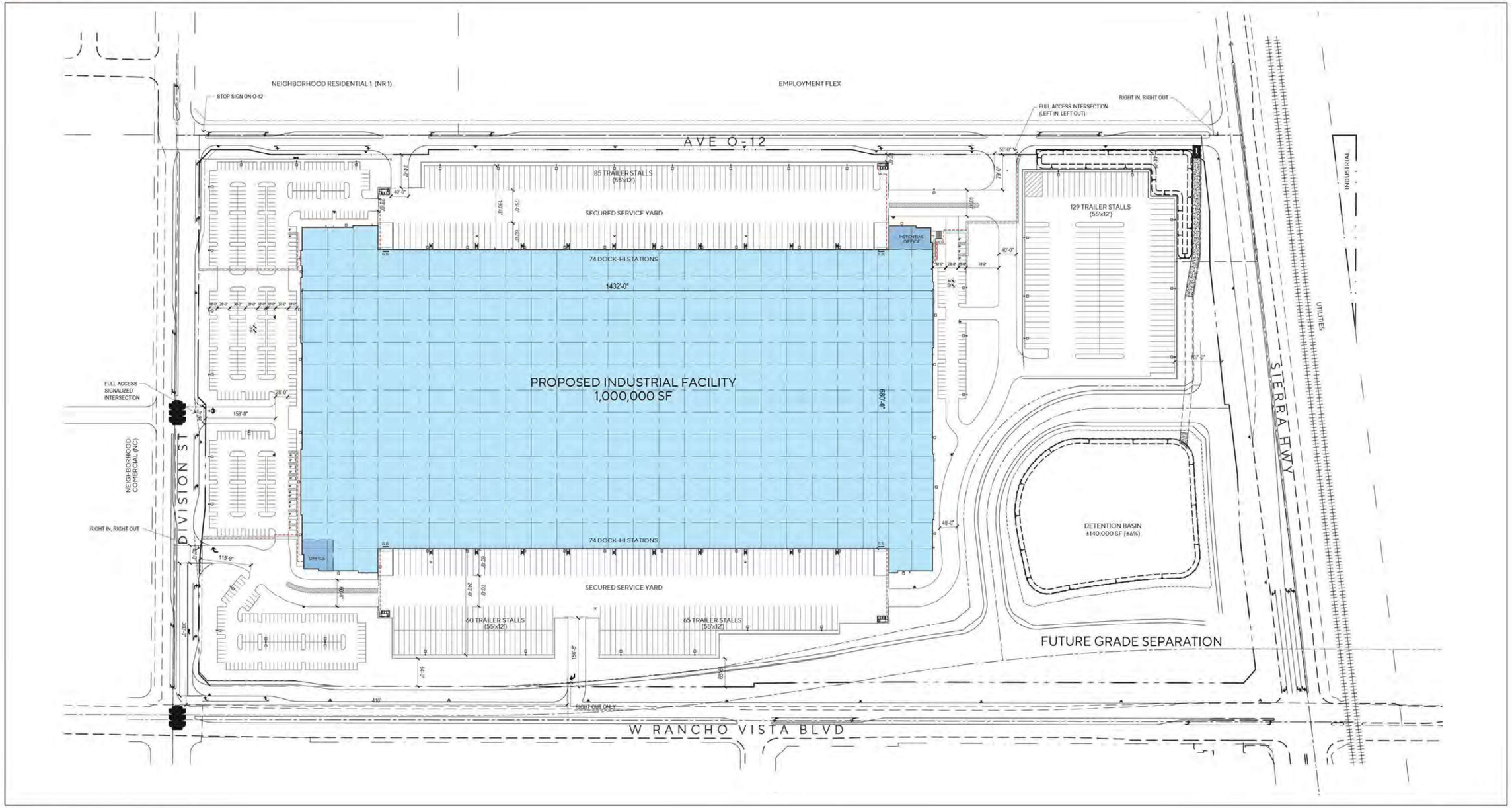
AVENUE O-12 (PROPOSED PUBLIC)
(66' ROW)

Source(s): Sikand (10-30-2025)

Figure 3-3

Not to Scale

Roadway Cross Sections

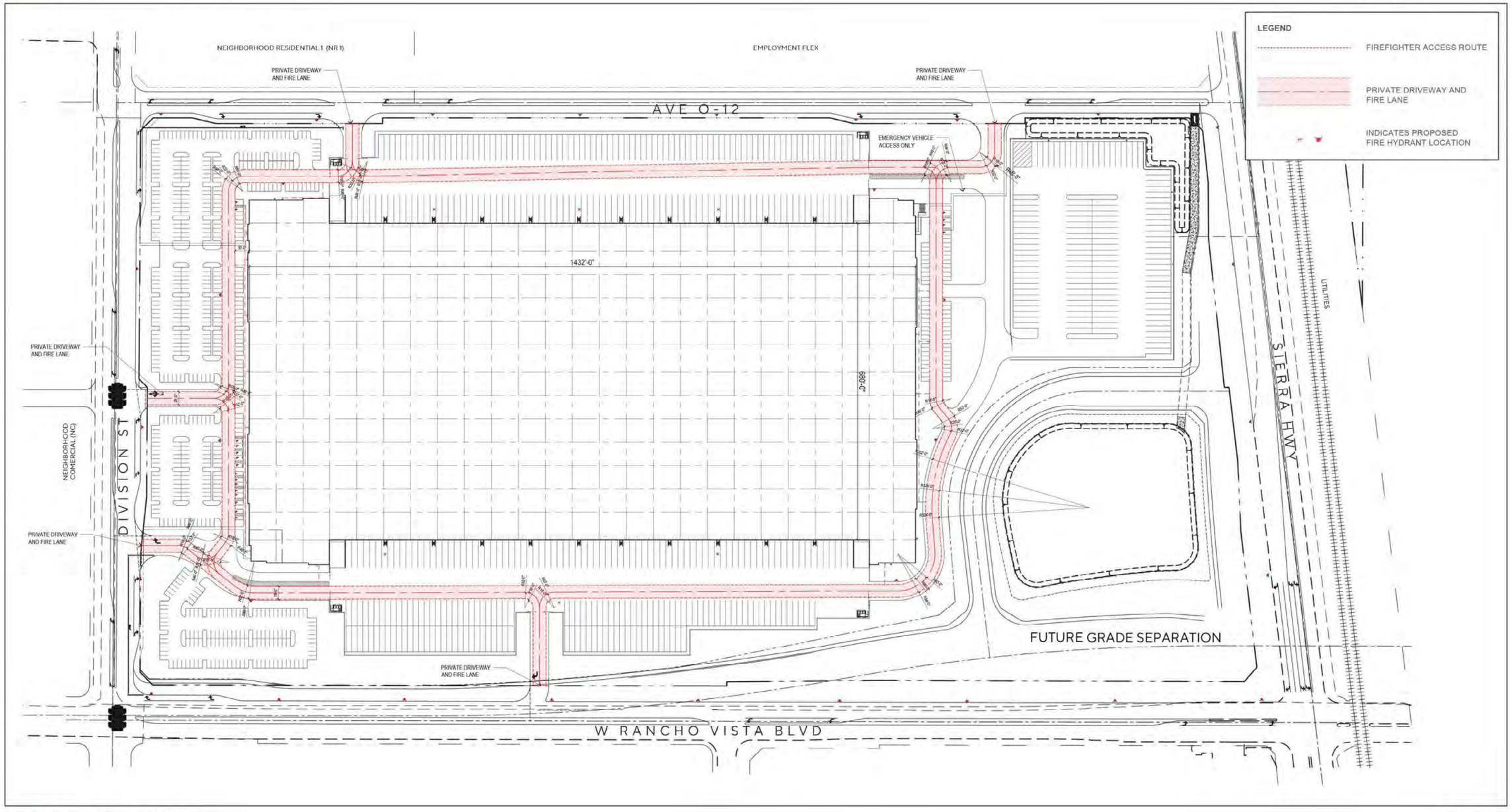


Source(s): Architects Orange (10-30-2025)

Figure 3-4

Not to Scale

Conceptual Site Plan



Source(s): Architects Orange (10-30-2025)

Figure 3-5

Not to Scale

Fire Apparatus Circulation Plan



1 | NORTH (AVE. O-12) ELEVATION



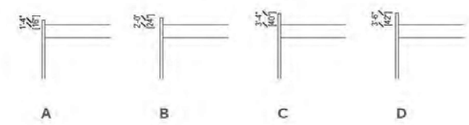
2 | WEST (DIVISION ST.) ELEVATION

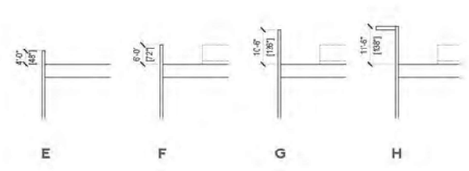


3 | EAST (SIERRA HWY) ELEVATION



4 | SOUTH (W. RANCHO VISTA BLVD) ELEVATION





5 | PARAPET SECTIONS

Source(s): Architects Orange (10-30-2025)

Figure 3-6

Not to Scale

Conceptual Elevations

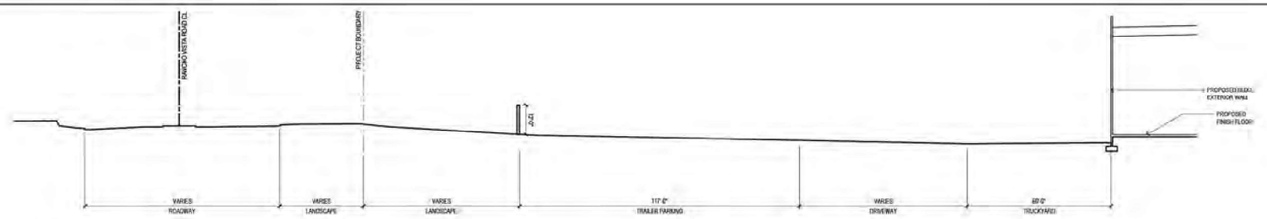


Source(s): Architects Orange (10-30-2025)

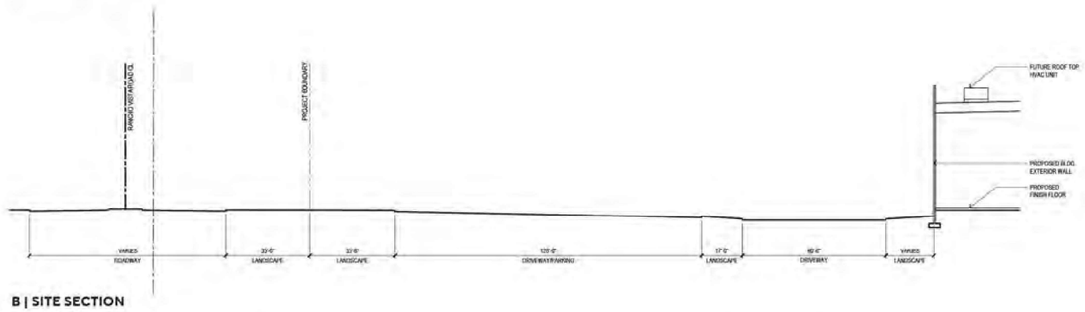
Figure 3-7

Not to Scale

Conceptual Design - Corner View



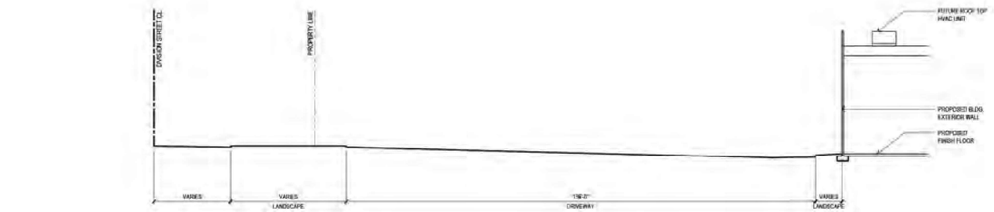
A | SITE SECTION



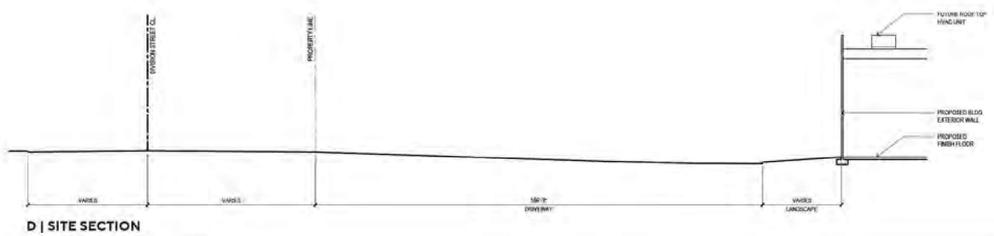
B | SITE SECTION



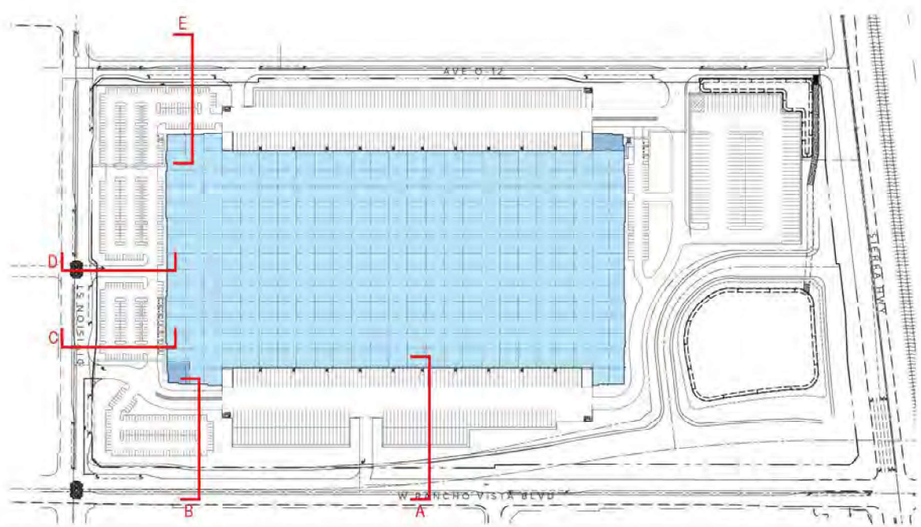
E | SITE SECTION



C | SITE SECTION



D | SITE SECTION

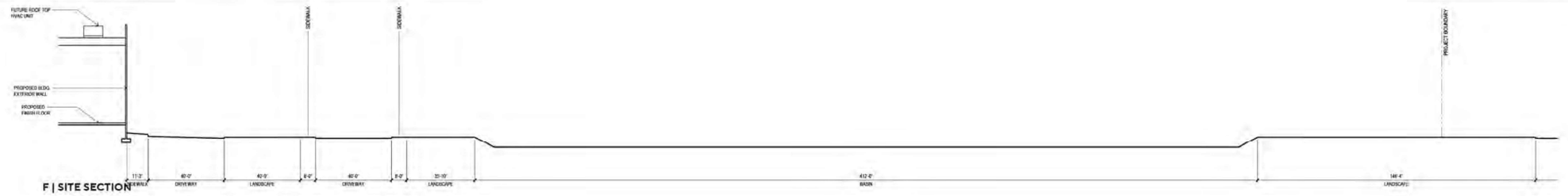


Source(s): Architects Orange (10-30-2025)

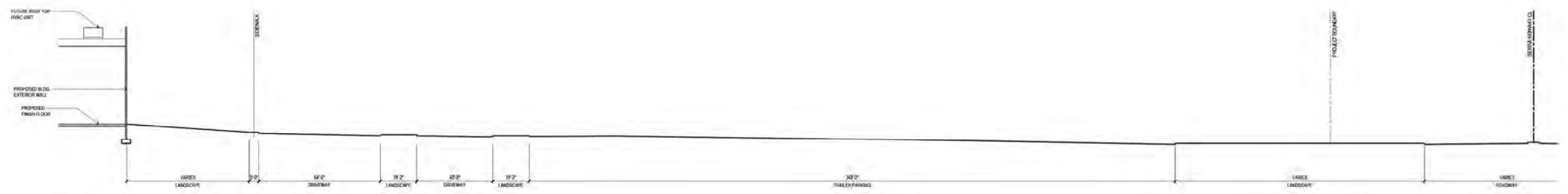
Figure 3-8

Not to Scale

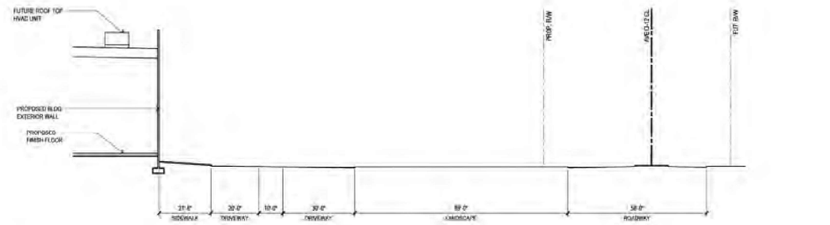
Conceptual Site Sections – Sheet 1



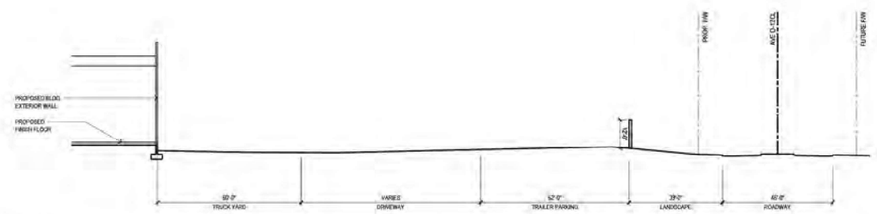
F | SITE SECTION



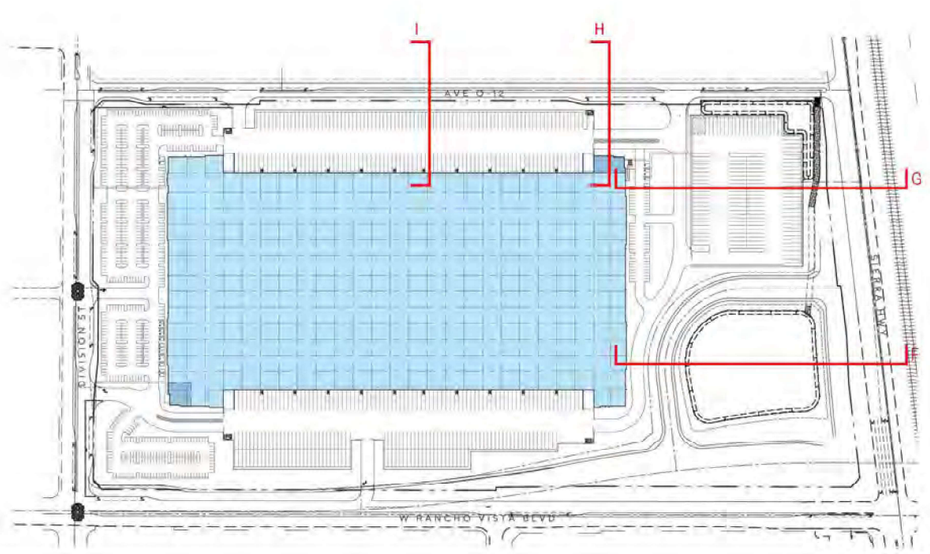
G | SITE SECTION



H | SITE SECTION



I | SITE SECTION

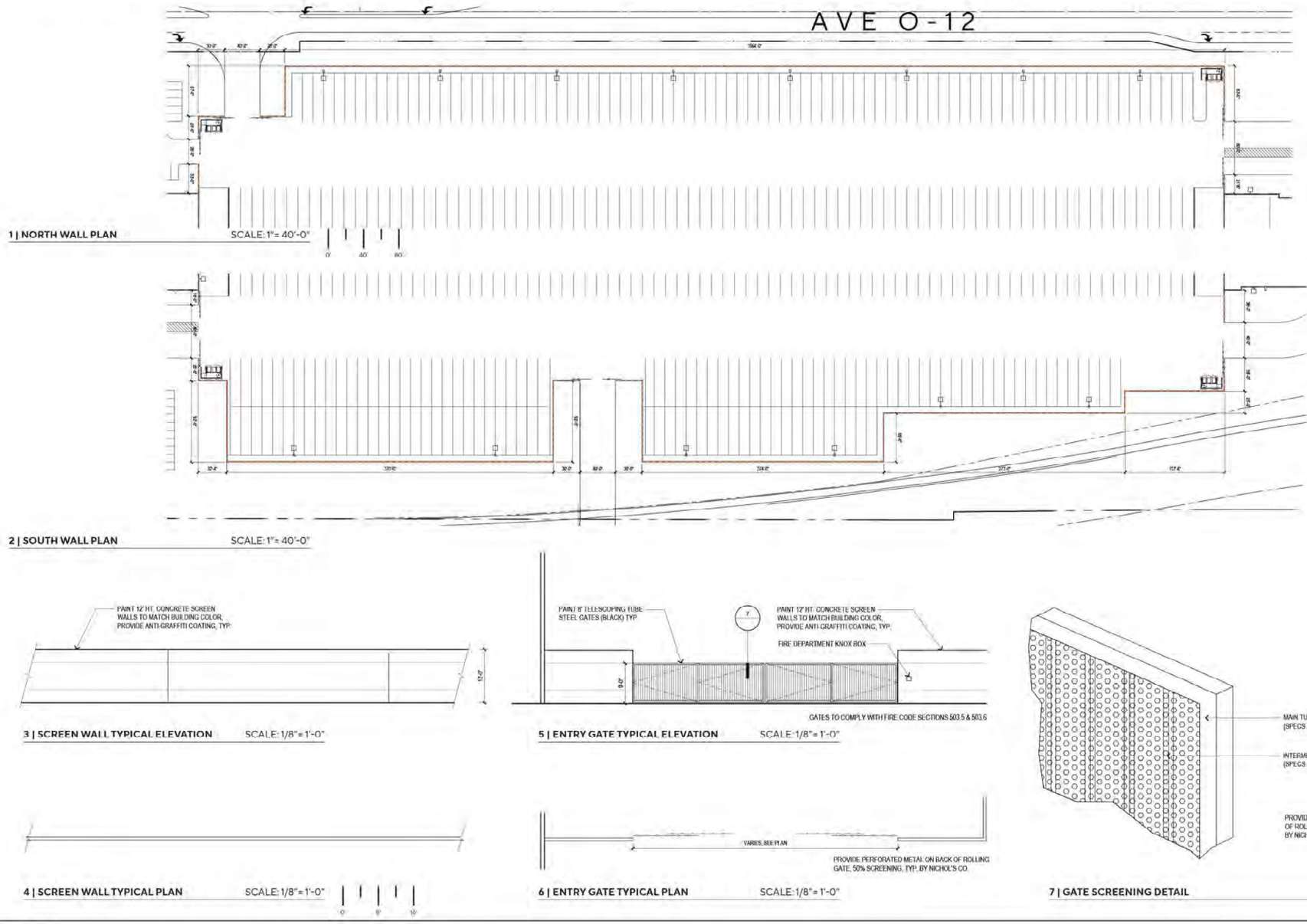


Source(s): Architects Orange (10-30-2025)

Figure 3-9

Not to Scale

Conceptual Site Sections – Sheet 2

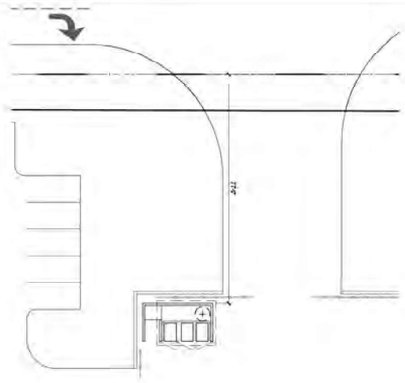


Source(s): Architects Orange (10-30-2025)

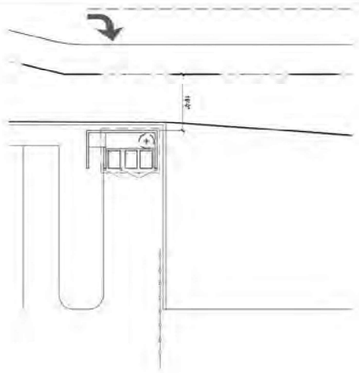
Figure 3-10

Not to Scale

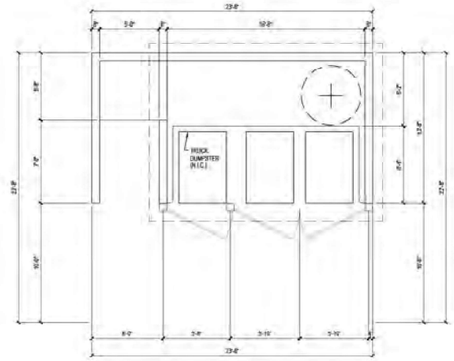
Wall and Gate Plan and Details



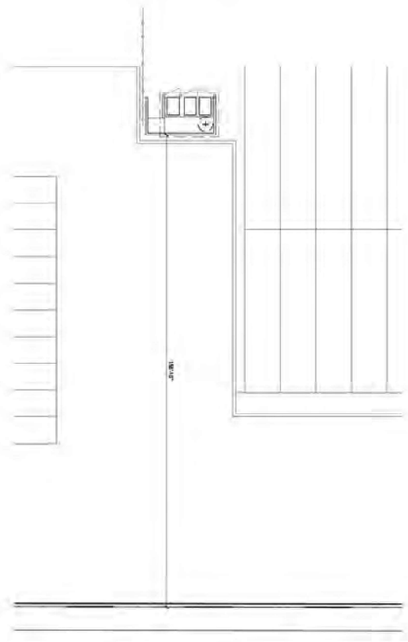
1 | TRASH ENCLOSURE - NORTHWEST



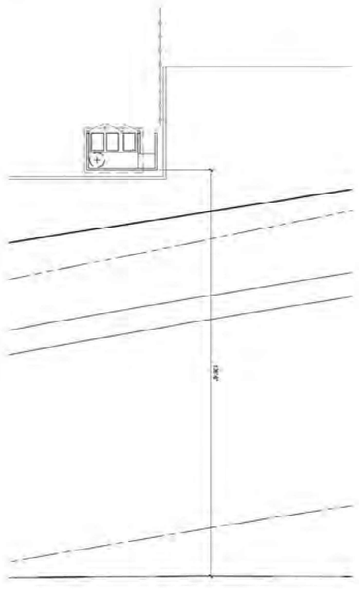
3 | TRASH ENCLOSURE - NORTHEAST



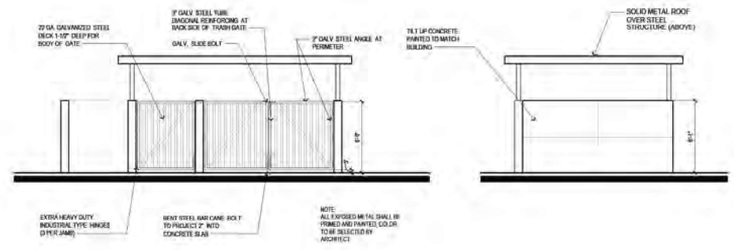
5 | TRASH ENCLOSURE PLAN - TYPICAL



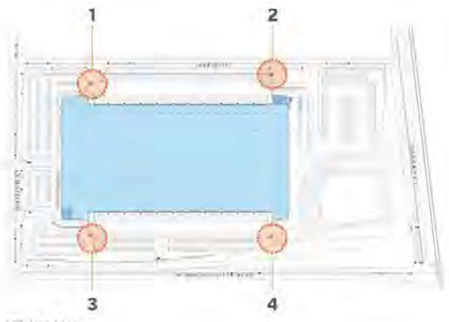
2 | TRASH ENCLOSURE - SOUTHWEST



4 | TRASH ENCLOSURE - SOUTHEAST



6 | TRASH ENCLOSURE ELEVATION - TYPICAL



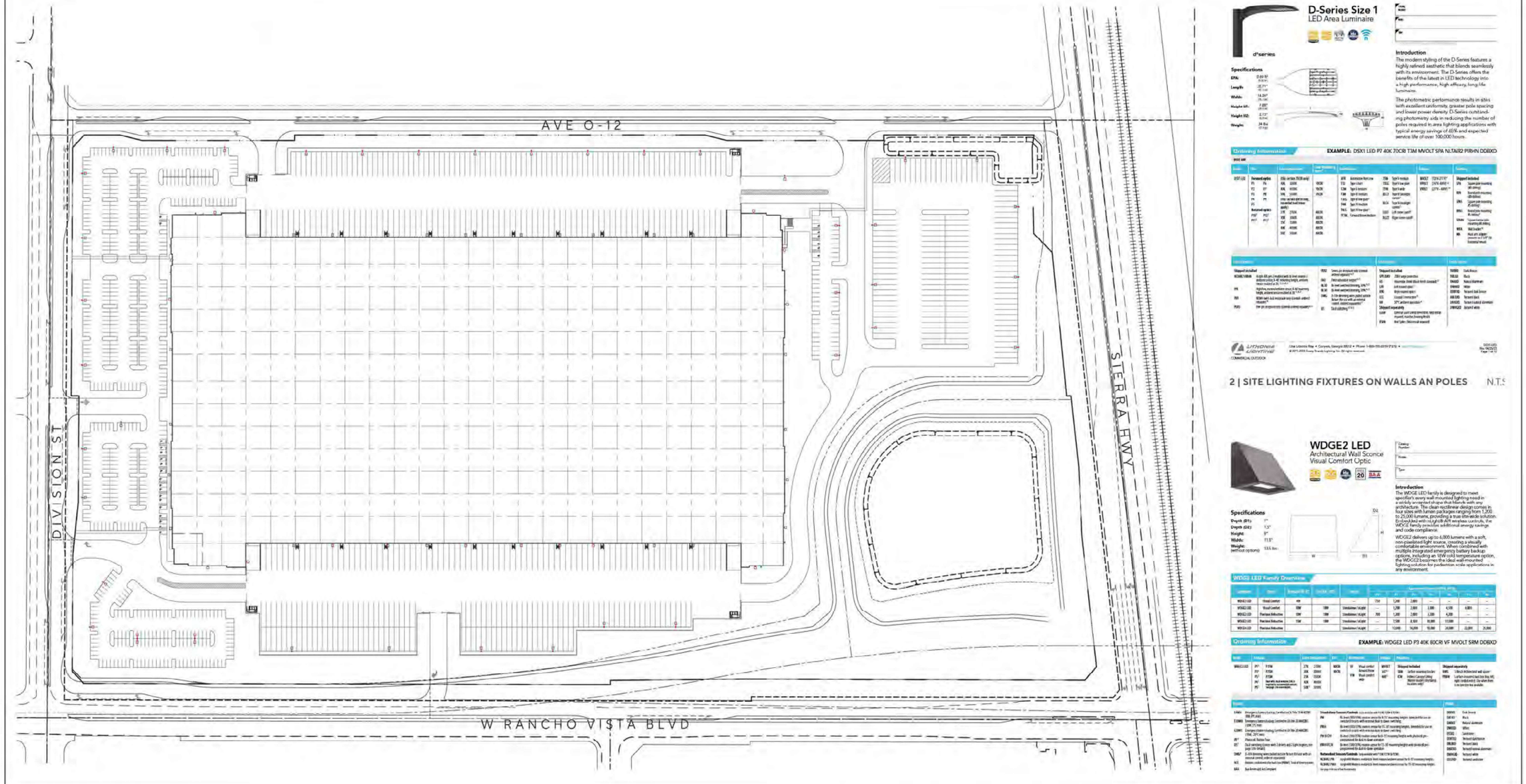
KEY PLAN

Source(s): Architects Orange (10-30-2025)

Figure 3-11

Not to Scale

Trash Enclosure Plans and Elevations

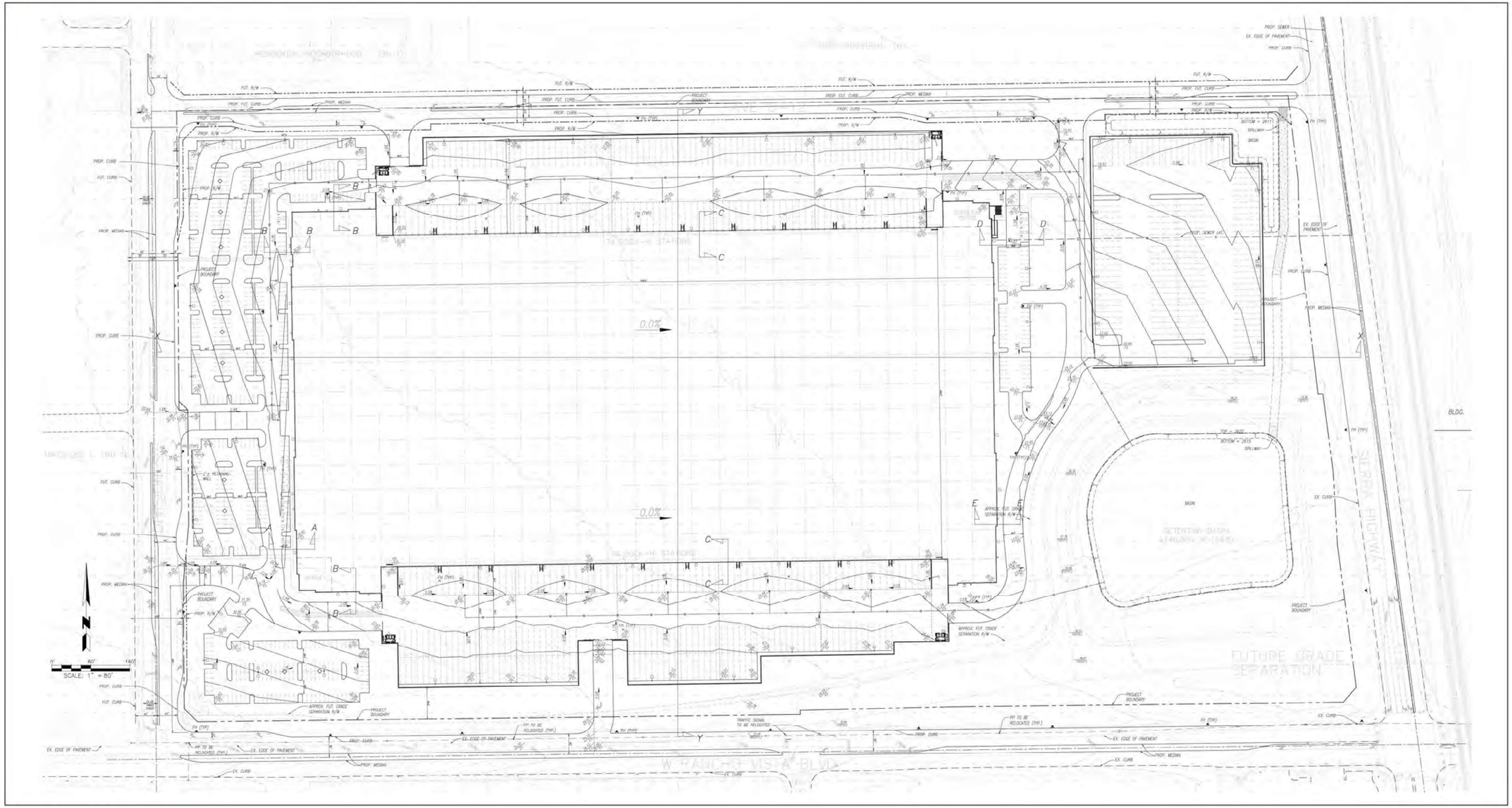


Source(s): Architects Orange (10-30-2025)

Figure 3-12

Not to Scale

Site Lighting Plans and Details



Source(s): Sikand (10-30-2025)

Figure 3-13

Not to Scale

Conceptual Grading Plan

4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

In accordance with California Environmental Quality Act (CEQA) Guidelines Sections 15126-15126.4, this EIR Section 4.0, *Environmental Analysis*, provides analyses of potential direct, indirect, and cumulatively considerable impacts that could occur from planning, constructing, and operating the proposed Project.

An Initial Study was not prepared for the proposed Project because the City determined that an EIR was required, although the Project's NOP did scope out certain issue areas from detailed environmental review that had no reasonable possibility of being significantly impacted by the Project. The City of Palmdale distributed a Notice of Preparation (NOP) to public agencies and interested individuals and posted the NOP on its website to solicit input on the scope of study for the EIR. The City of Palmdale also held one EIR Scoping Meeting to solicit input from public agencies and the general public on the scope of study for this EIR. Taking all known information and public comments into consideration, 16 primary environmental factors are evaluated in detail in this Section 4.0, as listed below. Each Subsection evaluates several specific topics related to the primary environmental subject. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

4.1	Aesthetics	4.9	Hydrology and Water Quality
4.2	Air Quality	4.10	Land Use and Planning
4.3	Biological Resources	4.11	Noise
4.4	Cultural Resources	4.12	Public Services
4.5	Energy	4.13	Transportation
4.6	Geology and Soils	4.14	Tribal Cultural Resources
4.7	Greenhouse Gas Emissions	4.15	Utilities and Service Systems
4.8	Hazards and Hazardous Materials	4.16	Wildfire

4.0.2 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines Section15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "[A] cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines Section 15130(a)(1)). As defined in CEQA Guidelines Section 15355:

> *'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

CEQA Guidelines Section 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: 1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency (the list of projects approach), or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact (the summary of projections approach).

Given the adoption of the City of Palmdale General Plan (Palmdale 2045) in October 2022, and the Project site's location in the center of the City, the summary of projections approach is used in this EIR. This methodology was determined to be appropriate because Palmdale 2045 is the City's long-range planning document which in combination with its Final EIR contain a sufficient amount of information to enable a comprehensive analysis of cumulative effects for all subject areas. Under this approach, the cumulative analyses contained in most subsections of this EIR Section 4.0 consider impacts to each environmental issue area based on the presumed buildout of Palmdale 2045, which along with its Final EIR having SCH No. 2021060494, are hereby incorporated by reference and available for public review at the City of Palmdale Department of Economic and Community Development located at 38250 Sierra Highway, Palmdale, California 93550 (City of Palmdale, 2023). This EIR also considers the California High Speed Rail Authority's planned High-Speed Rail (HSR) Palmdale to Bakersfield project for the topics of cumulative noise and vibration due to proximity of the planned HSR alignment being approximately 150 feet to the west of the Project site. The HSR project is a separate and independent project from the Palmdale 2045 General Plan but that is acknowledged in Palmdale 2045 as a cumulative project. While the HSR project may not be constructed or operational in Palmdale by 2045, the Bakersfield to Palmdale Project Section Final EIR/EIS (EIR/EIS) having SCH No. 2009082062 is considered herein as a reasonable foreseeable future cumulative project (CA High Speed Rail Authority, 2021).

Other plans used in the summary of projections approach that apply to specific environmental topic areas are referenced when used in the cumulative effects analyses in the various subsections of this EIR Section 4.0.

As an example of the summary of projections methodology used for geographic scope, for the issue area of aesthetics, the cumulative study area is defined by the Project's ground-level viewshed in the immediate vicinity of the Project site and horizon viewshed, which extends to the mountain ranges on

all sides. For the issue of hydrology and water quality, by contrast, the cumulative study area is defined as the Antelope Valley Watershed. For the issue of air quality, the cumulative study area comprises the Mojave Desert Air Basin (MDAB). For the issue of biology, the cumulative study area corresponds generally to the boundaries of the West Mojave Plan. The West Mojave Plan establishes a regional biological strategy to conserve plant and animal species and their habitats and provides for an efficient, equitable, and cost-effective process for complying with threatened and endangered species law. It is noted that until the State portion of the plan is permitted, it cannot be used by State or private entities; however, it is generally considered as a cumulative study area for biological resources. Refer to the individual subsections within this EIR Section 4.0 for a description of the specific cumulative study area used for each subject area evaluated in this EIR.

4.0.3 IDENTIFICATION OF IMPACTS

Subsections 4.1 through 4.16 of this EIR evaluate the 16 environmental subjects warranting analysis pursuant to CEQA. The format of discussion is standardized as much as possible in each subsection for ease of review. The environmental setting is discussed first, followed by a discussion of the governmental regulatory environment pertaining to the topic, followed by an analysis of potential environmental impacts of the Project based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant.

The thresholds of significance used in this EIR are based on the thresholds presented in CEQA Guidelines Appendix G and as applied by the City of Palmdale. The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, is significant, or is less than significant (with or without the incorporation of mitigation).

Serving as the CEQA Lead Agency for this EIR, the City is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. While the City has generally elected to use the thresholds presented in CEQA Guidelines Appendix G, it should be noted that CEQA affords the City discretion to formulate standards of significance, and recognizes that the significance of a particular impact may vary with the setting (14 Cal. Code Regs., Section 15064(b).) The standards of significance used in this EIR are based on the independent judgment of the City, taking into consideration the current CEQA Guidelines Appendix G, the City's Municipal Code (PMC), and adopted City policies and ordinances; the judgment of the technical experts that prepared this EIR's Technical Appendices; performance standards adopted, implemented, and monitored by regulatory agencies; significance standards recommended by regulatory agencies; and the standards in CEQA that trigger the preparation of an EIR. As required by CEQA Guidelines Section 15126.2(a), impacts are identified in this EIR as direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the proposed Project. A summarized "impact statement" is provided in each section following the analysis.

The following terms are used to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- No Impact: An adverse change in the physical environment would not occur.

- Less Than Significant Impact: An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this EIR.

- Significant Impact: A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures.

Each subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations, etc.) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- Less Than Significant Impact with Mitigation: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less than significant level through the application of feasible mitigation measure(s).

- Significant and Unavoidable Impact: A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measure(s) that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

For any impact identified as significant and unavoidable, the City would be required to adopt a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 in order to approve the Project despite its significant impact(s) to the environment. The Statement of Overriding Considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the administrative record for the Project, that outweigh the unavoidable impacts.

4.1 AESTHETICS

This subsection describes the aesthetic qualities and visual resources present on the Project site and within the vicinity of the site and evaluates the potential effects that the Project may have on these resources. Descriptions of existing visual characteristics on the site and in the immediate vicinity of the Project site and the analysis of the Project's potential aesthetic impacts are based in part on a visual field survey and site photographs collected by T&B Planning, Inc. on March 4, 2025. In addition, aerial photography (Google Earth, n.d.) and the Project's application materials were used for this analysis. This subsection also is based in part on information and policies contained in the City of Palmdale General Plan (Palmdale 2045) (City of Palmdale, 2023) and the City of Palmdale Municipal Code (PMC) (PMC, 2025). All references used in this subsection are listed in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of aesthetics.

4.1.1 EXISTING CONDITIONS

A. Project Site and Surrounding Areas

The Project site is comprised of approximately 67 acres of vacant land and is located within the City of Palmdale, California, which is located within the Antelope Valley portion of Los Angeles County. The Project site is located directly north of West Rancho Vista Boulevard / East Avenue P; directly east of Division Street; approximately 0.75-mile south of East Avenue O; and approximately 0.01-mile west of Sierra Highway. The Project site is located approximately 0.51-mile east of State Route 14 (SR-14) and approximately 1.8 miles (9,504 feet) southwest of Runway 7 of USAF Plant 42.

As previously shown on Figure 2-6, the Project site is vacant. A dirt access road running north-south bisects the Project site. The access road forks in the northern portion of the Project site, with one road continuing north beyond the boundaries of the Project site, and the other road running northwest beyond the boundaries of the Project site. The majority of the Project site, other than the dirt access roads, is undisturbed. As previously disclosed in Section 2.0, *Environmental Setting*, land uses in the immediate vicinity of the Project site are illustrated on Figure 2-3 and described below.

North: To the immediate north of the Project site is vacant land. Farther north are two business parks (Sierra Gateway), which contain various commercial uses, as well as single-family residences. To the northwest are additional residential uses, beyond which are industrial uses and a business park. To the northeast is Sierra Highway, the Sierra Highway Bike Trail, and the Union Pacific Railroad (UPRR) mainline tracks and easement, beyond which are vacant land and USAF Plant 42.

- South: West Rancho Vista Boulevard / Avenue P forms the southern boundary of the Project site. Beyond West Rancho Vista Boulevard is vacant land; single-family residential uses; a commercial plaza containing various uses, including a restaurant, dry cleaners, air conditioning service, and swimming pool contractor; and an industrial park (Winnell Industrial Park), which

contains various industrial uses. Farther south is Technology Drive, an east-west roadway, beyond which are Desert Sands Park and the Palmdale Transit Center.

- East: To the east of the Project site is Sierra Highway and directly east of Sierra Highway is the Sierra Highway Bike Trail and the Union Pacific Railroad (UPRR) mainline tracks and easement. East of the UPRR is vacant land. To the southeast of the Project site, east of the UPRR, is a commercial plaza, and farther southeast are additional vacant land, a self-storage facility (AV Self Storage), and Palmdale School District offices.

- West: Division Street forms the western boundary of the Project site. Beyond Division Street is vacant land, beyond which are residential uses of varying densities. To the southwest is additional vacant land, beyond which are retail/commercial uses and the Palmdale Auto Mall.

There are no rock outcroppings or other unique topographic or aesthetic features present on the property. As previously shown on Figure 2-7, the Project site is relatively flat with an elevation of approximately 2,625 feet above mean sea level (amsl) with a regional slope to the northeast. (HMC, 2024, p. 1) The topography generally drops downward to the east, with a maximum elevation differential of about 17± feet. (SCG, 2022, p. 4)

The Project site is located within an area referred to as "the high desert." Vegetation communities and land cover types on the Project site include Joshua tree woodland, Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub, rubber rabbitbrush scrub, disturbed habitat, and developed land (Dudek, 2025, pp. 21-25). Visually, Joshua trees are recognizable when viewing the Project site from its perimeters, as is the low-profile scrub vegetation crossed by a few dirt roads.

Pursuant to CEQA Guidelines Section 15125 and explained in Section 2.0 of this EIR, the physical environmental condition for purposes of establishing the setting of this EIR is the environment as it existed at the approximate time that the EIR's NOP was released for public review. The NOP was posted with the Los Angeles County Clerk on March 25, 2025. As of that date, the Project site was vacant. To demonstrate the existing condition, T&B Planning, Inc. collected photographs of the Project site on March 4, 2025. The locations of the photographs taken from seven public vantage points are relied upon herein to describe the Project site's existing aesthetic condition and character. These photographs provide a representative visual depiction of the Project site's visual characteristics as seen from surrounding public viewing areas, which consist of public roads.

The Project site is not visible at the ground level from any public school sites, public parks, or other prominent public places due to the flat topography of the surrounding area and intervening development that blocks views to the site. The Project site is visible from Sierra Highway which fronts the Project site on the east, as well as the Sierra Highway Bike Trail and the UPRR mainline tracks, which are located east of Sierra Highway. The site is also visible from West Rancho Vista Boulevard / East Avenue P, which fronts the Project site on the south, and Division Street, which fronts the site on the west. The photographs presented herein were all taken during the same session and reflect a field of view approximately five feet above the ground.

As shown on Figure 4.1-1, *Public Viewpoint Key Map*, Figure 4.1-2, *Viewpoints 1 and 2*, Figure 4.1-3, *Viewpoints 3 & 4,* and Figure 4.1-4, *Viewpoints 5 & 6*, the public viewpoints are described below.

- Viewpoint 1 is from Division Street, located west of the Project site, at the northwestern corner of the Project site and looking southeast. The Project site is relatively flat and is undeveloped with a mix of vegetation types including shrubs, groundcover, and Joshua tree woodland, along with areas of bare ground. Graded dirt immediately east of Division Street is visible in the foreground of the photograph on the right, and pieces of littered waste/trash material are visible in both photographs. The San Gabriel Mountains are visible in the distance along the horizon of the photograph on the right.

- Viewpoint 2 is from the intersection of Division Street and West Rancho Vista Boulevard / East Avenue P, at the southwestern corner of the Project site and looking northeast. The foreground of both photographs shows bare ground, ruderal vegetation, western Joshua trees, and pieces of littered waste/trash material. Several small piles of crushed asphalt are in the foreground of the photograph on the left, and a gravel pathway cutting through the corner of the Project site is visible in the foreground of the photograph on the right. The Sierra Gateway Business Park is visible in the background of the photograph on the left. Overhead utility lines along the southern boundary of the Project site are visible on the right.

- Viewpoint 3 is from the intersection of West Rancho Vista Boulevard/East Avenue P and 3rd Street East, south of the Project site and looking north. The foregrounds of the photographs show West Rancho Vista Boulevard / East Avenue P, overhead utility lines, and traffic signal. Bare ground is visible along the edge of the Project site adjacent to the street, with ruderal and native vegetation and western Joshua trees beyond the disturbed ground. A bus stop that is serviced by the Antelope Valley Transit Authority is visible in the photograph on the left. The Sierra Gateway Business Park and the buildings of the Lockheed Plant 10 Specific Plan are visible in the background of the central and right photographs.

- Viewpoint 4 is from the intersection of West Rancho Vista Boulevard / East Avenue P and Sierra Highway, at the southeastern corner of the Project site and looking northwest. Bare ground and ruderal vegetation are visible in the foreground, with western Josua trees visible in the background. The Sierra Gateway Business Park is visible in the background of the photograph on the right. The foothills of the Sierra Pelona Mountains are visible in the far distance in the photograph on the left, and the Tehachapi Mountains are visible in the far distance of both photographs.

- Viewpoint 5 is from Sierra Highway, at the northeastern corner of the Project site and looking southwest. Bare ground, ruderal vegetation, and western Joshua trees occur across the Project site. The Sierra Pelona Mountains are visible along the horizon of both photographs.

- Viewpoint 6 is from the Sierra Gateway Business Park, northeast of the Project site and west of Sierra Highway, looking southwest at the Project site. Bare ground, ruderal vegetation, and western Joshua trees occur across the Project site. The Sierra Pelona Mountains are visible along the horizon of the photograph.

B. Scenic Vistas and Scenic Resources

According to the City's General Plan EIR, a scenic vista is a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. Scenic vistas encompass long-range views and often emphasize large-scale natural features. Scenic views of the desert and local mountains are the predominant scenic vistas in Palmdale. Desert views are primarily available along the edges of the City, particularly in the undeveloped northern portions. Leona Valley, located approximately 4 miles to the west of the City, is a scenic area. Distant views of the San Gabriel Mountains, located approximately 34 miles to the southeast of the City; the Sierra Pelona Mountains, located approximately 11 miles to the west of the City; and Tehachapi Mountains, located approximately 36 miles to the northwest of the City are available, but the best views of these mountains are from large areas of unobstructed open space. In other areas, views of the mountains from within the City are fully to partially obstructed by existing trees and buildings. Ritter Ridge and the San Gabriel Mountains provide views from their heights down into the rest of the Antelope Valley. Similarly, the hills behind Foothill Ranch offer scenic vistas. Most of the principal north-south avenues, especially 30th Street West, 20th Street West, Division Street, 10th Street East, 25th Street East, 30th Street East, 40th Street East, and 47th Street East) provide views southward of the mountains themselves. (City of Palmdale, 2022a, pp. 4.1-1 to 4.1-2)

The Project site is located within a relatively flat valley floor surrounded by rugged hills and mountains. In the far distance on clear days, views are possible from the Project site and from the roads surrounding the Project site, of the Tehachapi Mountains ridgelines to the northwest, the San Gabriel Mountains to the south and southeast and the Sierra Pelona Mountains to the west (Google Earth, n.d.).

Daylight, dusk, or nighttime views of the Project site and its visual setting are not distinctive, and visual quality is low because the viewshed lacks vivid or highly noticeable features and is characterized by visually uninteresting and unvaried natural landscapes. Distant views of mountain ridgelines are the principal visual resource in this setting. Such views are easily acquired under existing conditions due to the open setting, although atmospheric haze in the region sometimes obscures or completely blocks the distant views of the mountains.

As identified in PMC Section 14.04.20, scenic tree resources include Joshua trees or those designated as 'desert vegetation' such as the California juniper (City of Palmdale, 2023, page 4.1-7). Joshua tree woodland and disturbed Joshua tree woodland generally occurs throughout the entire Project site, except for the central area and the northwestern and southeastern corners of the Project site. This vegetation type is dominated by western Joshua trees with an open to intermittent shrub and herbaceous layer with perennial grasses and seasonal annuals. (Dudek, 2025, pp. 22-23)

C. Light and Glare

The Project site contains no sources of artificial exterior lighting under existing conditions. However, artificial, exterior lighting sources occur in the vicinity of the Project site, emanating from streetlights within the adjacent residential areas and commercial plaza, the Sierra Gateway Business Park, and the Lockheed Plant 10 Specific Plan.

4.1.2 REGULATORY SETTING

A. State Plans, Policies, and Regulations

1. California State Scenic Highways

The California Department of Transportation (Caltrans) manages the State Scenic Highway Program, established in 1963 through Senate Bill 1467, Streets and Highways Code, Sections 260 through 263 to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated as scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Scenic corridors consist of land that is visible from, adjacent to, and outside the highway right-of-way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. Existing law provides Caltrans with full possession and control of all State highways, while this legislation places the Scenic Highway Program under the stewardship of Caltrans. The legislation further declares the intent of the State to assign responsibility for the regulation of land use and development along scenic highways to the appropriate State and local governmental agencies. Scenic highways are classified as either Officially Designated or Eligible for designation and Caltrans maintains the lists of these highways. (Caltrans, 2024)

B. Local Plans, Policies, and Regulations

1. City of Palmdale General Plan: Land Use and Community Design Element

The Land Use and Community Design Element of the City's General Plan (Palmdale 2045) includes goals and policies that define and guide the desired visual character and quality of specific districts, village centers, and corridors in the City. Specific goals applicable to the Project evaluated in this EIR include but are not limited to high quality architecture and site design (Goal LUD-4), well-landscaped streets and civic spaces (Goal LUD-6), safe and welcoming neighborhoods and streets (Goal LUD-7), encouraging art and culture (Goal LUD-8), increasing job opportunities through expanded flex, light industrial, production/distribution/repair, and creative/flex land uses (Goal LUD-16), and facilitating industrial areas that support and buffer USAF Plant 42 while maintaining compatibility with adjacent non-industrial uses (Goal LUD-17). (City of Palmdale, 2023)

Development standards are included for industrially designated areas to ensure compatibility and aesthetically pleasing views, and to limit building heights in specific geographic areas to minimize viewshed impacts. Palmdale 2045 states that the General Plan's industrial land use designations allow for the same character (look and feel) for the public realm, building character, connectivity, and

parking. Palmdale 2045 recognizes that industrial areas are often characterized by larger blocks defined by public streets to accommodate large buildings and truck loading and outdoor storage functions. Employee parking lots are directed to be located beside or behind buildings rather than in front with loading areas screened from view from public rights-of-way. (City of Palmdale, 2023, p. 130)

Under existing conditions, the Project site is designated Employment Flex (EMPFX) which is a transition zone intended to permit mixed-use development of lighter industrial uses and more intensive service, retail, and commercial uses. (City of Palmdale, 2023, p. 133) The Project is consistent with the site's General Plan land use designation.

2. City of Palmdale General Plan: Military Compatibility Element

The Military Compatibility Element of Palmdale 2045 includes goals and policies that define and guide the development surrounding USAF Plan 42. The goal and policies applicable to the Project evaluated in this EIR include avoidance of incompatible development in Plant 42 air space (Goal MC-2), City review of development proposals for light and glare hazards for any projects proposed within the USAF Plant 42 APZ (Policy MC-2.1), and consistency with APZ regulations outlined in the Plant 42 AICUZ Report (Policy MC-2.2). (City of Palmdale, 2023)

C. Zoning

Pursuant to the PMC, as shown previously on Figure 2-5, *Existing Zoning Classifications,* under existing conditions, the Project site is zoned Light Industrial (LI). The Light Industrial zone is intended to allow a range of medium to high intensity industrial uses such as manufacturing, assembly, warehousing, distribution, and similar uses, which provide employment and services for residents and businesses. Some of these uses, such as heavy manufacturing, may not be suitable adjacent to sensitive uses or housing, and should be physically separated from residential areas by natural or manmade barriers. This zone implements the Industrial and Employment Flex General Plan land use designations. (City of Palmdale, 2023) (PMC, 2025). The Project is consistent with the City's zoning classification for the site.

D. City of Palmdale Municipal Code

1. Lighting Standards

PMC Chapter 17.86.030, Outdoor Lighting, addresses lighting standards and glare for all development areas. The PMC places restrictions on lighting fixture height not to exceed 35 feet when such fixtures are visible from public rights-of-way and less intensive, non-industrial use districts. The PMC establishes standards for glare from exterior lighting to adjacent properties or streets and restricts the use of flood-lighting fixtures and placement of security lighting fixtures. The PMC restricts lighting intensity to a minimum of 0.5-foot candle (at the darkest spot on the parking area) maintained. There shall be no more than a four to one (4:1) average illumination ratio (average to minimum) level of illumination shown between lighting standards. The maximum average illumination across the parking lot shall be no more than 2.4-foot candles.

For new development in Palmdale, an exterior lighting (photometric) plan consisting of a point-by-point foot candle layout (based on a 10-foot grid center) extending a minimum of 20 feet outside the property lines, prepared by an electrical engineer registered in the State of California, is required. (PMC, 2023, pp. 8-25 to 8-28)

2. Light and Glare Emissions Standards

PMC Chapter 17.84.030, Heat, Light, and Glare, addresses the emanation of light and glare from any existing or proposed use, or portion thereof, allowed in any zone. The PMC regulates generated light or glare that constitutes or may be considered a nuisance or hazard on any adjacent property, such as reflective building materials, by requiring such emissions to be shielded or controlled to prevent the issuance, continuance, or recurrence of the disturbing emissions. (PMC, 2025)

3. Hillside Management

Chapter 17.100 of the PMC, Hillside Management, includes provisions that allow for development in hillside areas in conjunction with the preservation of natural open space on steeper terrain. The City's skyline backdrop provides views of significant natural ridgelines and prominent landforms. Natural landforms and features forming this backdrop include Ritter Ridge, Portal Ridge, Verde Ridge, the Ana Verde Hills, the Sierra Pelona mountains, and secondary ridges associated with the San Andreas Rift Zone and the lower foothills of the San Gabriel mountains. The City considers hillsides as a scenic skyline backdrop, which is visible from the Antelope Valley floor, or adjacent valleys. (City of Palmdale, 2022b, p.4.1-5) The Project site is relatively flat and is not within a hillside area.

E. Palmdale Public Art Master Plan

The Public Art Master Plan (2020) finalized in 2020, sets forth a vision and key goals to expand artwork on City property and within the public realm throughout Palmdale. The Plan includes a summary of key recommendations and a strategic approach to funding, managing, and reviewing local public art projects that will celebrate Palmdale's identity, expand economic opportunities, and encourage multidisciplinary collaboration. (City of Palmdale, 2020)

4.1.3 Basis for Determining Significance

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would:

a) *Have a substantial adverse effect on a scenic vista;*
b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*
c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;*

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Regarding the determination of significance under Threshold (a), the scenic vistas available in the vicinity of the Project site are views of the mountains in the far distance on clear days; as such, if views of the mountains would be blocked, obscured, or substantially and adversely affected as seen from a public viewing area, leaving no opportunity for the public to experience the scenic view, the impact would be regarded as significant.

Regarding the determination of significance under Threshold (b), if the Project were to block, obscure, or substantially and adversely affect scenic resources such as trees, rock outcroppings, and/or historic buildings within a state scenic highway, leaving no opportunity for the public to experience the scenic resource, the impact would be regarded as significant.

Regarding the determination of significance under Threshold (c), because the Project site is located in an urbanized area, the Project would result in a significant impact if it were to conflict with applicable goals, policies, zoning, or other regulations governing scenic quality as specified in the City's General Plan (Palmdale 2045) or the PMC.

Regarding the determination of significance under Threshold (d), if the Project would create a new source of substantial light and glare that may adversely affect daytime and nighttime views, the impact would be regarded as significant. In this context, "substantial" is defined as light that produces more than 2.4-foot candle of light spillover beyond the property line, per PMC Section 17.86, Outdoor Lighting. (PMC, 2023)

4.1.4 IMPACT ANALYSIS

***Threshold a:** Would the Project have a substantial adverse effect on a scenic vista?*

The Project site is not located in an area designated as scenic in the City's General Plan and is not within the City's Hillside Area (PMC Chapter 17.100, Hillside Management). On clear days, distant views of the Tehachapi Mountains ridgelines to the northwest, the San Gabriel Mountains to the south and southeast, and the Sierra Pelona Mountains to the west, are possible from the Project site and the roads surrounding the Project site (Google Earth, n.d.).

The Project would allow for the development of one industrial warehouse building totaling 1,000,000 s.f. Associated improvements to the Project site would include, but are not limited to, frontage roadway improvements, drive aisles, passenger vehicle parking areas, truck and trailer parking areas, loading dock truck courts, utility infrastructure, landscaping, water infiltration basins, signage, lighting, screen walls, security gates, and fencing, including perimeter fencing.

The Project site is relatively flat and does not contain a scenic vista or contribute to a scenic vista. Because views to the mountains beyond the Project site are at considerable distances between approximately 5 to 33 miles away, the temporary construction activities associated with the Project,

which would entail excavation and earth-moving activities and the temporary introduction of construction vehicles and equipment to the area, have no potential to obscure a scenic vista. There are no pieces of construction equipment so large that scenic vistas could be blocked, obscured, or substantially and adversely affected as seen from public roads and viewing points surrounding the Project site; therefore, the Project's temporary short-term construction activities would not have a substantial adverse effect on a scenic vista.

The architectural elevations for the proposed building are depicted on Figure 3-5 and show a variable roofline with a maximum height of approximately 56 feet. With architectural projections, the maximum height of the roofline is 59 feet 8 inches. Implementation of the Project would introduce other vertical features to the Project site (walls, fences, landscaping, etc.) that would be shorter and would have substantially less physical mass than the building. In some instances, the proposed building may intermittently obstruct mountain views in the distance as drivers travel immediately adjacent to the Project site along existing Sierra Highway, West Rancho Vista Boulevard / East Avenue P, and Division Street. Single views toward the mountains in the distance across the Project site from these roads typically are of short duration due to travel speeds, and viewer sensitivity is considered low-to-moderate because as the passing landscape becomes familiar, vehicle occupants, pedestrians, and bicyclists using roadway corridors typically focus their attention on the roadway, roadway signs, and surrounding traffic. The only potential for the Project to intermittently obscure a long-distance view of the mountains would be if a viewer were to look across the Project site while traveling adjacent to the Project site along Sierra Highway or the Sierra Highway Bike Trail, West Rancho Vista Boulevard / East Avenue P, and Division Street. Intermittent view obstruction is not considered a significant impact. Therefore, the Project would not have a substantial adverse effect on scenic vistas.

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

There are no designated or eligible State scenic highways within the immediate vicinity of the Project site. The nearest officially designated State scenic highway is the Angeles Crest Highway (Route 2) extension from Interstate 210 (near La Cañada Flintridge) to the boundary of Los Angeles and San Bernardino County (near Wrightwood), which is approximately 19.6 miles southeast of the Project site. (Caltrans, 2019). The view from the Project site to the eligible State scenic highway is obscured by the San Gabriel Mountains. Due to the distance of Angeles Crest Highway (Route 2) to the Project site and the presence of intervening development and topography, the Project site does not offer views of scenic resources from this road segment. Because the Project site is not located within a State scenic highway, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; therefore, no impact would occur.

***Threshold 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?*

A. Urbanized Area

The Project site is located within the boundaries of the Census-defined Lancaster-Palmdale urbanized area (USCB, 2023a). The U. S. Census Bureau (USCB) defines an "urbanized area" as a densely settled core of census tracts and/or census blocks that meet the minimum housing unit density of 425 housing units per square mile. To qualify as an urban area, the territory must encompass at least 2,000 housing units or have a population of at least 5,000 residents, and the territory includes adjacent areas containing non-residential urban land uses. (USCB, 2023b). Because the Project site is in an area that meets the USCB's definition of an "urbanized area" and is planned for urban uses by the City's General Plan (Palmdale 2045), the evaluation herein focuses on the compatibility of the Project with, or potential conflict with, applicable zoning and other regulations governing scenic quality found in the General Plan (Palmdale 2045) and the PMC.

B. Applicable Zoning and other Regulations Governing Scenic Quality

For reference and associated with the below evaluation, the Project's design, including site layout, architecture, and landscaping are discussed in more detail EIR Section 3.0, *Project Description*.

1. General Plan Land Use and Community Design Element

The Project site is within the Employment Flex (EMPFEX) General Plan land use designation. The proposed Project is consistent with the site's General Plan land use designation. The Land Use and Community Design Element of the General Plan focuses on establishing goals and policies that define and guide the desired visual character and quality of specific districts, village centers, and corridors in the City of Palmdale, including development standards for areas designated Employment Flex. (City of Palmdale, 2022a, Figure 5-4 and Figure 5-5). Consistency with applicable goals is demonstrated below.

- Land Use and Community Design Goal LUD-4 calls for high quality architecture and site design. The Project is consistent with this goal. Its proposed architectural character and site design are described in EIR Section 3.0, *Project Description*, which are of high quality and meet modern, contemporary standards for the proposed warehouse building type.

- Land Use and Community Design Goal LUD-7 calls for well-landscaped streets and civic spaces. The Project is consistent with this goal. Its proposed landscaping is described in EIR Section 3.0, *Project Description*, which includes a variety of trees, shrubs, and groundcover, with landscaping primarily proposed at the Project site frontage along Sierra Highway, West Rancho Vista Boulevard / East Avenue P, Division Street, and Avenue O-12, and within the passenger vehicle parking areas. The Project site's frontage with Sierra Highway, West Rancho

Vista Boulevard / East Avenue P, Division Street, and Avenue O-12 is proposed to be well-landscaped as part of the Project's design.

- Land Use and Community Design Goal LUD-8 encourages art and culture. The Project is consistent with this goal. To promote the goals established in the City of Palmdale's Public Art Master Plan, the Project would incorporate public art elements within the Project site and/or contribute to the City's Public Arts Fund. Art would be provided in compliance with PMC Chapter 15.01, Public Art Commission and Public Art in Private and Municipal Development.

- Land Use and Community Design Goal LUD-17 calls for and facilitates industrial areas that support and buffer Plant 42 while maintaining compatibility with adjacent non-industrial uses. The Project is consistent with this goal. The Project site is located southwest of Plant 42 and serves as a compatible transitional use between the aeronautical uses on the Plant 42 site and non-industrial designated land further to the west, south, and southwest.

Development standards also are included in Palmdale 2045 for industrially designated areas and address the consideration of setbacks, design of the public realm, connecting features like paseos and sidewalks, and parking. As shown on Figure 3-4, *Conceptual Site Plans,* the Project's design is consistent with the applicable standards. The Project's proposed building would be set back from Sierra Highway, West Rancho Vista Boulevard / East Avenue P, Division Street, and proposed Avenue O-12 and planted with appropriate landscaping to provide visual buffers from the public right-of-way.. Curb-adjacent sidewalks would be installed along the Project site's frontage with West Rancho Vista Boulevard/East Avenue P and Division Street.

Although the proposed Project would not be aesthetically offensive; would not adversely affect scenic resources on the site because no such resources exist; and would not obstruct any prominent scenic vistas or views open to the public, development of the Project site with an industrial land use would represent a change to the existing visual character of the site from vacant land to that of an industrial warehouse use. However, the use would be consistent with the City's General Plan goals and comply with the PMC and thus impacts would be less than significant and no mitigation is required.

To further promote the goals established in the City's Public Art Master Plan, the Project site would incorporate a public art element and/or contribute to the City's Public Arts Fund.

2. PMC Chapters Governing Scenic Quality

The PMC's standards pertaining to development in Light Industrial Zones is contained in PMC Division 6. Standards for the LI zone are contained in PMC Chapter 17.61, Light Industrial. All permitted uses involving new development are subject to review and approval of a Site Plan Review (SPR) application. As described in Section 3.0, *Project Description*, the Project Applicant submitted SPR 24-0021 for the proposed Project. As previously described in Section 3.0, *Project Description*, SPR 24-0021 proposes development of the 67-gross acre vacant Project site with one building totaling 1,000,000 s.f. that would include a total of 990,000 s.f. of warehouse space and a total of 10,000 s.f.

of office uses at each corner of the building. The building would be rectangularly shaped with the shorter sides of the buildings facing east and west and the longer sides of the buildings facing north and south. The building would have a total of 148 truck docking doors within walled and gated truck courts, with 74 dock doors facing north and 74 dock doors facing south. The architectural elevations for the proposed building are depicted on Figure 3-7, *Conceptual Building Elevation,* and show a variable roofline with a maximum height of approximately 56 feet. With architectural projections, the maximum height of the roofline is 59 feet 8 inches. The buildings' walls would be constructed of concrete tilt-up panels with offices located at the northeastern and southwestern corners of the building. The building would be painted a mixture of white, tan, and blue colors, with the office locations being treated with tempered glass with clear anodized aluminum mullions as well as grey metal canopies. Landscaping for the proposed Project would consist of a variety of trees, shrubs, and groundcover, with landscaping primarily concentrated at the site perimeter and around the proposed building.

The City of Palmdale reviewed proposed SPR 24-0021 for consistency with the applicable standards of PMC Division 6, Industrial Zones (see Table 17.66.01-1) and found the Project to be consistent. The Project's design complies with the minimum 10,000 s.f. lot area standard and the minimum building setback standard of 10 feet from side streets and 20 feet from freeways, the maximum building height standard of 50 feet/4 stories (the building would have a variable roofline with a maximum height of 59.67 feet), the maximum floor area ratio (FAR) of 0.50 (the maximum FAR is 0.428) and the minimum landscape requirement of 10 percent (the Project's design achieves a 16.3 percent landscape coverage). Refer to Figure 4.1-5, *Project Rendering* and Figure 3-7, *Conceptual Design - Corner View* in EIR Section 3.0. The Project's design also complies with the PMC's off-street parking requirements by providing for a total of 628 parking stalls for passenger vehicles, electric vehicles, and accessible parking would be provided on the northeastern and western sides of the, and, as required, all loading areas would be screened from public view along West Rancho Vista Boulevard / East Avenue P and proposed Avenue O-12 by landscaping and solid screen walls.

With approval of CUP 25-0006, the Project is consistent with the land use and zoning designations established by the City for the property and would not conflict with applicable General Plan goals and policies and zoning requirements. Therefore, implementation of the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. Thus, impacts would be less than significant and no mitigation is required.

Threshold d: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed Project would convert the Project site from a vacant undeveloped property to a developed property containing industrial uses. The Project proposes the construction and operation of one industrial warehouse building which would be illuminated by artificial lighting, have small elements of reflective building material such as window glass, and contain rooftop solar panels that may have reflective qualities. SP 22-001 Chapter 6 – Design Standards and Guidelines includes lighting

standards and guidelines. The analysis below discusses the potential of the Project to result in a new source of substantial artificial light and glare.

A. Artificial Light

The Project site contains no sources of artificial lighting under existing conditions. However, artificial, exterior lighting sources occur in the vicinity of the Project site, emanating from streetlights within the adjacent residential areas to the northwest and south, the commercial plaza to the southeast, and the Sierra Gateway Business Park and Lockheed Plant 10 Specific Plan to the northeast. New sources of artificial lighting would be introduced to the site as a result of implementation of the proposed Project. Lighting fixtures on the Project site would primarily be used to illuminate the driveway entrances, parking areas, truck docking areas, and building entrances. Development would be required to comply with PMC Chapter 17.86.030, Outdoor Lighting, which prevents light spillover, glare, nuisance, inconvenience, or hazardous interference of any kind on adjacent properties and streets. Mandatory compliance with the PMC lighting requirements would ensure that any pole-mounted and building-mounted lighting fixtures associated with the Project would not introduce any design features that would create a new source of light to the extent that would adversely affect day or nighttime views in the area. In addition, a photometric plan depicting light coverage in compliance with PMC Section 17.86.030, Outdoor Lighting, would be required as a condition of the Project's approval. Furthermore, the Project would be required to comply with PMC Chapter 17.84.030, Heat, Light, and Glare, which requires light generated by any use to be shielded or controlled to prevent nuisance or hazards to adjacent properties.

Because implementation of the Project would comply with the PMC, the Project would not create a new source of substantial light which would adversely affect day or nighttime views in the area; therefore, impacts would be less than significant and not mitigation is required.

B. Glare

With respect to glare, the building materials would consist of painted tilt-up concrete panels. The paint colors proposed for the Project have a flat finish and would not produce glare, although the building would incorporate some minor glass elements. While window glazing has a potential to result in minor glare effects, such effects would not adversely affect daytime views experienced from surrounding properties, including motorists along nearby roadways. Window and door glass would be clear or colored with subtle reflectiveness.

The PMC's minimum building setbacks of 20 feet from freeways and 10 feet from local and collector streets, which the Project is in compliance with, would minimize the potential for any vehicle headlights along Sierra Highway, West Rancho Vista Boulevard / East Avenue P, Division Street, and Avenue O-12 to shine into the building's glass elements. Also, the Project's conceptual landscaping plan calls for the Project site's frontages with Sierra Highway, West Rancho Vista Boulevard / East Avenue P, Division Street, and Avenue O-12 to be landscaped, inclusive of perimeter trees that would filter light from the nearby street system and limit the ability for vehicle headlights on public streets to directly shine onto any glass building elements. The glass elements in the building's designs also would

be softened by landscaping proposed near the buildings' entrances, thereby precluding any substantial sun glare. Furthermore, the passenger vehicle parking areas would be substantially shaded by tree canopies, as shown on the Project's conceptual landscaping plan. Thus, glare impacts from proposed building elements and parking surfaces would be less than significant.

The roof of the building would be solar-ready. The Project Applicant is proposing to cover the roof with solar panels to a maximum 2,000 amps in compliance with applicable Building Code requirements, clearance requirements around roof-mounted equipment, utility company interconnection regulations, transformer capacity, and other code compliance constraints. Some noticeable glare may occur, but the panels are expected to absorb and not reflect sunlight. The design of the photovoltaic panels is not available at this time and cannot be available until the buildings' construction documents become available and the structural roof designs are determined and the panel manufacturer selected. Rooftop mounted solar panels would be required to be reviewed and approved by the City prior to installation. Furthermore, the Project would be required to comply with PMC Chapter 17.84.030, Heat, Light, and Glare, which requires glare generated by any use to be shielded or controlled to prevent nuisance or hazards to adjacent properties. As such, glare impacts would be less than significant and would not adversely affect day or nighttime views in the area. Additionally, in compliance with the General Plan Military Compatibility Element Policy MC-2.1, APZ Development Review, which requires the City to review development proposals for light and glare hazards for any projects proposed within the USAF Plant 42 APZ, and Policy MC-2.2, AICUZ Consistency, which requires projects within APZs to be consistent with APZ regulations outlined in the Plant 42 AICUZ Report, consideration would be given to ensure that glare or reflectivity from the panels would not interfere with adjacent airport operations. Of greatest concern to views are reflection or glare observed by drivers. Because the solar panels would be placed on the building's roof and sit flat on the roof, no reflected glare is expected to affect nearby roadways or adjacent sensitive land uses and therefore this potential impact is considered less than significant.

The Project would be required to comply with the development standards of the PMC; therefore, the Project would not create a new source of substantial glare which would adversely affect day or nighttime views in the area. Impacts would be less than significant and no mitigation is required.

4.1.5 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other planned development in the area within the same viewsheds. The ground-level viewshed of the Project site extends to the immediate site vicinity, as the Project site is a vacant property directly surrounded on all sides by roads, vacant land, and some developments. To the north, the ground-level viewshed extends beyond the area of proposed Avenue O-12, across properties that are a mix of vacant and developed land. To the east, the ground-level viewshed extends beyond Sierra Highway and the UPRR mainline tracks, across properties that are a mix of vacant and developed land. To the south, the ground-level viewshed extends beyond West Rancho Vista Boulevard/East Avenue P, across properties that are a mix of vacant and developed land. To the west, the ground-level viewshed extends beyond Division Street, across properties that are a mix of vacant and developed land.

The Project site and its surroundings are located within a relatively flat valley floor flanked by rugged hills and mountains on the horizon at distances of between 5 and 33 miles. Although views to the mountains are sometimes obscured due to atmospheric haze, the horizon viewshed on a clear day extends to the Tehachapi Mountains to the northwest, the San Gabriel Mountains to the south and southeast, and the Sierra Pelona Mountains to the west.

Cumulative Effects to Scenic Vistas

The Project site is relatively flat and does not contribute to any prominent scenic vistas. Although views of the surrounding mountains at distances of between 5 and 33 miles are available in the Project area, such views are readily available throughout the cumulative study area including in the ground-level viewshed and horizon viewshed and are not unique to the Project site or the vicinity of the Project site. Development of the Project would be required to comply with the applicable policies of the PMC. Furthermore, other existing and reasonably foreseeable planned development in the cumulative study area with the potential to intermittently obstruct horizon views in visual foregrounds would also be required to comply with the applicable policies of the PMC, which limit building heights and other physical features to heights that would not impede on a scenic vista. Because of the low-profile nature of urban development compared to the heights of the mountains, there is no cumulative development in the valley floor that would block, obscure, or substantially and adversely affect mountain views as seen from public streets around the Project site and other public streets and public viewing areas across the valley. Because opportunities would remain for scenic mountain views after development of the Project and after the development of cumulative projects in the ground-level and horizon viewsheds, the Project would not result in a cumulatively considerable effect on scenic vistas. Views of the mountains would remain available to the public traveling on public roads adjacent to and near the Project site. Because the public would have opportunities to experience mountain views on the horizon, regardless of development in the ground-level foreground, the cumulative impact to scenic vistas would be less than significant and the Project's contribution would be less than cumulatively considerable.

Cumulative Effects to Views from a State Scenic Highway

There are no designated or eligible State scenic highways within the immediate vicinity of the Project site (Caltrans, 2019). The nearest officially designated State scenic highway is Angeles Crest Highway (Route 2), approximately 19.6 miles southeast of the Project. Therefore, the proposed Project has no potential to contribute to a cumulatively significant impact to damage scenic resources within a State scenic highway. Thus, no impact would occur on a direct or cumulatively considerable basis.

Cumulative Effects Associated with Inconsistencies with Policies and Regulations Governing Scenic Quality

The surrounding area of the Project site contains a variety of undeveloped vacant land and developed land with a mixture of uses such as residential, commercial, light industrial, and retail. Development of the Project site would be required to comply the PMC. Any other development in the immediately surrounding area would be subject to applicable development regulations and design standards,

including, but not limited to, PMC Title 17. Compliance with applicable development regulations and design standards would ensure that cumulative development projects incorporate high quality building materials, site design principles, and landscaping to preclude potential conflicts with applicable zoning and other regulations governing visual quality. Thus, a less than significant impact would occur on a cumulatively considerable basis.

Cumulative Light or Glare Effects

With respect to potential cumulative light and glare impacts, the Project would be required to comply with the PMC. In turn, other development projects in the City would be required to comply with the applicable provisions of the PMC. Mandatory compliance with regulatory requirements combined with the Project's proposed design features that reduce light and glare would assure that impacts are less than cumulatively significant and that the contribution of the Project to light and glare effects would be less than cumulatively considerable.

4.1.6 Significance of Impacts Before Mitigation

Threshold a: No Impact. The Project site does not comprise a scenic vista and no unique views to scenic vistas are visible from the property that are not also visible from other areas surrounding the site. The Project would not substantially change a scenic vista or substantially block or obscure a scenic vista; therefore, because the Project would not have a substantial adverse effect on a scenic vista, no impact would occur.

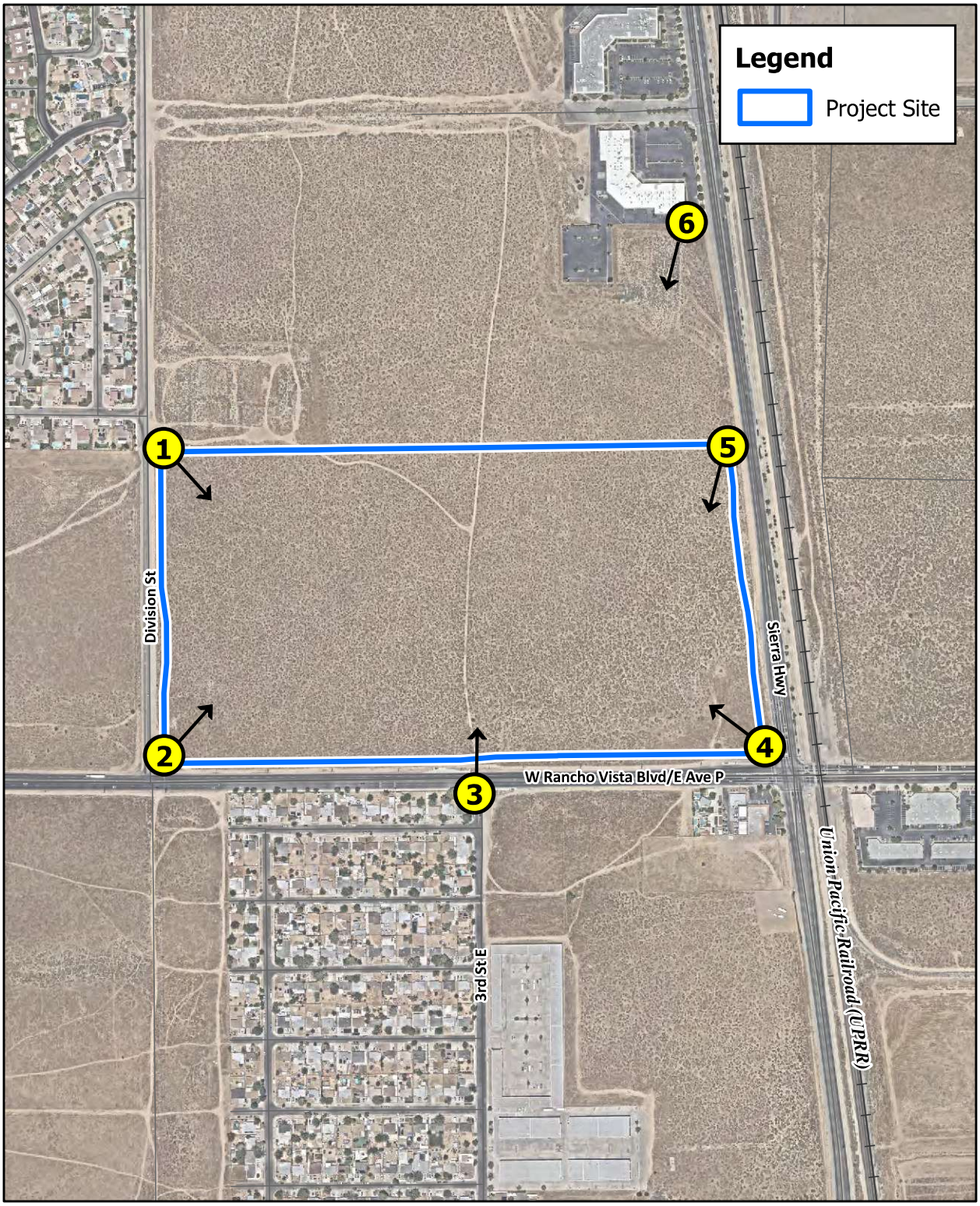
Threshold b: No Impact. Because the Project site is not located within a State scenic highway, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; therefore, no impact would occur.

Threshold c: Less than Significant Impact. The Project site is located within an urbanized area. Because the Project would not conflict with applicable zoning and other regulations governing scenic quality either during short-term construction or long-term operation of the Project, impacts would be less than significant, and no mitigation is required.

Threshold d: Less than Significant Impact. Project-related development would not create substantial light or glare. Compliance with the PMC would ensure that implementation of the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Impacts would be less than significant and no mitigation is required.

4.1.7 Mitigation

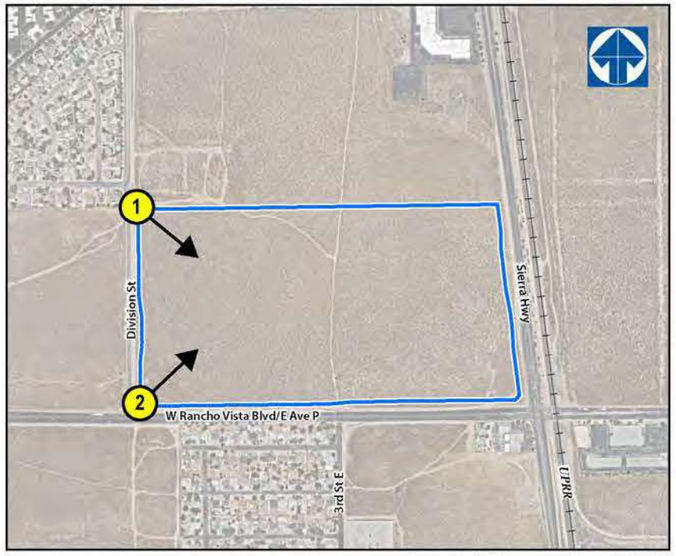
Impacts would be less than significant; therefore, no mitigation is required.



Source(s): Esri, LA County (2025), Nearmap Imagery (July 2024)

Figure 4.1-1

Public Viewpoint Key Map



Source(s): Esri, Nearmap Imagery (2023)

1 Northwest of the Project site, along Division St, looking southeast.



2 Southwest of the Project site, at the intersection of Division Street and W Rancho Vista Blvd/E Ave P, looking northeast.





Figure 4.1-2

Not to Scale

Viewpoints 1 & 2

3 South of the Project site, at the intersection of W Rancho Vista Blvd/E Ave P and 3rd St E, looking north.



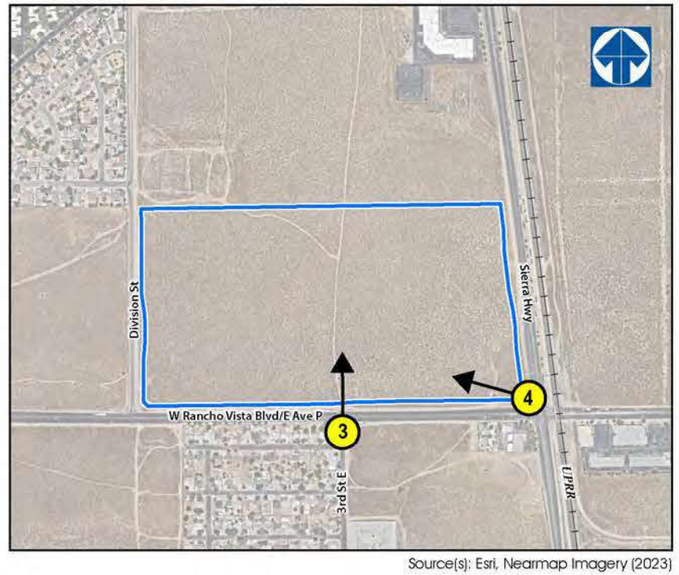




4 Southeast of the Project site, at the intersection of W Rancho Vista Blvd/E Ave P and Sierra Hwy, looking northwest.





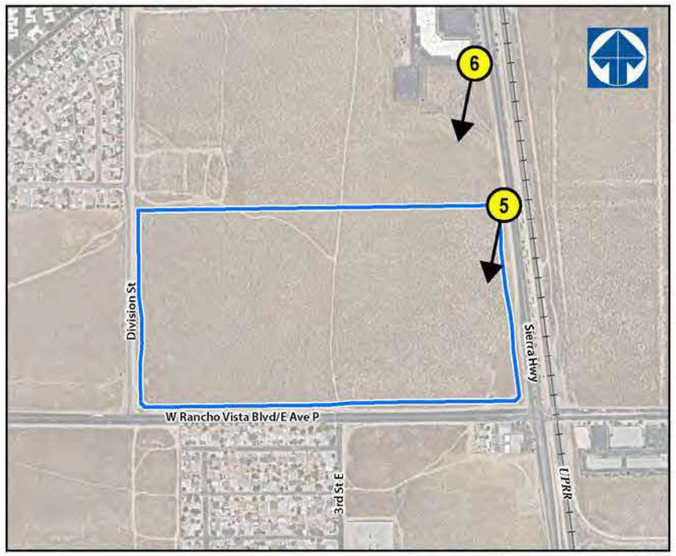


Source(s): Esri, Nearmap Imagery (2023)

Figure 4.1-3

Not to Scale

Viewpoints 3 & 4



Source(s): Esri, Nearmap Imagery (2023)

5 Northeast of the Project site, long Sierra Hwy, looking southwest.





6 Northeast of the Project site, near Sierra Hwy, looking southwest.



Figure 4.1-4

Not to Scale

Viewpoints 5 & 6



Source(s): AO (10-14-2025)

Figure 4.1-5

Not to Scale

Project Rendering

4.2 AIR QUALITY

The analysis in this subsection is based primarily on a technical study titled, "Air Quality, Greenhouse Gas Emissions, and Energy Technical Report," dated March 2025, and is included as *Technical Appendix B* to this EIR (Dudek, 2025a). All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025. A comment letter from the California Department of Justice's Bureau of Environmental Justice included comments related to air quality, which provided information on environmental impacts from warehouses and diesel trucks and recommended mitigation measures and best practices to reduce Project-related emissions. An additional comment letter, from the Coalition for Responsible Equitable Economic Development ("CREED LA"), also included comments related to air quality, which urged the EIR process to minimize air quality effects to the extent feasible.

4.2.1 EXISTING CONDITIONS

A. Mojave Desert Air Basin (MDAB)

The Project site is located within the Mojave Desert Air Basin (MDAB), which includes the desert portions of Los Angeles, Kern, San Bernardino, and Riverside Counties. The Project site is within the jurisdictional boundaries of the Antelope Valley Air Quality Management District (AVAQMD), which covers the northern desert portion of Los Angeles County.

Air pollutants are emitted by a variety of sources, including off-road equipment, mobile sources (vehicles), area sources (hearths [fireplaces], consumer product use, architectural coatings, and landscape maintenance equipment), energy sources (natural gas), and stationary sources (generators or other stationary equipment). Some air pollutants need to be examined at the local level, and others are predominantly an issue at the regional level. For instance, ozone (O_3) is formed in the atmosphere in the presence of sunlight by a series of chemical reactions involving oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) (also termed reactive organic gases [ROGs]). Because these reactions are broad scale in effects, O_3 is typically analyzed at the regional level (i.e., in the MDAB) rather than at the local level. On the other hand, air pollutants such as coarse particulate matter (particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), fine particulate matter (particulate matter with an aerodynamic diameter less than or equal to 2.5 microns, ($PM_{2.5}$), carbon monoxide (CO), and toxic air contaminants (TACs) are a potential concern in the immediate vicinity of the pollutant source because the pollutants are emitted directly by or are formed close to the source. Therefore, the study area for emissions of PM_{10}, $PM_{2.5}$, CO, and TACs is the local area near the source, such as in the vicinity of the Project site, and the study area for regional pollutants such as NOx and VOCs is the entire MDAB. (Dudek, 2025a, p. 7)

B. Meteorological and Topographical Conditions

Air quality is a function of the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal.

Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants and consequently affect air quality.

Most of the MDAB is commonly referred to as the "High Desert" because elevations range from approximately 2,000 to 5,000 feet above mean sea level (amsl). The MDAB is generally above the regional inversion layer and experiences relatively good dispersion conditions. The MDAB is separated from southern California coastal regions and central California valley regions by mountains extending up to 10,000 feet amsl. As a result, the Mojave Desert is removed from the cooling effects of the Pacific Ocean and is characterized by extreme temperatures. The MDAB consists of an assemblage of mountain ranges interspersed with valleys that often contain dry lakes. Lower-elevation mountains scattered throughout the basin are generally 1,000 feet to 4,000 feet high. Mountain passes form channels for air masses flowing from the west and southwest, and the prevailing winds from the west and southwest are caused by the proximity of the MDAB to coastal and central regions and the blocking effect of the Sierra Nevada to the north.

The MDAB region is characterized by hot, dry summers and cool winters, with little precipitation. During the summer, the MDAB is generally influenced by a Pacific subtropical high-pressure cell that resides off the coast of California. This high-pressure cell prevents cloud formation and engenders daytime solar heating. Most moisture arrives in frequent warm, moist, unstable air masses from the south. The MDAB is classified as a dry–hot desert climate, with portions classified as dry–very hot desert, to indicate at least 3 months have maximum average temperatures over 100.4°F. In Palmdale, the annual average precipitation is 7.4 inches.

C. Criteria Air Pollutants and Associated Human Health Effects

Criteria air pollutants are defined as pollutants for which the federal and State government have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), CO, sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants, as well as TACs, are discussed in the following paragraphs. (Dudek, 2025a, p. 8)

1. Ozone

Ozone (O_3) is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and VOCs. The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm

temperatures, and cloudless skies. O_3 exists in the upper atmosphere ozone layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).2 The O_3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed. (Dudek, 2025a, p. 8)

❑ **Human Health Effects of Ozone**

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in, thereby causing shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies on the effects of O_3 on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant. (Dudek, 2025a, pp. 8-9)

2. Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. (Dudek, 2025a, p. 9)

❑ **Human Health Effects of Nitrogen Dioxide**

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their faster breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases such as asthma and chronic obstructive pulmonary disease. (Dudek, 2025a, p. 9)

3. Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of 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, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. (Dudek, 2025a, p. 9)

❑ **Human Health Effects of Carbon Monoxide**

CO is harmful because it binds to the hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce the body's already compromised ability to respond to increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO. (Dudek, 2025a, pp. 9-10)

4. Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. (Dudek, 2025a, p. 10)

❑ **Human Health Effects of Sulfur Dioxide**

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 part per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. Older people and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects. (Dudek, 2025a, p. 10)

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter. People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma. SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways. (Dudek, 2025a, p. 10)

5. Particulate Matter

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) consists of particulate matter that is 10 microns or less in diameter and is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. $PM_{2.5}$ consists of particulate matter that is 2.5 microns or less in diameter and is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs. (Dudek, 2025a, p. 10)

❑ **Human Health Effects of Particulate Matter**

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility. (Dudek, 2025a, pp. 10-11)

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. According to the World Health Organization's Global Burden of Disease Project, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits. (Dudek, 2025a, p. 11)

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer. (Dudek, 2025a, p. 11)

6. Lead

Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern. (Dudek, 2025a, p. 11)

❑ **Human Health Effects of Lead**

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead. (Dudek, 2025a, p. 11)

7. Volatile Organic Compounds

Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to the formation of O_3 are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the main sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint. (Dudek, 2025a, p. 11)

❑ **Human Health Effects of Volatile Organic Compounds**

The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group. (Dudek, 2025a, p. 11)

8. Sulfates

Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment, as well as reduced visibility. (Dudek, 2025a, p. 11)

9. Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer. (Dudek, 2025a, p. 12)

10. Hydrogen Sulfide

Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations. (Dudek, 2025a, p. 12)

11. Visibility-Reducing Particles

Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$. (Dudek, 2025a, p. 12)

D. Non-Criteria Air Pollutants

1. Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. (Dudek, 2025a, p. 12)

Examples of TACs include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by several sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short term (acute) or long-term (chronic) exposure to a given TAC. (Dudek, 2025a, p. 12)

2. Diesel Particulate Matter

Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70th the diameter of a human hair) and thus is a subset of $PM_{2.5}$. DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2024h). CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) as a TAC in August 1998 (17 CCR 93000). DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and

off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM. To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000. Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems. (Dudek, 2025a, pp. 12-13)

3. Odorous Compounds

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting and headache). The ability to detect odors varies considerably among the population and overall is quite subjective; people may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. (Dudek, 2025a, p. 13)

4. Valley Fever

Coccidioidomycosis, more commonly known as "Valley Fever," is an infection caused by inhalation of the spores of the Coccidioides immitis fungus, which grows in the soils of the southwestern United States. California Labor Code section 6709 defines "highly endemic" areas for valley fever as those areas where the annual incidence rate is greater than 20 cases per 100,000 persons per year. Los Angeles County, where the Project site is located, is not considered a highly endemic region for Valley Fever; the latest report from the California Department of Public Health (CDPH) indicated the County has 15.7 cases per 100,000 people. While cases are reported countywide, most cases have occurred in northern areas, with an approximate 9-fold higher rate of cases in Antelope Valley than in other areas of the county. In contrast, in 2022 the statewide annual incident rate was 19.1 per 100,000 people. The California counties considered highly endemic for Valley Fever include Kern (264.9 per 100,000), Kings (111.0 per 100,000), Tulare (65.7 per 100,000), San Luis Obispo (51.5 per 100,000), Fresno (44.3 per 100,000), Madera (32.4 per 100,000), and Ventura (28.3 per 100,000), which accounted for 50.5% of the reported cases in 2022. (Dudek, 2025a, p. 13)

E. Local Ambient Air Quality

1. Los Angeles County Portion of Mojave Desert Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act (CAA) Amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on California Ambient Air Quality Standards (CAAQS) rather than the NAAQS. Table 4.2-1, *Los Angeles County Portion of Mojave Desert Air Basin - Attainment*, depicts the current attainment status of the project area with respect to the NAAQS and CAAQS. (Dudek, 2025a, p. 14)

Table 4.2-1 Los Angeles County Portion of Mojave Desert Air Basin - Attainment

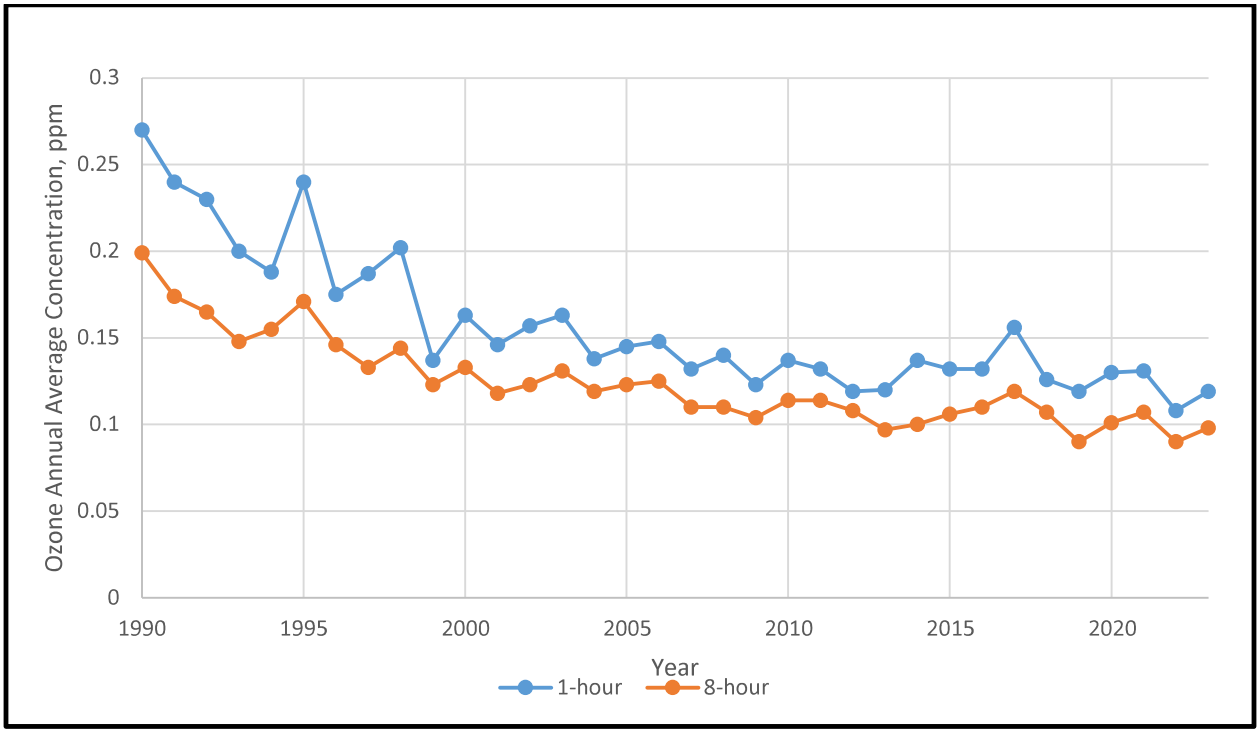
Pollutant	Designation/Classification*	
	Federal Designation	State Designation
O_3 – 1 hour	No federal standard	**Nonattainment**
O_3 – 8 hours	**Severe nonattainment**	**Nonattainment**
NO_2	Unclassifiable/attainment	Attainment
CO	Unclassifiable/attainment	Attainment
SO_2	Unclassifiable/attainment	Attainment
PM_{10}	Unclassifiable	**Nonattainment**
$PM_{2.5}$	Unclassifiable/attainment	Attainment
Lead	Unclassifiable/attainment	Attainment
Hydrogen sulfide	No federal standard	Unclassified
Sulfates	No federal standard	Attainment
Visibility-reducing particles	No federal standard	Unclassified
Vinyl chloride	No federal standard	No designation

Definitions: attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data. Notes: O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
*Designations/classifications in bold type indicate nonattainment.
Source: (Dudek, 2025a, Table 1)

In summary, the Project site is located in an area of the MDAB that is designated as a nonattainment area for federal and State O_3 standards and the state PM_{10} standard, and unclassifiable/attainment for all other criteria air pollutants. (Dudek, 2025a, p. 14)

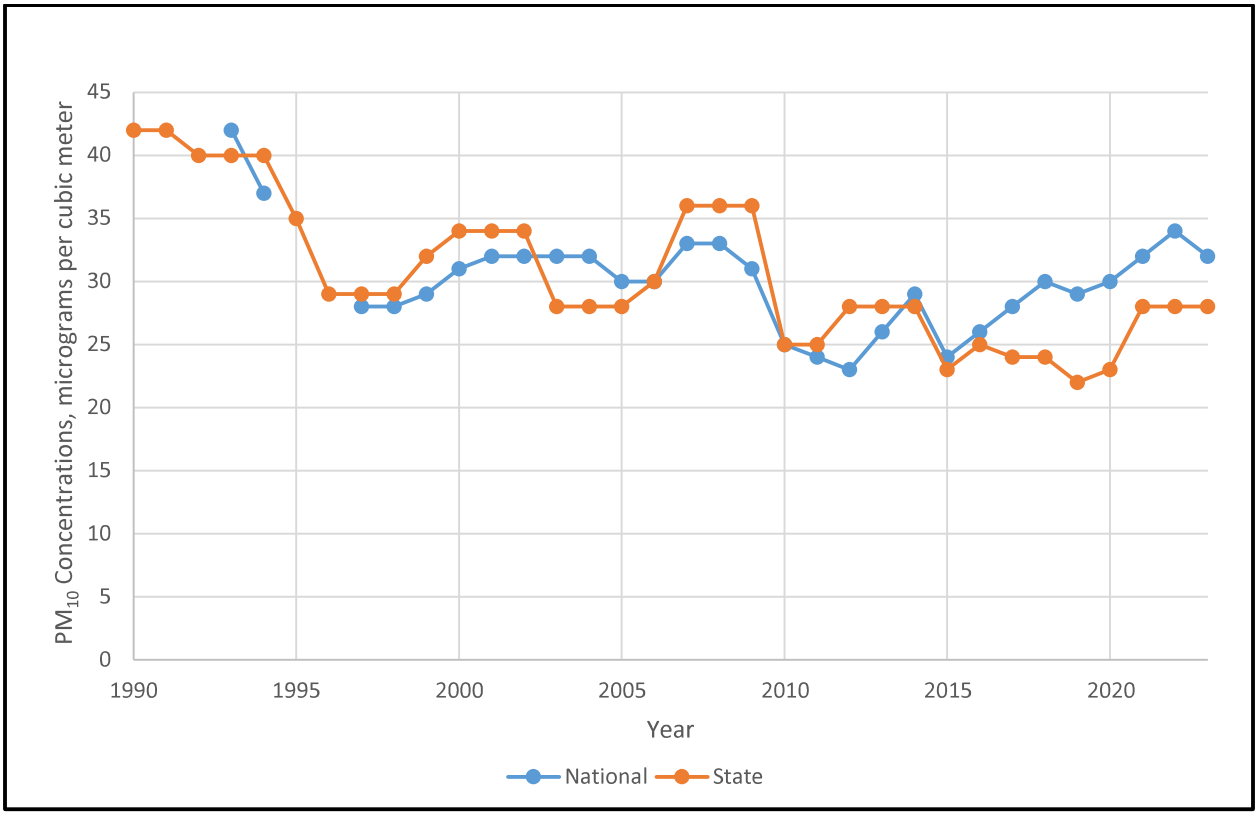
Despite the current nonattainment status for O_3 and PM_{10}, air quality in the MDAB has generally improved since the inception of air pollutant monitoring. This improvement is mainly a result of lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the AVAQMD and nearby air districts including the Mojave Desert Air Quality Management District (MDAQMD) and the South Coast Air Quality Management District (SCAQMD), as well as CARB and the EPA. This general trend toward cleaner air within the State, including the MDAB, has occurred in spite of continued population growth. State 1-Hour and 8-Hour Ozone Concentration Trend in Mojave Desert Air *Basin*, and Table 4.2-3, *National and State 3-Year Average PM10 Statistics in Mojave Desert Air Basin*, demonstrate the reduction in O_3 and PM_{10} over time, respectively. (Dudek, 2025a, p. 15)

Table 4.2-2 State 1-Hour and 8-Hour Ozone Concentration Trend in Mojave Desert Air Basin



Source: (Dudek, 2025a, Figure 3)

Table 4.2-3 National and State 3-Year Average PM_{10} Statistics in Mojave Desert Air Basin



Source: (Dudek, 2025a, Figure 4)

2. Ambient Air Quality Monitoring Data

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The AVAQMD monitors local ambient air quality in the area of the Project site. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The most recent background ambient air quality data from 2021 to 2023 are presented in Table 4.2-4, *Local Ambient Air Quality Data* . The Lancaster Division Street monitoring station at the physical address of 43301 Division Street, Lancaster, California, is located approximately 4.8 miles north of the Project site and is the nearest air quality monitoring station to the Project site. However, monitoring at this station discontinued after 2022 and monitoring has since shifted to the Lancaster Fairgrounds monitoring station, located at 2551 W Avenue H, Lancaster, California, approximately 8.5 miles north of the Project site. The combined data available from these stations (year 2021 and 2022 from the Division Street station and year 2023 from the Fairgrounds station) are considered representative of the air quality experienced in the vicinity of the Project site. The number of days exceeding the AAQS is also shown in Table 4.2-4. (Dudek, 2025a, p. 14)

Table 4.2-4 Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2021	2022	2023	2021	2022	2023
Ozone (O_3)									
Maximum 1-hour concentration	ppm	California	0.09	0.086	0.098	0.112	0	3	1
Maximum 8-hour concentration	ppm	California	0.070	0.080	0.083	0.089	4	36	6
		National	0.070	0.079	0.082	0.088	3	33	6
Nitrogen Dioxide (NO_2)									
Maximum 1-hour concentration	ppm	California	0.18	0.046	0.043	0.034	0	0	0
		National	0.100	0.046	0.043	0.034	0	0	0
Annual concentration	ppm	California	0.030	0.008	0.008	0.003	—	—	—
		National	0.053	0.008	0.008	0.003	—	—	—
Carbon Monoxide (CO)									
Maximum 1-hour concentration	ppm	California	20	1.4	ND	ND	0	ND	ND
		National	35	1.4	ND	ND	0	ND	ND
Maximum 8-hour concentration	ppm	California	9.0	1.1	ND	ND	0	ND	ND
		National	9	1.1	ND	ND	0	ND	ND
Coarse Particulate Matter (PM_{10})[a]									
Maximum 24-hour concentration	µg/m^3	California	50	ND	ND	118.3	ND (ND)	ND (ND)	7.1 (7)
		National	150	411.2	76.2	121.1	1.0 (0)	0.0 (0)	0.0 (0)
Annual concentration	µg/m^3	California	20	ND	ND	17.3	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a]									
Maximum 24-hour concentration	µg/m^3	National	35	35.7	15.1	12.4	1.0 (1)	0.0 (0)	0.0 (0)
Annual concentration	µg/m^3	California	12	8.1	ND	3.4	—	—	—
		National	9.0	8.1	7.5	3.3	—	—	—

Notes: ppm = parts per million by volume; — = not available; µg/m3 = micrograms per cubic meter; ND = insufficient data available to determine the value. The Lancaster Division Street monitoring station is located at 43301 Division Street, Lancaster, California 93535. The Lancaster Fairgrounds monitoring station is located at 2551 W Avenue H, Lancaster, California 93536. Data taken from CARB represents the highest concentrations experienced over a given year. Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. There is no national standard for 1-hour O_3 or annual PM_{10}, nor is there a California 24-hour standard for $PM_{2.5}$.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Source: (Dudek, 2025a, Table 2)

F. Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. The AVAQMD identifies sensitive receptors as residences, schools, playgrounds, childcare centers, and medical facilities. The nearest sensitive receptor buildings to the Project site boundary are the existing residences located approximately 150 feet to the northwest (along Division Street), approximately 150 feet to the south (across W Rancho Vista Boulevard), and along the Project's haul routes. (Dudek, 2025a, p. 13)

4.2.2 Regulatory Setting

The following is a brief description of the federal, State, and local environmental laws and related regulations governing air quality emissions.

A. Federal Regulations

1. Federal Clean Air Act

The Clean Air Act (CAA; 42 U.S.C. § 7401 et seq.) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants, which include O_3, CO, NO_x, SO_2, PM_{10}, $PM_{2.5}$, and Pb. One of the goals of the CAA was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The CAA was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines. (EPA, 2024a)

The sections of the federal CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions address the urban air pollution problems of O_3 (smog), CO, and PM_{10}. Specifically, it clarifies how areas are designated and re-designated "attainment." It also allows the EPA to define the boundaries of "nonattainment" areas: geographical areas whose air quality does not meet Federal air quality standards designed to protect public health. (EPA, 2024b) Mobile source emissions are regulated in accordance with the CAA Title II provisions. These standards are intended to reduce tailpipe emissions of hydrocarbons, CO, and NO_X on a phased-in basis that began in model year 1994. Automobile manufacturers are also required to reduce vehicle emissions resulting from the evaporation of gasoline during refueling. These provisions further require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. (EPA, 2024c)

2. National Emissions Standards for Hazardous Air Pollutants Program

National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. The EPA develops national enforcement initiatives that focus on significant environmental risks and noncompliance patterns. For Fiscal Years 2014 to 2016, the Cutting Hazardous Air Pollutants National Initiatives Strategy focused on categories of sources that emit HAPs. Sources subject to NESHAPs are required to perform an initial performance test to demonstrate compliance. To demonstrate continuous compliance, sources are generally required to monitor control device operating parameters which are established during the initial performance test. Sources may also be required to install and operate continuous emission monitors to demonstrate compliance. Consistent with EPA's Clean Air Act Stationary Source Compliance Monitoring Strategy, NESHAP sources that meet the Clean Air Act definition of "major source" generally receive a full compliance evaluation by the state or regional office at least once every two years. (EPA, 2025a)

B. State Regulations

1. California Clean Air Act

The California Clean Air Act (CCAA) establishes numerous requirements for district plans to attain State ambient air quality standards for criteria air contaminants. The CCAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the State's ambient air quality standards, the California Ambient Air Quality Standards (CAAQS), by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. Generally, the CAAQS are more stringent than the NAAQS. For districts with serious air pollution, its attainment plan should include the following: no net increase in emissions from new and modified stationary sources; and best available retrofit technology for existing sources. (SCAQMD, n.d.) The NAAQS and CAAQS are presented in Table 4.2-5, *Ambient Air Quality Standards*.

Table 4.2-5 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 mg/m^3)	—	Same as primary standard[f]
	8 hours	0.070 ppm (137 mg/m^3)	0.070 ppm (137 mg/m^3)[f]	
NO_2[g]	1 hour	0.18 ppm (339 mg/m^3)	0.100 ppm (188 mg/m^3)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 mg/m^3)	0.053 ppm (100 mg/m^3)	
CO	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	None
	8 hours	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	
SO_2[h]	1 hour	0.25 ppm (655 mg/m^3)	0.075 ppm (196 mg/m^3)	—
	3 hours	—	—	0.5 ppm (1,300 mg/m^3)
	24 hours	0.04 ppm (105 mg/m^3)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 mg/m^3	150 mg/m^3	Same as primary standard
	Annual arithmetic mean	20 mg/m^3	—	
$PM_{2.5}$[i]	24 hours	—	35 mg/m^3	Same as primary standard
	Annual arithmetic mean	12 mg/m^3	9.0 mg/m^3	15.0 mg/m^3
Lead[j, k]	30-day average	1.5 mg/m^3	—	—
	Calendar quarter	—	1.5 mg/m^3 (for certain areas)[k]	Same as primary standard
	Rolling 3-month average	—	0.15 mg/m^3	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m^3)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m^3)	—	—
Sulfates	24- hours	25 µg/m^3	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Notes: O_3 = ozone; ppm = parts per million by volume; mg/m^3 = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m^3= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
[f] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
[g] To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
[i] On February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12.0 mg/m^3 to 9.0 mg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 mg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 mg/m^3 were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
Source: (Dudek, 2025a, Table 3)

2. Air Toxic "Hot Spots" Information and Assessment Act

The Air Toxic "Hot Spots" Information and Assessment Act of 1987 (AB 2588), (Health & Safety Code §§ 44300, et seq.) requires facilities emitting specified quantities of pollutants to conduct risk assessments describing the health impacts to neighboring communities created by the emissions of numerous specified hazardous compounds. If the air district determines the health impact to be significant, neighbors must be notified. In addition, State law requires the facility to develop and implement a plan to reduce the health impacts to below significance, generally within five years. Additional control requirements for hazardous emissions from specific industries are established by the State and enforced by air districts. (SCAQMD, n.d.)

3. Air Quality Management Planning

The CARB and local air districts throughout the State are responsible for developing clean air plans to demonstrate how and when California will attain air quality standards established under both the CAA and the CCAA. For the areas within California that have not attained air quality standards, CARB works with local air districts to develop and implement State and local attainment plans. In general, attainment plans contain 1) a discussion of ambient air quality data and trends; 2) a baseline emissions inventory; 3) future year projections of emissions, which account for growth projections and already adopted control measures; 4) a comprehensive control strategy of additional measures needed to reach attainment; 5) an attainment demonstration, which generally involves complex modeling; and 6) contingency measures. Plans may also include interim milestones for progress toward attainment. Air quality planning activities undertaken by CARB also include the development of policies, guidance, and regulations related to State and federal ambient air quality standards; coordination with local agencies on transportation plans and strategies; and providing assistance to local districts and transportation agencies. (CARB, n.d.)

4. Title 24 Energy Efficiency Standards and California Green Building Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023. The 2022 Building Energy Efficiency Standards focuses on four key areas in newly constructed homes and businesses: 1) encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units; 2) establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies; 3) expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid; and 4) strengthening ventilation standards to improve indoor air quality. The 2019 Building Energy Efficiency Standards already were seven percent more efficient than the previous (2016) Building Energy Efficiency Standards for residential construction and 30 percent more efficient than the previous Standards for non-residential construction. The 2016 Building Energy Efficiency Standards also already were 28 percent more efficient for residential construction and five percent more efficient for nonresidential construction than the 2013 Building Energy Efficiency Standards that they replaced. (CEC, 2023)

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: 1) Planning and design; 2) Energy efficiency; 3) Water efficiency and conservation; 4) Material conservation and resource efficiency; and 5) Environmental air quality." The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green

building program that is not established and adopted by the California Building Standards Commission (BSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject to the requirements of the CALGreen Code.

As previously stated, the Title 24 Building Energy Efficient Standards and CALGreen Code are updated on a regular basis, with the most recent approved updates consisting of the 2022 Building Energy Efficiency Standards and 2022 CALGreen Code, which became effective as of January 1, 2023. Non-residential mandatory measures included in the 2022 CALGreen Code include the following, with citations to the applicable CalGreen Code Section:

- Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for five percent of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (CalGreen Code Section 5.106.4.1.1).

- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, secure bicycle parking for five percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (CalGreen Code Section 5.106.4.1.2).

- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in CalGreen Code Table 5.106.5.3.1. Additionally, CalGreen Code Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, and retail stores (CalGreen Code Section 5.106.5).

- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per CalGreen Code Table 5.106.8.

- Construction waste management. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with CalGreen Code Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (CalGreen Code Section 5.408.1).

- Excavated soil and land clearing debris. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (CalGreen Code Section 5.408.3).

- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (CalGreen Code Section 5.410.1).

- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

    - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (CalGreen Code Section 5.303.3.1)
    - Urinals. The effective flush volume of 1) wall-mounted urinals shall not exceed 0.125 gallons per flush (CalGreen Code Section 5.303.3.2.1) and 2) floor- mounted or other urinals shall not exceed 0.5 gallons per flush (CalGreen Code Section 5.303.3.2.2).

    - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (CalGreen Code Section 5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 per square inch (psi) (CalGreen Code Section 5.303.3.3.2).

    - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 pounds psi. Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute. Metering faucets shall not deliver more than 0.20 gallons per cycle . Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (CalGreen Code Sections 5.303.3.4.1 through 5.303.3.4.5).

- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (CalGreen Code Section 5.304.1).

- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 square feet or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (CalGreen Code Sections 5.303.1.1 and 5.303.1.2).

- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 s.f. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 s.f. requiring a building or landscape permit (CalGreen Code Section 5.304.3).

- Commissioning. For new buildings 10,000 s.f. and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (CalGreen Code Section 5.410.2).

5. California Air Resources Board Rules

The CARB enforces rules related to air pollutant emissions in the State of California. Rules with applicability to the Project include, but are not limited to, those listed below.

- CARB Rule 2480 (13 CCR 2480): Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools, which limits nonessential idling for commercial trucks and school buses within 100 feet of a school.
- CARB Rule 2485 (13 CCR 2485): Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling, which limits nonessential idling to five minutes or less for commercial trucks.
- CARB Rule 2449 (13 CCR 2449): In-Use Off-Road Diesel Idling Restricts, which limits nonessential idling to five minutes or less for diesel-powered off-road equipment.

6. Truck and Bus Regulation

The Truck and Bus regulation affects individuals, private companies, and Federal agencies that own diesel vehicles with a Gross Vehicle Weight Rating (GVWR) greater than 14,000 lbs. that operate in California. Heavier trucks and buses with a GVWR greater than 26,000 pounds must comply with a schedule by engine model year or owners can report to show compliance with more flexible options. Per the Regulation, all heavier vehicles with 1996 or newer model year engines should have a particulate matter (PM) filter (OEM or retrofit). Vehicles with a 1995 model year and older engine should have been replaced by January 1, 2015. By January 1, 2023, all trucks and buses were required to have 2010 model year engines with few exceptions. Lighter trucks and buses with a GVWR of 14,001 to 26,000 lbs. have replacement requirements starting January 1, 2015. Starting January 1, 2015, lighter vehicles with engines that are 20 years or older were to be replaced with newer trucks (or engines). Starting January 1, 2020, all remaining vehicles needed to be replaced so that they all have 2010 model year engines or equivalent emissions by January 1, 2023. (CARB, 2023)

7. Disadvantaged Communities (Senate Bill 535; 2012)

Senate Bill 535 (SB 535; De León, Chapter 830, 2012) recognizes the potential vulnerability of low-income and disadvantaged communities to poor air quality. Disadvantaged communities in California are specifically targeted for investment of proceeds from the State's cap-and-trade program. These investments are aimed at improving public health, quality of life, and economic opportunity in California's most burdened communities while at the same time reducing pollution that causes climate change. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the State's cap-and-trade program is one of several strategies that California uses to reduce greenhouse gas emissions

that cause climate change. The funds must be used for programs that further reduce emissions of greenhouse gases. SB 535 requires that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The CalEPA is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen). (OEHHA, 2021)

8. Environmental Justice in Local Land Use Planning (Senate Bill 1000; 2016)

In an effort to address the inequitable distribution of pollution and associated health effects in low-income communities and communities of color, the Legislature passed, and Governor Brown signed Senate Bill 1000 (SB 1000) in 2016, requiring local governments to identify environmental justice communities (called disadvantaged communities) and address environmental justice in their general plans. This new law has several purposes, including to facilitate transparency and public engagement in the planning and decision-making processes for local government, reduce harmful pollutants and the associated health risks in environmental justice communities, and promote equitable access to health-inducing benefits, such as healthy food options, housing, public facilities, and recreation. SB 1000 requires environmental justice elements to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements will include policies to reduce the exposure of the community to pollution through air quality improvement. SB 1000 affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities. (OAG, n.d.)

9. Statewide Warehouse Design and Operational Standards (Assembly Bill 98; 2024)

AB 98 (September 2024) imposed various statewide warehouse design and build standards for any proposed new or expanded logistics use developments, as specified, including, among other things, standards for building design and location, parking, truck loading bays, landscaping buffers, entry gates, and signage. The bill defines logistics use as a building in which cargo, goods, or products are moved or stored for later distribution to business or retail customers, or both, that does not predominantly serve retail customers for onsite purchases, and heavy-duty trucks are primarily involved in the movement of the cargo, goods, or products. AB 98 would prohibit a city or county from approving a logistics use development that does not meet or exceed the standards outlined in the bill. AB 98 will become effective on January 1, 2026. Notably, AB 98 will not apply to projects that have an application on file by September 30, 2024. Additionally, projects seeking approval between October 1, 2024 to January 1, 2026 and are on land that is already zoned industrial may be approved without having to meet AB 98 requirements. As the Project applicant submitted an application to the City of Palmdale before September 30, 2024, AB 98 does not apply to the Project. (Dudek, 2025a, p. 23)

10. Community Air Protection Program (Assembly Bill 617; 2017)

Assembly Bill 617 (AB 617) was enacted into law in 2017 as an environmental justice initiative aimed at reducing air pollution from sources other than vehicles in communities most burdened by poor air quality. In response to AB 617, the CARB established the Community Air Protection Program (CAPP or Program). Since its enactment, CARB has selected multiple communities across California for focused action under AB 617. These communities have developed and implemented Community Emissions Reduction Programs (CERPs) tailored to their specific needs and pollution sources and aimed at emission reductions and improved air quality monitoring. The program has also facilitated greater community involvement in air quality decision-making processes. AB 617 also included new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which is helping to advance air pollution control efforts throughout the State. (CARB, 2023)

11. California Health and Safety Code Section 41700

This section of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors. (Dudek, 2025a, p. 22)

C. Regional and Local Regulations

1. Antelope Valley Air Quality Management District Rules

The AVAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the Los Angeles County portion of the MDAB, where the project is located. The AVAQMD operates monitoring stations in the MDAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The AVAQMD's air quality management plans include control measures and strategies to be implemented to attain state and federal AAQS in the MDAB. The AVAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. The AVAQMD's most recent air quality plan is the Federal 70 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area) (O3 Attainment Plan) (Dudek, 2025a, p. 23)

The AVAQMD enforces rules related to air pollutant emissions in the MDAB. Rules applicable to the Project include, but are not limited to, those listed below.

- AVAQMD Rule 201. Permit to Construct;
- AVAQMD Rule 219. Equipment No Requiring a Permit;
- AVAQMD Rule 401. Visible Emissions;
- AVAQMD Rule 402. Nuisance;

- AVAQMD Rule 403. Fugitive Dust;
- AVAQMD Rule 431.1. Sulfur Content of Gaseous Fuels;
- AVAQMD Rule 431.2. Sulfur Content of Liquid Fuels;
- AVAQMD Rule 431.3. Sulfur Content of Fossil Fuels;
- AVAQMD Rule 442. Usage of Solvents; and
- AVAQMD Rule 1113. Architectural Coatings.

2. 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. On April 4, 2024, SCAG's Regional Council adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); also known as Connect SoCal. The 2024-2050 RTP/SCS builds upon the progress made through implementation of the 2020-2045 RTP/SCS and includes four goals focused on promoting economic prosperity, improving mobility, sustaining thriving communities, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation. (SCAG, 2024)

D. Local Plans

1. City of Palmdale General Plan

The Air Quality Element of the City's General Plan (Palmdale 2045) establishes goals and policies related to protecting, maintaining, and enhancing air quality within Palmdale. Specific goals applicable to the Project include minimizing local air pollution caused by motor vehicles (Goal AQ-1), minimizing particulates less than 10 microns in size (PM_{10}) and activities that generate dust (Goal AQ-2), reducing and/or eliminating unnecessary sources of air pollution (Goal AQ-3), and reducing air pollution caused by energy consumption (AQ-4). Also, the Equitable and Healthy Communities Element includes a goal focused on designing the City to improve air quality and reduce disparate health impacts (Goal EHC-12). (City of Palmdale, 2023)

4.2.3 Basis for Determining Significance

According to Section III of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to air quality if the Project or any Project-related component would:

a. Conflict with or obstruct implementation of the applicable air quality plan;

b. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;*

c. *Expose sensitive receptors to substantial pollutant concentrations; or*

d. *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

A. ***Analysis Methodologies***

The California Emissions Estimator Model (CalEEMod) Version 2022.1 was used to estimate air pollutant emissions from construction and operation of the Project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the State to quantify criteria air pollutant and GHG emissions associated with construction activities and operation of a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the land use type used to represent the Project and its size, construction schedule, anticipated use of construction equipment, and on-road vehicles, were based on information provided by the Project Applicant and default model assumptions in the event that Project specifics were unavailable.

Refer to Subsections 2.3.2.1 and 2.3.2.2 of *Technical Appendix B* for a discussion of the construction-related and operational-assumptions used as part of air quality modeling. The Project was assumed to commence construction in 2026, complete construction in 2027, and begin operating in 2027. Modeling of operational emissions assumes the Project would be powered by both electricity and natural gas, that building operations would include 50 diesel-powered forklifts operating 24 hours a day for 365 days of the year, and that the building would have one diesel-fueled 1,000-horsepower (hp) generator and one diesel-fueled 300-hp fire pump for emergency use operating two-hours a day for up to 50-hours a year for routine testing and maintenance, Also, because up to 25 percent of the building space is assumed to be temperature controlled for cold storage warehouse space, transport refrigeration units (TRUs) are assumed to maintain the temperature inside 188 daily delivery truck trailers, with TRU emissions estimated using emission factors from CARB's OFFROAD2021 model and assuming each TRU would operate for a total of 4.84 hours per the OFFROAD average activity. (Dudek, 2025a, pp. 29-34)

1. Methodology for Determining Impacts in the Antelope Valley Air Quality Management District

The analysis of Threshold (a) addresses Section III.a of Appendix G to the State CEQA Guidelines and relies upon the AVAQMD CEQA Air and Federal Conformity Guidelines (CEQA Air Guidelines) and considers whether the proposed Project would be consistent with the AVAQMD Federal 70 ppb Ozone Attainment Plan, which is the applicable air quality plan for the Project site.

The analysis of Threshold (b) addresses Section III.b of Appendix G to the CEQA Guidelines and relies upon the AVAQMD CEQA Air and Federal Conformity Guidelines (CEQA Air Guidelines), and considers whether the Project's air pollutant emissions would exceed the regional significance thresholds established by the AVAQMD for regulated pollutants, as shown in Table 4.2-6, *AVAQMD*

Maximum Regional Daily Emissions Thresholds. The AVAQMD's Guidelines indicate that any projects in the MDAB with daily regional emissions that exceed any of the indicated thresholds identified in Table 4.2-6 should be considered as having an individually and cumulatively significant air quality impact. AVAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. The emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly.

Table 4.2-6 AVAQMD Maximum Regional Daily Emissions Thresholds

Pollutant	Daily Threshold (lbs/day)
VOC	137 lbs/day
NO_X	137 lbs/day
CO	548 lbs/day
SO_X	137 lbs/day
PM_{10}	82 lbs/day
$PM_{2.5}$	65 lbs/day
Hydrogen sulfide[a]	54 lbs/day
Lead[a]	3 lbs/day

[a] The Project includes typical equipment and on-road vehicles, which result in negligible (if any) emissions of hydrogen sulfide and lead. Therefore, these pollutants are not discussed in this analysis.
Source: (Dudek, 2025a, Table 4)

All of the Project's mobile source emissions are included in the Project's criteria air pollutant emissions inventory prior to comparing emissions to the AVAQMD thresholds, which represents a conservative assumption because many of the heavy-duty trucks that would travel to and from the Project site are already operating within the region due to existing goods movement patterns. Thus, in reality, speculative warehouse projects, such as the Project, are not really creating all new truck trips but instead are diverting them to different points of distribution origin. Nevertheless, analysis herein conservatively assumes that all truck trips assigned to the Project are in fact "new" trips.

The analysis of Threshold (c) addresses Section III.c of Appendix G and considers whether the Project would result in cancer or non-cancer health risks that exceed the AVAQMD thresholds of significance. Relying upon the AVAQMD CEQA Air and Federal Conformity Guidelines (CEQA Air Guidelines), impacts would be significant if a project would expose sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in one million and/or a hazard index (non-cancerous) greater than or equal to 1. An impact also would be significant if the Project were to cause or contribute to any CO "hot spots."

Regarding localized CO, although the AVAQMD does not have screening levels for intersection traffic that could result in potential CO hotspots, several other air districts have established these levels, which

are described below to provide context of the magnitude of hourly volumes that could result in significant localized CO hotspot:

- The SCAQMD conducted CO modeling for its 2003 Air Quality Management Plan (SCAQMD 2003) for the four worst-case intersections in the South Coast Air Basin. At the time, the 2003 Air Quality Management Plan was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least more than 100,000 vehicles per day.

- The Bay Area Air Quality Management District (BAAQMD) determined that projects would result in a less-than-significant impact to localized CO concentrations if (1) project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour, or (2) project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) (Dudek, 2025a, p. 28)

Based on the Project's proximity to the South Coast Air Basin, the SCAQMD screening criterion of 100,000 vehicles per day was applied to the Project in this EIR as a metric to evaluate CO hotspots.

Threshold (d) evaluates Section III.d of Appendix G of the State CEQA Guidelines. AVAQMD Rule 402, and California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700 prohibit the emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public, including odors. The potential to violate Rule 402 or Section 41700 is used herein as a basis to consider whether the odors or other emissions potentially generated from the proposed Project would be significant and require mitigation measures.

2. Methodology for Determining Impacts in Neighboring Air Districts

In addition to Project-related emissions within the AVAQMD jurisdiction, it is likely that a portion of the Project's truck traffic would also traverse through neighboring air districts (i.e., those adjacent to AVAQMD), including San Joaquin Valley Air Pollution Control District (SJVAPCD), Eastern Kern Air Pollution Control District (EKAPCD), MDAQMD, and SCAQMD. As such, truck emissions within these neighboring districts were also considered and evaluated against the respective air district significance thresholds. Table 4.2-7, *Significance Thresholds for Neighboring Air Districts*, summarizes the thresholds of significance of the neighboring air districts for which the proportion of truck emissions during Project operation was compared. Truck emissions above the respective air district thresholds would result in a potentially significant impact. (Dudek, 2025a, p. 28)

Table 4.2-7 Significance Thresholds for Neighboring Air Districts

Pollutant	Threshold			
	SJVAPCD (tons per year)	EKAPCD (tons per year)	MDAQMD (pounds per day)	SCAQMD (pounds per day)
VOC	10	25	137	55
NO_x	10	25	137	55
CO	100	N/A	548	550
SO_x	27	N/A	137	150
PM_{10}	15	15	82	150
$PM_{2.5}$	15	N/A	65	55
Lead	N/A	N/A	3	3

Source: (Dudek, 2025a, Table 5)

Table 4.2-8, *Truck Activity by Air District*, shows the percentage of Project-related truck activity assumed to occur in neighboring air districts. It is noted that because some of the trucks are traveling through more than one air district the percentage totals more than 100 percent. The truck activity percentage was applied to the mobile source emissions for trucks to estimate emissions within the other air districts and compared to their respective thresholds. (Dudek, 2025a, p. 32)

Table 4.2-8 Truck Activity by Air District

Air District	Truck Activity
Eastern Kern County Air Pollution Control District	13%
San Joaquin Valley Air Pollution Control District	12%
Mojave Desert Air Quality Management District	25%
South Coast Air Quality Management District	68%

Source: (Dudek, 2025a, Table 10)

4.2.4 Impact Analysis

Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The AVAQMD develops and administers air quality plans to outline air pollution control programs for attaining all CAAQS and NAAQS. Currently, the most recent approved AVAQMD air quality plan is the AVAQMD Federal 70 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area). The AVAQMD Ozone Attainment Plan was developed to address the attainment of the 2015 national 8-hour O_3 ambient air quality standard (70 parts per billion). The AVAQMD Ozone Attainment Plan provides actions, strategies, and steps needed to reduce air pollutant emissions and meet the O_3 standard by 2033. (Dudek, 2025a, p. 38)

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with federal and state air quality standards. A project is non-conforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A

project is conforming if it complies with all applicable AVAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Zoning changes, specific plans, general plan amendments and similar land use plan changes that do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled (VMT) are also deemed to comply with the applicable air quality plan. The AVAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the SCAG for its RTP/SCS that is based on general plans for cities and counties within the SCAG jurisdiction and is used by the AVAQMD to develop the air quality plan emissions inventory. Connect SoCal and the associated Regional Growth Forecast are generally consistent with the local plans; therefore, the AVAQMD air quality plan is generally consistent with local government plans. (Dudek, 2025a, p. 38)

The Project would be required to comply with all applicable AVAQMD Rules and Regulations, including, but not limited to Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust). The City's Zoning Map designates the Project site as Light Industrial (LI). As discussed in EIR Section 2.0, *Environmental Setting*, the proposed Project is consistent with the Project site's General Plan land use designation; therefore, the Project is consistent with the SCAG RTP/SCS forecasts used in the AVAQMD air quality plan development. (Dudek, 2025a, pp. 38-39)

Finally, as discussed in the analysis of Threshold (b) below, prior to mitigation, construction-source emissions would exceed the applicable regional thresholds for emission for VOC and $NO_{X,}$ and operational-source emissions would exceed the applicable regional thresholds for emission for NO_X. As such, the Project's construction and operational-source VOC and NO_X emissions would have the potential to increase the frequency or severity of a violation in the federal or state ambient air quality. This represents a significant impact for which mitigation would be required.

Based on the preceding considerations, the Project's potential to conflict with or obstruct implementation of the applicable air quality plan would result in a significant impact.

Threshold 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?***

Provided below is an analysis of the potential for the Project to exceed the AVAQMD Regional Thresholds of Significance (refer to Table 4.2-6) during both near-term construction and long-term operational conditions and the potential for the Project to exceed the thresholds of significance in neighboring air basins for operational mobile source emissions.

A. Construction Emissions

Construction activities associated with the Project would result in emissions of VOCs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction

activities: 1) site preparation; 2) grading; 3) off-site improvements; 4) building construction; 5) on-site concrete; and 6) architectural coating. Construction of the Project would result in the temporary addition of pollutants to the local airshed caused by onsite sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day depending on the level of activity and the specific type of operation; and for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts. (Dudek, 2025a, p. 39)

Implementation of the Project would generate criteria air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement applications. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles, would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions. (Dudek, 2025a, p. 40)

The estimated maximum daily construction emissions without mitigation for both summer and winter periods is summarized in Table 4.2-9, *Emissions Summary of Construction (Without Mitigation)*. Detailed construction model outputs are presented in Appendix A of *Technical Appendix B* prepared for the Project. As shown in Table 4.2-9, emissions resulting from construction of the Project would exceed the criteria pollutant thresholds established by the AVAQMD for emissions of VOCs and NO_x during construction in years 2026 and 2027. Accordingly, impacts would be significant prior to mitigation. (Dudek, 2025a, p. 40)

Table 4.2-9 Emissions Summary of Construction (Without Mitigation)

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2026	15.78	137.78	138.05	0.36	41.33	14.37
2027	280.33	14.59	18.42	0.02	4.80	1.21
Winter						
2026	14.71	129.02	124.13	0.34	38.97	13.78
2027	6.65	74.70	88.19	0.18	19.71	3.49
Maximum Daily Emissions	280.33	137.78	138.05	0.36	41.33	14.37
AVAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: (Dudek, 2025a, Table 12)

B. Operational Emissions

1. Operational Emissions in the AVAQMD

Operational activities associated with the Project would result in emissions of VOCs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources: 1) area source emissions (consumer products, architectural coatings, landscaping equipment); 2) energy source emissions (natural gas combustion for space and water heating); 3) mobile source emissions (vehicular traffic); 4) on-site cargo handling equipment emissions (diesel-fueled forklifts), 5) stationary source emissions (diesel fueled emergency generator and fire pump, and 6) truck refrigeration unit (TRU) emissions. Refer to Subsection 2.3.22 of *Technical Appendix B* prepared for the Project for a discussion of modeling assumptions for each of these operational-related sources. (Dudek, 2025a, p. 41)

The estimated operational-source emissions are summarized on Table 4.2-10, *Summary of Peak Operational Emissions (Without Mitigation)*. Detailed operation model outputs for the Project are presented in Appendix A of *Technical Appendix B* prepared for the Project. As shown in Table 4.2-10, the Project would exceed the numerical thresholds of significance established by the AVAQMD for the emissions of NO_X during both the summer and winter seasons. Accordingly, impacts would be significant prior to mitigation. (Dudek, 2025a, p. 46)

Table 4.2-10 Summary of Peak Operational Emissions (Without Mitigation)

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile	5.12	54.35	60.80	0.64	30.97	8.78
Area	30.33	0.37	43.49	<0.01	0.08	0.06
Energy Source	0.31	5.57	4.68	0.03	0.42	0.42
Off-Road Equipment	9.91	93.38	154.79	0.21	4.01	3.69
Stationary	5.84	23.88	14.90	0.03	0.86	0.86
Transport Refrigeration Units	0.02	0.02	0.00	0.00	0.00	0.00
Total Daily Summer Emissions	51.53	177.56	278.66	0.91	36.33	13.81
AVAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**
Winter						
Mobile	4.77	57.31	47.48	0.63	30.97	8.78
Area	23.19	0.00	0.00	0.00	0.00	0.00
Energy Source	0.31	5.57	4.68	0.03	0.42	0.42

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Off-Road Equipment	9.91	93.38	154.79	0.21	4.01	3.69
Stationary	5.84	23.88	14.90	0.03	0.86	0.86
Transport Refrigeration Units	0.02	0.02	0.00	0.00	0.00	0.00
Total Daily Winter Emissions	44.04	180.15	221.85	0.90	36.26	13.75
Total Maximum Daily Emissions	51.53	180.15	278.66	0.91	36.33	13.81
AVAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: (Dudek, 2025a, Table 14)

2. Mobile Source Emissions in Neighboring Air Districts

As discussed in Subsection 4.2.3, the Project's truck and TRU trip-related emissions that would occur within neighboring air districts were evaluated by Dudek. The activity percentages previously shown in Table 4.2-8 were applied to the truck mobile source emissions to estimate potential air impacts within those air districts. Table 4.2-11, *Estimated Truck Mobile Source Criteria Air Pollutant Emissions by Air District*, provides an estimate of the mobile source emissions within the neighboring air districts and compares those emissions to the respective district thresholds to determine the Project's air quality impact. As shown, truck traffic associated with operation of the Project would not result in exceedances of any air district thresholds. (Dudek, 2025a, pp. 43-44)

Table 4.2-11 Estimated Truck Mobile Source Criteria Air Pollutant Emissions by Air District

Source	Emissions					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer (lbs/day)						
Antelope Valley Air Quality Management District	1.60	52.04	15.49	0.54	20.98	6.23
Mojave Desert Air Quality Management District	0.40	13.01	3.87	0.13	5.25	1.56
South Coast Air Quality Management District	1.09	35.39	10.53	0.37	14.27	4.23
Winter (lbs/day)						
Antelope Valley Air Quality Management District	1.56	54.72	15.38	0.54	20.99	6.23
Mojave Desert Air Quality Management District	0.39	13.68	3.84	0.14	5.25	1.56
South Coast Air Quality Management District	1.06	37.21	10.46	0.37	14.27	4.23
AVAQMD Threshold	137	137	548	137	82	65
MDAQMD Threshold	137	137	548	137	82	65
SCAQMD Threshold	55	55	550	150	150	55

Source	Emissions					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Annual (tons per year)						
Antelope Valley Air Quality Management District	0.29	10.09	2.79	0.10	3.81	1.13
Eastern Kern County Air Pollution Control District	0.04	1.31	0.36	0.01	0.49	0.15
San Joaquin Valley Air Pollution Control District	0.03	1.21	0.34	0.01	0.46	0.14
AVAQMD Thresholds	25	25	100	25	15	12
EKAPCD Thresholds	25	25	N/A	N/A	15	N/A
SJVAPCD Thresholds	10	10	100	27	15	15
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Dudek, 2025a, Table 16)

Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?

During construction and operation, the Project has the potential to expose nearby sensitive receptors to pollutant concentrations that may be substantial. Sensitive receptors are defined as occupied residential homes, schools, health care facilities, and other areas where humans sensitive to air pollution reside. The following provides an analysis of the potential of the Project to result in or contribute to CO "hot spots," to result in cancer risks and non-cancer health hazards, or to result in a significant impact attributable to valley fever exposure.

As discussed in Subsection 4.2.1, the nearest sensitive receptor buildings to the Project site boundary are the existing residences located approximately 150 feet to the northwest (along Division Street), approximately 150 feet to the south (across W Rancho Vista Boulevard), and along the Project's haul routes. Distances from the Project's nearest proposed loading docks to the buildings of these sensitive receptors are approximately 630 feet and 475 feet, respectively. (Dudek, 2025a, p. 53)

A. CO "Hot Spot" Analysis

Mobile source impacts occur on two scales of motion. Regionally, Project-related travel would add to regional trip generation and increase VMT within the local airshed and the MDAB. Locally, Project-generated traffic would be added to the roadway system near the Project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. However, because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the MDAB is steadily decreasing. (Dudek, 2025a, p. 53)

The AVAQMD thresholds of significance for local CO emissions is the 1-hour and 8-hour CAAQS of 20 ppm and 9 ppm, respectively. By definition, these represent levels that are protective of public health. As noted previously, the MDAB is currently designated attainment for both state and national CO ambient air quality standards, and the City of Palmdale typically experiences low background CO concentrations. (Dudek, 2025a, p. 53)

As discussed in Subsection 4.2.3, to verify that the Project would not cause or contribute to a violation of the CO standard, a screening evaluation was conducted comparing the highest hourly traffic volumes at any studied intersection in proximity to the Project site to the 100,000 vehicles per day criterion from the SCAQMD Air Quality Management Plan. As discussed in the Project's Traffic Impact Analysis (*Technical Appendix I1*), the highest average daily trips with Project vehicles added would be less than 60,000 daily trips (Sierra Highway and W Rancho Vista Blvd intersection), which would be substantially less than the 100,000 vehicles per day screening criterion applied. Therefore, impacts associated with CO hotspots would be less than significant. (Dudek, 2025a, p. 53)

B. Project-Related DPM Source Cancer and Non-Cancer Risks

A Project-specific Health Risk Assessment (HRA) was prepared for the Project based on AVAQMD guidelines to produce conservative estimates of risk posed by exposure to DPM. As discussed in 4.2.3, the Project was assumed to commence construction in 2026, complete construction in 2027, and begin operating in 2027. Modeling of operational emissions assumes the Project would be powered by both electricity and natural gas, that building operations would include 50 diesel-powered forklifts operating 24 hours a day for 365 days of the year, and that the building would have one diesel-fueled 1,000-horsepower (hp) generator and one diesel-fueled 300-hp fire pump for emergency use operating two-hours a day for up to 50-hours a year for routine testing and maintenance, Also, because up to 25 percent of the building space is assumed to be temperature controlled for cold storage warehouse space, transport refrigeration units (TRUs) are assumed to maintain the temperature inside 188 daily delivery truck trailers, with TRU emissions estimated using emission factors from CARB's OFFROAD2021 model and assuming each TRU would operate for a total of 4.84 hours per the OFFROAD average activity. (Dudek, 2025a, pp. 29-34)

As shown in Table 4.2-12, *Health Risk Assessment Results (Without Mitigation)*, the DPM emissions from short-term construction plus long-term operations of the Project would result in a Maximum Individual Cancer Risk of 105.01 per 1 million and a Chronic Hazard Index of 0.040 at the maximally exposed individual resident (MEIR). The Chronic Hazard Index would be below the 1.0 significance threshold; however, the Project would exceed the cancer risk threshold of 10 in a million and would be significant without mitigation. (Dudek, 2025a, pp. 53-54)

Table 4.2-12 Health Risk Assessment Results (Without Mitigation)

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – MEIR	Per Million	105.01	10	**Potentially Significant**
Chronic Hazard Index – MEIR	Index Value	0.040	1.0	Less than Significant

MEIR = maximally exposed individual resident.
Source: (Dudek, 2025a, Table 18)

C. Health Effects of Criteria Air Pollutants

The California Supreme Court's Sierra Club v. County of Fresno (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision) (issued on December 24, 2018) addresses the need to correlate mass emission values for air pollutants to specific health consequences and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency does know and why, given existing scientific constraints, it cannot translate potential health impacts further" (Italics in original) (Sierra Club v. County of Fresno 2018). As discussed in *Technical Appendix B,* there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and methods available to quantitatively evaluate health effects may not be appropriate to apply to emissions concentrations associated with the project, which cannot be estimated with a high-level of accuracy.

Nevertheless, the Co-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA) was used to estimate health outcomes associated with operational emissions from the Project. COBRA is a screening tool developed by the U.S. EPA that estimates the health impacts and economic benefits of changes in air pollution, particularly fine particulate matter ($PM_{2.5}$). COBRA uses emissions data and simplified air quality dispersion modeling to assess potential changes in public health outcomes (such as asthma attacks, hospital admissions, and premature deaths) resulting from changes in emissions of criteria pollutants like NOx, SOx, and VOCs. According to COBRA modeling of the Project's mitigated air pollutant emissions, Project-related increases in ambient concentrations of ozone and $PM_{2.5}$ were associated with minor estimated increases in health outcomes, including (Dudek, 2025a, p. 49):

- Asthma-related emergency room visits: ~0.000 cases/year
- Lung cancer incidence: ~0.006 cases/year
- Cardiovascular-related ER visits: ~0.022 cases/year
- Respiratory-related hospital admissions: ~0.013 cases/year
- Nonfatal heart attacks: ~0.052 cases/year
- Total mortality: up to ~0.086 additional deaths/year

While COBRA provides a useful screening-level assessment, the results reflect minor increases and should be interpreted with caution due to uncertainties in modeling emissions-to-health outcome relationships at the project level. Nonetheless, even under unmitigated conditions, health impacts remain very small in the context of regional health statistics. (Dudek, 2025a, p. 50)

D. Valley Fever

As discussed in Subsection 4.2.1, Los Angeles County is not considered a highly endemic region for Valley Fever, with an incident rate of 15.7 cases per 100,000 people. In contrast, in 2022 the Statewide annual incident rate was 19.1 per 100,000 people. Even if present at the site, construction activities may not result in increased incidence of valley fever. Propagation of valley fever is dependent on climatic conditions, with the potential for growth and surface exposure highest following early seasonal rains and long dry spells. Valley fever spores can be released when filaments are disturbed by earth-moving activities, although receptors must be exposed to and inhale the spores to be at increased risk of developing valley fever. Moreover, exposure to valley fever does not guarantee that an individual will become ill, approximately 60% of people exposed to the fungal spores are asymptomatic and show no signs of an infection. (Dudek, 2025a, pp. 54-55)

In order to reduce fugitive dust from the Project and minimize adverse air quality impacts, the Project would employ measures that address dust in accordance with the AVAQMD Rules 401 and 403.2 and AIR MM-3, which limit the amount of fugitive dust generated during construction. These requirements are consistent with California Department of Public Health recommendations for the implementation of dust control measures, including regular application of water during soil-disturbance activities, to reduce exposure to valley fever by minimizing the potential that the fungal spores become airborne. Further, regulations designed to minimize exposure to valley fever hazards are included in Title 8 of the California Code of Regulations and would be complied with during the Project's construction phase. (Dudek, 2025a, p. 55)

In summary, the Project would not result in a significant impact attributable to valley fever exposure based on its geographic location and compliance with the applicable regulatory standards listed above. Therefore, impacts associated with valley fever exposure for sensitive receptors would be less than significant. Implementation of AIR MM-3 would further minimize the release of and exposure to fungal spores. (Dudek, 2025a, p. 55)

Threshold d:	***Would the Project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?***

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints. (Dudek, 2025a, p. 55)

Land uses most commonly associated with odor complaints generally include agricultural uses (livestock and farming), wastewater treatment plants, food-processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The Project does not include uses that would be substantive sources of objectionable odors. Potential temporary and intermittent odors may result from construction equipment exhaust, the application of asphalt, and architectural coatings. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. (Dudek, 2025a, p. 55)

The Project would also be required to comply with AVAQMD Rule 402 (Nuisance). Rule 402 provides that "[a] person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property". Based on the preceding, the potential for the Project to create objectionable odors affecting a substantial number of people would be less than significant. (Dudek, 2025a, p. 56)

4.2.5 Cumulative Impact Analysis

With the exception of the potential impacts related to odors, the cumulative study area for air quality includes Palmdale and the MDAB, as well as neighboring air basins through which Project trucks would travel. The MDAB is designated as a nonattainment area for State standards of O_3 and PM_{10}. The region is also designated as a nonattainment area for federal standards of O_3. Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain ambient air quality standards. Thus, with the exception of potential impacts related to odors, the setting for this cumulative analysis consists of the MDAB and associated growth and development anticipated in the air basin, as well as neighboring air basins through which Project trucks would travel. For the issue of odors, because odors diminish rapidly with distance from the source, the cumulative study area includes the Project site and properties in close proximity to the Project site.

Air pollution is largely a cumulative effect. The nonattainment status of regional pollutants is a result of past and present development, and AVAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, Project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a Project's individual emissions would have a cumulatively significant impact on air quality. (Dudek, 2025a, p. 39)

Cumulatively Considerable Impacts due to Conflict with an Applicable Air Quality Plan

The Project would conform to local land use plans and would comply with all applicable AVAQMD Rules and Regulations but would emit maximum daily quantities of VOC and NOx during construction and NOx during operation in excess of the AVAQMD's regional significance thresholds. As such, the Project would not be consistent with the Federal 70 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area) (O3 Attainment Plan) resulting in a significant direct and cumulatively considerable impact. As other cumulative developments also have the potential to conflict with the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan, due to construction and

operational-related emissions, the Project's conflict with the AVAQMD's applicable air quality plans represents a cumulatively considerable impact for which mitigation would be required. With implementation of the Mitigation Measures listed in Subsection 4.2.7, construction and operational emissions of the Project would not exceed applicable regional thresholds for VOC and NO_X during Project construction or operation. As such, the Project's contribution to the cumulative impact would be mitigated to less than significant and the Project would be consistent with the Federal 70 ppb Ozone Attainment Plan (Western Mojave Desert Nonattainment Area) (O3 Attainment Plan) (i.e., the applicable air quality plans in the Project area).

Cumulatively Considerable Criteria Pollutant Impacts

As indicated under Thresholds (a) and (b), without mitigation, Project-related construction activities would exceed the AVAQMD regional thresholds for VOC and NO_X (refer to Table 4.2-9) and operational activities would exceed the AVAQMD regional thresholds for NO_X (refer to Table 4.2-10). As other cumulative developments within the MDAB also have the potential to exceed the SCAQMD regional thresholds, thereby contributing to a net increase of a criteria pollutant in the region, the Project's emissions of VOCs and NO_X during construction and NO_X during operation of the Project represents a cumulatively considerable impact for which mitigation would be required. This potentially significant impact would be addressed by Mitigation Measures which outline measures for reducing NOx emissions and VOCs during construction and operation of the Project. With implementation of the Mitigation Measures listed in Subsection 4.2.7, significant direct impacts would be less than significant. As such, the Project's contribution to the cumulative impact associated with a net increase in criteria pollutants for which the Project region is non-attainment under an applicable federal or State ambient air quality standard would be mitigated to less than significant.

Cumulatively Considerable Impacts to Sensitive Receptors

As discussed in EIR Section 2.0, *Environmental Setting*, the census tract containing the Project site (Census Tract 6037910201) is reported by CalEPA's Office of Environmental Health Hazard Assessment (OEHHA) using the OEHHA's California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0), ranks in the 67th percentile of communities that are disproportionately burdened by multiple sources of pollution (OEHHA, 2021). The Project site is not located in a SB 535 Disadvantaged Community identified by the California Environmental Protection Agency (CalEPA) (CalEPA, 2024). Future development activities in and around the Project site's census tract have the potential to improve or worsen pollution burdens.

The analysis under Threshold (c) provides substantial evidence that the proposed Project would not cause or contribute to any CO "hot spots" or valley fever exposure on a direct or cumulatively considerable basis. The proposed Project would not result in health effects associated with NO_X, VOCs, CO, SO_x, PM_{10}, or $PM_{2.5}$. (Dudek, 2025a, p. xi)

As discussed under the analysis of Threshold (c), the Project would expose the MEIR to construction- and operational-related cancer risks that would exceed the AVAQMD significance threshold of 10 in one million or non-cancer health risks that would exceed the applicable significance threshold of 1.0

for direct or cumulatively considerable impacts for which mitigation would be required. With implementation of the Mitigation Measures listed in Subsection 4.2.7, the Project's DPM emissions would not exceed the respective AVAQMD thresholds of significance. Because Project-related air pollutant emissions would not expose nearby sensitive receptors to substantial pollutant concentrations with the implementation of Mitigation Measures, the Project's contribution of health risk to sensitive receptors would be less than cumulatively considerable. The Project would worsen the pollution burden of the Project site's census tract but not to a level that is considered cumulatively considerable by the AVAQMD.

Cumulatively Considerable Odor Impacts

The proposed Project would be required to comply with AVAQMD Rule 402, Nuisance, to prevent occurrences of public nuisances (including odors) during both construction and long-term operation, and would be subject to the solid waste regulations for the City of Palmdale. Other developments within the cumulative study area similarly would be required to comply with AVAQMD Rules and Regulations and the solid waste regulations of the applicable jurisdictions. Therefore, Project impacts due to other emissions (such as those leading to odors) would be less than cumulatively considerable.

4.2.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct and Cumulatively Considerable Impact. During construction of the Project, prior to mitigation, the Project's daily construction emissions would exceed the AVAQMD thresholds for VOC and NO_X. Project operations, prior to mitigation, would exceed the AVAQMD daily threshold for NO_X. Therefore, prior to mitigation, the Project has the potential to conflict with the AVAQMD AQMP during both construction and operational activities, resulting in a significant direct and cumulatively considerable impact.

Threshold b: Significant Direct and Cumulatively Considerable Impact. During construction of the Project, prior to mitigation, the Project's daily construction emissions would exceed the AVAQMD thresholds for VOC and NO_X. Project operations, prior to mitigation, would exceed the AVAQMD daily threshold for NO_X. Therefore, prior to mitigation, the Project has the potential to result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, resulting in a significant direct and cumulatively considerable impact.

Threshold c: Significant Direct and Cumulatively Considerable Impact. The Project would not produce the volume of traffic required to generate a CO "hot spot" or result in a significant impact attributable to valley fever exposure. The Project would not result in a significant impact attributable to valley fever exposure based on its geographic location and compliance with the applicable regulatory standards. The DPM emissions from short-term construction plus long-term operations of the Project would result a Chronic Hazard Index below the 1.0 significance threshold; however, the Project would exceed the cancer risk threshold of 10 in one million; resulting in a significant direct and cumulatively considerable impact.

Threshold d: Less than Significant Impact. The Project does not propose land uses typically associated with emitting objectionable odors. The Project would be required to comply with AVAQMD Rule 402, Nuisance, to prevent occurrences of public nuisances. Therefore, odors associated with the construction and operation of the Project would be less than significant and no mitigation is required.

4.2.7 MITIGATION

The following Mitigation Measures are designed to reduce emissions attributable to the proposed Project for construction and operations.

AIR MM-1 **Architectural Coating Requirements.** The Project shall utilize "Super-Compliant" low-volatile organic compound (VOC) paints that have been reformulated to exceed the regulatory VOC limits put forth by Antelope Valley Air Quality Management District's (AVAQMD's) Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the Project Applicant shall utilize tilt-up concrete buildings that do not require the use of architectural coatings or limit the volume of Rule 1113 compliant interior and exterior building coatings to 126 gallons per day and 42 gallons per day, respectively.

AIR MM-2 **Heavy-Duty Off-Road Construction Equipment Requirements/Restrictions.** The following measures shall be implemented to reduce off-road equipment exhaust during construction:

- During construction of the Project, all internal combustion engines/construction equipment greater than 75 horsepower operating on the Project site shall meet U.S. Environmental Protection Agency (EPA)-compliant Tier 4 Final emissions standards. The Project Applicant or successor in interest shall include this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. Successful contractors must demonstrate the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. An exemption from these requirements may be granted by the City of Palmdale if the Project Applicant or successor in interest documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions and diesel particulate matter emissions are achieved from other means, such as using construction equipment with a combination of different tier ratings and/or by making adjustments in the number of pieces of simultaneously operating equipment or the duration of daily use, to ensure that AVAPCD daily emission thresholds are not exceeded. Before an exemption may be considered by the City of Palmdale, the Project Applicant or successor in interest shall be required to demonstrate that at least two construction fleet owners/operators in the air basin were contacted and that those owners/operators confirmed Tier 4 Final compliant equipment could not be feasibly obtained within the air basin for use on the Project site.

- After the grading phase of Project construction, and pursuant to permission from the utility provider, the Project Applicant or successor in interest shall provide temporary electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills, and compressors. The use of diesel-fueled generators for on-site construction activities shall be prohibited unless electrical infrastructure to power an electric generator is not yet available on the Project site. Diesel-fueled generators may be used for off-site construction work. All off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during Project construction must be electric-powered. The Project Applicant or successor in interest shall include these requirements in applicable bid documents, purchase orders, and contracts with successful contractors.

- The idling of heavy construction equipment for more than 5 minutes shall be prohibited. Signage shall be posted throughout the construction site informing construction personnel of the idling time limit. Idling time limits shall be noted in construction specifications.

AIR MM-3 **Dust Control Measures.** In compliance with all applicable Rules and Regulations of the AVAQMD, including, but not limited to Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust). To ensure compliance with these Rules and Regulations, the Project Applicant or successor in interest shall prepare and submit a Dust Control Plan to the AVAQMD for approval. The Dust Control Plan shall document the best management practices (BMPs) that will be implemented during project construction to prevent, to the maximum extent practicable, wind and soil erosion. BMPs that will be included in the Dust Control Plan shall include, but are not limited to, covering soil stockpiles when not in use, application of water or soil stabilizers to all disturbed areas so that no visible fugitive dust leaves the property line, and limiting vehicle speeds on unpaved roads to 25 miles per hour or less. On days when the hourly average wind speed for the Project site exceeds 20 miles per hour, additional dust control measures shall be implemented, such as increased surface watering. Grading and excavation shall be prohibited when sustained wind speed exceeds 30 miles per hour.

AIR MM-4 **Mobile Source Emission Minimization.** The Project Applicant or successor in interest shall implement the following measures to reduce operational mobile source air pollutant emissions to the extent feasible:

- Prior to issuance of a Certificate of Occupancy, Level 2 (or faster) electric vehicle (EV) charging stations shall be installed on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit application. In addition, the building shall include

accommodations for electrical infrastructure sufficiently sized to facilitate the potential installation of additional auto and truck EV charging stations in the future.

- Conduit shall be installed to tractor trailer parking areas in logical locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations.

- All loading docks serving cold and/or refrigerated space shall have electrical hook-ups for transport refrigeration units (TRUs).

- Provide tenants with information regarding funding opportunities that provide incentives for using cleaner-than-required engines and equipment, such as the Carl Moyer Program and Voucher Incentive Program, as well as the EPA SmartWay Program, which assists freight shippers, carriers, logistics companies, and other stakeholder partner with the EPA to measure, benchmark, and improve logistics operations and reduce air pollutant emissions from the transport of cargo.

- For occupants with more than 250 employees, a Transportation Demand management (TDM) Program to reduce employee commute vehicle emissions shall be established, subject to review and approval by the City of Palmdale. The Transportation Demand Management Plan shall apply to project tenants through tenant leases. The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking.

- Upon commencement of operation of the Project, the tenant/operator of the building shall be required to post signs restricting truck idling onsite to a maximum of three (3) minutes, subject to exceptions defined by the California Air Resources Board's (CARB) commercial vehicle idling requirements. The building manager or their designee shall be responsible for enforcing this requirement.

AIR MM-5 **Zero-Emission Equipment.** The following measure shall be implemented during all ongoing business operations and shall be included as part of contractual lease agreement language to ensure that tenants and operators of the Project are informed of the following operational responsibility.

- All equipment and appliances operating on the Project site other than emergency generators and pumps shall be zero-emission equipment. This requirement shall apply to indoor and outdoor equipment such as forklifts, handheld landscaping equipment, yard trucks, and office appliances. The building shall include the necessary charging stations or other necessary infrastructure for cargo handling equipment and shall be equipped with outdoor electric outlets in appropriate

locations to facilitate use of electrical lawn and garden equipment. The building manager or their designee shall be responsible for enforcing these requirements.

AIR MM-6 **Stationary Source Emission Minimization.** Any diesel-fueled emergency generators and fire pumps to be installed at the Project site shall be equipped with Tier 4 Final compliant engines.

AIR MM-7 **All-Electric Building.** The building shall be 100% electric powered and the use of natural gas for building operations shall be prohibited.

4.2.8 Design Features (DF) and Regulatory Requirements (RR)

The City of Palmdale will ensure that the Project complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Air Quality as part of the City's Conditions of Approval for the Project. The Project Applicant has agreed to implementing the design features, many of which represent a commitment to sustainable design that is integral to the Project, and/or are regulatory requirements, and as such, they are not considered to be mitigation measures.

AIR DF-1 **Water Conservation.** To reduce water demands and associated energy use, the Project would implement a Water Conservation Strategy and demonstrate a minimum 20 percent (%) reduction in indoor and outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Prior to the issuance of a building permit for the Project, the Project Applicant shall provide building plans that include the following water conservation measures:

- Install low-water use appliances and fixtures
- Use low water use plant material to minimize irrigation needs
- Limit the use of water for cleaning outdoor surfaces
- Install rainwater collection systems where feasible.

AIR DF-2 **Solid Waste Reduction.** In order to reduce the amount of waste disposed at landfills, the Project would implement a 75 percent waste diversion program. Prior to the issuance of a building permits f, the Project Applicant shall provide building plans that include the following solid waste reduction measures:

- Provide storage areas for recyclables and green waste in new construction, and food waste storage, if a pick-up service is available.
- Evaluate the potential for onsite composting.

AIR RR-1 The Project shall comply with the provisions of AVAQMD Rule 401, Visible Emissions, which requires that a person shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

a. As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (b)(1)(A) of Rule 401.

AIR RR-2 The Project shall comply with the provisions of AVAQMD Rule 402, Nuisance, which requires that a person shall not discharge air contaminants or other materials that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

AIR RR-3 The Project shall comply with the provisions of AVAQMD Rule 403, Fugitive Dust, including the submission of the required Dust Control Plan and Construction Excavation Fee, by implementing the following dust control measures during construction activities, such as earth-moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the following notes shall be included on the grading plans. Project contractors shall be required to ensure compliance with the notes. The notes also shall be specified in bid documents issued to prospective construction contractors.

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per AVAQMD guidelines in order to limit fugitive dust emissions, or water shall be applied to the soil not more than 15 minutes prior to moving such soil to limit Visible Dust Emissions (VDE) to 20 percent opacity.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered or subject to the application of dust suppressants sufficient to limit VDE to 20 percent opacity.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 mph or less.

AIR RR-4 The Project shall comply with AVAQMD rules related to sulfur content in fuels, including Rule 431.1, Sulfur Content of Gaseous Fuels; Rule 431.2, Sulfur Content of Liquid Fuels; and Rule 431.3, Sulfur Content of Fossil Fuels.

4.2.9 Significance of Impacts After Mitigation

Thresholds a and b: Less than Significant Impact with Mitigation. Mitigation Measure AIR MM-1 would be implemented to reduce the VOC impacts, which requires that the Project utilize "Super-Compliant" low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by AVAQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams

per liter (g/L) of VOC.. In addition, Mitigation Measure AIR MM-2 would be implemented to reduce Project-generated equipment exhaust, primarily by requiring use of 75 horsepower (hp) or greater equipment to have Tier 4 Final compliant engines, which are the cleanest engines currently available. In addition, fugitive dust controls are included pursuant to AVAQMD requirements, as specified in Mitigation Measure AIR MM-3.

As shown in Table 4.2-13, *Emissions Summary of Construction (With Mitigation)*, with the implementation of Mitigation Measures, emissions resulting from construction of the Project would be reduced and would not exceed criteria pollutant thresholds established by the AVAQMD for emissions of any criteria pollutant. Accordingly, direct and cumulative impacts would be less than significant.

Mitigation measures are required to minimize operational-related air quality impacts (AIR MM-4 through AIR MM-7). Most criteria air pollutants associated with the operation of the Project are generated by diesel-fueled off-road forklifts, on-road vehicles, and stationary sources. Mitigation Measure AIR MM-4 requires measures to minimize on-road vehicle emissions, including the provision of electric vehicle (EV) charging stations and electrical hook-ups for TRUs. Mitigation Measure AIR MM-5 includes the requirement for all off-road forklifts and landscaping equipment to be zero-emissions, which would reduce the long-term criteria air pollutant emissions substantially. In addition, Mitigation Measure AIR MM-6 requires the emergency generator and fire pump to each have Tier 4 Final compliant engines and Mitigation Measure AIR MM-7 requires the warehouse building to be all electric (i.e., no natural gas). As shown in Table 4.2-14, *Summary of Peak Operational Emissions (With Mitigation)*, with the implementation of Mitigation Measures, NOx emissions resulting from operation of the Project would be reduced and would not exceed the threshold established by the AVAQMD. Therefore, impacts would be less than significant with incorporation of mitigation measures.

Table 4.2-13 Emissions Summary of Construction (With Mitigation)

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2026	6.49	67.06	200.99	0.36	14.77	4.57
2027	59.05	8.95	19.44	0.02	2.02	0.72
Winter						
2026	5.78	63.27	186.42	0.34	13.89	4.46
2027	5.47	62.00	90.82	0.18	6.64	1.76
Maximum Daily Emissions	**59.05**	**67.06**	**200.99**	**0.36**	**14.77**	**4.57**
AVAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Dudek, 2025a, Table 13)

Table 4.2-14 Summary of Peak Operational Emissions (With Mitigation)

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile	5.12	54.35	60.80	0.64	30.97	8.78
Area	23.19	0.00	0.00	0.00	0.00	0.00
Energy Source	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00
Stationary	0.80	2.60	14.90	0.03	0.12	0.12
Transport Refrigeration Units	0.02	0.02	0.00	0.00	0.00	0.00
Total Daily Summer Emissions	29.13	56.97	75.70	0.67	31.08	8.89
Winter						
Mobile	4.77	57.31	47.48	0.63	30.97	8.78
Area	23.19	0.00	0.00	0.00	0.00	0.00
Energy Source	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00
Stationary	0.80	2.60	14.90	0.03	0.12	0.12
Transport Refrigeration Units	0.02	0.02	0.00	0.00	0.00	0.00
Total Daily Winter Emissions	28.78	59.93	62.38	0.66	31.08	8.89
Total Maximum Daily Emissions	29.13	59.93	75.70	0.67	31.08	8.89
AVAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Dudek, 2025a, Table 15)

Thresholds c: Less than Significant Impact with Mitigation. Mitigation measures are required to minimize construction and operational health risk impacts. These mitigation measures would reduce DPM to the extent feasible, by requiring Tier 4 Final compliant engines for off-road equipment greater than 75 hp during construction (Mitigation Measure AIR MM-2), all operational cargo handling equipment to be zero-emission (Mitigation Measure AIR MM-5), and Tier 4 Final compliant engines for any emergency generators and fire pumps during operations (Mitigation Measure AIR MM-6). In addition, although not quantified, Mitigation Measure AIR MM-4 would also reduce DPM by requiring the installation of TRU electrical hook-ups at all cold storage loading docks, as well as supporting the future installation of heavy-duty truck charging stations. (Dudek, 2025a, p. 54)

As shown in Table 4.2-15, *Health Risk Assessment Results (With Mitigation)*, DPM emissions from short-term construction plus long-term operations of the Project would result in a Maximum Individual

Cancer Risk of about 4.41 in 1 million and a Chronic Hazard Index of 0.0030 at the MEIR, which would not exceed the respective AVAQMD thresholds of significance. Therefore, impacts would be less than significant with incorporation of mitigation measures.

Table 4.2-15 Health Risk Assessment Results (With Mitigation)

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – MEIR	Per Million	4.41	10	Less than Significant
Chronic Hazard Index – MEIR	Index Value	0.0030	1.0	Less than Significant

MEIR = maximally exposed individual resident.
Source: (Dudek, 2025a, Table 18)

4.3 BIOLOGICAL RESOURCES

The information provided in this subsection is based primarily on a technical study titled "Biological Resources Technical Report: Pacific Palmdale Center Project," October 2025, and prepared by Dudek, which is included as *Technical Appendix C* to this EIR. All references used in this subsection are listed in EIR Section 7.0, *References*.

As defined in the Biological Resources Technical Report (*Technical Appendix C),* and when used in this EIR subsection, the term "Study Area" includes the Project site plus a 100-foot buffer around the perimeter of the Project site. (Dudek, 2025b, p. 1)

The NOP for this EIR was published in March 2025. One comment letter, from the California Department of Fish and Wildlife (CDFW), included comments related to biological resources. These comments raised concerns about potential direct, indirect, and cumulative impacts to, and mitigation for the potential loss of, sensitive plant and wildlife species.

4.3.1 EXISTING CONDITIONS

The Project site is located within the Mojave Desert, which is a region containing the urban areas of Palmdale and Lancaster and surrounding rural residential areas, desert plains, dry lakebeds, and mountain ranges. Of relevance to the Project site's biological setting, the site consists of vacant land that is vegetated other than where dirt roads cross the site and where a small fire caused by a human encampment recently removed vegetation in the southeastern corner of the site. The surrounding area consists of a combination of vacant land and developed areas.

A. Vegetation Types and Other Areas

As shown on Figure 4.3-1, *Vegetation Communities and Land Covers*, the following vegetation types and non-vegetated areas occur in the Study Area: Joshua tree woodland, rubber rabbitbrush scrub, Nevada joint fir-anderson's boxthorn-spiny hop sage scrub, disturbed habitat, and urban/developed land.

1. Joshua Tree Woodland

Joshua tree woodland or *Yucca brevifolia alliance* is recognized by the Natural Communities List, which includes western Joshua tree as an emergent small tree over a shrub or grass layer. Joshua tree woodland has an open to intermittent tree canopy less than 14 meters (45 feet) in height, and an open to intermittent shrub and herbaceous layer with perennial grasses and seasonal annuals. This alliance consists of Joshua trees evenly distributed of at least 1% cover with Juniperus and/or Pinus spp. of at least more than 1% absolute cover in tree canopy. The Joshua tree woodland alliance occurs on gentle alluvial fans, ridges, and gentle to moderate slopes. Joshua tree woodland may occupy coarse sands, very fine silts, gravel, or sandy loams. This vegetation alliance was mapped to the *Yucca brevifolia/Lycium andersonii-Ephedra nevadensis* association or Joshua tree/Anderson thornbush–Nevada ephedra association. The Joshua tree woodland alliance is considered a sensitive vegetation community by California Department of Fish and Wildlife (CDFW) under CEQA. Although no

separate ranking is assigned to the Y*ucca brevifolia/Lycium andersonii-Ephedra nevadensis* association, this association is still considered as sensitive in the California Natural Community List. (Dudek, 2025b, p. 23)

This vegetation community occurs throughout the Study Area. Other species found within this community include common Mediterranean grass (*Schismus barbatus*) and tall tumble mustard (*Sisymbrium altissimum*). (Dudek, 2025b, p. 23)

2. Rubber Rabbitbrush Scrub

Rubber rabbitbrush scrub or *Ericameria nauseosa* shrubland alliance include rubber rabbitbrush (*Ericameria nauseosa*) as the dominant or codominant species in the shrub canopy with a sparse or grassy herbaceous layer. Rubber rabbitbrush scrub has an open to continuous shrub canopy of less than three meters (nine feet) in height. This alliance consists of at least 2% absolute cover of rubber rabbitbrush or more than 25% relative cover in the shrub canopy. The rubber rabbitbrush scrub occurs in disturbed settings on well-drained sands and gravels. (Dudek, 2025b, pp. 23-24)

This community is found along western and southeastern portions of the Study Area. Other species occurring within this community included cheatgrass and common mediterranean grass. The rubber rabbitbrush association is not considered a sensitive biological resource by CDFW under CEQA. (Dudek, 2025b, p. 24)

3. Nevada Joint fir-Anderson's Boxthorn-Spiny Hop Sage Scrub

Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub or *Ephedra nevadensis-Lycium andersonii-Grayia spinosa* shrubland alliance recognized by the Natural Communities List and the community includes Nevada joint fir, Anderson's boxthorn, and/or spiny hop sage as the dominant or codominant species in the shrub canopy layer. This community has an open to continuous canopy of less than three meters in height. This alliance consists of at least 2 percent absolute cover of *Ephedra nevadensis* in the shrub canopy or at least 30 percent relative cover of Nevada joint fir (*Ephedra nevadensis*), water jacket (*Lycium andersonii*), peach thorn (*L. cooperi*), or spiny hop sage (*Grayia spinosa*). This vegetation community was mapped to the *Ephedra nevadensis-Lycium andersonii* association. Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub alliance is considered a sensitive vegetation community by CDFW under CEQA; however, the *Ephedra nevadensis-Lycium andersonii* association is not considered as sensitive in the California Natural Community List. (Dudek, 2025b, p. 23)

Nevada joint fir-Anderson's boxthorn-spiny hop sage is centrally located within the Study Area surrounded by the Joshua tree woodland vegetation community. Other species found within this association include cattle saltbush (*Atriplex polycarpa*), cheatgrass (*Bromus tectorum*), redstem stork's bill (*Erodium cicutarium*), and common Mediterranean grass (*Schismus barbatus*) all within the herbaceous layer. The area mapped north of the dirt road contained sparse creosote bush (*Larrea tridentata*). (Dudek, 2025b, p. 23)

4. Disturbed Habitat

Although not recognized by the Manual of California Vegetation, Online Edition or the Natural Communities List, disturbed habitat is described in the Draft Vegetation Communities of San Diego County. Disturbed habitat is described as areas generally lacking vegetation due to high levels of existing or historical human disturbance and are no longer recognizable as a native or naturalized vegetation association. Areas mapped as disturbed habitat may include unpaved roads, trails, and graded areas. Vegetation in these areas, if present at all, is usually sparse and dominated by nonnative weedy herbaceous species. This land cover type was mapped along the border of the Study Area and running through the Study Area representing the dirt roads. The southeastern portion of the Study Area was also mapped as disturbed because vegetation removal due to a recent fire was evident in the area. (Dudek, 2025b, p. 24)

5. Urban/Developed

Although not recognized by the Manual of California Vegetation or the Natural Communities List, the urban/developed mapping unit (or developed land) is described in Draft Vegetation Communities of San Diego County. This mapping unit is described as areas supporting human-made structures, including homes, yards, sidewalks, and other highly modified lands supporting structures associated with dwellings or other permanent structures. Vegetation in these areas, if present at all, is typically associated with ornamental landscaping that has been included in the development footprint. Developed lands include the developed roads adjacent to the Study Area and a small portion of the offsite residential properties in the northwest corner of the Study Area. (Dudek, 2025b, p. 24)

B. Wildlife Corridor and Nurseries

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Corridors can also be aquatic resources that provide passage for fish. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as steppingstones for wildlife dispersal. (Dudek, 2025b, p. 30)

On a regional level, the Study Area does not occur within any designated wildlife corridors or habitat linkages identified in the South Coast Missing Linkages analysis conducted by South Coast Wildlands or CDFW's California Essential Habitat Connectivity Project, as shown in the CDFW Biogeographic Information and Observation System (BIOS). On a local level, the Study Area does not have any streams that would provide fish passage and it provides limited connectivity for terrestrial wildlife movement due to the developed lands to the south and west, and due to Sierra Highway and the railroad tracks that parallel it on the east, the fenced Palmdale Regional Airport, and active agricultural fields to the north and east. (Dudek, 2025b, p. 30)

No diagnostic signs of bird rookeries (e.g., numerous nests, whitewash) or large maternal or overwintering bat roosts (e.g., large concentrations of guano or guano odors) were identified in the Study Area and are not expected. The lack of habitat to provide substantial foraging opportunities for

birds on the Project site or in the immediate area make rookeries unlikely. The lack of typical urban roosting habitat (bridges and older buildings with structural deficiencies) makes it unlikely for the Study Area to support native wildlife nursery sites. Shrub vegetation located within and adjacent to the Study Area provides suitable nesting habitat for birds. (Dudek, 2025b, pp. 30-31)

C. Special Status Biological Resources

The potential for special-status plant species to occur within the Study Area was assessed based on known geographic and elevation ranges as well as habitat and soil conditions that are known to support species occurring in the region. Potential for special-status wildlife species to occur within the Study Area was assessed by Dudek based on known geographic ranges, the presence/absence of suitable habitat, and other natural history elements that might predict their occurrence. (Dudek, 2025b, p. 15)

1. Special Status Plants

One special-status plant species, Joshua tree, was observed during the field reconnaissance surveys and subsequently mapped per CDFW standards. Two additional plant species, Mojave monardella (*Monardella exilis*) and crowned muilla (*Muilla coronata*), both California Rare Plant Ranks (CRPR) List 4 species (species with limited distribution), were initially assessed as having a moderate potential to occur in the Study Area due to local records and suitable habitat being present. However, the rare plant surveys conducted in the Study Area by Dudek, conducted after a positive identification of the species in bloom at local reference populations, were negative for the species. (Dudek, 2025b, p. 24)

Western Joshua tree is a candidate for listing as "Threatened" under the California Environmental Species Act (CESA) and afforded the protection of the Act while the California Fish and Game Commission decides if listing the species is warranted. Joshua tree is in the asparagus family (Agavaceae) and typically blooms between April and May but is a conspicuous tree that is identifiable at any time of the year. It is found within Joshua tree woodland, Great Basin grassland and scrub, Mojavean desert scrub, pinyon and juniper woodland, Sonoran desert scrub, and valley and foothill grassland between 1,310 and 6,560 feet amsl. This species occurs on desert flats and slopes in northern extent of Los Angeles County and other counties in southeastern California. (Dudek, 2025b, p. 25)

A total of 561 western Joshua trees were observed within the Study Area, with 543 trees located within the Project site and 18 trees located within the CDFW-required 50-foot survey buffer, as shown in Figure 4.3-2, *Impacts to Western Joshua Tree*. This includes 99 individuals measuring less than one meter in height, 432 individuals measuring between one and five meters in height, and 30 individuals measuring five meters or more in height. Appendix D, Western Joshua Tree Conservation Act Incidental Take Permit Application Package, of *Technical Appendix C,* provides complete details of the Joshua trees that were censused. (Dudek, 2025b, p. 25)

Take of western Joshua tree is defined as any activity that results in the removal of a western Joshua tree, or any part thereof, or impacts the seedbank surrounding one or more western Joshua trees. The western Joshua tree is granted full protection of a threatened species under CESA. Take of any endangered, threatened, candidate species is prohibited, except as authorized by State law (Fish and

Game Code Sections 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., Title 14, Section 786.9). Impacts on western Joshua tree requires a mandatory finding of significance under CEQA (CEQA Guidelines Section 15065). (CDFW, 2025)

2. California Desert Native Plants

Other than western Joshua tree, one desert native plant species was mapped within the Study Area, consisting of six Wiggins' cholla (*Cylindropuntia echinocarpa*) individuals that were observed. This species is a desert cactus that is regulated under the Joshua Tree and Native Desert Vegetation Preservation Ordinance and California Desert Native Plants Act (CDNPA). Although the CDNPA is codified in state law (California Food and Agricultural Code Division 23), enforcement powers and administrative responsibilities are given to the subject County commissioner, sheriff, and board of supervisors as stipulated in Chapter 4 of the CDNPA (Enforcement Powers and Administrative Responsibilities). (Dudek, 2025b, p. 25)

3. Special Status Wildlife Species

No critical habitat for wildlife has been designated within the Study Area by any regulatory authority. One special-status wildlife species was observed by Dudek during the field surveys, loggerhead shrike (*Lanius ludovicianus*), and three additional special-status wildlife have a moderate potential to occur in the Study Area, as summarized in Table 4.3-1, *Special-Status Wildlife Species Present or with a Moderate Potential to Occur in the Study Area*. Habitat assessments conducted in 2024 for Mohave ground squirrel and burrowing owl by Dudek determined that the species could potentially occur; however, focused surveys for the two species conducted in 2025 by Dudek were negative. Crotch's bumble bee (*Bombus crotchii*) is discussed below because it is a candidate for listing under CESA and has a low potential to occur within the Study Area. Desert tortoise (*Gopherus agassizii*) is also discussed below because the species is listed under the federal and state endangered species acts and the Study Area is within the range of the species, but it is not expected to occur within the Study Area. (Dudek, 2025b, p. 25)

Table 4.3-1 Special-Status Wildlife Species Present or with a Moderate Potential to Occur in the Study Area

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Anniella pulchra	northern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation	Moderate potential to occur. Suitable soils are present, and there is a documented occurrence approximately 2.5 miles west, from 2010. There have been no CDFW-documented sitings

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
			and sandy or loose, loamy soils	reported in the vicinity of the Project site for the past 15 years, since 2010; however, there are 2020 iNaturalist records of legless lizard from the nearby Palmdale Regional Airport property.
Anniella spp.	California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Moderate potential to occur. Suitable soils are present, and there is a documented occurrence approximately 2.5 miles west, from 2010. There have been no CDFW-documented sitings reported in the vicinity of the Project site for the past 15 years, since 2010; however, there are 2020 iNaturalist records of legless lizard from the nearby Palmdale Regional Airport property.
Lanius ludovicianus (nesting)	loggerhead shrike	None/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Present. This species was observed onsite during the biological reconnaissance survey conducted by Dudek on February 22, 2024. Additionally, the species was documented by CDFW

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				approximately one mile north, in 2008.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Moderate potential to occur. Suitable habitat is present and there is a historical documented occurrence in the Study Area, from 1964. The nearest recent occurrence is approximately 5.5 miles west, from 2008 in an area of higher elevation. There have been no CDFW-documented sitings reported in the vicinity of the Project site for the past 17 years, site since 2008; there is a 2023 iNaturalist record of Blainville's horned lizard within one mile of the Project site to the south.

Notes: Federal: FT=federally listed as threatened; BCC=Bird of Conservation Concern (USFWS)
State: ST=state listed as threatened; SCE=state candidate for endangered; SSC=Species of Special Concern (CDFW)Source: (Dudek, 2025b, Table 2)

- **Crotch's Bumble Bee**

Crotch's bumble bee is a candidate for listing as "Endangered" under CESA and is afforded the protection of CESA while the California Fish and Game Commission decides if listing the species is warranted. An Incidental Take Permit from CDFW per Section 2081 subdivision (b) of the Fish and Game Code would be necessary should a project take individuals of the species. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. In California, the species inhabits open grassland and scrub habitats. The size of Crotch's bumble bee colonies has not been well documented, but like most other species of bumble bees, the species primarily nests underground. Bumble bees, including Crotch's bumble bee, are generalist foragers and have been reported visiting a wide variety of flowering plants. Since it has a very short tongue, Crotch's bumble bee is best suited

to forage at open flowers with short corollas. The plant families most associated with observations or collections of the species from California include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. Nectar plants known to be visited by Crotch's bumble bee include the genera Asclepias, Chaenactis, Lupinus, Medicago, Phacelia, and Salvia, but it is assumed flowering plants in other genera could also support foraging by this species. (Dudek, 2025b, p. 28)

There are three California Natural Diversity Database (CNDDB) records within 10 miles of the Project, with the most recent being 1971. There are two citizen scientist records from within 10 miles of the Project site. Within the Antelope Valley, almost all the CNDDB records are from the slopes and alluvial fans from the Transverse Range and Tehachapi Mountains and consist of individuals observed primarily foraging, and not nest sites. Based upon the results of the surveys of the Study Area, there are few burrows that could be used for nesting and there are minimal foraging opportunities due to the high prevalence of non-native grasses that dominate the understory. Due to the limited recorded occurrences in the Project region and the limited nesting and foraging opportunities, Dudek determined that Crotch's bumble bee has a low potential to occur as a transient in the Study Area. (Dudek, 2025b, pp. 28-29)

❑ **Desert Tortoise**

Desert tortoise is a federally and state-listed threatened species. The range of the Mohave population of the desert tortoise includes portions of the Mojave Desert and the Colorado Desert in Southern California (parts of Inyo, Kern, Los Angeles, San Bernardino, and Riverside Counties), southern Nevada (Clark, Esmeralda, Nye, and Lincoln Counties), northwestern Arizona (Mohave County), and southwestern Utah (Washington County). The typical habitat for the desert tortoise in the Mojave Desert is creosote bush scrub where precipitation ranges from two to eight inches, with relatively high diversity of perennial plants, and high productivity of ephemeral plants. Throughout most of the Mojave Desert, desert tortoises occur most commonly on gently sloping terrain with sandy gravel soils and where there is sparse cover of low-growing shrubs, which allows for the establishment of herbaceous plants. Soils must be friable enough for digging burrows, but firm enough so that burrows do not collapse. Although populations of desert tortoise are not generally known to inhabit elevations much above 4,000 feet amsl; they occur from below sea level to an elevation of 7,300 feet amsl. Occupied habitat varies from flats and slopes dominated by creosote bush scrub at low elevations to rocky slopes in blackbrush and juniper woodland ecotones at higher elevations. (Dudek, 2025b, p. 29)

The Study Area provides marginal habitat for desert tortoise and no individuals or diagnostic sign of the species (burrows, scat, or carcasses) were observed by Dudek during the reconnaissance, burrowing owl, rare plant, and Mohave ground squirrel surveys. The Study Area is in the far southwestern corner of the desert tortoise's historic range on the northern and eastern edge of Palmdale. The Study Area is isolated from large, connected areas of suitable habitat for the species, and the nearest core population approximately 16 miles to the east-northeast, by Sierra Highway and the railroad tracks that parallel it on the east, the fenced Palmdale Regional Airport, and active agricultural fields. Protocol desert tortoise surveys in 2022 for the Antelope Valley Commerce Center (AVCC) Project, located just southeast of the intersection of Sierra Highway and West Avenue M (approximately 2.4 miles to the

northeast), were negative for individuals or diagnostic sign of the species. Due to lack of diagnostic sign, the presence of only marginal habitat, recent local negative survey results, and physical separation of the Project site from the nearest core population 16 miles away with intervening fenced areas, highways, railroads tracks, and development, desert tortoise is not expected to occur in the Study Area or in the immediate vicinity of the Project site. (Dudek, 2025b, p. 29)

- **Burrowing Owl**

Burrowing owl is a candidate for listing under CESA and a U.S. Fish and Wildlife Service (USFWS) Bird of Conservation Concern. With a relatively wide-ranging distribution throughout the west, burrowing owls are considered to be habitat generalists. In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats. Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils. (Dudek, 2025b, p. 29)

Within 10 miles of the Project, there are 14 CNDDB records of burrowing owl, with the nearest being approximately 1.10 miles to the southwest from 2006 that has been extirpated due to development. The most recent record within 10 miles of the Project is from 2013 and is approximately eight miles to the northwest and is associated with agricultural fields. There are 15 distinct eBird records within 10 miles of the Project and none of the observations were associated with breeding. (Dudek, 2025b, p. 29)

Based upon the negative results of the habitat assessment conducted in April 2024 by Dudek (few appropriately sized burrows, no diagnostic sign of the species, and marginal habitat due to the density of the shrubs) and no individuals or diagnostic sign during the non-breeding season surveys, the species was determined to not be expected breed on the Project site. Surveys conducted during the non-breeding season also found no individuals or diagnostic sign of burrowing owl. However, this species is opportunistic, especially during migration and wintering, and can move onto a site once a suitable burrow is established and is unoccupied. As such, the species has a low potential to occur in the Study Area as a transient. (Dudek, 2025b, p. 30)

- **Mohave Ground Squirrel**

Mohave ground squirrel is a state-listed threatened species. This species' distribution range is restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo Counties. Mohave ground squirrels generally inhabit areas where the soil is friable and sandy or gravelly. Mohave ground squirrels occur in desert scrub habitats dominated by creosote bush and desert saltbush scrub at elevations between 1,800 and 5,000 feet amsl. (Dudek, 2025b, p. 30)

The Study Area was assessed as having suitable habitat for Mohave ground squirrel based upon the presence of vegetation (spiny hop sage) foraged on by the species. No Mohave ground squirrel were captured or identified by sight or signs during the protocol surveys of the Project site conducted in April, May, and June of 2024 as documented in Appendix A of the Biological Resources Technical Report (*Technical Appendix C*). The Project site is located within the southwestern portion of the Mohave ground squirrel range where the population densities have historically been low and entirely

absent from the southwestern portion of the range since at least the mid-1990s. The closest CNDDB occurrence of the species was documented in 1944 approximately 0.52 miles south of the Project in an area that is now developed. The most recent occurrence was documented in 1984 approximately 4.71 miles north of the Project site. This site was re-trapped in 2005 with negative results before it was developed, and the area is now developed. The closest MGS core population to the Project, described in the CDFW Mohave Ground Squirrel Conservation Strategy, is the Edwards Air Force Base core population area located approximately 26 miles northeast of the Project site. (Dudek, 2025b, p. 30)

4. Jurisdictional Resources

No potential jurisdictional waters were observed during the reconnaissance surveys nor were any aquatic features identified during the desktop review of aerial imagery, the National Hydrography Dataset and Watershed Boundary Dataset, and the USFWS National Wetland Inventory. Therefore, there is no reasonable potential for jurisdictional waters or wetlands to be in the Project's Study Area, and a formal jurisdictional delineation was not required. (Dudek, 2025b, p. 31)

5. Local, Regional, or State Habitat Conservation Plans

The Project is not located within any formally adopted Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The Project is within the Draft West Mojave Plan area. The Bureau of Land Management (BLM) issued a Record of Decision for the West Mojave Plan in 2006, although the West Mojave Plan has not been formally adopted. The West Mojave Plan applies to projects on federal land, therefore, the proposed Project would not be processed under it. (Dudek, 2025b, p. 31)

4.3.2 REGULATORY SETTING

A. Federal Regulations

1. Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the USFWS for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. FESA is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and to provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to take any listed species; "take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. (Dudek, 2025b, p. 5)

FESA allows for the issuance of incidental take permits for listed species, which is generally available for projects that also require other federal agency permits or other approvals, and provides for the approval of habitat conservation plans on private property without any other federal agency

involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species. (Dudek, 2025b, p. 5)

2. Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50, Section 10.13 of the Code of Federal Regulations. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the U.S. Fish and Wildlife Service. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50, Section 20 of the Code of Federal Regulations. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors). On December 22, 2017, the Department of Interior issued a legal opinion (M-Opinion 37050) that interpreted the above prohibitions as only applying to direct and purposeful actions of which the intent is to kill, take, or harm migratory birds; their eggs; or their active nests. Incidental take of birds, eggs, or nests that are not the purpose of such an action, even if there are direct and foreseeable results, was not prohibited. On January 7, 2021, the USFWS published a final rule (the January 7th rule) that codified the previous administration's interpretation, which after further review was determined to be inconsistent with the majority of relevant court decisions and readings of the MBTA's text, purpose, and history. On May 7, 2021, the USFWS published a proposed rule to revoke the January 7th rule, which would result in a return to implementing the statute as prohibiting incidental take. On July 19, 2021, the USFWS announced the availability of two revised economic analysis documents for public review that evaluate the potential for the proposed rule to impact small entities, including businesses, governmental jurisdictions, and other organizations. The public review period on these documents ended on August 19, 2021. A final rule revoking the January 7th rule was published on October 4, 2021, and went into effect on December 3, 2021. In their summary of the October 4, 2021 final rule, the USFWS explained that "the immediate effect of this final rule is to return to implementing the MBTA as prohibiting incidental take and applying enforcement discretion, consistent with judicial precedent and longstanding agency practice prior to 2017" (86 FR 54642). (Dudek, 2025b, pp. 5-6)

B. State Regulations

1. California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050–2068) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA and is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from the CDFW under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. To comply with Section 2081, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of mitigation implementation, and monitoring of mitigation measures. (Dudek, 2025b, p. 7)

If a species is listed by both the federal ESA and CESA, CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA.

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement.

- **Western Joshua Tree**

On October 21, 2019, the California Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list western Joshua tree (*Yucca brevifolia*). On November 1, 2019, the Commission referred the petition to CDFW for evaluation. CDFW evaluated the scientific information presented in the petition and other relevant information possessed by CDFW at the time of review and prepared a report for submittal to the Commission. The report states that CDFW recommended that the Commission accept the petition for further consideration of western Joshua tree under the CESA. On September 22, 2020, the Commission accepted the candidacy proposal for western Joshua tree, effective October 9, 2020. When a plant or wildlife species is granted candidacy under the CESA, the species is given the same protection as a threatened or endangered species while the Commission evaluates whether formal listing as threatened or endangered under the CESA is warranted. (Dudek, 2025b, pp. 7-8)

In listing western Joshua tree as a candidate species under CESA, the Commission directed CDFW staff to evaluate whether the species should be formally listed under CESA. In March 2022, CDFW staff presented its findings to the Commission and recommended against the listing, citing the species widespread distribution and lack of data regarding the extent to which climate changes are expected to affect the species. This information was presented to the Commission on June 15–16, 2022. The Commission voted on the proposed listing at this meeting, but the vote resulted in a 2–2 tie. The Commission discussed western Joshua tree's listing status at its October 12–13, 2022 meeting; however, it was decided at this meeting to extend Joshua tree's candidate status discussion until their February 23, 2023, meeting, which was anticipated to be the final meeting before a listing decision was made. On July 1, 2023, the Western Joshua Tree Conservation Act (WJTCA) was passed. While western Joshua tree is a candidate species, take for western Joshua tree can be received through payment of pre-determined mitigation fees. (Dudek, 2025b, p. 8)

The WJTCA introduces a streamlined permitting framework that applies to specific development activities and mandates the collection of mitigation fees. These fees are intended to facilitate the

acquisition and preservation of western Joshua tree habitat, as well as to support conservation measures aimed at safeguarding the western Joshua tree. The underlying goal is to counterbalance the adverse impacts on western Joshua trees resulting from authorized projects and to promote species conservation on a landscape scale. (Dudek, 2025b, p. 8)

Under the WJTCA, CDFW is authorized to perform the following key functions:

- Issue permits for the trimming and removal of hazardous or deceased western Joshua trees.
- Grant incidental take permits for western Joshua trees, contingent upon the fulfillment of specific conditions.
- Establish agreements with counties or cities to delegate limited authority for the issuance of the aforementioned permits, provided that predetermined conditions are met. *(Dudek, 2025b, p. 8)*

Furthermore, the WJTCA instructed CDFW to develop a comprehensive conservation plan for the western Joshua tree by the conclusion of the year 2024. The California Fish and Game Commission released the draft Western Joshua Tree Conservation Plan in December 2024 for public comment. . The final Western Joshua Tree Conservation Plan was approved by the Commission on August 13, 2025. (Dudek, 2025b, p. 8)

The WJTCA institutes two categories of mitigation fees: reduced fees and standard fees, depending on the geographical location, as defined in the California Department of Fish and Game Code (Section 1927). The WJTCA empowers the CDFW to issue permits for the incidental take of one or more western Joshua trees, subject to compliance with stipulated conditions. Permit holders may opt to remit specified fees in lieu of undertaking mitigation activities. Additionally, the WJTCA authorizes the CDFW to issue permits for the removal of deceased western Joshua trees and the trimming of live western Joshua trees under specific circumstances. Notably, all in-lieu fees collected under the WJTCA are directed to the Western Joshua Tree Conservation Fund, with the explicit purpose of allocation to the CDFW. These funds are designated exclusively for the acquisition, conservation, and management of western Joshua tree conservation lands, as well as the execution of other initiatives designed to safeguard the western Joshua tree. (Dudek, 2025b, p. 8)

2. California Fish and Game Code

The CDFW administers the California Fish and Game Code. Particular sections of the Code are applicable to natural resource management.

❑ Fully Protected Species

Sections 3505, 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protections for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or

licenses that authorize the "take" of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of the CDFW to maintain viable populations of all native species. Toward that end, the CDFW has designated certain vertebrate species as Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. (Dudek, 2025b, p. 9)

❑ **California Native Plant Protection Act**

The Native Plant Protection Act of 1977 (see Section 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the act as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and a project proponent. (Dudek, 2025b, p. 10)

❑ **Nesting Birds**

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. (Dudek, 2025b, p. 10)

3. California Desert Native Plants Act

The purpose of the California Desert Native Plants Act (CDNPA) is to protect certain species of California desert native plants (i.e., species in the families Agavaceae, Cacti, Fouquieriaceae; species in the genera Prosopis and Parkinsonia (*Cercidium*); and the species (*Acacia greggii, Atriplex hymenelytra, Dalea spinosa, and Olneya tes*ota) from unlawful harvesting. The CDNPA only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. Within these counties, the CDNPA prohibits the harvest, transport, sale, or possession of specific native desert plants unless a person has authorization from the county sheriff or commissioner and the county will charge a fee to the project proponent. (Dudek, 2025b, p. 10)

4. California Porter-Cologne Water Quality Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The

Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous Non-Point Source (NPS)-related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions.

The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. A number of statewide water quality control plans have been adopted by the State Water Board. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by the EPA, when approved they become water quality standards under the CWA.

C. Regional Plans

1. West Mojave Plan

The West Mojave Plan was envisioned to develop management strategies for the Mojave desert tortoise ("desert tortoise"), Mohave ground squirrel, and more than 100 other sensitive plants and animals. The planning area encompassed approximately 9.3 million acres in Inyo, Kern, Los Angeles, and San Bernardino Counties, including approximately 3.3 million acres of public lands administered by the BLM, approximately three million acres of private lands, and approximately 102,000 acres administered by the State of California. The remaining land is military land administered by the Department of Defense. The West Mojave Plan was proposed to conserve those species throughout the western Mojave Desert, while streamlining the West Mojave Plan for compliance with the regulatory requirements of FESA and the CESA. Only the BLM elements of the West Mojave Plan were adopted, resulting in a number of amendments to BLM's California Desert Conservation Area (CDCA) Plan. In 2019, the BLM amended the CDCA plan for the West Mojave Route Network Project to address motor vehicle access, recreation, and livestock grazing elements in the West Mojave Planning Area. (Dudek, 2025b, p. 7)

D. Local Plans, Policies, and Regulations

1. City of Palmdale General Plan

The Conservation Element of the City's General Plan (Palmdale 2045) outlines the goals and policies related to conservation of natural and cultural resources in Palmdale. The goal applicable to the Project site's known or potentially present biological resources is Goal CON-1, aimed at protecting Significant Ecological Areas in and around the City, including, but not limited to, sensitive flora and fauna habitat areas. (City of Palmdale, 2023, p. 291)

2. Joshua Tree and Native Desert Vegetation Preservation

On December 15, 2020, the City of Palmdale issued an Urgency Ordinance Amending Chapter 14.04 of the Palmdale Municipal Code (Joshua Tree and Native Desert Vegetation Preservation) to require compliance with the California Endangered Species Act (CESA). This municipal code seeks to protect and preserve desert vegetation, and particularly Joshua trees, so as to retain the unique natural desert aesthetics in some areas of the city. Desert vegetation consists of California juniper (Juniperus californica) and other living plants identified pursuant to the California Desert Native Plants Act as protected or designated on any state or federal rare and endangered species list. (Dudek, 2025b, p. 11)

4.3.3 BASIS FOR DETERMINING SIGNIFICANCE

Section IV. of Appendix G to the CEQA Guidelines addresses typical adverse effects to biological resources, and includes the following threshold questions to evaluate the Project's impacts to biological resources:

a. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional*

plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;*

c. *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

d. *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*

e. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;*

f. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

The evaluation of whether or not an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or animal. Impacts may be important locally because they result in an adverse alteration of existing site conditions but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact and the offsetting benefits of mitigation are the primary determinants of whether or not that impact can be mitigated to a less-than-significant level. (Dudek, 2025b, p. 34)

4.3.4 Impact Analysis

Both direct and indirect impacts on biological resources are evaluated. Direct permanent impacts refer to the absolute and permanent physical loss of a biological resource due to clearing, grading, and/or construction of structures, which can be determined in four ways: (1) permanent loss of vegetation communities, land covers, and general wildlife and their habitat; (2) permanent loss of or harm to individuals of special-status plant and wildlife species; (3) permanent loss of suitable habitat for special-status species; and (4) permanent loss of wildlife movement and habitat connectivity. (Dudek, 2025b, p. 33)

Direct temporary impacts refer to a temporal loss of vegetation communities and land covers resulting from vegetation and land cover clearing. The main criterion for direct temporary impacts is that impacts would occur for a short period of time and would be reversible. Areas currently supporting native vegetation temporarily disturbed by construction activities would be restored and revegetated with a native species mix similar to that which existed prior to disturbance following completion of work in the area such that full biological function can be restored. Areas not currently supporting native

vegetation would be adequately restored to prevent adverse effects such as erosion or establishment of invasive species following construction. (Dudek, 2025b, p. 33)

Indirect impacts are reasonably foreseeable effects caused by Project implementation on remaining or adjacent biological resources outside the direct construction disturbance zone that may occur during construction (i.e., short-term construction related indirect impacts) or later in time as a result of the development (i.e., long-term, or operational, indirect impacts). Indirect impacts may affect areas within the defined Study Area, but outside the construction disturbance zone. Indirect impacts include short-term effects immediately related to construction activities and long-term or chronic effects related to the human occupation of developed areas (i.e., development related long-term effects) that are adjacent to naturalized areas. (Dudek, 2025b, p. 33)

For the Project, it is assumed that the potential indirect impacts resulting from construction activities include fugitive dust from earthmoving activities, accidental leaks or spills from construction equipment, noise from construction activities, and general human presence that may temporarily disrupt species and habitat vitality, as well construction-related soil erosion and runoff that could affect downstream resources. (Dudek, 2025b, p. 33)

Threshold 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?***

A. Direct Impacts

1. Special Status Plant Species

One listed special-status plant species (i.e., western Joshua Tree) was detected within the Project site. The Project would have significant impacts on western Joshua Tree absent mitigation or avoidance. Plant species that are not considered special-status but are protected under the locally-enforced CDNPA (i.e., Wiggins' cholla) are discussed under Threshold e. (Dudek, 2025b, p. 35)

❑ Western Joshua Tree

Western Joshua tree, a candidate for state listing under CESA, would be directly impacted by the Project. Implementation of the Project would result in direct impacts to 543 western Joshua trees. All ground-disturbing activities are considered permanent impacts to western Joshua trees. Direct impacts to western Joshua tree would be significant absent mitigation under CEQA. Appendix D, Western Joshua Tree Conservation Act Incidental Take Permit Application Package, of the Biological Resources Technical Report (*Technical Appendix C*) provides complete details of the Joshua trees that were censused. Specifically, the Project would result in direct impacts to 29 Joshua trees that are five meters or greater in height, 416 trees one meter or greater but less than five meters in height, and 98 trees less than one meter in height. (Dudek, 2025b, p. 35)

Based on the WJTCA Fish and Game Code Section 1927.3 requires the applicant to obtain an incidental take permit (ITP) from CDFW and mitigate by paying the statutorily prescribed fees to the CDFW. Trees located in the area described in Fish and Game Code Section 1927.3 (e) are in the reduced fee area; therefore, impacts to western Joshua tree can be mitigated on a per-tree basis as follows:

- five meters or greater in height - $1,000
- one meter or greater but less than 5 meters in height - $200
- less than one meter in height - $150

As required by Mitigation Measure BIO MM-1 (Western Joshua Tree Incidental Take Permit), mitigation for direct impacts to 543 western Joshua trees, their seed bank, and associated habitat would be fulfilled through off-site conservation of western Joshua trees through a payment of fees consistent with the Western Joshua Tree Conservation Act. Furthermore, the implementation of BIO MM-2 (Designated Biologist Authority) gives the Project's designated biologist the authority to stop work if construction is not compliant with this CEQA document. MM-BIO-3 (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the Project footprint. MM-BIO-4 (Education Program) would provide construction personnel with training related to special-status plants that could potentially occur on or adjacent to the impact footprint. MM-BIO5 (Construction Monitoring Notebook) provides for documentation that the education program was administered to applicable personnel. MM-BIO-6 (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to special-status plants that are outside the permitted Project footprint. (Dudek, 2025b, pp. 35-36)

Therefore, implementation of MM-BIO-1 (Western Joshua Tree Incidental Take Permit), MM-BIO-2 (Designated Biologist Authority), MM-BIO-3 (Compliance Monitoring), MM-BIO-4 (Education Programs), MM-BIO-5 (Construction Monitoring Notebook), and MM-BIO-6 (Delineation of Property Boundaries) would reduce direct impacts to western Joshua trees to less than significant. (Dudek, 2025b, p. 36)

2. Special Status Wildlife

Direct impacts can potentially occur to special-status wildlife species from impacts to habitat and impacts to the species from injury or mortality of individuals from construction activities. The Project could result in significant, direct impacts to four special-status wildlife species that were observed or have a moderate potential to occur within the Study Area: northern California legless lizard, California legless lizard, Blainville's horned lizard, and loggerhead shrike. Additionally, the potential for direct impacts to two special-status species that have a low potential to occur, Crotch's bumble bee and burrowing owl, are analyzed herein due their candidate for State listing status. Potential direct impacts to these five special status species are detailed below. Focused surveys conducted for Mohave ground squirrel were negative and desert tortoise has no reasonable potential to occur; therefore, impacts to these species will not be analyzed further. (Dudek, 2025b, p. 37)

❑ **Crotch's Bumble Bee**

Much of the Project site understory is dominated by non-native vegetation; however, there are floral resources that could support Crotch's bumble bee foraging. Implementation of the Project would result in permanent direct impacts to Crotch's bumble bee through the removal of potentially suitable foraging habitat. Abundant suitable habitat, including foraging and nesting resources, is present in the Project vicinity, including Palmdale Regional Airport and Edward Air Force Base. These areas will continue to provide habitat opportunities for this species. As a result, the loss of suitable habitat would not substantially reduce the habitat for the species and would not cause the species population to drop below self-sustaining levels; therefore, direct impacts resulting from the loss of habitat for Crotch's bumble bee would be less than significant. (Dudek, 2025b, p. 38)

Crotch's bumble bee is a highly mobile species so direct impact to individuals would only be expected due to impacts to a nest. Because Crotch's bumble bee typically nests underground, individuals would be highly vulnerable to injury and mortality during construction, which could crush nests, if present on site. Although there are few nesting opportunities (i.e., small mammal burrows) on the Project site, harm to or the loss of a nest during construction could be significant, absent mitigation. Potential significant direct impacts to Crotch's bumble bee nests would be avoided and reduced to less than significant with the implementation of BIO MM-2 (Designated Biologist Authority), BIO MM-3 (Compliance Monitoring), BIO MM-4 (Education Program), BIO MM-5 (Construction Monitoring Notebook), and BIO MM-10 (Crotch's Bumble Bee Pre-Construction Surveys). BIO MM-10 (Crotch's Bumble Bee Pre-Construction Surveys) would require pre-construction habitat assessments and focused surveys to identify any Crotch's bumble bee nest(s) present within the impact footprint. The measure would require no-impact buffers to be established around nests, thereby avoiding potential direct impacts to Crotch's bumble bee resulting from the loss of individuals. Accordingly, implementation of BIO MM-2, BIO MM-3, BIO MM-4, BIO MM-5, and BIO MM-10 would reduce potential direct impacts to Crotch's Bumble to less than significant. (Dudek, 2025b, p. 38)

❑ **Northern California Legless Lizard, California Legless Lizard, and Blainville's Horned Lizard**

Direct impacts could occur to northern California legless lizard, California legless lizard, and Blainville's horned lizard if individuals occur within the Project's ground disturbance area during construction. BIO MM-11 (Special-Status Wildlife Relocation Plan) provides a methodology for pre-construction surveys and relocation of individuals. In addition, implementation of BIO MM-2 (Designated Biologist Authority), BIO MM-3 (Compliance Monitoring), BIO MM-4 (Education Programs), and BIO MM-5 (Construction Monitoring Notebook) would reduce potential direct impacts to less than significant. (Dudek, 2025b, p. 38)

❑ **Burrowing Owl**

Direct impacts could occur to burrowing owl if transient individuals occur within the Study Area during construction. Construction activities could cause disruptions to breeding activities and mortality or injury to individuals in burrows if present within the disturbance footprint during construction during either the breeding or non-breeding seasons. Harm to or loss of individuals because of construction

activities would be potentially significant absent mitigation under CEQA. Pursuant to the California Fish and Game Code and MBTA, a pre-construction survey in compliance with the Staff Report on Burrowing Owl Mitigation would be necessary to confirm the presence or absence of burrowing owl so take of owls or active owl nests can be avoided if present. BIO MM-12 (Pre-Construction Burrowing Owl Survey and Potential Incidental Take Permit) would require pre-construction surveys for burrowing owl shall be conducted in areas supporting potentially suitable habitat with the first survey no less than 30 days prior to the start of construction activities and the last one within three days of start of construction. Should burrowing owl be identified during the survey, the Project Applicant would be required to notify the City and CDFW and a 500-foot no-work buffer shall be established around the location of the burrow. In addition, implementation of BIO MM-2 (Designated Biologist Authority), BIO MM-3 (Compliance Monitoring), BIO MM-4 (Education Programs), and BIO MM-5 (Construction Monitoring Notebook) would reduce potential direct impacts to less than significant. Accordingly, implementation of BIO MM-2, BIO MM-4, BIO MM-5, and BIO MM-12 would reduce potential direct impacts to burrowing owl to less than significant. (Dudek, 2025b, pp. 38-39)

- **Loggerhead Shrike**

The Study Area supports suitable loggerhead shrike foraging and nesting habitat (e.g., open desert scrub with scattered shrubs). Additionally, one foraging loggerhead shrike observation was made on the Project site in 2024. Implementation of the Project could result in direct impacts to loggerhead shrike through the removal of active nests. To avoid potential direct impacts to nesting loggerhead shrike, vegetation removal activities would be conducted between September 1 and January 31, which is outside the general bird nesting season (February 1 through August 31). If vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal to ensure that no occupied nests are present. This requirement is outlined in BIO MM-13 (Pre-Construction Nesting Bird Survey and Avoidance) Accordingly, implementation of BIO MM-13 would reduce potential direct impacts to loggerhead shrike to less than significant. (Dudek, 2025b, p. 39)

- **Nesting Migratory Birds and Raptors**

The Study Area contains trees, shrubs, and other vegetation suitable for birds of prey (raptors) and other avian species to nest on site. Native nesting bird species with potential to occur within the Study Area are protected by California Fish and Game Code Sections 3503 and 3503.5, and by the federal MBTA (16 USC 703–711). In particular, California Fish and Game Code Section 3503 provides that it is unlawful to take, possess, or needlessly destroy the active nests or eggs of any bird in California; Section 3503.5 protects all raptors and their eggs and active nests; and the MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of native migratory bird species throughout the United States. Currently, California considers any nest that is under construction or modification, or is supporting eggs, nestlings, or juveniles, as "active." Therefore, impacts to nesting migratory birds and raptors, if present, would be significant absent mitigation under CEQA. (Dudek, 2025b, p. 39)

To ensure compliance with the California Fish and Game Code and MBTA and to avoid potential impacts to nesting birds, vegetation removal activities would be conducted between September 1 and

January 31, outside the general bird nesting season (February 1 through August 31, depending on the species), and if vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal to ensure that active nests are protected. This requirement is outlined in BIO MM-13 (Pre-Construction Nesting Bird Survey and Avoidance. Accordingly, implementation of BIO MM-13 would reduce potential direct impacts to nesting migratory birds and raptors to less than significant. (Dudek, 2025b, pp. 39-40)

B. Indirect Impacts

1. Special Status Plant Species

❑ **Western Joshua Tree**

In total, 18 western Joshua trees were mapped within the 50-foot buffer outside of the Project footprint and would be preserved in place. The Project would result in indirect impacts to one Joshua tree that is five meters or greater in height, 16 trees one meter or greater but less than five meters in height, and one tree less than one meter in height. Although these trees would not be directly impacted, implementation of the Project may result in indirect impacts to these western Joshua trees. (Dudek, 2025b, p. 36)

Construction-related, short-term indirect impacts may include dust accumulation on Joshua trees, stormwater erosion and sedimentation, chemical spills, wildfire risk, and other inadvertent spillover impacts outside of the construction footprint. Potential long-term (post-construction) indirect impacts from Project-related operation and maintenance activities may include effects of herbicides, changes in water quality, spread of invasive plants, and accidental chemical spills. Indirect impacts to Joshua trees would be potentially significant absent mitigation. (Dudek, 2025b, p. 36)

To reduce fugitive dust and its resulting air pollutant effects from Project construction, the Project's construction contractors would employ dust control measures in accordance with the Mojave Desert Air Quality Management District's (AQMDs) Rules 401 and 403.2, which limit the amount of fugitive dust that is permitted to be generated during construction. (Dudek, 2025b, p. 36)

A Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented to prevent construction related pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and other pollutants from moving off site and into receiving waters. Best management practice (BMP) categories employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a SWPPP will help to avoid and minimize the potential effects of stormwater erosion during construction. (Dudek, 2025b, p. 36)

Upon completion of Project construction, the Project would not facilitate wildfire spread or exacerbate wildfire risk due to the low ignitability of the proposed concrete-tilt-up structure and the site's concrete parking lot surfaces, and implementation of fire-resistant and irrigated landscaping. Additionally, to reduce the spread of invasive plant species, BIO MM-7 (Invasive Plant Management) landscape plants

within 200 feet of native vegetation communities shall not be on the most recent version of the Cal-IPC California Invasive Plant Inventory. Further, given that surrounding off-site fuels consist of moderately spaced vegetation, wildfires in the immediate surrounding area are not common, and it is unlikely that the Project site would be exposed to the uncontrolled spread of a wildfire. (Dudek, 2025b, pp. 36-37)

Additionally, BIO MM-8 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. Implementation of BIO MM-9 (Herbicides) would limit herbicide use to instances where hand or mechanical efforts are infeasible and would only be applied when wind speeds are less than 7 miles per hour to prevent drift into offsite special-status plants. Thus, implementation of BIO MM-8 (Hazardous Waste) and BIO MM-9 (Herbicides) would help to avoid and minimize indirect impacts to special-status plants from any construction-related chemical spills or improper application of herbicides. (Dudek, 2025b, p. 37)

Furthermore, the implementation of BIO MM-2 (Designated Biologist Authority) gives the Project's designated biologist the authority to stop work if construction is not compliant with this CEQA document. BIO MM-3 (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the Project footprint. BIO MM-4 (Education Program) would provide construction personnel with training related to special-status plants that could potentially occur on or adjacent to the impact footprint. BIO MM-5 (Construction Monitoring Notebook) provides for documentation that the education program was administered to applicable personnel. BIO MM-6 (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to special-status plants that are outside the permitted Project footprint. Thus, implementation of BIO MM-2 through BIO MM-6 would help to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint. Accordingly, implementation of BIO MM-2 through BIO MM-9 would reduce potential indirect impacts to western Joshua tree to less than significant. (Dudek, 2025b, p. 37)

2. Special Status Wildlife

Indirect impacts to special-status wildlife species are those that occur during construction to species present near the site, but not within the construction zone. Such impacts include fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat, or that can result in disruption of bird nesting and abandonment of nests; increased human presence, which can also disrupt daily activities of wildlife and cause them to leave an area; generation of trash, such as food packaging and cigarette butts, and debris from construction-related materials, which can degrade wildlife habitat and can attract nuisance and pest species; night-time lighting, which can disrupt the activity patterns of nocturnal species, including many mammals and some birds, amphibians, and reptiles; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Implementation of the Project could result in significant indirect impacts to special-status wildlife

species absent mitigation. BIO MM-2 (Designated Biologist Authority), BIO MM-3 (Compliance Monitoring), BIO MM-4 (Education Program), and BIO MM-5 (Construction Monitoring Notebook) would require that all workers complete a Worker Environmental Awareness Program (WEAP) training and would require ongoing biological monitoring and compliance with all biological resource mitigation. BIO MM-8 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from Project construction and to minimize adverse air quality impacts, the Project would employ dust mitigation measures in accordance with the Mojave Desert AQMDs Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction. BI0 MM-14 (Trash and Debris) would require trash and debris to be removed regularly and would require animal-resistant trash receptacles to avoid attracting urban-related predator species. (Dudek, 2025b, p. 40)

❑ **Loggerhead Shrike**

Indirect impacts to loggerhead shrike could occur due to the loss of foraging and potential nesting habitat. However, the removal of habitat would not significant due to abundant suitable habitat present in the Project region, which includes the undeveloped portions of Palmdale Regional Airport and Edwards Air Force Base. These off-site areas within the regional range of the species will continue to provide habitat opportunities for loggerhead shrike. As a result, the loss of suitable habitat would not substantially reduce the habitat for the species and would not cause the species population to drop below self-sustaining levels. (Dudek, 2025b, p. 39)

Threshold 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 Wildlife or U.S. Fish and Wildlife Service?***

A. Jurisdictional Resources

According to the National Wetland Inventory dataset, there are no riparian features mapped within the Study Area. (Dudek, 2025b, p. 19) Therefore, no impact would occur.

B. Sensitive Natural Communities

1. Direct Impacts

The Project site contains two sensitive vegetation communities: Joshua tree woodland and Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub. Approximately 60.78 acres of these two communities would be directly impacted by the Project. Direct impacts to these sensitive vegetation communities would be significant absent mitigation under CEQA. Joshua trees are present in each community. As such BIO MM-1 (Western Joshua Tree Incidental Take Permit) would be expected to mitigate for the loss of the communities to a level of less than significant. (Dudek, 2025b, p. 40)

Furthermore, the implementation of BIO MM-2 (Designated Biologist Authority) gives the Project's designated biologist the authority to stop work if construction is not compliant with this CEQA document. BIO MM-3 (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the Project footprint. BIO MM-4 (Education Program) would provide construction personnel with training related to special-status plants that could potentially occur on or adjacent to the impact footprint. BIO MM-5 (Construction Monitoring Notebook) provides for documentation that the education program was administered to applicable personnel. BIO MM-6 (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to special-status plants that are outside the permitted Project footprint. Therefore, implementation of BIO MM-1 through BIO MM-6 would reduce potential direct impacts to Joshua tree woodland and Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub to less than significant. (Dudek, 2025b, p. 41)

2. Indirect Impacts

Indirect impacts to sensitive vegetation communities are similar to those identified for Joshua tree in threshold a. Accordingly, implementation of BIO MM-2 through BIO MM-9 would reduce potential indirect impacts to Joshua tree woodland and Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub to less than significant. (Dudek, 2025b, p. 41)

Threshold 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?

A. Direct Impacts

No jurisdictional features were observed on the Project site. Nor were any aquatic features identified during the desktop review of aerial imagery, the National Hydrography Dataset and Watershed Boundary Dataset, and the USFWS National Wetland Inventory. As such, the Project would have no impacts to jurisdictional features because no such features are present. (Dudek, 2025b, p. 41)

B. Indirect Impacts

Construction-related (short-term) indirect impacts may include inadvertent spillover impacts outside of the construction footprint, chemical spills, and stormwater erosion and sedimentation. These potential short-term or temporary indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA. (Dudek, 2025b, p. 42)

BIO MM-2 (Designated Biologist Authority) gives the Project's designated biologist the authority to stop work if construction is not compliant with this CEQA document. BIO MM-3 (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts within the Project footprint. BIO MM-4 (Education Program) would provide construction personnel with training related to waters of the state that are present on and adjacent to the impact footprint. BIO MM-5 (Construction Monitoring Notebook) provides for

documentation that the education program was administered to applicable personnel. BIO MM-6 (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the Project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to waters of the state that are outside the permitted Project footprint, if applicable. Thus, implementation of BIO MM-2 through BIO MM-6 would enable the Project to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint. (Dudek, 2025b, p. 42)

BIO MM-8 (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. Thus, implementation of BIO MM-8 (Hazardous Waste) would help to avoid and minimize impacts to waters of the state from any construction-related chemical spills. (Dudek, 2025b, p. 42)

In addition, a SWPPP would be prepared and implemented to prevent construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. BMP categories employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a SWPPP will help to avoid and minimize the potential effects of stormwater erosion during construction. (Dudek, 2025b, p. 42)

Post-construction (long-term) indirect impacts from operations and maintenance activities may include changes in water quality and accidental chemical spills. These potential long-term indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA. (Dudek, 2025b, p. 42)

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials; trash and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with CALGreen requirements (CCR, Title 24, Part 11), Project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to jurisdictional aquatic resources due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs. (Dudek, 2025b, p. 42)

As discussed above, implementation of BIO MM-2 through BIO MM-6, and BIO MM-8, SWPPP, low-impact-development features, BMPs, and CALGreen requirements would reduce potential indirect (short-term and long-term) impacts to jurisdictional aquatic resources to less than significant. (Dudek, 2025b, pp. 42-43)

Threshold 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?***

The Project site does not function as a wildlife corridor or habitat linkage and does not occur within any designated wildlife corridors of habitat linkages. Direct or indirect impacts to wildlife corridors and habitat connectivity are not anticipated; and would therefore, be less than significant.

As discussed in the analysis for Threshold (a), the Study Area contains trees, shrubs, and other vegetation suitable for birds of prey (raptors) and other avian species to nest on site. The loss of an active migratory bird nest, including nests of common species, would be considered a violation of the MBTA and Sections 3503, 3503.5, and 3513 of California Fish and Game Code. The MBTA and California Fish and Game Code prohibits the taking of migratory birds, nests, and eggs. The potential loss of an active nest would be considered adverse but not significant because the impact does not meet the significance criteria. However, BIO MM-2 has been included to address the time frame in which construction could occur to avoid active nests and includes a requirement for pre-construction surveys and avoidance of active nests. With implementation of Mitigation Measure BIO MM-13, the direct and cumulatively considerable impacts of the Project on migratory birds protected by the MBTA would be less than significant.

Threshold e:	***Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Prior to the initiation of construction, the Project Applicant shall obtain the necessary permits, tags, and/or seals, and shall pay the appropriate fees for removal of any individuals of a species protected by the California Desert Native Plant Protection Act. This includes six Wiggin's cholla. Implementation of BIO MM-15 (Desert Native Plants Removal Permit) requires compliance with the CDNPA. (Dudek, 2025b, p. 43)

The Conservation Element of the City's General Plan includes Goal CON-1, which is applicable to the Project and aimed at protecting Significant Ecological Areas in and around the City, including, but not limited to, sensitive flora and fauna habitat areas. Specifically, Policy CON-1.1 is aimed at local compliance with the California Endangered Species Act and the Federal Endangered Species Act (ESA). Policy CON-1.2 relates to enforcement of the City's Native Vegetation Ordinance to protect western Joshua trees and Juniper trees. Policy CON-1.3 requires implementation of the West Mojave Plan for protection of desert tortoise and Mohave ground squirrel. (City of Palmdale, 2023, pp. 291-292) Other Conservation Element policies for the protection of biological resources do not apply to the Project, as the Project site is not in a mapped Significant Ecological Area, does not contain riparian areas or wetlands and is not targeted for open space preservation.

PMC Chapter 14.04, Native Desert Vegetation Preservation, is designed to protect western Joshua trees and California Juniper trees in the City. As discussed above, the Project would result in direct impacts to 29 Joshua trees that are five meters or greater in height, 416 trees one meter or greater but less than

five meters in height, and 98 trees less than one meter in height. (Dudek, 2025b, p. 35) Impacts to the western Joshua tree would be significant on a direct and cumulatively considerable basis. Thus, mitigation is required. An Endangered Species Act Section 10(a)(1)(B) ITP or Western Joshua Tree Conservation Act ITP would be required for impacts to Joshua trees. Implementation of BIO MM-1 would reduce impacts to western Joshua trees to a less than significant level.

There are no additional biological resources on the Project site that are separately protected by local policies or ordinances.

Threshold 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?

The Project is not located within any formally adopted NCCP or HCP. The Project is within the Draft West Mojave Plan area. The BLM issued a Record of Decision for the West Mojave Plan in 2006, although the West Mojave Plan has not been formally adopted. The West Mojave Plan applies to projects on federal land; therefore, the Project would not be processed under it. Additionally, the Project would not conflict with the conservation criteria associated with the West Mojave Plan

Because implementation of the Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, no impact would occur as a result of implementation of the Project; thus, no mitigation is required.

4.3.5 Cumulative Impact Analysis

This cumulative impact analysis for biological resources considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City. As noted in Subsection 4.3.1, the Project is located within the Mojave Desert, which is a region containing the urban areas of Palmdale and Lancaster, rural residential, desert plains, dry lakebeds, and scattered mountains.

Candidate, Sensitive, or Special Status Species

The Project site contains two sensitive vegetation communities – Joshua tree woodland and Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub. Implementation of the Project would impact 60.78 acres of these communities. Impacts would be significant and mitigation is provided. The goal of mitigation is to ensure no net loss of habitat following implementation of the Project; this would also apply to all other cumulative projects. When issuing an ITP, all federal agencies, including the USFWS, must ensure that their activities are "not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species" (16 USC 1536[a]). Enforcement of the FESA is administered by the USFWS.

Due to the limited recorded occurrences in the Project region and the limited nesting and foraging opportunities, Crotch's bumble bee has a low potential to occur as a transient in the Study Area.

Therefore, the Project would not contribute to a substantial adverse cumulatively considerable impact on Crotch's bumble bee.

The Study Area contains potentially suitable habitat for the northern California legless lizard, California legless lizard, and Blainville's horned lizard. However, because implementation of the Project would impact a limited amount of habitat relative to the amount of available habitat for these species in the region, the loss of habitat would be less than cumulatively considerable.

The Study Area supports suitable loggerhead shrike foraging and nesting habitat. However, the removal of habitat would not significant due to abundant suitable habitat present in the Project region, which includes the undeveloped portions of Palmdale Regional Airport and Edward Air Force Base. Because implementation of the Project would impact a limited amount of habitat relative to the amount of habitat available for the loggerhead shrike, impacts due to the loss of habitat for loggerhead shrike would be less than cumulatively considerable.

Riparian Habitat or Other Sensitive Natural Community

Because no riparian habitat occur on the Project site, there is no potential for implementation of the Project to result in a cumulatively considerable impact to riparian habitats.

State or Federally Protected Wetlands

Because no wetlands occur on the Project site, there is no potential for implementation of the Project to result in a cumulatively considerable impact to State or federally protected wetlands.

Movement of any Native Resident or Migratory Fish or Wildlife, Wildlife Corridors, or Native Wildlife Nursery Sites

Given the constraints on wildlife movement under existing conditions, and the determination that the Project site does not include water that supports any known migratory fish or established native resident or migratory wildlife corridors or a known native wildlife nursery site, implementation of the proposed Project would not 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. Thus, impacts would be less than cumulatively significant.

In regard to migratory birds, the MBTA and California Fish and Game Code prohibits the taking of migratory birds, nests, and eggs; therefore, the Project has the potential to impact nesting migratory birds if active nests were disturbed during the nesting season (February 1 and September 15). All development projects are required to comply with the MBTA and California Fish and Game Code; therefore, impacts would be less than cumulatively considerable.

Any Local Policies or Ordinances Protecting Biological Resources

Although implementation of the Project would impact Wiggin's cholla and western Joshua tree, the Project would comply with local policies and ordinances by implementing appropriate mitigation

measures and acquiring the appropriate permits required as discussed previously. Thus, no cumulatively considerable impact would occur.

Adopted Habitat Conservation Plan Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan

Because implementation of the Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, no cumulatively considerable impact would occur.

4.3.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct and Indirect Impact. The Project would result in significant, direct impacts to one listed special-status plant species (western Joshua Tree) and four special-status wildlife species (northern California legless lizard, California legless lizard, Blainville's horned lizard, and loggerhead shrike) that were observed or have a moderate potential to occur within the Study Area. Additionally, the Project would result in potentially significant impacts two special-status species that have a low potential to occur, Crotch's bumble bee and burrowing owl.

Threshold b: Significant Direct and Indirect Impact. There are no riparian habits within the Study Area; therefore, no impact would occur. However, the Project would result in potential significant impacts to Joshua tree woodland and Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub.

Threshold c: No Direct Impact and Significant Indirect Impact. Because no wetland conditions occur on the Project site, there is no direct potential for the Project to 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. Therefore, no direct impact would occur and no mitigation is required. However, there is potential for indirect (short-term and long-term) impacts to jurisdictional aquatic resources.

Threshold d: Significant Direct and Cumulatively Considerable Impact. Direct or indirect impacts to wildlife corridors and habitat connectivity are not anticipated since the Project site does not function as a wildlife corridor or habitat linkage. However, the Project has the potential to impact nesting birds if active nests are disturbed during the nesting season (February 1 through September 15).

Threshold e: Significant Direct Impact. The Project would result in significant impacts to Wiggin's cholla and western Joshua trees, which are protected under the California Desert Native Plant Protection Act and PMC Chapter 14.04, respectively.

Threshold f: No Impact. Implementation of the Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.3.7 MITIGATION

The following Mitigation Measures are required for the Project and would avoid, minimize, or mitigate impacts on biological resources discussed above under Thresholds (a) and (d). Mitigation Measures shall be implemented on a phase-by-phase basis dependent on Project impacts for each phase.

BIO MM-1 **Western Joshua Tree Incidental Take Permit.** Mitigation for direct impacts to 543 western Joshua trees will be fulfilled through attainment of a Western Joshua Tree Conservation Act (WJTCA) Incidental Take Permit and a payment of the elected fees as described in Section 1927.3 of the WJTCA. In conformance with the reduced fee schedule prescribed for the Project area, mitigation will consist of payment of $1,000 for each western Joshua tree five meters or greater in height, $200 for each western Joshua tree less than five meters but greater than 1 meter in height; and $150 for each western Joshua tree less than one meter in height. California Department of Fish and Wildlife (CDFW) determines the final fee.

BIO MM-2 **Designated Biologist Authority.** A qualified biologist (the "designated biologist") shall be retained by the Project applicant to monitor construction activities. The designated biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures recommended in the Project's Biological Resources Technical Report (*Technical Appendix C*) and/or to order any reasonable measure to avoid the unauthorized take of an individual western Joshua tree or other sensitive biological resources.

BIO MM-3 **Compliance Monitoring.** The designated biologist shall be on site daily during construction activities that entail the removal of vegetation and ground disturbance activities. The designated biologist shall conduct compliance inspections to minimize incidental take of western Joshua trees and impacts to other sensitive biological resources; prevent unlawful take of western Joshua trees; ensure that signs, stakes, and fencing of the construction footprint are intact; and ensure that impacts are only occurring within the direct impact footprint. Weekly written observation and inspection records that summarize oversight activities, compliance inspections, and monitoring activities required by the CDFW-issued Joshua tree Incidental Take Permit shall be prepared.

BIO MM-4 **Education Program.** A construction worker education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working in the Project site during vegetation removal and grading shall be administered before ground-disturbing impacts occur. The WEAP shall consist of a presentation from the designated biologist that includes a discussion of the biology and status of western Joshua tree, northern California legless lizard, California legless lizard, and Blainville's horned and loggerhead shrike, along with other relevant sensitive biological resources and the mitigation measures described in the Project's California Environmental Quality Act (CEQA) compliance document. Interpretation for non-English-speaking workers shall be provided, and the same

instruction shall be provided to any new workers before they are authorized to perform vegetation removal and ground-disturbing work in the Project area. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for construction employees who will be conducting Project-related construction work.

BIO MM-5 **Construction Monitoring Notebook.** The designated biologist shall maintain a construction monitoring notebook on site throughout the construction period, which shall include a copy of the biological resources mitigation measures, permits, and a list of signatures of all personnel who have successfully completed the education program. The notebook will include a sign-off date page for the designated biologist to sign and date each construction date for which the Project is in compliance. The Project applicant or its successor in interest shall ensure that a copy of the construction monitoring notebook is available for review at the Project site upon request by the CDFW.

BIO MM-6 **Delineation of Property Boundaries.** Before beginning activities that would cause vegetation removal or other ground-disturbing impacts, the contractor shall, in consultation with the designated biologist, clearly delineate the boundaries of approved ground disturbance with fencing, stakes, or flags, consistent with the grading plan. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area.

BIO MM-7 **Invasive Plant Management.** To reduce the spread of invasive plant species, landscape plants within 200 feet of native vegetation communities shall not be on the most recent version of the Cal-IPC California Invasive Plant Inventory (http://www.cal-ipc.org/ip/inventory/index.php). Prior to the installation of landscaping, the City of Palmdale shall review and approve the Project's landscaping plan and verify that the prohibited plants will not be installed within 200 feet of native communities, and the City also shall conduct a site inspection after the landscaping has been installed and prior to issuance of a building occupancy permit to verify that the prohibited plants were not installed. Post-construction, the applicant, its successor in interest, or the building occupant shall be responsible for annual removal of invasive plant species on site by hand or mechanical methods, as feasible.

BIO MM-8 **Hazardous Waste.** Construction contractors shall immediately stop work and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Post-construction, the building user shall be responsible for compliance with the same requirements.

BIO MM-9 **Herbicides.** Herbicide use on the site for invasive plant species control shall be limited and herbicides should only be used if it has been determined that hand or mechanical efforts are infeasible. To prevent drift, herbicides shall only be applied

when wind speeds are less than 7 miles per hour. These requirements shall be made provisions of the Project's construction contracts, landscape installation and maintenance contracts, and building occupant leases, subject to verification by the City of Palmdale upon request. All herbicide application shall be performed by a licensed applicator and in accordance with all applicable federal, State, and local laws and regulations.

BIO MM-10 **Pre-Construction Crotch's Bumble Bee Survey and Potential Incidental Take Permit.** If Crotch's bumble bee is still a candidate for listing under the California Endangered Species Act or has been listed, a pre-construction survey for the species shall be conducted within the construction footprint prior to the start of initial vegetation removal or initial grading activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area. The pre-construction survey shall include 1) a habitat assessment and 2) focused surveys, both of which will be based on recommendations described in the "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species," released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The habitat assessment and focused surveys will be performed by a biologist with a California Department of Fish and Wildlife-issued Scientific Collecting Permit for handling Crotch's bumble bee.

The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat onsite including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and man-made structures that may support bumble bee colonies such as rock walls, rubble, and furniture. If nesting resources are present in the impact area, focused surveys will be conducted.

The focused survey will include at least three (3) survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys shall coincide with the Colony Active Period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys will not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors will wait at least 1 hour following rain. Optimal survey conditions are when there are sunny to partly sunny skies with temperatures that are greater than 60° Fahrenheit. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). the qualified biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the qualified biologist shall watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should

arrive and exit an active nest site with frequency, such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. The qualified biologist should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the qualified biologist regarding the actual survey viewshed limits from the chosen vantage point which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification will include the qualified biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographically documented. The bee will be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container will be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, bees become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch's bumble bee nests are not detected, no further mitigation shall be required, and no additional surveys shall be needed if construction begins within 14 days of the last survey for a given phase area. If construction in a given phase area does not start within 14 days of the last survey, or if construction in a given phase area stops for 14 days or longer, surveys shall be repeated if construction re-commences between February 1 and October 31.

The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a City-approved qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers,

males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report will be submitted to the City within 30 days of the pre-construction survey and shall be reviewed and approved by the City before the start of grading and construction activities. The survey report shall also be submitted to CDFW within the same timeframe for its consideration and action in accordance with applicable laws and regulations. The report will include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report will include the qualifications/resumes of the surveyor(s) and the qualified biologist(s), detailed habitat assessment, and photo vouchers. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information will be submitted to the California Natural Diversity Database (CNDDB) at the time of, or prior to, submittal of the survey report.

If a Crotch's bumble bee nest is found, the Project applicant will consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this CEQA document and shall be incorporated into a habitat mitigation and monitoring plan.

In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch's bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

BIO MM-11 **Special-Status Wildlife Relocation Plan.** Prior to commencement of any earthmoving activities or the pre-construction staging of equipment on the Project

site, the Project Applicant shall contract with a City-approved biologist to develop a Preconstruction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the northern California legless lizard, California legless lizard, and Blainville's horned lizard. The Applicant will work with the City to identify potential relocation sites that have suitable habitat for the species. The Preconstruction Wildlife Survey and Relocation Plan shall be submitted to City for review prior to any ground-disturbing activities within potentially occupied habitat.

The Plan shall include at a minimum, the following:

(1) Protocols for pre-construction surveys to flush out and/or move identified special status wildlife within the Project site, as feasible.

(2) The timing, frequency, and locations where surveys should be conducted.

- Surveys will be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity.
- Surveys shall be conducted in all areas anticipated to be subject to vegetation clearing.

(3) The habitat and conditions in the proposed relocation site(s).

(4) The methods that would be used for trapping and relocating identified species.

- All equipment used in the effort will be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens.

(5) Protocols for documentation/recordation of the species and number of animals relocated.

- Relocations shall be logged and made available to the City, if requested.

(6) The timing and frequency of reports documenting the results of the surveys.

BIO MM-12 **Pre-Construction Burrowing Owl Survey and Potential Incidental Take Permit.** Burrowing owl has the potential to occur as a transient during wintering, dispersal, and migration. Focused preconstruction surveys for burrowing owl shall be conducted beginning 30 days prior to the commencement of Project activities with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused preconstruction surveys, or during the monitoring of construction activities, a 500-foot no-work buffer shall be established around the location of the burrow(s), and the City and California Department of Fish and Wildlife (CDFW) shall be notified. No Project activities will be allowed and CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and Game Code 2081.

In the event an Incidental Take Permit is needed, mitigation for direct will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise

determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a Project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will consider all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

BIO MM-13 **Pre-Construction Nesting Bird Survey and Avoidance.** Vegetation removal activities shall occur between September 1 and January 31 to avoid the migratory bird nesting season (typically February 1 through August 31), to reduce any potential significant impact to birds that may be nesting on the Project site. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the Project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when construction occurs near an active nest buffer. No Project activities may encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined the nestlings have fledged and the nest is no longer considered active.

BIO MM-14 **Trash and Debris.** The following avoidance and minimization measures shall be implemented during Project construction.

(1) Fully covered trash receptacles that are animal-proof shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles shall be removed at least once a week from the Project site.

(2) Construction work areas shall be kept clean of debris, such as cable, trash, and discarded construction materials. All construction/contractor personnel shall

collect and properly dispose of all litter, and food waste from the Project site daily.

BIO MM-15 **Desert Native Plants Removal Permit.** Prior to the commencement of Project activities, the Project applicant shall apply for a permit with the County of Los Angeles for removal of protected native desert plants as required under California Desert Native Plants Act (Food and Agricultural Code, Division 23). The Project shall comply with any conditions of approval imposed by the applicable review authority upon issuance of the permit.

The permit application form shall specify information outlined in the California Desert Native Plant Act Section 80114, which includes but is not limited to, the number and species of native plants to be removed, a description of the real property from which the plants are to be removed, and in the case that relocation is required, the destination of the native plants and the manner in which the plants are to be salvaged. Pursuant to the California Desert Native Plants Act, tags or seals issued by the County must be attached to the native plants at the time of harvesting and before transporting to their permanent relocation site(s) and must remain attached to the plant until transplanted into its ultimate destination. Transport of salvaged plants will occur as prescribed by the County.

4.3.8 Design Features (DF and Regulatory Requirements (RR)

The City of Palmdale is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Biological Resources, which include the following regulatory requirements and design features. The Project shall be conditioned to implement the following design features and regulatory requirements as part of the City's Conditions of Approval for the Project.

BIO RR-1 **National Pollutant Discharge Elimination System (NPDES) Compliance**. The Project Applicant or its designee shall incorporate Best Management Practices (BMPs) during Project construction, including applicable measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of water runoff discharged by Project activities does not adversely affect biological resources. BMPs shall be designed to prevent, to the extent feasible, the runoff of toxins, chemicals, petroleum products, or other elements that might degrade water quality. Additionally, BMPs shall be used to minimize erosion.

BIO RR-2 **Clean Up Requirements for Accidental Hazardous Waste Spills**. Construction contractors shall immediately stop work and, pursuant to pertinent State and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so, to minimize impacts to biological resources

BIO DF-1 **Landscaping**. The Project Applicant or its designee shall retain a qualified biologist to review the landscaping plan to ensure that any landscaping component of the Project does not include the planting of exotic, invasive species that would potentially degrade the quality of the surrounding natural open space. A list of potential landscaping plant species shall be submitted to the qualified biologist for review; the qualified biologist shall ensure that exotic plant species known to be invasive (e.g., those on the California Invasive Plant Council's (Cal-IPC's) invasive plant inventory)) are not included on the list. The qualified biologist shall make recommendations for more suitable plant species if necessary. The qualified biologist shall sign the landscaping plan as approved prior to City approval of the landscaping plan. Once a final plant palette is prepared and approved by the City, landscaping installed in the development area shall include only species on the approved palette.

BIO DF-2 **Stockpiling**. During Project construction, areas where stockpiling can occur shall be selected in consultation with a qualified biologist. Spoils shall be stockpiled in disturbed areas lacking native vegetation. The construction contractor in coordination with a qualified biologist shall clearly mark stockpile areas in the field to define the limits where stockpiling can occur.

BIO DF-3 **Designation of Construction Vehicle Maintenance Area**. The construction contractor shall designate an area for vehicle maintenance that is not within or adjacent to any drainage area or native vegetation. Fueling and maintenance of equipment shall take place within the vehicle maintenance area. Impervious ground surfaces or plastic covering shall be used to prevent spillage or leakage onto the ground surface. Any spilled hazardous materials shall be immediately cleaned and hazardous materials properly disposed of. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.

BIO DF-4 **Prevention of the Spread of Weed Seeds**. The introduction of exotic plant species shall be avoided and minimized to the extent practicable. Weed seeds entering the construction area via vehicles shall be minimized by requiring construction vehicles to be washed prior to delivery to the Project site. Track-clean or other methods of vehicle cleaning shall be used by the construction contractor to prevent weed seeds from entering/exiting the construction areas on vehicles. Additionally, wattles used for erosion control shall be certified as weed-free.

BIO DF-5 **Lighting**. Lighting for construction activities and operations shall be directed inward toward the Project site and lighting shall not be directed toward adjacent undeveloped areas.

4.3.9 Significance of Impacts After Mitigation

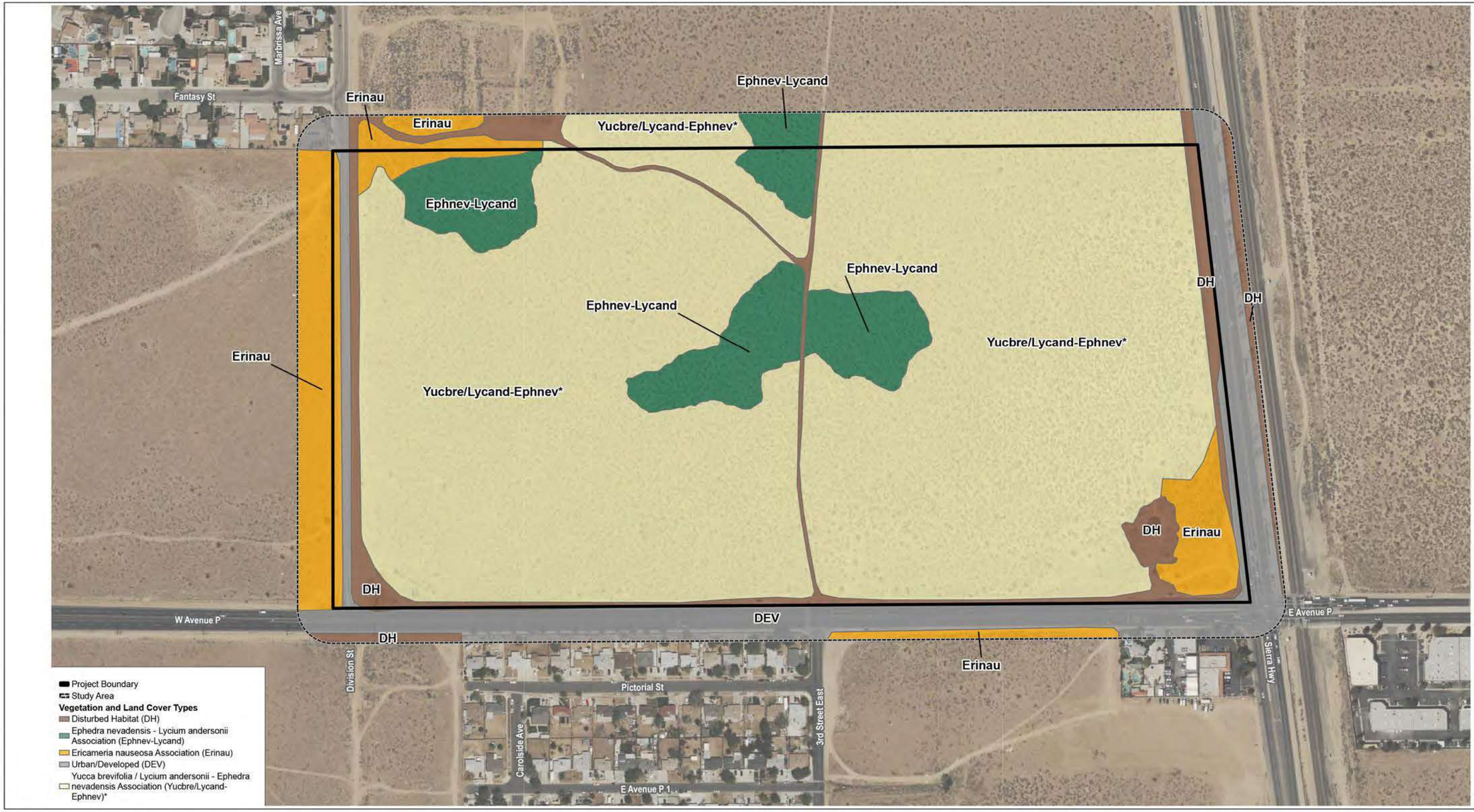
Threshold a: Less than Significant with Mitigation Incorporated. With implementation of Mitigation Measures BIO MM-1 through BIO MM-9, direct and indirect impacts to the western Joshua tree would be reduced to less than significant. With implementation of Mitigation Measures BIO MM-2 through BIO MM-11, BIO MM-13, and BIO MM-14, the direct and indirect impacts of the Project to sensitive wildlife species would be reduced to less than significant.

Threshold b: Less than Significant with Mitigation Incorporated. With implementation of Mitigation Measures BIO MM-1 through BIO MM-9, direct and indirect impacts to sensitive natural communities would be reduced to less than significant.

Threshold c: Less than Significant with Mitigation Incorporated. With implementation of Mitigation Measures BIO MM-2 through BIO MM-6, and BIO MM-8, indirect impacts to jurisdictional aquatic resources would be reduced to less than significant.

Threshold d: Less than Significant with Mitigation Incorporated. With implementation of Mitigation Measure BIO MM-13, the direct and cumulatively considerable impacts of the Project on migratory birds protected by the MBTA would be reduced to less than significant.

Threshold e: Less than Significant with Mitigation Incorporated. With implementation of Mitigation Measures BIO MM-1 and BIO MM-15, direct impacts to the Wiggin's cholla and western Joshua tree would be reduced to less than significant.

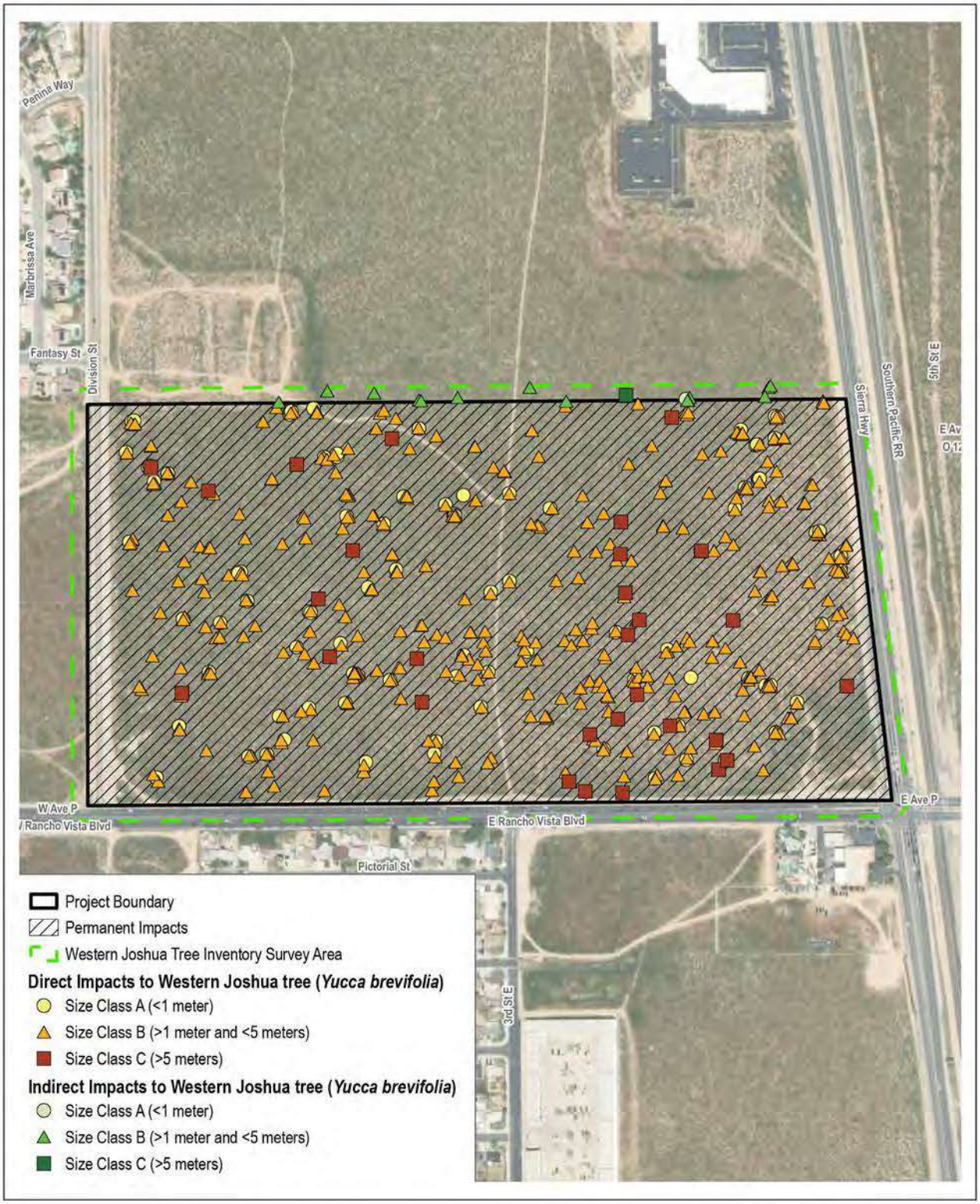


Source(s): Dudek (03-07-2025)

Figure 4.3-1

Not to Scale

Vegetation Communities and Land Covers



Source(s): Dudek (03-07-2025)

Figure 4.3-2

Not to Scale

Impacts to Western Joshua Tree

4.4 CULTURAL RESOURCES

The analysis in this subsection is based on a site-specific Cultural Resources Assessment prepared by Dudek, titled, "Cultural Resources Assessment for the Pacific Palmdale Project," dated September 9, 2024, and included as *Technical Appendix D* to this EIR (Dudek, 2024). Dudek uses the phrases "Project site" and "Project Area" interchangeably in *Technical Appendix D*. All references used in this subsection are included in EIR Section 7.0, *References*. No confidential information is contained in *Technical Appendix D;* however, much of the written and oral communication between Native American tribes, the City, and Dudek is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archaeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of cultural resources.

4.4.1 EXISTING CONDITIONS

A. Soil and Groundwater Conditions

Southern California Geotechnical (SCG) conducted subsurface exploration at the Project site consisting of 17 borings advanced to depths of approximately 10 to 30 feet below the existing site grades. Based on the results of the analysis, the Project site contains the following soil types:

- Younger Alluvium. Younger alluvial soils were encountered at the ground surface at all of the boring locations, extending to depths of approximately 2.5 to 17 feet below existing site grades. The borings encountered loose to very dense silty fine to medium sands, fine to coarse sands, with varying amounts of silt, clay, sand, and gravel content. (SCG, 2024, p. 5)

- Older Alluvium. Native older alluvial soils were encountered beneath the younger alluvium at Boring Nos. B-1, B-3, B-4, B-5, B-8, B-9, and B-10, extending to at least the maximum depth explored of approximately 30 feet. The older alluvium generally consists of medium dense to very dense silty fine to coarse sands, fine to coarse sands, and clayey fine to coarse sands, with varying amounts of clay, silt, sand, and gravel content. The older alluvium possesses some calcareous nodules and veining, with some slightly cemented samples. (SCG, 2024, p. 5)

Refer to EIR Subsection 4.6, *Geology and Soils*, for additional information about the Project site's subsurface conditions. The site's subsurface conditions are informative to the topic of cultural resources pertaining to the potential for discovery of cultural resources beneath the surface of the site, as discussed later in this subsection.

B. Prehistoric, Ethnohistoric, and Historical Setting

A general overview of prehistoric, ethnographic, and historical periods in the vicinity of the Project site is presented below. Over the past century, archaeologists have suggested various chronological sequences to describe cultural change within southern California. Most recently, archaeologists devised an updated Mojave Desert cultural history, dividing it into four temporal periods: Pleistocene (Pre-10,000 calibrated [cal] Before Christ [B.C.]-8,000 B.C.), Early Holocene (8000-6000 cal B.C.), Middle Holocene (7000-3000 cal B.C.), and Late Holocene (2000 cal B.C.-European Contact). (City of Palmdale, 2022, p. 4.5-1)

1. Prehistoric Setting

- **Late Pleistocene (ca. 10,000 to 8,000 cal B.C.)**

The climate of the Mojave Desert during the Pleistocene Period is generally characterized as cool and wet. During this time, the Antelope Valley featured several pluvial lakes, such as Lake Thomson and Lake China, and which indicates an environment with plentiful food and water resources suitable for early human habitation, compared to the harsher current desert environment. (City of Palmdale, 2022, p. 4.5-1)

The Clovis Complex is the earliest and only Paleo-Indian cultural complex widely accepted in the Mojave Desert. This complex is predominantly defined by large lanceolate-shaped bifaces with fluting. Paleo-Indian populations that utilized fluted point technology consisted of small, mobile groups who hunted and gathered near permanent sources of water such as pluvial lakes, as the tools associated with these populations are most commonly found in the drainage basins of the pluvial lakes. These groups hunted megafauna, although they also exploited many other available resources (City of Palmdale, 2022, p. 4.5-1)

Evidence of habitation in the Antelope Valley during this period has remained sparse until recently, when evidence of late Pleistocene occupation was identified on the southern slopes of the Tehachapi Mountains near Cottonwood Creek in the form of a fragment of a fluted Clovis projectile point. Evidence of occupation near Pleistocene China Lake and Fort Irwin has also been found, yielding radiocarbon dates from 9,500-8,000 ybp (years before present). (City of Palmdale, 2022, p. 4.5-2)

- **Early Holocene (ca. 8,000 to 6,000 cal B.C.)**

The onset of the early Holocene is marked by warmer temperatures and reduced precipitation, which led to the creation of shallow lakes and marshes as the pluvial lakes of the Pleistocene shrank. These changes are believed to have caused an irregular distribution of resources available to the early Holocene inhabitants. (City of Palmdale, 2022, p. 4.5-2)

The Lake Mojave Complex is the only clear complex in the region during this time and reflects an increasingly diversified subsistence strategy as people adapted to climatic changes. The Lake Mojave Complex is identified primarily by heavy, stemmed projectile points, and the presence of exotic stone materials and marine shell beads in Lake Mojave Complex assemblages supports the assertion that

these people were highly mobile and possibly traded with groups over long distances. (City of Palmdale, 2022, p. 4.5-2)

- **Middle Holocene (ca. 7,000 to 3,000 cal B.C.)**

The Middle Holocene climate was generally more arid than periods before and after, but it oscillated between wetter and drier conditions throughout its 4000 years. The desiccation of the lakes and marshes of the Pleistocene and early Holocene required the region's inhabitants to rely on streams and springs for water. As average temperatures and aridity increased, settlements shifted to higher elevations where sources of water still existed. Changes in tool assemblage content and diversity during this period marked the emergence of the Pinto Complex. The hallmarks of the Pinto Complex tool assemblage include concave, branched base projectile points with strong basal ears and more gradual shoulders. Other diagnostic artifacts of this complex include domed and keeled scrapers, large and small leaf-shaped bifaces, core/cobble tools, large metates and milling slabs, and shaped and unshaped hand stones. (City of Palmdale, 2022, p. 4.5-3)

Archaeological data indicate that the Pinto Complex overlaps the Lake Mojave Complex during the latter part of the Early Holocene. Pinto occupation is associated with springs and extinct rivers and is most commonly identified in the northern portion of the Antelope Valley. With the removal of moisture from the Pleistocene lakes, the Pinto Complex reflects the shift to a greater emphasis on the exploitation of plants, with the continued pursuit of artiodactyls and smaller game. The Pinto Complex has a wider distribution throughout the Mojave Desert than previous complexes, which implies a high degree of residential mobility. However, very few sites date to during this period, suggesting that populations were very low. It is also possible that some areas were abandoned during this hot period. (City of Palmdale, 2022, p. 4.5-3)

- **Late Holocene (ca. 2,000 cal B.C. to European Contact)**

The climate of the prehistoric late Holocene was cooler and moister than the middle Holocene, but not as cool and moist as the early Holocene, although it remained highly variable with periods that included the Mojave lakes refilling to levels of earlier high stands, contrasted with at least two major droughts. These climatic changes at the onset of the late Holocene once again resulted in modified subsistence strategies and correlating tool kits of three progressive cultural complexes: Gypsum Complex, Rose Spring Complex, and Late Prehistoric Complex (or period). (City of Palmdale, 2022, p. 4.5-3)

The Gypsum Complex is characterized by dart-point sized projectile points of notched or eared, concave base, and small-stemmed types. In addition to these diagnostic points, Gypsum Complex sites included leaf-shaped points, rectangular-based knives, flake scrapers, drills, and occasionally, large scraper planes, choppers, and hammerstones. The mortar and pestle were introduced during this period. Beads and figurines found at Gypsum Complex sites are indicative of trade with people of the southern California coast and southern Great Basin. The inhabitants of the Mojave Desert exported high quality locally available cryptocrystalline tool stone such as obsidian, chalcedony, and chert in exchange for exotic materials. (City of Palmdale, 2022, p. 4.5-4)

By A.D. 200, a slightly cooler climate led to an increased population, based on a higher frequency of archeological sites. The Rose Spring Complex was present from approximately A.D. 200 to 1100, during which the smaller Rose Spring projectile points replaced the dart-size points of previous complexes and heralded the introduction of the bow and arrow. This innovation appears to correspond with the onset of the Numic expansion westward to the coast, which likely started from southeastern California. (City of Palmdale, 2022, p. 4.5-4)

The Late Prehistoric period (circa A.D. 1100–1769) corresponds to the introduction of ceramic artifacts in the Mojave Desert region. The mortar and pestle became more widespread during this period, and evidence of food storage facilities becomes increasingly common. In the central Mojave Desert, the Mojave River became a primary area of occupation, and trade networks increased along the Mojave River and over the San Gabriel Mountains. (City of Palmdale, 2022, p. 4.5-4)

Archeological evidence left by highly mobile hunter-gatherers in the Mojave Desert during the Late Prehistoric period is typified by sparse scatters of flaked stone, ground stone, and ceramic artifacts and features such as hearths, rock rings, and trails. (City of Palmdale, 2022, p. 4.5-4)

2. Ethnohistoric Setting

The City of Palmdale was historically occupied by multiple cultural groups, including the Kitanemuk, Serrano, and Tataviam. Each of these groups are more closely associated with portions of the surrounding mountains – Kitanemuk to the north, Serrano to the southeast, and Tataviam to the southwest – but each of them likely visited the Antelope Valley floor to exploit resources. Ethnographic boundaries in the Mojave Desert are loosely defined, owing to the highly mobile nature of desert settlement and subsistence strategies, as well as the variety of interpretations presented by previous researchers. Brief overviews of the three groups are provided below.

The Serrano occupied an area in and around the San Bernardino Mountains, where their territory extended west of Cajon Pass, east past Twentynine Palms, north of Victorville, and south to the Yucaipa Valley. The term “Serrano” is ethnically defined as the name of the people in the San Bernardino Mountains. Year-round habitation was typically located on the desert floor, at the base of the mountains, and up into the foothills. The Serrano language is part of the Serran division of a branch of the Takic family of the Uto-Aztecan linguistic stock. (City of Palmdale, 2022, p. 4.18-2)

Most Serrano lived in small villages located near water sources. Houses were domed and constructed of branches and thatching and occupied by a single extended family. The subsistence economy of the Serrano was one of hunting and collecting plant goods, with occasional fishing. They hunted large and small mammals and various birds, particularly quail. Plant staples consisted of seeds, nuts, bulbs, tubers, shoots, and roots of various plants. People living in the lower elevation villages and people living in the foothill villages engaged in inter-village trade and communal food events, which integrated the economy and distributed resources that were available in different ecozones. (City of Palmdale, 2022, p. 4.18-2)

Contact between Serrano and Europeans was relatively minimal prior to the early 1800s. As early as 1790, however, Serrano were drawn into mission life, and more Serrano were relocated to Mission San Gabriel in 1811. In 1819, most of the remaining western Serrano were moved to an asistencia (Spanish settlement) built near Redlands. In addition, a smallpox epidemic, and an American military campaign in the 1860s killed many Serrano. Surviving Serrano sought shelter at Morongo with their Cahuilla neighbors, and the Morongo Band of Mission Indians of the Morongo Reservation, established through presidential executive orders in 1877 and 1889, includes both Cahuilla and Serrano members. Other survivors settled what later became the San Manuel Band of Mission Indians Reservation, which included 84 Serrano tribal members in 2004. Both Morongo and San Manuel are federally recognized tribes, and people of both reservations participate in cultural programs to revitalize traditional languages, knowledge, and practices. (City of Palmdale, 2022, p. 4.18-2)

- **Tataviam**

The Tataviam were not well documented by early ethnographers. However, researchers today generally agree that the Tataviam spoke an Uto-Aztecan language, most likely a Takic language. Tataviam territory included the upper Santa Clara River from Piru Creek eastward, extending over the Sawmill Mountains to the southwest edge of the Antelope Valley. Their territory was bounded on the west and north by various Chumash groups; on the south by the Tongva (Gabrielino and Fernandeño, though some Tataviam were also identified as Fernandeño because of their association with Mission San Fernando); and to the east by the Kitanemuk and Serrano. (City of Palmdale, 2022, p. 4.18-3)

Food resources of the Tataviam included yucca, acorns, sage seeds, berries, small mammals, and deer. Settlement size ranged from 10 to 200 persons, with small settlements often ancillary to large villages. Archaeological and ethnographic evidence suggest their ritual organization was similar to both the Chumash and Gabrielino, whose lifestyles were distinct from one another. By 1810, the Tataviam were virtually completely "missionized" through baptism at Mission San Fernando. (City of Palmdale, 2022, p. 4.18-3)

- **Kitanemuk**

Like the Tataviam, the Kitanemuk are one of the least-understood ethnographic groups in California, despite being the primary aboriginal inhabitants of Antelope Valley. Kitanemuk territory extended from the Tehachapi Mountains at the northwestern edge of the Antelope Valley southeast to beyond Rosamond Lake north of Palmdale, although their populations were most dense in the mountains at the southern end of the San Joaquin. (City of Palmdale, 2022, p. 4.18-1)

The Kitanemuk lived in semi-permanent village sites that functioned as year-round base camps; during the late winter and early spring, expeditions ventured onto the desert floor in pursuit of seasonal resources. The Kitanemuk were a subdivision of the Serrano and thus spoke a language of the Takic family that was similar to dialects spoken by groups living as far south and east as Yucca Valley and Twentynine Palms, although Kitanemuk rituals were most strongly shaped by their neighbors to the north (Kawaiisu and Tubatulabal) and west (Chumash). The Kitanemuk had particularly strong trade

ties with coastal and inland Chumash groups. Modern-day descendants of the Kitanemuk live at the Tule River Reservation, Porterville, and Tejon Ranch. (City of Palmdale, 2022, p. 4.18-1)

3. Historical Setting

❑ **Spanish Period (1769 – 1722)**

In 1542, Juan Rodriguez Cabrillo led the first European expedition to observe what is now called southern California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent inland settlements. (City of Palmdale, 2022, p. 4.5-5)

The first Spanish settlement was established along the west coast of the modern United States in what was known as Alta California at Mission San Diego de Alcalá in 1769. Mission San Diego was the first of 21 missions established by the Spanish between 1769 and 1823. No Spanish missions were established in the Antelope Valley, but local Native Americans were influenced by other native populations migrating to the area, driven from their homelands by the encroaching Spanish.

Spanish explorers may have encountered and interacted with groups of Tataviam and Kitanemuk during early exploration, but very little historical information was recorded on them. Native American populations in the Antelope Valley were less affected by the missions and the disease associated with European settlement of California than other populations. However, in some cases, individuals were taken from their tribes to be educated at one of the missions before being sent back, and by 1810, a majority of the Tataviam were baptized at the San Fernando Mission, located approximately 28 miles southwest of the Palmdale Civic Center. (City of Palmdale, 2022, p. 4.5-5)

During this period, Spain deeded a limited number of ranchos to prominent citizens and soldiers, few in comparison to the following Mexican Period. To manage and expand herds of cattle on these large ranchos, colonists enlisted the labor of the surrounding Native American population. (City of Palmdale, 2022, p. 4.5-5)

❑ **Mexican Period (1822 – 1848)**

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period was an era of extensive interior land grant development and exploration. The California missions declined in power and were ultimately secularized in 1834. Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time. These ranchos became important economic and social centers; however, no ranchos were claimed in the arid Antelope Valley. Rancho La Liebre, straddling present day Los Angeles and Kern counties, was the closest land grant located in the mountains west of the valley. Gold was found on Rancho San Francisco in 1842 at Placerita Canyon, the first to be found in California. (City of Palmdale, 2022, p. 4.5-5)

❑ **American Period (1848 – Present)**

The American Period officially began with the signing of the Treaty of Guadalupe Hidalgo in 1848 between the United States and Mexico. In 1850, California was admitted as the 31st state. (City of Palmdale, 2022, p. 4.5-6)

The discovery of gold in the foothills east of Sacramento led to the California Gold Rush in 1848, despite the first California gold being discovered in Placerita Canyon near the San Fernando Mission in 1842. Cattle ranches continued to dominate Southern California in the early American period, though droughts and increasing population resulted in farming and more urban professions, which increasingly supplanted ranching through the late nineteenth century. By 1853, the population of California exceeded 300,000 and thousands of settlers and immigrants continued to move into the State, particularly after the completion of the transcontinental railroad in 1869. During the Gold Rush, thousands of people traveled the Mojave River Trail from the east attempting to reach the fabled goldfields of California. (City of Palmdale, 2022, p. 4.5-6)

The construction of the Southern Pacific Railroad in 1876 was a major development in the Antelope Valley and proved to be the foundation for development. By 1920, upward of 80 towns were founded in the Antelope Valley area. Most of these towns were located along the railroad. However, a major component of the economy was ranching and agriculture. (City of Palmdale, 2022, p. 4.5-6)

❑ **Palmdale**

The Palmdale area was largely undeveloped prior to the completion of the Southern Pacific Railroad through the Antelope Valley. In 1886, farming families predominantly from the Midwest settled in the Antelope Valley. When drought in the valley's desert climate made many agricultural homesteads unviable, many settlers moved closer to the Southern Pacific Railroad Station in the present-day location of Palmdale's civic center. The completion of the Los Angeles Aqueduct in 1914 brought needed irrigation to the Antelope Valley which allowed for the cultivation of pears, apples, and alfalfa. (City of Palmdale, 2022, p. 4.5-6)

Palmdale remained a predominantly agricultural community until the growth of the aerospace sector during WWII. The town's proximity to Edwards Air Force Base, and the establishment of U.S. Air Force Plant 42 in 1953, made Palmdale a center of the U.S. aerospace industry. Plant 42 and the adjacent Los Angeles/Palmdale Regional Airport employ thousands of military personnel and aerospace workers and host manufacturing and flight test facilities for Northrop Grumman, Boeing, and Lockheed Martin. (City of Palmdale, 2022, p. 4.5-6)

C. Cultural Resources Inventory

1. Historic Resources in the City of Palmdale

Regionally, according to the City's General Plan EIR, a review of the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and the California State Office of Historic Preservation Built Environment Directory, in addition to consultation with City staff,

revealed there are five state-designated, and 14 locally recognized, historical resources located in the City of Palmdale; none of which are located on the Project site.

2. Cultural Records Search Results

On July 11, 2024, Dudek conducted a search of the California Historic Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC), located on the campus of California State University, Fullerton. The search included mapped prehistoric and historic archaeological resources and historic built- environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the Project site, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. (Dudek, 2024, p. 12)

❑ Previous Cultural Resources Investigations

The records search results indicate that 47 previous cultural resource investigations were completed within one mile of the Project site between 1985 and 2015 (refer to Table 1 of the Project's CRA, included as EIR *Technical Appendix D*). Six of these studies include or overlap the Project site. (Dudek, 2024, p. 12)

❑ Previously Recorded Cultural Resources

The records search indicated that 33 cultural resources were previously documented within one mile of the Project site and no cultural resources were previously documented and have been recorded within 1-mile of the Project site; none of which intersect or are adjacent to the Project site. These off-site resources include 18 historic trash scatters, six ranch/orchard remnants, three single family residences, one multifamily residence, one commercial building, one water conveyance system, one foundation, one prehistoric lithic scatter, and one prehistoric isolate. (Dudek, 2024, p. 13)

3. Native American Heritage Commission Sacred Lands File Search

Dudek contacted the Native American Heritage Commission (NAHC) on June 13, 2024 for a review of the Sacred Lands File (SLF). The objective of the SLF search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within the immediate vicinity of the Project site. The NAHC responded on July 2, 2024, stating that the results of the SLF search did not indicate that the Project site and surrounding area was sensitive for the presence of Native American tribal cultural resources, though they stated that negative results do not preclude the existence of Native American related resources within the Project site. The NAHC also provided a list of 10 Native American groups and individuals who may have knowledge of cultural resources within the Project site. Dudek sent letters to each of the 10 representatives on July 5, 2024. This coordination was conducted for informational purposes only and does not constitute formal government-to- government consultation. One response was received from the Cultural Resource Specialist for the Morongo Band of Mission Indians. (Dudek, 2024, p. 14)

Refer to Subsection 4.14, *Tribal Cultural Resources*, for further detail regarding the City of Palmdale's coordination and consultation with the Native American tribes on the NAHC Contact List.

D. Field Investigation

Dudek conducted a pedestrian survey of the Project site on July 15, 2024, using standard archaeological procedures and techniques. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory. All portions of the proposed Project site with exposed ground surface were inspected. The goal of the survey was to identify and record any cultural resources within the proposed Project site. The ground surface was examined for the presence of prehistoric artifacts, historical artifacts, sediment discolorations that might indicate the presence of a cultural midden, depressions, and other features that might indicate the former presence of structures or buildings. (Dudek, 2024, p. 16)

E. Results

Dudek's Phase I cultural resources inventory of the Project indicates that there is low sensitivity for intact subsurface cultural deposits. The SCCIC records search did not identify any cultural resources within the Project site. The NAHC SLF search was also negative for the Project. Historic topographic maps and aerials indicate that the Project site was never developed, though it does appear to have been travel on foot as indicated by trails running through the Project site. An intensive pedestrian survey of the Project site did not identify any cultural resources. (Dudek, 2024, p. 18)

In consideration of the negative results of the SCCIC records search, archival research, NAHC SLF search, and intensive-level survey, no further cultural investigations, including archaeological monitoring, are recommended to be necessary in support of implementation of the Project. No historical resources, as defined in Section 15064.5, were identified on the Project site. (Dudek, 2024, p. 18)

4.4.2 Regulatory Setting

The following is a brief description of the federal, State, and local environmental laws and related regulations governing the protection of cultural resources.

A. Federal Regulations

1. Native American Graves Protection and Repatriation Act (NAGPRA)

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) is a federal law enacted in 1990 that establishes procedures for the treatment, repatriation, and protection of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA applies to federal agencies and institutions that receive federal funding and has relevancy under CEQA when human remains or cultural items are inadvertently discovered during ground-disturbing activities, necessitating coordination with the appropriate federal or tribal authorities for disposition and repatriation in accordance with NAGPRA requirements. It

describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation.

Other provisions of NAGPRA: (1) stipulate that illegal trafficking in human remains and cultural items may result in criminal penalties; (2) authorizes the Secretary of the Interior to administer a grants program to assist museums and Indian Tribes in complying with certain requirements of the statute; (3) requires the Secretary of the Interior to establish a Review Committee to provide advice and assistance in carrying out key provisions of the statute; authorizes the Secretary of the Interior to penalize museums that fail to comply with the statute; and, (5) directs the Secretary to develop regulations in consultation with the Review Committee.

B. State Regulations

1. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (CCR, n.d.)

2. California Code of Regulations Title 14, Section 1427

California Code of Regulations Title 14, Section 1427 provides that: "No person shall collect or remove any object or thing of archaeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archaeological or historical interest or value is found." (NAHC, n.d.)

3. California Public Resources Code Section 5097

The Native American Historic Resources Protection Act (Public Resources Code Section 5097, et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a Project; and establishes the NRHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to one year in jail to deface or destroy a Native American historic or cultural site that is listed or may be eligible for listing in the CRHR. (Dudek, 2024, p. 5)

4. Assembly Bill 52

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September

25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017a)

The Public Resources Code now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017a)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a Notice of Preparation for an Environmental Impact Report or Negative Declaration or Mitigated Negative Declaration filed on or after July 1, 2015. (OPR, 2017a)

Section 21074 of the Public Resources Code defines "tribal cultural resources." In brief, in order to be considered a "tribal cultural resource," a resource must be either:

(1) Listed, or determined to be eligible for listing, on the national, state, or local register of historic resources; or

(2) A resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017a)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017a)

Because the proposed Project has a NOP for an EIR, AB 52 is applicable to the Project.

5. State Health and Safety Code

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery…" until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning

the treatment and disposition of the human remains. Further, this section of the Code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. HSC § 7051 specifies that the removal of human remains from "internment or a place of storage while awaiting internment" with the intent to sell them or to dissect them with "malice or wantonness" is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 established the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that "all California Indian human remains and cultural items are to be treated with dignity and respect." It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (CA Legislative Info, n.d.)

California Health and Safety Code, § 5097.98 states that whenever the commission receives notification of a discovery of Native American human remains pursuant to HSC subdivision (c) of § 7050.5, it shall immediately notify those persons that are the most likely descendants. The descendants may inspect the site and make recommendations to the landowner as to the treatment of the human remains. The landowner shall ensure that the immediate vicinity around the remains is not damaged or disturbed by further development activity until coordination has occurred with the descendants regarding their recommendations for treatment, taking into account the possibility of multiple human remains. The descendants shall complete their inspection and make recommendations within 48 hours of being granted access to the site. (CA Legislative Info, n.d.)

6. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows: (OPR, 2022)

- A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering,

scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

- The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

C. Local Plans, Policies, and Regulations

1. General Plan Conservation Element

The Conservation Element of the City's General Plan (Palmdale 2045) outlines the goals and policies related to conservation of natural and cultural resources in Palmdale. The goals applicable to the Project site's known or potentially present cultural resources is Goal CON-8, aimed at protecting historical and culturally significant resources, which contribute to the community's sense of history, and Goal CON-9, aimed at promoting community design that reflects Palmdale's history and preserves Palmdale's cultural resources. (City of Palmdale, 2023, p. 294)

4.4.3 Basis for Determining Significance

Based on Section V. of Appendix G to the State CEQA Guidelines, the Project would result in a significant impact to cultural resources if the Project or any Project-related component would:

a. *Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;*

b. *Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5; or*

c. *Disturb any human remains, including those interred outside of formal cemeteries.*

4.4.4 IMPACT ANALYSIS

Threshold a:	***Would the Project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?***

As discussed in Subsection 4.4.1, no historical resources, as defined in Section 15064.5, were identified on the Project site. (Dudek, 2024, p. 18) Because no historic resources were identified on the Project site, the Project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. Impacts would be less than significant and no mitigation is required.

Threshold b:	***Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?***

As discussed in Subsection 4.4.1, there is low sensitivity for intact subsurface cultural deposits. The SCCIC records search did not identify any cultural resources within the Project site. The NAHC SLF search was also negative for the Project. Historic topographic maps and aerials indicate that the Project site was never developed, though it does appear to have been travel on foot as indicated by trails running through the Project site. An intensive pedestrian survey of the Project site did not identify any cultural resources. In consideration of the negative results of the SCCIC records search, archival research, NAHC SLF search, and intensive-level survey, no further cultural investigations, including archaeological monitoring, are recommended to be necessary in support of implementation of the Project. (Dudek, 2024, p. 18)

Because no archaeological resources are known to exist on the Project site, implementation of the proposed Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5. However, although unlikely, there is a potential that significant archaeological resources could be uncovered during excavation activities including grading and trenching associated with the Project. As such, there is a potential for the Project to have a significant impact if archaeological resources meeting the definition given in CEQA Guidelines Section 15064.5 are unearthed and not properly treated, for which mitigation would be required. This potentially significant impact will be addressed by Mitigation Measures CUL MM-1 through CUL MM-4 which require that a qualified archaeological monitor is retained to monitor the Project site during earthmoving activities and implement mitigation to the satisfaction of the City in the event that any significant archaeological resources are unearthed during excavation activities including grading and trenching. Implementation of Mitigation Measures CUL MM-1 through CUL MM-4 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to archaeological resources would be less than significant.

Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate vicinity of the Project site. Field surveys conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. Nevertheless, the remote potential exists that human remains may be unearthed during ground excavation activities including grading and trenching associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code § 7050.5 "Disturbance of Human Remains." According to § 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner is required to contact the NAHC by telephone within 24 hours. Pursuant to California Public Resources Code § 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or their authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants must complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code § 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. With mandatory compliance to California Health and Safety Code § 7050.5 and Public Resources Code § 5097.98, any potential impacts to human remains, including human remains of Native American ancestry, that may result from development of the Project would be less than significant.

4.4.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within Antelope Valley. This study area was selected for evaluation because it encompasses a broad region with similar geological, biological, and climatic conditions with commonalities for like historic and archaeological resources.

Historic and Archaeological Resources

As noted under the analysis of Thresholds (a) and (b) above, there is low sensitivity for intact subsurface cultural deposits on the Project site. No historic or archaeological resources were identified for the Project site. However, although unlikely, there is a potential that archaeological resources could be uncovered during excavation activities including grading and trenching associated with the Project. As other cumulative developments within the region also have the potential to result in impacts to

subsurface pre-historic archaeological resources, the potential impacts of the Project to archaeological resources would be cumulatively considerable.

Human Remains

As discussed under the analysis of Threshold (c) above, mandatory compliance with the provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 et seq., would ensure that Project impacts to human remains would remain below a level of significance. Because other cumulative developments also would be subject to compliance with California Health and Safety Code § 7050.5 and Public Resources Code §5097 et seq., the impacts to human remains are evaluated as less than significant on a cumulatively considerable basis.

4.4.6 Significance of Impacts Before Mitigation

Threshold a: Less than Significant Impact. No known significant historic resources are present on the Project site and there is a low potential for historical resources to be buried beneath the site's surface.

Threshold b: Significant Direct and Cumulatively Considerable Impact. No known significant archaeological resources are present on the Project site and there is a low potential for archaeological resources to be buried beneath the site's surface. Although unlikely, there is a potential that significant archaeological resources could be uncovered during excavation activities including grading and trenching associated with the Project's construction. If significant archaeological resources are encountered and not properly identified and treated, the Project would have a significant direct and cumulatively considerable impact for which mitigation would be required.

Threshold c: Less Than Significant Impact. In the unlikely event that human remains are discovered during Project grading, trenching, or other ground disturbing activities, the Project's contractors would be required to comply with the applicable provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 et seq. Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.

4.4.7 Mitigation

The following Mitigation Measure addresses potential impacts to archaeological resources that may be buried beneath the site and discovered during the Project's construction activities as discussed under Threshold (b).

The following Mitigation Measures address potential impacts to cultural resources that may be buried beneath the site and discovered during the Project's construction activities as discussed under Thresholds (a) and (b).

CUL MM-1 Cultural Resource Sensitivity Training. Prior to construction and as needed throughout the construction period involving ground-disturbing construction activities, a

construction worker Cultural Resource Sensitivity Training program shall be provided to all construction workers involved in ground-disturbing activities prior to employment at the Project site. The training shall be prepared and conducted by a qualified professional that meets the Secretary of Interior's Professional Qualification Standards in conjunction with a Tribal Historic Preservation Officer or a designated Tribal Representative from one of the consulting Native American tribes, retained by the construction contractor or by the Project Applicant. The training session shall focus on the historic, archaeological, and tribal cultural resources that may be encountered during ground-disturbing activities, as well as the procedures to be followed in such an event. Workers attending the training shall sign a form that shall be kept by the construction contractor or Project Applicant and made available to the City upon request.

CUL MM-2 Tribal Monitoring Agreement. Prior to the issuance of grading permits, the Project Applicant shall enter into a Tribal Monitoring Agreement with the consulting tribe(s) for a Tribal Monitor. The designated Tribal Monitor(s) shall be on-site during all initial ground-disturbing activities, including but not limited to, clearing, grubbing, tree and bush removal, grading, trenching, fence post replacement, construction excavation for all utility and irrigation lines, and landscaping of any kind. In conjunction with a qualified professional that meets the Secretary of Interior's Professional Qualification Standards, the designated Tribal Monitor(s) shall have the authority to temporarily divert, redirect, or halt the ground-disturbing activities to allow identification, evaluation, and potential recovery of cultural resources. The Project Applicant shall submit a fully executed copy of agreement(s) to the City of Palmdale to ensure compliance with this requirement. Upon verification, the City shall clear this condition. The agreement(s) shall not modify any condition of approval or mitigation measure.

CUL MM-3 Cultural Resource Management Plan. Prior to any ground-disturbing activities the qualified professional that meets the Secretary of Interior's Professional Qualification Standards shall develop a Cultural Resource Management Plan (CRMP) and/or Archaeological Monitoring and Treatment Plan (AMTP) to address the details, timing, and responsibilities of all archaeological and cultural resource activities that occur on the Project site. This Plan shall be written in consultation with the consulting tribe(s).

CUL MM-4 On-Site Monitoring. During all ground-disturbing activities the qualified professional that meets the Secretary of Interior's Professional Qualification Standards and the Tribal Monitor(s) shall be on-site full-time. The frequency of inspections shall depend on the rate of excavation, the materials excavated, and any discoveries of Tribal Cultural Resources (TCRs) as defined in California Public Resources Code Section 21074. Archaeological and tribal monitoring shall be discontinued when the depth of grading and the soil conditions no longer retain the potential to contain cultural deposits. The qualified professional that meets the Secretary of Interior's Professional Qualification Standards, in consultation with the Tribal Monitor(s) shall have the

authority to temporarily divert and/or temporarily halt ground-disturbance operations in the area of discovery to allow for the evaluation of potentially significant cultural resources. Isolates and clearly non-significant deposits shall be minimally documented in the field and collected so that the monitored grading can proceed.

If a potentially significant cultural resource(s) is discovered, work shall stop within a 100-foot perimeter of the discovery and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. All work shall be diverted away from the vicinity of the find, so that the find can be evaluated by the qualified professional that meets the Secretary of Interior's Professional Qualification Standards and Tribal Monitor(s). The archaeologist shall notify the Lead Agency (City of Palmdale) and consulting Tribe(s) of said discovery. The qualified professional that meets the Secretary of Interior's Professional Qualification Standards, in consultation with the Lead Agency, the consulting Tribe[s], and the Tribal Monitor, shall determine the significance of the discovered resource. A recommendation for the treatment and disposition of the Tribal Cultural Resource (TCR) shall be made by the qualified professional that meets the Secretary of Interior's Professional Qualification Standards in consultation with the Tribe(s) and the Tribal Monitor(s) and be submitted to the Lead Agency for review and approval. Below are the possible treatments and dispositions of significant cultural resources in order of CEQA preference:

a. Full avoidance.

b. If avoidance is not feasible, preservation in place.

c. If preservation is not feasible, all items shall be reburied in an area away from any future Project impacts and reside in a permanent conservation easement or Deed Restriction.

d. If all other options are proven infeasible, data recovery through excavation and then in a curation facility that meets Federal Curation Standards (CFR 79.1).

4.4.8 Regulatory Requirements (RR)

The City of Palmdale is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Cultural Resources, which include the following regulatory requirements. The Project shall be conditioned to implement the following regulatory requirements as part of the City's Conditions of Approval for the Project.

CUL RR-1 If human remains are encountered during ground-disturbing construction activities, compliance with California Health and Safety Code § 7050.5 and Public Resources Code § 5097 et. seq. shall be required. State Health and Safety Code § 7050.5 states that no further disturbance shall occur until the Los Angeles County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code § 5097.98(b) remains shall be left in place and free from disturbance until a final decision

as to the treatment and disposition has been made. If the Los Angeles County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code § 5097.98. Evidence of compliance with this mitigation measure, if human remains are found, shall be provided to the City of Palmdale Economic and Community Development Department upon the completion of a treatment plan and final report detailing the significance and treatment finding.

4.4.9 Significance of Impacts After Mitigation

Threshold b: Less Than Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measures CUL MM-1 through CUL MM-4 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important historical and archaeological resources would be mitigated to less than significant.

4.5 ENERGY

The analysis in this subsection is based primarily on a technical study titled, "Air Quality, Greenhouse Gas Emissions, and Energy Technical Report," dated March 2025, and is included as *Technical Appendix B* to this EIR (Dudek, 2025a). All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of energy.

4.5.1 EXISTING CONDITIONS

Under existing conditions, the Project site is vacant; therefore, no energy is consumed on the Project site under existing conditions.

A. Electricity

The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into electrical energy. The delivery of electricity involves a number of system components, including power generation facilities, transmission and distribution lines, substations, and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Production of electricity and its conveyance through the power grid occur in response to market demand. Energy capacity, or electrical power, is generally measured in watts while energy use is measured in watt-hours (Wh). (Dudek, 2025a, p. 97)

According to the U.S. Energy Information Administration (EIA), California used approximately 239,480,452 megawatt hours of electricity in 2023. Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Although California consumes more electricity than any other state except Texas and Florida, it uses less electricity per capita than any other state but Hawaii, due to the state's energy efficiency building standards and efficiency and conservation programs. (Dudek, 2025a, p. 97)

Residences and businesses within the City of Palmdale, including the Project site, receive electricity from Southern California Edison (SCE). SCE. SCE administers various energy efficiency and conservation programs that may be available to residents, businesses, and other organizations within the region. In Los Angeles County, SCE reported an annual electrical consumption of approximately 68.5 billion kWh in 2022. SCE receives electric power from a variety of sources. According to the 2022 SCE Power Content Label, eligible renewable energy accounts for 33.2 percent of SCE's overall energy resources, with biomass and biowaste at 0.1 percent, geothermal resources at 5.7 percent, wind power at 9.8 percent, eligible hydroelectric sources at 0.5 percent and solar energy at 17.0 percent. (Dudek, 2025a, p. 97)

B. Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the state, and delivered through high-pressure transmission pipelines. The natural gas transportation system is nationwide network, and therefore, resource availability is typically not an issue. Natural gas provides almost one third of the State's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet. (Dudek, 2025a, pp. 97-98)

The California Public Utilities Commission (CPUC) regulates natural gas utility service for approximately 10.8 million customers who receive natural gas from PG&E, Southern California Gas, San Diego Gas and Electric Company, Southwest Gas, and several smaller natural gas utilities. According to the EIA, California used approximately 2,087 billion cubic feet of natural gas in 2023. The majority of California's natural gas customers are residential and small commercial customers (core customers) and account for approximately 35 percent of the natural gas delivered by California utilities. Large consumers, such as electric generators and industrial customers (noncore customers), account for approximately 65 percent of the natural gas delivered by California utilities. CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. Biogas (e.g., from wastewater treatment facilities or dairy farms) is just beginning to be delivered into the gas utility pipeline systems; however, the State has adopted regulations requiring its development to reduce Statewide emissions of methane by 40 percent below 2013 levels by 2030. (Dudek, 2025a, p. 98)

The Southern California Gas Company (SoCalGas) provides Los Angeles County (including the City of Palmdale) with natural gas service. SoCalGas' service territory encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03 percent in SoCalGas's service territory. In 2022, SoCalGas delivered approximately 2,820 million therms (282.0 billion thousand British thermal units [kBTU]) to Los Angeles County. (Dudek, 2025a, p. 98)

C. Petroleum

According to the EIA, California used approximately 628 million barrels of petroleum in 2022, with the majority (534 million barrels) used for the transportation sector. There are 42 U.S. gallons in a barrel, so this equates to a total daily use of approximately 14.9 million gallons of petroleum among all sectors and 12.7 million gallons for the transportation sector. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. At the federal and State levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled (VMT). Market forces have driven the price of petroleum products steadily upward over time, and technological

advances have made use of other energy resources or alternative transportation modes increasingly feasible. (Dudek, 2025a, p. 98)

Largely as a result of and in response to these multiple factors, gasoline consumption within the State has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend will likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state. According to CARB's Emission Factor (EMFAC) Web Database, Los Angeles County on-road transportation sources are projected to consume about 4.3 billion gallons of petroleum in 2027, which is analyzed as the first year of Project operations herein. (Dudek, 2025a, p. 98)

4.5.2 REGULATORY SETTING

A. Federal Plans, Policies, and Regulations

1. Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. The ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were required to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. (Dudek, 2025a, p. 100)

2. Transportation Equity Act for the 21st Century

The Transportation Equity Act of the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. The TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. The TEA-21 continues the program structure established for highways and transit under the ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. The TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems (ITS), to help improve operations and management of transportation systems and vehicle safety. (Dudek, 2025a, p. 100)

3. Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. The act includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The act requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs

capable of running on alternative fuels each year. In addition, financial incentives are also included in the act. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. The Energy Policy Act also requires states to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

In January 2005, the new Energy Policy Act was signed into law. It addresses energy production in the United States, including energy efficiency, renewable energy, oil and gas, coal, Tribal energy, nuclear matters and security, vehicles, and motor fuels, including ethanol, hydrogen, electricity, energy tax incentives, hydropower and geothermal energy, and climate change technology. The Energy Policy Act provides loan guarantees for entities that develop or use innovative technologies that avoid the by-production of GHGs. Another provision of the Energy Policy Act is the Renewable Fuel Standard (RFS), which increases the amount of biofuel that must be mixed with gasoline sold in the United States. (Dudek, 2025a, p. 99)

4. Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy (CAFE) standards for motor vehicles, the EISA facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory RFS that requires fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
- Requiring approximately 25% greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200% greater efficiency for light bulbs, or similar energy savings, by 2020.
- While superseded by the U.S. Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) actions described previously, establishing miles per gallon targets for cars and light trucks and directing the NHTSA to establish a fuel economy program for medium-and heavy-duty trucks and create a separate fuel economy standard for trucks.

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum. EPA is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains at least a minimum volume of renewable fuel. The RFS program was created under the Energy Policy Act and established the first renewable fuel volume mandate in the United States. As required under the Energy Policy Act, the original RFS

program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several ways that laid the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as "RFS2" and includes the following:

- The EISA expanded the RFS program to include diesel, in addition to gasoline.
- The EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- The EISA established new categories of renewable fuel and set separate volume requirements for each one.
- The EISA required EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green (environmentally beneficial) jobs. (Dudek, 2025a, pp. 99-100)

5. Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (Infrastructure Deal) was signed into law November 15, 2021. The legislation includes $39 billion of new investment to modernize transit, in addition to continuing the existing transit programs for five years as part of surface transportation reauthorization. The Infrastructure Deal would also invest $7.5 billion to build out a national network of electric vehicle (EV) chargers. The Infrastructure Deal would provide funding for deployment of EV chargers along highway corridors to facilitate long-distance travel and within communities to provide convenient charging where people live, work, and shop to support a goal of building a nationwide network of 500,000 EV chargers. This would accelerate the adoption of EVs, which would help reduce emissions and improve air quality. In addition, the Infrastructure Deal would include more than $65 billion of investments in clean energy transmission including upgrading existing power infrastructure through expanding transmission lines to facilitate the expansion of renewables and clean energy. (Dudek, 2025a, p. 101)

B. State Plans, Policies, and Regulations

1. Integrated Energy Policy Report

The California Energy Commission (CEC) is responsible for preparing integrated energy policy reports that identify emerging trends related to energy supply, demand, and conservation; public health and safety; and maintenance of a healthy economy. The CEC's 2023 Integrated Energy Policy Report discusses the State's policy goals of decarbonizing buildings, ensuring energy reliability, decarbonizing the State's gas system, the state's energy demand forecast, and quantifying the benefits of the clean transportation program. SB 100 calls for California's electricity system to become 100% zero-carbon by 2045. CEC, CPUC, and California Air Resources Board (CARB) are working together

to identify pathways to deeply decarbonize the State's electricity system in response to SB 100. The aim is to leverage California's clean electricity system to decarbonize, or remove carbon from, other portions of the State's energy system. Over time these policies and trends would serve to beneficially reduce the Project's GHG emissions profile and energy consumption as they are implemented. (Dudek, 2025a, pp. 101-102)

2. California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The 2019 Standards for building construction, which went into effect on January 1, 2020, improved upon the former 2016 Standards for residential and nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code.

3. Pavley Fuel Efficiency Standards

California Assembly Bill 1493 ("Pavley Fuel Efficiency Standards"), enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from model year 2009-2016 non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

4. California Renewable Portfolio Standards

The CEC implements and administers portions of California's Renewables Portfolio Standard (RPS). Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40 precent by December 31, 2024, 45 percent by December 31, 2027, and 50 percent by December 31, 2030. SB 100 raises California's RPS requirement to 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kWh of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include

sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

5. Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved, and the Governor signed, Senate Bill 350 (SB 350), which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027;
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities; and
- Reorganize the Independent System Operator (ISO) to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

6. Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation: (Dudek, 2025a, p. 101)

- The act directed the CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources. (Dudek, 2025a, p. 101)

7. Assembly Bill 1007

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the CARB and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase

in-state production of biofuels without causing a significant degradation of public health and environmental quality. (Dudek, 2025a, p. 101)

8. Integrated Energy Policy Report

The CEC is responsible for preparing integrated energy policy reports that identify emerging trends related to energy supply, demand, and conservation; public health and safety; and maintenance of a healthy economy. The CEC's 2023 Integrated Energy Policy Report discusses the state's policy goals of decarbonizing buildings, ensuring energy reliability, decarbonizing the state's gas system, the state's energy demand forecast, and quantifying the benefits of the clean transportation program. SB 100 calls for California's electricity system to become 100% zero-carbon by 2045. CEC, CPUC, and CARB are working together to identify pathways to deeply decarbonize the state's electricity system in response to SB 100. The aim is to leverage California's clean electricity system to decarbonize, or remove carbon from, other portions of the state's energy system. Over time these policies and trends would serve to beneficially reduce the project's GHG emissions profile and energy consumption as they are implemented. (Dudek, 2025a, p. 101)

C. Local Plans

1. City of Palmdale General Plan

The Sustainability, Climate Action, and Resilience Element of the City's General Plan (Palmdale 2045) establishes goals and policies related to City's greenhouse gas reduction and sustainability strategies, including a goal for the lowering of fossil fuel use. The specific goals related to energy and applicable to the Project are aimed at decarbonized buildings for new construction and major renovations (Goal SCR-3) and reducing greenhouse gas emissions from transportation (Goal SCR-4). (City of Palmdale, 2023)

4.5.3 Methodology for Calculating Project Energy Demands

Information from the CalEEMod version 2022.1 outputs for the Project's Air Quality, Greenhouse Gas Emissions, and Energy Technical Report (*Technical Appendix B*) was used to calculate the potential Project-related energy consumption during construction and operation. Construction of the Project would result in petroleum consumption primarily associated with use of off-road construction equipment, on-road vendor (material delivery) trucks, and worker vehicles. An energy estimate summary is also provided in Appendix A of *Technical Appendix B*. (Dudek, 2025a, p. 102)

4.5.4 Basis for Determining Significance

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact associated with energy if the Project or any Project-related component would:

a. *Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or*

b. *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

Regarding the determination of significance under Threshold (a), if energy consumed by the Project's construction and/or operation of the Project cannot be accommodated with existing available resources and energy delivery systems, and/or the Project requires and/or consumes more energy than industrial uses in California of similar scale and intensity, the Project would result in wasteful, inefficient, or unnecessary consumption of energy. There is no adopted quantitative threshold applicable to the Project for determining a significant energy impact.

4.5.5 IMPACT ANALYSIS

Threshold a:	***Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

A discussion of the expected energy demands for the Project during construction and operation is provided below.

A. Energy Use During Construction

1. Electricity Usage

Temporary electric power for as-necessary lighting and electronic equipment, such as computers inside temporary construction trailers, would be provided by SCE. The electricity used for such activities would be temporary, would be substantially less than that required for Project operation, and would therefore have a negligible contribution to the Project's overall energy consumption. (Dudek, 2025a, p. 103)

2. Natural Gas Usage

Natural gas is not anticipated to be required during construction of the Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below. 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. (Dudek, 2025a, p. 103)

3. Petroleum Usage

Petroleum would be consumed throughout construction of the Project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment and trucks associated with construction activities are assumed to use diesel fuel. Construction workers would travel to and from the Project site throughout the duration of construction. It is assumed that construction workers would travel to and from the Project site in gasoline-powered vehicles. Fuel consumption was estimated by converting the total CO_2 emissions from each construction phase to gallons of gasoline or diesel using conversion factors for CO_2. The conversion factor for gasoline is 8.78 kilograms per metric ton of CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton of CO_2 per gallon.

The estimated petroleum usage during construction is shown in Table 4.5-1, *Construction Petroleum Demand*.

Table 4.5-1 Construction Petroleum Demand

Project	Off-road (diesel)	Vener Trucks (diesel)	Haul Trucks (diesel)	Worker Vehicles (gasoline)
Construction Total (Gallons)	263,320	10,836	23,060	9,716
			Total Petroleum	**308,697**

Source: (Dudek, 2025a, Table 28)

4. Summary of Project's Construction Energy Demands

In summary, construction of the Project is conservatively anticipated to consume a total of approximately 308,697 gallons of petroleum. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient, wasteful, or unnecessary consumption of fuel. Construction contractors would be required to comply with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. (Dudek, 2025a, pp. 103-104)

Project construction would represent a single-event petroleum demand and would not require on-going or permanent commitment of petroleum resources for this purpose. Overall, construction of the Project would not result in the wasteful or inefficient use of petroleum fuel, and the Project would result in less-than-significant impacts during Project construction regarding the potential for wasteful, inefficient, or unnecessary consumption of energy resources. (Dudek, 2025a, p. 104)

B. Energy Use During Project Operations

1. Electricity Usage

The operational phase would require electricity for multiple purposes, including building heating and cooling, lighting, electronics, and electric pumps, as described above. CalEEMod was used to estimate Project emissions from electricity uses (see Appendix A of *Technical Appendix B*). The Project is anticipated to consume approximately 8,344,788 kWh of electricity per year. For context, the most recent energy data from the CEC shows that Los Angeles County consumed approximately 68.5 billion kWh hours in 2022. The Project would represent a 0.01 percent increase in the total demand for electricity. The Project would not represent a significant demand on electricity supplies that would require additional capacity. The Project proposes conventional industrial uses reflecting contemporary

energy efficient/energy conserving designs and operational programs. Notably, although not necessitated by an energy use impact, the Project would also implement measures that would further reduce electricity demand, such as Mitigation Measure GHG MM-1, whereby the Project would commit to renewable energy generation sufficient to meet at least 75 percent of the building envelope's anticipated total operational energy requirements. Finally, the Project would be required to comply with the applicable Title 24 standards applicable at that time of building permit application, which would further ensure that the Project's energy demands would not be inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant. (Dudek, 2025a, p. 104)

2. Natural Gas Usage

Natural gas consumption during operation would be required for various purposes, including, but not limited to, building heating and cooling. CalEEMod was used to estimate Project emissions from natural gas consumption (see Appendix A of *Technical Appendix B*). The Project is anticipated to consume approximately 20,720,620 kBtu per year. For context, the most recent energy data from the CEC shows that Los Angeles County consumed approximately 282 billion kBtu in 2022. The Project would represent a less than 0.01 percent increase in the total demand for natural gas. The Project would not represent a significant demand on natural gas supplies that would require additional capacity. The Project's natural gas demand would also not result in peak and base period demands that would affect energy supplies or require additional capacity. The Project would incorporate an all-electric building and thereby eliminate natural gas demand. Thus, because natural gas usage would by itself have no impact as to overall energy consumption, the natural gas consumption of the Project would not be considered inefficient or wasteful, and impacts would be less than significant (Dudek, 2025a, p. 104)

3. Petroleum Usage

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, as well as diesel-fueled cargo handling equipment, a diesel-fueled emergency generator and fire pump, TRUs, and landscaping equipment. Fuel demand estimates for the Project are provided in Table 4.5-2, *Operational Petroleum Demand*. As summarized on Table 4.5-2, the Project would result in an estimated annual fuel demand of 1,588,190 gallons of fuel. Fuel would be provided by current and future commercial vendors. For context, as Los Angeles County is estimated to consume approximately 4.3 billion gallons of petroleum in 2027 from on-road vehicles, the Project would represent less than a 0.04% increase in fuel demand. Trip generation, VMT, cargo handling and landscaping equipment required for the Project are consistent with other industrial uses of similar scale and configuration. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful activities, nor associated excess and wasteful vehicle energy consumption. In addition, although not accounted for in Table 4.5-2, the Project would also implement measures that would further reduce petroleum demand, such as Mitigation Measure AIR MM-1, which establishes anti-idling measures, requires electric hook-ups for TRUs, and specifies EV charging stations for passenger vehicles and conduit for future charging stations for heavy-duty trucks. In addition, Mitigation Measure AIR MM-5 would require zero-emission cargo handling and landscaping equipment. Finally, enhanced fuel economies realized pursuant to federal and State regulatory actions, and related transition of vehicles to alternative energy

sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. As supported by the preceding discussions, Project operational energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary; thus impacts would be less than significant. (Dudek, 2025a, p. 105)

Table 4.5-2 Operational Petroleum Demand

Project	Employee Vehicles (gasoline)	Haul Trucks (diesel)	Off-Road Equipment (diesel)	Stationary Sources (diesel)	Transport Refrigeration Units (diesel)	Landscaping Equipment (gasoline)
Operations (Gallons)	972,041	240,287	370,818	3,321	61	1,663
					Total Petroleum	**1,588,190**

Source: (Dudek, 2025a, Table 29)

4. Renewable Energy Potential

As part of the Project's design process, the Project Applicant considered how the Project could potentially increase its reliance on renewable energy sources to meet the Project's energy demand. Renewable energy sources that were considered for their potential to be used to power the Project, consistent with the CEC's definition of eligible renewables, include biomass, geothermal, solar, wind, and small hydroelectric facilities. (Dudek, 2025a, p. 105)

Given the Project's location and the nature of the Project, there are considerable site constraints including incompatibility with surrounding land uses for large scale power generation facilities, unknown interconnection feasibility, compatibility with utility provider systems, and no known water or geothermal resources to harness, that would eliminate the potential for biomass, geothermal, hydroelectric renewable energy to be installed on site. (Dudek, 2025a, p. 105)

Regarding wind power, first, due to the location of the site and surrounding land uses, wind turbines are generally not feasible because they would represent an incompatible use. Specifically, a general rule of thumb is to install a wind turbine on a tower with the bottom of the rotor blades at least 30 feet above anything within a 500-foot horizontal radius and to be sited upwind of buildings and trees, which the Project site cannot accommodate. As such, wind power was determined not to be feasible for the Project. (Dudek, 2025a, p. 106)

The Project would comply with all applicable Title 24 code provisions, such as the solar ready building mandatory requirements. Beyond that, as stated in Mitigation Measure GHG MM-1, the Project would commit to on-site renewable energy generation produced by rooftop solar panels sufficient to meet at least 75 percent of the building envelope's anticipated total operational electricity requirements. (Dudek, 2025a, p. 106)

In summary, the Project includes the on-site renewable energy source (i.e., solar) that was determined to be feasible for the site and does not include the on-site renewable energy sources that were determined to be infeasible. (Dudek, 2025a, p. 106)

C. Conclusion

Based on the foregoing analysis, implementation of the Project would not result in a potentially significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; therefore, impacts would be less than significant and no mitigation is required.

Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR Part 6 and Part 11). Part 6 of Title 24 establishes energy efficiency standards for non-residential buildings, including warehouses, constructed in California to reduce energy demand and consumption. Part 11 of Title 24 sets forth voluntary and mandatory energy measures that are applicable to the Project under CALGreen. For nonresidential projects, some of the key mandatory CALGreen standards involve requirements related to bicycle parking, designated parking for clean air vehicles, EV charging stations for passenger vehicles, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, and construction waste management (24 CCR, Part 11). The Project would comply with all applicable California code requirements for energy efficiency. (Dudek, 2025a, p. 106)

Regarding local plans, the Sustainability, Climate Action, and Resilience Element of the City's General Plan presents strategies to reduce energy demand. The Project's consistency with the City's strategies and policies that pertain to energy demand were assessed in Subsection 4.7, *Greenhouse Gas Emissions*, and Table 4.10-1, *General Plan Consistency Analysis*, of this EIR. As described therein, the Project would generally be consistent with the applicable GHG reduction strategies which involve implementation of clean energy, more efficient buildings, transportation measures, reduction of solid waste generation, and reduction in use of water and generation of wastewater, in the City's General Plan. (Dudek, 2025a, p. 107)

Based on the preceding analysis, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant and no mitigation is required.

4.5.6 Cumulative Impact Analysis

The proposed Project and other development projects would be required to comply with the same applicable federal, State, and local regulatory measures aimed at reducing fossil fuel consumption and the conservation of energy. Accordingly, the Project would not cause or contribute to a significant

cumulatively considerable impact related to conflicts with a State or local plan for renewable energy or energy efficiency.

4.5.7 Significance of Impacts Before Mitigation

Threshold a: Less than Significant Impact. The amount of energy and fuel estimated to be consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems.

Threshold b: Less than Significant Impact. The Project would not cause or result in the need for additional energy production or transmission facilities. The Project would not conflict with or obstruct the achievement of energy conservation goals within the State of California identified in State and local plans for renewable energy and energy efficiency.

4.5.8 Mitigation

Impacts would be less than significant; therefore, no mitigation is required; however, mitigation measures AIR MM-1 through AIR MM-7 would be implemented.

4.5.9 Design Features (DF) and Regulatory Requirements (RR)

Refer to the design features and regulatory requirements listed in EIR Subsection 4.2, *Air Quality*, and EIR Subsection 4.7. *Greenhouse Gas Emissions,* many of which also reduce the Project's energy consumption.

4.6 GEOLOGY AND SOILS

This subsection assesses the existing surface and subsurface geologic conditions and features of the Project site and determines the potential for impacts associated with these features. The analysis is based on information from the report titled, "Geotechnical Investigation, Proposed Industrial Building: NEC Rancho Vista Boulevard at Division Street, Palmdale, California for Pacific Industrial," prepared by Southern California Geotechnical (herein, "SCG"), dated February 28, 2024, and included as EIR *Technical Appendix E1* (SCG, 2024). The analysis is also based on information from the report titled, "Paleontological Resources Review – Pacific Palmdale Center Project," prepared by Dudek, dated February 10, 2025, and included as EIR *Technical Appendix E2* (Dudek, 2025c).

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of geology and soils.

4.6.1 EXISTING CONDITIONS

A. Regional Geologic Setting

The City of Palmdale is located in the southern part of the Mojave geomorphic province. The Mojave is a broad interior region of isolated mountain ranges separated by stretches of desert plains. There are two important fault trends that control topography in the Mojave: a prominent northwest-southeast trend and a secondary east-west trend (apparent alignment with Transverse Ranges is significant). The Mojave province is wedged in a sharp angle between the Garlock Fault (southern boundary Sierra Nevada) and the San Andreas Fault, where it bends east from its northwest trend. The northern boundary of the Mojave is separated from the prominent Basin and Range geomorphic province by the eastern extension of the Garlock Fault. (City of Palmdale, 2022a, p. 4.7-1)

B. Local Geologic Setting

SCG conducted subsurface exploration at the Project site consisting of 17 borings (identified as Boring Nos. B-1 through B-17) advanced to depths of approximately 10 to 30 feet below the existing site grades. The approximate locations of the borings are indicated on the Boring Location Plan, included as Plate 2 in Appendix A to the Project's Geotechnical Investigation (EIR *Technical Appendix E1*). Based on the results of the analysis, the Project site contains the following soil types:

- Younger Alluvium. Younger alluvial soils were encountered at the ground surface at all of the boring locations, extending to depths of approximately 2.5 to 17 feet below existing site grades. The borings encountered loose to very dense silty fine to medium sands, fine to coarse sands, with varying amounts of silt, clay, sand, and gravel content. (SCG, 2024, p. 5)

- Older Alluvium. Native older alluvial soils were encountered beneath the younger alluvium at Boring Nos. B-1, B-3, B-4, B-5, B-8, B-9, and B-10, extending to at least the maximum depth explored of approximately 30 feet. The older alluvium generally consists of medium dense to very dense silty fine to coarse sands, fine to coarse sands, and clayey fine to coarse sands, with

varying amounts of clay, silt, sand, and gravel content. The older alluvium possesses some calcareous nodules and veining, with some slightly cemented samples. (SCG, 2024, p. 5)

C. Site Topography

The Project site is relatively flat with an elevation of approximately 2,625 feet above mean sea level (amsl) with a regional slope to the northeast (HMC, 2024). The topography generally drops downward to the east, with a maximum elevation differential of about 17± feet. (SCG, 2024, p. 1)

D. Faulting and Seismicity

According to Palmdale 2045 General Plan Final Environmental Impact Report (SCH #2021060494), Figure 4.7-3, Fault Map of Palmdale, the Project site is not located within a fault zone. The nearest fault is the Littlerock Fault which is a fault trace that branches off from the primary fault - the San Andreas Fault. The Littlerock Fault is located approximately 2.14 miles southwest of the Project site (CGS, n.d.) (City of Palmdale Public Works Department, 2021, p. 62)

Research of available maps indicates that the Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Furthermore, SCG did not identify any evidence of faulting during the geotechnical investigation conducted on the Project site. Therefore, the possibility of significant fault rupture on the site is considered to be low. The potential for other geologic hazards such as seismically induced settlement, lateral spreading, tsunamis, inundation, seiches, flooding, and subsidence affecting the site is considered low. (SCG, 2024, p. 9)

E. Groundwater

Free water was not encountered during the drilling of any of the exploratory borings on the Project site. Based on the moisture content of the recovered soil samples and the lack of free water in the borings, the static groundwater table is considered to have existed at a depth of approximately 30 feet at the time of subsurface explorations, below existing site grades. (SCG, 2024, p. 6)

SCG also reviewed available groundwater data in order to determine the historic high groundwater level for the site. The primary reference used to determine the historic groundwater depths in the area. The California Geological Survey (CGS) Open File Report 083 and File Report 105, and the Seismic Hazard Zone Report for the Palmdale and Ritter Ridge 7.5 Minute Quadrangles, indicated that the historic high groundwater level for the site was greater than approximately 50 feet below the ground surface. (SCG, 2024, p. 6)

SCG also obtained recent water level data from the California Department of Water Resources website which indicated that the nearest monitoring well on record is located approximately 2,100 feet east of the Project site. Water level readings within this monitoring well indicate that the highest groundwater level of approximately 445 feet below the ground surface was recorded in April 1981. (SCG, 2024, p. 7)

F. Liquefaction

Liquefaction is the loss of the strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors that influence the potential for liquefaction include groundwater table elevation, soil type and grain size characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking. The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below the existing ground surface. Liquefaction potential is greater in saturated, loose, poorly graded fine sands with a mean (d_{50}) grain size in the range of 0.075 to 0.2 mm. Clayey (cohesive) soils or soils which possess clay particles ($d<0.005$mm) in excess of 20 percent generally are not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table. (SCG, 2024, p. 11)

The Earthquake Zones of Required Investigation, Palmdale and Ritter Ridge Quadrangles, published by the CGS indicate that the Project site is not located within a designated liquefaction hazard zone. Based on the mapping performed by the CGS and the lack of a historic high ground water table within the upper approximately 50 feet of the ground surface, liquefaction is not considered to be a design concern for the Project site. (SCG, 2024, p. 11)

G. Expansive Soils

Laboratory testing performed on a representative sample of the near surface soils indicates that the Project site's soils are non-expansive, with an Expansion Index (EI) of 0. Therefore, no expansive soils are located on the Project site. (SCG, 2024, p. 12)

H. Seiches

A seiche is an underwater wave that oscillates through a body of water which may be triggered by earthquakes or landslides. In general, seiches are present in larger lakes as a result of the depth, temperature, and contours of the body of water. The potential for seiches affecting the Project site is considered low because there are no large bodies of water in close proximity to the site. (SCG, 2024, p. 9)

I. Soil Types and Erosion Potential

Table 4.6-1, *Summary of On-Site Soils*, provides a summary of the soils present on the Project site and identifies the associated rate of runoff and erosion susceptibility. As shown on Table 4.6-1, the entirety of the Project site contains soils that have a very low to negligible rate of runoff. Table 4.6-1 also indicates that the entirety of the Project site contains soils that have a slight susceptibility to erosion. (USDA, n.d.; USDA, 1970, p. 10)

Table 4.6-1 Summary of On-Site Soils

Map Symbol	Map Unit Name	Rate of Runoff	Erosion Susceptibility	Acres in AOI[1,2]	Percent of AOI[1, 2]
Aca	Adelanto coarse sandy loam, 2 to 5 percent slopes	Very Low	Slight	58.9	87.8%
HkA	Hesperia fine sandy loam, 0 to 2 percent slopes	Very Low	Slight	8.2	12.2%
	Totals:	--	--	**67.1**	**100.0%**

[1]AOI = Area of Interest.
[2] Values reflect rounding.
(USDA, n.d.) (USDA, 1970)

J. Paleontological Resources

1. Paleontological Sensitivity

Absent specific agency guidelines, most professional paleontologists in California adhere to the guidelines set forth by the Society of Vertebrate Paleontology (SVP) that establish protocols for the assessment of the paleontological resource potential of underlying geologic units. Using baseline information gathered during a paleontological resource assessment, the paleontological resource potential of the geologic unit(s) (or members thereof) underlying a project area can be assigned to one of four categories defined by the SVP. These categories include high sensitivity, undetermined sensitivity, low sensitivity and no sensitivity for paleontological resource potential, as described below. (SVP, 2010, pp. 1-2)

- High Sensitivity: Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high sensitivity, as they have a high potential for containing additional significant paleontological resources. Rock units containing potentially datable organic remains older than late Holocene, such as animal nests, and rock units which may contain new vertebrate deposits, traces, or trackways, are also classified as having high sensitivity.

- Low Sensitivity: Stratigraphic units that have yielded few fossils in the past, based upon review of available literature and museum collections records, are considered to possess low paleontological sensitivity. Rock units with low sensitivity typically will not require mitigation measures to protect fossils.

- Undetermined Sensitivity: In certain instances, the lack of available literature on a particular geologic unit, or absence of exposures of that unit, make it difficult to determine a unit's likelihood of yielding fossiliferous remains. Under these circumstances, further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources.

- No Sensitivity: This category includes geological strata that have no potential to contain significant fossilized remains. For instance, metamorphic and plutonic igneous rocks normally

do not contain fossils due to the high heat and pressure during their formation and commonly possess no paleontological sensitivity. Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

As discussed below, documented Pleistocene fossil localities are present in the vicinity of the Project site and Pleistocene age alluvium is anticipated to occur at relatively shallow depths beneath the surface of the Project site (approximately 2.5 feet below the surface within some portions of the Project site). Therefore, the Pleistocene deposits beneath the surface of site are considered to have High Sensitivity for paleontological resources. (Dudek, 2025c, p. 2)

2. Site-Specific Geology and Paleontology

According to published geologic maps, the Project site is generally underlain by Quaternary (Holocene; less than approximately 11,700 years old) alluvium with Pleistocene (approximately 11,700 to 2.58 million years old) alluvium likely underlying these deposits at depth (Dudek, 2025c, p. 1). The Project's Geotechnical Investigation corroborates these geologic maps, as younger alluvium was encountered at the ground surface at all of the boring locations, extending to depths of 2.5 to approximately 17 feet below existing site grades, and older alluvial soils were encountered beneath the younger alluvium at seven of the 17 boring locations (SCG, 2024, p. 5).

Late Holocene age (less than 4,200 years ago), or recent alluvial deposits, have low paleontological resource sensitivity. Middle Holocene (approximately 4,200 to 8,200 years ago) and older sediments have high paleontological resource sensitivity. (Dudek, 2025c, p. 2)

3. Paleontological Records Search Results

Dudek requested a paleontological records search from the Natural History Museum of Los Angeles County (NHMLA), which reported no fossil localities from within the Project site; however, there are numerous nearby localities from the same sedimentary deposits that underlie the Project site. East of the Project site, fossil locality LACM (Los Angeles County Museum) VP (Vertebrate Paleontology) 5942-5950 yielded abundant remains of multiple species of small mammals, scaled reptiles, and birds, from zero to nine feet below the ground surface (bgs) along Avenue S in Palmdale near Lake Los Angeles. These localities were from an unnamed Holocene geological unit. North of the Project site, east of Sierra Highway and west of Challenger Way, between East Avenue H and East Avenue I in the City of Lancaster, LACM VP 7884 produced a fossil of a camel (*Camelops hesternus*) from a depth of four feet bgs from an unknown Pleistocene formation. Farther north of the Project site, LACM VP 7853 produced fossils of scaled reptiles, large and small mammals, and one fish from a depth of three to eleven feet bgs from an unknown Pleistocene formation at the Lancaster Landfill and Recycling Center. Northwest of the Project site, a single camelid (*Hemiauchenia*) specimen was found at LACM VP 7891 from a depth of 21 feet bgs in an unknown Pleistocene formation near the Aqueduct north of Willow Springs. Farther north of the Project site, a site along SR-14 in Rosamond (located in unincorporated Kern County), yielded a mammoth molar and associated dentary fragment, which are housed at the Buena Vista Museum of Natural History in Bakersfield, California. Prehistoric Lake Thompson, which dates to the Pleistocene, is thought to have occupied areas east and west of SR-14

in Rosamond, and possibly areas to the south in the City of Lancaster. These lake deposits have been associated with the recovery of other Pleistocene, or "Ice Age," paleontological resources. (Dudek, 2025c, pp. 1-2)

4.6.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations governing issues related to geology and soils.

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry and has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2024e)

2. Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act (PRPA) was signed into law on March 30, 2009 (Public Law 111-11, Title VI, Subtitle D; 16 U.S.C. §§ 470aaa - 470aaa-11). PRPA directs the Department of Agriculture (US Forest Service) and the Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service) to implement comprehensive paleontological resource management programs. Section 6310 of PRPA specifically states, "As soon as practical after the date of enactment of this Act, the Secretary shall issue such regulations as are appropriate to carry out this subtitle, providing opportunities for public notice and comment." (NPS, 2024b)

B. State Regulations

1. Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards.

The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Single-family wood-frame and steel-frame dwellings up to two stories not part of a development of four units or more are exempt. However, local agencies can be more restrictive than State law requires. (CA Legislative Info, n.d.)

Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). (CA Legislative Info, n.d.)

2. Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards.

Staff geologists in the Seismic Hazards Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation (ZORI) those areas prone to liquefaction and earthquake–induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. (CDC, n.d.)

The law requires the State Geologist to establish regulatory zones ZORI and to issue Seismic Hazard Zone maps. These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single-family wood-frame or steel-frame dwellings up to two stories not part of a development of four or more units are exempt from the State requirements. However, local agencies can be more restrictive than State law requires. (CDC, n.d.; CGS, 2008, p. 5)

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers.

The SHMA requires site-specific geotechnical investigations be conducted within the ZORI to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. (CDC, n.d.)

3. Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone.

The law requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single-family frame dwellings up to two stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires.

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers. (CA Legislative Info, n.d.)

4. Essential Services Buildings Seismic Safety Act

In 1986, the California Legislature determined that buildings providing essential services should be capable of providing those services to the public after a disaster. Their intent in this regard was defined in legislation known as the Essential Services Buildings Seismic Safety Act of 1986 and includes requirements that such buildings shall be "…designed and constructed to minimize fire hazards and to resist…the forces generated by earthquakes, gravity, and winds." This enabling legislation can be found in the California Health and Safety Code, Chapter 2, § 16000 through 16022. In addition, the California Building Code defines how the intent of the act is to be implemented in Title 24, Part 1 of the California Building Standards Administrative Code, Chapter 4, Articles 1 through 3. (CA Legislative Info, n.d.)

5. California Building Standards Code

California Code of Regulations (CCR) Title 24 is reserved for State regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code § 18909). Health and Safety Code (state law) § 18902 gives CCR Title 24 the name California Building Standards Code (CBSC).

The CBSC in CCR Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code §§ 18908 and 18938) throughout the

State of California. Cities and counties are required by State law to enforce CCR Title 24 (reference Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5). (CBSC, 2022)

6. Porter-Cologne Water Control Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 *et seq*.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2014)

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and are updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014) The Project site is located in the Antelope Valley Watershed, which is within the purview of the Lahontan RWQCB. Therefore, the Water Quality Control Plan for the Lahontan Region (Basin Plan) is the governing water quality plan for the region.

7. California Public Resources Code

Public Resources Code § 5097.5 states that "A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands." Public Resources Code § 30244 states that, "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required." (CCR, n.d.)

C. Local Regulations

1. General Plan Safety Element

The Palmdale 2045 General Plan Safety Element outlines goals and policies related to hazards and safety in Palmdale, including seismic safety. Per California Government Code section 65302, a Safety Element provides protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence; liquefaction; and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body. Safety Element Goal SE-1 aims for a city with minimal public health, safety, and welfare impacts resulting from seismic hazards. The Safety Element also includes mapping of known geologic hazards and addresses evacuation routes as they relate to geologic hazards. (City of Palmdale, 2023)

2. Palmdale Hazard Mitigation Plan

The Local Hazard Mitigation Plan (LHMP) analyzes natural and manmade hazards and mitigation procedures to help protect those who reside in Palmdale. Mitigation activities include among other items adoption of disaster resistant ordinances and regulations, including for seismic hazards. (City of Palmdale, 2022a, p. 4.7-12)

3. Palmdale Municipal Code

Palmdale Municipal Code (PMC) Chapter 8.04 contains health, safety, and technical construction codes, which include requirements for construction near a known active earthquake fault. Additionally, the PMC requires an engineering geology and/or geotechnical engineering report containing a finding regarding the safety of the building site for the proposed structure against hazard from landslide, settlement or slippage and a finding regarding the effect that the proposed building or grading construction will have on the geologic stability of property outside of the building site. (PMC, 2025) (City of Palmdale, 2022a, p. 4.7-12)

4. Palmdale Storm Water Management Plan (2003)

The Palmdale Storm Water Management Plan (SWMP) was adopted in 2003. The SWMP was prepared by the City of Palmdale Department of Public Works with the objective to preserve the quality of City waters, including storm water conveyances such as closed conduits, open channels, drainage basins, and dry wells. The City was issued a "small" Municipal Separate Storm Sewer System (MS4) permit by the Lahontan RWQCB which authorizes the City to legally discharge stormwater into local waterways. The California State Water Resources Control Board (SWRCB) designated the City of Palmdale MS4 as a "small" MS4 because it is located within an urbanized area defined by the US Census Bureau. As part of the MS4 permit requirements, the City was required to develop and submit a SWMP to the Lahontan RWQCB. The goal of the City's SWMP is to reduce the discharge of pollutants to the MS4 to the Maximum Extent Practicable (MEP). A requirement of the SWMP is that each development attenuate post-developed flows to 85 percent of pre-developed flows with the objective of protecting downstream properties. Additional requirements of the SWMP include employing BMPs for on-site detention/retention of stormwater runoff erosion events and tracking. (City of Palmdale, 2023, p. 329) (City of Palmdale, 2003, p. 3) (City of Palmdale, 2022a, p. 4.10-13)

4.6.3 Basis for Determining Significance

Based on Section VII. of Appendix G to the State CEQA Guidelines, the Project would result in a significant impact to geology and soils if the Project or any Project-related component would:

a. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
   i. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;*
   ii. *Strong seismic ground shaking;*
   iii. *Seismic-related ground failure, including liquefaction; or*
   iv. *Landslides;*
b. *Result in substantial soil erosion or the loss of topsoil;*

c. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;*

d. *Be located on expansive soil, as defined in Section 1803.5.3. of the California Building Code (2019), creating substantial direct or indirect risks to life or property;*

e. *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water; or*

f. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

4.6.4 IMPACT ANALYSIS

Threshold a:	***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.?
	ii. Strong seismic ground shaking?
	iii. Seismic-related ground failure, including liquefaction?
	iv. Landslides?

A. Seismic-Related Hazards

As previously indicated in Subsection 4.6.1, the Project site is not located within a fault zone or within an Alquist-Priolo Earthquake Fault Zone, and the possibility of significant fault rupture on the site is considered to be low (SCG, 2024, p. 11). Because the Project is not located in the immediate vicinity of a known earthquake fault and the possibility of significant fault rupture on the site is considered to be low, therefore impacts would be less than significant.

As with most properties in southern California, the Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. The risk is not considered substantially different than that of other similar properties in the area. The Project is required to be constructed in accordance with the California Building Standards Code (CBSC) and the City Building Code. The CBSC and the City Building Code are designed to preclude significant adverse effects associated with strong seismic ground shaking. Additionally, the Geotechnical Investigation (*Technical Appendix F1*) prepared for the Project includes site-specific recommendations to attenuate seismic-related hazards. Mandatory compliance with the CBSC, the City Building Code, and the recommendations of the site-specific Geotechnical Investigation would ensure that potential effects associated with strong seismic ground shaking would be less than significant.

B. Liquefaction Hazards

As previously indicated in Subsection 4.6.1, the Project site is not located within a designated liquefaction hazard zone. In addition, the subsurface conditions encountered at the Project site are not considered to be conducive to liquefaction. Based on the lack of a historic high ground water table within the upper approximately 50 feet of the ground surface, and the mapping performed by the CGS, SCG determined that liquefaction would not be considered a design concern for the Project site; therefore, impacts would be less than significant. (SCG, 2024, p. 11)

C. Landslides

The Project site and areas immediately surrounding the Project site do not contain steep slopes capable of producing landslide hazards that could affect future development on-site. The closest lands containing steep topography that are capable of producing landslides occur more than four miles southwest of the Project site. (Google Earth, 2022) Therefore, no impact would occur,

Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?

Although the soils on the Project site are not highly susceptible to erosion (as summarized in Table 4.6-1), the entirety of the soils on the Project site are classified as having slight susceptibility to erosion. Thus, implementation of the Project has the potential to result in soil erosion. The analysis below summarizes the likelihood of the Project to result in substantial soil erosion during temporary construction activities and long-term operation of the Project.

A. Construction-Related Impacts

Proposed grading and construction activities at the Project site would expose underlying soils and disturb surficial soils. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water.

The entirety of the Project site contains soils that have a slight susceptibility to erosion. The Project's construction contractors would be required by the City to implement the recommendations provided in the Project's Geotechnical Investigation to reduce erosion; thus, the potential for water and/or wind erosion impacts affecting exposed soils during Project construction would be reduced to less than significant levels.

Pursuant to the requirements of the Lahontan Regional Water Quality Control Board (RWQCB), the Project Applicant is required to obtain a NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (NPDES Permit). Compliance with the NPDES Permit is required for projects that result in more than one acre of ground disturbance, including through clearing, grading, grubbing, excavating, stockpiling, and removing or replacing existing facilities. The NPDES Permit requires the landowner and/or contractor to file permit registration documents prior to commencing construction and pay a fee annually throughout the duration of construction. These documents include a notice of intent, risk assessment, site map, stormwater pollution prevention plan (SWPPP), and signed certification statement. The NPDES Permit specifies

minimum Best Management Practice (BMP) requirements for stormwater control based on the risk level of the site. The SWPPP must include measures to ensure the following: all pollutants and their sources are controlled; non-stormwater discharges are identified and eliminated, controlled, or treated; site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges; and BMPs are installed to reduce or eliminate pollutants post-construction are completed and maintained. (City of Palmdale, 2022a, p. 4.10-8). Mandatory compliance with the SWPPP would ensure that the Project does not violate any water quality standards or waste discharge requirements during construction activities.

The Project also would be required to comply with the City's requirements and regulations, including those provided in the City's SWMP prepared as part of the City's MS4 permit compliance. As noted above in Subsection 4.6.2, a requirement of the SWMP is that each development attenuate post-developed flows to 85 percent of pre-developed flows with the objective of protecting downstream properties. Additional requirements of the SWMP include employing BMPs for on-site detention/retention of stormwater runoff erosion events and tracking. (City of Palmdale, 2022a, p. 4.10-8; City of Palmdale, 2023, p. 329; City of Palmdale, 2003, p. 3)

Additionally, proposed construction activities would be required to comply with AVAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. Rule 403 requires that certain construction practices be followed that limit dust and dirt from leaving the construction site. For example, no dust is allowed to be tracked out of the site by more than 25 feet.

In summary, with mandatory compliance to the requirements noted in the Project's SWPPP and the City's SWMP, as well as mandatory compliance to applicable regulatory requirements including but not limited to the PMC and AVAQMD Rule 403, the potential for water and/or wind erosion impacts during Project construction would be reduced to less than significant levels.

B. Long-Term Operational Impacts

Following construction, wind and water erosion on the Project site would be minimized, as the disturbed areas would be landscaped or covered with impervious surfaces, and drainage would be controlled through an on-site storm drain system. With implementation of the proposed Project, on-site stormwater would be captured through a series of storm drain systems and directed to the proposed aboveground infiltration basins, located in the northeastern and southeastern portions of the Project site, west of Sierra Highway. The on-site basins would be designed to function as infiltration basins that would mitigate water quality, reduce downstream flows to be less than or equal to existing conditions, and to promote groundwater infiltration. The basins would be sized to mitigate the increased runoff and fully retain the 25-yr storm event. The basins are expected to capture the entire on-site runoff volume and enable it to be infiltrated and released or drained onto the gutter system on Sierra Highway. The proposed basins would remove pollutants from all runoff and filter the water to meet the water quality standards of the Lahontan RWQCB prior to discharge. The proposed infiltration basins attenuation of water runoff from the Project site would preclude the potential for erosion on the

Project site. In addition, because minimal surface runoff from the Project site would leave the Project site following development, the Project has no reasonable potential to result in or contribute to erosion hazards downstream. Impacts would be less than significant.

Threshold c:	***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?***

A. Landslide Hazards

Under existing conditions, the Project site and immediately surrounding areas exhibit little topographic variation, indicating that there is no potential for landslide hazards. Additionally, the Project would not involve the creation of any large slopes that would have the potential to result in landslide hazards. Accordingly, no impact would occur.

B. Lateral Spreading, Subsidence, and Collapse

Based on the geotechnical conditions of the Project site, the potential for lateral spreading and subsidence is considered low (SCG, 2024, p. 9). Minor ground subsidence is expected to occur, however, below the zone of soil removal recommended in the Geotechnical Investigation (*Technical Appendix F1*) due to settlement and machinery working during the Project's construction. The subsidence is estimated to be approximately 0.1 feet (SCG, 2024, p. 13). Also, the results of laboratory testing indicate that the near-surface soils within the upper approximately 3 to 6 feet of the site's surface possess a moderate potential for collapse when exposed to moisture infiltration (SCG, 2024, p. 11). Mandatory compliance with the CBSC, the City Building Code, and the recommendations of the site-specific Geotechnical Investigation would ensure that potential effects associated with soil subsidence and collapse would be addressed during Project construction; thus, no impact would occur.

C. Liquefaction

As previously indicated in Subsection 4.6.1 and under the analysis of Threshold (a), the Project site is not located within a designated liquefaction hazard zone. In addition, the subsurface conditions encountered at the Project site are not considered to be conducive to liquefaction. Based on the lack of a historic high ground water table within the upper approximately 50 feet of the ground surface, and the mapping performed by the CGS, SCG concludes that the Project would not be subject to seismic-related ground failure, including liquefaction, thus no impact would occur. (SCG, 2024, p. 11)

Threshold d:	***Would the Project be located on expansive soil, as defined in Section 1803.5.3. of the California Building Code (2019), creating substantial direct or indirect risks to life or property?***

As previously indicated in Subsection 4.6.1, laboratory testing performed on a representative sample of the near surface Project site soils indicates that these materials are non-expansive, with an Expansion Index (EI) of 0 (SCG, 2024, p. 12). Therefore, the Project would not be located on expansive soil, as

defined in Section 1803.5.3. of the California Building Code (2022) and would not create substantial direct or indirect risks to life or property, and no impact would occur.

Threshold e:	***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?***

The public sewer system that would provide service to the proposed Project is owned and maintained by the City of Palmdale Public Works, Sewer Maintenance Division (COPSM). Wastewater produced by the Project would be conveyed via new sewer laterals to the City's collection and conveyance system to be treated at the Los Angeles County Sanitation District (LACSD) No. 14's Lancaster Water Reclamation Plant (LACSD, 2022). No septic tanks or alternative wastewater disposal systems are proposed as part of the Project. Accordingly, no impact would occur.

Threshold f:	***Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

The Project's construction would involve ground excavation activities including grading and trenching that could extend to approximately 8 feet below the existing ground surface. Pleistocene age alluvium, which has a high sensitivity to contain paleontological resources, is anticipated to be encountered at relatively shallow depths (approximately 2.5 feet below the surface within some portions of the Project site) (Dudek, 2025c, p. 2). Earthwork activities in Pleistocene age deposits may therefore result in significant impacts to paleontological resources, such as destruction, damage, or loss of scientifically important paleontological resources (Dudek, 2025c, p. 2). This is considered a potentially significant impact for which mitigation would be required. This potentially significant impact will be addressed by Mitigation Measure GEO MM-1, which outlines the Paleontological Resources Mitigation and Monitoring Plan (PRMMP) for monitoring site grading/earthmoving activities. Implementation of Mitigation Measure GEO MM-1 would ensure that a PRMMP is prepared and approved by the City prior to the issuance of grading permits. Implementation of the PRMMP would ensure that any paleontological resources that may be uncovered during Project-related ground-disturbing activities are identified, avoided, salvaged, and curated at an appropriate facility, and further requires the preparation of a Final Paleontological Mitigation Report. Implementation of the required Mitigation Measure GEO MM-1 would reduce the Project's potential impacts to paleontological resources to a less than significant level.

4.6.5 CUMULATIVE IMPACT ANALYSIS

Geologic Hazards

With the exception of erosion hazards and potential impacts to paleontological resources, potential effects due to geology and soils are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other existing, planned, or proposed development. That is, thresholds including fault rupture, seismic ground shaking, liquefaction, landslides, expansive soils, and other geologic hazards would involve effects to (and not from) the

proposed development and are specific to on-site conditions. Accordingly, addressing these potential hazards for the proposed development would involve using measures to conform to existing requirements, and/or site-specific design and construction efforts that have no relationship to, or impact on, off-site areas. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties. Cumulatively considerable impacts would be less than significant.

Soil Erosion or the Loss of Topsoil

As discussed under Threshold (b), during both near-term construction and long-term operation, measures would be incorporated into the design of the Project to ensure that significant erosion hazards do not occur. Other developments within the cumulative study area would be required to comply with similar requirements, such as the need to obtain an NPDES permit and mandatory compliance with the resulting SWPPPs and the City's SWMP. All projects in the cumulative study area also would be required to demonstrate that measures have been incorporated to ensure that development does not result in substantial increases in the amount or rate of runoff under long-term operating conditions, which could in turn increase soil erosion. Further, all projects in the cumulative study area also would be required to comply with AVAQMD Rule 403 as well as the PMC sections related to erosion and sedimentation, which would preclude water- and wind-related erosion hazards during construction. Therefore, because the Project would result in less than significant erosion impacts, and because other projects within the cumulative study area would be subject to similar requirements to control erosion hazards during construction and long-term operation, cumulatively-considerable impacts associated with wind and water erosion hazards are evaluated as less than significant.

Unique Paleontological Resource or Site or Unique Geologic Feature

As noted under the analysis of Threshold (f), Pleistocene age alluvium of high sensitivity is anticipated to occur at relatively shallow depths within the Project site (approximately 2.5 feet below the surface within some portions of the Project site). As such, the Project has the potential to impact paleontological resources during Project construction activities that involve ground excavation work such as grading and trenching. Other cumulative developments within the region located on geologic formations with paleontological sensitivity have a potential to also result in impacts to paleontological resources. Such activities could destroy any fossils present; the destruction of such fossils could adversely impact the region's paleontological resources. Accordingly, Project impacts to paleontological resources that may be buried beneath the site's surface represents a potential cumulatively considerable impact. This potentially significant impact will be addressed by Mitigation Measure GEO MM-1, which outlines the Paleontological Resources Mitigation and Monitoring Plan (PRMMP) for monitoring site grading/earthmoving activities. Implementation of Mitigation Measure GEO MM-1 would ensure that a PRMMP is prepared and approved by the City prior to the issuance of grading permits. Implementation of the PRMMP would ensure that any paleontological resources that may be uncovered during Project-related ground-disturbing activities would be identified, avoided, salvaged, and curated at an appropriate facility, and further requires the preparation of a Final Paleontological Mitigation Report. Implementation of the required Mitigation Measure GEO MM-1 would reduce the Project's potential impacts to paleontological resources to less than significant.

4.6.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Thresholds a: Less than Significant Impact. The Project site is not located within an Alquist-Priolo Earthquake Fault Zone or within a fault zone depicted on the City's Fault Map and thus the risk of fault rupture to occur on the site is less than significant. Although the Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project, mandatory compliance with the California Building Standards Code (CBSC), the City Building Code, and the recommendations of the site-specific Geotechnical Investigation would ensure that potential effects associated with strong seismic ground shaking would be less than significant. Based on the lack of a historic high ground water table within the upper approximately 50 feet of the ground surface, and the mapping performed by the California Geological Survey (CGS), the Project would not be subject to seismic-related ground failure, including liquefaction, and impacts would be less than significant. The Project site and areas immediately surrounding the Project site do not contain steep slopes capable of producing landslide hazards that could affect future development on site, and there are no components of the proposed Project that would result in the potential for landslide hazards; thus, no impact would occur.

Threshold b: Less than Significant Impact. The Project site contains soils that have a slight susceptibility to erosion. However, the Project would not result in substantial soil erosion or loss of topsoil as the Project would implement the recommendations provided in the Project's Geotechnical Investigation to reduce soil erosion and the potential for water and/or wind erosion impacts to soils during Project construction would be reduced to less than significant levels. Additionally, the Project Applicant would be required to obtain an NPDES permit for construction activities and adhere to a Stormwater Pollution Prevention Plan (SWPPP) and the City's Stormwater Management Plan (SWMP), as well as the PMC, and AVAQMD Rule 403. With mandatory compliance to these regulatory requirements, the potential for water and wind erosion impacts during construction would be less than significant. Following development, wind and water erosion on the Project site would be minimized, because the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Furthermore, because all runoff generated on-site would be retained on site and allowed to infiltrate into site soils, the Project has no potential to result in or contribute to erosion hazards downstream. Impacts would be less than significant.

Threshold c: Less than Significant Impact. No large slopes are located near the Project site and no large slopes would be created by the Project; thus, there is no potential for impacts to occur associated with landslide hazards. Based on the site's soil and geologic conditions, the potential for lateral spreading is low and less than significant. During Project construction, there is a potential for approximately 0.1 feet of soil subsidence to occur due to settlement and machinery working and for surface soils within the upper approximately 3 to 6 feet of the site's surface to be subject to collapse when exposed to moisture infiltration. However, mandatory compliance with the CBSC, the City Building Code, and the recommendations of the site-specific Geotechnical Investigation would ensure that potential effects associated with soil subsidence and collapse would be less than significant. Based on geologic mapping

and the lack of a historic high ground water table, the Project would have no potential for impacts associated with seismic-related ground failure, including liquefaction.

Threshold d: No Impact. The Project site's soils are non-expansive, with an Expansion Index (EI) of 0. Therefore, the Project would not be located on expansive soil, as defined in Section 1803.5.3. of the California Building Code (2022) and would not create substantial direct or indirect risks to life or property associated with expansion soils, and no impact would occur.

Threshold e: No Impact. Sewer service to the Project site would be provided by the City of Palmdale Public Works, Sewer Maintenance Division (COPSM). No septic tanks or alternative wastewater disposal systems are proposed or allowed as part of the Project. Accordingly, no impact related to septic systems would occur.

Threshold f: Significant Direct and Cumulatively Considerable Impact. The Project's ground disturbing excavation activities including grading and trenching would affect Pleistocene age alluvium, which has a high sensitivity to contain paleontological resources. Earthwork activities in Pleistocene age deposits may therefore result in significant impacts to paleontological resources, such as destruction, damage, or loss of scientifically important paleontological resources. This is considered a potentially significant impact for which mitigation would be required.

4.6.7 MITIGATION

The following Mitigation Measure addresses potential impacts to paleontological resources that could potentially be encountered during grading/earthmoving activities as discussed under Threshold (f). With implementation of mitigation, impacts to potentially undiscovered subsurface paleontological resources would be avoided.

GEO MM-1 Prior to commencement of any grading activity on site, the applicant shall retain a qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program for the Project. The Paleontological Resources Impact Mitigation Program shall be consistent with the guidelines of the SVP (2010) and include the following elements at a minimum: project description, requirements for preconstruction worker environmental awareness training, frequency of monitoring, salvage protocols, reporting, and collections management. The qualified paleontologist or a qualified monitor meeting the SVP (2010) guidelines shall be on site during rough grading and other significant ground-disturbing activities below a depth of 5 feet below the existing ground surface in previously undisturbed older Holocene and Pleistocene-age deposits. If excavations below 5 feet are not impacting previously undisturbed deposits, as determined by the qualified paleontologist, spot-check monitoring shall ensue. The paleontologist will re-evaluate the need for continued monitoring, and will determine whether to reduce monitoring, to spot-check, or to suspend monitoring altogether, as appropriate. No monitoring is required during excavations within

artificial fill or previously disturbed alluvium. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activity to allow recovery of the paleontological resources. The area of discovery shall be roped off with a 50-foot-radius buffer to document and collect the fossils. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Any costs associated with laboratory processing of sediments and fossils and curation fees are the responsibility of the applicant.

4.6.8 Design Features (DF) and Regulatory Requirements (RR)

The City of Palmdale is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Geology and Soils, which include the following regulatory requirements and design features. The Project shall be conditioned to implement the following design features and regulatory requirements as part of the City's Conditions of Approval for the Project.

GEO RR-1 Prior to issuance of grading or building permits, the City of Palmdale Building and Safety Division shall verify that all of the recommendations provided in the Project's Geotechnical Investigation prepared by Southern California Geotechnical and included as *Technical Appendix E1* to the Project's EIR, are incorporated into the Project's grading and building plans and implemented by the construction contractors. Recommendations are made for, but are not limited to: 1) Seismic Design Considerations; 2) Geotechnical Design Considerations: all grading activities shall be completed in accordance with the Grading Guide Specifications included as Appendix D of the Geotechnical Investigation; 3) Site Grading Recommendations; 4) Construction Considerations; 5) Foundation Design and Construction; 6) Floor Slab Design and Construction; 7) Retaining Wall Design and Construction; and 8) Pavement Design Parameters.

GEO RR-2 The Project is required to comply with the provisions of PMC Chapter 8.04, Adoption of Health, Safety and Technical Construction Codes, which generally require that all projects comply with California Building Codes and the International Building Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public, and include requirements related to erosion.

GEO RR-3 The Project is required to comply with the provisions of AVAQMD Rule 403 by addressing blowing dust from the Project's construction activities.

GEO RR-4 The Project is required to comply with the provisions of the Project's NPDES permit, the Project's SWPPP as well as the City's SWMP. Compliance would identify and implement an effective combination of erosion control and sediment control measures

(i.e., Best Management Practices) to reduce or eliminate discharge to surface water from stormwater and non-stormwater discharges.

4.6.9 Significance of Impacts After Mitigation

Threshold f: Less than Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure GEO MM-1 would ensure that a Paleontological Resources Mitigation and Monitoring Plan (PRMMP) is prepared and approved by the City prior to the issuance of grading permits. Implementation of the PRMMP would ensure that any paleontological resources that may be uncovered during Project-related ground-disturbing activities would be identified, avoided, salvaged, and curated at an appropriate facility, and further requires the preparation of a Final Paleontological Mitigation Report. Implementation of the required mitigation would reduce the Project's potential impacts to paleontological resources to a less than significant level.

4.7 GREENHOUSE GAS EMISSIONS

The analysis in this subsection is based primarily on a technical study titled, "Air Quality, Greenhouse Gas Emissions, and Energy Technical Report," dated March 2025, and is included as *Technical Appendix B* to this EIR (Dudek, 2025a). All references used in this subsection are included in EIR Section 7.0, *References.*

The NOP for this EIR was published in March 2025. One comment letter, from the Coalition for Responsible Equitable Economic Development ("CREED LA"), included comments related to greenhouse gas emissions. These comments urged the City to adopt a quantitative GHG threshold.

4.7.1 EXISTING CONDITIONS

A. Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns lasting for an extended period (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching the Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere. (Dudek, 2025a, p. 57)

The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (troposphere). The greenhouse effect traps heat in the troposphere through a threefold process, as follows: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and greenhouse gas emissions (GHGs) in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. (Dudek, 2025a, p. 57)

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. However, recent climate changes, in particular, the warming observed over the past century, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of warming since the mid-twentieth century and are the most significant driver of observed climate change. Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system. The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily

from fossil fuel emissions and secondarily from emissions associated with land use changes. Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Subsection 3.1.5, Potential Effects of Climate Change, of *Technical Appendix B*. (Dudek, 2025a, p. 57)

B. Greenhouse Gases

1. Greenhouse Gases and Health Effects

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in the California Health and Safety Code, Section 38505(g), for purposes of administering many of the State's primary GHG emission reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). (See also CEQA Guidelines, Section 15364.5.) Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources. (Dudek, 2025a, pp. 57-58)

❑ Carbon Dioxide

Carbon Dioxide (CO_2) is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic (i.e., caused by human activity) GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use. (Dudek, 2025a, p. 58)

❑ Methane

Methane (CH_4) is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion. (Dudek, 2025a, p. 58)

❑ Nitrous Oxide

Nitrous Oxide (N_2O) is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric

acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (e.g., rockets, racecars, and aerosol sprays). (Dudek, 2025a, p. 58)

❑ Fluorinated Gases

Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric O_3-depleting substances (e.g., chlorofluorocarbons [CFCs], hydrochlorofluorocarbons [HCFCs], and halons). The most prevalent fluorinated gases include the following:

- Hydrofluorocarbons: HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.

- Perfluorocarbons: PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the O_3-depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.

- Sulfur Hexafluoride: SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.

- Nitrogen Trifluoride: NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays. *(Dudek, 2025a, p. 58)*

❑ Chlorofluorocarbons

Chlorofluorocarbons (CFCs) are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3. (Dudek, 2025a, p. 59)

❑ Hydrofluorocarbons

Hydrofluorocarbons (HFCs) are a large group of compounds, whose structure is very close to that of CFCs, containing hydrogen, fluorine, chlorine, and carbon atoms, but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out. (Dudek, 2025a, p. 59)

❑ **Black Carbon**

Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. Black carbon is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential (GWP). DPM emissions are a major source of black carbon and are TACs that have been regulated and controlled in California for several decades to protect public health. (Dudek, 2025a, p. 59)

❑ **Water Vapor**

The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life. (Dudek, 2025a, p. 59)

❑ **Ozone**

Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation. (Dudek, 2025a, p. 59)

❑ **Aerosols**

Aerosols are suspensions of PM in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. (Dudek, 2025a, p. 59)

2. Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo). The Intergovernmental Panel on Climate Change (IPCC) developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference

gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e). (Dudek, 2025a, p. 59)

The current version of CalEEMod (version 2022.1) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report. The GWP values identified in CalEEMod were applied to the Project. (Dudek, 2025a, p. 60)

C. *Source of Greenhouse Gas Emissions*

1. *Global Inventory*

Anthropogenic GHG emissions worldwide in 2020 (the most recent year for which data is available) totaled approximately 49,800 million metric tons (MMT) of CO_2e, excluding land use change and forestry. The top six GHG emitters include China, the United States, the Russian Federation, India, Japan, and the European Union, which accounted for approximately 60 percent of the total global emissions, or approximately 30,270 MMT CO_2e. Table 4.7-1, *Top GHG Producing Countries and the European Union*, presents the top GHG-emissions-producing countries. (Dudek, 2025a, p. 60)

Table 4.7-1 Top GHG Producing Countries and the European Union

Countries	2020 GHG Emissions (MMT CO_2e)[a]
China	14,300
United States	5,640
European Union	3,440
India	3,520
Russian Federation	2,210
Japan	1,160
Total	**30,270**

Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
[a] Column may not add due to rounding.
Source: (Dudek, 2025a, Table 20)

2. *National Inventory*

Per the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022, total United States GHG emissions were approximately 6,343.2 million MT CO_2e (MMT CO_2e) in 2022. Total U.S. emissions have decreased by 3.0 percent from 1990 to 2022, down from a high of 15.2 percent above 1990 levels in 2007. Gross emissions increased from 2021 to 2022 by 0.2 percent (14.4 MMT CO_2e). Net emissions (i.e., including sinks) were 5,489.0 MMT CO_2e in 2022. Overall, net emissions increased 1.3 percent from 2021 to 2022 and decreased 16.7 percent from 2005 levels. Between 2021 and 2022, the increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion due to the continued economic activity rebounding after the height of the COVID-19

pandemic. The CO_2 emissions from fossil fuel combustion increased by 1.0 percent from 2021 to 2022, including a 5.0 percent increase in residential sector emissions, 8.9 percent increase in commercial sector emissions, 2.6 percent increase in industrial emissions, a 0.1 percent decrease in transportation sector emissions and a 0.6 percent decrease in electric power sector emissions. Carbon sequestration in the Land Use, Land-Use Change, and Forestry sector offset 14.5 percent of total emissions in 2022. (Dudek, 2025a, p. 60)

3. State Inventory

According to California's 2000–2022 GHG emissions inventory (2024 edition), California emitted approximately 371.1 MMT CO_2e in 2022, including emissions resulting from out-of-State electrical generation. The sources of GHG emissions in California include transportation, industry, electric power production from both in-State and out-of-State sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 4.7-2, *Greenhouse Gas Emissions Sources in California*, presents California GHG emission source categories and their relative contributions to the emissions inventory. In 2014, statewide GHG emissions dropped below the 2020 GHG limit of 431 MMT CO_2e and have remained below that level since that time. (Dudek, 2025a, p. 61)

Table 4.7-2 Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total
Transportation	139.9	37.69%
Industrial uses	72.7	19.59%
Electricity generation[a]	59.8	16.11%
Residential and commercial uses	39.5	10.64%
Agriculture and forestry	29.8	8.03%
High-GWP substances	21.3	5.74%
Recycling and waste	8.2	2.21%
Totals	**371.1**	**100%**

[a] Includes emissions associated with imported electricity, which account for 17.5 MMT CO_2e.
Source: (Dudek, 2025a, Table 21)

4. Local Inventory

According to the GHG inventory data compiled in the Sustainability, Climate Action, and Resilience chapter of the City's General Plan (Palmdale 2045), the City emitted approximately 1,042,284 MT CO_2e in year 2017. As outlined in Table 4.7-3, *City of Palmdale GHG Emissions by Sectors*, on-road transportation generated about 59 percent of these emissions. (Dudek, 2025a, p. 61)

Table 4.7-3 City of Palmdale GHG Emissions by Sectors

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total
Residential Energy - Electricity	90,470	8.68%
Residential Energy - Natural Gas	107,180	10.28%
Nonresidential Energy - Electricity	119,700	11.48%
Nonresidential Energy – Natural Gas	42,310	4.06%
Transportation – On-Road	615,601	59.06%
Solid Waste	30,490	2.93%
Off-Road	8,634	0.83%
Water	27,900	2.68%
Totals	**1,042,284**	**100%**

Source: (Dudek, 2025a, Table 22)

D. Effects of Climate Change in California

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification. (Dudek, 2025a, p. 62)

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Global surface temperature in the first two decades of the twenty-first century (2001–2020) was 0.99 [0.84 to 1.10]°C higher than 1850 –1900. Global surface temperature has increased faster since 1970 than in any other 50-year period over at least the last 2,000 years. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities, principally through emissions of GHGs, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850-1900 in 2011-2020. (Dudek, 2025a, p. 62)

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. California Office of Environmental Health Hazard Assessment (OEHHA) identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California and is having significant, measurable impacts in the state. Changes in the State's climate have been observed including an increase in annual average air temperature, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of Statewide precipitation. (Dudek, 2025a, p. 62)

Warming temperatures and changing precipitation patterns have altered California's physical systems, the ocean, lakes, rivers, and snowpack upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in spring snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters. (Dudek, 2025a, p. 62)

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing. (Dudek, 2025a, pp. 62-63)

CNRA has released four California Climate Change Assessments (in 2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the State, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments' need for information to support action in their communities, the Fourth Assessment includes reports for nine regions of the State. Key highlights for the Los Angeles Region, where the Project is located, include the following:

- Continued future warming over the Los Angeles region. Across the region, average maximum temperatures are projected to increase around 4°F to 5°F by the mid-century, and 5°F to 8°F by the late-century.

- Extreme temperatures are also expected to increase. The hottest day of the year may be up to 10°F warmer for many locations across the Los Angeles region by the late-century under certain model scenarios. The number of extremely hot days is also expected to increase across the region.

- Despite small changes in average precipitation, dry and wet extremes are both expected to increase. By the late 21st century, the wettest day of the year is expected to increase across most of the Los Angeles region, with some locations experiencing 25 percent to 30 percent increases under certain model scenarios. Increased frequency and severity of atmospheric river events are also projected to occur for this region.

- Sea levels are projected to continue to rise in the future, but there is a large range based on emissions scenario and uncertainty in feedbacks in the climate system. Roughly 1 to 2 feet of sea level rise is projected by the mid-century, and the most extreme projections lead to 8 feet to 10 feet of sea level rise by the end of the century.

- Projections indicate that wildfire may increase over southern California, but there remains uncertainty in quantifying future changes of burned area over the Los Angeles region. (Dudek, 2025a, p. 63)

4.7.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations related to GHG emissions.

A. International Regulations

1. Kyoto Protocol

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. On December 8, 2012, in Doha, Qatar, the "Doha Amendment to the Kyoto Protocol" was adopted. The amendment includes:

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from January 1, 2013 to December 31, 2020;
- A revised list of GHGs to be reported on by Parties in the second commitment period; and
- Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

On December 21, 2012, the amendment was circulated by the Secretary-General of the United Nations, acting in his capacity as Depositary, to all Parties to the Kyoto Protocol in accordance with Articles 20 and 21 of the Protocol. During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of 5 percent against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of Parties in the second commitment period is different from the first. (UNFCCC, n.d.)

2. *The Paris Agreement*

The Paris Agreement builds upon the Convention and for the first time brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries. The central aim of the Paris Agreement is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below two degrees Celsius (2 ˚C) above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 ˚C. Additionally, the Agreement aims to strengthen the ability of countries to deal with the impacts of climate change. The Paris Agreement requires all Parties to put forward their best efforts through "nationally determined contributions" (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. The Paris Agreement entered into force on November 4, 2016, thirty days after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55 percent of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval, or accession with the Depositary. (UNFCCC, n.d.)

3. *Intergovernmental Panel on Climate Change*

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable. (Dudek, 2025a, p. 63)

4. *United Nation's Framework Convention on Climate Change (UNFCCC)*

On March 21, 1994, the U.S. joined a number of countries around the world in signing the United Nation's Framework Convention on Climate Change (UNFCCC). Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change. (Dudek, 2025a, p. 63)

B. ***Federal Regulations***

1. *Clean Air Act*

Coinciding with the 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the EPA issued an Endangerment Finding under § 202(a) of the Clean Air Act (CAA), introducing federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the CAA. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them. Previously the EPA had not regulated GHGs under the CAA because it asserted that the Act did not authorize it to issue mandatory regulations to address

GCC and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 [2007]); however, the US Supreme Court held that GHGs are pollutants under the CAA and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. (EPA, 2024a; EPA, 2025b)

2. Executive Order 13990

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

3. Massachusetts v. U.S. Environmental Protection Agency

In Massachusetts v. EPA (April 2007), the U.S. Supreme Court ruled that CO_2 was a pollutant and directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of CAA Section 202(a). On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under CAA Section 202(a):

- Endangerment Finding: The elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."

- Cause or Contribute Finding: The combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding." (Dudek, 2025a, p. 64)

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA. (Dudek, 2025a, p. 64)

4. Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (Public Law 110-140), among other key measures, did the following to aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.

- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
-
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances. (Dudek, 2025a, p. 64)

5. Federal Vehicle Standards

In 2007, in response to the Massachusetts v. EPA U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 directing the EPA, the U.S. Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 Federal Register [FR] 25324– 25728). (Dudek, 2025a, p. 64)

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 FR 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued, which set CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. (Dudek, 2025a, p. 65)

On December 21, 2021, the NHTSA finalized the Corporate Average Fuel Economy Preemption rulemaking to withdraw its portions of the Part One Rule. The final rule concluded that the Part One Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important State and local interests. Then, in March 2022, the NHTSA established new fuel economy standards that would require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks by model year 2026 by increasing fuel efficiency by 8% annually for model years 2024 and 2025, and 10% annually for model year 2026. (Dudek, 2025a, p. 65)

6. The Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The Act includes specific investment in energy and climate reform and is projected to reduce GHG emissions in the United States by 40% compared to 2005 levels by 2030. The Act allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of

electric vehicles, and includes measures that will make homes more energy efficient. The Inflation Reduction Act confirms that reduction of GHGs is a core goal of the CAA and that the funding provided should allow the EPA to increase the scope of its CAA rulemakings. The Act also confirms applicability of the Inflation Reduction Act to GHGs in three specific areas: (1) California's ability to regulate GHG emissions from vehicles, (2) the EPA's authority to regulate CH_4 emissions from oil and gas facilities, and (3) the EPA's authority to regulate GHG emissions from power plants. (Dudek, 2025a, p. 65)

C. State Regulations

1. Title 24 Building Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 version of Title 24 was adopted by the CEC became effective on January 1, 2023. The 2022 Building Energy Efficiency Standards focuses on four key areas in newly constructed homes and businesses: 1) encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units; 2) establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies; 3) expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid; and strengthening ventilation standards to improve indoor air quality. (CEC, n.d.)

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: 1) Planning and design; 2) Energy efficiency; 3) Water efficiency and conservation; 4) Material conservation and resource efficiency; and 5) Environmental air quality." The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the CBSC. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject to the requirements of the CALGreen Code.

The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

The 2025 Building Energy Efficiency Standards will apply to newly constructed buildings, additions, and alterations, with an effective date of January 1, 2026. The California Energy Commission updates these standards every three years.

2. *California Air Resources Board Rules*

The CARB enforces rules related to air pollutant emissions in the State of California. Rules which are applicable to the Project include, but are not limited to, those listed below.

- CARB Rule 2480 (13 CCR 2480): Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools, which limits nonessential idling for commercial trucks and school buses within 100 feet of a school.
- CARB Rule 2485 (13 CCR 2485): Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling, which limits nonessential idling to five minutes or less for commercial trucks.
- CARB Rule 2449 (13 CCR 2449): In-Use Off-Road Diesel Idling Restricts, which limits nonessential idling to five minutes or less for diesel-powered off-road equipment.

3. *California Assembly Bill 1493*

California Assembly Bill 1493 (AB 1493) required the CARB to adopt the nation's first GHG emission standards for passenger vehicles. The US EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. On September 24, 2009, CARB adopted amendments to the Pavley regulations that reduced GHG emissions in new passenger vehicles from model year 2009 through 2016. It is estimated by CARB that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. (CARB, n.d.)

4. *Executive Order S-3-05*

Executive Order S-3-05 (EO S-3-05) documents GHG emission reduction goals, creates the Climate Action Team and directs the Secretary of the California EPA to coordinate efforts with meeting the GHG reduction targets with the heads of other State agencies. EO S-3-05 requires the Secretary to report back to the Governor and Legislature biannually to report: progress toward meeting the GHG goals; GHG impacts to California; and applicable Mitigation and Adaptation Plans. The EO S-3-05 goals for GHG emissions reductions include: reducing GHG emissions to 2000 levels by the year 2010; reducing GHG emissions to 1990 levels by the year 2020; and reducing GHG emissions to 80 percent below 1990 levels by 2050. (CA State Library, 2005)

5. *California Assembly Bill 32 – Global Warming Solutions Act of 2006*

In September 2006, Governor Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. AB 32 required California to reduce its GHG emissions to 1990 levels by 2020,

which represented a reduction of approximately 15 percent below emissions expected under a "business as usual (BAU)" scenario. (CARB, 2018)

In November 2007, CARB completed its estimated calculations of Statewide 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons (MMTs). Accordingly, 427 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) was established as the emissions limit for 2020. For comparison, CARB's estimate for baseline GHG emissions was 473 $MMTCO_2e$ for 2000 and without emissions reduction measures 2010 emissions were projected to be 532 $MMTCO_2e$. BAU conditions (without the reductions to be implemented by CARB regulations) for 2020 were projected to be 596 $MMTCO_2e$. (CARB, 2007)

AB 32 required CARB to develop a Scoping Plan to lay out California's strategy for meeting the goals, and the Scoping Plan must be updated every five years. In December 2008, CARB approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions. Overall, CARB determined that achieving the 1990 emission level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent in the absence of new laws and regulations (referred to as BAU). When the 2020 emissions level projection also was updated to account for implemented regulatory measures, including Pavley (vehicle model years 2009 - 2016) and the renewable portfolio standard (RPS) (12 percent to 20 percent), the 2020 projection in the BAU condition was reduced further to 507 $MTCO_2e$. As a result, based on the updated economic and regulatory data, CARB determined that achieving the 1990 emissions level in 2020 would now only require a reduction of GHG emissions of 80 $MTCO_2e$, or approximately 16 percent (down from 28.5 percent), from the BAU condition.

In May 2014, CARB approved the First Update to the Climate Change Scoping Plan (Update), which built upon the initial Scoping Plan with new strategies and recommendations. The Update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals, highlights the latest climate change science and provides direction on how to achieve long-term emission reduction goal described in EO S-3-05. The Update recalculated 1990 GHG emissions using new global warming potentials identified in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report released in 2007. Using those Global Warming Potentials (GWPs), the 427 $MTCO_2e$ 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 $MTCO_2e$. Based on the revised 2020 emissions level projection identified in the 2011 Final Supplement and the updated 1990 emissions levels identified in the discussion draft of the First Update, achieving the 1990 emissions level in 2020 would require a reduction of 78 $MTCO_2e$ (down from 509 $MTCO_2e$), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. (CARB, 2018; CARB, 2017)

6. Assembly Bill 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50% for indoor residential lighting and by 25% for indoor commercial lighting (PRC Section 25402.5.4). (Dudek, 2025a, p. 71)

7. CARB Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan to help achieve the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code Section 38561[a]), and to update the scoping plan at least once every 5 years. In 2008, CARB approved the first scoping plan: The Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan). The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emissions-reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. (Dudek, 2025a, p. 67)

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (2014 Scoping Plan) defined the state's GHG emissions-reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The 2014 Scoping Plan concluded that California was on track to meet the 2020 target but recommended that a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The 2014 Scoping Plan recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. (Dudek, 2025a, p. 67)

In December 2017, CARB released the 2017 Climate Change Scoping Plan (2017 Scoping Plan) for public review and comment. The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and 2014 Scoping Plan while identifying new technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. Commitments include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%. (Dudek, 2025a, p. 67)

CARB adopted the 2022 Scoping Plan in December 2022. The 2022 CARB Scoping Plan outlines the state's plan to reach carbon neutrality by 2045 or earlier, while also assessing the progress the state is making toward achieving GHG reduction goals by 2030. Per the Legislative Analyst's Office, the 2022 CARB Scoping Plan identifies a more aggressive 2030 GHG goal. As it relates to the 2030 goal, perhaps the most significant change in the 2022 plan (compared to previous Scoping Plans) is that it identifies a new GHG target of 48 percent below the 1990 level, compared to the current statutory goal of 40% below. Current law requires the state to reduce GHG emissions by at least 40% below the 1990 level by 2030, but it does not specify an alternative goal. According to CARB, a focus on the lower target is needed to put the state on a path to meeting the newly established 2045 goal, consistent with

the overall path to 2045 carbon neutrality. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel-fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options, such as green hydrogen. (Dudek, 2025a, pp. 67-68)

The 2022 CARB Scoping Plan also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage from anthropogenic point sources, where CO2 is captured as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete), and CO2 removal from ambient air through mechanical (e.g., direct air capture with sequestration) or nature-based (e.g., management of natural and working lands) applications. (Dudek, 2025a, p. 68)

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and the EOs; it also establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it would meet the general policies in reducing GHG emissions to facilitate the achievement of the state's goals and would not impede attainment of those goals. Lead agencies under CEQA can make a significance determination based on whether the project would result in net-zero GHG emissions and whether the project is consistent with a significance determination/threshold recommended by the applicable air district or other lead agencies (CARB 2022). The 2022 CARB Scoping Plan acknowledges, however, that net zero may not be feasible or appropriate for every project. (Dudek, 2025a, p. 68)

8. California Senate Bill 1368

In 2006, the State Legislature adopted California Senate Bill 1368 (SB 1368) (Perata, Chapter 598, Statutes of 2006), which directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standards (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed specified emissions criteria. Accordingly, SB 1368 effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand. (CEC, n.d.)

9. Executive Order S-01-07

Executive Order S-01-07 (EO S-01-07) is effectively known as the Low Carbon Fuel Standard (LCFS). EO S-01-07 seeks to reduce the carbon intensity of California's passenger vehicle fuels by at least 10 percent by 2020. The LCFS requires fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO2e grams per unit of fuel energy sold. (CA State Library, 2007)

10. Senate Bill 1078

Senate Bill 1078 (SB 1078) established the California RPS Program, which required electric utilities and other entities under the jurisdiction of the CPUC to supply 20 percent of their power by renewables by December 31, 2017 for the purposes of increasing the diversity, reliability, public health, and environmental benefits of the energy mix. (CA Legislative Info, n.d.)

11. Senate Bill 107

Senate Bill 107 (SB 107) directed CPUC's Renewable Energy Resources Program to increase the amount of renewable electricity (RPS) generated per year, from 17 percent to an amount that equals at least 20 percent of the total electricity sold to retail customers in California per year by December 31, 2010. (CA Legislative Info, n.d.)

12. Executive Order S-14-08

On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08 (EO S-14-08), revising California's existing RPS upward to require all retail sellers of electricity to serve 33 percent of their load from renewable energy sources by 2020. In order to meet this new goal, a substantial increase in the development of wind, solar, geothermal, and other "Renewable Portfolio Standard eligible" energy projects would be needed. EO S-14-08 sought to accelerate such development by streamlining the siting, permitting, and procurement processes for renewable energy generation facilities. To this end, EO-S-14-08 issued two directives: 1) the existing Renewable Energy Transmission Initiative will identify renewable energy zones that can be developed as such with little environmental impact, and 2) the California Energy Commission (CEC) and the California Department of Fish and Wildlife (CDFW) will collaborate to expedite the review, permitting, and licensing process for proposed RPS-eligible renewable energy projects. (CA State Library, 2008)

13. Senate Bill 97

Senate Bill 97 (SB 97) was enacted in 2007 to recognize the need to analyze GHGs as a part of the CEQA process. SB 97 required the Governor's Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHGs. As part of the administrative rulemaking process, the Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010. Of note, the CEQA Guidelines state that a

lead agency has discretion to determine whether to use a quantitative model or methodology or rely on a qualitative analysis or performance-based standards to evaluate GHGs. (CA Legislative Info, n.d.)

CEQA emphasizes that GHG effects are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See CEQA Guidelines § 15130(f)). CEQA Guidelines § 15064.4(b) provides direction for lead agencies for assessing the significance of impacts of GHGs:

1. The extent to which the project may increase or reduce GHGs as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
3. The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHGs. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the incremental contribution of GHGs by a project. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared.

The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a "good-faith effort, based on available information, to describe, calculate or estimate the amount of GHGs resulting from a project." The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

14. Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, Senate Bill (SB 375), Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, CARB set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). CARB periodically reviews and updates the targets, as needed. (CARB, n.d.)

Each of California's MPOs must prepare a sustainable communities strategy (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the

SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy (APS) to meet the targets. (CARB, n.d.)

15. Executive Order B-18-12

EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the Governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also identified goals for existing state buildings for reducing grid based energy purchases and water use. (Dudek, 2025a, p. 68)

16. Senate Bill 605 and Senate Bill 1383

SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state (California Health and Safety Code Section 39730) and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018 (California Public Resources Code [PRC] Sections 42652–43654). SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH4, and fluorinated gases. (Dudek, 2025a, pp. 68-69)

17. Clean Energy and Pollution Reduction Act of 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the CPUC, the CEC, and local publicly owned utilities.
- Reorganize the ISO to develop more regional electric transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

18. Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15 (EO B-30-15), which sets a goal to reduce GHG emissions in California to 40 percent below 1990 levels by 2030. The 2030 target

serves as a benchmark reduction set by former Governor Schwarzenegger via EO S-3-05 (i.e., 80 percent below 1990 GHG levels by 2050). (CA State Library, 2015)

19. Senate Bill 32 and Assembly Bill 197

On September 8, 2016, Governor Jerry Brown signed Senate Bill 32 (SB 32) and its companion bill, Assembly Bill 197 (AB 197). SB 32 requires the State to reduce Statewide GHG emissions to 40 percent below 1990 levels by 2030 a reduction target that was first introduced in EO B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving EO S-3-05, which sets a Statewide GHG reduction target of 80 percent below 1990 levels by 2050. (CA Legislative Info, n.d.)

AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan. (Dudek, 2025a, p. 66)

20. California Climate Crisis Act

The California Climate Crisis Act (AB 1279) declares that it is the policy of the State to achieve net zero GHGs as soon as possible, but no later than 2045; to achieve and maintain net negative greenhouse gas emissions thereafter; and to ensure that by 2045, Statewide anthropogenic GHGs are reduced to at least 85 percent below the 1990 levels. AB 1279 requires the CARB to work with relevant State agencies to ensure that updates to the CARB Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California. AB 1279 also requires CARB to submit an annual report evaluating progress toward these policies. (CA Legislative Info, n.d.)

21. Clean Energy, Jobs, and Affordability Act of 2022

The Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill 1020 (SB 1020)), revised State policy to include interim targets requiring that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all State agencies by December 31, 2035. SB 1020 also requires each State agency to ensure that zero-carbon resources and eligible renewable energy resources supply 100 percent of electricity procured to serve their agency by December 31, 2035. In addition, SB 1020 requires the State Water Project (SWP) to procure eligible renewable energy and zero-carbon resources as necessary to meet the clean energy requirements

specified for all State agencies. Finally, SB 1020 requires the CPUC to develop utility affordability metrics for both electricity and gas service. (CA Legislative Info, n.d.)

22. Carbon Sequestration: Carbon Capture, Removal, Utilization, and Storage Program

Senate Bill 905 (SB 905) requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage (CCRUS) Program and adopt regulations for a model unified permit program for the construction and operation of CCRUS projects. SB 905 is intended to accelerate the deployment of carbon management technologies and ensure that they are deployed in a safe and equitable way. SB 905 requires the CCRUS Program to ensure that carbon dioxide capture, removal, and sequestration projects include specified components including, among others, certain monitoring activities. In addition, SB 905 requires that by January 1, 2025, CARB adopt regulations for a unified permit application for the construction and operation of carbon dioxide capture, removal, or sequestration projects to expedite the issuance of permits or other authorizations for the construction and operation of those projects. SB 905 also requires the establishment of a centralized public database to track the deployment of carbon capture, utilization, or storage (CCUS) technologies and carbon dioxide removal (CDR) technologies. (CA Legislative Info, n.d.)

23. Assembly Bill 1757

Assembly Bill 1757 (AB 1757) directs the California Natural Resources Agency (CNRA) to determine an ambitious range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions for 2030, 2038, and 2045 to support State goals to achieve carbon neutrality and foster climate adaptation and resilience. Additionally, AB 1757 requires these targets to be integrated into the CARB Scoping Plan and other State policies. It also includes provisions to avoid double counting emission reductions, updates the Natural and Working Lands Climate Smart Strategy, develops GHG tracking protocols, and biennially post progress made in achieving the targets on CNRA's internet website. In addition, AB 1757 requires CARB to develop standard methods for State agencies to consistently track GHG emissions and reductions, carbon sequestration, and, where feasible, additional benefits from natural and working lands over time. (CA Legislative Info, n.d.)

24. Executive Order B-55-18

EO B-55-18 (September 2018) identified a policy for the State to achieve carbon neutrality as soon as possible (no later than 2045) and achieve and maintain net-negative emissions thereafter. The goal is in addition to the existing Statewide targets of reducing the State's GHG emissions. CARB will work with relevant State agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. (Dudek, 2025a, p. 66)

25. Heavy-Duty Truck and Bus Regulation

CARB adopted the final Heavy-Duty Truck and Bus Regulation on December 31, 2014, to reduce DPM, a major source of black carbon, and NOx emissions from heavy-duty diesel vehicles (13 CCR 2025). The rule requires that DPM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule required nearly all diesel

trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. On December 12, 2013, CARB adopted an Airborne Toxics Control Measure to limit idling of diesel-fueled commercial vehicles. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485). (Dudek, 2025a, p. 73)

26. Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEVs that contributes to both types of emission reductions. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that by 2025, cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the Advanced Clean Cars I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years. (Dudek, 2025a, p. 74)

The Advanced Clean Cars II program, which was adopted in August 2022, established the next set of low-emission vehicle and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality O_3 standards and California's carbon neutrality standards. The main objectives of Advanced Clean Cars II are as follows:

- Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
- Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use. (Dudek, 2025a, p. 74)

The Advanced Clean Cars II rulemaking package also considers technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts. (Dudek, 2025a, p. 74)

27. Executive Order N-79-20

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the state toward the target of 100% of in-state sales by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the state toward the target of 100% of the fleet transitioning to ZEVs by 2045 everywhere feasible, and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other state agencies, the EPA, and local air districts, to achieve 100% zero emissions from off-road vehicles and equipment operations in the state by 2035. EO N-79-20 called for the development of a ZEV Market Development Strategy, which was released in February 2021, to be updated every 3 years, that ensures coordination and

implementation of the EO, and outlines actions to support new and used ZEV markets. In addition, the EO specifies identification of near-term actions and investment strategies to improve clean transportation, sustainable freight, and transit options, and calls for development of strategies, recommendations, and actions by July 15, 2021, to manage and expedite the responsible closure and remediation of former oil extraction sites as the state transitions to a carbon-neutral economy. (Dudek, 2025a, pp. 74-75)

28. Advanced Clean Trucks Regulation

The Advanced Clean Trucks Regulation was also approved by CARB in 2020. The purpose of the Advanced Clean Trucks Regulation is to accelerate the market for ZEVs in the medium- and heavy-duty truck sector and to reduce air pollutant emissions generated from on-road mobile sources. The regulation has two components, (1) a manufacturer sales requirement and (2) a reporting requirement:

- Zero-emission truck sales: Manufacturers who certify Class 2b–8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b–3 truck sales, 75% of Class 4–8 straight truck sales, and 40% of truck tractor sales.

- Company and fleet reporting: Large employers, including retailers, manufacturers, brokers, and others, will be required to report information about shipments and shuttle services. Fleet owners with 50 or more trucks will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs. (Dudek, 2025a, p. 75)

D. Regional and Local Regulations

1. Antelope Valley Air Quality Management District

The AVAQMD has adopted GHG emissions thresholds in its CEQA Guidelines but has not adopted a comprehensive strategy for reducing GHG emissions. The AVAQMD threshold is 100,000 tons of CO_2e per year, or approximately 90,718 MT CO_2e per year. (Dudek, 2025a, p. 77)

2. Connect SoCal 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy

Pursuant to Government Code Section 65080(b)(2)(B), the Sustainable Communities Strategy (SCS) must "set forth forecasted development pattern for the region which when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve the GHG reduction targets." To that end, SCAG has developed the 2024–2050 RTP/SCS, also referred to as Connect SoCal 2024, which complies with CARB's updated emissions reduction targets and meets the requirements of SB 375 by achieving per-capita GHG emissions reductions relative to 2005 of 8 percent by 2020 and 19 percent by 2035. The 2024–2050 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, and charts a path toward a more mobile,

sustainable and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. (Dudek, 2025a, pp. 77-78)

3. City of Palmdale General Plan

The Sustainability, Climate Action, and Resilience Element of the City's Palmdale 2045 General Plan establishes goals and policies to reduce GHGs in the City and serves as the City's Climate Action Plan (CAP). Pursuant to CEQA Guidelines Section 15183.5, the CAP would meet the requirements of a qualified CAP, and future residential and nonresidential projects developed would be able to tier from the CAP for analysis purposes. The following goals and policies from the CAP would be applicable to the Project: (Dudek, 2025a, p. 78)

Maintain and Implement CAP

- Goal SCR-1: Achieve a carbon neutral community by 2045 (EO B-55-18).
    - SCR-1.1 CAP Maintenance. Maintain and regularly update a CAP to reduce GHGs generated within the City.
    - SCR-1.2 GHG Inventory. Conduct community GHG inventories every three to five years to track progress toward achieving the City's GHG reduction goal.
    - SCR-1.3 Funding Sources. Seek funding to support implementation of GHG reduction projects for the City, residents, and businesses.
    - SCR-1.4 Community Engagement. Develop and implement comprehensive community engagement including educational outreach, issue-specific awareness campaigns, and technical assistance.

Clean Energy

- Goal SCR-2: Utilize a fossil fuel free energy system (SB 100).
    - SCR-2.1 Carbon Free Energy. Direct EPIC to provide 75 percent carbon-free or renewable electricity to residents and businesses by 2030, achieving 100 percent carbon-free electricity by 2045.
    - SCR-2.2 Community Solar. Explore the development of community solar projects and microgrids.
    - SCR-2.3 Battery Permitting. Establish a streamlined approval process for battery storage systems.

Buildings

- Goal SCR-3: Green and decarbonized buildings for new construction and major renovations.

- SCR-3.1 Energy Efficient New Construction. Integrate CALGreen Tier 1 and Tier 2 green building and energy efficiency standards into new construction and major remodels.
- SCR-3.2 All-Electric Reach Code. Consider adopting a local reach code to encourage new buildings to be all-electric.
- SCR-3.3 Solar and Storage. Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sf.
- SCR-3.4 Energy Efficient Existing Buildings. Establish an energy and water efficiency upgrade program for existing buildings, focusing resources on the most underserved populations.
- SCR-3.4 Benchmarking Energy and Water Use. Register municipal buildings with Energy Star Portfolio Manager and report energy and water use (AB 802).

Transportation

- Goal SCR-4: Reduced greenhouse gas emissions from transportation (SB 379, EO N-79-20).
  - SCR-4.1 Bike Facilities. Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes.
  - SCR-4.2 Public Transit. Expand the public transit system, increase frequency of service, and provide shade at transit stops.
  - SCR-4.3 Public EV Chargers. Install EV chargers at suitable public facilities, including Downtown parking structures, the future multi-modal High Speed Rail station, and community parks.
  - SCR-4.4 EV Reach Code. Adopt EV requirements beyond CALGreen in both number of chargers and charger capacity.
  - SCR-4.5 ZEV Purchasing. When purchasing City vehicles give preference to fuel efficient vehicles, including the use of zero emission vehicles.
  - SCR-4.6 Clean Fuels. Require use of clean fuels for City construction and maintenance vehicles and lawn/garden equipment.
  - SCR-4.7 Pedestrian and Cyclist Safety. Improve bicycle and pedestrian modes of travel by improving pedestrian and cyclist safety. Example techniques include increasing the number of sidewalks, pending connected and protected bike lanes, and redesigning high incidence intersections.

Solid Waste

- Goal SCR-5: Increased resource capture and reduced waste sent to landfills (SB 1383).

- SCR-5.2 Organic waste diversion. Establish programs to comply with State-established requirements for organics and food waste diversion.
- SCR-5.4 Nonresidential collection efficiency. Continue to review waste franchise agreements to establish rate structures that encourage less frequent nonresidential collection.

Water and Wastewater

- Goal SCR-6: Safe and secure water supply.
  - SCR-6.1 Recycled Water. Increase availability of local recycled water.
  - SCR-6.2 Water Efficiency Standards. Establish water efficiency standards that are more stringent than CALGreen and MWELO.
  - SCR-6.3 Low-Water Use Plant List. Implement the City's landscape plant list and use of low-water plants in new or renovated landscaped areas.
  - SCR-6.4 Rainwater Capture. Encourage rainwater capture and use of cisterns for outdoor watering purposes.
  - SCR-6.5 Greywater Permitting. Establish a streamlined permitting process for greywater systems.

Ecosystems

- Goal SCR-7: Safe and secure water supply.
  - SCR-7.1 Tree planting in public spaces. Plant additional trees on streets, parks, and other public spaces to sequester carbon, provide shade, contribute to stormwater management, provide habitat, and enhance community character.
  - SCR-7.3 Tree planting on private property. Adopt a tree preservation ordinance to encourage tree preservation and additional planting on private property as appropriate.
  - SCR-7.4 Green infrastructure. Integrate green infrastructure stormwater management practices into the design of open spaces and public rights-of-way.
  - SCR-7.5 Cool pavement. Incorporate cool pavement practices into street maintenance activities to reduce the urban heat island effect.

4.7.3 Basis for Determining Significance

According to Section VIII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact due to GHG emissions if the Project or any Project-related component would:

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

Section 15064.7(c) of the State CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of the CEQA's requirements for cumulative impact analysis.

CEQA Guidelines Section 15064.4(a) further states, ". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- Consideration 1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

- Consideration 2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

- Consideration 3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

Based on the foregoing guidance, the City of Palmdale has not adopted a numeric significance threshold for determining significant impacts associated with GHG emissions. Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues. While the Project is located within the jurisdiction of the AVAQMD, both AVAQMD and the South Coast Air Quality Management District (SCAQMD) recommended thresholds are discussed below. Because SCAQMD's thresholds are more stringent and are backed by substantial

evidence from an expert agency, the SCAQMD's recommended thresholds are used for determining the potential significance of impacts for the Project, as discussed below. (Dudek, 2025a, p. 80)

On May 13, 2010, EPA finalized the GHG Tailoring Rule (75 FR 31514, June 3, 2010). The Tailoring Rule sets major source emissions thresholds that define when federal operating permits under Prevention of Significant Deterioration or Title V are required. The Tailoring Rule establishes a threshold of 100,000 tons per year or 90,719 MT per year of GHGs from new sources above which sources are considered major sources requiring a federal operating permit. As such, the AVAQMD has adopted a significance threshold for GHGs of 100,000 tons per year. More specifically, 100,000 tons per year of GHG emissions from a single facility constitutes major sources that require a federal operating permit. Similarly, the AVAQMDs NO_x significance threshold of 25 tons per year is equal to the major source threshold applicable to areas designated severe non-attainment for O_3. As such, use of the EPA's determination of whether a project is a major source and consequently establishing a threshold based on that is supported by substantial evidence. (Dudek, 2025a, pp. 80-81)

The SCAQMD, which oversees the adjacent South Coast Air Basin, has recommended more stringent numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects; however, these thresholds were not adopted. The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses: (Dudek, 2025a, p. 81)

- Tier 1. Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2. Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3. Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO2e per year threshold for industrial uses and stationary projects would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO2e per year), commercial projects (1,400 MT CO2e per year), and mixed-use projects (3,000 MT CO2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4. Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG

emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO2e per service population for project level analyses and 6.6 MT CO2e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

- Tier 5. Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels. (Dudek, 2025a, p. 81)

Based on the supporting analysis outlined in SCAQMD's draft GHG guidance and meeting notes, the 3,000 MT CO_2e per year level would capture 90% of GHG emissions from new residential or commercial projects in the region. This type of market capture analysis captures a substantial fraction of the GHG emissions from future development to accommodate for future population and job growth and excludes small development projects that would contribute a relatively small fraction of the cumulative statewide GHG emissions. (Dudek, 2025a, p. 81)

While the City has not adopted a numeric significance threshold, the City has previously relied on use of the 3,000 MT CO_2e per year threshold to evaluate the potential for a project to result in a significant GHG emissions impact under CEQA because it has been recommended by SCAQMD and SCAQMD is an expert agency in the Southern California region. Further, the SCAQMD provides substantial evidence that the thresholds are consistent with policy goals and 2050 GHG emissions reduction targets set by the state. Specifically, the thresholds were set at levels that capture 90% of the GHG emissions from the above-described uses, consistent with EO S-3-05 target of reducing GHGs to 80% below 1990 levels by 2050. Finally, the SCAQMD specifically recommended that the 3,000 MT CO_2e per year threshold be used by lead agencies for not only residential and commercial projects, but also industrial parks and warehouses as well. (Dudek, 2025a, pp. 81-82)

In addition, the Project was evaluated for its potential to conflict with SB 32 (2017 Scoping Plan) and AB 1279 (2022 Scoping Plan), the City's CAP, and SCAG's RTP/SCS. (Dudek, 2025a, p. 82)

4.7.4 IMPACT ANALYSIS

A. Greenhouse Gas Emissions Modeling

Emissions from the Project's construction and operational phase were estimated using the CalEEMod Version 2022.1. Output from the model runs for both construction and operational activity are provided in Appendix A of *Technical Appendix B* prepared for the Project. (Dudek, 2025a, p. 82)

Threshold a:	***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

A. Construction Emissions

Project construction activities would result in GHG emissions, which are primarily associated with the use of off-road construction equipment, haul trucks, on-road vendor trucks, and worker vehicles. For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. The AVAQMD follows the South Coast Air Quality Management District (SCAQMD)

recommendation in calculating the total GHG emissions for construction activities by amortizing the emissions over the life of the Project by dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 4.7-4, *Amortized Annual Construction Emissions*. As shown, total estimated GHG emissions generated during construction of the Project are approximately 3,165 MT CO_2e. Estimated Project-generated construction emissions amortized over 30 years would be 05.49 MT CO_2e per year. (Dudek, 2025a, pp. 84-85)

Table 4.7-4 Amortized Annual Construction Emissions

Year	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e[1]
2026	2,555.64	0.09	0.06	0.35	2,576.39
2027	581.68	0.02	0.02	0.13	588.26
Total GHG Emissions	3,137.32	0.11	0.08	0.49	3,164.65
Amortized Over 30-Years					**105.49**

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent. Totals may not sum due to rounding.
Source: (Dudek, 2025a, Table 23)

B. Operational Emissions

Project operations would generate CO_2, CH_4, N_2O, and Refrigerant (R) emissions. Primary emissions sources would include mobile source (vehicles), area sources (landscape maintenance equipment operation), energy use (natural gas combustion and utility generation of electricity consumed by the project), water supply, treatment, and distribution and wastewater treatment, solid waste disposal, refrigerants, off-road equipment, stationary sources, and Transportation Refrigeration Units (TRUs). (Dudek, 2025a, p. 85)

1. Mobile Source Emissions

Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the Project's motor vehicles. The effectiveness of fuel economy improvements was evaluated using the CalEEMod emission factors for motor vehicles in 2027 to the extent it was captured in CalEEMod 2022.1, which is based on the Emission FACtor (EMFAC) 2021 model. (Dudek, 2025a, p. 82)

2. Area Source Emissions

❑ **Landscape Maintenance Equipment**

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, roto tillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. The emissions associated from landscape equipment use were estimated using CalEEMod defaults. (Dudek, 2025a, p. 83)

3. Energy Source Emissions

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. GHG emissions associated with the natural gas and electricity usage associated with the Project were calculated by CalEEMod using default parameters. (Dudek, 2025a, p. 83)

The CalEEMod default energy intensity factor (CO_2, CH_4, and N_2O mass emissions per kilowatt-hour) for SCE was applied, which is based on the projected value for SCE's energy mix in 2027. SB 100 and SB 1020 call for further development of renewable energy, with targets of 52 percent by December 31, 2027; 60 percent by December 31, 2030; 90 percent by December 31, 2035; 95 percent by December 31, 2040; and 100percent by December 31, 2045. As such, GHG emissions associated with Project electricity demand would continue to decrease over time. (Dudek, 2025a, p. 83)

4. Water and Wastewater

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. GHG emissions associated with Project water consumption were calculated using CalEEMod using default parameters. (Dudek, 2025a, p. 83)

5. Solid Waste

The Project would generate solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the Project were calculated by CalEEMod using default parameters. (Dudek, 2025a, p. 83)

6. Refrigerants

Refrigerants are substances used in equipment for air conditioning (A/C) and refrigeration. Most of the refrigerants used today are hydrofluorocarbons or blends thereof, which can have high GWP values.

All equipment that uses refrigerants has a charge size (i.e., quantity of refrigerant the equipment contains), and an operational refrigerant leak rate, and each refrigerant has a GWP that is specific to that refrigerant. CalEEMod default values were applied, which quantify refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. (Dudek, 2025a, p. 83)

7. Off- Road Equipment

Regarding cargo handling equipment, on-site modeled operational diesel-fueled equipment would include a total of 50 forklifts operating 24 hours a day for 365 days of the year. (Dudek, 2025a, p. 84)

8. Stationary Source

The Project would potentially operate one diesel-fueled 1,000-hp generator and one diesel-fueled 300-hp fire pump for emergency use. These stationary sources were assumed to operate for up to 50 hours per year for routine testing and maintenance. (Dudek, 2025a, p. 84)

9. Transport Refrigeration Units

Based on data from the Project's TIA, the Project would generate 188 truck delivery trips per day to the High-Cube Cold Storage warehouse space of the building (25 percent of the building space), all of which were assumed be equipped with TRUs. (Dudek, 2025a, p. 84)

C. ***Emissions Summary***

The estimated Project-related unmitigated GHG emissions are summarized on Table 4.7-5, *Project GHG Emissions Summary (Without Mitigation)*. Detailed operation model outputs for the Project are presented in Appendix A of *Technical Appendix B*. As shown, operation of the Project would result in approximately 19,723 MT CO_2e per year, including amortized construction emissions, which would exceed the applied GHG threshold of 3,000 MT CO_2e per year. Therefore, the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; this would represent a cumulatively potentially significant impact. (Dudek, 2025a, p. 85)

Table 4.7-5 Project GHG Emissions Summary (Without Mitigation)

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Mobile	10,987.84	0.08	1.40	15.05	11,423.03
Area	14.60	<0.01	<0.01	0.00	14.65
Energy	2,409.84	0.22	0.02	0.00	2,420.52
Water	286.74	7.54	0.18	0.00	529.31
Waste	83.87	8.38	0.00	0.00	293.45
Refrigerants	0.00	0.00	0.00	1,103.06	1,103.06

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Off-Road Equipment	3,786.05	0.15	0.03	0.00	3,799.05
Stationary Source	33.91	<0.01	<0.01	0.00	34.02
Transport Refrigeration Units	0.62	0.00	0.00	0.00	0.62
Total	**17,603.47**	**16.38**	**1.63**	**1,118.12**	**19,617.71**
Amortized Construction Emissions					105.49
Operational Emissions plus Amortized Construction Emissions					**19,723.20**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent. Values of "<0.01" indicate that the estimated emissions are less than 0.01 metric tons per year. Totals may not sum due to rounding.
Source: (Dudek, 2025a, Table 24)

Threshold b: ***Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

A. Potential to Conflict with the City's General Plan

As previously stated, the Sustainability, Climate, and Resilience Element of the City's Palmdale 2045 serves as the City's CAP and presents a number of strategies that make it possible for the City to meet California's GHG emissions targets. As described below, the Project would generally be consistent with these reduction strategies and would support the City's CAP. (Dudek, 2025a, p. 88)

- **Clean Energy.** The Project would require measures that would support renewable energy generation and energy efficiency, as specified in Mitigation Measure GHG MM-1 (Energy Demand Minimization). These would include, but not limited to, installation of rooftop solar of the maximum size feasible to meet a least 75 percent of the building's anticipated total operational electricity requirements and the installation of Energy Star-rated heating, cooling, lighting, and appliances.

- **Buildings.** The Project would support the green building strategies of the City's CAP through the provision of an all-electric building (Mitigation Measure AQ MM-7), as well as the installation of a solar photovoltaic system and energy efficient appliances (Mitigation Measure GHG MM-1).

- **Transportation.** The Project would require measures that would support reducing GHGs through the transportation sector. Specifically, implementation of Mitigation Measure AQ MM-4 requires the installation of Level 2 (or faster) EV chargers and electrical conduit and infrastructure accommodations for future auto and truck charging stations. In addition, Mitigation Measure AQ MM-4 also requires electrical hook-ups for TRUs, stringent anti-idling restrictions, and the establishment of transportation demand management programs for occupants with more than 250 employees in order to reduce employee commute vehicle emissions. Finally, although the requirement for all cargo handling and landscaping equipment

to be zero-emission (Mitigation Measure AQ MM-5) would not specifically be in the transportation sector, it would also substantially reduce GHG emissions.

- **Solid Waste.** The Project would be consistent with the solid waste strategies of the CAP, which requires waste diversion to reduce the amount of waste disposed at landfills through the provision of storage areas for recyclables, green waste, and food waste (Mitigation Measure GHG MM-2).

- **Water and Wastewater.** The Project would implement Mitigation Measure GHG MM-3, which requires water efficient landscaping and low-flow indoor fixtures to reduce outdoor and indoor water usage when compared to baseline water demand. As water conveyance and treatment generates GHGs indirectly due to the electricity involved in the process, reducing water demand would also reduce the amount of electricity required.

- **Ecosystems.** A variety of trees, shrubs, and groundcovers would be planted within the Project frontage's landscape setback area, within the landscape areas found around the parking lot areas and perimeter of the Project site, pursuant to City requirements. (Dudek, 2025a, p. 88)

B. Potential to Conflict with SCAG's RTP/SCS

On April 4, 2024, SCAG adopted the 2024–2050 RTP/SCS, also referred to as Connect SoCal 2024. Connect SoCal 2024 builds on the prior RTP/SCS and identifies the following strategy areas to support its environmental goals: Sustainable Development, Air Quality, Clean Transportation, Natural and Agricultural Lands Preservation, and Climate Resilience. The primary objective of the RTP/SCS is to provide guidance for future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the region, as stipulated under SB 375. The Project's potential to conflict with the 2024–2050 RTP/SCS strategies is presented below. (Dudek, 2025a, p. 88)

- **Sustainable Development.** The 2024–2050 RTP/SCS identifies sustainable development, including water and energy-efficient building practices and green infrastructure, as a strategy to reduce GHG emissions. The Project would support this strategy by requiring an all-electric building (Mitigation Measure AQ MM-7) and including rooftop solar and energy star appliances into the Project design (Mitigation Measure GHG MM-1), as well as water conservation measures (Mitigation Measure GHG MM-3).

- **Air Quality.** The 2024–2050 RTP/SCS identifies air quality as an environmental strategy because the transportation sector is the predominant source of criteria air pollutant emissions in the region. The 2024– 2050 RTP/SCS states that a comprehensive and coordinated regional solution with integrated land use and transportation planning from all levels of governments will be required to achieve the needed emission reductions. According to the SCAG Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028. Thus, the Project would meet the growing demand for warehousing space and would do so in

an area that is proximate to regional highways (State Route 14 and State Route 138), thereby reducing the need for longer distance trips, which could result in additional air pollutant and GHG emissions. Additionally, the Project would employ approximately 1,180 workers, helping the City better meet its jobs/housing balance, which should shorten commute distances of City residents who choose to work on the project site, which would have a direct positive effect on tailpipe GHG and air contaminant emissions.

- **Clean Transportation.** One of the technology innovations identified in the 2024–2050 RTP/SCS that would apply to the Project is the promotion and support of low emission technologies for transportation, such as alternative fueled vehicles to reduce per capita GHG emissions. For this particular Project, Mitigation Measure AQ MM-4 would require the installation of Level 2 (or faster) EV chargers and conduit in tractor trailer parking areas to support future truck charging stations, as well as Mitigation Measure AQ MM-5, which would require that all cargo handling and landscaping equipment to be zero-emission.

- **Natural and Agricultural Lands Preservation.** The 2024–2050 RTP/SCS promotes the conservation and restoration of natural and agricultural lands through several policies, such as quantifying the carbon sequestration potential of natural and agricultural lands and prioritizing sensitive habitat and wildlife corridors for permanent protection. The Project would be located on an area zoned for industrial and business uses. The Project site does not support agriculture.

- **Climate Resilience.** The 2024–2050 RTP/SCS promotes regional coordination and solutions for effective emergency response for climate-related hazards. Additionally, in the category of climate resilience, SCAG has established the following policies: prioritize the most vulnerable populations and communities subject to climate hazards, support local and regional climate and hazard planning, support nature-based solutions to increase regional resilience, promote sustainable water use planning, and support an integrated planning approach to help jurisdictions meet housing needs in a drier environment. While the Project does not directly pertain to these regional coordination efforts for climate resilience, the Project would not interfere with this strategy. (Dudek, 2025a, pp. 88-89)

Based on the analysis above, the Project would be consistent with the SCAG 2024–2050 RTP/SCS. (Dudek, 2025a, p. 89)

C. Project Potential to Conflict with State Reduction Targets and CARB's Scoping Plan

The California State Legislature passed AB 32 to provide initial direction to limit California's GHG emissions to 1990 levels by 2020 and initiate the state's long-range climate objectives. Since the passage of AB 32, the State has adopted GHG emissions reduction targets for future years beyond the initial 2020 horizon year. CARB is required to develop a Scoping Plan, which provides the framework for actions to achieve the State's GHG emission targets. While the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used as the sole basis for project-level evaluations, it is the official framework for the measures and regulations that will be implemented to

reduce California's GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with the statutes if it meets the Scoping Plan policies and would not impede attainment of the goals therein. (Dudek, 2025a, pp. 89-90)

For the Project, the relevant GHG emissions reduction targets include those established by SB 32 and AB 1279, which require GHG emissions be reduced to 40% below 1990 levels by 2030, and 85 percent below 1990 levels by 2045, respectively. In addition, AB 1279 requires the State achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter. CARB's 2017 Scoping Plan update was the first to address the State's strategy for achieving the 2030 GHG reduction target set forth in SB 32, and the most recent CARB 2022 Scoping Plan update outlines the State's plan to reduce emissions and achieve carbon neutrality by 2045 in alignment with AB 1279 and assesses progress is making toward the 2030 SB 32 target. As such, given that SB 32 and AB 1279 are the relevant GHG emission targets, the 2017 and 2022 Scoping Plan updates that outline the strategy to achieve those targets, are the most applicable to the Project. (Dudek, 2025a, p. 90)

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), increase stringency of the low-carbon fuel standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed SLCP Plan, and increase stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines). Many of the measures and programs included in the Scoping Plan would result in the reduction of Project-related GHG emissions with no action required at the project level, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (low-carbon fuel standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy). Table 4.7-6, *Project Potential to Conflict with 2017 Scoping Plan*, and Table 4.7-7, *Project Potential to Conflict with 2022 Scoping Plan*, summarize the Project's potential to conflict with the applicable 2017 and 2022 Scoping Plan. (Dudek, 2025a, p. 90)

Table 4.7-6 Project Potential to Conflict with 2017 Scoping Plan

Action	Responsible Parties	Potential to Conflict
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	**No Conflict**. The Project would use energy from SCE. SCE has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE energy source diversification efforts.

Action	Responsible Parties	Potential to Conflict
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		**No Conflict**. The Project would be constructed in compliance with the current California Building Code requirements at the time of construction. Currently, new buildings must achieve compliance with the applicable 2022 Building and Energy Efficiency Standards and the 2022 California Green Building Standards requirements. In addition, the Project would implement Mitigation Measure AQ MM-7, which requires an all-electric building (i.e., no natural gas), as well as Mitigation Measure GHG MM-1, which specifies that the Project would commit to renewable energy sufficient to meet at least 75% of the Project's total operational energy requirements from within the building envelope, as well as install Energy Star-rated heating, cooling, lighting, and appliances.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty EVs by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	**No Conflict.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
At least 4.2 million zero emission and plug-in hybrid light-duty EVs by 2030.		**No Conflict.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.

Action	Responsible Parties	Potential to Conflict
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		**No Conflict.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Medium- and Heavy-Duty GHG Phase 2.		**No Conflict.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Last Mile Delivery: New regulation that would result in the use of low NO_X or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		**No Conflict.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB cleaner last mile delivery trucks in California. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy. In addition, Mitigation Measure AQ MM-4 requires the project to install conduit to support future electric truck charging stations.

Action	Responsible Parties	Potential to Conflict
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor's Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	**No Conflict**. The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	**No Conflict**. The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	**No Conflict**. This measure would apply to all trucks accessing the Project site, including existing trucks or new trucks that are part of the Statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to improve freight system efficiency.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	**No Conflict**. This measure, which was increased to 20% reduction in carbon intensity by 2030, applies to all fuel purchased and used by the Project vehicles in the state. The Project would not obstruct or interfere with agency efforts to implement a Low Carbon Fuel Standard.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		**No Conflict**. To the extent appropriate for the proposed industrial buildings, wood products would be used in construction.

Source: (Dudek, 2025a, Table 26)

Table 4.7-7 Project Potential to Conflict with 2022 Scoping Plan

Sector	Action	Potential to Conflict
GHG Emissions Reductions Relative to the SB 32 Target	40% below 1990 levels by 2030	**No Conflict**. While the SB 32 GHG emissions reduction target is not an Action that is analyzed independently, it is included in Table 2-1 of the 2022 Scoping Plan for reference. The Project would not obstruct or interfere with agency efforts to meet the SB 32 reduction goal.
Smart Growth / VMT	VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	**No Conflict**. The Project would not obstruct or interfere with agency efforts to meet this regional VMT reduction goal, including through implementation of SB 375. As detailed above, the Project would be consistent with the SCAG 2024–2050 RTP/SCS, which is the regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375.
Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs)	100% of LDV sales are ZEV by 2035	**No Conflict**. As this action pertains to LDV sales within California, the Project would not obstruct or interfere with its implementation. Furthermore, the Project would support the transition from fossil fuel LDV to ZEV through its provision of Level 2 (or faster) EV chargers (Mitigation Measure AQ MM-4).
Truck ZEVs	100% of medium-duty vehicle (MDV)/ heavy-duty vehicle (HDV) sales are ZEV by 2040	**No Conflict**. As this action pertains to MDV and HDV sales within California, the Project would not obstruct or interfere with its implementation. Furthermore, the Project would support the transition from fossil fuel MDV and HDV to ZEV through its installation of conduit at or near dock doors and electrical rooms of sufficient size to accommodate the upsizing of electrical equipment for future electrical loads, such as for truck EV charging stations (Mitigation Measure AQ MM-4).

Sector	Action	Potential to Conflict
Electricity Generation	Sector GHG target of 38 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2030 and 30 $MMTCO_2e$ in 2035 Retail sales load coverage[1] 20 gigawatts (GW) of offshore wind by 2045 Meet increased demand for electrification without new fossil gas-fired resources	**No Conflict**. As this Action pertains to the Statewide procurement of renewably generated electricity, the project would not obstruct or interfere with its implementation. However, the Project would support increased usage of renewable electricity through the installation of on-site solar panels and/or other means sufficient to meet at least 75% of the building's anticipated total operational electricity requirements (Mitigation Measure GHG MM-1).
New Residential and Commercial Buildings	All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030	**No Conflict**. The Project would support agency efforts to meet the all-electric appliance and heat pump goals by requiring an all-electric building (i.e., no natural gas) (Mitigation Measure AQ MM-7).
Construction Equipment	25% of energy demand electrified by 2030 and 75% electrified by 2045	**No Conflict**. As this Action pertains to the electrification of off-road equipment across California, the Project would not obstruct or interfere with its implementation. However, the Project would support the Action through the requirement that all cargo handling and landscaping equipment to be zero-emission (Mitigation Measure AQ MM-5).
Low Carbon Fuels for Transportation	Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen	**No Conflict**. The Project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for transportation.
Low Carbon Fuels for Buildings and Industry	In 2030s biomethane blended in pipeline Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040 In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters	**No Conflict**. The Project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for use in buildings and industry.
High GWP Potential Emissions	Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions	**No Conflict**. The Project would not obstruct or interfere with agency efforts to introduce low GWP refrigerants.

Notes: [1] As noted in Table 2-1 of the 2022 Scoping Plan, SB 100 speaks only to retail sales and state agency procurement of electricity (i.e., wholesale or non-retail sales and losses from storage and transmission and distribution lines are not subject to the law).
Source: (Dudek, 2025a, Table 27)

Based on the analysis in Table 4.7-6 and Table 4.7-7, the Project would be consistent with the applicable strategies and measures in the 2017 Scoping Plan and the 2022 Scoping Plan, respectively.

The 2045 carbon neutrality goal required CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions. However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the State's natural and working lands will not be sufficient to address residual GHG emissions, and achieving carbon neutrality will require research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture). Given that the specific path to neutrality will require development of technologies and programs that are not currently known or available, the Project's role in supporting the statewide goal would be speculative and cannot be wholly identified at this time. (Dudek, 2025a, p. 95)

Overall, the Project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent applicable and required by law. As demonstrated above, the Project would not conflict with CARB's 2017 or 2022 Scoping Plan updates and with the State's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals. (Dudek, 2025a, p. 95)

D. Summary

The Project demonstrates consistency with the CARB's Scoping Plan, would not conflict with other regulations regarding reductions to GHG emissions including SB 32 and AB 1279, would be consistent with the SCAG 2024–2050 RTP/SCS and the City's CAP as part of the General Plan; therefore, the Project's potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases, would be less than significant. Implementation of MM-AQ-4, MM-AQ-5, MM-AQ-7, and MM-GHG-1 through MM-GHG-3 would further reduce GHG emissions. (Dudek, 2025a, p. 95)

4.7.5 Cumulative Impact Analysis

As discussed in Subsection 4.7.3, there is no evidence that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate. As such, Project impacts due to GHG emissions are inherently cumulative in nature.

As discussed under the analysis of Threshold (a), Project emissions are calculated to be 19,723.20 MT CO_2e per year. The level of GHG emissions for the Project would be far above the SCAQMD screening threshold of 3,000 MT CO_2e per year. Other cumulative developments within the region have a similar potential to result in GHG emissions that would exceed the screening threshold. Accordingly, GHG emissions associated with the construction and long-term operation of the Project represent a cumulatively considerable impact for which mitigation would be required. This cumulatively-considerable impact is addressed in part by Mitigation Measures AIR MM-4, AIR MM-6, and AIR MM-7, identified in EIR Subsection 4.2, *Air Quality*, and Mitigation Measures GHG MM-1 through GHG MM-3; however, Project's impacts due to direct or indirect GHG emissions are a significant and unavoidable impact of the proposed Project for which additional feasible mitigation measures are not available.

As discussed under the analysis of Threshold (b), the Project would be consistent with or otherwise would not conflict with the CARB Scoping Plan or SCAG's 2024–2050 RTP/SCS and would not conflict with the GHG reduction goals of the City's General Plan. As such, because the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases, Project impacts would be less than significant on a cumulatively considerable basis.

4.7.6 Significance of Impacts Before Mitigation

Threshold a: Significant Cumulatively Considerable Impact. The Project would generate approximately 19,723.20 MT CO_2e per year from construction and operational activities, which is above the SCAQMD screening threshold of 3,000 $MTCO_2e$ per year. Accordingly, prior to mitigation, the Project's GHG emissions represent a significant cumulatively considerable impact on the environment.

Threshold b: Less than Significant Impact. The Project would not conflict with any of the CARB Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Additionally, the Project would not conflict with the GHG reduction goals of the City's General Plan, and impacts would therefore be less than significant. The Project's mitigation measures, design features, and regulatory requirements specified below in 4.7.7 and 4.7.8 would further ensure that the Project does not conflict with the GHG reduction policies of the City's General Plan. Impacts would be less than significant.

4.7.7 Mitigation

Mitigation Measures AIR MM-4, AIR MM-6, and AIR MM-7 identified in EIR Subsection 4.2, *Air Quality*, would also assist in reducing GHG emissions as discussed under Threshold (a); therefore, these air quality mitigation measures listed in EIR Subsection 4.2, *Air Quality* shall also apply to GHG.

GHG MM-1 **Energy Demand Minimization.** The Project shall implement the following measure to reduce operational energy source GHG emissions to the extent feasible:

- The proposed building shall offset at least 75 percent of its operational energy demand within the building envelope through renewable energy generation, demonstrated to the City of Palmdale prior to issuance of a Certificate of Occupancy. To achieve all or part of this requirement, the roof of the building shall be outfitted with a solar photovoltaic system of the maximum size feasible given building tenant electrical demands, applicable Building Code requirements, clearance requirements around skylights and roof-mounted equipment, utility company interconnection regulations, transformer capacity, and other applicable code compliance constraints. Prior to issuance of a certificate of occupancy for the tenant, the City shall verify that the roof-mounted solar photovoltaic systems are either installed, or that the systems have been ordered and are scheduled to be installed within 12 months of tenant occupancy. The number of solar panels shall

not exceed the total available roof space and the available total Kilovolt-Amperes (kVA) used to service the building by a Southern California Edison (SCE) final approved drawing showing the transformer size and capacity.

- All heating, cooling, lighting, and appliance fixtures shall be Energy Star-rated.

GHG MM-2 **Solid Waste Diversion.** To reduce the amount of waste disposed at landfills, the Project shall implement solid waste program that would divert at least 50 percent of the Project's solid waste. Prior to the issuance of building permits for the Project, the Project Applicant shall provide building plans that include the following solid waste reduction measures:

- Provide storage areas for recyclables and green waste in new construction, and food waste storage, if a pick-up service is available.

- Evaluate the potential for on-site composting and implement composting if it is determined to be feasible.

GHG MM-3 **Water Conservation.** To reduce water demands and associated energy use, a Water Conservation Strategy shall be implemented that achieves a minimum 20 percent reduction in indoor and outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Prior to the issuance of building permits for the Project, the Project Applicant shall provide building plans that include, but not limited to, the following water conservation measures:

- The Project's landscape plan shall emphasize drought-tolerant plants and use water-efficient irrigation techniques.

- All fixtures installed in restrooms and employee break areas would be U.S. Environmental Protection Agency WaterSense Certified or equivalent.

- Install dual-flush toilets.

- Install rainwater collection systems where feasible.

4.7.8 Design Features (DF) and Regulatory Requirements (RR)

The City of Palmdale will ensure that the Project complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Greenhouse Gas Emissions as part of the City's Conditions of Approval for the Project. The Project Applicant has agreed to implementing the design features, many of which represent a commitment to sustainable design that is integral to the Project, and/or are regulatory requirements, and as such, they are not considered to be mitigation

measures. Refer also to the design features and regulatory requirements listed in EIR Subsection 4.2, *Air Quality*, many of which also reduce the Project's GHG emissions.

GHG DF-1 Cargo handling equipment shall be non-diesel. If more than one piece of cargo handling equipment is required by the building user, the equipment shall be zero-emission.

GHG RR-1 The Project is required to comply with the PMC Chapter 14.05, Water Efficient Landscape. Efficient water use lowers GHG emissions by reducing the consumption of energy resource required to treat and deliver water.

GHG RR-2 The Project is required to directly or indirectly comply with all applicable GHG reduction mandates imposed by the State of California and the AVAQMD. Those that are applicable to the Project either directly or indirectly and that would reduce GHG emissions are:

a) Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles.

b) Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction.

c) Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances.

d) Title 17 California Code of Regulations (Low Carbon Fuel Standard). Regulates the carbon content of fuel sold in California.

e) Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.

f) Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources.

4.7.9 Significance of Impacts after Mitigation

Threshold a: Significant Unavoidable Cumulatively Considerable Impact. Mitigation measures are required to minimize operational-related GHG impacts. Most GHGs associated with the Project are generated by on-road vehicles, diesel-fueled off-road forklifts, and energy sources. Mitigation Measure AQ MM-4 requires measures to minimize on-road vehicle emissions, including the provision of EV charging stations and electrical hookups for TRUs. Mitigation Measure AQ MM-5 includes the requirement for all off-road forklifts and landscaping equipment to be zero emission, which would reduce the long-term criteria air pollutant emissions substantially. Mitigation Measure AQ MM-7 requires the warehouse building to be all-electric (i.e., no natural gas). Finally, implementation of Mitigation Measure GHG MM-1 through Mitigation Measure GHG MM-3 would reduce GHG

emissions associated with renewable/energy efficiency, solid waste disposal, and water conservation. (Dudek, 2025a, p. 85)

As shown on Table 4.7-8, *Project GHG Emissions Summary (With Mitigation)*, after implementation of feasible mitigation measures, the Project's greenhouse gas emissions are calculated to be 13,990.65 MT CO_2e per yr. Thus, the proposed Project's GHG emissions would exceed the SCAQMD screening threshold of 3,000 MTCO_2e per year after mitigation. Although mobile vehicles (82 percent) are the main source of GHG emissions associated with Project operations, neither the Project Applicant nor the City can substantively or materially affect reductions in the Project's on-road mobile source emissions beyond what is already required by federal and State regulation. No feasible mitigation measures beyond those already identified exist that would reduce these emissions to levels that are less than significant. Therefore, even with the incorporation of mitigation measures, long-term impacts associated with a cumulatively considerable increase in GHG emissions would be significant and unavoidable. (Dudek, 2025a, p. 86)

Table 4.7-8 Project GHG Emissions Summary (With Mitigation)

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Mobile	10,987.84	0.08	1.40	15.05	11,423.03
Area	0.00	0.00	0.00	0.00	0.00
Energy	749.89	0.07	0.01	0.00	754.26
Water	229.39	6.03	0.14	0.00	423.45
Waste	41.94	4.19	0.00	0.00	146.72
Refrigerants	0.00	0.00	0.00	1,103.06	1,103.06
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00
Stationary Source	33.91	<0.01	<0.01	0.00	34.02
Transport Refrigeration Units	0.62	0.00	0.00	0.00	0.62
Total	**12,043.58**	**10.38**	**1.56**	**1,118.12**	**13,885.16**
Amortized Construction Emissions					105.49
Operational Emissions plus Amortized Construction Emissions					**13,990.65**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent. Values of "<0.01" indicate that the estimated emissions are less than 0.01 metric tons per year. Totals may not sum due to rounding.
Source: (Dudek, 2025a, Table 25)

4.8 HAZARDS AND HAZARDOUS MATERIALS

The information and analysis presented in this subsection is based in part on a technical study that was prepared to determine the presence or absence of hazardous materials on the Project site under existing conditions. This report is titled, "Phase I Environmental Site Assessment" (herein, "Phase I ESA"), prepared by Hazard Management Consulting, Inc. (herein, "HMC"), dated March 4, 2024, and included as *Technical Appendix F1* to this EIR (HMC, 2024). In addition, this subsection includes a determination from the Federal Aviation Administration (FAA) on hazards from proximity to airports dated April 15, 2025, which is included as *Technical Appendix F2* to this EIR. All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of hazards and hazardous materials.

4.8.1 EXISTING CONDITIONS

A. Definition of Toxic Substances and Hazardous Waste

For purposes of this EIR, the term "toxic substance" is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include chemical, biological, flammable, explosive, and radioactive substances.

"Hazardous material" is defined as a substance which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness.

Hazardous waste is defined in the California Code of Regulations (CCR) Title 22, § 66261.3. The defining characteristics of hazardous waste are ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States (US) Environmental Protection Agency (EPA) as capable of inducing systemic damage to humans or animals).

Certain wastes are called "Listed Wastes" and are found in the CCR Title 22, §§ 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

A historical recognized environmental condition (HREC) is defined under American Society for Testing and Materials (ASTM) E1527-13 as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction

of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls." (BLM, 2017, pp. 5-6)

A controlled recognized environmental condition (CREC) is defined under ASTM E1527-13 as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls." (BLM, 2017, p. 4)

A recognized environmental condition (REC) is defined under ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment." (BLM, 2017, p. 8)

A business environmental risk (BER) is defined under ATSM E1527-13 as "a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice." (BLM, 2017, p. 3)

B. Historical Review, Prior Investigations, Regulatory Review, and Field Reconnaissance

As part of the Project's Phase I ESA (*Technical Appendix F1*), HMC conducted an inspection of the Project site and a reconnaissance of the surrounding area; a review of a regulatory databases; a review of historic aerial photographs, topographic maps, and interviewed the current owner and user of the site. The results of the assessment are summarized below.

Review of historic aerial photographs indicates that the Project site has consisted of undeveloped vacant land since 1928 to present. There was no evidence observed by HMC that suggests the historical use of hazardous materials at the Project site. (HMC, 2024, p. 6)

During the site inspection, HMC observed a dirt road intersecting the center of the site in a north to south direction. No evidence of underground storage tanks (USTs), aboveground storage tanks (ASTs), drainage features, ponds, lagoons, staining, wells, or transformers were observed at the site. There was no evidence of historical or present structural improvements and no evidence of historical or present hazardous materials usage observed at the site. (HMC, 2024, p. 7)

The Project's Phase I ESA did not identify any evidence of HRECs, CRECs, or RECs on the Project site. Additionally, while there were facilities reported to utilize hazardous chemicals or have had releases in the vicinity of the Project site, none of the facilities are expected to have impacted the site. There were no RECs identified from the review of records for off-site sources. (HMC, 2024, pp. 10, 13)

C. Airport-Related Hazards

As discussed in Section 2.0 *Environmental Setting*, located to the northeast of the Project site are runways associated with the United States Air Force (USAF) Plant 42 and the inactive Palmdale Regional Airport. The Palmdale Regional Airport is a 9,000-square foot commercial airport within the City limits owned by the City of Los Angeles Department of Airports and operated under a joint agreement with USAF Plant 42. According to the Federal Code of Regulations (CFR), 14 CFR 77 would require the proponent of any planned development in proximity of the airport to file notice with the Federal Aviation Administration (FAA) for any construction or alteration that exceeds an imaginary surface extending outward and upward at a slope of 25 to one (25:1) for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of a heliport described in 14 CFR 77.9(d). However, if future development in the vicinity of the Palmdale Regional Airport were "shielded by existing structures of a permanent and substantial nature of equal or greater height," a notice to the FAA under 14 CFR 77 would not be required (City of Palmdale, 2022a, p. 4.9-23). Additionally, according to 14 CFR Part 77, for any construction or alteration within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet, FAA notification is required (FAA, 2023). The Project site is located approximately 1.80 miles (9,504 feet) southwest of Runway 7 of Palmdale Regional Airport/USAF Plant 42. Because the Project is located within 20,000 feet of a public use or military airport, FAA notification is required for the Project.

1. *Los Angeles County Airport Land Use Plan*

The Los Angeles County Airport Land Use Commission (ALUC) is responsible for establishing land use policy to mitigate potential noise and safety hazards regarding the fifteen airports in its jurisdiction (Los Angeles ALUC, 2004, p. 15). According to the Los Angeles County ALUC's Airport Land Use Plan's (ALUP's) Palmdale Airport/USAF Plant 42 Airport Influence Area map, the Project site does not occur within the Planning Boundary/AIA of the Palmdale Airport/USAF. An AIA is an airport planning area boundary that consists of all areas in which current or future airport-related noise, over flight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those areas. According to the ALUP AIA map, the Project site is not located within a runway protection zone (RPZ) (Los Angeles County ALUC, 2004, Palmdale Airport/USAF Plant 42 Airport Influence Area map).

2. *USAF Plant 42 Air Installation Compatible use Zone (AICUZ) Final Report*

The Department of the Air Force's USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report (December 2011) documents aircraft operations at USAF Plant 42 and reaffirms the Air Force's policy of assisting Federal, state, regional, and local officials in planning for the areas surrounding military installations. The AICUZ Final Report promotes compatible development within the AICUZ area of influence with the goal of protecting community health and Air Force operational capacity from the negative effects of incompatible land uses. The AICUZ Final Report provides compatible use guidelines for land use areas surrounding the installation as well as identifies noise contours. (City of Palmdale, 2023, p. 203)

According to the AICUZ Final Report, the Project site occurs within the USAF Plant 42 AICUZ area of influence (Department of the Air Force, 2011, p. 3-17). The area of influence for airfield planning is concerned with three primary aircraft operational/land use determinants: 1) accident potential to occupants on the ground; 2) aircraft noise; and 3) hazards to flight operations from land uses (height obstructions, increased potential for bird-aircraft strike hazards, operations such as factories that emit smoke, dust, or light that adversely affect flight operations) (Department of the Air Force, 2011, p. 2-17).

As shown in the AICUZ Final Report's Figure 3-6, *Plant 42 CZs and APZs*, the southeastern corner of the Project site is located within an Accident Potential Zone II (APZ II). However, the proposed light industrial use of the Project site is compatible with the APZ II (Department of the Air Force, 2011, Table 3-5). The Project site is not located within an APZ I or a Clear Zone (CZ). APZs and CZs are areas that are designated to promote and maintain clear airspace for safe flight operations near the airfield (Department of the Air Force, 2011, pp. 3-20 to 3-23). As shown in the AICUZ's Final Report's Figure 3-3, Air Force Plant 42 – Community Noise Equivalent Level (CNEL), the Project site consisting of planned industrial land uses is located within the 60-65 dBA CNEL noise level contour boundary. Therefore, according to the City of Palmdale General Plan Noise Element Noise Land Use Compatibility Criteria, the Project's land uses are considered *normally acceptable* (City of Palmdale, 2023, p. 405).

4.8.2 Regulatory Setting

The following is a brief description of the federal, State, and local environmental laws and regulations related to hazards and hazardous materials. Refer to EIR Subsection 4.16, *Wildfire*, for information about regulatory requirements associated with wildfire hazards and fire protection.

A. Federal Regulations

1. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Superfund Amendments and Reauthorization Act (SARA)

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through the CERCLA, the EPA was given power to seek out parties responsible for releases and assure their cooperation in the cleanup. The EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when responsible parties fail to act, and also recovers costs from financially viable individuals and companies once a response action has been completed. The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized the CERCLA to continue cleanup activities and strengthen its provisions. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA), which requires facilities to report on the storage, use, and release of hazardous chemicals to support local emergency planning. (EPA, 2024)

2. *Resource Conservation and Recovery Act (RCRA)*

The Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to the RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to the RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. In California, RCRA is implemented in coordination with state agencies, primarily through the Department of Toxic Substances Control (DTSC). (EPA, 2024h)

3. *Hazardous Materials Transportation Act (HMTA)*

The Hazardous Materials Transportation Act is the primary federal law governing the safe transportation of hazardous materials. Enacted in 1975 and administered by the U.S. Department of Transportation (DOT), the HMTA authorizes the regulation of the handling, packaging, labeling, and routing of hazardous materials to prevent accidents and protect public health, safety, and the environment. The HMTA establishes requirements for all modes of transportation—including road, rail, air, and water—and applies to both public and private carriers. It also allows states and local agencies to implement additional regulations, provided they are consistent with federal standards. In California, oversight is provided in part by the California Highway Patrol (CHP) and the Office of Emergency Services (Cal OES). Hazardous materials regulations are subdivided by function into four basic areas:

- Procedures and/or Policies 49 CFR Parts 101, 106, and 107
- Material Designations 49 CFR Part 172
- Packaging Requirements 49 CFR Parts 173, 178, 179, and 180
- Operational Rules 49 CFR Parts 171, 173, 174, 175, 176, and 177

The HMTA is enforced by use of compliance orders [49 U.S.C. 1808(a)], civil penalties [49 U.S.C. 1809(b)], and injunctive relief (49 U.S.C. 1810). The HMTA (Section 112, 40 U.S.C. 1811) preempts state and local government requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement. (OSHA, n.d.)

4. *Hazardous Materials Transportation Uniform Safety Act of 1990*

The Hazardous Materials Transportation Uniform Safety Act of 1990 (HMTUSA) is a federal law that strengthens and updates the regulatory framework for transporting hazardous materials. As an amendment to the HMTA, HMTUSA was enacted to improve coordination among federal, state, and local agencies, enhance safety standards, and ensure consistency in hazardous materials transportation

regulations across jurisdictions. HMTUSA promotes uniformity by preempting conflicting state and local laws, requires training for hazardous materials handlers, and provides funding for emergency response planning and training. The law also supports the development of routing guidelines and information systems to track hazardous material shipments. (OSHA, n.d.)

5. Occupational Safety and Health Act (OSHA)

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. The goal was to make sure employers provide workers with a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. (EPA, 2024i)

In order to establish standards for workplace health and safety, the OSHA also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the OSHA and enforces standards in all 50 states. (EPA, 2024i)

6. Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 that is administered by the U.S. EPA provides the EPA with authority to regulate the manufacture, importation, use, distribution, and disposal of chemical substances that may pose a risk to human health or the environment. TSCA requires chemical manufacturers to submit data on chemical toxicity and allows the EPA to ban or restrict chemicals deemed unsafe. The TSCA also addresses the cleanup of PCBs (polychlorinated biphenyls), asbestos, radon, lead-based paint, and other hazardous substances. (EPA, 2024j)

Various sections of the TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture;
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found;
- Issue Significant New Use Rules (SNURs), under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern;
- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list;
- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements;
- Require, under Section 8, reporting and record-keeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce; and
- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform the EPA, except where the EPA

has been adequately informed of such information. The EPA screens all TSCA b§8(e) submissions as well as voluntary "For Your Information" (FYI) submissions. The latter are not required by law but are submitted by industry and public interest groups for a variety of reasons. (EPA, 2024j)

7. Federal Aviation Administration (FAA) and Federal Regulation Title 14 Part 77

Federal Aviation Regulation (FAR) Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effect of the construction or alteration on operating procedures;
- Determining the potential hazardous effect of the proposed construction on air navigation;
- Identifying mitigating measures to enhance safe air navigation; and
- Charting of new objects.

Notification allows the Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA:

- Any construction or alteration exceeding 200 ft above ground level;
- Any construction or alteration:
    - within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 ft;
    - within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft; or
    - within 5,000 ft of a public use heliport which exceeds a 25:1 surface;
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards;
- When requested by the FAA; or
- Any construction or alteration located on a public use airport or heliport regardless of height or location. (FAA, 2023)

Persons failing to comply with the provisions of Federal Code of Regulations Title 14 Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). (FAA, 2023)

B. State Regulations

1. California Occupational Safety and Health Act of 1973 and the California State Plan

The California Division of Occupational Safety and Health (Cal/OSHA) is the state agency responsible for enforcing workplace safety and health regulations in California. Operating under the authority of

the California Occupational Safety and Health Act of 1973, Cal/OSHA implements and enforces standards that are at least as stringent as those required by federal OSHA, and in many cases, more protective. Cal/OSHA regulations apply to virtually all workplaces in California and cover a wide range of occupational hazards, including exposure to hazardous substances, construction safety, excavation and trenching, noise, air contaminants, and use of personal protective equipment (PPE). Cal/OSHA also oversees the permitting and inspection of certain high-risk operations such as demolition, crane use, and tunnel construction.

The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for promulgating State safety and health standards and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace. (OSHA, n.d.)

Pursuant to 29 CFR 1952.172, the California State Plan applies to all public and private sector places of employment in the State, with some exceptions. Cal/OSHA is the only agency in the State authorized to adopt, amend, or repeal occupational safety and health standards or orders. The Cal/OSHA enforcement unit conducts inspections of California workplaces in response to a report of an industrial accident, a complaint about an occupational safety and health hazard, or as part of an inspection program targeting industries with high rates of occupational hazards, fatalities, injuries, or illnesses. (OSHA, n.d.)

2. California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Section 25100, et seq.) is the primary hazardous waste statute in California. The HWCL implements RCRA as a "cradle-to-grave" waste management system in the State. It specifies that generators have the primary duty to determine whether waste created is hazardous and to ensure proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It also regulates a number of waste types and waste management activities not covered by federal law (RCRA). (CA Legislative Info, n.d.)

3. California Code of Regulations (CCR), Titles 22 and 26

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully authorized State according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the EPA, the integration of State and federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as does 40

CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). The hazardous waste regulations are commonly referred to collectively as "Title 22." (DTSC, n.d.)

4. Safe Drinking Water and Toxic Enforcement Act

Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986 (Health and Safety Code, Division 20, Chapter 6.6, Section 25249.5, et seq), protects the State's drinking water sources from being contaminated with chemicals known to cause cancer, birth defects, or other reproductive harm, and requires businesses to inform Californians about exposures to such chemicals. Proposition 65 requires the State to maintain and update a list of chemicals known to the State to cause cancer or reproductive toxicity. (CA Legislative Info, n.d.)

5. California Water Code

The California Water Code is the principal State law regulating water quality in California. The California Water Code includes provisions that regulate the discharge of hazardous substances into water sources and protect the quality of surface water and groundwater resources. The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) are responsible for enforcing these provisions under the state's Porter-Cologne Water Quality Control Act. Under the Water Code:

- Discharges of waste, including hazardous materials, to waters of the state are prohibited unless authorized by waste discharge requirements (WDRs), a waiver, or a permit under the federal Clean Water Act.
- Parties responsible for the unauthorized release of hazardous substances that affect or threaten water quality can be subject to cleanup and abatement orders (Water Code § 13304).
- Spills, leaks, or discharges of hazardous materials that impact groundwater or surface water may require investigation and remediation under the oversight of the appropriate RWQCB.
- Sites with existing or potential contamination may be listed in the State's GeoTracker database and subject to long-term monitoring or cleanup actions. (CA Legislative Info, n.d.)

6. Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

California's Unified Program, overseen by the California Environmental Protection Agency (CalEPA), protects Californians from hazardous waste and hazardous materials by ensuring local regulatory agencies consistently apply statewide standards when they issue permits, conduct inspections, and engage in enforcement activities. The Unified Program is a consolidation of multiple environmental and emergency management programs, including the following:

- Aboveground Petroleum Storage Act (APSA) Program;
- Area Plans for Hazardous Materials Emergencies;

- California Accidental Release Prevention (CalARP) Program;
- Hazardous Materials Release Response Plans and Inventories (Business Plans);
- Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statements (HMIS) (California Code);
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and,
- Underground Storage Tank Program.

State agency partners involved in the implementation of the Unified Program are responsible for setting program element standards, working with CalEPA to ensure program consistency, and providing technical assistance to the California Unified Program Agencies (CUPAs) and Program Agencies (PAs). The State agencies involved with the Unified Program include CalEPA, DTSC, the Governor's Office of Emergency Services (Cal OES), California Department of Forestry and Fire Protection (CalFire) – Office of the State Fire Marshall, and the State Water Resources Control Board (State Water Board). (CalEPA, n.d.)

7. Uniform Fire Code

The Uniform Fire Code, Article 80 (Section 80.103 of the Uniform Fire Code as adopted by the State Fire Marshal pursuant to HSC Section 13143.9), includes specific requirements for the safe storage and handling of hazardous materials. These requirements are intended to reduce the potential for a release of hazardous materials and for mixing of incompatible chemicals, and specify the following specific design features to reduce the potential for a release of hazardous materials that could affect public health or the environment:

- Separation of incompatible materials with a noncombustible partition;
- Spill control in all storage, handling, and dispensing areas; and
- Separate secondary containment for each chemical storage system. The secondary containment must hold the entire contents of the tank, plus the volume of water needed to supply the fire suppression system for a period of 20 minutes in the event of catastrophic spill. (CCR, n.d.)

8. California Vehicle Code Section 32000.5

Caltrans regulates hazardous materials transportation on all interstate roads (California Vehicle Code, Section 32000.5, et seq). Within California, the State agencies with primary responsibility for enforcing federal and State regulations and for responding to transportation emergencies are the California Highway Patrol and Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications for vehicles transporting hazardous materials. (CCR, n.d.)

9. California Hazardous Materials Release Response Plan and Inventory Law of 1985

The California Hazardous Materials Release Response Plan and Inventory Law of 1985, also known as the Hazardous Materials Business Plan (HMBP) Law, requires businesses that handle hazardous

materials in quantities at or above state-defined thresholds (California Health and Safety Code, Division 20, Chapter 6.95, Article 1) to prepare and submit a Hazardous Materials Business Plan (HMBP) (sometimes also called a Hazardous Materials Emergency Business Plan (HMEBP)) to their local Certified Unified Program Agency (CUPA). The HMBP must include:

- An inventory of hazardous materials stored or used on-site,
- Emergency response and employee training plans,
- Site maps showing the location of hazardous materials and emergency equipment.

The law is intended to improve emergency response readiness, reduce the risk of accidental releases, and ensure public and environmental safety. It also ensures that first responders and regulatory agencies have accurate and up-to-date information in the event of an incident. Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the State. Local agencies are responsible for administering these regulations. (CA Legislative Info, n.d.)

10. State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics ("Division") under the California Department of Transportation (Caltrans) and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. As a result of this legislation, the Division's first priorities are those mandated by the Aeronautics Act, then Caltrans guidance, then Division guidance as expressed through its Policy Element. The Act is intended to ensure the safe, orderly, and compatible development of airports and airspace use across the state. As directed by the Aeronautics Act, the Division is a steward and advocate of aviation in California. To that end, its efforts are focused on activities that "protect the public interest in aeronautics and aeronautical progress." Among other items, the Act requires the creation of Airport Land Use Commissions (ALUCs) and the development of Airport Land Use Compatibility Plans (ALUCPs) to prevent incompatible development near public-use airports.

11. Public Resources Code Sections 4290-4299

Public Resources Code (PRC) Sections 4290-4299 establish minimum statewide fire safety provisions pertaining to: 1) roads for fire equipment access; 2) signs identifying streets, roads, and buildings; 3) minimum private water supply reserves for emergency fire use; and 4) fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The state requirements, however, do not supersede more restrictive local regulations. (CA Legislative Info, n.d.)

As defined by CAL FIRE, wildland areas defined as SRAs may contain substantial wildfire risks and hazards and consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State's responsibility to provide fire protection services to buildings

or structures located within the wildlands unless CAL FIRE has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CAL FIRE to provide maps identifying the boundaries of lands classified as SRAs to the appropriate County Assessor every five years. (CA Legislative Info, n.d.)

12. California Environmental Quality Act

The operation of airports and aircraft is the responsibility of the Federal Aviation Administration (FAA), but the requirement to document potential hazards related to airports and air activities when a new project is proposed is contained in CEQA, specifically PRC Section 21096, which states:

> *"(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.*
>
> *(b) A lead agency shall not adopt a negative declaration for a project described in subdivision (a) unless the lead agency considers whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area."*

C. Local Regulations

1. General Plan Safety Element

The Palmdale 2045 General Plan Safety Element outlines the goals and policies related to hazards and safety in Palmdale. Per California Government Code Section 65302, a Safety Element provides protection of the community from any unreasonable risks associated with the effects of a wide variety of hazards. Safety Element Goal SE-3 is aimed at minimizing risks associated with the transport, storage, use, and disposal of hazardous materials. (City of Palmdale, 2023)

2. City of Palmdale Emergency Operations Plan

The 2023 City of Palmdale Emergency Operations Plan (EOP) addresses the planned response to extraordinary emergencies associated with natural disasters, technological and intentional incidents, pandemics, and national security emergencies affecting the City. The EOP identifies the policies, responsibilities, and procedures required to protect the health and safety of the community, public and private property, and the environmental effects of natural, incidental, and technological incidents. It also establishes the operational concepts and procedures associated with field response to emergencies,

the City's Emergency Operations Center (EOC) activities, and the recovery process. The EOP is intended to facilitate multi-agency and multi-jurisdictional coordination in emergency operations, particularly between the City of Palmdale, Special Districts, and the Los Angeles County Office of Emergency Management (OEM). (City of Palmdale, 2022b)

3. City of Palmdale Local Hazard Mitigation Plan 2021-2026 Update

To help ensure that the City can protect its residents and businesses from natural and manmade hazards. The City has adopted a Local Hazard Mitigation Plan (LHMP). The LHMP covers a wide range of hazards affecting Palmdale including earthquakes, floods, dams and inundation, wildfires and brush fires, transportation accidents and hazardous materials spills, drought, severe weather, and power/utility failure. The LHMP describes these hazards and lays out how the City and other local partners can work to either reduce hazards or to help address their impacts when disasters occur. Having an LHMP in place helps direct City resources appropriately and qualifies the City for federal disaster relief. (City of Palmdale Public Works Department, 2021)

4. PMC Chapter 8.04, Adoption of Health, Safety and Technical Construction Codes

The proposed Project would be required to comply with PMC Chapter 8.04, Adoption of Health, Safety and Technical Construction Codes, which establishes specific requirements for the storage of hazardous materials.

4.8.3 Basis for Determining Significance

Based on Section IX of Appendix G to the State CEQA Guidelines, the Project would result in a significant impact to hazards and hazardous materials if the Project or any Project-related component would:

a. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
b. *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;*
c. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*
d. *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;*
e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;*
f. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or*

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

The significance of potential impacts associated with hazards and hazardous materials were evaluated by use of the environmental checklist questions included in Appendix G of the CEQA Guidelines, as detailed above. Potential impacts were evaluated based on a comprehensive review of the proposed Project, all associated plans, documents, and reports prepared for the Project, and all applicable regulatory requirements. The analysis provided below is partially based on the information provided in the Project site's Phase I ESA included as *Technical Appendix F1* to this EIR. This report was prepared by HMC, a professional hazardous materials consulting firm, in general accordance with the requirements and limitations of the American Society for Testing and Materials (ASTM) International Standard E1527-21 S (HMC, 2024). In addition and in relation to the topic of potential airport hazards, requests for determinations of air navigation safety were made to the FAA using the four corners of the proposed building and the building's maximum height above sea level as data points. In response, the FAA issued Determinations of No Hazard to Air Navigation, which are included in *Technical Appendix F2* to this EIR. Based on these resources, the significance of the Project's potential impacts were determined per the CEQA significance criteria described in 4.8.3, above.

4.8.4 IMPACT ANALYSIS

Threshold a:	***Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***
Threshold b:	***Would the Project 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?***

The analysis below evaluates the potential for the Project to result in a substantial hazard to people or the environment due to existing site conditions, construction activities, and long-term operation.

A. Impact Analysis for Existing Site Conditions

As indicated above under Subsection 4.8.1, and based on the results of the Project's Phase I ESA, the Project site does not contain any evidence of recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), or controlled recognized environmental conditions (CRECs). Additionally, while there were facilities reported to utilize hazardous chemicals or have had releases in the vicinity of the Project site, none of the facilities are expected to have impacted the site. There were no RECs identified from the review of records for off-site sources. (HMC, 2024, pp. 10, 13)

As such, there are no conditions associated with the existing condition of the Project site or surroundings that would create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. Accordingly, no impact would occur associated with the existing conditions of the Project site.

B. Impact Analysis for Temporary Construction-Related Activities

Heavy equipment such as dozers, excavators, and tractors would be operated on the Project site during construction of the Project. This heavy equipment likely would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous to the public and environment if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be used on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project's construction than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including, but not limited to, requirements imposed by the U.S. EPA, Cal/OSHA, and DTSC, as well as the Lahontan Regional Water Quality Control Board (RWQCB) pertaining to water quality as discussed in Subsection 4.9, *Hydrology and Water Quality*. With mandatory compliance with applicable hazardous materials regulations mandated by federal, State, and local regulatory authorities, the Project would have no reasonable potential create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. Accordingly, impacts would be less than significant during temporary construction-related activities.

C. Impact Analysis for Long-Term Operation

The future occupants/users of the Project's building are not yet known. However, the Project Applicant expects that based on the building design and location, the building user is expected to operate as a high-cube non-sort warehouse with up to 25 percent of the building space (250,000 s.f.) potentially being temperature controlled for cold storage. It is possible that hazardous materials could be used during the course of daily operations for future building user(s). State and federal Community-Right-to-Know laws allow public access to information about the amounts and types of chemicals in use at local businesses. Laws also are in place that require businesses to plan and prepare for possible chemical emergencies. Any business that occupies the proposed building on the Project site and that handles hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) would require a permit from the Los Angeles County Fire Department, Health Hazardous Materials Division (HHMD) serving as the CUPA

in order to register the business as a hazardous materials handler. Such businesses also are required to comply with California's Hazardous Materials Release Response Plans and Inventory Law (HMBP Law), which requires immediate reporting to the Los Angeles County Fire Department and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business. In addition, any business handling at any one time, greater than 500 pounds of solid, 55 gallons of liquid, or 200 cubic feet of gaseous hazardous material, is required, under the HMBP Law, to file a Hazardous Materials Business Emergency Plan (HMBEP) with the County Fire Department. A HMBEP is a written set of procedures and information created to

help minimize the effects and extent of a release or threatened release of a hazardous material. The intent of the HMBEP is to satisfy federal and State Community Right-To-Know laws and to provide detailed information for use by emergency responders.

If businesses that use or store hazardous materials occupy the future building on the Project site, the business owners and operators would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above). At this time, it is unknown if such materials would be used. However, because the building on the Project site is expected to accommodate up to 250,000 s.f. of cold storage space, the refrigeration system is likely to be cooled by a closed-circuit ammonia-based system, which is a standard system used for temperature control at warehouse buildings. Anhydrous ammonia is a colorless gas or liquid that is a regulated substance that can result in hazards to human health and the environment if mishandled. The ammonia refrigeration system would, however, be required to comply with all federal, state, and local standards including OSHA General Industry standards and would be addressed by the Project's HMBEP. With mandatory regulatory compliance, the Project is not expected to pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. In addition, the Project would be required to comply with PMC Chapter 8.04, Adoption of Health, Safety and Technical Construction Codes, which establishes specific requirements for the storage of hazardous materials.

With mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project would be less than significant.

D. Summary

Under existing conditions, during temporary constriction-related activities, and under long-term operation of the Project, with mandatory compliance with federal, State, and local regulations, impacts would be less than significant; thus, no mitigation is required.

Threshold c:	***Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

There are no existing schools located within 0.25-mile of the Project site. The nearest school is R. Rex Parris High School, located approximately 0.92-mile south of the Project site (Google Earth, n.d.). As described above under the analysis of Thresholds (a) and (b), the use of and transport of hazardous substances or materials to and from the Project site during temporary construction and long-term operational activities would be required to comply with applicable federal, State, and local regulations that would preclude substantial public safety hazards.

Because there are no existing or proposed schools located within 0.25-mile of the Project site, there is no potential for the Project to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, no impact would occur.

Threshold d:	***Would the Project 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, create a significant hazard to the public or the environment?***

Based on the results of the Project's Phase I ESA (*Technical Appendix I*), the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (HMC, 2024, p. 8). Accordingly, no impact would occur.

Threshold 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?***

Runway 7 of United States Air Force (USAF) Plant 42 is located approximately 1.8 miles (9,504 feet) to the northeast of the Project site. Hazards associated with airports are generally related to the construction of tall structures within a flight zone that could interfere with flight paths, increasing the number of people working or residing in areas subject to crash hazards, and noise hazards to sensitive receptors within the vicinity of a flight path.

The FAA conducted an aeronautical study for the Project site and determined that the building proposed on the Project site would not exceed obstruction standards and would not be a hazard to air navigation. "Determination of No Hazard to Air Navigation" letters were issued on April 15, 2025 for all four corners of the proposed building that represent the maximum height of the structure above mean seal level. The FAA determination letters are included in *Technical Appendix F2* to this EIR (FAA, 2025). Based on the FAA's determination that the Project would not be a hazard to air navigation, implementation of the Project would not result in a safety hazard for people residing or working in the Project area.

The Project site is not located within the Los Angeles County ALUP's runway protection zone (RPZ) for USAF Plant 42 or the AICUZ Final Report's Clear Zone (CZ), but the southeastern corner of the Project site is located in the AICUZ Final Report's APZ II. However, according to Table 3-5, Land use Compatibility, Noise Exposure, and Accident Potential, of the AICUZ, the proposed light industrial use of the Project site is compatible within the APZ II.

In summary, because the Project site is not located within the ALUP's runway protection zone (RPZ) or the AICUZ Final Report's Clear Zone (CZ), the proposed land use of the Project is compatible with the AICUZ Final Report's APZ II, and the FAA determined that the Project would result in no hazard to air navigation, the Project would not result in a safety hazard for people residing or working in the

Project area. Therefore, although the Project is located within an airport land use plan or within two miles of a public airport or public use airport, impacts would be less than significant and no mitigation is required.

As shown in the AICUZ's Final Report's Figure 3-3, Air Force Plant 42 – Community Noise Equivalent Level (CNEL), the Project site consisting of industrial land use is located within the 60-65 dBA CNEL noise level contour boundary. According to the City of Palmdale General Plan Noise Element Noise Land Use Compatibility Criteria, the Project's light industrial land use is considered *normally acceptable* (City of Palmdale, 2023, p. 405). Therefore, as disclosed in EIR Subsection 4.10, *Noise*, the Project would be consistent with the noise contours and would therefore not result in excessive noise for a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.

In summary, because the Project's would be consistent with FAA requirements, the ALUC, and the AICUZ Final Report, implementation of the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area; therefore, impacts would be less than significant and no mitigation is required.

Threshold f:	***Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

As previously indicated, the 2023 Palmdale Emergency Operations Plan (EOP) addresses the planned response to extraordinary emergencies associated with natural disasters, technological and intentional incidents, pandemics, and national security emergencies affecting the City (City of Palmdale, 2022b). The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation of the Project, adequate emergency access for emergency vehicles would be required to be maintained along public streets that abut the Project site as part of a construction management plan. Furthermore, improvements planned as part of the Project are not anticipated to adversely affect traffic operations in the local area, including along the portions of West Rancho Vista Boulevard, Division Street, Sierra Highway, or proposed Avenue O-12 along the frontages of the Project site. As part of the City's discretionary review process, the City reviewed the Project's application materials for consistency with the PMC to ensure that appropriate emergency ingress and egress would be available to and from the Project site and that circulation on the Project site was adequate for emergency vehicles. Furthermore, there are no components of the proposed Project that would interfere with the City's EOP. Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan. Therefore, impacts would be less than significant and no mitigation is required.

Threshold g: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Project site is not located within a state responsibility area (SRA); the nearest area subject to an SRA occurs approximately 1.6 miles southwest of the Project site. CAL FIRE updated the Fire Hazard Severity Zone Maps in 2025; therefore, the City of Palmdale General Plan EIR (effective October 2022, amended March 2023) is no longer the most current source of mapping data for fire hazard zones. According to CAL FIRE, the Project site is located within a Local Responsibility Area (LRA) in a Moderate Fire Hazard Severity Zone (CAL FIRE, 2025a). The proposed building would be developed in a manner consistent with the jurisdictional requirements for fire protection and would generally decrease the fire hazard in the local area by transiting a vacant property with unirrigated vegetation to a developed property with irrigated landscaping and an industrial building having fire protection and sprinkler systems. The Project would be required to comply with all applicable Building and Fire Codes and include installation of on-site and street frontage improvements to provide fire access. As such, the Project would not expose people or structures, directly or indirectly, to significant risk of loss, injury or death involving wildland fires. Therefore, no impact would occur as a result of implementation of the Project and no mitigation is required.

The Project's potential impacts due to wildland fire hazards is further discussed in EIR Subsection 4.15, *Wildfire*.

4.8.5 CUMULATIVE IMPACT ANALYSIS

Because the issue of hazards and hazardous materials tends to be site-specific in nature, the cumulative study area includes existing and planned developments within a one-mile radius of the Project site. A one-mile radius is appropriate for most of the thresholds identified herein because that is the standard distance used in regulatory database searches of properties that may generate or store toxic materials. With respect to cumulatively considerable impacts to public airport facilities, the cumulative study area would include the Project site and surroundings, as well as other properties located within the Los Angeles County ALUP and the USAF AICUZ.

Routine Transport, Use or Disposal of Hazardous Materials / Releasee of Hazardous Materials into the Environment

As discussed under the analysis of Thresholds (a) and (b), the Project site does not contain any RECs under existing conditions. As such, the Project would not result in any cumulatively considerable impacts due to existing site contamination. With respect to construction activities, the Project would be subject to compliance with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the EPA and DTSC, as well as the Lahontan RWQCB pertaining to water quality. Other cumulative developments similarly would be subject to applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials. As such, cumulatively considerable impacts would be less than significant. Similarly, under long-term operating conditions, future businesses on site that involve the storage or use of hazardous

materials or substances would be subject to applicable federal, State, and local requirements related to hazardous materials. Other businesses within the cumulative study area of the Project would similarly be required to comply with applicable federal, State, and local requirements related to hazardous materials. With mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project are determined to be less than cumulatively considerable.

Hazardous Emissions within 0.25-Mile of an Existing or Proposed School

There are no existing schools located within 0.25-mile of the Project site. The use of and transport of hazardous substances or materials to and from the Project site during construction and long-term operational activities would be required to comply with applicable federal, State, and local regulations that would preclude substantial public safety hazards. Other cumulative developments similarly would be required to comply with applicable federal, State, and local regulations. Accordingly, no cumulatively considerable impact would occur as a result of implementation of the Project.

Hazardous Materials Site Compiled Pursuant to Environmental Code Section 65962.5

The Project site is not located on the list of hazardous materials sites compiled pursuant to Government Code § 65962.5; therefore, the Project has no potential to contribute to substantial, cumulatively considerable effects related to the development of contaminated sites listed on regulatory databases.

Airport Land Use Plan or Airports

As discussed under Threshold (e). the Project is consistent with the Los Angeles County ALUP and the USAF AICUZ and the FAA determined that the Project would not represent a hazard to air navigation; therefore, implementation of the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area. All other development projects proposed by others in the area would also be required to be consistent with the ALUP and the AICUZ zone. Therefore, cumulatively considerable impacts would not occur.

Emergency Response or Emergency Evacuation Plans

As discussed under the analysis of Threshold (f), the Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. Additionally, Project construction activities are not anticipated to adversely affect operations of existing local roadways in the area. Therefore, there is no potential for the Project to contribute to any cumulatively considerable impacts associated with an adopted emergency response plan or emergency evacuation plan. Therefore, cumulatively considerable impacts would not occur.

Wildland Fires

As discussed under the analysis of Threshold (g), the Project site is not located within an LRA. The closest SRA is located approximately 1.6 miles to the southwest of the Project site. The Project would be developed in a manner consistent with jurisdictional requirements for fire protection and would generally decrease fire hazards in the local area. Other developments within the area would also be

subject to the jurisdictional requirements for fire protection and would generally decrease fire hazards in the local area by reducing vegetative fuel and installing irrigated landscaping and fire protection and sprinkler systems as part of any new structural development. As such, fire hazards are anticipated to decline over time. Accordingly, the Project has no potential to contribute to adverse, cumulative wildland fire hazards.

4.8.6 Significance of Impacts Before Mitigation

Thresholds a and b: Less than Significant Impact. With mandatory compliance with applicable hazardous materials regulations, the Project would result in less than significant impacts due to the creation of a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. Additionally, with mandatory regulatory compliance, potential hazardous materials impacts associated with long-term operation of the Project would be less than significant; thus no mitigation is required.

Threshold c: No Impact. Because there are no existing schools located within 0.25-mile of the Project site, there is no potential for the Project to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, no impact would occur.

Threshold d: No Impact. Because the Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, no impact would occur.

Threshold e: Less than Significant Impact. Because the Project's would be consistent with FAA regulations, the ALUC, and the AICUZ Final Report, implementation of the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area; therefore, impacts would be less than significant.

Threshold f: Less than Significant Impact. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route, and there are no components of the Project with the potential to conflict with or interfere with the City's Emergency Operation Plan (EOP). Accordingly, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan. Therefore, impacts would be less than significant and no mitigation is required.

Threshold g: No Impact. Because the Project site is not located in close proximity to wildlands or areas with high fire hazards, development of the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires significant wildfire risk.

4.8.7 Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

4.8.8 Design Features (DF) and Regulatory Requirements (RR)

The City of Palmdale is required to ensure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Hazards and Hazardous Materials, which include the following regulatory requirements and design features. The Project shall be conditioned to implement the following design features and regulatory requirements as part of the City's Conditions of Approval for the Project.

HAZ RR 4-1 All construction contractors and employers that occupy the Project site are required to comply with all applicable regulations and requirements promulgated by the federal Occupational Safety and Health Administration (OSHA) and the California Division of Occupational Safety and Health (Cal/OSHA).

HAZ RR 4-2 The Project is required to comply with Title 22, Division 4.5 of the California Code of Regulations, which requires residents and employees to dispose of household hazardous waste, including pesticides, batteries, old paint, solvents, used oil, antifreeze, and other chemicals, at a Household Hazardous Waste Collection Facility.

HAZ RR 4-3 The Project is required to comply with Title 22, Division 4.5, Chapter 11 of the California Code of Regulations which requires fluorescent lamps, batteries, and mercury thermostats be recycled or taken to a Household Hazardous Waste Collection Facility.

HAZ RR 4-4 In accordance with the Hazardous Materials Business Plan (HMBP) Law and the California Accidental Release Prevention (CalARP) program, if any businesses occupies the Project site that handles more than a specific threshold quantity of a regulated substance listed in the CalARP regulations, the business is required to prepare and submit a Hazardous Materials Business Plan (HMBP) (sometimes also called a Hazardous Materials Emergency Business Plan (HMEBP)) to their local Certified Unified Program Agency (CUPA) detailing the potential accident factors present and the measures that will be implemented to reduce accident potential. The HMBP must include, but not be limited to, safety information, a hazard review, operating procedures, training requirements, maintenance requirements, compliance audits, and incident investigation procedures. The CalARP program requirements are implemented and enforced at the local government level by California Unified Program Agencies (CUPAs), such as the Los Angeles County Fire Department. The CUPAs determine the level of detail needed in the RMPs, review the RMPs, conduct facility inspections, and provide public access to most of the relevant information.

4.9 HYDROLOGY AND WATER QUALITY

The analysis in this subsection is based on a technical study prepared by Sikand Engineering Associates, Inc. (herein, "SEA") titled, "Preliminary Drainage Study," April 19, 2024, and included as EIR *Technical Appendix G* (SEA, 2024). All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025. A comment letter from the Los Angeles County Waterworks District included comments recommending that this EIR include a discussion of water supply sources and availability, and that this EIR address potential impacts involving new water infrastructure.

4.9.1 EXISTING CONDITIONS

A. Regional Hydrology

The Project site is located within the southern portion of the Antelope Valley Watershed, which is a part of the Antelope Valley Groundwater Basin. The Antelope Valley Watershed is unique in that it does not drain into the Pacific Ocean. The watershed straddles the Los Angeles-Kern County Line and encompasses approximately 1,220 square miles within Los Angeles County, 2,006 square miles in Kern County, and 143 square miles in San Bernardino County. Numerous streams originating in the mountains and foothills flow across the valley floor and eventually pond in the dry lakes on and near Edwards Air Force Base adjacent to the northern County line. The valley lacks defined natural and improved channels outside of the foothills and is subject to unpredictable sheet flow patterns. (City of Palmdale, 2022a, p. 4.10-1; LADPW, n.d.)

B. Site Hydrology

As shown on Figure 4.9-1, *Existing Conditions - Hydrology*, drainage sheet flows across the Project site in a northeasterly direction. Specifically, runoff from the Project site is carried north along the western shoulder of Sierra Highway in an earthen ditch, and ultimately discharges into an existing retention basin located approximately 0.85-mile north of the Project site, north of Avenue O. Off-site runoff approaching the site is captured by Division Street and carried north along Division Street and or is captured by West Rancho Vista Boulevard and carried east along West Rancho Vista Boulevard. (SEA, 2024, p. 3)

Table 4.9-1, *Peak Flow Rates Under Existing Conditions*, shows the peak flow rates during a 25-year storm event under existing conditions. Burned condition refers to a theoretical condition when a wildfire has occurred on the site.

Table 4.9-1 Peak Flow Rates Under Existing Conditions

Conditions	Peak Flow Rate (cfs)
Clear Condition	5.7
Burned Condition	10.7
85% of Burned (limit for proposed runoff)	9.1

Source: (SEA, 2024, p. 5)

C. Flood Hazards

As shown previously on Figure 2-8, *FEMA Flood Insurance Rate Map*, according to the Federal Emergency Management Agency (FEMA) the Project site is mapped on two Flood Insurance Rate Maps (FIRMs). The majority of the Project site is located within FIRM No. 06037C0657F, mapped within Zone X (Unshaded), which are areas determined to be outside the 0.2 percent annual chance floodplain. The eastern side of the Project site is located within FIRM No. 06037C0700F. In this portion of the Project site, the Project site is also mapped within Zone X (Unshaded). (FEMA, 2008)

D. Water Quality

The Project site is undeveloped and there are no known sources of water quality pollutants on the Project site under existing conditions, aside from sediment that may be carried off the site during rain events. The Project site is within the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB), and the Water Quality Control Plan for the Lahontan Region (Basin Plan) is the governing water quality plan for the region. The current Basin Plan became effective March 31, 1995, and includes amendments that occurred between August 1995 through September 22, 2021. As noted in the Basin Plan, although high quality water supplies are available near streams in desert areas of the Lahontan Region, many desert waters have naturally poor quality (e.g., high concentrations of salts, and minerals such as arsenic and selenium). Water quality problems in the Lahontan Region are largely related to nonpoint sources (including erosion from construction, timber harvesting, and livestock grazing), stormwater, acid drainage from inactive mines, and individual wastewater disposal systems. There are relatively few point source discharges; these include several wastewater treatment plants, fish hatcheries operated by the California Department of Fish and Wildlife (CDFW), and some geothermal discharges. (Lahontan RWQCB, 2021, p. 1-4)

E. Groundwater Supplies

The Lahontan Region includes over 1,581 square miles of groundwater basins. Groundwater in the region supplies high quality drinking water and irrigation water, as well as industrial service supply, wildlife habitat supply, and aquaculture supply waters. Groundwaters in the region also provide a source of freshwater for the replenishment of inland lakes and streams of varying salinity. (Lahontan RWQCB, 2021, p. 4.6-1)

The Project site is located within the Antelope Valley Groundwater Basin. The Antelope Valley Groundwater Basin encompasses 1,580 square miles of Los Angeles County, Kern County, and, less prominently, San Bernardino County, and has a storage capacity of approximately 70,000,000 acre-

feet. The Antelope Valley Groundwater Basin is composed of two primary aquifers: the upper (principal) aquifer and the lower (deep) aquifer. (City of Palmdale, 2022a, pp. 4.10-2) (LADWP, 2025)

The U.S. Geological Survey (USGS) has identified a series of subbasins in the Antelope Valley Groundwater Basin. The Project site is located within the Lancaster groundwater subbasin. The Lancaster subbasin is in the center of the Antelope Valley Groundwater Basin with its southernmost portions lying within the Palmdale Water District (PWD) service area. PWD operates 10 wells in the Lancaster subbasin, with a pumping capability of approximately 12,500 gallons per minute (gpm). (City of Palmdale, 2022a, p. 4.10-2)

PWD and Los Angeles County Waterworks District No. 40 (LACWD 40) are involved in the adjudication of groundwater rights for the Antelope Valley Groundwater Basin that began in 2004. The adjudication allows groundwater banking between entities and allows PWD and LACWD 40 to take any additional groundwater banked. In late 2015, PWD and LACWD 40, as well as the majority of parties involved, agreed to a stipulated judgment for the adjudication of the Antelope Valley Groundwater Basin. Per the judgment, PWD is receiving a groundwater production right of 2,770 acre-feet per year (AFY). Prior to the judgment, PWD had an unquantified right to pump water for beneficial use and assumed projected pumping volumes of up to 12,000 AFY based on pumping capacity. In addition to its groundwater production right, PWD is entitled to a share of the unused federal reserved right. Currently, the average amount of PWD's share of unused Federal Reserved Water Right Production is 1,450 AFY. PWD is also entitled to a pumping allocation for return flow credit of imported water used. Based on the analyses conducted in planning reports, return flow credits are projected to range between approximately 4,900 AFY and 6,000 AFY through 2040. LACWD 40 was given the right to pump 6,789 AFY, use approximately 3,500 AFY of unused federal reserve rights, and return flows equivalent to 39 percent of LACWD 40's five-year average of purchased SWP water supply (39 percent of 26,657 AFY or 10,400 AFY). LACWD 40 also has the right to lease 2,600 AFY of groundwater rights from Antelope Valley-East Kern Water Agency (AVEK). Overall, LACWD 40's groundwater rights total of 23,289 AFY. (City of Palmdale, 2022a, pp. 4.10-2 and 4.10-3)

Because of the adjudication of groundwater rights as discussed above, the Antelope Valley Groundwater Basin is exempt from the requirements of the Sustainable Groundwater Management Act (SGMA), which was passed by the State of California in 2014 and sets forth a Statewide framework to help protect groundwater resources over the long-term. The PWD has not adopted a groundwater management plan, and no regional groundwater management plan currently exists for the Antelope Valley Groundwater Basin. The Department of Water Resources (DWR) Bulletin 118, California's Groundwater (2019), does not characterize the groundwater basin as overdrafted; however, it was deemed a 'low-priority' basin by DWR. (City of Palmdale, 2022a, p. 4.10-3)

4.9.2 Regulatory Setting

The following is a brief description of the federal, State, and local environmental laws and related regulations related to hydrology and water quality.

A. Federal Regulations

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. The Clean Water Act became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also water quality standards for all contaminants in surface waters. A specific provision of the CWA is CWA Section 402, which authorizes the National Pollutant Discharge Elimination System (NPDES) permit program that covers point source pollution discharging to a water body. Point sources are discrete conveyances such as pipes or man-made ditches. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2024e)

The NPDES program requires operators of a construction site one acre or larger to obtain authorization to discharge storm water under an NPDES construction storm water permit. Compliance with the NPDES Permit is required for projects that result in more than one acre of ground disturbance, including through clearing, grading, grubbing, excavating, stockpiling, and removing or replacing existing facilities. The NPDES Permit requires the landowner and/or contractor to file permit registration documents prior to commencing construction and pay a fee annually throughout the duration of construction. These documents include a notice of intent, risk assessment, site map, SWPPP, and signed certification statement. The SWPPP is required to specify the minimum Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. The SWPPP must include measures to ensure the following: all pollutants and their sources are controlled; non-stormwater discharges are identified and eliminated, controlled, or treated; site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges; and BMPs are installed to reduce or eliminate pollutants post-construction are completed and maintained. (City of Palmdale, 2022a, p. 4.10-8).

2. Federal Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government.

If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The Federal Insurance and Mitigation Administration (FIMA) within the FEMA is responsible for administering the NFIP and administering programs that provide assistance for mitigating future damages from natural hazards. (FEMA, 2025)

3. Executive Order 11988 – Floodplain Management

Executive Order 11988 requires federal agencies to avoid to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains. (FEMA, 2021)

B. State Regulations

1. Porter-Cologne Water Control Act

The Porter-Cologne Act (California Water Code § 130000 et. seq.) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, groundwater and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 et seq.), the policy of the State is as follows: (SWRCB, 2014)

- The quality of all the waters of the State shall be protected;
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and,
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Resources Control Board (SWRCB), which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews decisions made by each Regional Water Board. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of the nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source related responsibilities, including monitoring and assessment, planning, financial assistance, and management. (SWRCB, 2014)

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also implements many provisions of the Clean Water Act (CWA), such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, basin plans have been adopted by each of the RWQCBs and are updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2014) The Project site is located in the Antelope Valley Watershed, which is within the purview of the Lahontan RWQCB. The Basin Plan is the governing water quality plan for the region.

2. California Water Code

The California Water Code is the principal State law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including:

- The Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances;
- The Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life;
- The Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and,
- The Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies.

The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW. (CA Legislative Info, n.d.)

Surface water quality is the responsibility of the RWQCB, water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans

establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water. (CA Legislative Info, n.d.)

3. California Toxics Rule

The California Toxics Rule (CTR) fills gaps in California's water quality standards necessary to protect human health and beneficial uses of aquatic life. The CTR criteria are similar to those published in the National Recommended Water Quality Criteria. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the applicable water quality standards for toxic priority pollutants in California waters. (SWRCB, 2016, pp. 14-15)

4. Watershed Management Initiative

California's Watershed Management Initiative (WMI) is a statewide strategy developed by the State Water Resources Control Board (SWRCB) and RWQCBs to improve water quality through integrated, watershed-based planning and management that considers entire watersheds when addressing water pollution. The WMI establishes a broad framework overlying the numerous federal and State mandated priorities. As such, the WMI helps the RWQCBs achieve water resource protection, enhancement, and restoration while balancing economic and environmental impacts. The integrated approach of the WMI involves three main ideas:

- Use water quality to identify and prioritize water resource problems within individual watersheds. Involve stakeholders to develop solutions;
- Better coordinate point source and nonpoint source regulatory efforts. Establish working relationships between staff from different programs; and,
- Better coordinate local, State, and federal activities and programs, especially those relating to regulations and funding, to assist local watershed groups. (SWRCB, 2025)

5. Sustainable Groundwater Management Act

The 2014 Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under the SGMA, these basins should reach sustainability within 20 years of implementing sustainability plans. The DWR categorizes the priority of groundwater basins. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The SGMA also requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement

Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins will reach long term sustainability. (DWR, n.d.; DWR, 2020)

C. Local Regulations

1. Palmdale Municipal Code, Chapter 14.05 Water Efficient Landscape

The Palmdale Municipal Code (PMC), Chapter 14.05, Water Efficient Landscape, establishes provisions for water management practices. It encourages stormwater best management practices to minimize run off and maximize infiltration to recharge groundwater. PMC Chapter 14.05 regulates landscape design, Chapter 14.05 contains irrigation design criteria, specifications, and requirements. PMC Section 14.05 regulates grading design plans including recommendations for preventing excessive erosion and runoff. PMC Chapter 14.05 regulates stormwater management practices to minimize runoff and increase infiltration which recharges groundwater and improves water quality. PMC Chapter 14.05 requires project applicants to complete a soil management report in order to reduce runoff. This requires a project applicant to submit soil samples to a laboratory for analysis and recommendations. Soil would be tested for pH, total soluble salts, sodium, percent organic matter, and other physical or chemical properties. (City of Palmdale, 2022a, p. 4.10-10)

2. Palmdale Municipal Code, Chapter 15.28 Floodplain Management

PMC Chapter 15.28, Floodplain Management, minimizes public and private losses due to flood conditions in specific areas by legally enforceable regulations applied uniformly throughout the community to all publicly and privately owned land within flood prone mudslide (i.e., mudflow) or flood related erosion areas. This chapter of the PMC contains the basis for obtaining a development permit in flood prone areas and construction standards intended to minimize impacts of flooding. (City of Palmdale, 2022a, p. 4.10-10)

3. City of Palmdale Storm Water Management Plan

The Palmdale Storm Water Management Plan (SWMP) was adopted in 2003. The SWMP was prepared by the City of Palmdale Department of Public Works with the objective to preserve the quality of City waters, including storm water conveyances such as closed conduits, open channels, drainage basins, and dry wells. The City was issued a "small" Municipal Separate Storm Sewer System (MS4) permit by the Lahontan RWQCB which authorizes the City to legally discharge stormwater into local waterways. The California State Water Resources Control Board (SWRCB) designated the City of Palmdale MS4 as a "small" MS4 because it is located within an urbanized area defined by the US Census Bureau. As part of the MS4 permit requirements, the City was required to develop and submit a SWMP to the Lahontan RWQCB. The goal of the City's SWMP is to reduce the discharge of pollutants to the MS4 to the Maximum Extent Practicable (MEP). A requirement of the SWMP is that each development attenuate post-developed flows to 85 percent of pre-developed flows with the objective of protecting downstream properties. Additional requirements of the SWMP include employing BMPs for on-site detention/retention of stormwater runoff erosion events and tracking. (City of Palmdale, 2023, p. 329)

4.9.3 BASIS FOR DETERMINING SIGNIFICANCE

Based on Section X of Appendix G to the State CEQA Guidelines, the Project would result in a significant impact to hydrology and/or water quality if the Project or any Project-related component would:

a. *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;*
b. *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;*
c. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
    i. *result in substantial erosion or siltation on- or off-site;*
    ii. *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*
    iii. *create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or,*
    iv. *impede or redirect flood flows;*
d. *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or,*
e. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

The hydrology and water quality analysis below relies upon the CEQA Guidelines and applicable local and regional regulations, including those of the City of Palmdale and the Lahontan RWQCB. The analysis is based on a review of existing site conditions, including topography, soils, hydrologic features, and drainage patterns, as well as the Project's site plan and proposed grading and storm water drainage plans. The quantitative assessment of drainage effects is based upon modeling methodologies described in the Preliminary Drainage Study included as EIR *Technical Appendix G* (SEA, 2024), which was prepared consistent with Los Angeles County hydrology practices and includes modeling based upon the Modified Rational Method. Potential impacts are evaluated in relation to existing conditions and thresholds established by local, regional, and state standards. Potential impacts on water quality water quality were evaluated by considering the general type of pollutants that the Project would generate during construction and operation and the methods proposed by the Project to address water quality in relation to applicable water quality standards and waste discharge requirements established by regulatory authorities.

4.9.4 IMPACT ANALYSIS

Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The California Porter-Cologne Water Quality Control Act (Section 1300 [Water Quality] et seq., of the CWC), and the Federal Water Pollution Control Act Amendment of 1972 (also referred to as the CWA) require the preparation of comprehensive water quality control plans for all waters within the State of California. As previously described, the Project site is within the jurisdiction of the Lahontan Region of the State RWQCB. The Lahontan Region Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters.

In addition, the Basin Plan incorporates all applicable State and RWQCB plans and policies and other pertinent water quality policies and regulations. (Lahontan RWQCB, 2021)
Specifically, the Basin Plan:

- Designates beneficial uses for surface and ground waters;
- Sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy; and,
- Describes implementation programs to protect all waters in the Region.

Because the proposed Project is an industrial use, certain pollutants are anticipated to be generated based on the Los Angeles County Low Impact Development (LID) Manual. Per Table 7-3 within the LID manual, the development of the Project would potentially produce the following pollutants: suspended solids, phosphorous, nitrogen, kjeldahl nitrogen, copper, lead, and zinc. (LADPW, 2014, Table 7-3)

The CWA requires all states to conduct water quality assessments of water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The Project site is located within the Antelope Valley Watershed. However, the Project site is not tributary to any waters identified as being impaired due to Section 303(d) of the CWA. The nearest impaired water body is Palmdale Lake, located approximately 3.17 miles south of the Project site; however, the Project site is not tributary to Palmdale Lake because the Project site sits at a lower elevation than the lake. Palmdale Lake is located at an elevation of approximately 2,840 feet above mean sea level (amsl), while the elevations on the Project site range from 2,620 feet amsl to 2,644 feet amsl. Accordingly, the Project has no potential to contribute to any existing water quality impairments in any receiving waters. (SWRCB, 2022a; Google Earth, n.d.)

A specific provision of the CWA applicable to the Project is CWA Section 402, which authorizes the NPDES permit program that covers point source pollution discharging to a water body. The NPDES program requires operators of a construction site one acre or larger to obtain authorization to discharge storm water under an NPDES construction storm water permit. A discussion of the potential for the

Project to result in water quality impacts during construction and long-term operation is presented below.

The Project site is tributary to and in the watershed of the Anaverde Creek, which is the largest tributary of the Amargosa Creek (RWQCB, 2007). According to the California RWQCB, the U.S. Army Corps of Engineers has determined that Amargosa Creek is not defined as a waters of the United States because it flows to a closed internal dry lake basin (Rosamond Dry Lake). Therefore, stormwater discharge into the Amargosa Creek would not be subject to regulation under the NPDES program. This is consistent with California's 2016 Water Quality Integrated Report (CWA Section 303(d) List) as Rosamond Dry Lake is not listed as impaired. However, the State WQCB encourages implementation of best management practices (BMPs) for new development in order to protect the waters of the State. (USACE, 2014)

A. Potential Water Quality Impacts from Temporary Construction Activities

Construction of the Project would involve clearing, grading, paving, utility installation, building construction, and landscaping activities. Construction activities would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, solvents, and other chemicals with the potential to adversely affect water quality though the migration of soil and sediment in stormwater runoff to downstream surface waters and storm drains. As stormwater flows over a construction site, it can pick up sediment, debris, and chemicals, and transport them to receiving water bodies. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Lahontan RWQCB, the Project Applicant is required to obtain a NPDES Permit, discussed previously in Subsection 4.9.2. Mandatory compliance with the SWPPP (prepared as part of the NPDES permit) would ensure that the Project does not violate any water quality standards or waste discharge requirements during construction activities. In addition, the Project would be required to comply with the Lahontan RWQCB's Basin Plan and the requirements of the City's SWMP prepared as part of the MS4 permit compliance. Also, mandatory compliance with the CWA, the NPDES permit, LID standards, and the City's SWMP, as well as ensuring consistency with the goals and policies of Palmdale 2045 (the City's General Plan) would reduce the potential for water quality degradation. Therefore, water quality impacts associated with construction activities would be less than significant and no mitigation is required.

B. Potential Water Quality Impacts from Post-Development Activities

The Project's site design and stormwater drainage plan are designed to perpetuate the existing drainage patterns, to provide storm drain infrastructure that is consistent with the City of Palmdale and to not adversely impact downstream property owners.

As previously described in EIR Section 3.0, *Project Description*, with development of the Project site as proposed, the Project site is divided into three drainage areas and runoff would be captured in two separate extended detention basins. On-site stormwater would be conveyed through a storm drain

system to on-site detention basins located in the northeastern and southeastern portion of the Project site, directly east of Sierra Highway. Under the post-project developed condition during a 25-year storm event, the peak runoff would be 47.3 cubic feet per second (cfs) with a runoff volume of 13.74 acre-feet. The outflow rate from the basins is limited by the lesser value of the 85 percent of the existing peak runoff rate, or the gutter capacity of Sierra Highway. Since the street slope is only about 0.5 percent and the current gutter capacity on Sierra Highway is small (approximately 0.6 cfs in one gutter, or 1.2 cfs if both sides of the street are used), the detention basins will also be drained by infiltration. The on-site basins would also be designed to function as infiltration basins that would mitigate water quality and promote groundwater infiltration. Based on a conservation design infiltration rate of 0.5 inches per hour, the Project's basins would result in an outflow rate of 2.7 cfs. Since the outflow rate (2.7 cfs) is less than 10 percent of the inflow rate (47.3 cfs), the majority of the runoff would be retained inside the proposed basins. The required storage volume at both basins is approximately 10 acre-feet, approximately 73 percent of the runoff volume (13.74 cfs). The northern basin would be designed to provide a storage volume of 0.74 acre feet and the southern basin would be designed to provide a volume of 15.71 acre-feet, for a total of 16.45 acre-feet. The North basin is 5 feet deep from the top, and 4 feet from the emergency spillway elevation. The North basin is 7 feet deep from the top and 6 feet from the emergency spillway elevation. Emergency spillways would be installed for both basins, with inverts 1 foot below the top of the basin elevation. They are designed to carry 125 percent of the peak 25-year discharge for the proposed condition. The two spillways transition to a rectangular channel, ultimately discharging through a culvert under the sidewalk onto Avenue O-12 on the north. Accordingly, the basins would be sized to mitigate the increased runoff and fully retain the 25-yr storm event. (SEA, 2024, pp. 5-6)

Because the proposed aboveground detention basins would mitigate the increased runoff and retain and filter stormwater runoff captured from the Project site, the Project has no potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water quality. Impacts would be less than significant.

With respect to groundwater quality, all first-flush runoff generated on the Project site would be conveyed to the aboveground detention basins and then retain onsite and allowed to infiltrate into the groundwater table within the proposed detention basins. The majority of runoff would be captured on-site from an area of 65.07 acres out of the total 67.1 acres, the remainder draining away from the site onto nearby streets through parkway culverts. The proposed detention basins would remove pollutants from all runoff and filter the water to meet the water quality standards of the Lahontan RWQCB. The proposed detention basins would ensure that runoff generated on the Project site would not substantially degrade groundwater quality, thereby resulting in less than significant impacts to groundwater quality and no mitigation is required.

Threshold 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?

Potable water service to the Project site would be provided by LACWD District 40, and the Project would not involve direct groundwater extraction via existing or proposed groundwater wells. According to the 2020 Urban Water Management Plan (UWMP), which relies upon land use information in local jurisdictions' general plans as part of water supply planning, during a normal year water scenario, it is anticipated that LACWD would have enough water supply on its own to serve the land uses in its service area without the need to use banked water supplies from the Antelope Valley East Kern Water District (AVEK); therefore, no domestic water supply deficit is anticipated in normal years. In the single dry and multiple dry year scenarios, AVEK would assist with meeting the LACWD's anticipated water demands by pumping groundwater from its banked supplies; therefore, no supply deficit is anticipated in dry years. (LACWD, 2021, p. 7-3 to 7-8)

Based on the foregoing analysis, it is reasonably concluded that the existing and planned water supply and demand reduction responses that are in place to address drought conditions will enable LACWD to meet all future water demands under all hydrologic conditions through 2045 (LACWD, 2021, p. 7-3 to 7-8). Accordingly, because the Project is consistent with Palmdale 2045 and its land use is accounted for by the LACWD 2020 UWMP, and because the UWMP demonstrates that the LACWD would have sufficient supply to meet projected demand through 2045, it is concluded that LACWD would have sufficient water supply available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Based on the information in the adopted 2020 UWMP for the LACWD No. 40, the District has documented and is prepared to serve its existing customers, including the proposed Project, potable water demands through 2045. Furthermore, LACWD 40 in collaboration with the AVEK has secured contingency plans to deliver uninterruptable water supply to the proposed Project. According to the Project's WSA (*Technical Appendix K*), due to LACWD's reliance on purchased or imported water, the available water supply would be unaffected by dry weather conditions and will consistently meet the water demands through 2045 during single-dry and multiple-dry years. Accordingly, the Project's WSA concluded that in accordance with the standards set forth by Senate Bill (SB) 610, the total projected water supplies available to LACWD No. 40 during normal, single-dry, and multiple-dry water years over the next 20 years would be sufficient to meet the projected water demands of the proposed Project (Akel, 2025, pp. 10-11). As such, the Project would not directly or indirectly result in a substantial decrease in groundwater supplies and would not otherwise impede sustainable groundwater management of the basin, and impacts would be less than significant with no mitigation required.

On-site captured stormwater would be conveyed to two aboveground detention basins that would have sufficient storage volume to mitigate the full 25-year storm runoff volume, which would retain and infiltrate water quality volume on-site to the extent feasible. The majority of runoff would be captured on-site from an area of 65.07 acres out of the total 67.1 acres, the remainder draining away from the

site onto nearby streets through parkway culverts. Therefore, although new impervious surfaces would be introduced at the site, the inclusion of stormwater control features that allow for on-site detention and infiltration would minimize the amount of runoff discharged off site and continue to permit groundwater recharge on the site. Accordingly, buildout of the Project with these design features would not interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant and no mitigation is required.

Threshold 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 off-site?

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows?

The grading associated with the proposed Project would not significantly alter the existing topography of the site. The site is relatively flat and necessary changes in topography as a result of the Project would be minimal to accommodate proper drainage and sewer flows. Development of the site would, however, introduce impervious surfaces onto site. Provided below is an evaluation of the potential of the Project to result in erosion or siltation; result in flood hazards on- or off-site; exceed the capacity of stormwater drainage systems; result in substantial additional sources of polluted runoff; and result in impediments to or redirection of flood flows. Figure 4.9-2, *Proposed Conditions - Hydrology*, illustrates the post-development drainage conditions on the Project site. Please refer to the discussion and analysis of Thresholds (a) and (e) for a discussion of water quality impacts, which would be less than significant.

A. Erosion and Siltation

1. Construction-Related Erosion Impacts

Construction of the Project would involve substantial ground disturbance during clearing and grading of the site. The proposed grading activities would generate silt which could be carried off-site during a heavy rainfall event. Should such an event occur in the absence of any preventative measures to contain silt and other soils on-site, erosion and/or siltation downstream could result. However, in compliance with the CWA, the Project Applicant would be required to obtain a NPDES permit for construction activities. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP which would specify BMPs to minimize the potential for erosion and siltation to occur and would include specific Project site measures to address the potential for the

caving in of temporary excavations. Typical BMPs that are implemented at construction sites to protect water quality include the implementation of straw bale barriers, plastic sheeting/erosion control blankets, and outlet protection measures. With mandatory adherence to the SWPPP requirements, impacts associated with erosion during temporary construction activities would be less than significant and no mitigation is required.

2. Post-Development Erosion Impacts

Following development of the Project site as proposed, all runoff generated on the site would be conveyed to two proposed detention basins that are sized to accommodate a design storm event over the entire Project site following development of the site. The majority of runoff would be captured on-site from an area of 65.07 acres out of the total 67.1 acres, the remainder draining away from the site onto nearby streets through parkway culverts. The Project design incorporates the required site assessment and planning, site design control measures, source control measures, and treatment control measures to ensure stormwater runoff flows leaving the Project site would not carry substantial amounts of sediment. Therefore, the Project has no potential to contribute runoff to off-site areas that may increase erosion hazards off site.

Based on the foregoing analysis, with the design of the Project's detention basins and implementation of a SWPPP during construction activities, Project impacts to water quality, including erosion and siltation, during both construction and long-term operation, would be less than significant; thus, no mitigation is required.

B. Flooding

The Project is designed to capture all runoff generated on the Project site in two detention basins for infiltration into the groundwater table, with small amounts of water flowing onto nearby streets at volumes less than occur under existing conditions. The stormwater drainage system is adequately sized and there is no potential for the Project during either construction or long-term operation to result in flooding or to significantly contribute to flooding hazards. Additionally, the Project site is not located within a flood zone. As such, the Project has no potential to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; therefore, no impact would occur and no mitigation is required.

C. Stormwater Drainage Capacity

The Project is designed to capture all runoff generated on the Project site that would either be retained onsite in two basins or drain away from the site onto nearby streets through parkway culverts. The drainage facilities proposed on-site have been designed with sufficient capacity to accommodate runoff generated on site. Refer to the Project's Preliminary Drainage Study included as EIR *Technical Appendix G* (SEA, 2024). As such, the Project has no potential to exceed the capacity of any existing or proposed stormwater drainage systems; thus, no impact would occur and no mitigation is required.

D. Impede or Redirect Flood Flows

According to the FEMA, the Project site is mapped on two FIRMs. The majority of the Project site is located within FIRM No. 06037C0657F, mapped within Zone X (Unshaded), which are areas determined to be outside the 0.2 percent annual chance floodplain. The eastern side of the Project site is located within FIRM No. 06037C0700 and is also mapped within Zone X (Unshaded) (FEMA, 2008). In addition, all runoff generated from the Project site would be conveyed to two proposed detention basins with the majority of the runoff being retained onsite and infiltrated into the groundwater table, with small amount of excess flows draining away from the site onto nearby streets at volumes less than occur under existing conditions. Therefore, the Project would not result in any substantial increase in flood boundaries, levels, or frequencies from the Project site or within the Anaverde Creek watershed. As such, the Project would not impede or redirect flood flows; therefore, impacts would be less than significant and no mitigation is required.

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

The Project site is not located in a flood hazard zone and has no potential to be impacted by tsunamis or seiches. As such, there is no reasonable potential for the Project to contribute to the release of water pollutants during flooding, tsunami, or seiche events.

As previously indicated under the analysis of Threshold (c), according to the FEMA, the Project site is mapped on two FIRMs. The majority of the Project site is located within FIRM No. 06037C0657F, mapped within Zone X (Unshaded), which are areas determined to be outside the 0.2 percent annual chance floodplain. The eastern side of the Project site is located within FIRM No. 06037C0700F, which is also mapped within Zone X (Unshaded) (FEMA, 2008). In addition, as all runoff generated from the Project site would be conveyed to two detention basins, with the majority of the runoff being retained onsite and infiltrated into the groundwater table with a small amount of excess flows draining away from the site onto nearby streets at volumes less than occur under existing conditions. As discussed above, design of the detention basins would ensure the Project would provide effective control and would not provide substantial additional sources of polluted runoff to receiving waters. There is no potential for the Project site to become flooded or for the Project to contribute to off-site flooding events. As such, the Project would not risk release of pollutants due to inundation from floods; therefore, no impact would occur.

The Project site is located approximately 46 miles northeast of the Pacific Ocean (Google Earth, n.d.). As such, the Project has no potential to be affected by tsunamis; therefore, no impact would occur.

A seiche is an underwater wave that oscillates through a body of water, which may be triggered by earthquakes or landslides. In general, seiches are small (generally a few inches) and are present in larger lakes as a result of the depth, temperature, and contours of the body of water. Due to the lack of an on-site body of water or other bodies of water within close proximity to the site that have the potential to result in site inundation, the potential for the subject site to be impacted by seiches is

considered low. Although a seismic event could cause a seiche to occur at Lake Palmdale, which could potentially overtop the dam, the design report for the dam considers a reflection of the wave on return unlikely. Also, wave volume above the dam would not be substantial and would not result in damaging floods. Accordingly, the Project site would not be subject to inundation due to seiches; therefore, no impact would occur. (City of Palmdale, 2022a, p. 4.10-16)

Threshold e: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As previously indicated in Subsection 4.9.1, the Project site is located within the Antelope Valley Groundwater Basin. The Antelope Valley Groundwater Basin is adjudicated and exempt from the requirements of the SGMA; as such, LACWD has not adopted a groundwater management plan, and no regional groundwater management plan currently exists for the Antelope Valley Groundwater Basin. The Antelope Valley Groundwater Basin was deemed a low-priority basin by the DWR. As such, the Project has no potential to conflict with or obstruct implementation of a sustainable groundwater management plan, and no impact would occur.

As indicated under the analysis of Threshold (a), the Project site is located within the jurisdiction of the Lahontan RWQCB. Water quality information for the Antelope Valley Watershed is contained in the Basin Plan. As previously indicated under the analysis of Threshold (a), Project construction activities would be subject to the NPDES permit, requiring the preparation and implementation of a SWPPP during construction activities. The Project's construction contractors would be required to comply with the SWPPP, which would ensure that the Project does not violate any water quality standards or waste discharge requirements during construction activities. In addition, the Project site has been designed to capture all runoff generated on the Project site. Runoff generated on the Project site would be conveyed to the aboveground detention basins with the majority being retain onsite and excess flows draining away from the site onto nearby streets through parkway culverts. Design of the detention basins would ensure the Project would provide effective control and would not provide substantial additional sources of polluted runoff to receiving waters. As such, the Project has no potential to conflict with or obstruct implementation of a water quality control plan. No impact would occur as a result of implementation of the Project.

4.9.5 Cumulative Impact Analysis

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full buildout of the City's General Plan and the general plans of local jurisdictions that are located within the Antelope Valley Watershed.

Surface and Groundwater Quality

As discussed under the analysis of Threshold (a), the Project would result in less than significant impacts to surface and groundwater quality during construction because the Project Applicant would be required to obtain a NPDES Permit for construction activities. Compliance with the NPDES permit

involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify the BMPs that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Additionally, the Project would comply with the requirements of the City's SWMP prepared as part of the City's MS4 permit compliance. Other cumulative developments within the cumulative study area also would be required to obtain an NPDES Permit and would be required to implement BMPs during construction activities to preclude water quality impacts that could impair downstream waters or groundwater. Additionally, other developments would be required to comply with the City's SWMP. As such, construction-related surface water and groundwater quality impacts, would be less than cumulatively considerable. With respect to long-term impacts to water quality, the majority of runoff would be retain onsite with excess flows draining away from the site onto nearby streets through parkway culverts. Design of the detention basins would ensure the Project would provide effective control and would not provide substantial additional sources of polluted runoff to receiving waters. Other cumulative developments would similarly be required to incorporate measures to treat water quality pollutants of concern. Accordingly, cumulatively considerable impacts to surface and groundwater quality would not occur.

Sustainable Groundwater Management

As indicated under the analysis of Threshold (b), the Project would be served with potable water by LACWD District 40 and the Project would not entail any direct groundwater extraction. Additionally, because the Project's proposed land uses are accounted for by the LACWD 2020 UWMP, and because the UWMP demonstrates that the LACWD to meet projected demand through 2045, it is concluded that LACWD would have sufficient water supply available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. As such, the Project would not result in a substantial decrease in groundwater supplies and would not otherwise impede sustainable groundwater management of the basin. The Project also would not interfere with groundwater recharge, as all runoff generated on-site would be allowed to infiltrate directly into the ground. Accordingly, cumulatively considerable impacts to groundwater quality and supplies would not occur.

Drainage Patterns

As discussed under the analysis of Threshold (c), the Project generally would maintain the existing topography of the Project site, except as necessary to facilitate proper drainage and sewer flows. Development of the site would, however, introduce impervious surfaces on the site. The Project Applicant would be required to comply with the Basin Plan and obtain a NPDES Permit for construction activities. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP, which would ensure that Project construction activities do not result in impacts associated with erosion or siltation. As other cumulative developments similarly would be subject to the NPDES permit requirements and would be required to prepare and implement a SWPPP, Project erosion impacts during construction would be less than significant on a cumulatively considerable basis. Additionally, the Project, along with other future developments, would be required to comply with the City's SWMP. Under long-term operational conditions, large portions of the Project

site would consist of impervious surfaces, with areas of pervious surfaces largely confined to landscaped areas. Thus, the potential for erosion hazards on-site would be substantially decreased as compared to existing conditions. Furthermore, the majority of runoff from the Project site would infiltrate into on-site soils and excess flows would discharge off-site. The Project would incorporate the required site assessment and planning, site design control measures, source control measures, and treatment control measures to ensure stormwater runoff flows leaving the Project site would not carry substantial amounts of sediment. Thus, the Project has no potential to contribute to erosion or siltation hazards under long-term operating conditions.

As also discussed under the analysis of Threshold (c), the Project has no potential to substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite, create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or impede or redirect flood flows. As such, cumulatively considerable impacts would not occur.

Flood Hazard, Tsunami, or Seiche Zones

As indicated under the analysis of Threshold (d), the Project would not be subject to inundation by floods, tsunamis, or seiches. As such, cumulatively considerable impacts associated with the release of pollutants due to site inundation would not occur.

Water Quality Control Plan or Sustainable Groundwater Management Plan

As discussed under the analysis of Threshold (e), there is no adopted groundwater management plan in the Project area, and as such the Project has no potential to result in cumulatively considerable impacts due to a conflict with or obstruction of a sustainable groundwater management plan. Additionally, and as more fully discussed under the analysis of Threshold (a), the Project would result in less than significant impacts to surface and groundwater quality during construction because the Project Applicant would be required to comply with the Basin Plan and obtain a NPDES Permit for construction activities. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP, which would ensure that Project construction activities do not result in impacts associated with erosion or siltation. Other cumulative developments within the cumulative study area also would be required to comply with the NPDES Permit and would be required to implement BMPs during construction activities to preclude water quality impacts that could conflict with the Basin Plan. As such, construction-related surface water and groundwater quality impacts, would be less than cumulatively considerable. Additionally, the Project, along with other future developments, would be required to comply with the City's SWMP. With respect to long-term impacts to water quality, the Project would not discharge any surface waters from the Project site and the proposed aboveground infiltration basin would address erosion and other water quality pollutants of concern. Other cumulative developments would similarly be required to incorporate measures to treat water quality pollutants of concern. Accordingly, the impacts of the Project due to a conflict with the Basin Plan would be less than cumulatively considerable.

4.9.6 SIGNIFICANCE OF IMPACTS

Threshold a: Less than Significant Impact. As required by the National Pollutant Discharge Elimination System (NPDES) permit, an approved Stormwater Pollution Prevention Plan (SWPPP) would be implemented during construction activities; therefore, impacts to water quality during construction would be less than significant. Under long-term operation, runoff generated from the Project site would be conveyed to two detention basins that would filter and infiltrate water into the groundwater table. Minor amounts of flow conveyed onto nearby streets at volumes less than occur under existing conditions would be filtered before discharge. As such, the Project has no potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water quality under long-term operational conditions. Impacts would be less than significant.

Threshold b: Less than Significant Impact. The Project would not substantially interfere with groundwater recharge. The Project does not propose to directly extract water from the groundwater table and groundwater that would extracted by Los Angeles County Waterworks District (LACWD) District 40 to serve the site with domestic water is accounted for by the LACWD 2020 Urban Water Management Plan (UWMP), which demonstrates that the LACWD has sufficient water supply to meet projected demand through 2045 during normal, dry and multiple dry years. In addition, the Project design includes two detention basins that are designed to filter and infiltrate water into the groundwater basin to facilitate groundwater recharge. Accordingly, buildout of the Project with these design features would not interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

Threshold c: Less than Significant Impact. The Project Applicant would be required to obtain an NPDES permit, which involves the preparation and implementation of a SWPPP to address erosion and siltation hazards during Project construction. The potential for erosion hazards on the site would be substantially decreased as compared to existing conditions with buildout of the Project. The Project includes an on-site stormwater drainage system that includes two detention basins that would filter pollutants including sediment and infiltrate water into the groundwater table; as such, the Project has no potential to contribute runoff to off-site areas that may increase erosion hazards off-site. The Project also has no potential to substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site, and no water quality impacts related to flooding would occur. Additionally, the Project has no potential to exceed the capacity of any existing or proposed stormwater drainage systems, and no impact would occur. Furthermore, the Project would not impede or redirect flood flows, and impacts would be less than significant.

Threshold d: No Impact. The Project site is not subject to inundation by flood hazards, seiches, or tsunamis. As such, the Project has no potential to risk release of pollutants due to site inundation. Therefore, no impact would occur as result of implementation of the Project.

Threshold e: No Impact. The Antelope Valley Groundwater Basin is adjudicated and exempt from the requirements of the Sustainable Groundwater Management Act (SGMA); LACWD District 40 has not adopted a groundwater management plan, and no regional groundwater management plan currently

exists for the Antelope Valley Groundwater Basin. As such, the Project has no potential to conflict with or obstruct implementation of a sustainable groundwater management plan, and no impact would occur. Furthermore, the Project has no potential to conflict with or obstruct implementation of a water quality control plan. Therefore, no impact would occur as result of the Project.

4.9.7 MITIGATION

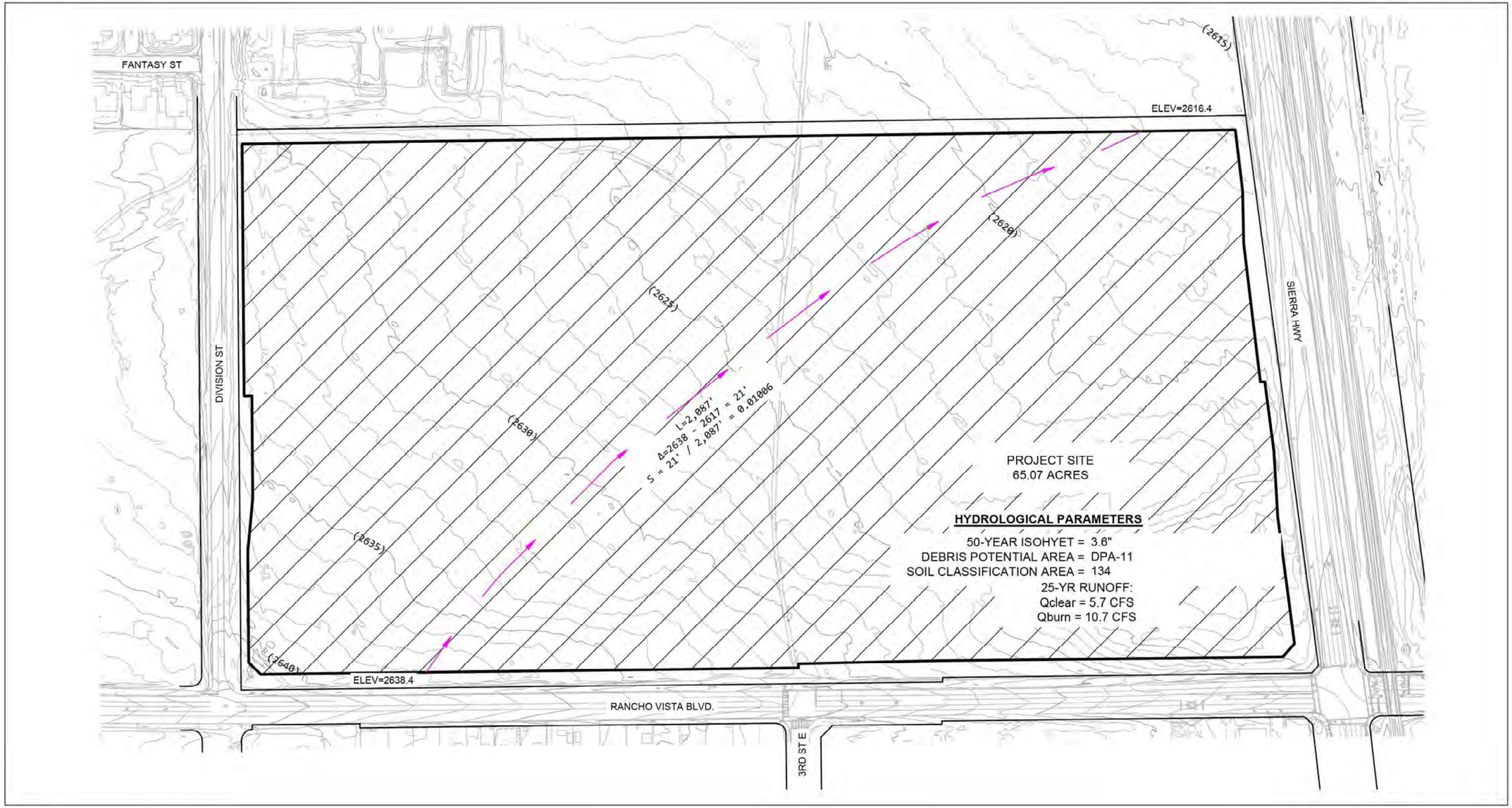
Project impacts to hydrology and water quality would be less than significant; therefore, no mitigation is required.

4.9.8 DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)

The City of Palmdale is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Hydrology and Water Quality, which include the following regulatory requirements and design features. The Project shall be conditioned to implement the following design features and regulatory requirements as part of the City's Conditions of Approval for the Project.

HYDRO RR-1 As required by the provisions of the NPDES permit, the Project Applicant would be required to obtain an NPDES permit for construction activities, which includes the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The Project's construction contractors will be required to follow the requirements outlined in the SWPPP. Compliance with the NPDES permit and the SWPPP would identify and implement an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge to surface water from storm water and non-stormwater discharges during construction activities.

HYDRO DF-1 As part of the Project's development, two detention basins shall be installed on the site in substantial conformance to the Project's Preliminary Drainage Study, at the sizes and water holding capacities determined by a Final Drainage Study to be approved by the City of Palmdale prior to issuance of a building permit. The basins shall be owned and maintained by the property owner for the life of the Project.

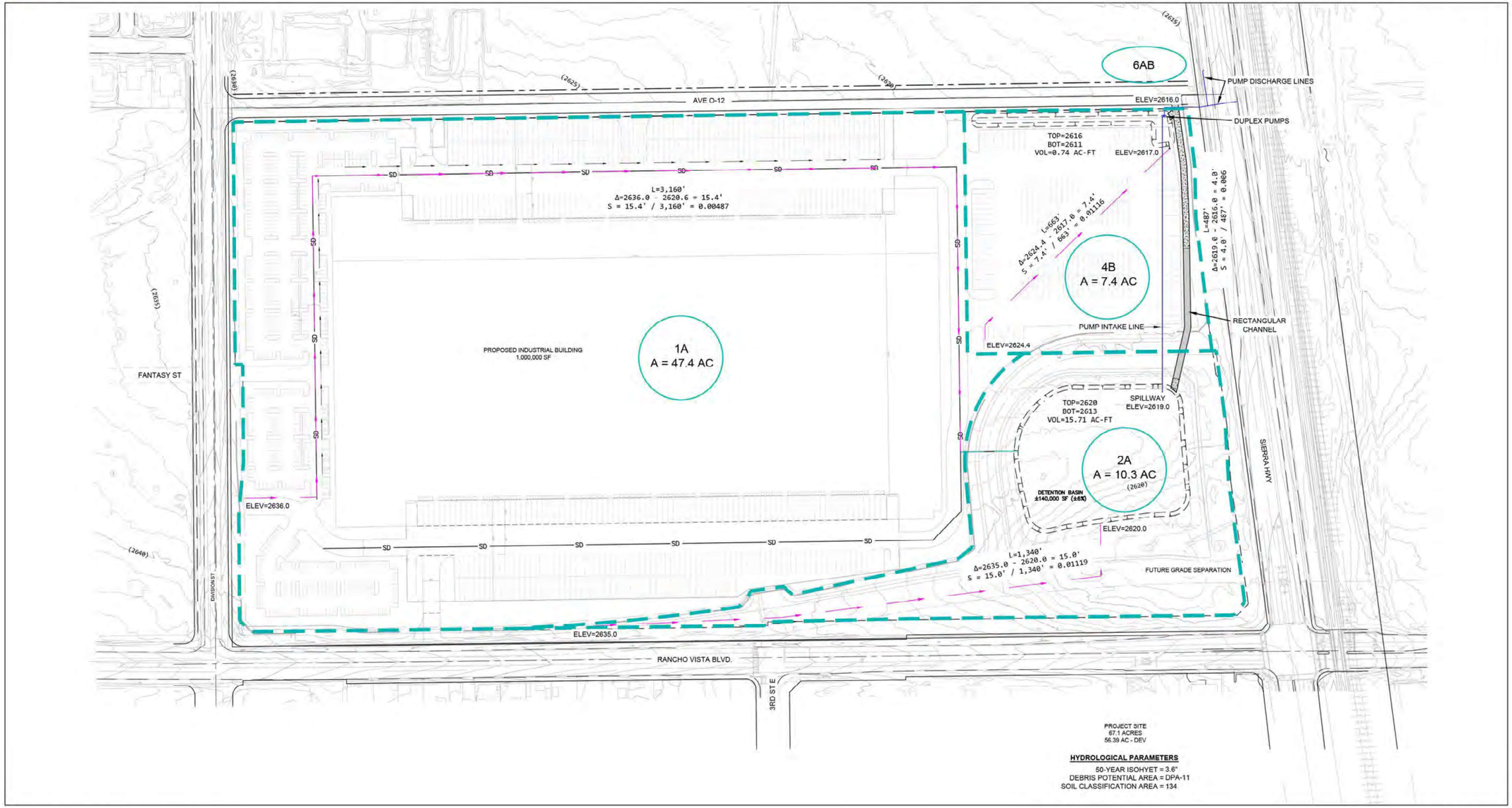


Source(s): Sikand Engineering Associates (04-19-2024)

Figure 4.9-1

Not to Scale

Existing Conditions - Hydrology



Source(s): Sikand (04-19-2024)

Figure 4.9-2

Not to Scale

Proposed Conditions - Hydrology

4.10 LAND USE AND PLANNING

This subsection discusses the Project's consistency with applicable land use and planning policies adopted by the City of Palmdale and other governing agencies for the purpose of reducing adverse effect on the physical environment. This subsection also addresses present and future land uses, zoning, and the physical environment arrangement of uses on the land. This subsection also is based in part on information and policies contained in the City of Palmdale General Plan (Palmdale 2045) (City of Palmdale, 2023) and the City of Palmdale Municipal Code (PMC) (PMC, 2025). All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of land use and planning.

4.10.1 EXISTING CONDITIONS

A. Project Site

The 67-acre Project site is located within the central portion of the City of Palmdale. The Project site encompasses Assessor Parcel Numbers (APNs) 3006-027-001, -002, -003, -004, and -005 and is located in Section 14, Township 6 North, Range 12 West, San Bernardino Baseline and Meridian. The Project site is located directly north of West Rancho Vista Boulevard / East Avenue P; directly east of Division Street; approximately 0.75-mile south of East Avenue O; and approximately 0.01-mile west of Sierra Highway. State Route 14 (SR-14) is located approximately 0.51-mile to the west of the Project site and Runway 7 of United States Air Force (USAF) Plant 42 is located approximately 1.8 miles (9,504 feet) to the northeast of the Project site.

As previously shown on Figure 2-6, under existing conditions, the Project site is vacant. A dirt access road running north-south bisects the Project site. The access road forks in the northern portion of the Project site, with one road continuing north beyond the boundaries of the Project site, and the other road running northwest beyond the boundaries of the Project site. The majority of the Project site, other than the dirt access roads, is undisturbed

B. Surrounding Land Uses

As previously disclosed in EIR Section 2.0, *Environmental Setting*, land uses in the immediate vicinity of the Project site are illustrated on Figure 2-3 and described below.

- North: To the immediate north of the Project site is vacant land. Farther north are two business parks (Sierra Gateway), which contain various commercial uses, as well as single-family residences. To the northwest are additional residential uses, beyond which are industrial uses and a business park. To the northeast is Sierra Highway, the Sierra Highway Bike Trail, and the Union Pacific Railroad (UPRR) mainline tracks and easement, beyond which are vacant land and USAF Plant 42.

- South: West Rancho Vista Boulevard / Avenue P forms the southern boundary of the Project site. Beyond West Rancho Vista Boulevard is vacant land; single-family residential uses; a commercial plaza containing various uses, including a restaurant, dry cleaners, air conditioning service, and swimming pool contractor; and an industrial park (Winnell Industrial Park), which contains various industrial uses. Farther south is Technology Drive, an east-west roadway, beyond which are Desert Sands Park and the Palmdale Transit Center.

- East: To the east of the Project site is Sierra Highway and directly east of Sierra Highway is the Sierra Highway Bike Trail and the Union Pacific Railroad (UPRR) mainline tracks and easement. East of the UPRR is vacant land. To the southeast of the Project site, east of the UPRR, is a commercial plaza, and farther southeast are additional vacant land, a self-storage facility (AV Self Storage), and Palmdale School District offices.

- West: Division Street forms the western boundary of the Project site. Beyond Division Street is vacant land, beyond which are residential uses of varying densities. To the southwest is additional vacant land, beyond which are retail/commercial uses and the Palmdale Auto Mall.

C. City of Palmdale General Plan (Palmdale 2045)

As previously shown on Figure 2-4, under existing conditions, the General Plan designates the Project site for Employment Flex (EMPFX) land uses. The Employment Flex (EMPFX) land use designation is a transition zone intended to permit mixed development of lighter industrial uses and more intensive service, retail, and commercial uses, with a floor area ratio (FAR) of up to 1.0. (City of Palmdale, 2023, Table 5.4 and Figure 5.5). As also shown on Figure 2-4, lands to the north of the site are designated EMPFX and Neighborhood Residential 1; lands located south of the site and south of West Rancho Vista Boulevard / Avenue P are designated EMPFX and Neighborhood Commercial; lands located east of the site and east of Sierra Highway are designated Utilities and Industrial; and lands located west of the site and west of Division Street are designated Neighborhood Commercial and Neighborhood Residential 2.

D. Zoning

Title 17 of the Palmdale Municipal Code (PMC) establishes zoning classifications within the City. Pursuant to the PMC, as shown previously on Figure 2-5, the Project site is zoned Light Industrial (LI). The Light Industrial zone is intended to allow a range of medium to high intensity industrial uses such as manufacturing, assembly, warehousing, distribution, and similar uses, which provide employment and services for residents and businesses. Some of these uses, such as heavy manufacturing, may not be suitable adjacent to sensitive uses or housing, and should be physically separated from residential areas by natural or manmade barriers. This zone implements the Industrial and EMPFX General Plan land use designations. (City of Palmdale, 2023) (PMC, 2023). As also shown on Figure 2-5, lands located north of the site are zoned Light Industrial (LI) and Residential Neighborhood 1; lands located

south of the site and south of Rancho Vista Boulevard / Avenue P are zoned Office Flex and Neighborhood Commercial; lands located east of the site and east of Sierra Highway are zoned Utilities, Light Industrial, and Heavy Industrial; and lands located west of Division Street are zoned Neighborhood Commercial and Residential Neighborhood 2.

4.10.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations governing land use and planning.

A. Federal Regulations

1. Federal Aviation Administration (FAA) and Federal Regulation Title 14 Part 77

The primary role of the Federal Aviation Administration (FAA) is to promote aviation safety and control the use of airspace. Public use airports that are subject to the FAA's grant assurances must comply with specific FAA design criteria, standards, and regulations. Land use safety compatibility guidance from the FAA is limited to the immediate vicinity of the runway, the runway protection zones at each end of the runway, and the protection of navigable airspace. Federal Code of Regulations Title 14 Part 77, Safe Efficient Use and Preservation of the Navigable Airspace, establishes the federal review process for determining whether proposed development activities in the vicinity of an airport have the potential to result in a hazard to air navigation. Federal Code of Regulations Title 14 Part 77 identifies standards for determining whether a proposed project would represent an obstruction "that may affect safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities." Objects that are identified as obstructions based on these standards are presumed to be hazards until an aeronautical study conducted by the FAA determines otherwise. (City of Palmdale, 2022a, p. 4.9-9)

According to Federal Code of Regulations Title 14 Part 77, any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA:

- Any construction or alteration exceeding 200 ft above ground level;
- Any construction or alteration:
    - within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 ft;
    - within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft; or
    - within 5,000 ft of a public use heliport which exceeds a 25:1 surface;
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards;
- When requested by the FAA; or

- Any construction or alteration located on a public use airport or heliport regardless of height or location (FAA, 2023).

Persons failing to comply with the provisions of Federal Code of Regulations Title 14 Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). (FAA, 2023)

B. State Regulations

1. Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The SCAG is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. On April 4, 2024, SCAG adopted the 2024-2050 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) ("RTP/SCS"; also referred to herein as "Connect SoCal") with goals to: 1) build and maintain an integrated multimodal transportation network; 2) develop, connect and sustain communities that are livable and thriving; 3) create a healthy region for the people of today and tomorrow; and 4) support a sustainable, efficient and productive regional economic environment that provides opportunities for all residents. Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP.

Connect SoCal includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. Connect SoCal also provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (CARB); these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning (SCAG, 2024a). Connect SoCal is updated periodically to allow for the consideration and inclusion of new transportation strategies and methods.

2. Airport Land Use Plans

❑ **Los Angeles County Airport Land Use Plan (ALUP)**

The Los Angeles County Airport Land Use Commission (ALUC) is responsible for establishing land use policy to mitigate potential noise and safety hazards regarding the fifteen airports in its jurisdiction (Los Angeles ALUC, 2004, p. 15). According to the Los Angeles County ALUC's Airport Land Use Plan's (ALUP's) Palmdale Airport/USAF Plant 42 Airport Influence Area map, the Project site does not occur within the Planning Boundary/AIA of the Palmdale Airport/USAF. An AIA is an airport planning area boundary that consists of all areas in which current or future airport-related noise, over flight, safety, and/or airspace protection factors may significantly affect land uses or necessitate

restrictions on those areas. According to the ALUP AIA map, the Project site is not located within a runway protection zone (RPZ). As also identified on the ALUP AIA map, the Project site is not located within the 65 Community Noise Equivalent Level (CNEL) ALUP noise contour. (Los Angeles County ALUC, 2004, Palmdale Airport/USAF Plant 42 Airport Influence Area map)

❑ **USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report**

The Department of the Air Force's USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report (December 2011) documents aircraft operations at USAF Plant 42 and reaffirms the Air Force's policy of assisting Federal, state, regional, and local officials in planning for the areas surrounding military installations. The AICUZ Final Report promotes compatible development within the AICUZ area of influence with the goal of protecting community health and Air Force operational capacity from the negative effects of incompatible land uses. The AICUZ Final Report provides compatible use guidelines for land use areas surrounding the installation as well as identifies noise contours. (City of Palmdale, 2023, p. 203)

According to the AICUZ Final Report, the Project site occurs within the USAF Plant 42 AICUZ area of influence (Department of the Air Force, 2011, p. 3-17). The area of influence for airfield planning is concerned with three primary aircraft operational/land use determinants: 1) accident potential to occupants on the ground; 2) aircraft noise; and 3) hazards to flight operations from land uses (height obstructions, increased potential for bird-aircraft strike hazards, operations such as factories that emit smoke, dust, or light that adversely affect flight operations) (Department of the Air Force, 2011, p. 2-17).

As shown in the AICUZ Final Report's Figure 3-6, *Plant 42 CZs and APZs*, the southeastern corner of the Project site is located within an Accident Potential Zone II (APZ II). However, the proposed light industrial use of the Project site is compatible with the APZ II (Department of the Air Force, 2011, Table 3-5). The Project site is not located within an APZ I or a Clear Zone (CZ). APZs and CZs are areas that are designated to promote and maintain clear airspace for safe flight operations near the airfield (Department of the Air Force, 2011, pp. 3-20 to 3-23). As shown in the AICUZ's Final Report's Figure 3-3, Air Force Plant 42 – Community Noise Equivalent Level (CNEL), the Project site consisting of planned industrial land uses is located within the 60-65 dBA CNEL noise level contour boundary. Therefore, according to the City of Palmdale General Plan Noise Element Noise Land Use Compatibility Criteria, the Project's land uses are considered normally acceptable. (City of Palmdale, 2023, p. 405)

3. West Mojave Coordinated Management Plan

The West Mojave Plan was envisioned to develop management strategies for the Mojave desert tortoise ("desert tortoise"), Mohave ground squirrel, and more than 100 other sensitive plants and animals. The planning area encompassed approximately 9.3 million acres in Inyo, Kern, Los Angeles, and San Bernardino Counties, including approximately 3.3 million acres of public lands administered by the BLM, approximately three million acres of private lands, and approximately 102,000 acres

administered by the State of California. The remaining land is military land administered by the Department of Defense. The West Mojave Plan was proposed to conserve those species throughout the western Mojave Desert, while streamlining the West Mojave Plan for compliance with the regulatory requirements of FESA and the CESA. Only the BLM elements of the West Mojave Plan were adopted, resulting in a number of amendments to BLM's California Desert Conservation Area (CDCA) Plan. In 2019, the BLM amended the CDCA plan for the West Mojave Route Network Project to address motor vehicle access, recreation, and livestock grazing elements in the West Mojave Planning Area. (Dudek, 2025a, p. 7)

As disclosed in EIR Subsection 4.3, *Biological Resources,* the Project is within the Draft West Mojave Plan area. The BLM issued a Record of Decision for the West Mojave Plan in 2006, although the West Mojave Plan has not been formally adopted. The West Mojave Plan applies to projects on federal land; therefore, the Project would not be processed under it. Additionally, the Project would not conflict with the conservation criteria associated with the West Mojave Plan. (Dudek, 2025a)

C. Local Regulations

1. City of Palmdale General Plan (Palmdale 2045)

The City of Palmdale General Plan (Palmdale 2045) is a policy document that reflects the City's vision for the future. The City of Palmdale adopted an update to its General Plan (Palmdale 2045) on October 22, 2022; amended on March 23, 2023. Palmdale 2045 is organized into 12 elements including 1) Land Use and Community Design; 2) Circulation and Mobility; 3) Economic Development; 4) Military Compatibility; 5) Equitable and Healthy Communities; 6) Parks, Recreation, and Open Space; 7) Conservation; 8) Public Facilities, Services, and Infrastructure; 9) Safety; 10) Sustainability, Climate Action, and Resilience; 11) Air Quality; and 12) Noise. Each General Plan element is instrumental to achieving the City's long-term development goals. Each element contains a series of policies that guide the course of action the City must take to achieve the City's vision for future development. Provided below is a summary of each General Plan Element.

- **Land Use and Community Design.** The Land Use and Community Design Element provides a long-term vision, goals, and policies for the City over the next 20 to 30 years. The overall focus is on how to accommodate change and growth in the City, while preserving and enhancing the City's features and attributes. The element focuses on the mix of residential, commercial, employment, and industrial uses to provide the foundation for a fiscally healthy community. Furthermore, the element provides design and quality of buildings, streets, and public spaces policies to provide an attractive and highly livable place for its residents.
- **Circulation and Mobility.** The Circulation and Mobility Element presents the approach to transportation, addressing access and mobility within the City. The element provides a roadway classification system, corresponding cross-sections, and recommended future networks for motor vehicles, walking, biking, riding transit, and the movement of freight. Additionally,

goals, policies, and actions for advancing health and safety, access to services and opportunities, sustainability, and economic vitality through transportation are provided.

- **Economic Development.** The Economic Development Element establishes policies essential to the economic success of the City and its residents. The element provides policy direction and metrics to grow and diversify the City's economy and promote fiscal sustainability by attracting new businesses and residents, retaining, and nurturing existing industries, and expanding workforce development opportunities. The Economic Development Element also discusses jobs and workforce development, housing and community amenities, transportation and infrastructure investment, and fiscal health.
- **Military Compatibility.** The Military Compatibility Element seeks to balance and protect the needs of US Air Force (USAF) Plant 42 and the overall community to promote a sustainable environment where both coexist successfully.
- **Equitable and Healthy Communities.** The Equitable and Healthy Communities Element outlines the goals and policies related to public health, equity, and environmental justice in Palmdale.
- **Parks, Recreation, and Open Space.** The Parks, Recreation, and Open Space Element sets goals, policies, and actions related to the acquisition, management, and maintenance of parks and open space, and planning of recreational facilities and programs.
- **Conservation.** The Conservation Elements outlines the goals and policies related to conservation of natural and cultural resources in Palmdale.
- **Public Facilities, Services, and Infrastructure.** The Public Facilities, Services, and Infrastructure Element outlines the goals and policies related to public facilities, services, and infrastructure in Palmdale.
- **Safety.** The Safety Element outlines the goals and policies related to hazards and safety in Palmdale.
- **Sustainability, Climate Action, and Resilience.** The Sustainability, Climate Action, and Resilience Element serves as the Climate Action Plan for the City and outlines the City's greenhouse gas reduction and sustainability strategies.
- **Air Quality.** The Air Quality Element establishes goals and policies related to protecting, maintaining, and enhancing air quality within Palmdale.
- **Noise.** The Noise Element outlines the goals and policies related to the noise environment in the Palmdale community.

2. City of Palmdale Title 17 (Zoning Ordinance)

Title 17 of the PMC establishes zoning classifications within the City. The purpose of the zoning ordinance is to promote public health, safety, and general welfare and to preserve and enhance the

quality of life within the City by establishing standards to ensure that an appropriate mix of land uses is developed in an orderly manner. To achieve this purpose, the City desires to achieve a pattern and distribution of land uses which generally meets the following objectives:

- To implement the goals, objectives, and policies of the City of Palmdale General Plan;
- To retain and enhance established residential neighborhoods, commercial and industrial districts, public facilities, recreation, open space, and other amenities;
- To allow for the infill and redevelopment of areas at similar scale and character;
- To accommodate expansion of development into vacant and underutilized lands, while considering environmental and infrastructural constraints;
- To provide a diversity of areas throughout the community characterized by differing land use activity, scale, and intensity;
- To maintain and enhance significant environmental and visual resources;
- To provide opportunities for economic development, including business creation and expansion in a variety of manufacturing, service, and marketing industries; and
- To establish Palmdale as a distinctive community with a high quality of life and a visually pleasing, secure environment for the City's residents and businesses. (PMC, 2025)

4.10.3 Basis for Determining Significance

Section XI of Appendix G to the CEQA Guidelines addresses typical adverse effects to land use and planning resources, and includes the following threshold questions to evaluate the Project's impacts on land use and planning resources:

a. *Physically divide an established community;*

b. *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The analysis of physically dividing an established community under Threshold (a) identifies the existing land use of the Project site and adjacent areas prior to and after implementation of the proposed Project to determine if a potential physical division would occur, including establishment of a new and inconsistent land use within or through an existing established community and/or the introduction of new streets or other infrastructure that has the potential to result in a physical division.

The analysis of land use consistency impacts under Threshold (b) considers whether the proposed Project would be inconsistent with, or conflict with, regional and local plans, policies, and regulations that are applicable to the proposed Project, and focuses on the goals and policies of those plans that relate to avoiding or mitigating environmental impacts. The analyses determines whether any Project-related inconsistencies with these plans would directly or indirectly cause a significant physical impact on the environment. A project's inconsistency with a policy is only considered significant if such

inconsistency would cause significant physical environmental impacts (as defined by CEQA Guidelines Section 15382). CEQA Guidelines Section 15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision-makers should address; however, a project does need not be consistent with each and every policy and objective listed in a planning document. Rather, a project is considered consistent with the applicable plan if it meets the general intent of the plan and would not preclude the attainment of the primary goals of the land use plan or policy.

4.10.4 Impact Analysis

Threshold a: ***Would the Project physically divide an established community?***

Under existing conditions, the Project site is vacant and is crossed by dirt roads. Land uses in the immediate vicinity of the Project site are illustrated on Figure 2-3 and described above. In summary, the Project site is surrounded by vacant land to the north with various commercial uses located in two business parks (Sierra Gateway) and single-family residences further north. East of the Project site are the Sierra Highway Bike Trail, UPRR, and vacant land. South of the Project site are vacant land, single-family residential uses, a restaurant, and an industrial park (Winnell Industrial Park) beyond West Rancho Vista Boulevard. West of the Project site beyond Division Street is vacant land and with residential uses.

As shown on Figures 2-3 and 2-6, the Project site is surrounded by paved roads to the south, west, and east, and vacant land to the north. Although there are established communities to the south and northwest of the Project site, they are physically separated from the Project site by paved roads (Division Street along the west boundary of the Project site and West Rancho Vista Boulevard / East Avenue P along the south boundary of the Project site). The Project site is not a part of these established communities and development of the Project site as proposed would not physically divide any established community. In addition, the Project would connect to the existing roadway system and other infrastructure and would not involve the reconfiguration of streets that could have the potential to alter the surrounding pattern of future development and affect the connectivity of existing nearby residential uses and established communities. Because the Project would not physically divide an established community, no impact would occur as a result of implementation of the Project and no mitigation is required.

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

The Project entails the proposed construction and operation of a 1,000,000 s.f. industrial building that is consistent with the existing General Plan land use and zoning designations of Employment Flex (EMPFX) and Light Industrial (LI) applied to the site by Palmdale 2045 and the PMC Zoning Code, respectively. No General Plan Amendment or zone change would be required as part of the Project. The Project's consistency with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect is described below.

1. Federal Aviation Administration (FAA) and Federal Regulation Title 14 Part 77 Regulations Part 77

The Project site is located approximately 1.8 miles (9,504) feet southwest of USAF Plant 42. As discussed in EIR Section 3.0, *Project Description*, the Project's proposed building would have a variable roofline with a maximum height of approximately 56 feet. With architectural projections, the maximum height of the roofline is 59 feet 8 inches, which would not interfere with operations at the inactive Palmdale Regional Airport nor with USAF Plant 42. According to 14 CFR Part 77, because the Project is located within 20,000 feet of a public use or military airport, FAA notification is required for the Project. The FAA conducted an aeronautical study for the Project site and determined that the proposed structure does not exceed obstruction standards and would not be a hazard to air navigation. "Determination of No Hazard to Air Navigation" letters were issued by the FAA to the Project Applicant on April 15, 2025. The FAA determination letters are provided in *Technical Appendix F2* to this EIR. Because the height of the Project's structure would not exceed 200 feet AGL and based on the FAA's determination that the Project would not be a hazard to air navigation, implementation of the Project would be consistent with FAA regulations.

2. Airport Land Use Plans Consistency

❑ **Los Angeles County Airport Land Use Plan (ALUP)**

The FAA issued letters of "No Determination of Hazard to Air Navigation" for the structure to be built for the Project. As discussed further in EIR Subsection 4.8, *Hazards and Hazardous Materials* and EIR Subsection 4.11, *Noise*, the Project would be consistent with the ALUP. As such, the Project's proposed industrial land use would be consistent with the ALUP and no impact would occur.

❑ **USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report**

The FAA issued letters of "No Determination of Hazard to Air Navigation" for the structure to be built for the Project. As discussed further in EIR Subsection 4.8, *Hazards and Hazardous Materials* and EIR Subsection 4.11, *Noise*, the Project would be consistent with the ALUP. As such, the Project's proposed land uses would be consistent with the AICUZ Compatibility Zone and no impact would occur.

3. City of Palmdale General Plan (Palmdale 2045)

As previously discussed, the General Plan designates the Project site for Employment Flex (EMPFX). The Employment Flex (EMPFX) land use designation is a transition zone intended to permit mixed development of lighter industrial uses and more intensive service, retail, and commercial uses, with a floor area ratio (FAR) of up to 1.0. Table 4.10-1, *General Plan Consistency Analysis*, provides an analysis of the proposed Project with respect to the relevant goals, objectives, and policies of the General Plan. As shown in Table 4.10-1, with approval of CUP 25-0006, the Project is consistent with the goals, policies, and objectives of Palmdale 2045 and has no potential to result in significant land use and planning conflicts in the context of compliance with applicable environmental plans, policies,

and regulations beyond those identified in other sections of this EIR. Refer to EIR Subsection 4.13, *Transportation,* for an analysis of the Project's consistency with the SCAG 2024 Connect SoCal Regional Planning Policies. There are no other land use plans, land use policies, or land use regulations applicable to the Project site. Therefore, the Project would not 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; thus, no impact would occur and no mitigation is required.

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
Land Use and Community Design Element	
Goal LUD-4. High-quality architecture and site design in the renovation and construction of all buildings.	
Policy LUD-4.1 Quality Construction. Use simple, urban building forms made with permanent materials with high-quality detailing that stands the test of time.	**Consistent.** The proposed building would be constructed with concrete tilt-up panels, with special architectural features and colors at the potential office locations at the corners of the building. There are varying aesthetic colors and materials which eliminate the appearances of "sameness" or "flat" from the publicly visible elevations. The primary color scheme of the proposed building would include varying shades of white, grays, and tan and has been designed to be visually compatible with the adjacent buildings.
Policy LUD-4.5 Attractive Building Entrances. Use visual and physical design cues within the design of a building and within building entries to emphasize the building entrance and connections to public spaces and public pathways/networks.	**Consistent.** Several metal doors would be provided along the truck dock doors to provide employee access into the building. The visitor entrances would occur at the office areas with special architectural features and colors at the potential office locations at the corners of the building to emphasize the building entrance.
Policy LUD-4.9 Public Streetscapes. Create pedestrian-oriented streetscapes by establishing unified street tree planting, sidewalk dimensions and maintenance, pedestrian amenities, and high-quality building frontages in all new development.	**Consistent.** Development of the Project would encourage access and circulation within and surrounding the Project site via non-motorized means. Currently, there are existing sidewalks on segments of Division Street and West Rancho Vista Boulevard. The Project would install sidewalks along Division Street to allow for pedestrian access to the proposed building.
Goal LUD-8 A place that encourages and supports its local arts and community culture.	
Policy LUD-8.1 Arts and Cultural Program. Expand arts and cultural programming in public spaces, building off the existing Public Art Master Plan.	**Consistent.** The Project would incorporate public art elements within the Project site and/or contribute to the City's Public Arts Fund. Public art would be provided in compliance with PMC Chapter 15.01, Public Art Commission and Public Art in Private and Municipal Development.
Goal LUD-16 Increased job opportunities in Palmdale through expanded flex, light industrial, production/ distribution/repair (PDR), and creative/flex land uses.	
Policy LUD-16.2 Employment Diversity. Support a diverse mix of light industrial, information, film, makerspace, boutique food/wine/beer processing, local	**Consistent.** The Project proposes an industrial warehouse that will enhance the City's economic well-being and employment opportunities for community

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
food, and technology uses to provide jobs and tax revenues for the community by allowing emerging economic uses and industries within the Mixed-Use and Employment designations.	residents. The proposed use would provide jobs and tax revenues for the community by allowing emerging economic uses and industries.
Policy LUD-16.7 Industrial Incentives. Promote establishment of incentives for new light industrial development in Palmdale including the use of local, state, and federal programs.	**Consistent.** The Project proposes industrial land use, which is consistent with the City's vision of promoting opportunity for new light industrial development within the City.
Goal LUD-18 Attraction and stimulation of new employment uses through flexible land use regulations and supportive policies/actions.	
Policy LUD-18.2 Middle-Income Employment. Expand a core area of light industrial and service uses that provide middle-income jobs for Palmdale residents.	**Consistent.** The Project proposes an industrial warehouse building and is expected to generate approximately 1,180 jobs, some of which would include middle-income jobs.
LUD-18.5 Parcel Aggregation. Encourage lot assembly to allow businesses to grow and expand.	**Consistent.** The Project includes Tentative Parcel Map 84510 to subdivide the Project site into lots to facilitate its development.
Circulation and Mobility Element	
Goal CM-1 Build and maintain a transportation system that is safe and comfortable for travelers of all modes regardless of age or ability.	
Policy CM-1.1 Roadway Design. Design and maintain the public right-of-way through a complete streets approach that facilitates safe, comfortable, and efficient travel for all roadway users.	**Consistent.** The Project includes improvements to Division Street / West Rancho Vista Boulevard, Sierra Highway / West Rancho Vista Boulevard, and 8th Street / West Rancho Vista Boulevard. Additionally, the Project would construct a new roadway, Avenue O-12. The proposed improvements would improve circulation to accommodate the demands of the future workplaces.
Goal CM-2 Build and maintain a transportation system that accommodates future growth and maintains transportation networks for all modes.	
Policy CM-2.5 Multimodal Comfort. Prioritize quality of multimodal facilities with respect to a user's experience of stress, connectivity, and safety for streets with a non-automobile priority, and ensure the appropriate balance with vehicular operations.	**Consistent.** The Project proposes sidewalk along Division Street for non-automobile connectivity. Additionally, the closest bus stop to the Project site is Route 3 on West Rancho Vista Boulevard along the Project's frontage and there is an existing bikeway on Sierra Highway. The Project would not result in changes to the existing transit and bicycle facilities and would allow for non-automobile uses to the Project site.
Economic Development Element	
Goal ED-1 Preserve the existing economic base of high-quality jobs in the City.	
Policy ED-1.1 Attract Manufacturing Employers. Attract supply chain employers for the manufacturing and defense industries to strengthen Palmdale's economic viability and competitiveness within these sectors.	**Consistent.** The Project proposes an industrial warehouse building that is designed to attract supply chain employers, including manufacturing and defense industries, to strengthen Palmdale's economic viability and competitiveness within these sectors.

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
Military Compatibility Element	
Goal MC-1 Compatible adjacent land uses that support continued operation of Plant 42.	
Policy MC-1.1 Aerospace Compatible Land. Maintain appropriate land use designations surrounding Plant 42 to limit incompatible uses and to ensure continued safe operation of airport activities.	**Consistent.** The Project proposes industrial land use consistent with the site's underlying land use designation. Therefore, the Project would comply with acceptable uses permitted near USAF Plant 42.
Policy MC-1.2 Land Use Buffers. Continue to buffer Plant 42 from adjacent, non-compatible residential and commercial uses by reviewing development applications in the Military Influence Area for potential conflicts.	**Consistent.** The Project proposes industrial land use consistent with the site's underlying land use designation. As such, the Project would provide a buffer between USAF Plant 42 and non-compatible residential and commercial uses.
Policy MC-1.4 Evaluate Existing and Future Land Uses. Use overlay maps of the Air Installation Compatibility Use Zones (AICUZ) noise contours and Air Force Land Use Compatibility Guidelines to evaluate existing and future land use proposals.	**Consistent.** The proposed industrial use within the Project site would be compatible with the AICUZ noise contours and the Air Force Land Use Compatibility Guidelines.
Goal MC-2 Mitigate and/or avoid encroachment of incompatible development into space utilized by Plant 42 air operations.	
MC-2.1 APZ development review. Within the Accident Potential Zones (APZ), review all development proposals for hazards to aircraft in flight including uses that release into the air any substance such as: • Steam, dust, or smoke, which could impair pilot visibility; uses that produce light emissions, glare, or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; sources of electrical emissions, which could interfere with aircraft communications or navigation; and uses that could attract birds or waterfowl to the extent that they would pose a danger to aircraft operation in the vicinity of Plant 42. • Require project applicants to notify Plant 42 and the City of any potential hazards, including but not limited to the above list.	**Consistent.** The southeastern corner of the Project site is located within APZ II. The Project proposes an industrial warehouse building that would not produce steam, dust, or smoke during operation, which could impair pilot visibility. Lighting on the Project site would be developed in compliance with PMC Section 17.86.030, Outdoor Lighting Requirements. Ancillary lighting would include light fixtures in the parking and loading dock areas and downward-directed lighting affixed to the exterior of the buildings. Decorative lighting, appropriate for the architecture of the buildings, is proposed. Submittal of a photometric plan for City approval that depicts light coverage in compliance with PMC Section 17.86.030 is required and would be a condition of the Project's approval.
Policy MC-2.2 AICUZ Consistency. Require all development to be consistent with DoD regulations as outlined in the Plant 42 AICUZ Report and comply with regulations which affect development in the Clear Zones/Accident Potential Zones.	**Consistent.** The Project site is not within the USAF Plant 42 AICUZ Clear Zones but is located within APZ II. According to Table 3-5, Land use Compatibility, Noise Exposure, and Accident Potential, of the AICUZ, most industrial/manufacturing noise uses are compatible within APZ II. Additionally, the proposed industrial use within the Project site is compatible with the AICUZ noise contours and the Air Force Land Use Compatibility Guidelines.

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
Goal MC-3 Protect residents from excessive noise and protect Plant 42 from noise complaints by preventing incompatible land uses from encroaching upon the site.	
Policy MC-3.1 Noise and Overflight Compliance. Ensure that all new land use proposals comply with the noise and overflight policies of the most recent AICUZ for Plant 42.	**Consistent.** Use within the Project site is compatible with the AICUZ noise contours and the Air Force Land Use Compatibility Guidelines.
Policy MC-3.8 Non-noise Sensitive Land Uses. Designate and permit land uses within the 65 CNEL contour that are primarily industrial, business park, commercial and recreational uses that are not noise sensitive; permit other uses only when it is found that no adverse noise impacts will result.	**Consistent.** The Project site is located outside of the 65 CNEL contour for USAF Plant 42. According to the AICUZ, the Project site is located within the 60 to 65 CNEL noise contour boundary of the USAF Plant 42 facility. The Project proposes an industrial warehouse with associated improvements. . According to the AICUZ Final Report, most industrial/manufacturing noise uses are compatible within the airfield area of influence. Because the proposed land use is considered compatible within the airfield area of influence, the Project would not conflict with this General Plan policy.
Equitable and Healthy Communities Element	
Goal EHC-12 A City designed to improve air quality and reduce disparate health impacts.	
Policy EHC-12.7 Toxic Air Emissions. Coordinate with regional, state, and federal agencies, including the U.S. Environmental Protection Agency, as well as large aerospace and industrial employers to decrease toxic chemical emissions. Proactively explore potential partnerships and interventions to decrease potential exposure of residents to these chemicals.	**Consistent.** As discussed in EIR Subsection 4.2, *Air Quality*, the Project would not result in significant toxic chemical releases.
Conservation Element	
Goal CON-1 Protect Significant Ecological Areas in and around the City, including, but not limited to, sensitive flora and fauna habitat areas.	
Policy CON-1.1 Endangered Species Protection. Ensure local compliance with the California Endangered Species Act and the Federal Endangered Species Act (ESA).	**Consistent.** As further discussed in EIR Subsection 4.3, *Biological Resources*, the Project would comply with the California Endangered Species Act and the Federal ESA. Additionally, EIR Subsection 4.3 discusses the proposed mitigation measures to address potential impacts to endangered species should they be encountered at the Project site.
Policy CON-1.2 Joshua and Juniper Trees. Continue enforcing the City's Native Vegetation Ordinance to protect western Joshua trees and Juniper trees.	**Consistent.** As further discussed in EIR Subsection 4.3, *Biological Resources*, the Project Applicant would obtain the appropriate permits necessary for impacts to the western Joshua trees. Additionally, EIR Subsection 4.3 discusses the proposed mitigation measures to address impacts to the western Joshua trees..
Policy CON-1.3 West Mojave Plan. Comply with the required implementation of the West Mojave Plan for	**Consistent.** Although the Project site is located within the geographic boundaries of the West Mojave Plan, the Project would not be processed under the West Mojave

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
protection of desert tortoise and Mohave ground squirrel.	Plan because it is a private project and the West Mojave Plan can only be used for projects on federal land. Additionally, the Project would not conflict with the conservation criteria associated with the West Mojave Plan.
Goal CON-6 Minimize the impacts of urban development on groundwater supplies.	
Policy CON-6.2 Reduce Landscaping Irrigation Needs. Require the use of water conserving native or drought resistant plants and drip irrigation systems where feasible.	**Consistent.** The Project's Conceptual Landscape Plan is provided in EIR Section 3.0, *Project Description*. The species proposed are drought tolerant and are classified as either low or moderate water need in the Water Use Classification of Landscape Species (WUCOLS). Additionally, drip design irrigation systems are proposed within the Project site.
Policy CON-6.3 Reduce Street Runoff. Design streets to incorporate vegetation, soil, and engineered systems to slow, filter, and cleanse stormwater runoff.	**Consistent.** As discussed in EIR Section 3.0, *Project Description*, on-site runoff will be collected in extended retention basins for infiltration. Excess flow will be spilled over onto nearby streets through parkway culverts. The proposed drainage basins would be adequately sized to serve the Project site's stormwater needs. In the event that the maximum basin capacity is reached, an emergency overflow system would transition to a rectangular channel, ultimately discharging through a culvert under the sidewalk onto Avenue O-12 on the north.
Goal CON-8 Protect historical and culturally significant resources, which contribute to the community's sense of history.	
Policy CON-8.5 Tribal Consultation. Conduct Native American consultation consistent with the applicable regulations when new development is proposed in potentially culturally sensitive areas.	**Consistent.** As discussed in EIR Subsections 4.4, *Cultural Resources*, and 4.14, *Tribal Cultural Resources,* the City conducted Native American consultation for potentially culturally sensitive areas within the Project site.
Policy CON-8.6 Discovery Coordination with Tribal Groups. When human remains suspected to be of Native American origin are discovered, coordinate with the Native American Heritage Commission and any local Native American groups to determine the most appropriate course of action.	**Consistent.** As discussed in EIR Subsections 4.4, *Cultural Resources*, and 4.14, *Tribal Cultural Resources*, if human remains are unearthed during Project construction, the Native American Heritage Commission and any local Native American groups would be notified to determine the appropriate course of action.
Policy CON-8.7 Cooperation with Preservation Entities. Cooperate with private and public entities whose goals are to protect and preserve historic landmarks and important cultural resources.	**Consistent.** As discussed in EIR Subsection 4.4, *Cultural Resources*, mitigation measures are provided which require that a qualified professional that meets the Secretary of Interior's Professional Qualification Standards and a qualified Native American Tribal monitor are retained to monitor the Project site during earthmoving activities and implement mitigation to the

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
	satisfaction of the City in the event that any significant archaeological or tribal cultural resources are unearthed during excavation and grading activities.
Public Facilities, Services, and Infrastructure Element	
Goal PSFI-3 Ensure that all development in Palmdale is served by adequate water distribution and sewage facilities.	
Policy PSFI-3.1 Local Drainage Detection Basins. Make use of interim local drainage detention basins to slow stormwater runoff until such time as permanent drainage facilities are constructed.	**Consistent.** The Project includes installation of two proposed drainage basins positioned in the northeast and southeast portion of the Project site. The proposed drainage basins would be adequately sized to serve the Project site's stormwater needs.
Policy PSFI-3.3 Retention Facilities. Where feasible, plan for detention or retention facilities in areas where groundwater recharge can be accomplished.	**Consistent.** The Project includes installation of two proposed drainage basins positioned in the northeast and southeast portion of the Project site. The proposed drainage basins would be adequately sized to serve the Project site's stormwater needs.
Policy PSFI-3.4 Drainage Facilities. Through the development review process, reserve land in appropriate locations for construction of drainage facilities.	**Consistent.** The Project site is divided into three drainage areas and runoff would be capture in two separate extended detention basins. Drainage facilities for the Project site are further discussed in EIR Section 3.0, *Project Description,* and EIR Subsection 4.9, *Hydrology and Water Quality.*
Policy PSFI-3.7 Public Sewer System Prioritization. Require that all commercial, industrial, institutional, and multiple family uses be connected to a public sewer system with only limited use of private sewage disposal systems.	**Consistent.** This Project site's sewer infrastructure will connect to the existing public sewer system along Sierra Highway . Refer to EIR Section 3.0, *Project Description* and EIR Subsection 4.15, *Utilities and Service Systems,* for details of the sanitary sewer system.
Policy PSFI-3.11 New Development Fees. Require new development to pay necessary fees for expansion and ongoing maintenance of the sewage disposal system to the appropriate agencies, to handle the increased load, which it will generate.	**Consistent.** The Project would adhere to PMC Chapter 3.45, which requires development applicants to pay Development Impact Fees (DIF) to address usage demands from new development on the City's existing facilities. Payment of the required DIF would ensure that the Project provides fair share funds for the provision of public facilities.
Policy PSFI-3.16 Service Levels. Provide sufficient levels of water, sewer, and storm drain services throughout the City.	**Consistent.** The proposed utility infrastructure would be sufficient to serve the Project site. Refer to EIR Section 3.0, *Project Description* and EIR Subsection 4.15, *Utilities and Service Systems*, for details of the proposed utility infrastructure system.
Goal PSFI-5 Ensure that adequate public utilities are available to support development in an efficient and orderly manner.	
Policy PSFI-5.2 On-site Infrastructure. Require all new development, including major modifications to	**Consistent.** All infrastructure necessary to serve the proposed Project would be constructed pursuant to all applicable City standards. Refer to EIR Section 3.0,

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
existing development, to construct required on-site infrastructure improvements pursuant to City standards.	*Project Description* and EIR Subsection 4.15, *Utilities and Service Systems*, for details of the utility proposed infrastructure system.
Policy PSFI-5.3 Off-Site Fair Share Contribution. Require all new development, including major modifications to existing development, to construct or provide a fair share contribution toward construction of required off-site improvements needed to support the project. This includes a fair share contribution toward development of regional master facility plans for roads, sewer, water, drainage, schools, libraries, parks, fire, and other community facilities, prior to granting approval of development applications.	**Consistent.** The Project Applicant would provide a fair share contribution toward construction of the off-site improvements needed to support the Project.
Goal PSFI-6 Coordinate with utility providers to support adequate provision of critical utilities.	
Policy PSFI-6.3 New Utility Development. When feasible, require new utility lines to be constructed underground and along existing utility corridors.	**Consistent.** The Project's proposed utility infrastructure improvements would utilize existing corridors where feasible and would be primarily installed within the public street rights-of-way. Refer to EIR Section 3.0, *Project Description* and EIR Subsection 4.15, *Utilities and Service Systems*, for details of the proposed utility infrastructure system.
Safety Element	
Goal SE-1 A city with minimal public health, safety, and welfare impacts resulting from seismic hazards.	
Policy SE-1.1 Geological Review. Review development within or adjacent to geologic hazard zones and provide copies of geotechnical reports and studies to be reviewed by a qualified geologist and implement recommendations to ensure adequate provisions for public safety.	**Consistent.** A geological investigation has been completed for the Project site, which includes site-specific recommendations to attenuate seismic-related hazards. As discussed in EIR Subsection 4.6, *Geology and Soils*, the Project would comply with the recommendations of the Project's Geotechnical Investigation, provided as EIR *Technical Appendix E*
Policy SE-1.2 California Building Code. Require appropriate structural setbacks from active fault rupture traces in accordance with Alquist-Priolo standards and continue to follow California Building Code.	**Consistent.** The Project site is not located within an Alquist-Priolo Earthquake Fault Zone or within a fault zone depicted on the City's Fault Map and the risk of fault rupture to occur on the site is considered low. The Project would be constructed in accordance with the California Building Standards Code (CBSC) and the City Building Code.
Goal SE-2 Minimize public health, safety, and welfare impacts resulting from wildfire hazards.	
Policy SE-2.9 Development Requirements. As part of the city's development review process, require that all new buildings and facilities comply with Los Angeles County, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards and work with the Fire	**Consistent.** The Project would be constructed in compliance with Los Angeles County, State, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards. Additionally, a minimum of 28-foot wide fire lanes are proposed around the perimeter of the building.

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
Department to ensure the provision of adequate fire stations, personnel, and equipment to meet the City's needs over time.	
Policy SE-2.10 Water system requirements. Require all new development to be served by a water system that meets applicable fire flow requirements.	**Consistent.** Water lines for fire service lines and fire hydrants would be constructed around the proposed building. Refer to EIR Section 3.0, *Project Description* and EIR Subsection 4.15, *Utilities and Service Systems*, for additional information regarding the construction the proposed water lines for the Project.
Goal SE-4 Minimize impacts to public safety and/or property as a result of flooding.	
Policy SE-4.3 National Pollutant Discharge Elimination System and Low Impact Development. Ensure that new development meets National Pollutant Discharge Elimination System (NPDES) and associated Low Impact Development (LID) standards that limit peak runoff to pre-development rates.	**Consistent.** As discussed in EIR Subsection 4.9, *Hydrology and Water Quality,* the Project Applicant would be required to obtain a NPDES Permit for construction activities and would comply with the requirements of the permit. Additionally, the Project would comply with LID standards.
Goal SE-6 Minimize impacts to public safety and property resulting from aircraft accidents.	
Policy SE-6.1 Consistent Development with Department of Defense. Require all development to be consistent with Department of Defense regulations as outlined in the Air Force Plant 42 Air Installation Compatibility Use Zone (AICUZ) Report and comply with applicable FAA regulations that affect development in the Accident Potential Zones.	**Consistent.** The Project would be consistent with the Plant 42 AICUZ Final Report and applicable FAA regulations. Furthermore, future development at the Project site would be required to comply with the applicable requirements from the City.
Sustainability, Climate Action, and Resilience Element	
Goal SCR-3 Green and decarbonized buildings for new construction and major renovations.	
Policy SCR-3.3 Solar and Storage. Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sq. ft.	**Consistent.** As proposed by the Project, the building's roof would be solar-ready and the roof is proposed to be covered with solar panels to a maximum 2,000 amps in in compliance with applicable Building Code requirements, clearance requirements around roof-mounted equipment, utility company interconnection regulations, transformer capacity, and other code compliance constraints.
Goal SCR-4 Reduced greenhouse gas emissions from transportation (SB 379, EO N-79-20).	
Policy SCR-4.1 Bike Facilities. Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes.	**Consistent.** The Project would be confined to the Project site and would not conflict with the existing bikeway along Sierra Highway. Additionally, bike racks are proposed outside of the office locations of the building.
Goal SCR-5 Increased resource capture and reduced waste sent to landfills (SB 1383).	
Policy SCR-5.2 Organic Waste Diversion. Establish programs to comply with State-established requirements for organics and food waste diversion.	**Consistent.** As discussed in EIR Subsection 4.7, *Greenhouse Gas Emissions*, a waste diversion program

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
	would be implemented during Project construction where applicable.
Goal SCR-6 Safe and secure water supply.	
Policy SCR-6.3 Low-Water Use Plant List. Implement the City's landscape plant list and use of low-water plants in new or renovated landscaped areas.	**Consistent.** The Project's Conceptual Landscape Plan is provided in EIR Section 3.0, *Project Description*. The species proposed are drought tolerant and are classified as either low or moderate water need in the WUCOLS.
Air Quality Element	
Goal AQ-1 Minimize local air pollution caused by motor vehicles.	
Policy AQ-1.1 Reduced Work-Related Trips. Reduce the number and length of work-related trips through such means as providing a balance of jobs and housing in the community, promoting alternate work schedules, telecommuting, tele-conferencing, company-sponsored ride-share and alternative fuel vehicle programs, use of commuter trains and other alternative modes of transportation to the workplace, creation of additional park and ride facilities, and improving the fiber optic network and connectivity.	**Consistent.** The Project site would improve the job/housing balance by providing new employment opportunities within the City, which would allow residents to work locally, rather than commuting outside of the Palmdale area.
Policy AQ-1.8 Environmentally Review New Development. Use the environmental review process for new development applications to assess and, as necessary, mitigate the impacts of new development related to increased vehicle miles traveled.	**Consistent.** Appropriate traffic analyses have been prepared for the Project to assess potential impacts of the Project in relation to vehicle miles traveled. Refer to EIR Subsection 4.13, *Transportation,* for a discussion regarding vehicle miles traveled.
Goal AQ-2 Minimize particulates less than 10 microns in size (PM10) and minimizes activities that generate dust.	
Policy AQ-2.2 Construction Site Requirements. Require measures at construction sites to prevent deposition of soil onto public right-of-way.	**Consistent.** Appropriate dust control measures would be in place during construction of the Project as required by AVAQMD Rule 403, Fugitive Dust.
Policy AQ-2-3 Natural Contours. Encourage developers to maintain natural contours to the greatest degree possible, to eliminate the need for extensive land clearing, blasting, ground excavation, grading and cut and fill operations.	**Consistent.** The natural topography of the Project site is relatively flat. The Project site would be graded in a manner that is generally lower than the existing grade. No import or export of soils is anticipated.
Policy AQ-2-4 Erosion and Control Measures. Require erosion and dust control measures for new construction, including covering soil with straw mats or use of chemical soil and dust binders during site grading, followed by hydroseeding and watering disturbed construction areas as soon as possible after grading to prevent fugitive dust.	**Consistent.** The Project Applicant is required to obtain an NPDES permit for construction activities. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP is required to specify the BMPs that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
	to being discharged from the subject property. Additionally, the Project would comply with the requirements of the City's SWMP prepared as part of the City's MS4 permit. In addition, proposed construction activities would be required to comply with AVAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion.
Goal AQ-3 Reduction and/or elimination of unnecessary sources of air pollution.	
Policy AQ-3-7 Environmentally Review New Development Applications. Through the environmental review process for new development applications, ensure that emissions of toxic air contaminants are minimized and that any significant health effects associated with such contaminants are appropriately mitigated.	**Consistent.** Appropriate air quality analyses have been prepared for the Project to assess potential impacts of the Project in relation to emissions of toxic air contaminants. Refer to EIR Subsection 4.2, *Air Quality*, for further discussion regarding air quality.
Goal AQ-4 Reduce air pollution caused by energy consumption.	
Policy AQ-4-3 Recycling. Require local government, Palmdale citizens, and local businesses and industries to recycle, as mandated by state law, and to otherwise recycle to the maximum extent possible in accordance with the requirements of the Palmdale Municipal Code.	**Consistent.** The Project would be required to comply with the County of Los Angeles Countywide Integrated Waste Management Plan (CIWMP)'s requirement to divert up to 65 percent of its solid waste from area landfills. In conformance with the CIWMP, the Project applicant is required to work with future contract refuse haulers to implement recycling and waste reduction programs for solid wastes. Additionally, the Project would be required to comply with all applicable solid waste statutes and regulations.
Noise Element	
Goal N-2 Maintain acceptable noise environments throughout the City.	
Policy N-2.2 Restrict Construction Activities. Restrict construction activities in the vicinity of sensitive receptors during the evening, early morning, and weekends and holidays.	**Consistent.** The Project would comply with appropriate standards established in the PMC noise ordinance. Refer to EIR Subsection 4.11, *Noise*, for further discussion on the Project's potential impacts regarding noise. Noise impacts are sensitive receptors are determined to be less than significant.
Policy 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,	**Consistent.** A noise analysis has been prepared for the Project to assess potential impacts of the Project in relation to noise and is included as *Technical Appendix H* to this EIR. Refer to EIR Subsection 4.11, *Noise*, for further discussion regarding noise.

Table 4.10-1 General Plan Consistency Analysis

General Plan Goals and Policies	Consistency Analysis
racetracks, stadiums, aircraft overflights, and similar uses.	
Goal N-3 Promote noise compatible land uses within the 65 dBA CNEL contour and the Frequent Overflight Area of Air Force Plant 42.	
Policy N-3.1 Frequent Overflight Area. Designate and permit employment flex, industrial, aerospace industrial, and similar uses within the 65 dBA CNEL contour and the Frequent Overflight Area.	**Consistent.** The Project proposes an industrial warehouse and associated improvements. The Project site is located outside of the 65 CNEL contour for USAF Plant 42. According to the AICUZ, the southeastern corner of the Project site is located within the 60 to 65 CNEL noise contour boundary of the USAF Plant 42 facility. According to the AICUZ Final Report, most industrial/manufacturing noise uses are compatible within the airfield area of influence. Because the proposed land use is considered compatible within the airfield area of influence, the Project would not conflict with this General Plan policy.

4.10.5 Cumulative Impact Analysis

This cumulative impact analysis for land use and planning considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Palmdale and other jurisdictions in the region.

Divide an Established Community

As indicated under the analysis of Threshold (a), because the Project site is already physically separated from neighboring developed properties under existing conditions, development of the Project site as proposed would not physically divide any established community. Accordingly, there is no potential for the Project to cause or contribute to the division of an established community and Project impacts would be less than cumulatively considerable.

Conflict with any Land Plan, Policy, or Regulation

As indicated under the analysis of Threshold (b), implementation of the Project would be consistent with Federal Aviation Administration (FAA) regulations. The Project's proposed land uses would be consistent with the Los Angeles County Airport Land Use Plan (ALUP) and would be consistent with the Department of the Air Force's USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report. Moreover, with approval of CUP 25-0006, the Project is consistent with the land use and zoning designations established by the City for the property, and the Project would be fully consistent with the City's General Plan. Therefore, the Project would not conflict with the Palmdale Municipal Code (PMC) or any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Other developments within the City similarly would be required to demonstrate compliance with the General Plan, PMC and other land use plans, policies, or regulations.

Thus, significant direct and cumulatively considerable impacts would occur due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.10.6 Significance of Impacts Before Mitigation

Threshold a: Less than Significant Impact. The Project would not disrupt or divide the physical arrangement of an established community. Impacts would be less than significant.

Threshold b: Less than Significant Impact. Implementation of the Project would be consistent with Federal Aviation Administration (FAA) regulations, the Los Angeles County Airport Land Use Plan (ALUP), and the USAF Plant 42 Air Installation Compatible Use Zone (AICUZ) Final Report. No General Plan Amendment or zone change would be required as part of the Project. Finally, the Project would not conflict with the Palmdale Municipal Code (PMC) or any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Additionally, there are no impacts due to land use incompatibility that have not already been evaluated and mitigated to the maximum feasible extent in other relevant sections of this EIR.

4.10.7 Mitigation

Impacts to land use and planning would be less than significant; therefore, mitigation measures are not required.

4.11 NOISE

The information and analysis in this subsection is based on a technical study titled, "Noise Technical Report: Pacific Palmdale Center Project," dated September 2025, prepared by Dudek and included as *Technical Appendix H* to this EIR (Dudek, 2025d). All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of noise.

4.11.1 FUNDAMENTALS OF NOISE AND VIBRATION

Provided below is an overview of key principles related to environmental noise and vibration, focusing on how humans perceive and respond to sound. While sound pressure level is a measurable physical quantity, human perception of loudness also depends on the frequency of the sound and the sensitivity of the human ear. To better reflect human response, sound levels are typically reported using A-weighted decibels (dBA), which approximate the humans ear's sensitivity to different frequencies. The discussion also explains how noise levels are quantified over time using descriptors like L_{eq} and CNEL, and how sound propagates through the environment. In addition, it covers the fundamentals of ground-borne vibration, including how it is transmitted and measured. Together, these concepts form the technical foundation for assessing noise and vibration impacts.

A. A-Weighted Sound Level

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans will respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness, or human response, is determined by the characteristics of the human ear. Human hearing is limited not only in the range of audible frequencies, but also in the way it perceives the sound in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 hertz, and it perceives a sound within that range as more intense than a sound of higher or lower frequency with the same magnitude. To approximate the frequency response of the human ear, a series of sound level adjustments is usually applied to the sound measured by a sound level meter. The adjustments (referred to as a weighting network) are frequency-dependent. The A-scale weighting network approximates the frequency response of the average young ear when listening to ordinary sounds. When people make judgments about the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Noise levels are typically reported in terms of A-weighted sound levels. All sound levels discussed in *Technical Appendix H* and herein are A-weighted decibels (dBA). (Dudek, 2025d, p. 6)

B. Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound pressure levels of 1 dBA when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely

perceive noise level changes of 3 dBA. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as twice (if a gain) or half (if a loss) as loud. A doubling of sound energy results in a 3 dBA increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level. (Dudek, 2025d, p. 7)

C. Noise Descriptors

Units of measure have been developed to evaluate the long-term characteristics of sound. The energy-equivalent sound level (L_{eq}), or the time-average sound level, is the equivalent steady-state or constant sound level that in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period. For instance, the 1-hour A-weighted equivalent sound level, $L_{eq(h)}$, is the energy average of the A-weighted sound levels occurring during a 1-hour period, and it is the basis for most of the noise ordinance standards. People are generally more sensitive to and thus potentially more annoyed by noise occurring during the evening and nighttime hours. Therefore, another noise descriptor used in community noise assessments, the community noise equivalent level (CNEL), represents a time-weighted, 24-hour average noise level based on the A-weighted sound level. However, unlike an unmodified 24-hour L_{eq} value, the CNEL descriptor accounts for increased noise sensitivity during the evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) by adding 5 dBA and 10 dBA, respectively, to the average sound levels occurring during these defined hours within a 24-hour period. Whereas CNEL is used mostly in California, the L_{dn} descriptor (day-night average noise level, which is the same as CNEL with the only exception of not including the 5 dBA evening correction) is used more often for environmental noise evaluations for federal projects. (Dudek, 2025d, p. 7)

D. Sound Propagation

Sound propagation, the traverse of sound from a noise emission source position to a receiver location, is influenced by multiple factors such as geometric spreading, ground absorption, atmospheric effects, and occlusion by natural terrain and/or features of the built environment. Sound levels attenuate (or diminish) geometrically at a rate of approximately 6 dBA per doubling of distance from an outdoor stationary point-type source due to the spherical spreading of sound energy with increasing distance travelled. The effects of atmospheric conditions such as humidity, temperature, and wind gradients are typically distance-dependent and can also temporarily increase or decrease sound levels measured or perceived at a receptor location. In general, the greater the distance the receiver is from the source of sound emission, the greater the potential for variation in sound levels at the receptor due to these atmospheric effects. Additional attenuation can result from sound path occlusion and diffraction due to intervention of natural (ridgelines, dense forests, etc.) and built features (such as solid walls, buildings, and other structures). (Dudek, 2025d, pp. 7-8)

E. Ground-Borne Vibration Fundamentals

Ground-borne vibration is fluctuating or oscillatory motion transmitted through the ground mass (i.e., soils, clays, and rock strata). The strength of ground-borne vibration attenuates rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not. Several

basic measurement units are commonly used to describe the intensity of ground vibration. The descriptors used by the Federal Transit Administration (FTA) are peak particle velocity (PPV), in units of inches per second (ips), and velocity decibel (VdB) that is based on a root-mean square (RMS) of the vibration signal magnitude. (Dudek, 2025d, p. 8)

F. Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise. The term "receptor" is defined in *Technical Appendix H* and herein, as a single residential dwelling unit or the equivalent of a single dwelling unit. A "receiver" is defined as a single point in a noise model that can represent one receptor or multiple receptors.

4.11.2 Existing Conditions

A. Noise Measurement Surveys

Dudek conducted sound pressure level (SPL) measurements near the Project site on Wednesday January 29, 2025, to quantify and characterize the existing outdoor ambient sound levels. Table 4.11-1, *Measured Baseline Outdoor Ambient Noise Levels,* identifies the locations at which the baseline noise level measurements were taken and the measured L_{eq} and L_{max} noise levels. Four short-term (ST) noise level measurement locations (ST1–ST4) that represent existing noise-sensitive receivers were selected on and near the Project site, shown as receivers ST1–ST4 on Figure 4.11-1., *Noise Measurement Locations.* The primary noise sources at the sites consisted of traffic along adjacent roadways, distant conversations, birdsong, landscaping noise, and rustling leaves. As shown in Table 4.11-1, the measured daytime SPL ranged from 70.8 dBA L_{eq} at ST3 to 72.2 dBA L_{eq} at ST4. All measured L_{eq} values are above 70 dBA due largely to their proximity to roadways and associated vehicle noise. Detailed noise measurement data is included in Appendix A of *Technical Appendix H*. (Dudek, 2025d, p. 14)

Table 4.11-1 Measured Baseline Outdoor Ambient Noise Levels

Location[1]	Description	Noise Level (dBA)	
		L_{eq}	L_{max}
ST1	South of Rancho Vista Blvd., west of 3rd St.; adjacent to the backyard of the single-family residence at 257 Pictorial St.	72.0	89.2
ST2	South of Rancho Vista Blvd. and west of Sierra Hwy.; adjacent to The Pool Boss	71.5	94.8
ST3	Approximately 480 feet north of Rancho Vista Blvd. and east of Division St.	70.8	91.1
ST4	South of Fantasy St. and west of Division St.; adjacent to the single-family residence at 102 Fantasy St.	72.2	90.5

[1]See Figure 4.11-1. for the existing noise model receiver locations.
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dBA = A-weighted decibels; ST = short-term noise measurement locations.
(Dudek, 2025d, Table 2)

B. Sensitive Receptor Locations

As shown on Figure 4.11-2, *Offsite Traffic Noise Model Receiver Locations*, the closest sensitive receptors in the vicinity of the Project site are the nearest existing residences located as close as 45 feet from construction activity limits of the proposed Project. (Dudek, 2025d, p. 15)

C. Airport Noise

The Project site is located approximately 1.8 miles (9,504 feet) southwest of Runway 7 of Palmdale Regional Airport/USAF Plant 42. According to the AICUZ Final Report, the Project site occurs within the USAF Plant 42 AICUZ area of influence (Department of the Air Force, 2011, p. 3-17). One of the factors considered in airport land use compatibility is aircraft noise (Department of the Air Force, 2011, p. 2-17). The noise level contours are found on Figure 3-3 of the USAF Plant 42 California Air Installation Compatible Use Zone (AICUZ) Study and are used to describe the airport noise level impacts. As shown in the AICUZ's Final Report's Figure 3-3, Air Force Plant 42 – Community Noise Equivalent Level (CNEL), a small portion of the northeastern corner of the Project site designated for industrial land uses is located within the 60-65 dBA CNEL aircraft noise level contour boundaries. According to the City of Palmdale General Plan Noise Element Noise Land Use Compatibility Criteria, industrial land uses are considered *normally acceptable* within this noise contour (City of Palmdale, 2023, p. 405).

4.11.3 Regulatory Setting

The following is a brief description of the federal, State, and local environmental laws and regulations related to noise that are applicable to the Project, the Project site, and/or the surrounding area.

A. Federal Plans, Policies, and Regulations

1. Noise Control Act of 1972

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to 1) establish a means for effective coordination of Federal research and activities in noise control; 2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and 3) provide information to the public respecting the noise emission and noise reduction characteristics of such products. While primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The Environmental Protection Agency (EPA) is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control.

2. OSHA Hearing Conservation Program

The Occupational Safety and Health Administration (OSHA) hearing conservation program is designed to protect workers with significant occupational noise exposures from hearing impairment even if they are subject to such noise exposures over their entire working lifetimes. Standard 29 CFR, Part 1910

indicates the noise levels under which a hearing conservation program is required to be provided to workers exposed to high noise levels. (OSHA, 2002)

3. Federal Railroad Administration

The Federal Railroad Administration (FRA) provides guidance on determining impacts related to high-speed rail noise effects. The criteria used in evaluating noise impacts are based on maintaining a noise environment considered acceptable for land uses where noise would have an effect. These criteria take into account the characteristics of high-speed rail operations. The noise impact criteria for human annoyance are based on the comparison of the existing outdoor noise levels and the future outdoor noise levels from a proposed high-speed train project. An increase in noise exposure is dependent on land use. For noise-sensitive land uses, Figure 3-2 in the FRA High-Speed Ground Transportation Noise and Vibration Impact Assessment Final Report, 2012 displays the noise exposure increase required by the FRA to be considered a moderate or severe impact. A Category 2 land use represents noise-sensitive residential land uses. (Dudek, 2025d, pp. 10-11)

B. State Plans, Policies, and Regulations

1. California Health and Safety Code

California Health and Safety Code (HSC) § 46000 - 46080 states that the State is responsible for controlling, preventing, and abating noise to protect the health and welfare of its citizens. The State's policy is to provide an environment free from noise that jeopardizes health or welfare. The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research (OPR). The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels.

2. California Building Standards Code

The State of California's noise insulation standards are codified in the California Code of Regulations (CCR), Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. The latest version of the 2022 California Building Standards Code (Cal. Code Regs., Title 24), with an effective date of January 01, 2023. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. According to Title 24, interior noise levels are not to exceed 45 dBA CNEL in any habitable room. (BSC, n.d.).

3. California Vehicle Code Sections 27150, 27151, and 40610

As a result of 2022 Senate Bill (SB) 1079, local jurisdictions were authorized to use sound-activated enforcement devices to capture vehicle noise levels that exceed legal limits. Under the California Vehicle Code (CVC), exhaust noise is limited to 95 dbA for vehicles and 80 dbA for motorcycles. It is illegal to install new exhaust systems or make other vehicle modifications that change the level of sound produced by a vehicle. Under CVC Sections 27150 and 27151, vehicles are required to be equipped with an adequate muffler to prevent excessive or unusual noise. As a result of 2022 Assembly Bill (AB) 2496, several CVC Sections strengthened enforcement of California's vehicle exhaust noise laws by requiring courts to ensure violators obtain compliance certificates. This applies to violations of the noise limit requirements mentioned for mufflers or exhaust systems for specified vehicles. It also grants the Department of Motor Vehicles (DMV) authority to block registration renewals until violations are resolved and mandates authorized testing by referee stations for noisy vehicles.

C. Regional and Local Regulations

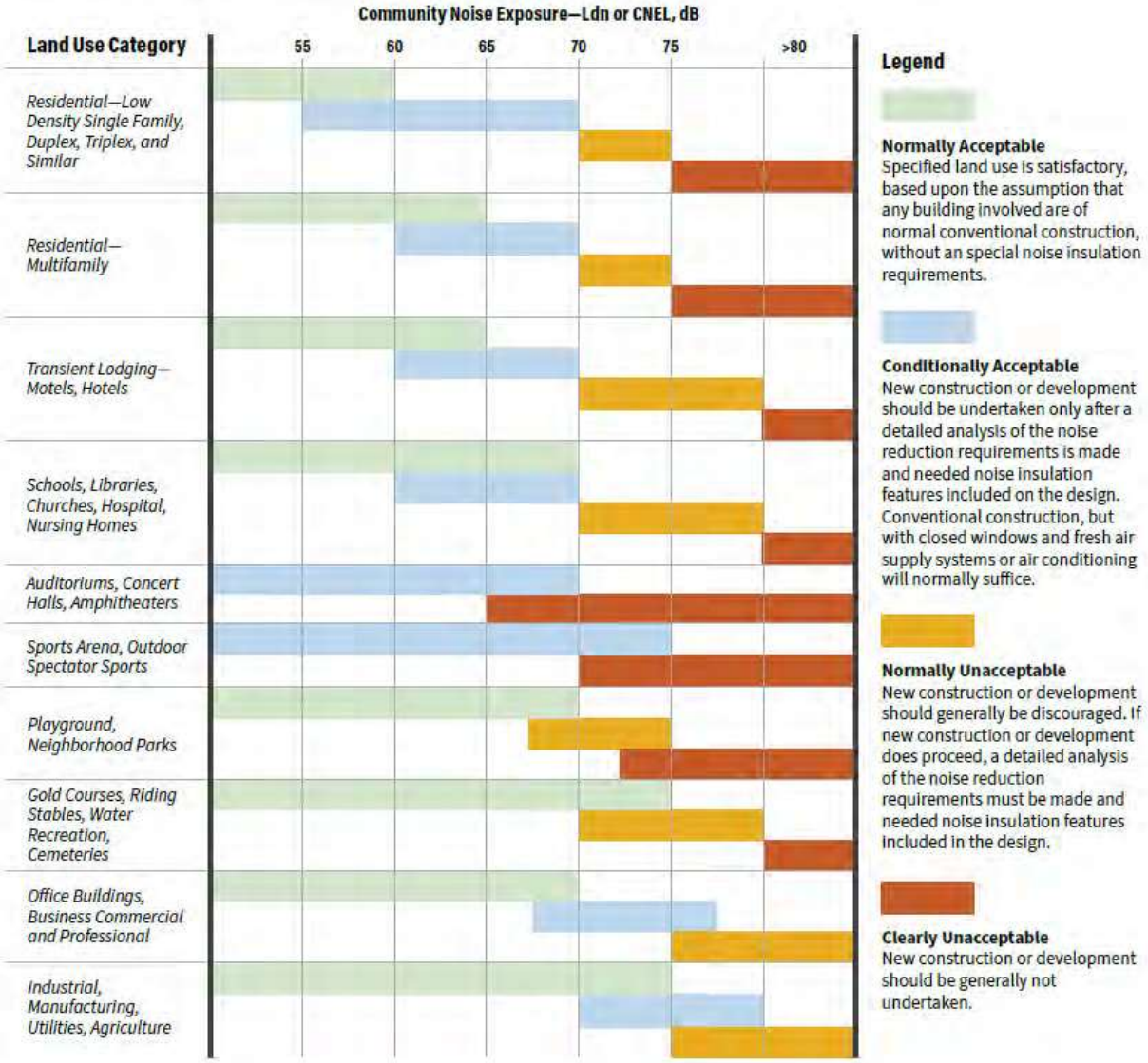
1. General Plan Noise Element

The City's Palmdale 2045 General Plan Noise Element outlines the goals and policies related to the noise environment in the City of and its sphere of influence. The purpose of the Noise Element is to reduce and limit the exposure of the public to excessive noise levels. The Noise Element sets the goals and policy direction for implementation. To limit the exposure of sensitive receptors to excessive noise, the Noise Element contains the following goals:

- Goal N-1: Minimize resident exposure to excessive noise
- Goal N-2: Maintain acceptable noise environments throughout the City
- Goal N-3: Promote noise compatible land uses within the 65 dBA CNEL contour and the Frequent Overflight Area of Air Force Plant 42
- Goal N-4: Minimize adverse noise impacts associated with transportation (City of Palmdale, 2023, pp. 416-418)

The City's General Plan Noise Element includes the *California Land Use and Noise Compatibility Guide* that outlines the noise levels allowable for new developments impacted by transportation noise sources. The City's compatibility criteria identify the criteria for industrial land uses such as the Project. As shown in Table 4.11-2, *Land Use Noise Compatibility Criteria,* when the unmitigated exterior noise levels approach 75 dBA CNEL, industrial land use is considered *normally acceptable*. With exterior noise levels ranging from 70 to 80 dBA CNEL, industrial land uses are considered *conditionally acceptable*, and with exterior noise levels greater than 75 dBA CNEL, they are considered *normally unacceptable*. For *normally unacceptable* land use, new construction or development should generally be discouraged. If new construction or development does proceed, as a condition of Project approval, a detailed analysis of the noise reduction requirements must be made and required noise insulation features shall be included in the design. (City of Palmdale, 2023, Figure 16.1).

Table 4.11-2 Land Use Noise Compatibility Criteria



(City of Palmdale, 2023, Figure 16.1)

The City's Noise Element also establishes a policy for exterior sensitive areas to be protected from high traffic noise levels. The Noise Element sets 65 dBA L_{dn} (day-night average noise level) for exterior noise levels and 45 dBA L_{dn} for interior noise levels as the "normally acceptable" levels. For interior noise, the Noise Element also establishes 45 dBA L_{dn} as the maximum acceptable level for habitable rooms when exterior predicted noise levels due to traffic are 65 dBA L_{dn} or more. If windows and doors are required to be closed to meet this standard, then mechanical ventilation (i.e., air conditioning) shall be included in the project design. (Dudek, 2025d, pp. 10-13)

2. Palmdale Municipal Code

Palmdale Municipal Code (PMC) Section 9.18.010 makes it unlawful for any person to willfully make or continue, or cause or permit to be made or continued, any loud, unnecessary, or unusual noise which unreasonably disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

Pursuant to PMC Section 8.28.30, except as provided in Section 8.28, 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. As described in Section 2.0 *Existing Conditions,* under existing conditions, the Project site is zoned for Light Industrial (LI) land uses and has an Employment Flex (EMPFX) General Plan land use designation. (City of Palmdale, 2023) (PMC, 2025) However, the Project site is located within 500 feet of a residential zone.

4.11.4 Basis for Determining Significance

According to Section XIII. of the CEQA Guidelines, the proposed Project would result in a significant noise impact if the Project or any Project-related component would result in:

a. *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*

b. *Generation of excessive ground borne vibration or ground borne noise levels;*

c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.*

0,

Significance Criteria Summary, summarizes the significance criteria used to evaluate the Project's potential impacts due to increases in noise levels. Refer to the Project's Noise Technical Report (*Technical Appendix H*) prepared for the Project for a discussion of the significance criteria. The methodologies used to determine the significance criteria for noise level and ground-borne vibration impacts related to construction, long-term on-site operations, and long-term off-site traffic for the Project are explained below.

Table 4.11-3 Significance Criteria Summary

Analysis	Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site	Noise-Sensitive[1]	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
Operational	Residential	Exterior Noise Level Limit[2]	60 dBA L_{dn}	
	Industrial	Exterior Noise Level Limit[2]	75 dBA L_{dn}	
Construction	Noise-Sensitive	Noise Level Threshold[3]	80 dBA L_{eq}	70 dBA L_{eq}
		Vibration Level Threshold[4]	0.2 PPV in/sec	n/a
	Non-Noise Sensitive	Vibration Level Threshold	0.3 PPV in/sec	n/a

[1] FICON, 1992.
[2] City of Palmdale General Plan Noise Element, Figure 16.1 (Table 4.11-2)
[3] FTA, Transit Noise and Vibration Impact Assessment Manual.
[4] Caltrans *Technical Noise Supplement to the Traffic Noise Analysis Protocol,* September 2013.
[5] Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19.
"Daytime" = 7:00 a.m. to 7:00 p.m.; "Nighttime" = 7:00 p.m. to 7:00 a.m. "n/a" = construction activities are not planned during the nighttime hours; "PPV" = peak particle velocity.
(Dudek, 2025d)

A. Methodology Guidance

The methodology for evaluating noise and vibration impacts in this EIR draws from multiple federal, state, and local guidance sources. While not regulatory, these guidelines provide industry-accepted thresholds for assessing the significance for potential impacts in the absence of formal local standards. Key references include the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Manual*, the Federal Interagency Committee on Noise (FICON) recommendations, and technical guidance documents from the California Department of Transportation (Caltrans), including the *Technical Noise Supplement to the Traffic Noise Analysis Protocol* and the *Transportation and Construction Vibration Guidance Manual*. These sources inform the thresholds and criteria used in the analysis of both temporary (construction) and permanent (operational) noise and vibration impacts, and are supplemented by applicable PMC provisions where available. The analysis ensures consistency with established best practices and provides a conservative basis for determining potential environmental effects for the topics of noise and vibration under CEQA.

1. Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although the FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such noise limits at the state and local jurisdictional levels. (Dudek, 2025d, p. 9)

2. Federal Interagency Committee on Noise

Some guidance regarding the determination of a substantial permanent increase in ambient noise levels in the Project vicinity above existing levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON 1992), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment. The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn}. The changes in noise exposure that are shown below are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in *Technical Appendix H* and herein to define a substantial increase in community noise levels related to all transportation noise sources and permanent non-transportation noise sources. (Dudek, 2025d, p. 9)

- Outdoor ambient sound level without the project is less than 60 dBA Ldn, then a project-attributed increase of 5 dBA or more would be considered significant;
- Outdoor ambient sound level without the project is between 60 and 65 dBA Ldn, project-attributed increase of 3 dBA or more would be considered significant; and
- Outdoor ambient sound level without the project is greater than 65 dBA Ldn, then project-attributed increase of 1.5 dBA or more would be considered significant

3. California Department of Transportation Technical Noise Supplement

The purpose of the Caltrans *Technical Noise Supplement* is to provide technical background information on transportation-related noise in general and highway traffic noise in particular. It is designed to elaborate on technical concepts and procedures referred to in the protocol. Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dBA when exposed to steady single-frequency (pure tone) signals in the midfrequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA. (Caltrans, 2013)

4. California Department of Transportation and Construction Vibration Guidance Manual

The Caltrans *Transportation and Construction Vibration Guidance Manual* provides screening tools for assessing the potential for adverse vibration effects related to human perception and structural damage. General information on the potential effects of vibration on vibration-sensitive research and advanced technology facilities is also provided. (Caltrans, 2020)

Caltrans recommends 0.5 ips PPV as a threshold for the avoidance of structural damage to typical newer residential buildings exposed to continuous or frequent intermittent sources of ground-borne vibration. For transient vibration events, such as blasting, the damage risk threshold would be 1.0 ips PPV (Caltrans 2020) at the same type of newer residential structures. For older structures, these guidance thresholds would be more stringent: 0.3 ips PPV for continuous/intermittent vibration sources, and 0.5 ips PPV for transient vibration events. With respect to human annoyance, Caltrans guidance indicates that building occupants exposed to continuous ground-borne vibration in the range of 0.2-0.6 ips PPV would find it "unpleasant or "annoying" and thus a likely significant impact. Although these Caltrans guidance thresholds are not regulations, they can serve as quantified standards in the absence of such limits at the local jurisdictional level. (Dudek, 2025d, p. 11) The proposed Project does not include blasting activities.

B. Methodology Used to Analyze Construction Noise

To control noise impacts associated with the construction of the proposed Project, the City has established limits to the hours of operation. PMC Section 8.28.030 addresses construction-related noise by prohibiting earth excavating and similar activities between 8:00 p.m. and 6:30 a.m. and on Sundays and holidays in any residential zone or within 500 feet of any residence, hotel, motel, or recreational vehicle park. However, neither the City's General Plan Noise Element nor the PMC establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or permanent increase in ambient noise levels. Therefore, a numerical construction threshold based on the FTA's *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} and a nighttime exterior construction noise level of 70 dBA L_{eq} as a reasonable threshold for noise sensitive residential land uses (Dudek, 2025d, p. 21)

C. Methodology Used to Analyze Construction Vibration

Construction activity can result in varying degrees of ground-borne vibration depending on the equipment and methods used, distance to the affected structures, and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. To analyze vibration impacts originating from the operation and construction of the proposed Project, vibration-generating activities are appropriately evaluated against standards established under a city's municipal code, if such standards exist. However, the City of Palmdale and the County of Los Angeles do not

identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual* for vibration damage is used in the Noise Technical Report (*Technical Appendix H)* prepared for the Project to assess potential temporary construction-related impacts at nearby building locations. Therefore, pursuant to the Caltrans *Transportation and Construction Vibration Guidance Manual*, a maximum acceptable continuous vibration threshold of 0.3 peak particle velocity (PPV) (in/sec [ips]) is used to describe vibration damage to the nearby building structures. In addition, the Caltrans *Technical Noise Supplement to the Traffic Noise Analysis Protocol* is used in the Noise Technical Report prepared for the Project to assess potential impacts to nearby residents (annoyance). Guidance from the Caltrans *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (September 2013) indicates that a vibration velocity level of 0.2 ips PPV received at a structure would be considered annoying by occupants within. (Dudek, 2025d, pp. 17-18)

D. Methodology Used to Analyze Operational Noise

Following is a summary of the methodology used to evaluate Project-related operational noise impacts. Refer to the Noise Technical Report (*Technical Appendix H)* prepared for the Project, for a complete discussion of the methodology and modeling inputs and assumptions.

1. Reference Noise Levels

To analyze noise impacts originating from a designated fixed location or private property such as the proposed Project, stationary-source (operational) noise, such as the expected loading dock activity, roof-top air conditioning units, trash enclosure activity, parking lot vehicle movements, truck movements, and drive-through speakerphone activity, are typically evaluated against standards established under a jurisdiction's municipal code. PMC Section 9.18.010 makes it unlawful for any person to willfully make or continue, or cause or permit to be made or continued, any loud, unnecessary, or unusual noise which unreasonably disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. However, the PMC does not identify specific exterior noise level standards. Therefore, the City of Palmdale General Plan Noise Element Land Use Noise Compatibility Criteria are used in the Noise Technical Report (*Technical Appendix H)* prepared for the Project to assess the potential impacts at adjacent sensitive receiver locations. The operational noise level standards are summarized in the Noise Technical Report (*Technical Appendix H*) for the Project. For purposes of this analysis, a noise impact would be considered significant if noise from typical operation of heating, ventilation, and air conditioning (HVAC), truck movements, and other electro-mechanical systems associated with the proposed Project exceeded 75 dBA L_{dn} at the property line. Note that these are the City's thresholds for the industrial zones that characterize the proposed Project site. For residential land uses near the Project site, a noise impact would be considered significant if noise from typical operations exceeds 60 dBA L_{dn} at the property line. (Dudek, 2025d, p. 17)

E. Methodology Used to Analyze Cumulative Noise with High-Speed Rail Project

An EIR/EIS was prepared for the nearby High-Speed Rail (HSR) Palmdale to Bakersfield project, which is planned to occur approximately 150 feet east of the Project site. To evaluate potential cumulative

noise effects associated with the proposed Project evaluated in this EIR and the HSR project, the Federal Railroad Administration (FRA) guidance was used. These criteria take into account the characteristics of high-speed rail operations. The noise impact criteria for human annoyance are based on the comparison of the existing outdoor noise levels and the future outdoor noise levels from a proposed high-speed train project. For noise-sensitive land uses, Figure 3-2 in the FRA High-Speed Ground Transportation Noise and Vibration Impact Assessment Final Report, 2012, which was part of the EIR/EIS, displays the noise exposure increase required by the FRA to be considered a moderate or severe impact. A Category 2 land use represents noise-sensitive residential land uses. (Dudek, 2025d, pp. 10-11)

4.11.5 Impact Analysis

Threshold a: Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The three components of the Project that would generate noise are the construction process, on-site operational activities, and off-site traffic.

A. On-site Construction Noise

Construction noise and vibration are temporary phenomena, with emission levels varying from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. Equipment that would be in use during construction of the Project would include, in part, graders, backhoes, rubber-tired dozers, loaders, cranes, forklifts, pavers, rollers, and air compressors. The typical maximum noise levels at a distance of 50 feet from various pieces of construction equipment and activities anticipated for use on the proposed Project site are presented in Table 4.11-4. *Construction Reference Noise Levels*. The equipment noise levels are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time. (Dudek, 2025d, p. 19)

Aggregate noise emissions from Project construction activities, broken down by sequential phase, was predicted at the nearest existing noise-sensitive receptor from the nearest position of the construction activity boundary for a given phase. The intent of the "nearest receptor" methodology is to help evaluate anticipated construction noise from all construction equipment or vehicle activity expected to be at the construction site boundary for some period of time. The construction equipment anticipated for development of the Project, including site preparation, grading, off-site improvements, building construction, on-site concrete, and architectural coating, was provided by the Project Applicant. (Dudek, 2025d, p. 20)

Table 4.11-4 Construction Reference Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 feet)[1]
Backhoe	78
Compressor (air)	78
Concrete Saw	90
Crane	81
Dozer	82
Excavator	81
Flat Bed Truck	74
Front End Loader	79
Generator	72
Grader	85
Man Lift	75
Paver	77
Roller	80
Scraper	84
Welder / Torch	73
All Other Equipment > 5 HP	85

[1] FHWA Roadway Construction Noise Model (RCNM).
(Dudek, 2025d, Table 3)

Project related construction noise would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction. Table 4.11-5*Construction Equipment Noise Level Compliance* summarizes the distances to the apparent closest noise-sensitive receptor for each of the five sequential construction phases. At the construction activity boundary, this analysis assumes that one piece of equipment for each listed type (i.e. if there are multiple pieces of the same type of equipment in a given phase, only one piece was used to avoid unrealistic equipment "stacking" at a single location) per phase will be involved in the construction activity for the full 8-hour period. (Dudek, 2025d, p. 20)

Although noise from construction would be exempt from the City's noise standard during the specified hours (6:30 a.m. to 8:00 p.m.), to be consistent with CEQA expectations regarding "applicable standards of other agencies" the City has selected to apply quantified construction noise thresholds per Federal Transit Administration (FTA) guidance, which recommends 80 dBA 8-hour L_{eq} at the exterior of a residence during daytime hours, and 70 dBA 8-hour L_{eq} during nighttime hours. (Dudek, 2025d, p. 21)

As presented in Table 4.11-5 the highest estimated construction noise levels from Project construction activities are calculated to stay below 73 dBA L_{eq} over an 8-hour period at the nearest existing residences (located west of the Project site) when off-site improvement activities in the public roadways fronting the Project site take place. Residences further afield, such as those to the south of the Project site, would experience lower construction noise levels than those shown. Additionally, the existing noise

environment at the nearest existing residences to the south is dominated by traffic noise from Rancho Vista Boulevard. A concurrent phase analysis was also conducted to analyze potential overlapping site preparation and grading phases over an 8-hour period at the nearest existing residences described above and predicted noise levels were found to be below 73 dBA L_{eq}. (Dudek, 2025d, p. 21)

Construction activities would occur during daytime hours except for concrete pouring activities that may occur when air temperatures are cool enough to efficiently cure concrete. On-site concrete pouring activities that may occur during nighttime hours are evaluated against the FTA nighttime threshold of 70 dBA L_{eq} over an 8-hour period. As presented in Table 4.11-5, noise levels for concrete pouring activities are predicted to stay below 62 dBA L_{eq} over an 8-hour period, which is below the FTA nighttime threshold of 70 dBA L_{eq} over an 8-hour period. (Dudek, 2025d, p. 21)

As shown in Table 4.11-5, Project's daytime construction activities would also be compliant with the FTA daytime threshold of 80 dBA 8-hour L_{eq}; resulting in increases ranging from 1 to 2 dBA over the existing outdoor ambient sound level when compared with daytime samples shown in Table 4.11-1; thus, construction activities would not result in a significant increase over ambient levels; therefore, short-term construction noise impacts would be less than significant. (Dudek, 2025d, p. 22)

Table 4.11-5 Construction Equipment Noise Level Compliance

Construction Phase (and Equipment Types Involved)	Distance from Nearest Noise-Sensitive Receptor to Construction Phase Boundary (ft)[1]	8-Hour L_{eq} at Nearest Noise-Sensitive Receptor to Construction Phase Boundary (dBA)	Threshold	Threshold Exceeded?
Site Preparation (dozer, tractor, front end loader)	135	62.2	80	No
Grading (excavator, grader, dozer, scraper, backhoe, trencher[3])	135	65.4	80	No
Off-Site Improvements (paver, pavement scarifier, roller, trencher[3])	45	72.5	80	No
Building Construction (crane, man-lift, generator, backhoe, concrete mixer truck, welder/torch, concrete mixer truck)	400	49.4	80	No
On-Site Concrete (paver, pavement scarifier, concrete mixer truck, roller, other construction equipment, surfacing equipment[2])	185	61.6	70	No
Architectural Coating (air compressor, man-lift)	400	44.2	80	No

[1] Construction noise source and receiver locations are shown on Figure 5 of the Project's Noise Technical Report.
[2] Trencher data are not available in RCNM and were replaced by an excavator.
[3] Surfacing equipment data are not available in RCNM and were replaced by a paver.
* Measured distance is from property line of the noise-sensitive receptor to project-related construction activities concerning the reconfiguration of adjacent roadways.
(Dudek, 2025d, Table 4, Table 5)

B. Off-Site Construction Traffic Noise

The Project would result in local, short-term increases in roadway noise as a result of construction traffic. Project-related construction traffic would include workers commuting to and from the Project site as well as vendor and haul trucks bringing or removing materials. The highest number of average daily construction-related trips to and from the Project site for all of construction phases is estimated to be 40 one-way worker trips, 30 one-way vendor trips, and 30 one-way haul truck trips (for a passenger car equivalent [PCE] of 400 total round-trips) occurring during the building construction phase. (Dudek, 2025d, p. 22)

Division Street is expected to carry the highest volume of construction-related Project traffic. Based upon the Project 's Traffic Impact Analysis (TIA) (*Technical Appendix I1),* the existing PM peak hour volume on Division Street is 387 vehicles, which is approximately 3,870 vehicles per day when adjusted to an Average Daily Traffic (ADT) volume using a k-factor of 10. Comparing the maximum number of daily construction-related trips (PCE total of 400 round-trips) to the Division Street ADT volume of 3,870 PCE trips, the additional vehicle trips would amount to an increase of approximately 10 percent. Based upon the fundamentals of acoustics, a doubling (i.e., a 100 percent increase) would be needed to result in a 3-dB increase in noise levels, which is the level corresponding to an audible change to the typical human listener. Therefore, traffic related to construction activities would not result in 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. Impacts from project-related construction traffic noise would be less than significant. No mitigation measures are required. (Dudek, 2025d, pp. 22-23)

C. On-Site Operational Noise

The operational noise evaluation considers on-site noise generated by the Project after the Project is constructed and is operational. The operational noise analysis describes noise level impacts associated with the expected typical daytime and nighttime activities at the Project site. The on-site Project-related noise sources are expected to include, but not be limited to, loading dock activity, roof-top air conditioning units, trash enclosure activity, parking lot vehicle movements, and truck movements.

2. Operational Noise Impact Analysis - Stationary Noise

Dudek modeled an operational scenario of the proposed Project that assumes all the HVAC equipment operates simultaneously for a minimum period of one hour, along with peak hour truck movements in the loading dock areas. Figure 4.11-3, *Predicted On-Site Operational Noise Contours*, displays the

predicted noise contours associated with aggregate sound propagation from operating HVAC and peak hour loading dock sound sources. (Dudek, 2025d, p. 28)

Loading dock areas for the loading and unloading of heavy trucks would be positioned on the north and south facing sides of the buildings and the truck courts would be surrounded with solid perimeter screen walls that act as an acoustical sound barrier. Since loading and unloading occurs in a fixed location such noise is analyzed as a stationary noise source. Onsite loading dock noise was calculated for a single heavy truck pass-by trip and extrapolated based upon the number of heavy trucks expected to be entering or exiting the Project site during the peak hour. Backup alarms are also included in the truck noise level calculations. Loading dock data were modeled for the prediction of stationary operations noise levels. Detailed information supporting the calculation of daytime and nighttime loading dock noise is contained in Appendix D of *Technical Appendix H* to this EIR (Dudek, 2025d, p. 28).
Based on the noise level contours illustrated in Figure 4.11-3, the proposed Project is predicted to produce up to 43 dBA L_{eq} at peak operation, with a calculated L_{dn} of 49 dBA at the nearest residential land uses. Accordingly, the Project's operational noise levels are expected to be lower than and thus comply with the City's 60 dBA L_{dn} threshold for residential land uses. (Dudek, 2025d, p. 29) Therefore, impacts associated with operational noise from stationary sources would be less than significant.

3. Operational Noise Impact Analysis – Onsite Parking Activity

Employee parking spaces are proposed to be distributed throughout the Project site adjacent to the proposed building, no closer than 155 feet from the edge of the closest parking space to the property lines of the nearest residences to the west. At a distance of 155 feet, parking space noise levels would be less than 14 dBA L_{eq}, which would be inaudible to the human ear at the property lines of the nearest residences. Because noise levels are summed in the logarithmic, a noise level that is at least 10 decibels lower than another noise level is negligible, because the sound energy from the higher noise source dominates. Therefore, the combination of the parking space noise (less than 14 dBA L_{eq}) and the predicted stationary operation level (43 dBA L_{eq} at the nearest receptor) would be 43 dBA L_{eq}, which would be well below the threshold of 60 dBA L_{dn} for residential receptors. Therefore, impacts associated with parking noise would be less than significant. (Dudek, 2025d, p. 29)

D. Off-Site Operational Traffic Noise

4. Traffic Noise Prediction Model

The Project is expected to add an additional 2,093 average daily trips to the roadway system. During the afternoon (PM) peak-hour (the highest of the AM and PM peak hours), approximately 107 PCE vehicles are estimated to enter or exit the Project site, with a mix of 91 passenger cars, four 2-axle trucks, three 3-axle trucks, and nine 4+ axle trucks. Utilizing this information, as well as additional traffic data provided in Appendix C of the Noise Technical Report, the Federal Highway Administration Traffic Noise Model 2.5 (TNM) was used to predict noise exposure levels at multiple representative sensitive receptor positions adjacent to the Project site. Two separate modeling scenarios were considered for each opening year condition. The "Without Grade Separation" models assume that Sierra Highway would remain as-is, with an at grade crossing at the intersection with Rancho Vista Boulevard.

The "With Grade Separation" models assume that Sierra Highway would be slightly re-routed to pass over Rancho Vista Boulevard on an elevated structure. (Dudek, 2025d, p. 23)

The following scenarios were modeled for the traffic noise analysis.

- Existing Year 2024;
- Opening Year 2027 Without Project and Without Grade Separation;
- Opening Year 2027 With Project and Without Grade Separation;
- Opening Year 2027 Without Project and With Grade Separation; and
- Opening Year 2027 With Project and With Grade Separation.

It should be noted that the Project design provides room in the southeastern corner of the Project site to allow for West Rancho Vista Boulevard / East Avenue P to span over Sierra Highway in the future; however, constructing the grade separated roadway is not proposed by the Project Applicant and is not a part of the Project evaluated in this EIR. Nonetheless, a grade separated future condition is assumed in the Project's traffic study and thus this condition is evaluated in the noise modeling.

The truck percentages used in the existing and "without project" noise model scenarios for the modeled scenarios were 1.5 percent medium trucks and 2.3 percent heavy trucks for the existing and without Project scenarios. This truck mix is based on 2022 annual average daily truck traffic data on SR-14 from the Caltrans Traffic Census Program. The truck percentages used in the "with project" noise model scenarios were calculated by adding the existing roadway traffic volume mixes using the existing truck percentage mix (1.5 percent medium trucks and 2.3 percent heavy trucks) to the mix described above (91 passenger cars, 4 2-axle trucks, 3 3-axle trucks, and 9 4+ axle trucks). Therefore, truck percentages used for individual "with project" roadways in the "with project" modeled scenarios varied. All truck percentages used in the analysis can be found in Appendix C of *Technical Appendix H*. (Dudek, 2025d, p. 23)

As part of the CNEL calculation process, the peak hour volume was used and is generally considered to be roughly equivalent to the worst-case hourly traffic volume; hence, using this input value in the noise model results in an average hourly equivalent noise level approximately equal to the CNEL. Thus, this relationship results in a CNEL value that is representative of traffic noise resulting from typical daytime, evening, and nighttime traffic distribution. (Dudek, 2025d, p. 23)

5. Operational Traffic Noise Analysis

Table 4.11-6, *Predicted Future Year Traffic Noise Levels*, shows the existing year 2024, opening year 2027 without Project and without grade separation, opening year 2027 with Project and without grade separation, opening year 2027 without Project and with grade separation, and opening year 2027 with Project and with grade separation predicted noise levels at noise-sensitive receptors located nearest to the Project site. Figure 4.11-3, *Predicted On-Site Operational Noise Contours,* displays the modeled prediction locations of the noise-sensitive receptors listed below. (Dudek, 2025d, p. 24)

Table 4.11-6 Predicted Future Year Traffic Noise Levels

Receiver ID	2024 Existing Noise Level, $L_{eq(1hr)}$ (A)	Predicted Noise Level, $L_{eq(1hr)}$ dBA							
		OY 2027 No Project, No Grade Separation (B)	OY 2027 With Project, No Grade Separation (C)	OY 2027 No Project, With Grade Separation (D)	OY 2027 With Project, With Grade Separation (E)	Delta (C-A)	Delta (E-A)	Delta (C-B)	Delata (E-D)
R01	56	56	59	56	59	3	3	3	3
R02	57	57	61	57	61	4	4	4	4
R03	63	63	64	62	63	1	0	1	1
R04	63	63	64	59	60	1	-3	1	1

(Dudek, 2025d, Table 6)

Based upon the FICON thresholds presented in Subsection 4.11.4, an increase equal to or less than 5 dBA when the ambient sound level is less than 60 dBA L_{dn}/CNEL, equal to or less than 3 dBA when the ambient sound level is between 60 and 65 dBA L_{dn}/CNEL, or equal to or less than 1.5 dBA when the ambient sound level is greater than 65 dBA L_{dn}/CNEL would not be substantial. As shown in Table 4.11-6, above, the predicted increase is less than the 5 dBA FICON threshold when the ambient noise level is below 60 L_{dn}/CNEL (such as in the cases of R01 and R02) and less than the 3 dBA FICON threshold when the ambient noise level is between 60 and 65 dBA L_{dn}/CNEL (such as in the cases of R03 and R04). In addition, no location would exceed 65 dBA Ldn, the acceptable transportation noise level set by the Palmdale 2045 General Plan Noise Element. Therefore, potential impacts related to Project-generated future traffic noise increases at existing off-site noise-sensitive land uses closest to the Project site and its frontage roads would be less than significant (Dudek, 2025d, p. 27).

E. Summary

Based on the foregoing analysis, the three components of the Project that would generate noise 1) construction activities, 2) on-site operational activities, and 3) off-site traffic, would not generate 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. Therefore, impacts would be less than significant, and no mitigation is required.

Threshold b: Would the Project generate excessive groundborne vibration or groundborne noise levels?

A. Construction Vibration Analysis

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using vibration assessment methods defined by the FTA. At a distance of 45 feet, the closest estimated distance between the Project site's construction limits boundary and a sensitive receptor, the estimated vibration velocity would be 0.087 ips, which falls below the annoyance threshold of 0.2 ips Therefore, the impact of vibration-induced annoyance to occupants of all nearby existing homes would be less than significant. (Dudek, 2025d, p. 32)

Construction vibration, at sufficiently high levels, can also present a building damage risk. However, anticipated construction vibration associated with the proposed Project would yield a maximum amplitude of 0.087 ips, which does not surpass the guidance limit of 0.2 to 0.3 ips PPV for preventing damage to residential structures, as suggested in the Caltrans *Transportation and Construction Vibration Guidance Manual*. Because the predicted vibration level at 45 feet is less than the guidance limit, the risk of vibration damage to nearby structures is considered less than significant. (Dudek, 2025d, p. 32)

Based on the foregoing analysis, the Project would not generate excessive groundborne noise levels; therefore, impacts would be less than significant and no mitigation is required.

B. Operational Vibration Analysis

Once operational, the proposed Project would not be expected to be occupied by major producers of ground-borne vibration. Anticipated mechanical systems like heating, ventilation, and air-conditioning units are designed and manufactured to feature rotating (fans, motors) and reciprocating (compressors) components that are well-balanced with isolated vibration within or external to the equipment casings. The potential for future tenants or operators to introduce equipment or processes that generate atypical or excessive vibration is speculative. Under CEQA, an EIR must evaluate only those impacts that are reasonably foreseeable and supported by substantial evidence; hypothetical or uncertain future activities are not required to be analyzed. Based on the foreseeable uses and standard mechanical operations, operational vibration impacts associated with the proposed Project would be less than significant. (Dudek, 2025d, p. 32)

Threshold 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?

CEQA Guidelines Threshold (c) applies when there are nearby public and private airports and/or airstrips and focuses on land use compatibility of the Project to nearby airports and airstrips. The closest airport to the Project site which could require additional noise analysis under CEQA Guidelines Threshold (c) is the Palmdale Airport/USAF Plant 42; the Project site is located approximately 1.80 miles southwest of Runway 7. Although the Project site is not located within the AIA, as shown on Figure 3-3 of the United States Air Force Plant 42 California Air Installation Compatible Use Zone (AICUZ) Study, a small portion of the northeastern corner of the Project site is located within the 60-65 dBA CNEL noise level contour boundary. However, according to the City of Palmdale General Plan Noise Element Noise Land Use Compatibility Criteria (see Table 4.11-2), the Project's industrial land use is considered *normally acceptable*. Therefore, impacts would be less than significant, and no further noise analysis is required regarding airport noise.

4.11.6 Cumulative Impact Analysis

The cumulative study area for the issue of noise includes the Project site vicinity as well as areas adjacent to roadways evaluated by the Project's Traffic Impact Analysis prepared for the Project (*Technical Appendix 11*). Also, the California High Speed Rail Authority's planned Bakersfield to Palmdale high speed rail segment was considered, which is planned to occur approximately 150 feet east of the Project site. A cumulative impact is a potential impact that could be created from Project related noise combined together with noise from other planned projects.

Construction Noise

The analysis under Threshold (a), indicates that the proposed Project would not generate substantial amounts of construction-related noise that could adversely affect nearby sensitive receptors. There are no known cumulative projects near the Project site that are expected to be under simultaneous construction with the Project's construction. Nonetheless, there is some potential that construction activities associated with the proposed Project and other construction projects in the area may overlap, resulting in cumulative periodic noise increases in the local area. However, construction noise impacts primarily affect the areas immediately adjacent to a construction site, and there are no known cumulative projects adjacent to the Project site with reasonable potential to be under simultaneous construction. Further, the Project's short-term construction noise is predicted to be below the FTA guidance of 80 dBA L_{eq} over an 8-hour period during daytime hours and 70 dBA L_{eq} over an 8-hour period during nighttime hours (for on-site concrete activities). The FTA standards presume there is some pre-existing outdoor ambient sound level to which a project's construction noise would add and result in a future noise level. Therefore, the FTA fixed-value construction noise limits account for typical cumulative ambient noise levels associated with each studied receptor location. (Dudek, 2025d, p. 21) For these reasons, the Project's construction noise has no reasonable potential to contribute to a significant cumulative impact.

Stationary Noise

The analysis presented for Threshold (a) addresses the Project's contribution of noise to existing cumulative noise sources (i.e., ambient noise) in the Project area. The Project's noise contribution would not be perceptible to noise-sensitive receptors in the Project area during daytime or nighttime hours. The Project's permanent stationary noise levels would not be cumulatively considerable because the Project's noise contribution would not be perceptible to noise-sensitive receptors.

The EIR/EIS prepared for the nearby California High Speed Rail Authority's high-speed rail (HSR) Palmdale to Bakersfield project, which is planned to occur approximately 150 feet east of the Project site, concluded that operational noise impacts from high-speed rail operations would be significant and unavoidable to sensitive receivers even after mitigation. The addition of the HSR project, which is unrelated to the proposed Project evaluated in this EIR, was considered for potential cumulative impacts due to the combined Project-related noise sources (i.e., Project-related operations and traffic noise) and rail noise from the potential future HSR. Rail noise levels at modeled receiver locations were calculated using the Federal Railroad Administration (FRA) HSR Noise Spreadsheet Model (FRA 2012). Inputs

used in the FRA HSR Spreadsheet Model were taken from Table 6-17 in the Draft Noise and Vibration Technical Report for the Bakersfield to Palmdale Project Section of the HSR project's EIR/EIS (California High-Speed Rail Authority, 2018) with the exception of the maximum speed. Due to the proximity to the proposed Palmdale HSR Station (approximately 0.7 miles from the Project site), a speed of 190 mph was used, which is extremely conservative. Available data from the Japanese Shinkansen N700 high-speed train indicates that reaching the maximum design speed of 190 mph would require approximately 4.2 miles of track. To decelerate from the maximum design speed of 190 mph, approximately 3 miles of track would be required. As shown in Table 8 of the Project's Noise report (*Technical Appendix H),* the cumulative Project noise and offsite unrelated rail noise levels were predicted to be lower than the FRA threshold at all receiver locations. Therefore, receivers near the Project site would be expected to be in the "No Impact" range and impacts due to the cumulative effects of Project noise and HSR noise would be considered less than significant. (Dudek, 2025d, pp. 30-33)

Traffic Noise

The analysis presented under Threshold (a) evaluates the Project's traffic noise contribution in surrounding off-site areas and at the Project site. As previously shown in Table 4.11-6, the Project's noise contribution in future year scenarios, which consider buildout of the City's General Plan land uses as a cumulative condition, would not be perceptible to noise-sensitive receptors in the Project area during daytime or nighttime hours. As such, the Project's contribution to traffic noise would not be cumulatively considerable.

Groundborne Vibration and Noise

During construction, the Project's peak vibration impacts would occur during the grading phase when large pieces of equipment, like bulldozers, are operating on-site. During the non-grading phases of Project construction, when smaller pieces of equipment are used on-site, vibration from the Project would be minimal. As demonstrated by the analysis herein, Project-related vibration impacts are considered less than significant during construction activities at the Project site. There are no known cumulative projects near the Project site that are expected to be under simultaneous construction with the Project's construction. Nonetheless, there is some potential that vibratory construction activities associated with the proposed Project and other construction projects in the area may overlap, resulting in cumulative periodic vibration increases in the local area. However, vibration impacts primarily affect the areas immediately adjacent to a construction site, and there are no known cumulative projects adjacent to the Project site with reasonable potential to be under simultaneous construction. As such, the Project's construction activities have no reasonable potential to contribute to a significant cumulative temporary vibration impact.

During long-term operation of the Project, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration beyond the Project site. Trucks would travel to and from the Project site along local roadways; however, vibration levels for heavy trucks operating at the posted speed limits on paved surfaces would not be perceptible beyond the roadway. The Project would not cumulatively contribute to the exposure of persons to excessive groundborne vibration or noise levels during long-term operation. As previously stated, the proposed rail is planned

directly east of the Project site. Therefore, vibration effects from the planned rail line could be experienced by future occupants of the Project's building. However, the EIR/EIS prepared for the high-speed rail project concluded that no significant vibration impacts from construction or operation of HSR would occur. (CA High Speed Rail Authority, 2021). Therefore, the Project would have no reasonable potential to contribute to cumulative vibration including any vibration effects potentially produced by the California High Speed Rail Authority's planned high speed rail project.

Airport Noise

The Project would not involve the construction, operation, or use of any public airports or public use airports and there are no conditions associated with implementation of the Project that would contribute to airport noise or exposure of additional people to unacceptable levels of airport noise. Accordingly, the Project would have no potential to cumulatively contribute to impacts associated with noise from a public airport, public use airport, or private airstrip.

4.11.7 Significance of Impacts Before Mitigation

Threshold a: Less than Significant Impact. Noise levels generated by short-term construction of the Project would be less than significant at the nearest receptors. On-site operational noise levels would be less than significant at the nearest receptors. In addition, the off-site traffic noise levels generated by the Project would be less than significant. Therefore, the Project would not generate 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. Impacts would be less than significant and no mitigation is required.

Threshold b: Less than Significant Impact. The vibration impacts of the Project are considered less than significant during construction activities and operational activities at the Project site. The Project would not result in a perceptible groundborne vibration or noise that exceeds thresholds of significance. Impacts would be less than significant, and no mitigation is required.

Threshold c: Less than Significant Impact. Although a small portion of the northeastern corner of the Project site is located within the 60-65 dBA CNEL noise level contour boundary of the USAF Plant 42 airport operations, the Project's industrial land uses are considered *normally acceptable* within the 60-65 CNEL range of exposure; therefore, because the Project would not expose people residing or working in the Project area to excessive noise levels related to a private airstrip, airport land use plan or public airport our public use airport, impacts would be less than significant and no mitigation is required.

4.11.8 Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

4.11.9 Design Features (DF) and Regulatory Requirements (RR)

Although noise impacts from the Project would be less than significant, The City of Palmdale will ensure that the Project complies with the assumptions relied upon herein and applicable regulatory

requirements pertaining to the topic of Noise as part of the City's Conditions of Approval for the Project. The Project Applicant has agreed to implementing the design features, many of which represent a commitment to sustainable design that is integral to the Project, and/or are regulatory requirements, and as such, they are not considered to be mitigation measures.

NOI DF-1 As part of the Project's development, the Project would include twelve 12-foot-tall concrete screen walls along the northern, eastern, and western sides of the northern truck court and along the southern, eastern, and western sides of the southern truck court. Screen walls also would be provided around the trash enclosures.

NOI RR-1 All construction activities shall adhere to PMC Section 8.28.030, limiting construction-activities to the hours of 6:00 AM and 6:00 PM, prohibiting earth excavating and similar activities between 8:00 PM and 6:30 AM and on Sundays in any residential zone or within 500 feet of any residence, hotel, motel, or recreational vehicle park. Exceptions may be granted by the City with verification that acceptable noise levels will be maintained at the property lines of residences, hotels, motels, or recreational vehicle parks within 500 feet . This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

NOI RR-2 The Project contractor shall, to the extent feasible, schedule construction activities to avoid concurrent operation of several pieces of construction equipment close to an offsite noise-sensitive receptor.

NOI RR-3 All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.

NOI RR-4 Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and nearby residences, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.

NOI RR-5 Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary. In the event the City receives a complaint, appropriate corrective actions shall be implemented by the contractor, and a report of the action provided to the reporting party.

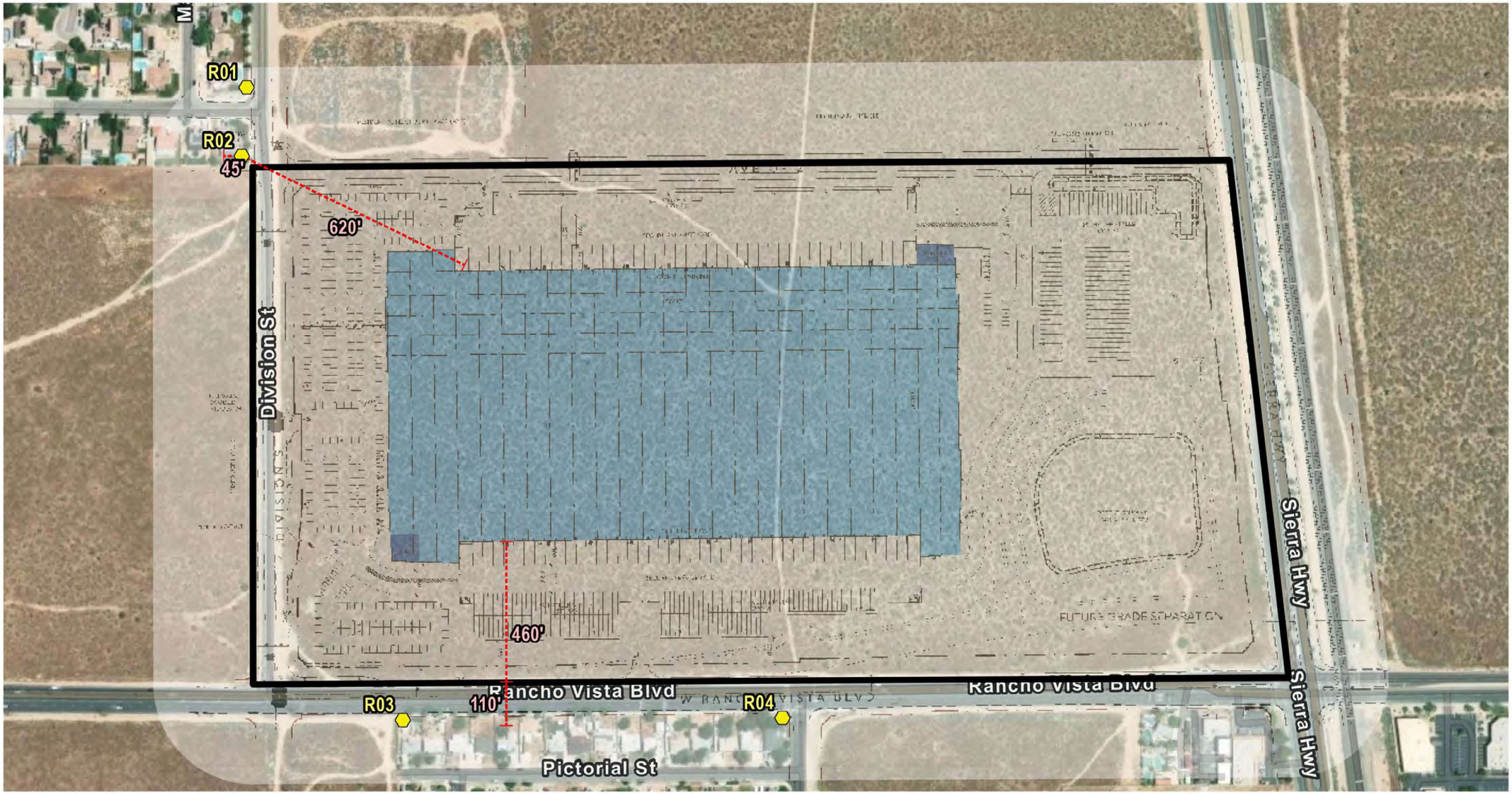


Source(s): Dudek (04-25-2025)

Figure 4.11-1

Not to Scale

Noise Measurement Locations

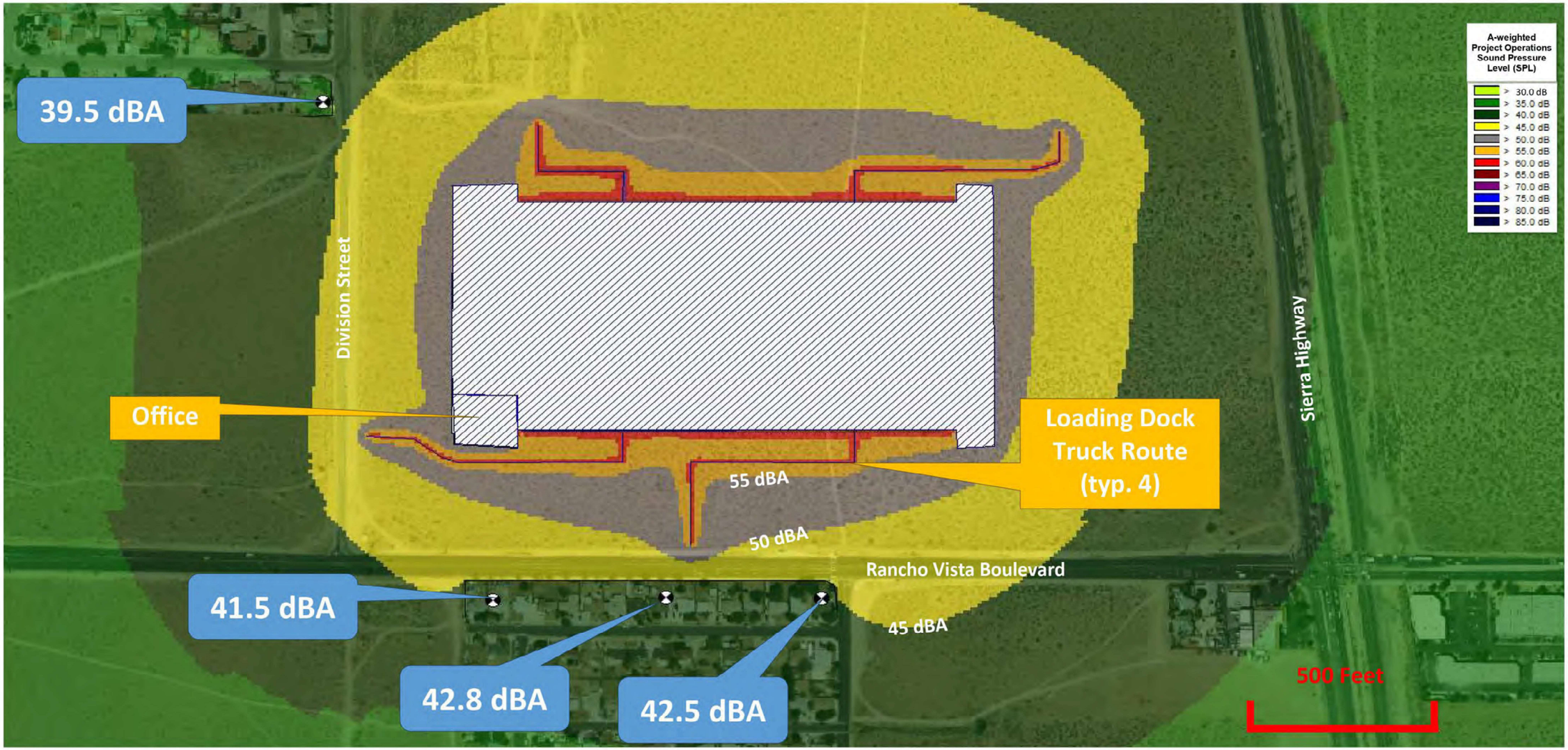


Source(s): Dudek (05-08-2025)

Figure 4.11-2

Not to Scale

Offsite Traffic Noise Model Receiver Locations



Source(s): Dudek (04-25-2025)

Figure 4.11-3

Not to Scale

Predicted On-Site Operational Noise Contours

4.12 PUBLIC SERVICES

This subsection provides information on existing public services and service levels for fire protection, police protection, schools, parks, and other public facilities, and evaluates impacts to the environment that may result from the demand the Project may have on such services. All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of public services.

4.12.1 EXISTING CONDITIONS

A. Fire Protection/Emergency Medical Services

The City of Palmdale contracts fire protection, first response emergency, and medical services through the Los Angeles County Fire Department (LACFD). According to the City of Palmdale 2045 General Plan Update Draft Environmental Impact Report (SCH# 2021060494), there are seven fire stations that are part of the LACFD within the City: Station 24, Station 37, Station 93, Station 114, Station 131, Station 136, Station 140, and two stations as part of the Plant 42 Fire Department (City of Palmdale, 2022a, p. 4.9-25). The nearest LACFD fire station to the Project site is LACFD Station No. 24, located approximately 1.12 miles to the west of the Project site (Google Earth, n.d.). LACFD maintains a response time for emergency fire protection services of four to six minutes (City of Palmdale, 2022a, p. 4.15-1). LACFD also dedicates its staff and resources to back up the fire stations located in the City; fire protection needs in the City will be met by the entire LACFD's resources, if needed, regardless of the number of firefighters and equipment stationed in the City (City of Palmdale Public Works Department, 2021, p. 22). To ensure compliance with the California Fire Code, LACFD conducts site inspections of new construction as well as annual inspections of existing structures and reviews Project Applicant Site Plans for compliance with applicable fire codes.

According to CAL FIRE, the Project site is located within an LRA in a Moderate Fire Hazard Severity Zone (CAL FIRE, 2025a). Local Responsibility Areas (LRA) are incorporated cities, urban regions, agriculture lands, and portions of the desert where the local government is responsible for wildfire protection. This is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract. (CalFire, 2023)

B. Police Protection

The City of Palmdale contracts with Los Angeles County for police services. The Los Angeles County Sheriff's Department (LACSD) patrols 770 square miles and a population of approximately 200,000 people in and around the City of Palmdale. The LACSD operates the Palmdale Sheriff's Station located at 750 East Avenue Q that serves the City of Palmdale and surrounding communities, including the Project site. The Palmdale Sheriff's Station was constructed in 2006, replacing a previous neighborhood sub-station. The Palmdale Sheriff's Station includes a 47,000 s.f. main building, a 7,800 s.f. jail, and an 8,400 s.f. motor pool and storage building (City of Palmdale, 2022a, p. 4.15-2). The Palmdale Sheriff's Station has approximately 200 sworn staff members consisting of lieutenants,

sergeants, detectives, and patrol deputies along with one captain (LA County Sheriff's Department, 2022, p. 19).

C. Schools

The nearest school to the Project site is R. Rex Parris High School, located approximately 0.92-mile south of the Project site. The Project site is located within the service area of the Palmdale School District (PSD) for elementary and middle school services and is within the Antelope Valley Union High School District (AVUHSD) for high school services. Summerwind Elementary School for K-5 school services is located approximately 1.6 miles southwest of the Project site, David G. Millen Intermediate School for grades 6-8 is located approximately 2.3 miles southwest of the Project site, and Highland High School is located approximately 2.6 miles southwest of the Project site. (Google Earth, n.d.) (AVSD, n.d.) (Palmdale School District, n.d.)

D. Parks

One existing public park is located within approximately two miles of the Project site, which is the Desert Sands Park, located approximately 0.5-mile south of the Project site. This park comprises approximately 20 acres and includes a variety of recreational uses including a recreation building, two tennis and basketball courts, two softball fields, volleyball and tetherball courts, playground and picnic areas, and a tot lot. (Google Earth, n.d.) (City of Palmdale, n.d.).

E. Other Public Facilities

The City's main governmental offices are located at the intersection of Palmdale Boulevard and Sierra Highway. Facilities include the City Hall, located at 38300 Sierra Highway. City Hall contains the offices of the City Manager and elected officials, City Council chambers, and government offices include City Attorney, City Manager Clerk, and Administrative Services. Development Services are located at 38250 Sierra Highway and include Building and Safety, Planning, Public Works, Business License, Economic Development, and Neighborhood Services; Human Resources & Community Programs are located at 823 East Avenue Q-9, and Chimbole Cultural Center is located at 38350 Sierra Hwy. (City of Palmdale, 2022a, p. 4.15-5)

The closest library to the Project site is the Palmdale City Library, located at 700 East Palmdale Boulevard, approximately 1.6 miles southwest of the Project site. The library is typically open Monday through Saturday, with limited hours on Sunday. Other facilities include the Palmdale Playhouse, Recreation & Culture Offices, Legacy Commons, and Courson Park (which features a recreation pool), located off 10th Street East. The City's Maintenance Yard is located at 39110 3rd Street East, across from Desert Sands Park. (Google Earth, n.d.; City of Palmdale, 2022a, p. 4.15-5)

4.12.2 Regulatory Setting

The following is a brief description of the State and local environmental laws and related regulations related to public services.

A. State Regulations

1. Fire Protection Services Regulations and Plans

❑ Public Resources Code Sections 4290-4299

Public Resources Code (PRC) Sections 4290-4299 establish minimum statewide fire safety provisions pertaining to the following: 1) roads for fire equipment access; 2) signs identifying streets, roads, and buildings; 3) minimum private water supply reserves for emergency fire use; and 4) fire fuel breaks and greenbelts.

With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The state requirements, however, do not supersede more restrictive local regulations. As defined by CAL FIRE, wildland areas defined as State Responsibility Areas (SRAs) may contain substantial wildfire risks and hazards consisting of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State of California's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CAL FIRE has entered into a cooperative agreement with a local agency for those purposes pursuant to Public Resources Code (PRC) Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CAL FIRE to provide maps identifying the boundaries of lands classified as SRAs to the appropriate County Assessor every five years. (CA Legislative Info, n.d.) As discussed in further detail in EIR Section 4.16, *Wildfire*, the Project site is located within an LRA. The nearest SRA very high fire hazard severity zone is located approximately 1.6 miles southwest of the Project site (CAL FIRE, 2025a).

❑ Public Resources Code Sections 4102 and 4127 - State Responsibility Areas

PRC Section 4102 specifies that SRA means areas of the State in which the financial responsibility of preventing and suppressing fires has been determined by the [State Fire] Board pursuant to Section 4125, to be primarily the responsibility of the state." These areas may contain state or privately-owned forest, watershed, and rangeland. PRC §§ 4126-4127 further specify the standards that define what does and does not constitute an SRA. (CA Legislative Info, n.d.) As discussed in further detail in EIR Subsection 4.16, *Wildfire*, the Project site is located within an LRA. The nearest SRA very high fire hazard severity zone is located approximately 1.6 miles southwest of the Project site (CAL FIRE, 2025a).

❑ California Code of Regulations Title 24, Parts 2 and 9 – Fire Codes

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, establishes design and construction requirements for buildings and structures to ensure public health, safety, and welfare. Two components of Title 24 that are relevant to fire protection and prevention are Part 2 (California Building Code (CBC)) and Part 9 (California Fire Code (CFC)). The CBC sets structural design requirements, occupancy classifications, and fire-resistance standards for

building materials and assemblies. It includes provisions to minimize fire hazards through passive fire protection measures such as fire-rated walls, doors, and separations between occupancies and uses. The CFC is based on the International Fire Code and amended for California conditions. The CFC governs fire prevention, fire suppression systems, hazardous materials management, emergency access, and water supply requirements. It addresses building features such as fire alarms, sprinkler systems, smoke control, and fire department access roads, and regulates activities that pose fire risks. Compliance with the California Building and Fire Codes is required for all new construction and substantial remodels. These regulations are enforced locally by the City of Palmdale's Fire Marshal and Building Division, in coordination with the Los Angeles County Fire Department.

As discussed in further detail in EIR Subsection 4.16, *Wildfire*, the Project site is located within an LRA. The nearest SRA very high fire hazard severity zone is located approximately 1.6 miles southwest of the Project site (CAL FIRE, 2025a).

- ❑ CCR Title 14 – Natural Resources

Title 14 of the California Code of Regulations (CCR) governs the management and protection of California's natural resources. It implements statutes administered by various state agencies, including those of the California State Board of Forestry and Fire Protection that address fire prevention and suppression efforts, particularly in California's State Responsibility Areas (SRAs) and Very High Fire Hazard Severity Zones. These regulations are intended to reduce the risk of wildland fires and promote fire-safe land use and development. CCR Title 14, Sections 1270–1276.03 apply to development in SRAs and address access, signage, emergency water supply, vegetation management, and fuel modification zones. Requirements are designed to ensure that new construction provides adequate ingress and egress for emergency vehicles and safe evacuation routes for occupants. (CCR, n.d.)

- ❑ California Government Code (CGC) Sections 51178-51179 – Very High Fire Hazard Severity Zones

California Government Code (CGC) Sections 51178–51179 establish the framework for identifying and managing Very High Fire Hazard Severity Zones (VHFHSZs) in LRAs, which are locations where local agencies, not the state, have primary responsibility for fire protection. Section 51178 specifies that the Director of CAL FIRE, in cooperation with local fire authorities, must identify areas that are Very High Fire Hazard Severity Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria such as fuel loading, slope, fire weather and other relevant factors like Santa Ana wind conditions, and the expected severity of fire hazard. Section 51179 states that a local agency (such as a city or county) must also designate and map the VHFHSZs in its jurisdiction by ordinance. Once adopted, these zones become subject to additional fire safety building and defensible space regulations under PRC Section 4291 and the California Building Code Chapter 7A (materials and construction standards for exterior wildfire exposure). (CA Legislative Info, n.d.)

2. Police Services

❑ California Constitution Article XIII, Section 35

Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a one-half percent sales tax to be expended exclusively for local public safety services, including police protection. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Section 30056 provides that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on police protection, as well as other public safety services. Revenues allocated to cities and counties must be used exclusively for front-line public safety services and cannot be diverted for other purposes. Subdivision (a)(2) of Section 35 provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." In *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including police protection, and that it is reasonable to conclude that the city will comply with that provision to ensure that public safety services are provided. (City of Palmdale, 2022a, p. 4.15-6)

3. School Services Regulations and Plans

❑ Critically Overcrowded School Facilities Program - Assembly Bill 16 (2002)

In 2002, Assembly Bill No. 16 (AB 16) created the Critically Overcrowded School Facilities program, which supplemented the new construction provisions within the School Facilities Program (SFP). The SFP provides State of California funding assistance for new facility construction projects and modernization projects. The Critically Overcrowded School Facilities program allows school districts with critically overcrowded school facilities, as determined by the California Department of Education (CDE), to apply for new construction projects in advance of meeting all SFP new construction program requirements. Districts with SFP new construction eligibility and school sites included on a CDE list of source schools may apply. (CA Legislative Info, n.d.)

The Project proposed is an industrial use that would not directly generate any additional school children or the need for additional schools or the physical alteration of schools.

❑ School Facilities Act - Assembly Bill 2926 (1986)

To assist in providing school facilities to serve students generated by new development, Assembly Bill (AB) 2926 was enacted in 1986 and authorized a levy of impact fees on new residential and commercial/industrial development. The ability of local governments to collect fees was subsequently limited by the Leroy F. Greene School Facilities Act of 1998.

❑ Leroy F. Greene School Facilities Act of 1998 – Sentate Bill 50 (1988)

The Leroy F. Greene School Facilities Act was enacted pursuant to Senate Bill 50 (SB 50) in 1998, which amended existing State law governing school fees. SB 50 amended California Government Code Section 65995(a) to prohibit state or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with "any legislative or adjudicative act...by any state or local agency involving...the planning, use, or development of real property...." (CA Legislative Info, n.d.)

The legislation also amended California Government Code Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act involving the planning, use or development of real property." As such, SB 50 established the base amount of allowable developer fees as $1.93 per square foot for residential and $0.31 per square foot for commercial construction. These base amounts are commonly referred to as "Level 1 fees" and are the same caps that were in place at the time SB 50 was enacted. Level 1 fees are subject to inflation adjustment every two years. In certain circumstances, for residential construction, school districts can impose fees that are higher than Level 1 fees. (CA Legislative Info, n.d.)

The Project proposed is an industrial use that would not directly generate any additional school children or the need for additional schools or the physical alteration of schools.

4. Recreation

❑ Quimby Act, California Government Code § 66477

The State of California's Quimby Act was established by the California Legislature for the purpose of preserving open space and providing park facilities for California's growing communities. The Quimby Act allows local agencies to establish ordinances requiring residential subdivisions to provide land or "in-lieu-of" fees for park and recreation purposes. This State Act requires the dedication of land and/or imposes a requirement of fees for park and recreational purposes as a condition of approval of a tentative tract or parcel map. (CA Legislative Info, n.d.)

The Project proposed is an industrial use and does not involve a residential component; therefore, the Quimby Act is not applicable to the proposed Project.

B. Local Regulations

1. Palmdale Fire Code

As part of Palmdale Municipal Code (PMC) Chapter 8.04, Adoption of Health, Safety, and Technical Construction Codes, as amended, Title 32, Fire Code, of the Los Angeles County Code, adopting with certain changes and amendments the 2019 Edition of the California Fire Code and 2018 Edition of the International Fire Code, was adopted and is referred to as the Palmdale Fire Code. Relevant to the

proposed Project, the Fire Code sets requirements for fire flow to buildings (City of Palmdale, 2022a, p. 4.15-7) (PMC, 2025)

2. Palmdale Municipal Code Chapter 3.45

Pursuant to PMC Chapter 3.45, Public Facility Development Impact Fee Requirements, the City collects Development Impact Fees for public facilities in order to mitigate environmental impacts derived from projects. The fees are required on applicable residential and non-residential developments, and funds collected via these fees are used to construct, expand, or rehabilitate public facilities within the City. (City of Palmdale, 2022a, p. 4.15-7) (PMC, 2025)

4.12.3 Basis for Determining Significance

Based on Section XV of Appendix G to the State CEQA Guidelines, the Project would result in a significant impact to public services if the Project or any Project-related component would:

a. *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*
    i. *Fire protection?*
    ii. *Police protection?*
    iii. *Schools?*
    iv. *Parks?*
    v. *Other public facilities?*

The evaluation of potential impacts to public services presented below is based upon whether existing public services can meet the demands of the Project based on established thresholds, including maintaining acceptable service ratios, staffing levels, adequate equipment, response times, or other performance objectives. The methodology includes a review of existing conditions and available service capacities based on agency data and adopted plans. Demand on public services is not an environmental impact under CEQA but if the additional demand placed on public services by a development project would cause the need to physically expand existing public service facilities or to construct a new facility (fire station, police station, school, park, etc.), the environmental effects resulting from the expansion or new construction is evaluated.

4.12.4 IMPACT ANALYSIS

Threshold a:	***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***
i.	***Fire protection?***

The LACFD provides fire protection, first response emergency, and medical services within the City. Although fire protection services are available to the Project site under existing conditions, the Project site is vacant and undeveloped. Therefore, implementation of the Project and the introduction of an industrial building to the Project site would place an additional demand on existing LACFD resources to service the site. The proposed building is proposed to be constructed with concrete tilt-up walls, which are non-combustible. The building's roof would have combustible components as would the building's contents.

The Project would be required by the City to conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety. Based on the building type, the building would be equipped with an Early Suppression, Fast Response (ESFR) fire sprinkler system. ESFR systems incorporate high volume, high-pressure sprinkler heads to provide necessary fire protection. While most other sprinkler systems are intended to control the growth of a fire, an ESFR sprinkler system is designed to suppress a fire. To suppress a fire does not necessarily mean that the system will extinguish the fire but rather it is meant to "knock" the fire back down to its point of origin. ESFR systems provide buildings with a high margin of fire safety and also allow more time for emergency responders to reach a fire incident before a fire spreads from its point of origin.

In addition, access routes to the Project site are required to be maintained throughout construction and buildout of the Project. As required by the PMC and the Fire Code, the Project site is designed to accommodate fire truck access by providing 28-foot-wide fire lane surrounding the proposed building.

Development of the proposed Project would nonetheless place an additional demand on existing LACFD resources and personnel by adding combustible materials to the site as part of Project implementation. As discussed in EIR Section 3.0, *Project Description*, the Project entails the construction of a one industrial warehouse building. The Project could result in an increased number of emergency and public service calls due to the presence of a new structure, and associated traffic, employees, and visitors. However, demand on services is not considered an impact under CEQA unless such demand causes physical changes in the environment, such as the need to construct a new or physically altered fire station. Although new fire protection facilities ultimately may be needed in the LACFD service area to serve full buildout of the City of Palmdale, the Project would not in and of itself trigger the need for a new fire station or physical alterations to existing fire stations. The nearest LACFD fire station to the Project site is LACFD Station No. 24, located approximately 1.12 miles

west of the Project site (Google Earth, n.d.). As such, no impact would occur associated with fire protection facilities as a direct result of implementation of the Project.

The Project is required to adhere to PMC Chapter 3.45, which requires development applicants to pay public facility fees to address service demands of new development on the City's existing fire protection facilities. Payment of the required Public Facility Development Impact Fee would ensure that the Project provides fair share funds for the provision of additional public services, including fire protection services, which may be applied to fire facilities and/or equipment to offset the incremental increase in the demand for fire protection services that would be created by the Project. Any new or physically altered facilities that could possibly be implemented using this funding is speculative and beyond the scope of analysis required to be conducted in this EIR for proposed Project.

Although implementation of the Project would place demand on fire protection services, it would not result in the need for new or physically altered fire protection facilities. Because implementation of the Project would not result in environmental impacts associated with fire protection facilities, no impact would occur.

Threshold a:	***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***
ii.	***Police protection?***

As previously indicated, the LACSD provides police protection services within the Project area. Implementation of the Project and the introduction of one industrial warehouse building to the Project site could result in an incremental increase in demands on service to address potential criminal activity such as burglaries, thefts, vandalism, etc. However, police protection services are not "facility-driven," meaning that the provision of such services are not heavily reliant on facilities in order to effectively patrol a beat. An expansion of, or intensification of development within a patrol beat does not necessarily result in the need for additional facilities if police officers and patrol vehicles are equipped with adequate telecommunications equipment in order to communicate with police headquarters. Thus, the Project would not directly result in the need for any new or expanded facilities for police protection services. (City of Palmdale, 2022a, p. 4.15-10)

Although the Project would not directly result in the need for new or expanded police protection facilities, the Project would result in an incremental increase in demand for police protection services. The Project is required to adhere to PMC Chapter 3.45, which requires development applicants to pay Development Impact Fees to address the impacts of new development on the City's existing services and facilities, including police protection. Payment of the required fee would ensure that the Project provides fair share funds for the provision of additional police protection services, which may be applied to police facilities and/or equipment to offset the incremental increase in the demand for police protection services that would be created by the Project. Any new or physically altered facilities that

could possibly be implemented using this funding is speculative and beyond the scope of analysis required to be conducted in this EIR for the Project.

Although implementation of the Project would place demand on police protection services, it would not result in the need for new or physically altered police protection facilities. Because implementation of the Project would not result in environmental impacts associated with police protection facilities, no impact would occur.

Threshold a:	***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***
iii.	***Schools?***

The Project does not propose any type of residential use or other land use that may directly generate a school-aged population. As previously indicated, the Project site is located within the service area of the PSD for elementary and middle school services and the AVUHSD for high school services. However, because no residential uses are proposed as part of the Project, the Project would not result in a direct demand for new or expanded school services in the local area; thus, no impact would occur.

Notwithstanding, it is a reasonable assumption that the Project's building user would employ residents living in the area, which could potentially place additional demand on public educational services and school facilities if households with school-aged children choose to reside in the school district due to the availability of these jobs. Although the PSD and/or AVUHSD may need to construct new school facilities to meet growing public education demands within their attendance boundaries, the Project would not directly or measurably cause or contribute to the need for new or expanded school facilities. Although the Project would not result in a direct increase in the demand for school services, the Project Applicant would be required to contribute fees to the PSD and the AVUHSD pursuant to the Leroy F. Greene School Facilities Act of 1998. Pursuant to the Act and Government Code Section 65995, , payment of school impact fees constitutes full and complete mitigation for any Project-related indirect effects to school services. Accordingly, no physical environmental impacts associated with school services would occur as a result of implementation of the Project. Any new or physically altered school facilities that could possibly be implemented using this funding is speculative and beyond the scope of analysis required to be conducted in this EIR for the proposed Project.

Although implementation of the Project may place an indirect demand on school services, it would not result in the need for new or physically altered school facilities. Because implementation of the Project would not result in environmental impacts associated with school facilities, no impact would occur.

Threshold a:	***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***
iv.	***Parks?***

The Project does not propose any residential uses or other land use that may directly or indirectly generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities such that they would experience physical change or cause the need to construct or physically alter a park or other recreation facility. The Project's workforce may utilize park facilities during their lunch hour or workday breaks, however, the Project as well as other development projects in the area, would be required to pay Development Impact fees; thus, no impact would occur.

Threshold a:	***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***
v.	***Other public facilities?***

The Project would not directly substantially increase the residential population in the City and therefore is not expected to result in a demand for other public facilities/services, including libraries, community recreation centers, post offices, and animal shelters. As such, implementation of the proposed Project would not adversely affect other public facilities or require the construction of new or modified public facilities and no impact would occur.

The Project is required to adhere to PMC Chapter 3.45, which requires development applicants to pay Development Impact Fees to address usage demands from new development on the City's existing facilities. Payment of the required development impact fees would ensure that the Project provides fair share funds for the provision of other public facilities. Accordingly, no physical environmental impacts associated with the other public facilities would occur from Project implementation. Any new or physically altered public facilities that could possibly be implemented using development impact fee funding is speculative and beyond the scope of analysis required to be conducted in this EIR for the proposed Project.

4.12.5 CUMULATIVE IMPACT ANALYSIS

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the service areas for the LACFD, LACSD, PSD, and AVUHSD for fire protection, police protection, and school services, as land uses outside the service area for these agencies would have no potential to contribute to Project-related cumulatively-considerable impacts. The cumulative study area for park facilities is a radius of two miles from the

Project site, which is a reasonable distance to travel for park use from origin to destination. The cumulative study area for library services is the buildout of the City of Palmdale, as the Palmdale City Library is intended to serve residents within the City of Palmdale.

Fire Protection Services

Although new fire protection facilities ultimately may be needed in the LACFD service area to serve full buildout of the City of Palmdale, the proposed Project in and of itself would not trigger the need for a new fire station or physical alterations to existing fire stations. Additionally, the Project would result in an incremental increase in requests for service, which would affect the ability of the Fire Department to provide acceptable levels of service. These effects include an increased number of emergency and public service calls due to the development of one industrial warehouse building, increased traffic volumes, and an incremental increase in the local workforce. However, the proposed Project and all cumulative developments within the City of Palmdale or surrounding areas would be required to contribute Development Impact Fees to address the impacts of each development on the City's existing fire protection facilities. Mandatory fee contributions by the Project Applicant and cumulative developments would ensure that adequate funding is provided to the LACFD for the acquisition of additional facilities, equipment, and personnel, as needed.

It is not possible to identify environmental impacts that may be associated with the development of any new or physically altered fire protection facilities until a specific proposal and design for the facility is prepared by the LACFD. Accordingly, cumulative impacts due to the construction of new or expanded fire protection facilities are too speculative for evaluation in this EIR (CEQA Guidelines § 15145). Environmental effects of such fire protection facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded fire protection facilities put forth by the LACFD. Accordingly, impacts would be less than cumulatively considerable.

Sheriff Protection Services

Although the Project site would be adequately served by sheriff facilities, the additional demand for services generated by the Project, when considered in conjunction with other on-going development throughout the City of Palmdale, has the potential to adversely affect service response times. However, the proposed Project and all cumulative developments within the City of Palmdale or surrounding areas would be required to contribute Development Impact Fees to address the impacts of each development on the City's existing sheriff protection facilities. Mandatory fee contributions by the Project Applicant and cumulative developments would ensure that adequate funding is provided to the LACSD for the acquisition of additional sheriff protection facilities, equipment, and personnel, as needed.

It is not possible to identify environmental impacts that may be associated with the development of any new or physically altered sheriff's station facilities until a specific proposal and design for the facility is prepared by the LACSD. Accordingly, cumulative impacts due to the construction of new or expanded sheriff's stations are too speculative for evaluation in this EIR (CEQA Guidelines § 15145). Environmental effects of such police protection facilities and any associated mitigation would be

identified through a future CEQA process required in association with any future proposals for new or expanded fire protection facilities put forth by the LACSD. Accordingly, impacts would be less than cumulatively considerable.

School Services

The proposed Project would entail development of the site with one industrial warehouse building, which is not a land use that involves residential development; therefore, the Project would not result in a direct demand for school services or new or expanded school facilities. Although the Project may indirectly result in an increase in school-aged children within the PSD and/or the AVUHSD, the Project Applicant would be required to contribute fees as required by SB 50. Other cumulative developments, including both residential and non-residential developments, would similarly be required to contribute fees pursuant to SB 50. Pursuant to SB 50, payment of school impact fees constitutes full and complete mitigation for Project-related impacts to school services. As such, and with mandatory fee payment, the Project's impacts to school services and facilities would be less than cumulatively considerable.

Parks

The Project does not propose any residential uses or other land use that may directly or indirectly generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities such that they would experience physical change or cause the need to construct or physically alter a park or other recreation facility. The Project's workforce may utilize park facilities during their lunch hour or workday breaks, however, the Project as well as other development projects in the area, would be required to pay Development Impact fees; thus, impacts would be less than cumulatively considerable.

The proposed Project and all cumulative developments within the City of Palmdale or surrounding areas would be required to contribute Development Impact Fees to address the impacts of each development on the City's parks. Mandatory fee contributions by the Project Applicant and cumulative developments would ensure that adequate funding is provided. In addition, the Project and all cumulative developments in the City would contribute property taxes.

Other Public Facilities

The Project would not directly substantially increase the residential population in the City and therefore is not expected to result in a demand for other public facilities/services.

The proposed Project and all cumulative developments within the City of Palmdale or surrounding areas would be required to contribute Development Impact Fees to address the impacts of each development on the City's existing public facilities. Mandatory fee contributions by the Project Applicant and cumulative developments would ensure that adequate funding is provided. In addition, the Project and all cumulative developments in the City would contribute property taxes.

Accordingly, cumulative impacts due to the construction of new or expanded other public facilities are too speculative for evaluation in this EIR (CEQA Guidelines § 15145). Environmental effects of such facilities and any associated mitigation would be identified through a future CEQA process required in association with any future proposals for new or expanded facilities. Accordingly, impacts would be less than cumulatively considerable.

4.12.6 Significance of Impacts

Threshold a.i: No Impact. The Project would place demand on fire protection services but would not result in the need for new or physically altered fire protection facilities. No impact would occur.

Threshold a.ii: No Impact. The Project would place demand on sheriff's services but would not result in the need for new or physically altered sheriff station facilities. No impact would occur.

Threshold a.iii: No Impact. The Project would not directly generate a residential population; therefore, the Project would not directly or indirectly impact school services in the local area or cause the need for new or physically altered school facilities. No impact would occur.

Threshold a.iv: No Impact. The Project would not directly generate a residential population; therefore, the Project would not directly or indirectly impact park services in the local area such that they would experience physical change or cause the need to construct or physically alter a public facility. No impact would occur.

Threshold a.v: No Impact. The Project would not directly generate a residential population; therefore, the Project would not directly or indirectly impact other public facilities in the local area such that they would experience physical change or cause the need to construct or physically alter a public facility. No impact would occur.

4.12.7 Mitigation

No impact would occur to Public Services; therefore, no mitigation is required.

4.12.8 Design Features (DF) and Regulatory Requirements (RR)

The City of Palmdale is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Public Services, which include the following regulatory requirements and design features. The Project shall be conditioned to implement the following design features and regulatory requirements as part of the City's Conditions of Approval for the Project.

PS DF-1 As a condition of the Project's tenant improvement building permit, an Early Suppression Fast Response (ESFR) fire sprinkler system or equivalent shall be installed in the warehouse portion of the building.

PS RR-1 As a condition of Project approval, the proposed Project shall conform to all mandatory local, State, and federal laws, ordinances, and standards relating to fire safety. Among other items, these requirements include conformance with the Uniform Building Code Section 1503, which requires that all buildings be constructed with fire retardant roofing material. Access routes in the Project area would be required to be maintained throughout construction and buildout of the proposed Project.

PS RR- 2 The Project shall adhere to PMC Chapter 3.45, Public Facility Development Impact Fee Requirements, which requires payment of a Development Impact Fee to assist the City in providing for fire protection facilities, including fire stations; providing for police protection facilities; and providing for other public services and facilities. Payment of the Development Impact Fees would ensure that funds are available for capital improvements, such as land/equipment purchases and fire station construction.

PS RR-3 Prior to issuance of occupancy permits, the Project Applicant shall contribute appropriate school impact fees to the Palmdale School District (PSD) and the Antelope Valley Unified School District (AVUHSD) at the rates established by the PSD and the AVUHSD, as required by Public Education Code § 17072.10-18.

4.13 TRANSPORTATION

The analysis and information in this subsection is based on the "Pacific Palmdale Center Traffic Impact Analysis," dated October 13, 2025, prepared by Translutions, Inc., attached to this EIR as *Technical Appendix I1,* and the "Pacific Palmdale Center - Vehicle Miles Traveled (VMT) Analysis," dated February 14, 2025, and attached to this EIR as *Technical Appendix I2*. All references used in this subsection are included in EIR Section 7.0, *References*.

California Public Resources Code Section 21099 is a provision of CEQA, added by Senate Bill (SB) 743 in 2013. It primarily addresses the analysis of transportation impacts under CEQA and directed the Governor's Office of Planning and Research (OPR) to identify alternative metrics for evaluating transportation impacts under CEQA. Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." Adopted changes to the CEQA Guidelines in response to Section 21099 include Section (5064.3 that specifies that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by OPR provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects. (Translutions, 2025b)

The City of Palmdale prepared and adopted the *Analyzing Vehicle Miles Traveled (VMT) for CEQA Compliance - SB 743 VMT Implementation Guidelines for the City of Palmdale* (City's Guidelines) in May 2024 to address changes to CEQA pursuant to SB-743 to include VMT analysis methodology, screening tools, and VMT thresholds. (Translutions, 2025b)

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of transportation.

4.13.1 EXISTING CONDITIONS

A. Existing Roadway Conditions

The Palmdale Roadway Classification presents an enhancement to the functional Federal Highway Administration (FHA) and California Road System classification that is more focused on the scale and connective role of each street with Palmdale's roadway network. The roadways are organized into the following street types: Regional, Crosstown, Connector and Neighborhood Streets. (Translutions, 2025a, p. 19)

- Regional Streets: Regional streets provide the principal network for regional travel connecting Palmdale to other communities. They have limited commercial frontages and may overlap with existing or planned designated truck routes.

- Crosstown Streets: Crosstown streets provide the principal network for citywide travel by all modes, including walking, bicycling, transit, and automobiles. Most commercial land uses in Palmdale are accessed directly via Crosstown streets. Crosstown streets should have a

minimum of 8-foot sidewalks to accommodate pedestrian travel and other activities. Additional width is necessary to accommodate the sidewalk furniture zone on commercial corridors to support vibrant commercial use with minimal setback on commercial lots. Bicycle facilities on Crosstown streets should be dedicated bicycle lanes with a buffer. Crosstown streets also make up most of the transit priority corridor network.

- Connector Streets: Connector streets provide connections for all modes of travel between neighborhoods and activity centers and provide direct access to land uses while linking Crosstown and Neighborhood streets. Connector streets tend to have fewer driveways, higher speed limits, and more signalized intersections than Neighborhood streets. Connector streets are also an essential component of the citywide bicycle network.

- Neighborhood Streets: Neighborhood streets are found mostly in residential neighborhoods and provide access to adjacent land uses, typically housing. Neighborhood streets should be designed to accommodate automobiles traveling at lower speeds. Traffic calming elements such as bulb outs, alternating chicanes, landscaping, and on-street residential parking should be incorporated. These streets prioritize pedestrians traveling on sidewalks. Bicycle facilities on neighborhood streets may include shared travel lanes.

Regional access to the Project site is provided by SR-14 to the west. Local access is provided by the following existing roadways:

- **Division Street** is a two-lane roadway oriented in the north-south direction and borders the western edge of the Project site. Division Street is classified as Crosstown Street in the City's General Plan.

- **West Rancho Vista Boulevard / East Avenue P** is a four-lane roadway oriented in the east-west direction and borders the southern edge of the Project site. West Rancho Vista Boulevard / East Avenue P has a raised median east of Sierra Highway, and a two-way left turn lane median west of Sierra Highway. West Rancho Vista Boulevard/East Avenue P is classified as a Crosstown Street in the City's General Plan.

- **Sierra Highway** is a four-lane roadway oriented in the north-south direction. Sierra Highway has a raised median in the Project vicinity. Sierra Highway is classified as a Regional Street in the City's General Plan.

- **8th Street** is oriented in the north-south direction. It is a five-lane roadway between Lockheed Way and West Rancho Vista Boulevard/East Avenue P. 8th Street is classified as a Connector Street in the City's General Plan. (Translutions, 2025b, p. 22)

B. Goods Movement and the City of Palmdale's Truck Route

According to the City's General Plan, goods within and passing through Palmdale move via truck and the Union Pacific Railroad (UPRR). Designated truck routes prioritize automobile and heavy vehicle usage. Commercial vehicles with a manufacturer's gross vehicle weight rating of 10,000 or more must use designated truck routes within City limits, as designated by the PMC, unless they are making pickups or deliveries of goods, wares, or merchandise to or from a building, or for delivering materials to support construction. (City of Palmdale, 2023, p. 147)

The City's General Plan Circulation and Mobility Element identifies truck routes to accommodate the regional circulation needs of large trucks. Vehicles that weigh more 10,000 pounds must use the following truck routes in the City as shown on Figure 4.13-2, *Designated Truck Route Network* (City of Palmdale, 2023, p. 166). As shown on Figure 4.13-2, Rancho Vista Boulevard and / East Avenue P and Sierra Highway are the closest truck routes to the Project site.

C. Existing Transit Service

According to the City's General Plan, public transit is designed to serve intra-county and local travel needs. The existing transit system mostly caters to regional commute patterns (City of Palmdale, 2023, p. 146). The City of Palmdale is currently served by the Antelope Valley Transit Authority (AVTA), a public transit agency serving various jurisdictions within Los Angeles County. Based on a review of the existing transit routes within the vicinity of the Project site, AVTA Routes 3 and 8 run along West Rancho Vista Boulevard / East Avenue P and Sierra Highway, respectively, within the vicinity of the Project site. (AVTA, 2025)

- Route 3 provides service near the Project site along the Project frontage. Route 3 travels along West Rancho Vista Boulevard / East Avenue P and operates at a 30-minute headway and connects the Project site to the Palmdale Transportation Center. The nearest stops are located on either side of West Rancho Vista Boulevard / East Avenue P near 3rd street and Sierra Highway along to the Project's southern boundary.

- Route 8 provides service near the Project site. Route 8 travels along Sierra Highway and operates at an approximate headway of 90 minutes. Route 8 is an express route and does not have a stop in the Project vicinity (Translutions, 2025a, p. 22)

Transit service is reviewed and updated by AVTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. Existing AVTA transit routes and the planned priority transit network are shown on Figure 4.13-3,*Existing Transit and Pedestrian Facilities.*.

Commuter rail service is provided by Metrolink, which is operated by the Southern California Regional Rail Authority (SCRRA). Metrolink train service is available between the counties of Ventura, Los Angeles, San Bernardino, Orange, Riverside, and north San Diego. The area is served by the Palmdale

Transportation Center/ Metrolink Station and is approximately 1.3 miles south of the Project site. (Translutions, 2025a, p. 22)

D. Future Transportation Projects

Below is a description of future transportation projects planned for the area.

1. California High Speed Rail

The California High-Speed Rail Authority (CHSRA) is responsible for planning, designing, building and operation of a high-speed rail system that will connect the mega-regions of the State. At this time, no schedule has been established for completing construction of the high-speed rail line sections between Bakersfield and Palmdale or between Palmdale and Los Angeles Union Station. Due to Palmdale's location along the corridor, linking the Central Valley and Los Angeles basin, accommodation of future high-speed rail is a consideration of the City's Circulation and Mobility Element. To accommodate the HSR station, the Palmdale Transportation Center would be relocated south of the existing location, to a location between Avenue Q and Palmdale Boulevard. In June 2024, the California High-Speed Rail Authority Board of Directors approved the final environmental document for the 38-mile rail segment from Palmdale to Burbank, a major milestone that marks the full environmental clearance from downtown San Francisco to Los Angeles. (City of Palmdale, 2023, p. 143; CA High Speed Rail Authority, 2025)

2. High Desert Corridor

The High Desert Corridor (HDC) is a proposed project to create a high-capacity connection between SR-14 in Palmdale and Interstate 15 (I -15) in Victorville, continuing as an expressway to join with SR-18 in Apple Valley, which would be implemented after the General Plan horizon year. The HDC project would also include bicycle facilities, extending 36 miles along the corridor from US 395 in Adelanto to 20th Street East, providing a bike route connection to the Palmdale Transportation Center. Some of the right-of-way required for the project may also accommodate an HOV lane in each direction, plus a high- speed passenger rail line. (City of Palmdale, 2023, p. 143)

3. Brightline West Connection to Las Vegas

The proposed high-speed rail feeder service would be modeled on the Brightline service currently operating in Florida between Fort Lauderdale and Miami. The high-speed rail feeder may be built within the HDC right-of-way, primarily within the highway median. The stop serving Brightline West would be at the Palmdale Multimodal Rail Station to be located south of the existing Palmdale Transportation Center between Avenue Q and Palmdale Boulevard. The initial Southern California station is proposed to be in Victorville and intends to add stations and provide connections to Metrolink and future California High-Speed Rail. (City of Palmdale, 2023, p. 143)

4. Antelope Valley Line Study

The Los Angeles County Metropolitan Transportation Authority (Metro) is a member agency of the Southern California Regional Rail Authority (SCRRA). Metro, in collaboration with SCRRA, is studying potential opportunities to add more rail service from Lancaster and Palmdale to Los Angeles. The Antelope Valley Line Study has two objectives: to look at increasing the frequency of the Metrolink service; and to develop a phased and prioritized approach for capital improvements based on benefits, costs and impacts in Los Angeles County. The average speed for this line is approximately 40 miles per hour, and passenger rail travel time between Palmdale and Los Angeles Union Station is approximately two hours. The Antelope Valley Line is currently Metrolink's third busiest line with approximately 7,000 passengers per weekday. The line is facing a variety of service challenges due to its aging infrastructure, which was constructed through mountainous terrain with single track in many areas. The final report identifies rail infrastructure projects needed to deliver the track capacity necessary for increased service levels, including potential double-tracking of portions of the line that are currently single track, extension of passing sidings, additional platforms at stations, and improved signaling systems. Adding late night train service, more frequent service and bidirectional service are some of the recommendations likely to move forward toward implementation. (City of Palmdale, 2023, p. 144)

E. Existing Bicycle and Pedestrian Facilities

According to the City's General Plan, the City's bicycle network is anchored by a 4.7-mile Class I bicycle path located along Sierra Highway from Technology Drive, continuing north into the City of Lancaster. Class I bike paths are multi-use paths physically separated from motor vehicle traffic. While the path provides a regional link, the facility is disconnected from communities outside of central Palmdale. (City of Palmdale, 2023, p. 145)

The Sierra Highway Trail is located east of the Project site and east of Sierra Highway. As shown on Figure 4.13-4, *Existing and Planned Bicycle Network Map*, the City's General Plan plans for a bikeway along the Project site's frontage on West Rancho Vista Boulevard / East Avenue P, which would extend west beyond Avenue N-8 West and east beyond 10th Street East. As shown in Figure 4.13-3, there are existing sidewalks on segments of Division Street and West Rancho Vista Boulevard /East Avenue P in the Project vicinity

4.13.2 REGULATORY SETTING

A. State Regulations

1. Assembly Bill 1358 – Complete Streets Act

In September 2008, Governor Schwarzenegger signed Assembly Bill 1358 (AB 1358), the Complete Streets Act. AB 1358 requires that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities,

seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. By requiring new duties of local officials, AB 1358 imposes a State-mandated local program. AB 1358 required the Office of Planning and Research (OPR) to prepare or amend guidelines for a legislative body to accommodate the safe and convenient travel of users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the general plan, and in doing so to consider how appropriate accommodation varies depending on its transportation and land use context. AB 1358 authorized OPR, in developing these guidelines, to consult with leading transportation experts, including, but not limited to, bicycle transportation planners, pedestrian planners, public transportation planners, local air quality management districts, and disability and senior mobility planners (CA Legislative Info, n.d.).

2. Statewide Transportation Improvement Program

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15th (odd years). Caltrans prepares the Interregional Transportation Improvement Plan (ITIP) and regional agencies prepare Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years) (Caltrans, n.d.).

3. Public Resources Code Section 21099 - Senate Bill 743 (2013)

Senate Bill 743 (SB 743, Steinberg, 2013), which was codified in Public Resources Code Section 21099, required changes to the implementing State CEQA Guidelines regarding the analysis of transportation impacts. As one appellate court explained: "During the last 10 years, the Legislature has charted a course of long-term sustainability based on denser infill development, reduced reliance on individual vehicles and improved mass transit, all with the goal of reducing greenhouse gas emissions. Section 21099 is part of that strategy…" (*Covina Residents for Responsible Development v. City of Covina* (2018) 21 Cal.App.5th 712, 729.) Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (*Id.*, subd. (b)(1); see generally, adopted State CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) To that end, in developing the criteria, OPR has proposed, and the California Natural Resources Agency (CRNA) has certified and adopted changes to the State CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the CRNA's certification and adoption of the changes to the State CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, generally no longer constitutes a significant

environmental effect under CEQA as of July 1, 2020. (Public Resources Code § 21099, subd. (b)(3)) (OPR, 2018).

4. Transportation Development Act (TDA, Mills-Alquist-Deddeh Act)

The Mills-Alquist-Deddeh Act (Senate Bill 325 (SB325)) was enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination. Known as the Transportation Development Act (TDA) of 1971, this law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans. TDA established two funding sources; the Local Transportation Fund (LTF), and the State Transit Assistance (STA) fund. Providing certain conditions are met, counties with a population under 500,000 (according to the 1970 federal census) may also use the LTF for local streets and roads, construction, and maintenance. The STA funding can only be used for transportation planning and mass transportation purposes (Caltrans, n.d.).

5. Road Repair and Accountability Act of 2017

On April 28, 2017, Governor Brown signed Senate Bill 1 (SB 1) (Chapter 5, Statutes of 2017), known as the Road Repair and Accountability Act of 2017. SB 1 augments the base of the State Transit Assistance program essentially doubling the funding for this program. To provide for SB 1 reporting and transparency, transit agencies are asked to work with Caltrans to report on planned expenditures for these augmented funds (Caltrans, n.d.).

B. Regional and Local Regulations

1. SCAG Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)

The SCAG is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. On April 4, 2024, SCAG adopted the 2024-2050 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) ("RTP/SCS"; also referred to herein as "Connect SoCal") with goals to: 1) build and maintain an integrated multimodal transportation network; 2) develop, connect and sustain communities that are livable and thriving; 3) create a healthy region for the people of today and tomorrow; and 4) support a sustainable, efficient and productive regional economic environment that provides opportunities for all residents. Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP.

Connect SoCal includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. Connect SoCal also provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (CARB); these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning (SCAG, 2024a). Connect SoCal is

updated periodically to allow for the consideration and inclusion of new transportation strategies and methods.

2. City of Palmdale General Plan

The Palmdale 2045 General Plan's Circulation and Mobility Element presents the City's long-range approach to transportation, addressing access and mobility within the City. The Circulation and Mobility Element provides a roadway classification system. Corresponding cross-sections, and recommended future networks are provided for motor vehicles, walking, biking, riding transport, and the movement of freight. Goals, policies, and actions provide a framework for advancing health and safety, access to services and opportunities, sustainability, and economic vitality through transportation. Circulation and Mobility Element goals are listed below. (City of Palmdale, 2023, p. 139)

- Goal CM-1. Build and maintain a transportation system that is safe and comfortable for travelers of all modes regardless of age or ability.
- Goal CM-2. Build and maintain a transportation system that accommodates future growth and maintains transportation networks for all modes.
- Goal CM-3. Build and maintain a transportation system that provides affordable, equitable, and efficient access to employment centers and essential services.
- Goal CM-4. Build and maintain a transportation system that enhances quality of life and public health.
- Goal CM-5. Build and maintain a transportation system that fosters a more active and vibrant downtown.
- Goal CM-6. Build and maintain a transportation system that leverages the City's natural setting and reduces impacts to the environment.
- Goal CM-7. Proactively prepare for the future, ensure that implementation of transportation innovations and regional projects align with the City's vision.
- Goal CM-8. Maintain the purpose and need of the essential functions of the City's transportation system.

3. City of Palmdale Municipal Code

❑ **Chapter 17.101 Transportation Demand Management**

PMC Chapter 17.101 discusses the development standards for any development project as it relates to traffic demands. Prior to approval of any development project, the applicant must make provisions for all applicable transportation demand management and trip reduction measures. All facilities and improvements constructed or otherwise shall be maintained in a state of good repair. The property owner shall be responsible for complying with the provisions of this Chapter either directly or by delegating such responsibility as may be appropriate to a tenant or to an agent. (City of Palmdale, 2022, p. 4.17-11)

❑ **Chapter 17.87 Off-Street Parking**

PMC Chapter 17.87 discusses the amount, location, and design of parking and loading access for motor vehicles and bicycles. It also serves to ensure the provision of adequate, accessible, secure, properly lighted, and well-maintained and screened off-street parking facilities. Properly provided and designed parking will facilitate the intended use of the property; reduce traffic congestion and safety concerns; protect the neighborhoods from the effects of vehicular noise and traffic generated by adjacent nonresidential land use district; assure maneuverability of emergency vehicles; and provide a positive visual experience. (City of Palmdale, 2022, p. 4.17-11)

❑ **Chapter 3.40 Traffic Impact Fee Requirements**

PMC 3.40.030 discusses that nonresidential traffic impact fees are required .Except as provided in PMC 3.40.040, the required traffic impact fee for a nonresidential development shall be paid, in an amount established by resolution of the City Council, prior to issuance of the certificate of occupancy for that development; provided, however, that if a nonresidential development project is to be constructed and occupied in phases, and a separate certificate of occupancy will be issued for each phase, payment of the traffic impact fee may be made separately prior to the issuance of a certificate of occupancy for each phase of the development. Pursuant to PMC 3.40.40, a developer shall be exempted from the traffic impact fee requirements of PMC 3.40.020 and 3.40.030 if the developer enters into a development agreement with the City pursuant to which traffic impact fees are assessed to the developer, or transportation improvements are implemented by the developer.

4.13.3 Basis for Determining Significance

According to Section XVII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to transportation and traffic if the Project or any Project-related component would:

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

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

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or,

d) Result in inadequate emergency access.

Regarding Threshold (b), which relates to VMT, based on County Guidelines, the City utilizes the following impact threshold:

- Regarding vehicle miles traveled (VMT), the existing North Los Angeles County average VMT per employee is 18.2 Work VMT/Employee (Translutions, 2025b).

4.13.4 IMPACT ANALYSIS

As discussed previously, the City prepared and adopted the City's Guidelines in May 2024 to address changes to CEQA pursuant to SB-743 to include VMT analysis methodology, screening tools, and VMT thresholds. The City has also implemented a screening tool to evaluate if projects screen out of requiring a VMT analysis, with a presumption of less than significant impacts. The City conducted an evaluation of the proposed project using the City's TREDLite platform. (Translutions, 2025b)

Additionally, Translutions was requested to conduct a detailed analysis for the proposed Project for informational purposes, and to determine if a full analysis would result in significant impacts in spite of the screening tool showing a less than significant impact.

The analysis was conducted based on the City's Guidelines. The analysis was conducted using the City's General Plan Model which is based on the SCAG Regional Transportation Plan Model. This is also the basis of the TREDLite platform and the City's thresholds. The potential employment generated by the proposed Project was calculated using rates for Transportation and Warehousing, and Manufacturing from the SCAG Sustainable Communities Strategy Technical Report (September 3, 2020). The land use category 'Transportation and Warehousing' would yield one employee per 1,700 square feet. This results in 588 employees for the proposed Project. (Translutions, 2025b)

A. Project Trip Generation

Trip generation for the proposed Project is based on the rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual (11th Edition). Trip generation rates for Land Use 154 "High-Cube Transload and Short-Term Storage Warehouse" were used for the Transload and Short-Term Storage portion of the warehouse. Trip generation rates for Land Use 157 "High-Cube Transload Cold Storage Warehouse" were used for the Cold Storage portion of the warehouse. Truck traffic generation was also based on the ITE Trip Generation. Further, the truck trips were converted to passenger care equivalents (PCEs) using the conversion rates of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks and 3.0 for 4+ axle trucks.

Table 4.13-1, *Project Trip Generation*, shows the combined summary of the proposed Project trip generation of the proposed High-Cube Warehouse for the AM peak hour, PM peak hour, and weekday. As shown in Table 4.13-1, the proposed Project is forecast to generate 122 PCE trips in the a.m. peak hour, 131 PCE trips in the p.m. peak hour, and 2,093 PCE daily trips. (Translutions, 2025a, p. 2)

Table 4.13-1 Project Trip Generation

Land Use	Units	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Project Trip Generation (Trips, By Vehicle Type)								
Warehouse	1,000.000 TSF							
Passenger Cars		**58**	**7**	**65**	**27**	**64**	**91**	**1,228**
2-Axle Trucks		4	2	6	2	2	4	93
3-Axle Trucks		2	2	4	2	1	3	55
4+ Axle Trucks		6	7	13	5	4	9	205
All Trucks		12	11	23	9	7	16	353
Total Vehicles		**70**	**18**	**88**	**36**	**71**	**107**	**1,581**
Project Trip Generation (Passenger Car Equivalent Trips, By Vehicle Type)								
Passenger Cars		58	7	65	57	64	91	1,228
Truck PCE								
2-Axle Trucks		6	4	10	3	4	7	140
3-Axle Trucks		4	4	8	4	2	6	110
4+ Axle Trucks		18	21	39	15	12	27	615
Total Truck PCE		**28**	**29**	**57**	**22**	**18**	**40**	**865**
Total PCE		**86**	**36**	**122**	**49**	**82**	**131**	**2,093**

[1]Rates based on Land Use 154 - "High-Cube Transload and Short-Term Storage Warehouse" from Institute of Transportation Engineers (ITE) Trip Generation (11th Edition).
[2]Passenger Vehicle/Truck splits are based on percentages provided in ITE Trip Generation (11th Edition). Truck Splits by axle-type based on data from SCAQMD.
[3]Recommended PCE Factor per County of Riverside *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment (December 2020)*
Source: (Translutions, 2025a, Table A)

B. Project Trip Distribution & Assignment

Project trip distribution patterns for the proposed project were developed based on the location of local and regional destinations, residential uses, and based on discussion with City staff. Due to the existing congestion at the intersection of Rancho Vista Boulevard and Sierra Highway, the City is working on the Rancho Vista Grade Separation Project (STR-019) which consists of a bridge carrying Rancho Vista Boulevard over the Metrolink/UPRR tracks and Sierra Highway. The bridge will provide adequate clearance for present tracks and future proposed high speed rail tracks. The STR-019 project will include a ramp from westbound Rancho Vista Boulevard to northbound Sierra Highway. There will be two connecting ramps ("loop roads") from the west side of Sierra Highway linking to Rancho Vista Boulevard with signalized intersections on Sierra Highway. As a result of the STR-019 project, the surrounding roadway network will change significantly. Therefore, two different project trip distribution patterns were developed, one for the "Without Grade Separation" and the other for the "With Grade Separation" scenarios, while maintaining the regional distribution patterns for both scenarios. (Translutions, 2025b, p. 2)

Threshold a: ***Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?***

The analysis below addresses the Project's potential to result in a conflict with plans, programs, ordinances, or policies that address the circulation system, including transit, roadway, bicycle, and pedestrian facilities. A project that generally conforms with, and does not obstruct, applicable plans, programs, ordinances, and policies, is considered to be consistent. The transportation plans, policies, programs, ordinances, and standards that are relevant to the Project are identified in the analysis below.

A. General Plan Circulation and Mobility Element

As discussed in EIR Section 3.0, *Project Description*, the Project includes roadways improvements on Sierra Highway, West Rancho Vista Boulevard/East Avenue P, and Division Street.

In accordance with CALGreen, secure bicycle parking also would be provided interior to the Project site to encourage biking as a form of transportation. The Project site is located west of Sierra Highway and approximately 100 feet west of the Sierra Highway Bike Trail and approximately 1.3-mile north of the Palmdale Metrolink Station. Further, the Project site is fronted by Sierra Highway on the east; the site is approximately 150 feet west of the active Union Pacific Railroad (UPRR) mainline tracks, which are located east of Sierra Highway, and both Rancho Vista Boulevard and / East Avenue P and Sierra Highway are designated truck routes. The existing rail line also is the location of the planned California High Speed Rail Project, Bakersfield to Palmdale segment. Locating the Project in its proposed location close to the intersection of two designated truck routes (Rancho Vista Boulevard and / East Avenue P and Sierra Highway) is consistent with the General Plan, which establishes the planned truck route to accommodate the regional circulation needs of large trucks, while discouraging truck travel through residential areas (City of Palmdale, 2023, p. 166).

The Project's proposed improvements are fully consistent with all goals and policies of the General Plan's Circulation and Mobility Element, as well as the requirements of the City's Municipal Code. In addition, the Circulation Element indicates that the City's desired Level of Service (LOS) is LOS D or better. As indicated in the Project's Traffic Impact Analysis (*Technical Appendix I1*), although the Project would contribute to projected LOS deficiencies and the need for intersection signalization, the Project would be conditioned to construct improvements, pay fees pursuant to the City's Development Impact Fee (DIF) program, Measure M, and pay fair-share contributions towards improvements not included in any existing fee programs. Construction of public streets to City standards is required and would ensure that the roadway surfaces are built to accommodate the weights and tire friction of all vehicles, including trucks, that are permitted to operate on the public roadway system. The improvements to be constructed as part of the Project, as part of the City's fee programs, or as the result of Project fair-share contributions would ensure that the Project is fully consistent with the General Plan Circulation and Mobility Element policies related to streets and roadways.

B. Transit, Bicycle, and Pedestrian Facilities

As discussed above in Subsection 4.13.1, AVTA Routes 3 and 8 run along West Rancho Vista Boulevard / East Avenue P and Sierra Highway within the vicinity of the Project site and could potentially serve the Project's employees and visitors. Also, the California High Speed Rail Authority is planning for the construction of a high-speed rail line, of which the Bakersfield to Palmdale segment alignment is planned to parallel Sierra Highway east of the Project site, with a station planned south of the Project site that could potentially serve the Project's employees and visitors.

As shown on Figure 4.13-4, the General Plan shows bicycle routes proposed along the Project site's frontage on West Rancho Vista Boulevard /East Avenue P, which would extend west beyond Avenue N-8 West and would extend east beyond 10th Street East. There are limited pedestrian facilities within the vicinity of the Project site. Sidewalks are located along the segments of Division street and West Rancho Vista Boulevard / East Avenue P. Pedestrian crosswalks are located on West Rancho Vista Boulevard /East Avenue P at the intersections with Sierra Highway and 3rd East Street; however, no sidewalks are located on the northbound side of West Rancho Vista Boulevard / East Avenue P, adjacent to the south side of the Project site. The Project would not impact the City's ability to build out the planned bicycle route and sidewalk system and would implement improvements as described above.

The Project would not conflict with any plans or policies regarding existing or proposed bicycle or pedestrian facilities. Because the California High Speed Rail Authority's plans would include using existing UPRR mainline tracks located east of Sierra Highway and east of the Project site, the Project also would not conflict with the California High Speed Rail Authority's plans to construct a high speed rail segment to the west of the Project site. (CA High Speed Rail Authority, 2023)

C. Connect SoCal

SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), referred to as "Connect SoCal" seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal are pertinent to the proposed Project. These goals are meant to provide guidance for considering the proposed Project within the context of regional goals and policies.

Consistency with the Connect SoCal goals identified in Table 4.13-2, *Analysis of Consistency with Connect SoCal Goals*, demonstrates that the Project would not conflict with applicable goals in the 2020-2045 RTP/SCS, adopted for the purpose of avoiding or mitigating an environmental effect. Table 4.13-2 shows how the Project promotes consistency with the guiding principles and policies of the RTP/SCS.

Table 4.13-2 Analysis of Consistency with Connect SoCal Goals

Goal	Project Consistency Discussion	Project Consistency
Goal 1: Encourage regional economic prosperity and global competitiveness.	This policy would be implemented by the cities and counties within the SCAG region as part of comprehensive local and regional planning efforts. The Project would support this goal by providing an employment-generating land uses (i.e., industrial uses) that would help the City better meet its jobs/housing balance. The Project also would support this policy by offering a more balanced array of land uses throughout the Project area.	Consistent
Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	The Project would provide for a maximum building footprint of up to 1,000,000 square feet (s.f.)of industrial uses, that would be easily accessible to Sierra Highway and SR-14, facilitating the movement of goods throughout Southern California.	Consistent
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.	This policy would be implemented by the cities and counties within the SCAG region as part of comprehensive local and regional planning efforts. There are no components of the proposed Project that would adversely affect the preservation, security, or resilience of the regional transportation system. The Project Applicant would contribute fees towards regional improvements required in the Project vicinity. Furthermore, the Project would entail roadway and intersection improvements consistent with the General Plan Circulation and Mobility Element, and the PMC. Further, the City has created its own local Development Impact Fee (DIF) program to impose and collect fees from new residential, commercial, and industrial development for the purposes of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation and Mobility Element. As such, the Project Applicant will be subject to the City's DIF fee program and will pay the requisite City DIF fees at the rates in effect.	Consistent
Goal 4: Increase person and goods movement and travel choices within the transportation system.	This policy would be implemented by the cities and counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would expand facilities for goods movement in the local	Consistent

Goal	Project Consistency Discussion	Project Consistency
	area, and would construct or contribute fees towards regional transportation improvements.	
Goal 5: Reduce greenhouse gas emissions and improve air quality.	This policy would be implemented by the cities and counties within the SCAG region as part of comprehensive transportation planning efforts. The Project would entail development of an industrial building, in a region that experiences a relatively low jobs-to-housing ratio; thus, the Project would serve to reduce worker commute times in the local area by providing jobs in close proximity to housing. Additionally, and as discussed in EIR Subsections 4.2, *Air Quality*, and 4.7, *Greenhouse Gas Emissions*, the Project could be required to implement mitigation measures to reduce air quality and greenhouse gas emissions to the maximum extent feasible.	Consistent
Goal 6: Support healthy and equitable communities.	An analysis of the Project's environmental impacts is provided throughout this EIR and mitigation measures, project design features, and regulatory requirement compliance are specified as warranted. Air quality is addressed in EIR Subsection 4.2, *Air Quality*, which identifies mitigation measures to reduce air quality emissions to less than significant impacts. Additionally, the Project would implement sidewalks improvements along public roadway rights-of-way in a manner that is consistent with General Plan. EV supply equipment would be installed as part of the Project to allow charging stations to be supplied based on demand. The Project study area is within the service area of AVTA, a public transit agency serving various jurisdictions within the Antelope Valley. The Project would not conflict with any existing or planned AVTA routes. Additionally, the Project would be consistent with or otherwise would not conflict with any applicable General Plan policies or requirements, including policies and requirements included in the General Plan's Equitable and Healthy Communities Element and Circulation and Mobility Element. Thus, the Project would facilitate the establishment of healthy and equitable communities.	Consistent
Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	This policy would be implemented by the cities and counties within the SCAG region as part of comprehensive transportation planning efforts. Connect SoCal provides objectives for meeting	Consistent

Goal	Project Consistency Discussion	Project Consistency
	emissions reduction targets set forth by the CARB; these objectives were provided in a direct response to SB 375 which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The Project entails a use that is closely associated with, and relies directly on, the goods movement system (e.g., manufacturing, construction, retail trade, wholesale trade and transportation, and warehousing). The SCAG region is a vibrant hub for international and domestic trade because of its large transportation base and extensive multimodal transportation system. The SCAG region's freight transportation system includes warehouses and distribution centers; the Ports of Los Angeles, Long Beach, and Hueneme; airports; rail intermodal terminals; rail lines, and local streets, State highways, and interstates. Together the system enables the movement of goods from source to market, facilitating uninterrupted global commerce. The region is home to approximately 34,000 warehouses with 1.17 billion square feet (s.f.) of warehouse building space, and undeveloped land that could accommodate an additional 338 million s.f. of new warehouse building space. These regions attract robust logistics activities and are a major reason the region is a critical mode in the global supply chain. Thus, the Project would meet the growing demand for warehouse space and in a location that is easily accessible to regional highways.	
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	This policy provides guidance to the City to leverage new transportation technologies and data-driven solutions that result in more efficient travel. There are no components of the proposed Project that would preclude the City's ability to implement this goal. The Project would meet the growing demand for warehouse space and in a location that is easily accessible to regional highways and result in more efficient travel.	Not Applicable.
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	This policy would be implemented by the cities and counties within the SCAG region as part of comprehensive transportation planning efforts. The Project does not include any residential uses,	Not Applicable

Goal	Project Consistency Discussion	Project Consistency
	and therefore has no potential to conflict with this goal.	
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats.	As discussed in EIR Subsection 4.3, *Biological Resources*, the Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; and the Project would not impact any jurisdictional resources. The Project site is not mapped as containing any important farmland types. Additionally, the Project site is designated by the General Plan for future development with urban land uses, and therefore the Project site is not suitable for conservation as agricultural land.	Consistent

D. Summary

Based on the analysis provided above, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, impacts would be less than significant, and no mitigation is required.

Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

In 2013, the State of California approved legislation (SB 743) to change the primary basis of evaluation of traffic impacts in CEQA from LOS to VMT. CEQA Guidelines Section 15064.3 was approved in December 2018 and became effective in early 2019. Section 15064.3 required agencies to implement the new VMT requirement no later than July 1, 2020. The City of Palmdale adopted the City's Guidelines in May 2024. for the evaluation of VMT under CEQA.

The City conducted an evaluation of the proposed Project using the City's TREDLite platform and determined that the proposed Project screens out of a VMT analysis since it falls in a low VMT area. Therefore, VMT impacts would be less than significant. However, a detailed VMT analysis for the proposed Project was conducted for information purposes.

The City's Guidelines require the use of "Work VMT per Employee" as the metric to evaluate transportation impacts for industrial projects. Work VMT specifically applies to commute trips as represented by the home-based work trip attractions in the City's General Plan Travel Demand Model. The City has adopted a threshold of 4% below existing North Los Angeles County average VMT per employee, which, based on the Guidelines, is 18.2 Work VMT/Employee. (Translutions, 2025b)

As shown in Table 4.13-3, *Project Generated VMT*, the proposed Project generated Work VMT per Employee would be less than the City's threshold. Therefore, impacts are considered to be less than significant.

Table 4.13-3 Project Generated VMT

	Project Generated VMT	Threshold
Total Employment	588	
Total Homebased Work (HBW) VMT	6,804	
VMT per Employee	11.6	15.81/18.2[1]

[1] The TREDLite tool lists a threshold of 15.81 VMT/Employee which is lower than the threshold of 18.2 listed on the City's Guidelines.
Source: (Translutions, 2025b, Table A)

Threshold c: ***Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

The Project site is located at the northeast corner of West Rancho Vista Boulevard / East Avenue P and Sierra Highway, approximately 0.51mile east of SR-14. The Project would allow for a maximum of 1,000,000 square feet (s.f.) of building footprint to be comprised of industrial use and is consistent with the existing General Plan land use and zoning designations of Employment Flex (EMPFX) and Light Industrial (LI), respectively. No General Plan Amendment or zone change would be required as part of the Project. The types of traffic generated during the operation of the Project (i.e., passenger cars and trucks) would be compatible with the type of traffic observed along adjacent roadways under existing conditions. All proposed improvements within the public right-of-way would be installed in conformance with City design standards and project construction activities that would occur in the public right-of-way and are required to adhere to the applicable construction control practices that are specified in the *State of California Department of Transportation Construction Manual* and the *California Manual on Uniform Traffic Control Devices*, to minimize potential safety hazards.

The Project would have access via five driveways. The northern driveway on Division Street would be for automobile access only with full access and the southern driveway would be used by both automobiles and trucks with a right-in-right out (RIRO) access. On Ave O-12 would have two full access driveways - the westerly driveway would be for truck access only and the easterly driveway would be used by both automobiles and trucks. On W. Rancho Vista Boulevard the driveway would be for truck access and only a right out access would be allowed. Driveway access points to the buildings have been designed pursuant to City standards and would not introduce any design hazards. As such, the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible uses.

Threshold d: Would the Project result in inadequate emergency access?

During construction of the proposed Project, Project construction contractors would be required to maintain adequate emergency access routes on site. Additionally, the Project's proposed development plans have been reviewed by the Los Angeles County Fire Department (LACFD), which has determined that the Project's design would provide adequate access for emergency vehicles under long-term operations. As shown previously in Figure 3-3, *Fire Access Plan*, a 28-foot-wide fire lane would be provided interior to the site around the circumference of the proposed warehouse building for sufficient emergency vehicle and fire truck access. Accordingly, the Project would not result in inadequate emergency access, and impacts would be less than significant.

4.13.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other nearby planned developments in the cities of Palmdale and Lancaster including but not limited to the two projects listed in Appendix B of the Project's Traffic Analysis included as *Technical Appendix I1* to this EIR and the California High Speed Rial Authority's planned Bakersfield to Palmdale high speed rail segment. The nearest of the development projects to the Project site is the proposed industrial project to the east of the Project site located on the west side of 8th Street East and south of West Rancho Vista Boulevard /East Avenue P.

Conflict with a Program, Plan, Ordinance or Policy Addressing the Circulation System

As indicated under the analysis of Threshold (a), the Project would be consistent with the City's General Plan and the PMC. Because other cumulative developments would be required to comply with the City's General Plan and ordinances, or the general plan and ordinances of surrounding jurisdictions, the Project would result in less than significant impacts on a cumulatively considerable basis due to a conflict with a program, plan, ordinance, or policy addressing the circulation system.

Conflict or be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)

As indicated under the analysis of Threshold (b) and based on the Project's VMT analysis (*Technical Appendix I2*), the proposed Project falls in a low VMT area and Project generated Work VMT per Employee would be less than the City's threshold. Therefore, the Project would result in less than significant VMT impacts on a cumulatively considerable basis

Increase Hazards Due to a Geometric Design Feature or Incompatible Uses

All public roadway improvements proposed as part of the Project would be constructed to City standards. Other cumulative developments within the cumulative study area likewise would be required to demonstrate that there would be no geometric design feature hazards or impacts due to incompatible risks.

Emergency Access

During Project construction and operations, the Project Applicant would be required to maintain adequate access for emergency vehicles, as required by the PMC. Other cumulative developments similarly would be required to maintain adequate emergency access. Accordingly, cumulative impacts due to inadequate emergency access would be less than significant.

4.13.6 Significance of Impacts Before Mitigation

Threshold a: Less than Significant Impact. The Project is consistent with the RTP/SCS, the City's General Plan, including the goals and policies of the General Plan Circulation and Mobility Element, and also would be required to comply with all applicable requirements of the PMC. As there are no other applicable programs, plans, ordinances, or policies addressing the circulation system, Project impacts due to a conflict with a program, plan, ordinance or policy addressing the circulation system would be less than significant.

Threshold b: Less than Significant Impact. Based on the VMT analysis for the proposed Project, the proposed Project falls in a low VMT area and Project generated Work VMT per Employee would be less than the City's threshold. Therefore, the Project's VMT would be less than significant.

Threshold c: Less than Significant Impact. With mandatory compliance with City roadway and private driveway design standards, the Project would not substantially increase hazards due to a geometric design feature. Additionally, due to the short distance between the Project site and the designated truck routes, the Project would not result in increased hazards to transportation as a result of incompatible uses.

Threshold d: Less than Significant Impact. Adequate emergency access is required to be maintained during both construction and long-term operation of the Project, in accordance with City and Fire Department requirements. Accordingly, the Project would not result in inadequate emergency access, and impacts would be less than significant.

4.13.7 Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

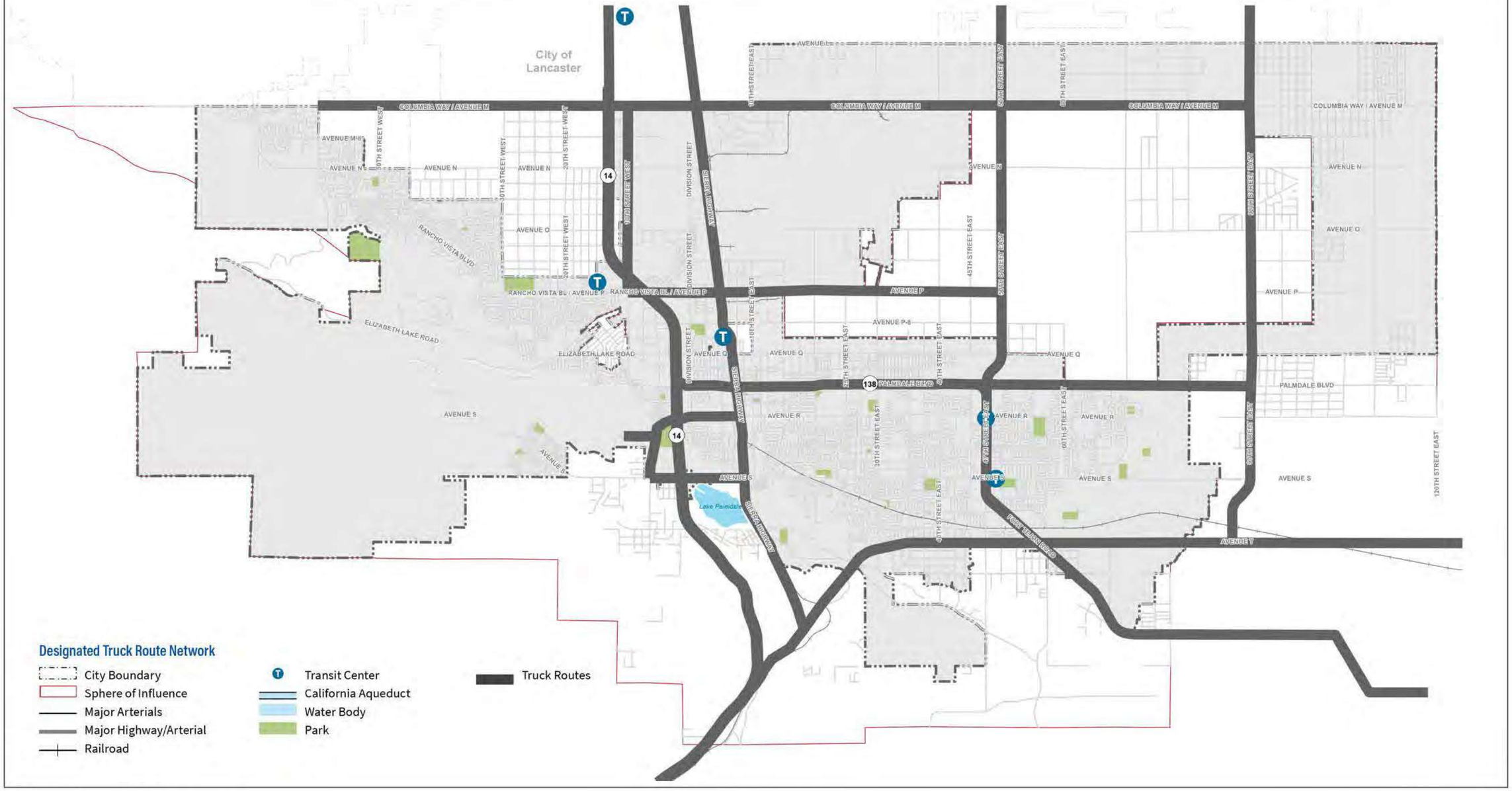


Source(s): Translutions, Inc (01-16-2025)

Figure 4.13-1

Not to Scale

Study Area Intersections

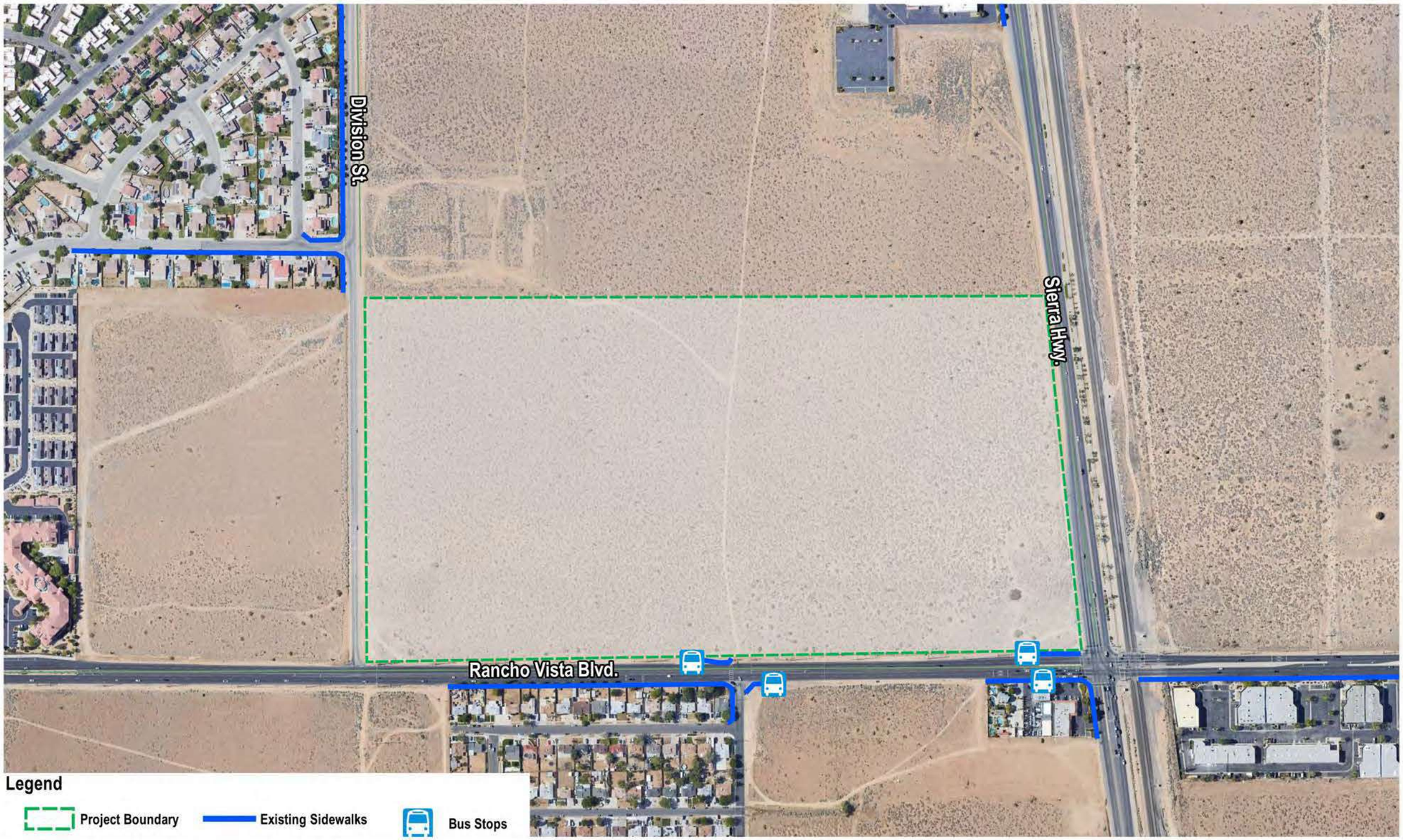


Source(s): City of Palmdale General Plan (04-04-2025)

Figure 4.13-2

Not to Scale

Designated Truck Route Network

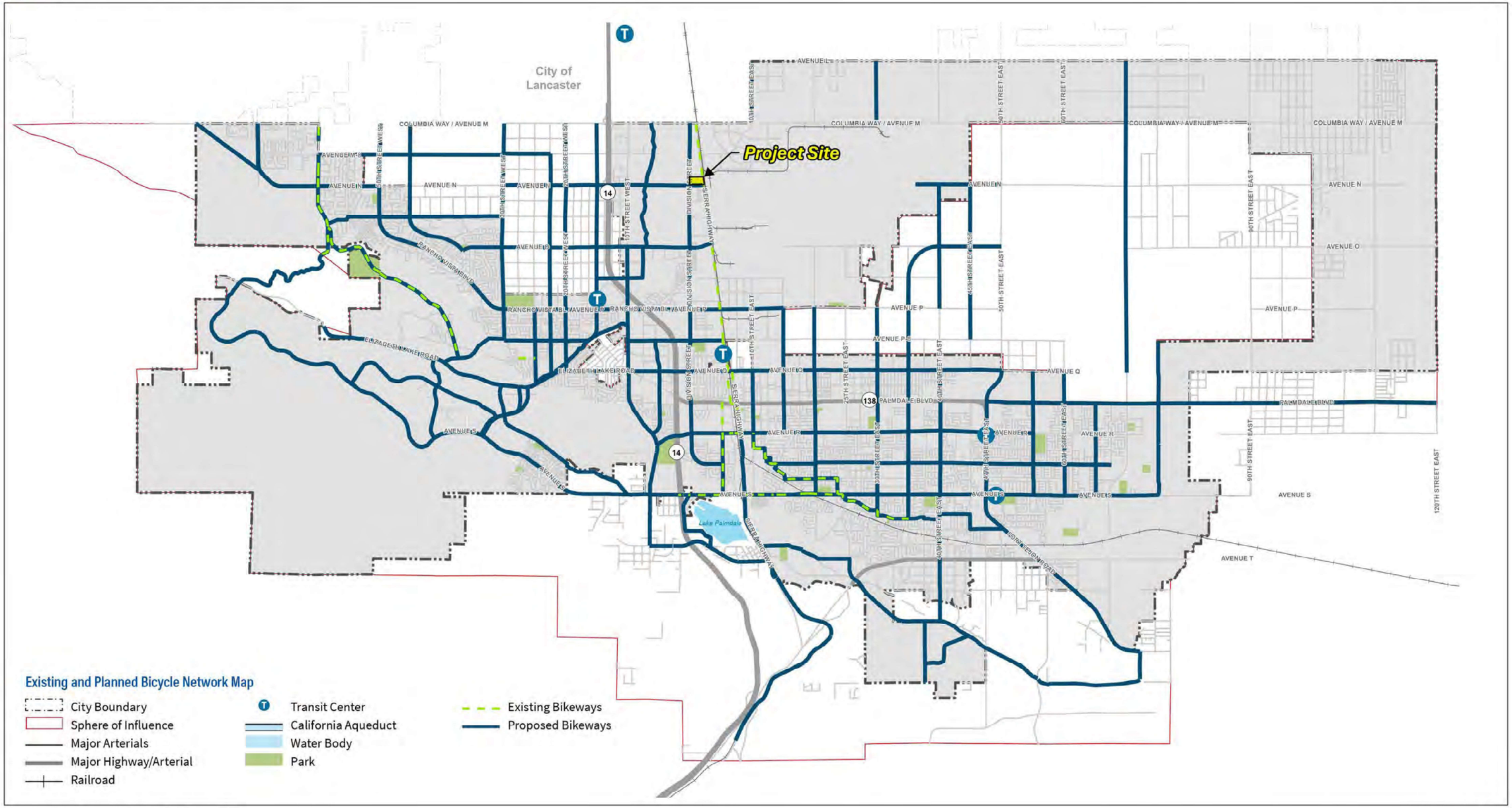


Source(s): Translutions, Inc (01-16-2025)

Figure 4.13-3

Not to Scale

Existing Transit and Pedestrian Facilities



Source(s): City of Palmdale General Plan (04-04-2025)

Figure 4.13-4

Not to Scale

Existing and Planned Bicycle Network Map

4.14 TRIBAL CULTURAL RESOURCES

The analysis in this subsection documents the results of the consultation process between the City of Palmdale and Native American Tribes regarding the proposed Project. Communications between Native American tribes and the City of Palmdale are considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of tribal cultural resources.

4.14.1 EXISTING CONDITIONS

Refer to EIR Subsection 4.4, *Cultural Resources*, for a complete description of the cultural setting, existing site conditions, and the archaeological resources assessment for the Project site.

4.14.2 REGULATORY SETTING

The following is a brief description of the environmental laws and related regulations addressing Tribal Cultural Resources (TCRs). Refer also to EIR Subsection 4.4.2 for a complete description of federal, State, and local environmental laws and regulations governing the protection of cultural resources.

A. State Regulations

1. California Code of Regulations Title 14, Section 1427

California Code of Regulations Title 14, Section 1427 provides that: "No person shall collect or remove any object or thing of archaeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archaeological or historical interest or value is found." (CCR, n.d.)

2. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (CCR, n.d.)

3. Assembly Bill 52

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to

ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017a)

The Public Resources Code now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017a)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a Notice of Preparation for an Environmental Impact Report or Negative Declaration or Mitigated Negative Declaration filed on or after July 1, 2015. (OPR, 2017a)

Section 21074 of the Public Resources Code defines "tribal cultural resources." In brief, in order to be considered a "tribal cultural resource," a resource must be either:

(1) Listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
(2) A resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017a)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017a)

Because the proposed Project has a NOP for an EIR, AB 52 is applicable to the Project.

4. State Health and Safety Code

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery…" until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies

that the removal of human remains from "internment or a place of storage while awaiting internment" with the intent to sell them or to dissect them with "malice or wantonness" is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that "all California Indian human remains and cultural items are to be treated with dignity and respect." It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (CA Legislative Information, n.d.)

5. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows:

- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:*
    - *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
    - *Is associated with the lives of persons important in our past;*
    - *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
    - *Has yielded, or may be likely to yield, information important in prehistory or history.*

- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.* (Westlaw, n.d.)

4.14.3 Basis for Determining Significance

Section XVIII of Appendix G to the CEQA Guidelines addresses typical adverse effects on tribal cultural resources and includes the following threshold question to evaluate the impacts of the Project on tribal cultural resources. The Project would result in a significant impact to tribal cultural resources if the Project or any Project-related component would:

1. *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).*
   - *ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth is subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

4.14.4 Impact Analysis

Threshold a*: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: 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 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

No prehistoric resource sites, features, places, or landscapes were identified on the Project site during a field visit and in literature review that are either listed or eligible for listing in the California Register of Historic Places. (Dudek, 2024, p. 6) .

To be eligible for the Register, (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852), a resource must include the following:

> *(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
>
> *(B) Is associated with the lives of persons important in our past;*
>
> *(C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
>
> *(D) Has yielded, or may be likely to yield, information important in prehistory or history.*

No resources were identified on the Project site that meet any of the four criteria listed above to be eligible for the California Register and no prehistoric resource sites or isolates were found on the Project site based on the cultural records search and pedestrian survey of the Project site (refer to EIR Subsection 4.4, *Cultural Resources*). Furthermore, no substantial evidence was presented to or found by the City that led to the identification of any resources on the Project site that in the City's discretion had the potential to be considered a tribal cultural resource.

Because the proposed Project involves an NOP for an EIR, AB 52 consultation is required. As required by State law, the City sent notification of the Project to Native American tribes with possible traditional or cultural affiliation to the Project area. In compliance with AB 52, on July 1, 2025, the City mailed notices regarding the proposed Project to the following Native American Tribes listed in the Native American Heritage Commission (NAHC) Native American Contact List (included as Appendix A of *Technical Appendix D*).

- Quechan Tribe of the Fort Uma Reservation
- Fernandeño Tataviam Band of Mission Indians
- Morongo Band of Mission Indians
- San Fernando Band of Mission Indians
- Serrano Nation of Mission Indians
- Yuhaaviatam of San Manuel Nation (also known as the San Manuel Band of Mission Indians)

Out of the six Native American tribal groups the following group requested to consult on the Project. The City engaged in consultation accordingly and closed consultation.

- Yuhaaviatam of San Manuel Nation

According to correspondence from the one Native American tribes that requested consultation, there are no known Tribal Cultural Resources (TCRs) on the Project site. However, there is the potential that TCRs could be located beneath the surface of the Project site and become discovered during Project-related earth-disturbing activities. If TCRs are discovered and do not receive proper treatment, the impact to TCRs would be significant.

Mitigation is provided in EIR Subsection 4.4, *Cultural Resources*, based on consultation with the Yuhaaviatam of San Manuel Nation (also known as the San Manuel Band of Mission Indians).

4.14.5 Cumulative Impact Analysis

As indicated under the analysis of Threshold (a), the Project would not result in a significant impact to any known TCR. Although unlikely, there is a remote possibility that TCRs could be encountered during ground-disturbing construction activities, which would result in a site-specific potentially significant impact to TCRs. As indicated below, mitigation is defined in EIR Subsection 4.4, *Cultural Resources*, to reduce this potential impact to less than significant.

Other development projects throughout the City that require excavation of undisturbed soils may result in similar site-specific impacts to TCRs, which would also require mitigation in order to reduce their respective impact(s) to a less than significant level. However, the proposed Project does not include any components that would affect potentially significant off-site TCRs or would otherwise result in an increase in the likeliness that such resource would be encountered when combined with the impacts of other cumulative projects. Therefore, cumulative impacts to TCRs would be less than significant.

4.14.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct Impact. The Project site does not contain any known TCRs. If TCRs are unearthed during the Project's excavation activities, a potentially significant impact could occur if the resources are not properly identified and treated

4.14.7 Mitigation

Mitigation Measures CUL MM-1 through CUL MM-4, and CUL RR-1 included in EIR Section 4.4, *Cultural Resources*, shall apply.

4.14.8 Significance of Impacts After Mitigation

Threshold a: Less than Significant with Mitigation Incorporated. Implementation of Mitigation Measures CUL MM-1 through CUL MM-4 and CUL RR-1 would ensure the proper identification and subsequent treatment of any TCRs that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important subsurface TCRs (if such resources are unearthed during Project construction) would be reduced to less than significant levels.

4.15 UTILITIES AND SERVICE SYSTEMS

This subsection addresses the topics of water service and supply, wastewater collection and treatment, stormwater drainage facilities, dry utilities, and solid waste collection and disposal. The analysis in this subsection is based in part on publicly available information provided by local service providers and State oversight agencies, as well as a Project-specific Water Supply Assessment (WSA) prepared by Akel Engineering Group, Inc. (herein, "Akel"). This document is entitled, "Water Supply Assessment Report (WSA) for Pacific Industrial Development," dated March 2025, and included as *Technical Appendix K* to this EIR (Akel, 2025). The analysis is also based in part on a Project-specific Sewer Area Study Report prepared by Sikand Engineering Associates (herein, "SEA"). This document is entitled, "Sewer Area Study Report Northwest of Sierra Highway and Rancho Vista Blvd," dated April 23, 2025, and included as *Technical Appendix J* to this EIR (SEA, 2024b). All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025. One comment letter, from the Los Angeles County Waterworks Districts, included comments related to utilities and service systems. These comments raised concerns about water supply sources and availability and the Project's potential impacts to water supply, as well as the impacts of new water infrastructure to be constructed as a condition of water service.

4.15.1 EXISTING CONDITIONS

The Project site is located within the service boundaries of Los Angeles County Waterworks District (LACWD) District 40 for water service, the City of Palmdale Public Works, Sewer Maintenance Division (COPSM) for sewer service, Southern California Edison (SCE) for electricity, and the Southern California Gas Company (SoCal Gas) for natural gas, with numerous service providers for cable television and telephone services. Solid waste hauling service to the Project site is provided by Waste Management.

A. Water Service and Supply

The Project site is located within the service area of LACWD District 40. LACWD District 40 maintains 1,057 miles of potable and recycled water lines and 71 portable water tank reservoirs. The land use within the Antelope Valley has been primarily agricultural uses; however, this area is in transition from mainly agricultural to residential and industrial uses. According to the 2020 Urban Water Management Plan (UWMP), the region plans to maintain agricultural land use within Antelope Valley, meet the growing demand of the recreational spaces, and improve blended land use and planning management and flexible management strategies for climate change. (LACWD, 2021, p. 1-2)

1. Water Supply

LACWD District 40 currently receives water from two sources: groundwater and imported water from the Antelope Valley East Kern Water District (AVEK), as discussed below. LACWD anticipated

supplies for the years 2025 through 2045 are summarized in Table 4.15-1, *LACWD Summary of Projected Supplies*. (LACWD, 2021, p. 6-14)

LACWD purchases water from AVEK which is mostly imported water from the State Water Project (SWP). AVEK is able to purchase additional water from the SWP during the low demand period and recharge the ground water basins and has the flexibility to pump the ground water during high demands and drought conditions. To acquire additional water supply, LACWD has executed a Memorandum of Understanding (MOU) with AVEK to implement a new Water Supply Entitlement Acquisition program for new developments that will be used to acquire additional imported water supplies. Developers may secure entitlements by working with the LACWD to determine the volume of new water supply needed to meet their project's annual demand and then paying AVEK to purchase the permanent new water supply. AVEK then designates this new water supply to the LACWD for the developer, over and above the LACWD's current allocation of supplies (LACWD, 2021, p. 6-1).

Groundwater supply is typically the most reliable source of water supply, especially during drought conditions. LACWD District 40 has historically used groundwater as its secondary source of potable water supply. LACWD District 40's groundwater is pumped from the Antelope Valley Groundwater Basin. Although groundwater has not been a major source of water supply to the LACWD, it plays a critical role and continues to be an important resource within the Antelope Valley region. The Antelope Valley Groundwater Basin is composed of two primary aquifers and due to this basin being a closed water basin, the only major outflow is by pumping. The total storage capacity of the Antelope Valley Groundwater basin has been reported at 68 million acre-feet, or over 22 trillion gallons. As of 2020, the groundwater adjudication judgement has provided the LACWD with additional groundwater rights. Based on the LACWD's groundwater pumping record and its available groundwater rights, the LACWD has remained substantially below its groundwater pumping right threshold. Therefore, the LACWD groundwater source is a viable and sustainable secondary source of potable water. The LACWD can increase its groundwater pumping by 35 percent and continue to remain below its pumping right. (LACWD, 2021, pp. 6-2, 6-3)

2. Water Demands

LACWD's projected water deliveries were estimated in 2021 by understanding the characteristics of the customer type creating the demand. However, fluctuations in climate over the prior five years, the global COVID-19 pandemic, and adjudication of the Antelope Valley Groundwater Basin have significantly impacted the demand patterns in the LACWD. As such, the projected water demands are based on the anticipated increase in population in the target per capita water use. Table 4.15-2, *LACWD Projected Water Deliveries*, depicts LACWD's anticipated water deliveries from 2025 through 2045. (LACWD, 2021, p. 4-2)

Table 4.15-1 LACWD Summary of Projected Supplies (AFY)

Water Supply	Additional Detail on Water Supply	2025 Reasonably Available Volume	2030 Reasonably Available Volume	2035 Reasonably Available Volume	2040 Reasonably Available Volume	2045 Reasonably Available Volume
Purchased or imported water		57,300	55,800	54,200	52,700	52,700
Groundwater		23,298	23,298	23,298	23,298	23,298
Purchased or imported water	New supply from AVEK	1,733	1,733	1,733	1,733	1,733
Recycled Water		764	902	1,102	1,302	1,302
Total		**83,095**	**80,831**	**80.333**	**79,033**	**79,033**

(LACWD, 2021, Table 6-9)

Table 4.15-2 LACWD Projected Water Deliveries

	Projected Water Use, ac-ft/yr				
Use Type	**2025**	**2030**	**2035**	**2040**	**2045**
Single-family	40,919	43,709	46,599	49,601	52,116
Multi-family	2,212	2,364	2,518	2,683	2,819
Commercial[1]	3,112	2,617	2,178	1,780	1,870
Industrial	3,315	3,546	3,777	4,022	4,226
Institutional/governmental[1]	1,035	870	726	595	625
Losses[2]	3,808	3,998	4,202	4,419	4,643
Total	**54,400**	**57,100**	**60,000**	**63,100**	**66,300**

[1] The 2025-2040 projected water demand is based on gallons per capita per day (GPCD) times the projected population.
[2] Losses are assumed to be seven percent of projected water demand.
(LACWD, 2021, pp. 4-2, Table 4-2)

B. Sewer Service and Treatment

Public sewer systems that would provide service to the Project site are owned and maintained by the COPSM. The COPSM prepared a Sewer System Management Plan (SSMP) in 2014 to comply with the State Water Resources Control Board (SWRCB) Order 2006-0003: *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* (City of Palmdale, 2014). COPSM manages wastewater collection system of public sewer mainlines within the City's service area, which encompasses approximately 105 square miles. Unincorporated areas surrounding Palmdale fall within Los Angeles County jurisdiction. Most of the collected wastewater flows that are conveyed through public sewer mainlines discharge to Los Angeles County Sanitation District (LACSD) trunk mainlines, which ultimately direct flows to the Palmdale Water Reclamation Plant (WRP), which is managed in Los Angeles County Sanitation District No. 20 and can reclaim up to 12 million gallons per day (mgd). The Palmdale WRP provides primary, secondary, and tertiary water treatment with a design capacity

of 12 mgd. Treatment includes preliminary mechanically cleaned bar screens, aerated grit chambers, and settling tanks; secondary anaerobic digester, air compressors and clarifier tanks; and tertiary chemical treatments with aqueous ammonia, sodium hypochlorite, and chlorine contact tanks. The fully treated water is then reused in municipal and agricultural settings or stored in recycled water reservoirs. (City of Palmdale, 2022a, pp. 4.19-3, 4.19-4)

Some wastewater is sent to the Lancaster Water Reclamation Plant (LWRP), located approximately 16 miles north of the City (City of Palmdale, 2022a, pp. 4.19-3 and -4). Sewage within the Project area is conveyed to the LWRP for treatment, located approximately 9.5 miles north of the Project site. The LWRP is managed in LACSD District #14 and serves a population of approximately 160,000 people. The LWRP currently provides primary, secondary, and tertiary treatment for a design capacity of 18 million gallons per day (mgd), and approximately 12.6 mgd of recycled water are used at over 55 different sites. The reclaimed water is used for landscape and agricultural irrigation in and around the City of Lancaster, along with a variety of other municipal and industrial purposes. In addition, reclaimed water is used to maintain water levels in Apollo Lakes Regional Park and Piute Ponds. In addition to producing recycled water, the LWRP processes all wastewater solids generated at the plant. The wastewater solids are anaerobically digested, centrifugally dewatered, and further dried in drying beds. The dried biosolids are hauled away and beneficially used. Methane gas is produced during the digestion process and is used to heat the anaerobic digesters. (LACSD, n.d.)

Existing sewer facilities in the Project area include a 12-inch-diameter sanitary sewer line located within the Sierra Highway right-of way (ROW), north of the Project site boundary; a 15- to 18-inch-diameter sanitary sewer line located within the Avenue O-8 ROW west of Sierra Highway; and a 12-inch-diameter trunk sewer located within the Avenue O-8 ROW east of Sierra Highway (SEA, 2024b, p. 6)

C. Solid Waste Collection and Disposal

The City contracts with Waste Management to provide complete residential and commercial trash, organic waste processing, and recycling services, including residential curbside trash, recycling and yard waste collection, pickup of bulky items, and electronic waste pickup, for all single and multi-family homes, as well as businesses. (City of Palmdale, 2022a, p. 4.19-4)

Like all municipalities, the City of Palmdale must meet the solid waste diversion mandates established by the California Integrated Waste Management Act under State Assembly Bill 939 (AB 939) in 1989. AB 939 mandates that all cities reduce annual waste per capita by 50 percent. The City of Palmdale is working toward compliance with all state recycling requirements, including legislation that imposes Mandatory Commercial Recycling on all businesses that generate at least four cubic yards of trash per week and all multi-family dwellings that have five units or more. City waste haulers send all residential and commercial solid waste to the Antelope Valley Recycling and Disposal Facility, located at 1200 West City Ranch Road, approximately one mile from State Route 14 (SR-14). (City of Palmdale, 2022a, p. 4.19-4)

The City also complies with Assembly Bill (AB) 1826, California's Mandatory Commercial Organics Recycling law, which requires businesses and multi-family dwellings to recycle their organic waste. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled waste that is mixed with food waste. Through the City of Palmdale, Waste Management offers organic waste recycling services for both businesses and multi-family dwellings. (City of Palmdale, 2022a, p. 4.19-4)

According to the California Department of Resources Recycling and Recovery's (CalRecycle's) Disposal Reporting System, in the fourth quarter of 2019, solid waste generated in the City of Palmdale was disposed of at eight different landfills, recycling centers, and waste recovery and conversion facilities. (City of Palmdale, 2022a, p. 4.19-4)

Table 4.15-3, *Existing Landfill Maximum Permit Capacity and Maximum Permitted Throughput*, summarizes the maximum permit capacity and maximum permitted throughput allowed at each of the solid waste facilities that receive solid waste from the City of Palmdale. The "maximum permit capacity" represents the total capacity of the solid waste facility throughout its lifetime. The "maximum permitted throughput" represents the amount of waste the solid waste facility is allowed to receive per day, or in the case of the Simi Valley Landfill and Recycling Center, per week, and is identified in Table 4.15-3. (CalRecycle, n.d)

Recyclables are collected in separate containers in the City of Palmdale at single family residences, some multi-family residences, businesses, and agencies. Waste Management, the City's waste hauler, achieves most of its waste diversion through mixed waste processing at materials recovery facilities. In accordance with AB 939, recyclables are sorted, and the residual waste is transferred to the landfill. Waste generation for the City of Palmdale is taken into account in the County of Los Angeles Countywide Integrated Waste Management Plan, which projects future waste generation and disposal facility needs. (City of Palmdale, 2022a, p. 4.19-5)

Table 4.15-3 Existing Landfill Maximum Permit Capacity and Maximum Permitted Throughput

Landfill	Maximum Permit Capacity[1]	Maximum Permitted Throughput[1]
Antelope Valley Public Landfill	30,200,000 cy	5,548 tpd
Lancaster Landfill and Recycling Center	27,700,000 cy	5,100 tpd
McKittrick Waste Treatment Site	5,474,900 cy	3,500 tpd
Simi Valley Landfill and Recycling Center	119,600,000 cy	64,750 tpw
El Sobrante Landfill	209,910,000 cy	16,054 tpd
Sunshine Canyon City/County Landfill	140,900,000 cy	12,100 tpd
Chiquita Canyon Sanitary Landfill	110,366,000 cy	12,000 tpd
Victorville Sanitary Landfill	93,400,000 cy	3,000 tpd

Note: cy = cubic yards; tpd = tons per day; tpw = tons per week.
[1] (CalRecycle, 2025)

D. Storm Water Drainage

The City of Palmdale Department of Public Works maintains the public stormwater systems. The City operates closed conduits, open channels, drainage basins, dry wells, and two dry creeks as natural stormwater conveyances. Because of the arid climate within the City, the stormwater system remains dry for most of the year and only captures stormwater during rainy periods. (City of Palmdale, 2022a, p. 4.19-4)

Under existing conditions, the existing drainage sheet flows in a northeasterly direction. Specifically, runoff from the Project site is carried north along the western shoulder of Sierra Highway in an earthen ditch and ultimately discharges into an existing retention basin immediately north of Avenue O. Off-site runoff approaching the site is captured by Division Street and West Rancho Vista Boulevard and carried north and east, respectively. (SEA, 2024a, p. 3)

Refer to EIR Subsection 4.9, *Hydrology and Water Quality*, for additional information regarding the Project site's existing drainage conditions.

4.15.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations related to utilities and service systems.

A. Federal Regulations

1. United States Department of Energy/Federal Energy Regulatory Commission

The United States Department of Energy (DOE) is the federal agency responsible for establishing policies regarding energy conservation, domestic energy production and infrastructure. The Federal Energy Regulatory Commission (FERC) is an independent federal agency, officially organized as part of the DOE which is responsible for regulating interstate transmission of natural gas, oil and electricity, reliability of the electric grid and approving of construction of interstate natural gas pipelines and storage facilities. The Energy Policy Act of 2005 has also granted FERC with additional responsibilities of overseeing the reliability of the nation's electricity transmission grid and supplementing state transmission siting efforts in national interest electric transmission corridors.

FERC has authority to oversee mandatory reliability standards governing the nation's electricity grid. FERC has established rules on certification of an Electric Reliability Organization (ERO) which establishes, approves, and enforces mandatory electricity reliability standards. The North American Electric Reliability Corporation (NERC) has been certified as the nation's ERO by FERC to enforce reliability standards in all interconnected jurisdictions in North America. Although FERC regulates the bulk energy transmission and reliability throughout the United States, the areas outside of FERC's jurisdictional responsibility include state level regulations and retail electricity and natural gas sales to consumers which falls under the jurisdiction of state regulatory agencies. (FERC, 2024)

B. State Regulations

1. Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. When such an ordinance had not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary, must be adopted. In the absence of such an ordinance or findings, the policies and requirements contained in the "model" ordinance drafted by the State of California apply within the affected jurisdiction. (CA Legislative Info, n.d.)

2. Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) was proposed and adopted to ensure that water planning is conducted at the local level, as the State of California recognized that two water agencies in the same region could have very different impacts from a drought. The UWMP Act requires water agencies to develop UWMPs over a 20-year planning horizon and further requires UWMPs to be updated every five years. UWMPs are exempt from compliance with CEQA. (DWR, 2021, pp. 1-3, 1-4)

The UWMPs provide a framework for long term water planning and inform the public of a supplier's plans for long-term resource planning that ensures adequate water supplies for existing and future demands. This part of the California Water Code (CWC) requires urban water suppliers to report, describe, and evaluate:

- Water deliveries and uses;
- Water supply sources;
- Efficient water uses;
- Demand management measures; and,
- Water shortage contingency planning. (DWR, 2021, pp. 1-2, 1-3, p. 1-3)

The UWMP Act has been modified over the years in response to the State's water shortages, droughts, and other factors. A significant amendment was made in 2009 (Water Conservation Act of 2009, also known as Senate Bill X7-7), after the drought of 2007-2009 and as a result of the governor's call for a statewide 20 percent reduction in urban water use by the year 2020. This Act required agencies to establish water use targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020. Within UWMPs, urban water suppliers must:

- Assess the reliability of water sources over a 20-year planning time frame
- Describe demand management measures and water shortage contingency plans
- Report progress toward meeting a targeted 20 percent reduction in per-capita (per-person) urban water consumption by the year 2020
- Discuss the use and planned use of recycled water (DWR, 2021, p. 1-2)

3. *Executive Order B-29-15*

Executive Order B-29-15 (EO B-29-15) ordered the SWRCB to impose restrictions to achieve a 25-percent reduction in potable urban water usage through February 28, 2016; directed the California Department of Water Resources (DWR) to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawn and ornamental turf with drought tolerant landscapes; and directed the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices. (SWRCB, 2024)

4. *Executive Order B-37-16*

Signed on May 9, 2016, Executive Order B-37-16 (EO B-37-16) established a new water use efficiency framework for California. The order bolstered the state's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans. (SWRCB, 2024)

5. *Executive Order B-40-17*

Signed on April 7, 2017, Executive Order B-40-17 (EO B-40-17) ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, state agencies, including the DWR, released a plan to continue making water conservation a way of life. (SWRCB, 2024)

6. *Sustainable Groundwater Management Act*

The Sustainable Groundwater Management Act (SGMA) established a new structure for managing California's groundwater resources at a local level by local agencies. SGMA required, by June 30, 2017, the formation of locally-controlled groundwater sustainability agencies (GSAs) in the State's high- and medium-priority groundwater basins and subbasins (basins). A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The GSP Emergency Regulations for evaluating GSPs, the implementation of GSPs, and coordination agreements were adopted by DWR and approved by the California Water Commission on May 18, 2016. (DWR, n.d.)

7. *Water Supply Assessment Requirements - Senate Bill 610 (2002)*

The California Water Code (Water Code) §§ 10910 through 10915 were amended by the enactment of Senate Bill (SB 610) in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable

cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA (CA Legislative Info, n.d.) (DWR, 2003). For the purposes of SB 610, "project" is defined and includes industrial facilities planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area (CA Legislative Info, n.d.) (DWR, 2003). Because the Project site is comprised on more than 40 acres of land and proposes more than 650, 000 square feet of floor area for industrial use, the Project meets the definition of a "project" under SB 610. As such, a WSA was prepared for the Project, and is provided as *Technical Appendix K*.

8. Water Use Efficiency and Drought Planning Requirements - Senate Bill 606 (2018)

Senate Bill 606 (SB 606) and Assembly Bill 1668 (AB 606) built on Governor Brown's ongoing efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. SB 606 and AB 1668 establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022. The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial, and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses;
- Providing incentives for water suppliers to recycle water;
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning; and,
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

SB 606 would require an urban retail water supplier to calculate an urban water use objective no later than November 1, 2023, and by November 1st every year thereafter, and its actual urban water use by those same dates. SB 606 would authorize the State Water Resources Control Board to issue information orders, written notices, and conservation orders to an urban retail water supplier that does not meet its urban water use objective, as specified. (SWRCB, 2024)

9. Water Management Planning Act of 2018 - Assembly Bill 1668 (2018)

Assembly Bill 1668 (AB 1668) requires the SWRCB, in coordination with the DWR, to adopt long-term standards for the efficient use of water and performance measures for commercial, industrial, and institutional water use on or before June 30, 2022. The bill, until January 1, 2025, establishes 55 gallons per capita daily as the standard for indoor residential water use. Beginning January 1, 2025, the bill establishes the greater of 52.5 gallons per capita daily or a standard recommended by the SWRCB and beginning January 1, 2030, the bill establishes the greater of 50 gallons per capita daily or a standard

recommended by the SWRCB. AB 1668 imposes civil liability for a violation of an order or regulation issued pursuant to these provisions. (CalMatters, n.d.)

10. California Plumbing Code

Title 24, Part 5 of the California Code of Regulations establishes the California Plumbing Code. The California Plumbing Code sets forth efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. The 2022 California Plumbing Code, which is based on the 2021 Uniform Plumbing Code, was published by the California Building Standards Commission on July 1, 2022 and went into effect on January 1, 2023. (CBSC, 2022) The proposed Project is subject to the 2022 CBC.

11. California Code of Regulations Title 20 and 24

Title 20 of the California Code of Regulations (CCR) includes state and federal minimum efficiency requirements for energy and water use in regulated appliances. These appliances include, but are not limited to, water heaters, furnaces, heat pumps, air conditioners, refrigerators, pumps, lamps and ballasts, computers, spray sprinkler bodies and showerheads. Manufacturers are responsible for certifying regulated appliances to the California Energy Commission's Modernized Appliance Efficiency Database System. This serves as the manufacturer's claim that it has met all applicable requirements, including testing and marking products. (CCR, n.d.)

Title 24 of the CCR is a broad set of requirements for energy conservation, green design, construction and maintenance, fire and life safety, and accessibility that apply to the structural, mechanical, electrical, and plumbing systems in a building. Title 24 was published by the California Building Standards Commission and applies to all buildings in California. Title 24 receives updates every three years with the latest revisions being in 2022. Title 24 energy compliance requirements apply to new construction and any new installations or retrofits in existing buildings. Older buildings do not have to upgrade their systems, but if they choose to renovate, their new systems must meet Title 24 standards. (CBSC, 2022) The proposed Project is subject to the 2022 CBC.

12. California Water Plan

The California Water Plan is the State's strategic plan for sustainably managing and developing water resources for current and future generations. Required by Water Code Section 10005(a), it presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The plan is updated every five years; provides a way for various groups to collaborate on findings and recommendations and make informed decisions regarding California's water future; cannot mandate actions or authorize spending for specific actions; does not make project- or site-specific recommendations nor include environmental review or documentation as would be required by CEQA; and requires policy- and law-makers to take definitive steps to authorize the specific actions proposed in the plan and appropriate funding needed for implementation.

California Water Plan Update 2023 (Update 2023) provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers, planners, and decision-makers to overcome California's most pressing water resource challenges. It reaffirms the unique role of the State and commitment to sustainable, equitable, long-term water resource management; it also introduces implementation tools to inform sound decision-making. Update 2023 also provides a broad and diverse portfolio of recommended actions addressing critical, systemic, and institutional challenges facing the State. (DWR, 2023)

13. California Solid Waste Integrated Waste Management Act

Assembly Bill 939 (AB 939), the Integrated Waste Management Act (IWMA) of 1989, established an integrated waste management hierarchy aimed at reducing solid waste through various programs such as source reduction, recycling and composting, and environmentally safe transformation and land disposal. The IWMA established the California Integrated Waste Management Board (CIWMB) whose task was to reduce the waste stream generated by the state by encouraging recycling and overseeing landfills and other solid waste facilities. The IWMA required each city or county to prepare, adopt, and submit an Integrated Waste Management Plan (IWMP) to the CIWMB. IWMPs were required to include an implementation schedule indicating diversion of 50 percent of all solid waste by January 1, 2000, through source reduction, recycling, and composting activities. In July of 2009, the CIWMB was eliminated and all CIWMB duties and responsibilities were assumed by CalRecycle. (CalRecycle, n.d.) (LA County Solid Waste Management Committee, 2010)

14. Waste Reuse and Recycling Act

The Waste Reuse and Recycling Act (WRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRA also required local agencies to adopt a local ordinance by September 1, 1993, or allow the model ordinance to take effect. The WRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided prior to issuance of building permits. (CalRecycle, n.d.)

15. Mandatory Commercial Recycling Program

Assembly Bill 341 (AB 341) (Chapter 476, Statutes of 2011) directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning October 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB 341 was designed to help meet California's recycling goal of 75 percent by the year 2020. AB 341 requires all commercial businesses and public entities that generate four cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. (CalRecycle, n.d.)

16. California Green Building Standards Code (CAL Green; Part 11 of Title 24, California Code of Regulations)

The current edition of CalGreen became effective on January 1, 2023. The provisions of CalGreen are applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California (including warehouse buildings like the buildings evaluated in this EIR). CalGreen Section 5.408.3 requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing must be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed. (CBSC, 2023)

17. Construction and Demolition Waste Materials Diversion Requirements - Senate Bill 1374 (2002)

SB 1374 (Chapter 501, Statues of 2002), the Construction and Demolition Waste Materials Diversion Requirements, was codified in Public Resources Code Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste. The legislation also required that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills. The model ordinance was adopted by CalRecycle on March 16, 2004. (CA Legislative Info, n.d.)

18. Mandatory Commercial Organics Recycling - Assembly Bill 1826 (2014)

Assembly Bill 1826 (AB 1826) (Chapter 727, Statues of 2014) requires jurisdictions to implement an organic waste recycling program for businesses, including outreach, education, and monitoring of affected businesses. Additionally, each jurisdiction must identify information including barriers to siting organic waste recycling facilities, as well as closed or abandoned sites that might be available for new organic waste recycling facilities. AB 1826 defines "organic waste" as food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste that is mixed in with food waste. It also defines a "business" as a commercial or public entity, including, but not limited to, a firm, partnership, proprietorship, joint stock company, corporation, or association that is organized as a for-profit or nonprofit entity, or a multifamily residential dwelling consisting of five or more units. As of January 1, 2017, businesses that generate four cubic yards or more of organic waste per week are subject to this requirement. Commencing January 1, 2019, businesses that generate four cubic yards or more of commercial solid waste per week also are required to arrange for organic waste recycling services. (CA Legislative Info, n.d.) In September 2020, CalRecycle reduced this threshold to two cubic yards of solid waste generated by covered businesses. (CalRecycle, n.d.)

19. California Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CA. Code Regs. 6)

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute. In 1975 the Department of Housing and Community Development (HCD) adopted rudimentary energy conservation standards under the authority granted to HCD by State Housing Law that were a precursor to the first generation of the Standards. However,

the Warren-Alquist Act was passed one year earlier with explicit direction to the Energy Commission (formally titled the State Energy Resources Conservation and Development Commission) to adopt and implement the Standards. The Energy Commission's statute created separate authority and specific direction regarding what the Standards must address, what criteria must be met in developing the Standards, and what implementation tools, aids, and technical assistance must be provided. (CEC, 2023)

The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the Energy Commission to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Standards that contain data and other information that helps builders comply with the Standards. (CEC, 2023)

The 2022 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential Standards include the introduction of photovoltaic into the prescriptive package, improvements for attics, walls, water heating, and lighting. The most significant efficiency improvements to the nonresidential Standards include alignment with the ASHRAE 90.1 2017 national standards. The 2022 Standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. (CEC, 2023)

Public Resources Code Section 25402.1 also requires the Energy Commission to support the performance standards with compliance tools for builders and building designers. The Alternative Calculation Method (ACM) Approval Manual adopted by regulation as an appendix of the Standards establishes requirements for input, output, and calculational uniformity in the computer programs used to demonstrate compliance with the Standards. From this, the Energy Commission develops and makes publicly available free, public domain building modeling software in order to enable compliance based on modeling of building efficiency and performance. The ACM Approval Manual also includes provisions for private firms seeking to develop compliance software for approval by the Energy Commission, which further encourages flexibility and innovation. (CEC, 2023)

20. California Solar Rights and Solar Shade Control Acts

The Solar Rights Act sets parameters for establishing solar easements, prohibits ordinances and private covenants, which restrict solar systems, and requires communities to consider passive solar and natural heating and cooling opportunities in new construction. This Act is applicable to all California cities

and counties. California's solar access laws appear in the state's Civil, Government, Health and Safety, and Public Resources Codes. California Public Resources Code § 25980 sets forth the Solar Shade Control Act, which encourages the use of trees and other natural shading except in cases where the shading may interfere with the use of active and passive solar systems. (EPIC, 2014; EPIC, 2010)

21. Public Resources Code Sections 25300–25323 - Senate Bill 1389 (2002)

SB 1389 (Public Resources Code Sections 25300–25323), adopted in 2002, requires the development of an integrated plan for electricity, natural gas, and transportation fuels. Under the bill, the CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. In 2018, the CEC decided to write the Integrated Energy Policy Report in two volumes. Volume I, which was published on August 1, 2018, highlights the implementation of California's innovative policies and the role they have played in moving toward a clean energy economy. Volume II, which was adopted in February 2019, identifies several key energy issues and actions to address these issues and ensure the reliability of energy resources. (CA Legislative Info, n.d.)

C. Regional and Local Regulations

1. Water Shortage Contingency Plan

On November 22, 2022, LACWD updated its Water Shortage Contingency Plan (WSCP) as part of its UWMP. The WSCP details how the LACWD responds in the event of a declared water emergency or water shortage conditions. The WSCP provides guidance for managing water supplies, mitigating water shortages, improving preparedness for droughts, and other impacts to water supplies and ultimately enables LACWD to efficiently manage future response actions due to water shortages. Provisions in the California Water Code Section 10632.1 require that an annual assessment of water supply and demand be conducted by LACWD on or before July 1 each year beginning in July 2022. The annual assessment must then be submitted to the DWR. (City of Palmdale, 2022a, p. 4.19-9) (LACWD, 2022, pp. 3, 8)

2. City of Palmdale Municipal Code

PMC Chapter 5.52, Solid Waste Handling and Recycling Services, establishes regulations and standards for collection of solid waste and recycling of solid waste materials. The intent of PMC Chapter 5.52 is to set forth terms and conditions pursuant to which authorization may be granted by the City Council to provide solid waste handling services, and to promote the public health, welfare and safety of the community by establishing reasonable regulations relating to the storage, accumulation, collection and disposal of garbage, trash, rubbish, debris and other discarded matter, goods and material. (PMC, 2025)

3. City of Palmdale Storm Water Management Plan

The Palmdale Storm Water Management Plan (SWMP) was adopted in 2003. The SWMP was prepared by the City of Palmdale Department of Public Works with the objective to preserve the quality of City waters, including storm water conveyances such as closed conduits, open channels, drainage

basins, and dry wells. The City was issued a "small" Municipal Separate Storm Sewer System (MS4) permit by the Lahontan RWQCB which authorizes the City to legally discharge stormwater into local waterways. The California State Water Resources Control Board (SWRCB) designated the City of Palmdale MS4 as a "small" MS4 because it is located within an urbanized area defined by the US Census Bureau. As part of the MS4 permit requirements, the City was required to develop and submit a SWMP to the Lahontan RWQCB. The goal of the City's SWMP is to reduce the discharge of pollutants to the MS4 to the Maximum Extent Practicable (MEP). A requirement of the SWMP is that each development attenuate post-developed flows to 85 percent of pre-developed flows with the objective of protecting downstream properties. Additional requirements of the SWMP include employing BMPs for on-site detention/retention of stormwater runoff erosion events and tracking. (City of Palmdale, 2023, p. 329)

4.15.3 Basis for Determining Significance

Based on Section XIX of Appendix G to the State CEQA Guidelines, the Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would:

a. *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;*

b. *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;*

c. *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;*

d. *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or,*

e. *Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

The analyses methodology for public services and utilities impacts considers existing baseline conditions, including service provider capacities, infrastructure availability, and applicable service standards. Assessment of impacts associated with utilities and service systems was based on a review of site information and conditions, Project plans and application information, analysis provided in the WSA prepared by Akel and included as *Technical Appendix K* to this EIR (Akel, 2025), analysis provided in the Sewer Area Study Report prepared by SEA and included as *Technical Appendix J* to this EIR (SEA, 2024b), and City information regarding utilities. Projected demand on utility service systems was compared to projected available supply and capacity to determine whether new or modified utilities would be required as a result of the Project. If new or modified utilities would be required, then the environmental effects resulting from installing and operating the modified utilities

is analyzed. Utility and service demand in and of itself is not an environmental impact under CEQA unless the demand triggers physical environmental effects.

4.15.4 IMPACT ANALYSIS

Threshold 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?

As discussed in EIR Section 3.0, *Project Description*, water service to the proposed Project would be provided by the LACWD.

Water service for the proposed warehouse building would be provided by an existing LACWD water line north of the Project site within the Sierra Highway ROW that terminates prior to reaching the Project site. There is insufficient infrastructure under existing conditions to provide water service to the Project site. As such, pursuant to the Cooperative Agreement between LACWD District 40 and the Project Applicant, as a condition of Project approval, in order to provide additional water service infrastructure to the area surrounding the Project site, and to provide the customary level of potable water service to the proposed warehouse building, the following water service facilities would be constructed as part of the Project: 1) approximately 2,500 feet of 12-inch-diameter watermain along West Rancho Vista Boulevard / East Avenue P, from Division Street to Sierra Highway; 2) approximately 2,200 feet of 16-inch-diameter watermain along Sierra Highway, from approximately 450 feet south of East Avenue O-8 to West Rancho Vista Boulevard / East Avenue P; 3) 22 public fire hydrants; and 4) two 10-inch Reduced Pressure Principle Detector Assemblies, new pressure regulating station to regulate flow from the 2980 pressure zone to 2911 pressure zone, and associated interconnections. The water line proposed within the West Rancho Vista Boulevard / East Avenue P ROW will connect to the water line proposed within the Sierra Highway ROW, which will extend northward beyond the Project site frontage and connect to the existing LACWD water line within the Sierra Highway ROW.

Public sewer service would be provided by the COPSM, and sewer service for the proposed warehouse building would be accommodated by a proposed sewer lateral that would extend eastward from the northeastern corner of the warehouse building to a proposed sewer line within the Sierra Highway ROW. The proposed sewer line located within the Sierra Highway ROW would extend north and connect to an existing 12-inch-diameter sewer line within the Sierra Highway ROW, which ultimately conveys flows to an existing 12-inch-diameter trunk sewer within the Avenue O-8 ROW. (SEA, 2024b, Sewer Area Study Exhibit) The sewer discharge would then be conveyed to the Palmdale Water Reclamation Plant (PWRP) for treatment, located approximately 2.6 miles east of the Project site.

With respect to wastewater treatment capacity, using LACSD Table 1, Loadings for Each Class of Land Use, the land use for the Project would be “Warehousing”, which has a flow rate of 25 gpd per 1,000 s.f. Thus, the gpd of wastewater estimated for the Project would be approximately 25,000 gpd

["Warehouse": 1,000,000 s.f. ÷ 1000 = 1,000 x 25 = 25,000 gpd]. (LACSD, n.d.) Accordingly, the Project is anticipated to generate approximately 25,000 gpd of wastewater requiring treatment. The PWRP provides primary, secondary, and tertiary wastewater treatment with a design capacity of 18 mgd (LACSD, n.d.) Wastewater generation from the Project would represent approximately 0.14 percent (25,000 gpd ÷ 12,000,000 x 100 = 0.14 percent) of the daily design capacity at the PWRP. Because the Project's demand for wastewater treatment would only amount to approximately 0.14 percent of the total capacity of the PWRP, no physical alterations of the PWRP would be needed to accept and treat the Project's wastewater.

The Project's stormwater drainage system would capture runoff and direct it into two extended detention basins located in the northeastern and southeastern portions of the Project site, directly east of Sierra Highway. The on-site basins would also be designed to function as infiltration basins that would mitigate water quality and to promote groundwater infiltration. Based on a conservation design infiltration rate of 0.5 inches per hour, the Project's basins would result in an outflow rate of 2.7 cfs. Since the outflow rate (2.7 cfs) is less than 10% of the inflow rate (47.3 cfs), the majority of the runoff would be retained inside the proposed basins and infiltrate into the ground and to the groundwater table (SEA, 2024a, pp. 5-6). Construction of the Project's stormwater drainage system would be contained to the Project site and would not cause significant environmental effects outside of the Proect boundary or to the groundwater table.

The Project site is located in the service territories of SoCal Gas and SCE (CEC, 2020a; CEC, 2020b). A variety of companies in Palmdale and the surrounding area provide telecommunications utilities, including phone, internet, and television. Because electricity, gas, and telecommunications facilities are available in the local area, it is anticipated that the Project would connect to the existing facilities within existing improved site-adjacent roadways and would not cause significant environmental effects.

Impacts to the physical environment associated with the above-described Project-related water, sewer, drainage, electricity, gas, and telecommunications facilities that would be constructed to service the Project are inherent to the Project's construction phase, and all potential impacts have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). Where significant direct or cumulative impacts are identified, mitigation measures have been imposed to reduce the Project's impacts to the maximum extent feasible. There are no environmental impacts that would occur specifically related to the Project's proposed water, sewer, drainage, electricity, gas, and telecommunications improvements. As such, Project impacts associated with the installation of water, sewer, drainage, electricity, gas, and telecommunications improvements to service the Project would be less than significant.

Based on the foregoing analysis, the proposed Project would result in less than significant impacts associated with the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, and impacts would be less than significant.

Threshold b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As previously indicated, LACWD is responsible for supplying water services in the Project area. LACWD's 2020 UWMP provides a framework for long-term water planning and informs the public of LACWD's plans to ensure adequate water supplies through the year 2045. The UWMP also establishes a water use target that aids in meeting the State's goal of reducing per capita water use by 20 percent by 2020. LACWD's UWMP identifies current and future water demands and supplies and provides a planning framework for water-related management decisions.

Akel utilized the Los Angeles Department of Water and Power (LADWP) – Alameda Street EIR water duty factors, which are 170 gpd/ksf for office uses and 30 gpd/ksf for industrial uses, to estimate the average potable water demand for the Project (Akel, 2025). Based on this demand factor, the Project would result in an average daily demand for approximately 35.6 gpm of potable water, equivalent to 57.4 afy (Akel, 2025, pp. 6-7)

The demand projections included in the UWMP are based, in part, on existing land uses as well as planned land uses, such as land uses identified in the City's General Plan. The proposed Project was included in the 2020 UWMP and is consistent with its existing Employment Flex (EMPFX) land use designation, as anticipated by the UWMP. Therefore, it can be concluded that the Project's water demand is accounted for by the UWMP. (Akel, 2025, p. 7)

LACWD's anticipated water demands and supplies between 2025 and 2045 during normal year, single dry year, and multiple dry years are provided in Tables 7-2 through 7-4 of the 2020 UMWP. As discussed in EIR Subsection 4.9, *Hydrology and Water Quality*, according to the 2020 UWMP, during a normal year water scenario, it is anticipated that LACWD would have enough water supply on its own without the need to use AVEK's banked groundwater supplies; therefore, no supply deficit is anticipated. In the single dry and multiple dry year scenarios, AVEK would assist with meeting the LACWD's anticipated water demands by pumping groundwater from its banked supplies; therefore, no supply deficit is anticipated. (LACWD, 2021, p. 7-3 to 7-8)

Accordingly, because the Project's proposed land uses are accounted for by the LACWD 2020 UWMP, and because the UWMP demonstrates that the LACWD would have sufficient supply to meet projected demand through 2045, LACWD would have sufficient water supply available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Thus, Project impacts to water supply would be less than significant.

Threshold 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?

As noted above under the analysis of Threshold (a), wastewater from the Project would be conveyed to the PWRP for treatment. The PWRP provides primary, secondary, and tertiary wastewater treatment with a design capacity of 12 mgd. The Project's wastewater generation would represent approximately 0.14 percent) of the daily design capacity at the PWRP. Because the Project's demand for wastewater treatment would only represent approximately 0.14 percent of the total capacity of the WRP, the Project would not individually trigger the need for any physical changes or treatment capacity increases at the PWRP to service the Project. As such, impacts would be less than significant.

Threshold 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?

Solid waste generated by the Project would be disposed of at one of eight landfills. Table 4.15-3 (previously presented) provides a summary of the maximum daily permitted throughput capacity for each of the landfills that may service the proposed Project.

A. Solid Waste Impacts During Construction

Table 4.15-4, *Estimated Construction Solid Waste Generation*, provides an estimate of the amount of construction waste that would be generated by the Project for all four phases, based on non-residential construction waste generation factors provided by the U.S. EPA. Table 4.15-4 does not account for the construction of site improvements other than buildings. Proposed non-building features (e.g., parking areas, drive aisles, utilities, etc.) would produce nominal amounts of construction waste that would not substantially exceed the solid waste totals listed in Table 4.15-4.

Table 4.15-4 Estimated Construction Solid Waste Generation

Land Use	Construction Rate[1]	Estimated Building Size	Solid Waste Generation Rate[3]	Total	
				lbs/Day[4]	Tons/Day
Non-Residential	2,381 s.f./day for 420 days	1,000,000 s.f.	4.34 lbs/s.f.	10,333	5.17

[1] Based on information presented in the Project's Energy Analysis technical report (EIR *Technical Appendix B*), which indicates that building construction would occur from January 2026 through June 2027.

[3] Source: U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*. Available online at: https://www.epa.gov/smm/estimating-2003-building-related-construction-and-demolition-materials-amounts. Accessed: May 6, 2025.

[4] 2,381 s.f./day X 4.34 lbs/s.f. = 10,333 lbs/day

[5] 10,333 lbs/day ÷ 2,000 (pounds to tons conversion rate) = 5.17 tons/day

As presented in Table 4.15-4, and based on an analysis of the Project's expected rate of building construction, the Project is anticipated to generate approximately 10,333 pounds per day (lbs/day) of

construction waste requiring disposal, or approximately 5.17 tons per day (tpd), which equates to approximately 3.69 cubic yards (cy) per day (5.17 tons/1.4 [tons to cubic yards conversion rate] = 3.69 cubic yards. In total, construction of the Project would produce a projected 2,170 tons of construction waste (5.17 tons/day for 420 days = 2,170 tons), which equates to approximately 1,550 cy (2,170 tons/1.4 [tons to cy conversion rate] = 1,550 cy).

As discussed above, the Project would generate approximately 3.69 cy per day and 5.17 tpd of construction waste requiring disposal. Each percentage shown in Table 4.15-5, *Comparison of Project-Generated Construction Waste to Permitted Capacities at Each Landfill*, represents a scenario in which all Project-generated construction waste would go to only one landfill (i.e., Project-generated construction waste would not be divided among the eight landfills).

Table 4.15-5 Comparison of Project-Generated Construction Waste to Permitted Capacities at Each Landfill

Landfill	Maximum Permit Capacity[1]	Percentage of Maximum Permit Capacity Utilized by Project-Generated Construction Waste	Maximum Permitted Throughput[1]	Percentage of Maximum Permitted Throughput Utilized by Project-Generated Construction Waste
Antelope Valley Public Landfill	30,200,000 cy	0.005 percent	5,548 tpd	0.09 percent
Lancaster Landfill and Recycling Center	27,700,000 cy	0.006 percent	5,100 tpd	0.10 percent
McKittrick Waste Treatment Site	5,474,900 cy	0.028 percent	3,500 tpd	0.15 percent
Simi Valley Landfill and Recycling Center	119,600,000 cy	0.001 percent	64,750 tpw	0.06 percent
El Sobrante Landfill	209,910,000 cy	0.001 percent	16,054 tpd	0.03 percent
Sunshine Canyon City/County Landfill	140,900,000 cy	0.001 percent	12,100 tpd	0.04 percent
Chiquita Canyon Sanitary Landfill	110,366,000 cy	0.001 percent	12,000 tpd	0.04 percent
Victorville Sanitary Landfill	93,400,000 cy	0.002 percent	3,000 tpd	0.17 percent

Note: cy = cubic yards; tpd = tons per day; tpw = tons per week.
[1] (CalRecycle, 2025)

Because the estimated solid waste quantity generated by the Project on a daily basis during construction represents less than one percent of the total maximum permit capacities and total maximum permitted throughput capacities of each landfill, it is anticipated that all landfills would have sufficient daily capacity to accept the construction waste generated by the proposed Project. Furthermore, all proposed development within the City is required to submit a Construction Waste Management Plan (CWMP).

To verify AB 341 compliance for recycling of construction materials, the City requires accurate records for construction material recycling and solid waste disposal. Mandatory compliance with the CWMP requirements would further reduce Project impacts to solid waste by ensuring that 65 percent of the nonhazardous construction waste is recycled or reused. Based on the foregoing analysis, the Project would not cause or contribute to the need for new or expanded solid waste facilities during construction, and impacts would therefore be less than significant.

B. Solid Waste Impacts During Operation

As shown in Table 4.15-6, *Estimated Operational Solid Waste Generation*, buildout and occupancy of the Project is estimated to produce approximately 31.25 tpd of solid waste, or approximately 11,406 tpy. Per the County of Los Angeles Countywide Integrated Waste Management Plan (CIWMP), which applies to the Project, up to 65 percent of its solid waste would need to be diverted from area landfills. In conformance with the CIWMP, the Project applicant is required to work with future contract refuse haulers to implement recycling and waste reduction programs for solid waste.

Table 4.15-6 Estimated Operational Solid Waste Generation

Land Use	Square Footage (s.f.)	Generation Factors per Day	Total Solid Waste Generated	Average Solid Waste per Day
Industrial	1,000,000 square feet	62.5 lbs/1,000 square feet	11,406 tpy	31.25 tpd

Notes: s.f. = square feet; tpy = tons per year; tpd = tons per day.
(City of Palmdale, 2022a, Table 4.19-4)

As discussed above, solid waste from the Project would be disposed of at one of eight landfills that serve the City of Palmdale. The Project's estimated daily operational solid waste generation rate of 31.25 tpd represents the following percentages of the maximum permitted throughputs for the landfills shown below in Table 4.15-7, *Comparison of Project-Generated Operational Waste to Maximum Permitted Throughput at Each Landfill*. Each percentage shown in Table 4.15-7 represents a scenario in which all Project-generated operational waste would go to only one landfill (i.e., the Project-generated operational waste would not be divided amongst the eight landfills). Note that a percentage of maximum permit capacity utilized by Project-generated operational waste cannot be determined because the Project is assumed to operate indefinitely and therefore, an "operational rate" in days cannot be determined.

Because the estimated solid waste quantity generated by the Project on a daily basis during operation represents approximately one percent or less of the total maximum permitted throughput capacities for each landfill, it is anticipated that all landfills would have sufficient daily capacity to accept the solid waste generated by operation of the proposed Project. Based on the foregoing analysis, the Project would not cause or contribute to the need for new or expanded solid waste facilities during operation, and impacts would therefore be less than significant.

Table 4.15-7 Comparison of Project-Generated Operational Waste to Maximum Permitted Throughput at Each Landfill

Landfill	Maximum Permit Capacity[1]	Maximum Permitted Throughput[1]	Percentage of Maximum Permitted Throughput Utilized by Project-Generated Operational Waste
Antelope Valley Public Landfill	30,200,000 cy	5,548 tpd	0.56 percent
Lancaster Landfill and Recycling Center	27,700,000 cy	5,100 tpd	0.61 percent
McKittrick Waste Treatment Site	5,474,900 cy	3,500 tpd	0.89 percent
Simi Valley Landfill and Recycling Center	119,600,000 cy	64,750 tpw	0.34 percent
El Sobrante Landfill	209,910,000 cy	16,054 tpd	0.19 percent
Sunshine Canyon City/County Landfill	140,900,000 cy	12,100 tpd	0.26 percent
Chiquita Canyon Sanitary Landfill	110,366,000 cy	12,000 tpd	0.26 percent
Victorville Sanitary Landfill	93,400,000 cy	3,000 tpd	1.04 percent

[1] (CalRecycle, 2025)

C. Summary of Project Solid Waste Impacts

As indicated above, regional solid waste facilities would have adequate capacity to handle solid waste generated by the Project's construction and operational phases, and the Project would not cause or contribute to the need for new or expanded solid waste facilities during construction or operation of the Project. Accordingly, impacts would be less than significant.

Threshold e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed Project would be regulated by the County of Los Angeles CIWMP. The CIWMP outlines goals, policies, and programs Los Angeles County and its cities would implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. Additionally, AB 341 made a legislative declaration that it is the policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, although CalRecycle may not establish or enforce a diversion rate greater than the 50 percent diversion rate as set forth by the CIWMP (per Public Resources Code § 41780.01[b]).

The proposed Project would be required to comply with the CIWMP's requirement to divert up to 65 percent of its solid waste from area landfills. In conformance with the CIWMP, the Project applicant is required to work with future contract refuse haulers to implement recycling and waste reduction

programs for solid wastes. Implementation of a waste disposal strategy for the proposed Project would assist Los Angeles County and the City of Palmdale in achieving the mandated goals of the IWMA by developing feasible waste programs that encourage source reduction, recycling, and composting. The City of Palmdale is required to implement programs that ensure that the City achieves 65 percent diversion of solid waste from landfill disposal. With mandatory compliance to AB 939, AB 341, and the City's programs and policies, the potential for implementation of the Project to the Project would result in a less than significant impact due to a conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

4.15.5 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis for utilities and service systems considers development of the Project site in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout in the City of Palmdale and other jurisdictions in the region that are within the same public utility and service boundaries as the Project site.

Relocation or Construction of New or Expanded Utilities

As indicated under the analysis of Threshold (a), the Project would require the installation of water, sewer, stormwater, electric power, natural gas, and telecommunications facilities to provide utility service to the Project site. Cumulative effects associated with the proposed water, sewer, stormwater drainage, and utility connections associated with the Project have been evaluated throughout this EIR. There are no components of the water, sewer, stormwater drainage, or utility connections associated with the Project that would result in cumulatively considerable impacts not already evaluated by this EIR. Accordingly, Project impacts due to new or expanded water, wastewater treatment, stormwater drainage, and utility connections would be less than cumulatively considerable.

Water Supply

As discussed under the analysis of Threshold (b), based on LACWD's 2020 UWMP, with implementation of the Project and other cumulative developments, the LACWD would have adequate water supplies during normal, dry, and multiple dry years to meet projected demand through 2045. Therefore, cumulatively considerable impacts due to water supply would be less than significant.

Wastewater Treatment Capacity

As indicated under the analysis of Threshold (c), the wastewater generation associated with the Project would represent approximately 0.14 percent of the daily design capacity at the PWRP. In terms of cumulative conditions and as noted by the EIR prepared for the City's General Plan, the City concluded that upgrades to the PWRP may be needed in the future to accommodate the additional wastewater generated from full buildout of the City of Palmdale per its General Plan. However, because the demand for wastewater treatment associated with the Project would only represent approximately 0.14 percent of the existing capacity of the PWRP, the contribution of the Project to the possible future need

to expand the capacity of the PWRP or to build a new treatment plant would not be cumulatively considerable. Should the existing PWRP need to be expanded or should a new treatment plant be needed in the future to serve full buildout of the City of Palmdale, these additional wastewater treatment facilities would be evaluated under CEQA on a project-specific basis at the time such physical improvements are proposed by the City's Utilities Services Division. The need for potential future improvements to treatment plant capacity is too speculative for evaluation in this EIR (CEQA Guidelines § 15145). (City of Palmdale, 2022a, Table 4.19-3 and pp. 4.19-20 and -21)

The Project would be consistent with General Plan Goal PSFI-5, Policy PFSI-5:3, "Off-Site Fair Share Contribution. Require all new development, including major modifications to existing development, to construct or provide a fair share contribution toward construction of required off-site improvements needed to support the project. This includes a fair share contribution toward development of regional master facility plans for roads, sewer, water, drainage, schools, libraries, parks, fire, and other community facilities, prior to granting approval of development applications." (City of Palmdale, 2023, p. 322) Additionally, the Project is required to adhere to PMC Chapter 3.45, which requires development applicants to pay Development Impact Fees (DIF) to address usage demands from new development on the City's existing facilities. Payment of the required DIF would ensure that the Project provides fair share funds for the provision of public facilities. The proposed Project and all cumulative developments within the City of Palmdale or surrounding areas would be required to contribute DIFs to address the impacts of each development on the City's existing sewer system facilities. Mandatory fee contributions by the Project Applicant and cumulative developments would ensure that adequate funding is provided to the LACSD for the construction of additional facilities, equipment, and personnel, as needed.

Solid Waste Generation

As indicated under the analysis of Threshold (d), solid waste generated by construction and operation of the Project would represent small proportions (less than one percent) of the total/daily/weekly disposal capacities at each of the eight landfills that serve the City of Palmdale. These landfills have a sufficient capacity to handle solid waste generated by the Project and other cumulative developments both during construction and long-term operation. The incremental contribution to solid waste generation associated with the Project would be less than cumulatively considerable given the available capacities at existing landfills. Therefore, the Project's impacts to solid waste disposal facilities are evaluated as less than significant on a cumulatively considerable basis.

Compliance with Solid Waste Reduction Requirements

The Project would adhere to regulations set forth by local and State regulations (including AB 341 and AB 939) during both construction and long-term operations. Other cumulative developments also would be required to comply with such regulations. As such, the Project as well as other cumulative developments in the area would not result in cumulative impacts with respect to compliance with federal, State, and local statutes and regulations related to solid wastes. Impacts would be less than cumulatively considerable.

4.15.6 Significance of Impacts Before Mitigation

Threshold a: Less Than Significant Impact. The Project's wet and dry utility infrastructure facilities have been evaluated throughout this EIR under the appropriate subject headings (e.g., air quality, biological resources, etc.). There are no significant environmental impacts that would occur specifically related to the Project's proposed water, sewer, drainage, and dry improvements that have not already been addressed.

Threshold b: Less Than Significant Impact. Existing water supplies in combination with identified future and potential water supply opportunities and demand reduction responses would enable Los Angeles County Waterworks District (LACWD) District 40 to meet all future water demands under all hydrologic conditions through 2045. Additionally, because the Project's proposed land uses are accounted for by the LACWD 2020 UWMP, and because the UWMP demonstrates that the LACWD would have sufficient supplies to meet projected demands, it is determined that the LACWD will have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. Thus, Project impacts to water supply would be less than significant.

Threshold c: Less Than Significant Impact. The Project's wastewater generation would represent approximately 0.14 percent of the daily design capacity at the Lancaster Water Reclamation Plant (LWRP). Because the Project's individual wastewater treatment capacity need represents only 1.25 percent of the total treatment capacity of the LWRP, impacts due to implementation of the Project would be less than significant.

Threshold d: Less Than Significant Impact. Solid waste generated by construction and operation of the Project would represent less than one percent of the disposal capacities at landfills that service the area. Existing landfills have a sufficient capacity to accept the Project's solid waste for disposal and the Project would not 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. Therefore, impacts would be less than significant.

Threshold e: Less Than Significant Impact. There is no potential for the Project to conflict with applicable federal, State, and local statutes and regulations related to the management and reduction of solid waste and pertaining to waste disposal, reduction, and recycling. Impacts would be less than significant.

4.15.7 Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

4.15.8 Design Features (DF) and Regulatory Requirements (RR)

The City of Palmdale is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of

Utilities and Service Systems, which include the following regulatory requirements and design features. The Project shall be conditioned to implement the following design features and regulatory requirements as part of the City's Conditions of Approval for the Project.

UTIL RR-1 Project construction contractors are required to comply with the requirements of the California Green Building Standards Code (CalGreen, Part 11 of Title 24, California Code of Regulations), which requires among other items the installation of low water-use appliances and the diversion of a certain amount of construction waste from landfills.

UTIL RR -2 The Project design is required to comply with the provisions of the California Solid Waste Reuse and Recycling Act (AB 1327), which requires that an adequate area for collecting and loading recyclable materials over the lifetime of the Project must be provided. The City of Palmdale shall ensure the Project applicant has met this requirement prior to the issuance of building permits.

UTIL RR-3 The Project applicant, construction contractors, and operators, shall comply with all applicable provisions of PMC Chapter 5.52, Solid Waste Handling and Recycling Services.

UTIL RR-4 The Project applicant, construction contractors, and operators, shall comply with all applicable provisions of PMC Title 13, Sanitary Sewers and Industrial Waste.

UTIL RR-5 The Project applicant, construction contractors, and operators, shall comply with all applicable provisions of PMC Chapter 14.05, Water Efficient Landscape.

4.16 WILDFIRE

This subsection provides information on the existing Project site conditions and fire hazard severity zone classification and determines the potential for wildfire impacts related to these conditions. All references used in this subsection are included in EIR Section 7.0, *References*.

The NOP for this EIR was published in March 2025, and no comments or concerns were raised about the topic of wildfire.

4.16.1 EXISTING CONDITIONS

Under existing conditions, the Project site is vacant. A dirt access road running north-south bisects the Project site. The access road forks in the northern portion of the Project site, with one road continuing north beyond the boundaries of the Project site, and the other road moving northwest beyond the boundaries of the Project site. The majority of the Project site, other than the dirt access roads, is undisturbed.

To the immediate north of the Project site is vacant land. Farther north are two business parks (Sierra Gateway), which contain various commercial uses, as well as single-family residences. Sierra Highway forms the eastern boundary of the Project site, directly east of which is the Sierra Highway Bike Trail. Immediately east of the bike trail is the Union Pacific Railroad (UPRR) mainline tracks and easement. East of the UPRR is vacant land. West Rancho Vista Boulevard forms the southern boundary of the Project site. Beyond West Rancho Vista Boulevard is vacant land, single-family residential uses, a restaurant, and an industrial park (Winnell Industrial Park), which contains various industrial uses. Division Street forms the western boundary of the Project site. Beyond Division Street is vacant land, beyond which are residential uses, including a retirement community, of varying densities.

A. Wildfire Susceptibility

According to the California Department of Forestry and Fire Protection (CAL FIRE), the Project site is located in a Local Responsibility Area (LRA) and fire protection for the City is the responsibility of the Los Angeles County Fire Department (LACFD). With the exception of the residential development located to the south, the Project site and immediately surrounding areas are located within a Moderate Fire Hazard Severity Zone (CAL FIRE, 2025a).

B. Topography

As previously shown on Figure 2-7, *USGS Topographic Map*, the Project site is mostly level, with the site's elevation ranging from approximately 2,642 feet above mean sea level (amsl) at the southwestern corner of the Project site, to 2,618 feet amsl at the northeastern corner of the Project site. Overall site topography slopes downward to the east at a gradient less than approximately one percent. (SCG, 2024, p. 4)

C. Existing Vegetation

The Project site is located within an area referred to as "the high desert." Vegetation serves as fire fuel. Vegetation communities and land cover types on the Project site include Joshua tree woodland, Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub, rubber rabbitbrush scrub, disturbed habitat, and developed land. Joshua tree woodland occurs throughout the Project site. This vegetation community is dominated by western Joshua trees as an emergent small tree over a shrub or grass layer. Other species in this community include common Mediterranean grass and tall tumble mustard. Nevada joint fir-Anderson's boxthorn-spiny hop sage scrub occurs as a shrub canopy layer in the central, northern, and northwestern portions of the Project site. Other species in this community include cattle saltbush, cheatgrass, redstem stork's bill, and common Mediterranean grass, all within the herbaceous layer. Rubber rabbitbrush scrub occurs in the southeastern and northwestern corners of the Project site and on the west side of Division Street. This vegetation community includes rubber rabbitbrush as the dominant species in the shrub canopy with a sparse or grassy herbaceous layer, with cheatgrass and common Mediterranean grass also occurring in the community. Disturbed habitat, areas generally lacking vegetation due to high levels of human disturbance, occurs along the eastern, western, and southern borders of the Project site; in the southeastern portion of the Project site; and as dirt roads north and northwest in the central portion of the Project site. Developed land on the Project site consists of portions of the roads immediately east, south, and west of the Project site. (Dudek, 2025, pp. 21-24)

D. State, Local, and Federal Responsibility Areas

State Responsibility Areas (SRAs) are recognized by the Board of Forestry and Fire Protection (BFFP) as areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention. The Project site and all immediately surrounding areas are not located within an SRA. The nearest area located within an SRA occurs approximately 1.6 miles southwest of the Project site.

According to CAL FIRE, the Project site is located within an LRA in a Moderate Fire Hazard Severity Zone (CAL FIRE, 2025a). Local Responsibility Areas (LRA) are incorporated cities, urban regions, agriculture lands, and portions of the desert where the local government is responsible for wildfire protection. This is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract. (CalFire, 2023)

The USAF Plant 42 and the inactive Palmdale Regional Airport property to the northeast of the Project site is located within a Federal Responsibility Area (FRA). Federal agencies are responsible for wildfire prevention and suppression for lands in FRAs. (City of Palmdale, 2022a, p. 4.20-1)

E. Wildfire Occurrences

According to CAL FIRE mapping, there has been little to no wildfire activity on or in the vicinity of the Project site (CAL FIRE, 2025b). Wildfires that occurred near the site in the past were of an unknown cause, covering approximately 133 acres and 182 acres on vacant land south of the Palmdale Municipal Airport in 1995 and 1998, respectively. The most recent large wildlife in the area and closest

to the Project site was the Crown Fire in 2010, which burned 12,582 acres and was contained west of SR-14.

4.16.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations related to wildfire hazards.

A. Federal Regulations

1. Healthy Forests Restoration Act of 2003

On August 22, 2002, President Bush established the Healthy Forests Initiative, directing the Departments of Agriculture and the Interior, and the Council on Environmental Quality, to improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risk of catastrophic wildland fires. On June 5, 2003, the Departments of Agriculture and the Interior adopted two new categorical exclusions from documentation in an environmental assessment or environmental impact statement (EIS): an exclusion for hazardous-fuel reduction and another for rehabilitation of resources and infrastructure damaged by wildfire (68 FR 33814). (BLM, 2003)

B. State Regulations

1. Public Resources Code Sections 4290-4299

Public Resources Code (PRC) Sections 4290-4299 establish minimum statewide fire safety provisions pertaining to: 1) roads for fire equipment access; 2) signs identifying streets, roads, and buildings; 3) minimum private water supply reserves for emergency fire use; and 4) fire fuel breaks and greenbelts. With certain exceptions, all new construction after July 1, 1991, in potential wildland fire areas, is required to meet these statewide standards. The state requirements, however, do not supersede more restrictive local regulations. (CA Legislative Info, n.d.)

As defined by CAL FIRE, wildland areas defined as SRAs may contain substantial wildfire risks and hazards and consist of lands exclusive of cities, and federal lands regardless of ownership. The primary financial responsibility for preventing and suppressing fires within wildlands belongs to the State of California. However, it is not the State's responsibility to provide fire protection services to buildings or structures located within the wildlands unless CAL FIRE has entered into a cooperative agreement with a local agency for those purposes pursuant to PRC Section 4142. As such, wildland areas require disclosure of these fire hazards in real estate transactions, and owners of properties in wildland areas are subject to PRC Section 4291 maintenance requirements. The law requires CAL FIRE to provide maps identifying the boundaries of lands classified as SRAs to the appropriate County Assessor every five years. (CA Legislative Info, n.d.)

2. *California Government Code Section 51178-51179 – Very High Fire Hazard Severity Zones*

California Government Code (CGC) Sections 51178–51179 establish the framework for identifying and managing Very High Fire Hazard Severity Zones (VHFHSZs) in LRAs, which are locations where local agencies, not the state, have primary responsibility for fire protection. Section 51178 specifies that the Director of CAL FIRE, in cooperation with local fire authorities, must identify areas that are Very High Fire Hazard Severity Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria such as fuel loading, slope, fire weather and other relevant factors like Santa Ana wind conditions, and the expected severity of fire hazard. Section 51179 states that a local agency (such as a city or county) must also designate and map the VHFHSZs in its jurisdiction by ordinance. Once adopted, these zones become subject to additional fire safety building and defensible space regulations under PRC Section 4291 and the California Building Code Chapter 7A (materials and construction standards for exterior wildfire exposure). (CA Legislative Info, n.d.)

3. *California Code of Regulations Title 14 – Natural Resources*

Title 14 of the California Code of Regulations (CCR) governs the management and protection of California's natural resources. It implements statutes administered by various state agencies, including those of the California State Board of Forestry and Fire Protection that address fire prevention and suppression efforts, particularly in California's State Responsibility Areas (SRAs) and Very High Fire Hazard Severity Zones. These regulations are intended to reduce the risk of wildland fires and promote fire-safe land use and development. CCR Title 14, Sections 1270–1276.03 apply to development in SRAs and address access, signage, emergency water supply, vegetation management, and fuel modification zones. Requirements are designed to ensure that new construction provides adequate ingress and egress for emergency vehicles and safe evacuation routes for occupants. (CCR, n.d.)

4. *California Code of Regulations Title 24, Parts 2 and 9 – Fire Codes*

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, establishes design and construction requirements for buildings and structures to ensure public health, safety, and welfare. Two components of Title 24 that are relevant to fire protection and prevention are Part 2 (California Building Code (CBC)) and Part 9 (California Fire Code (CFC)). The CBC sets structural design requirements, occupancy classifications, and fire-resistance standards for building materials and assemblies. It includes provisions to minimize fire hazards through passive fire protection measures such as fire-rated walls, doors, and separations between occupancies and uses. The CFC is based on the International Fire Code and amended for California conditions. The CFC governs fire prevention, fire suppression systems, hazardous materials management, emergency access, and water supply requirements. It addresses building features such as fire alarms, sprinkler systems, smoke control, and fire department access roads, and regulates activities that pose fire risks. Compliance with the California Building and Fire Codes is required for all new construction and substantial remodels. These regulations are enforced locally by the City of Palmdale's Fire Marshal and Building Division, in coordination with the Los Angeles County Fire Department.

C. Local Regulations

1. City of Palmdale General Plan Safety Element

The General Plan Safety Element outlines the goals and policies related to hazards and safety in Palmdale. Per California Government Code Section 65302, a Safety Element provides protection of the community from any unreasonable risks associated with the effects of wildland and urban fires. Safety Element Goal SE-2 is aimed to minimize public health, safety, and welfare impacts resulting from wildfire hazards. The Safety Element also includes mapping of known geologic hazards and addresses evacuation routes, military installations, peak load water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards. (City of Palmdale, 2023)

2. City of Palmdale Emergency Operations Plan

The 2023 City of Palmdale Emergency Operations Plan (EOP) addresses the planned response to extraordinary emergencies associated with natural disasters, technological and intentional incidents, pandemics, and national security emergencies affecting the City. THE EOP identifies the policies, responsibilities, and procedures required to protect the health and safety of the community, public and private property, and the environmental effects of natural, incidental, and technological incidents. It also establishes the operational concepts and procedures associated with field response to emergencies, the City's Emergency Operations Center (EOC) activities, and the recovery process. The EOP is intended to facilitate multi-agency and multi-jurisdictional coordination in emergency operations, particularly between the City of Palmdale, Special Districts, and the Los Angeles County Office of Emergency Management (OEM). (City of Palmdale, 2022b)

3. City of Palmdale Local Hazard Mitigation Plan 2021-2026 Update

To help ensure that the City can protect its residents and businesses from natural and manmade hazards. The City has adopted a Local Hazard Mitigation Plan (LHMP). The LHMP covers a wide range of hazards affecting Palmdale including earthquakes, floods, dams and inundation, wildfires and brush fires, transportation accidents and hazardous materials spills, drought, severe weather, and power/utility failure. The LHMP describes these hazards and lays out how the City and other local partners can work to either reduce hazards or to help address their impacts when disasters occur. Having an LHMP in place helps direct City resources appropriately and qualifies the City for federal disaster relief. (City of Palmdale Public Works Department, 2021)

4.16.3 BASIS FOR DETERMINING SIGNIFICANCE

Based on Section XX of Appendix G to the State CEQA Guidelines, the Project would result in a significant impact if the Project or any Project-related component would:

a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, substantially impair an adopted emergency response plan or emergency evacuation plan;*

b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;*

c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, 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; or,*

d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, 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.*

The methodology for the evaluation of potential wildfire-related impacts is based on a review of applicable fire hazard mapping and regulatory documents, including the 2025 CAL FIRE Fire Hazard Severity Zone (FHSZ) maps, and relevant portions of the California Government Code, Public Resources Code, and PMC. Because the Project site is not located within a SRA and is not designated as a VHFHSZ by CAL FIRE, CEQA Guidelines Appendix G does not require a wildfire impact assessment. Regardless, in the interest of disclosure, analysis is provided below.

4.16.4 IMPACT ANALYSIS

Threshold a: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project site is not located within an SRA; the nearest area subject to an SRA occurs approximately 1.6 miles southwest of the Project site (Google Earth, n.d.; CAL FIRE, 2025a). According to mapping information available from the CAL FIRE, the Project site is located within a Local Responsibility Area (LRA). With the exception of the residential development located to the south, the Project site and immediately surrounding areas are located within a Moderate Fire Hazard Severity Zone. (CAL FIRE, 2025a)

The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. Additionally, because the Project is not located near SRAs or lands classified as very high fire hazard severity zones, the Project would not impair local plans such as the Local Hazard Mitigation Plan (LHMP) or the Palmdale Emergency Operations Plan (EOP).

During construction and long-term operation of the Project, adequate emergency access for emergency vehicles would be required to be maintained along public streets that abut the Project site. As part of the City's discretionary review process, the Los Angeles County Fire Department (LACFD) conducted a review of the Project plans to ensure that appropriate emergency ingress and egress would be

available to and from the Project site and that circulation on the Project site was adequate for emergency apparatus.

Because the Project is not located in or near SRAs or lands classified as very high fire severity zones, and it is served by public streets from which emergency vehicles can access the site, implementation of the Project would not substantially impair an adopted emergency response plan or an emergency evacuation plan; thus, no impact would occur, and no mitigation is required.

Threshold b: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project, 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?

Because the Project is not located in or near SRAs or lands classified as very high fire severity zones, the Project, due to slope, prevailing winds, and other factors, would not exacerbate wildfire risks, and thereby would not expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impact would occur as a result of implementation of the Project; thus, no mitigation is required.

Threshold c: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project 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?

Because the Project is not located in or near SRAs or lands classified as very high fire severity zones, and because the Project involves construction of one new structure in compliance with all applicable Building and Fire Codes and installation of on-site and off-site improvements to provide fire access, implementation of the Project would not exacerbate fire risk of the site. Due to the lack of wildfire susceptibility in the areas surrounding the Project site, the Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, no impact would occur as a result of implementation of the Project; thus, no mitigation is required.

Threshold d: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project 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?

Because the Project site is not located in or near an SRA or lands classified as very high fire severity zones, the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no impact would occur as a result of implementation of the Project; thus, no mitigation is required.

4.16.5 CUMULATIVE IMPACT ANALYSIS

The cumulative study area for the issue of wildfire includes the City of Palmdale LRA, within which the Project site is located. The study area is appropriate for analysis because the LRA represents the geographic area that would be served by the same fire protection resources, and no areas near the site are located in a SRA or a VHFHSZ.

Adopted Emergency Response Plan or Emergency Evacuation Plan

As discussed under the analysis of Threshold (a), the Project site does not contain any emergency facilities, nor does it currently serve as an emergency evacuation route, and the Project would not serve as an evacuation route under long-term conditions. During construction and at Project build-out, the LACFD requires approval prior to and during construction of the proposed Project and the Project would be required to maintain adequate access for emergency apparatus. Other cumulative developments similarly would be required to accommodate emergency access and facilities. As such, cumulatively-considerable impacts would not occur as a result of implementation of the Project.

Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire

As discussed under the analysis of Threshold (b), due to the lack of wildfire susceptibility in the areas surrounding the Project site, the Project and other cumulative developments within the local area have no potential to exacerbate wildfire risks in a manner that could expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. As such, cumulatively-considerable impacts would not occur as a result of implementation of the Project.

Fire Protection-related Infrastructure

As discussed under the analysis of Threshold (c), due to the lack of wildfire susceptibility in the areas surrounding the Project site, the Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. As such, cumulatively-considerable impacts due to fire protection-related infrastructure would not occur as a result of implementation of the Project.

Wildfire-related Hazards

As indicated under the analysis of Threshold (d), the Project site is not located in a portion of the City that is subject to wildland fire hazards and is not located within a portion of the City that is subject to wildfire-related downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Cumulatively-considerable impacts would not occur as a result of implementation of the Project.

4.16.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: No Impact. Because the Project site is not located in or near SRAs or lands classified as very high fire severity zones, implementation of the Project would not substantially impair an adopted

emergency response plan or an emergency evacuation plan; therefore, no impact would occur and no mitigation is required.

Threshold b: No Impact. Because the Project is not located in or near SRAs or lands classified as very high fire severity zones, the Project, due to slope, prevailing winds, and other factors, would not exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impact would occur and no mitigation is required.

Threshold c: No Impact. The Project is not located in or near SRAs or lands classified as very high fire severity zones. Therefore, due to the lack of wildfire susceptibility in the areas surrounding the Project site, the Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Accordingly, no impact would occur.

Threshold d: No Impact. Because the Project site is not located in or near an SRA or lands classified as very high fire severity zones, the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no impact would occur and no mitigation is required.

4.16.7 MITIGATION

The Project would not be developed in or near state responsibility areas (SRAs) or lands classified as very high fire hazard severity zones. Thus, no impact would occur, and no mitigation is required.

4.16.8 DESIGN FEATURES (DF) AND REGULATORY REQUIREMENTS (RR)

The City of Palmdale is required to assure that implementing development complies with the assumptions relied upon herein and applicable regulatory requirements pertaining to the topic of Wildfire, which include the following regulatory requirements and design features. The Project shall be conditioned to implement the following design features and regulatory requirements as part of the City's Conditions of Approval for the Project.

WF DF-1 As a condition of the Project's tenant improvement building permit, and Early Suppression Fast Response (ESFR) fire sprinkler system or equivalent shall be installed in the warehouse portion of the building.

WF RR-1 Prior to issuance of building permits, the City shall assure that the Project's building plans comply with required fire protection ratings specified in the applicable California Code of Regulations Title 24 requirements.

5.0 OTHER CALIFORNIA ENVIRONMENTAL QUALITY ACT CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The California Environmental Quality Act (CEQA) Guidelines require that an Environmental Impact Report (EIR) disclose the significant environmental effects of a proposed project that cannot be reduced to a level of less than significant if the Project is implemented and, where impacts cannot be alleviated without imposing an alternative design, the reasons why the project is being proposed, notwithstanding its effect, should be described (CEQA Guidelines Section 15126(b) and Section 15126.2(c)). As described in detail in Section 4.0, *Environmental Analysis*, of this EIR, the proposed Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after the consideration of Project design features, compliance with applicable federal, State, and local regulations, and the application of feasible mitigation measures. These impacts are as follows:

- Greenhouse Gas Emissions (Threshold a): Significant Unavoidable Cumulatively Considerable Impact. Mitigation measures are required to minimize operational-related GHG impacts. Most GHGs associated with the Project are generated by on-road vehicles, diesel-fueled off-road forklifts, and energy sources. Mitigation Measure AQ MM-4 requires measures to minimize on-road vehicle emissions, including the provision of EV charging stations and electrical hookups for TRUs. Mitigation Measure AQ MM-5 includes the requirement for all off-road forklifts and landscaping equipment to be zero emission, which would reduce the long-term criteria air pollutant emissions substantially. Mitigation Measure AQ MM-7 requires the warehouse building to be all-electric (i.e., no natural gas). Finally, implementation of Mitigation Measure GHG MM-1 through Mitigation Measure GHG MM-3 would reduce GHG emissions associated with renewable/energy efficiency, solid waste disposal, and water conservation. As shown previously on Table 4.7-8, *Project GHG Emissions Summary (With Mitigation),* after implementation of feasible mitigation measures, the Project's greenhouse gas emissions are calculated to be 13,990.65 MT CO_2e per yr. Thus, the proposed Project's GHG emissions would exceed the SCAQMD screening threshold of 3,000 $MTCO_2e$ per year after mitigation. Although mobile vehicles (82 percent) are the main source of GHG emissions associated with Project operations, neither the Project Applicant nor the City can substantively or materially affect reductions in the Project's on-road mobile source emissions beyond what is already required by federal and State regulation. No feasible mitigation measures beyond those already identified exist that would reduce these emissions to levels that are less than significant. Therefore, even with the incorporation of mitigation measures, long-term impacts associated with a cumulatively considerable increase in GHG emissions would be significant and unavoidable

5.2 Significant Irreversible Environmental Changes Which Cannot be Avoided if the Proposed Project is Implemented

The CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (CEQA Guidelines Section 15126.2(c)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project would involve uses in which irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

Determining whether the proposed Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources in the form of construction materials and energy resources would be used in the construction of the proposed Project, but development of the Project site as proposed would have no measurable adverse effect on the availability of such resources, including resources that may be non-renewable (e.g., fossil fuels). Construction and operation of the proposed Project would not involve the use of large sums or sources of non-renewable energy. Additionally, the Project is required by law to comply with the California Green Building Standards Code (CALGreen), compliance with which requires a reduction in building operation energy volume that is produced by fossil fuels. The Project would be subject to regulations to reduce the Project's reliance on non-renewable energy sources. The Project also would be subject to the Energy Independence and Security Act of 2007, which contains provisions designed to increase energy efficiency and availability of renewable energy. In addition, the Project is subject to California Energy Code, or Title 24, which contains measures to reduce natural gas and electrical demand, thus requiring less non-renewable energy resources. The Project would avoid the wasteful, inefficient, or unnecessary consumption of energy during Project construction or operation. With mandatory compliance to the energy efficiency regulations and any applicable mitigation measures, the Project would not involve the use of large sums or sources of non-renewable energy. A more detailed discussion of Project energy consumption is provided in EIR Subsection 4.5, *Energy*.

EIR Subsection 4.8, *Hazards and Hazardous Materials*, provides an analysis of the potential for the Project to transport or handle hazardous materials which if released into the environment, could result in irreversible damage. As concluded in EIR Subsection 4.8, compliance with federal, State, and local regulation related to hazardous materials would be required during the construction phase of the Project and for all future occupants of the Project's building. As such, construction and long-term operation of the proposed Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

5.3 Growth-Inducing Impact of the Proposed Project

CEQA requires a discussion of the ways in which the proposed Project would be growth inducing. The CEQA Guidelines identify a project as growth inducing if it would foster economic or population

growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines Section 15126.2(d)). New employees and new residential development represents direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

To address this issue, potential growth-inducing effects are examined through analysis of the following questions:

1. Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area or through changes in existing regulations pertaining to land development)?

2. Would this project result in the need to expand one or more public services to maintain desired levels of service?

3. Would the project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

4. Would approval of this project involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment?

A project could indirectly induce growth by reducing or removing barriers to growth, or by creating a condition that attracts additional population or new economic activity. However, a project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors. Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment. This issue is presented to provide additional information on ways in which the Project could contribute to significant changes in the environment, beyond the direct consequences of implementing the Project examined throughout Section 4.0, *Environmental Analysis* of this EIR.

Would this project remove obstacles to growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area or through changes in existing regulations pertaining to land development)?

The Project would require the construction and extension of roadways and utility infrastructure to serve the development. As shown previously on Figure 3-1, Tentative Parel Map 84510, the right-of-way reserved for Avenue 0-14 to extend through the site east/west is proposed to be vacated and this road segment would not be built. Similarly, the right-of-way reserved for 3rd Street East to extend through the site north/south between Rancho Vista Boulevard and Avenue O-14 is proposed to be vacated and this road segment would not be built. TTM 84510 also shows a remainder parcel (APN 3006-027-005) on 0.27 acres located east of the Project site, east of Sierra Highway and east of the UPRR. The remainder parcel is not proposed to be developed or used for any purpose as part of the Project and

would remain in its existing condition. As shown and as described in EIR Section 3.0, *Project Description*, the Project would improve Sierra Highway, West Rancho Vista Boulevard / East Avenue P, Division Street, and Avenue O-12 along the Project frontages. In addition to improving the travel lanes on the four Project site-adjacent streets, the Project would also provide a curb-adjacent parkway on West Rancho Vista Boulevard / East Avenue P and sidewalk would be provided for pedestrian access. The Project would also provide a curb-adjacent parkway on Division Street and a sidewalk would be provided for pedestrian access. Because Sierra Highway, West Rancho Vista Boulevard / East Avenue P, and Division Street are existing roadways, and because Avenue O-12 would be classified as a Connector Street, a street type designed for intracity travel rather than regional travel (City of Palmdale, 2023, Table 6.1), the Project would not create any major new roadway infrastructure that could result in substantial, unplanned growth.

Utility infrastructure would be installed as roadways are constructed. Water service for the proposed warehouse building would be provided in part by an existing LACWD water line, located within the Sierra Highway ROW. Pursuant to the Cooperative Agreement between LACWD District 40 and the Project Applicant, as a condition of Project approval, in order to provide additional water service infrastructure to the area surrounding the Project site, and to provide the customary level of potable water service to the proposed warehouse building, the following water service facilities would be constructed as part of the Project: 1) approximately 2,500 feet of 12-inch-diameter watermain along West Rancho Vista Boulevard / East Avenue P, from Division Street to Sierra Highway; 2) approximately 2,200 feet of 16-inch-diameter watermain along Sierra Highway, from approximately 450 feet south of East Avenue O-8 to West Rancho Vista Boulevard / East Avenue P; 3) 22 public fire hydrants; and 4) two 10-inch Reduced Pressure Principle Detector Assemblies, new pressure regulating station to regulate flow from the 2980 pressure zone to 2911 pressure zone, and associated interconnections.

As discussed in EIR Subsection 4.9, *Hydrology and Water Quality*, based on the information in the adopted 2020 UWMP for the LACWD No. 40, the District has documented and is prepared to serve its existing customers, including the proposed Project, potable water demands through 2045. Furthermore, LACWD 40 in collaboration with the AVEK has secured contingency plans to deliver uninterruptable water supply to the proposed Project. According to the Project's WSA, the LACWD can serve the proposed Project through 2045, and the Project would not indirectly include substantial unplanned population growth but instead by the payment of development impacts fees, the Project would instead provide a financial means to assist the LACWD with serving future needs of the area, beyond the year 2045.

In summary, as described above, because new utility infrastructure is not proposed to extend beyond the Project site; the Project would not indirectly induce substantial unplanned population growth.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As discussed in Subsection 4.12, *Public Services*, the Project would not necessitate the expansion of existing public service facilities to maintain desired levels of service. If these facilities or associated resources do need to be expanded in the future, funding mechanisms are in place through existing regulations and standard practices to accommodate such growth. This Project would not, therefore, have significant growth inducing consequences with respect to public services.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or removing the barriers to growth. This typically occurs in suburban or rural environments where population or employment growth results in increased demand for service and commodity markets responding to the new population of residents or employees. Economic growth would likely take place as a result of the operation of the proposed Project as an industrial warehouse building. The Project would generate employment during the construction and operational phases of the Project, which would result in the purchase of goods and services in the region. Any secondary increase in employment associated with meeting these goods and services needs would be marginal, accommodated by existing goods and service providers, and highly unlikely to result in any new physical impacts to the environment. Therefore, while the Project would create economic opportunities by introducing new job opportunities to the Project site, this change would not induce substantial new growth in the region. It is anticipated that the employment base for both the construction and operational phases of the Project would come from the existing population in the City of Palmdale and surrounding area.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. Typically, growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies such as the Southern California Association of Governments (SCAG). Significant growth impacts also could occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

As disclosed in the City's General Plan EIR, SCAG's Regional Comprehensive Plan (RCP) and Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) serve as a framework for addressing problems and creating a path to correct issues on a regional level through 2045. Population projections are made through the RTP/SCS and are the basis for growth for the RCP. Reasonably foreseeable development under the General Plan (Palmdale 2045) is projected to result in approximately 22,000 new homes and 26,391 new jobs, which would move the City closer to a 1 to 1

(1:1) jobs/housing ratio. Based on Palmdale's estimated average household size of 3.44 persons (DOF 2022), this would lead to an increase of approximately 75,756 residents in the City. Adding the 75,756 new residents to the City's 2022 population of 167,398, future residential growth carried out under the General Plan is predicted to increase the City's total population to 243,154, which is above SCAG's 2045 population forecasts of 207,000 as cited in the 2016-2040 RTP/SCS. The addition of approximately 75,756 residents constitutes a 45 percent population increase between 2022 and 2045. Therefore, the General Plan would accommodate substantial population growth in the area. (City of Palmdale, 2022a, p. 4.14-4)

It is noted herein that the 2016-2040 RTP/SCS was published before the City's General Plan update was adopted in October 2022 and therefore does not reflect the population forecasts as cited in the General Plan EIR and herein.

Economic growth would likely take place as a result of the operation of the proposed. Employees (short-term construction and long-term operational) of the Project would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services demands is expected to be accommodated by existing goods and service providers near the Project site, and would be highly unlikely to result in any unanticipated, adverse physical impacts to the environment. As previously disclosed in EIR Section 3.0, *Project Description*, using an employment generation rate for industrial buildings of 1.18 employees per 1,000 s.f. of building space[1], the 1,000,000 s.f. of total building space is anticipated to generate approximately 1,180 new, recurring jobs (1,000,000 s.f. x 1.18 employees = 1,180,000 /1,000 s.f. = 1,118 employees).

While the Project would create economic opportunities by introducing new job opportunities to the Project site, it is anticipated that the employment base for both the construction and operational phases of the Project would come from the existing population in the City of Palmdale and surrounding area. Accordingly, because it is anticipated that most of the future employees of the proposed Project would already be living in Palmdale, introduction of employment opportunities by the proposed Project on the Project site would not induce substantial unplanned growth in the area.

As discussed in Section 2.0, *Environmental Setting*, under existing conditions, the Project site is vacant and undeveloped. A dirt access road running north-south bisects the Project site. The access road forks in the northern portion of the Project site, with one road continuing north beyond the boundaries of the Project site, and the other road moving northwest beyond the boundaries of the Project site. The majority of the Project site, other than the dirt access roads, is undisturbed.

Development of the Project site is not expected to place short-term development pressure on abutting vacant properties because the Project site is located directly north of West Rancho Vista Boulevard; directly east of Division Street; directly west of Sierra Highway, directly east of which are the Sierra

[1] According to Table 2-4 of the City of Palmdale 2045 General Plan Update Final EIR (SCH No. 2021060494), the City projects that between 2016 and 2045 there would be approximately 11,820 new jobs associated with 10,046,865 s.f. of industrial space, which results in a ratio of approximately 1.18 employees per 1,000 s.f. of building area.

Highway Bike Trail and the Union Pacific Railroad (UPRR) mainline tracks and easement. North of the Project site is vacant land, beyond which are two business parks and single-family residences. Furthermore, the improvements necessitated by the proposed Project to the public infrastructure, including Division Street that forms the western boundary of the Project site and proposed Avenue O-12 that will form the northern boundary of the Project site, drainage infrastructure, and other utility improvements, are consistent with the City's General Plan (Palmdale 2045) and would not indirectly induce substantial and unplanned population growth in the local area.

Would approval of this project involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment?

The Project is limited to the Project site's boundaries and does not include any components that would indirectly affect existing or planned uses on neighboring properties. The development of the proposed industrial use on the Project site would not reasonably or foreseeably cause the redevelopment of other properties or cause unplanned development on other properties because these properties are planned for future development as part of the City's General Plan buildout.

Furthermore, the Project's potential influence on other nearby properties to redevelop at greater intensities and/or different uses than the City's General Plan and Zoning Code allow is speculative; however, it should be noted that implementation of the Project would not result in the approval of proposed uses on any other property outside of the Project site. CEQA does not require the analysis of speculative effects (State CEQA Guidelines Section 151454). If any other property owner were to propose redevelopment of a property in the Project vicinity or in any part of the City, the redevelopment project would require evaluation under CEQA based on its own merits, including an analysis of direct and cumulatively considerable effects.

The operation and maintenance of the Project would generate jobs, but any potential growth-inducing impact of the employment of persons at the Project site was accounted for in the City's General Plan. Accordingly, the Project would not directly promote growth either at the Project site or at the adjacent and surrounding properties that were not accounted for in the City's General Plan.

Implementation of the proposed Project would create revenue in the form of construction and operational jobs as well as revenues generated by the businesses that would occupy the Project's building and that would be taxable by the City sales tax and through traditional e-commerce taxes or as an e-commerce marketplace facilitator. The local economy would benefit economically through direct spend within the community that would be driven by operations of the new facilities. Additional direct spend would come from construction of the Project's building. As these new monies from construction and ongoing operations ripple through the economy it would create jobs directly on the Project site as well as indirectly in the surrounding community. Moreover, these economic activities would generate additional tax revenues for the City. The economic activity generated by construction and ongoing operations of the tenants would increase the personal earnings of City residents as the monies generated from the activities circulates through the local economy. The new monies introduced

into the City as a result of the new construction and new business activity taking place would also increase the economic output of the region.

Based on the foregoing analysis, the Project would not result in substantial, adverse growth-inducing impacts.

5.4 EFFECTS NOT FOUND TO BE SIGNIFICANT DURING THE EIR SCOPING PROCESS

CEQA Guidelines Section 15128 requires that an EIR *"…contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."* The Project's Notice of Preparation (NOP) for this EIR, which is included in *Technical Appendix* A to this EIR, determined that implementation of the Project for a master-planned commerce center would clearly have no potential to result in significant impacts under the following four environmental issue areas: 1) agriculture and forestry resources; 2) mineral resources; 3) population and housing; and 4) recreation. These four issues were not required to be analyzed in detail in EIR Section 4.0, *Environmental Analysis*. A brief analysis of the potential impacts to agriculture and forestry resources, mineral resources, population and housing, and recreation is presented below.

5.4.1 AGRICULTURE AND FORESTRY RESOURCES

Threshold 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?***

According to information available from the Farmland Mapping and Monitoring Program (FMMP), the entire Project site is designated as "Other Land." According to the California Department of Conservation, "Other Land" is classified as "land which is not included in any other category with common examples including low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as "Other Land" (CDC, 2018).

The Project site is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). Therefore, because the Project site is not designated Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), no impact would occur as a result of implementation of the Project and no mitigation is required.

Threshold b:	***Would the Project conflict with existing zoning for agricultural use, or Williamson Act contract?***

According to the California Department of Conservation, the Project site is not located on land that is subject to a Williamson Act contract (CDC, 2018). Under existing conditions, the Project site is zoned Light Industrial (LI). In addition, no land zoned for agricultural use or Williamson Act contract is located adjacent to the Project site (CDC, 2023). Therefore, because the Project site is not zoned for agricultural use nor does it abut land zoned for agricultural use, and it does not contain land under a Williamson Act contract, no impact would occur as a result of implementation of the Project, and no mitigation is required.

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

The Project site is not located on lands designated as forest land, timberland, or timberland zoned Timberland Production by the City's General Plan, and none of the immediately surrounding properties are designated as forest lands or timberlands. Therefore, the Project would have no potential to 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 Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g)). As such, no impact would occur as a result of implementation of the Project and no mitigation is required.

Threshold d:	***Would the Project result in the loss of forest land or conversion of forest land to non-forest use?***

As noted above under Threshold (c), the Project site is not located on or near forest land. Therefore, the proposed Project would not result in the loss of any forest land or convert forest land to non-forest use. As such, no impact would occur as a result of implementation of the Project, and no mitigation is required.

Threshold e:	***Would the Project involve other changes to 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?***

As noted above under Thresholds (a) and (c), the Project site is not located on or near lands designated Farmland or forest land. There is no Farmland, forest land, or timberland near the Project site. As such, the proposed Project has no potential to 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. As such, no impact would occur as a result of implementation of the Project and no mitigation is required.

5.4.2 MINERAL RESOURCES

Threshold a:	***Would the Project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?***

According to the City's General Plan, known and potential major deposits of sand and gravel, crushed rock, clay, limestone, and dolomite have been identified in the City's Planning Area by the State Division of Mines and Geology. Sand and gravel deposits are found extensively in flood plains and stream channels located north of the San Gabriel Mountains in the Little Rock and Big Rock Wash areas.

Palmdale lies within the Palmdale Production-Consumption region, which is a California Department of Conservation-designated Mineral Resource Zone encompassing 1,103 square miles, including Palmdale and Lancaster. Two mineral resource zones (MRZ) MRZ-2 areas were classified within the Palmdale area. The mineral deposits within Palmdale are the Littlerock Fan and the Big Rock Creek Fan alluvial deposits. The Littlerock Fan is a 12 square mile area extending from the north flank of the San Gabriel Mountains for approximately eight miles, which includes the Littlerock Wash floodplain and the fan area to the west. The Big Rock Creek Fan encompasses a 26 square mile area extending northward from the San Gabriel Mountains for eight miles. Both mineral deposits are composed of approximately 60 percent fine to coarse sand and silt, overlain by approximately 40 percent pebbly gravel. As shown in General Plan Figure 4.12-1, *Mineral Resource Locations in and Around Palmdale* and Figure 4.12-2, *Mineral Resource Extraction in Palmdale,* the Project site is not located in an area of known mineral resource availability. (City of Palmdale, 2022a, p. 4.12-1 and Figure 4.12-1 and Figure 4.12-2)

Because the Project site is not located within an area known for mineral resources that are of value to the region and the residents of the State, no impact would occur and no mitigation is required.

Threshold 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?***

The General Plan designation for the Project site is EMPFX (Employment Flex) and is a transition zone intended to permit mixed development of lighter industrial uses and more intensive service, retail, and commercial uses, with a floor area ratio (FAR) of up to 1.0. The Project site is not zoned for mineral resources extraction. As discussed above under Threshold (b), the Project site is not located within an area designated by the State Mining and Geology Board as being of regional or Statewide significance. Therefore, because the Project site is not located on an important mineral resources recovery site, implementation of the Project would have no potential to 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; therefore, no impact would occur and no mitigation is required.

5.4.3 POPULATION AND HOUSING

Threshold a:	***Would the Project 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)?***

The proposed Project would result in the construction of an industrial warehouse building that would generate employment opportunities in the area. It is anticipated that the employment base for both the construction and operational phases of the Project would come from the existing population in the City of Palmdale and surrounding area. According to the California Employment Development Department, the City of Palmdale's civilian labor force contains approximately 62,100 persons with approximately 57,300 people employed and an unemployment rate of approximately 7.7 percent (approximately 4,800 persons) (EDD, 2025). Furthermore, approximately 85 percent of Palmdale residents commute outside of the City for work (SCAG, 2019, p. 21). Accordingly, the Project region already contains an ample supply of potential employees under existing conditions, and the labor demand of the Project – estimated to be 1,180 employees - is not expected to draw substantial numbers of new residents to the area.

There are no components of the Project that would reasonably result in indirect or unplanned population growth because the land use of the surrounding area is planned for industrial uses by the City's General Plan. Accordingly, no significant indirect impacts associated with population growth would result from any Project related improvements because the Project and its required improvements would not induce substantial growth on surrounding properties.

Based on the foregoing analysis, neither the Project nor any Project related component would result in substantial, direct, or indirect population growth that would cause a significant direct or indirect impact to the environment. This impact is considered less than significant.

Threshold b:	***Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

The Project site is currently vacant; therefore, implementation of the Project would not result in the displacement of substantial numbers of existing people or housing and would not necessitate the construction of replacement housing elsewhere. Accordingly, no impact would occur, and no mitigation is required.

5.4.4 RECREATION

Threshold 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?***

The Project does not involve any type of residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities. Accordingly, implementation of the proposed Project would not result in the increased use or

substantial physical deterioration of an existing neighborhood or regional park, and no impact would occur.

Threshold 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?***

The Project does not involve the construction of any new on- or off-site recreation facilities. The Project would not expand any existing off-site recreational facilities. Therefore, no impacts related to the construction or expansion of recreational facilities would occur with implementation of the proposed Project.

6.0 ALTERNATIVES

An Environmental Impact Report (EIR) must identify ways to mitigate or avoid the significant effects that a project may have on the environment. In compliance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6(a), an EIR must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project and evaluate the comparative merits of the alternatives."

As discussed in Section 4.0 of this EIR, the Project would result in significant adverse environmental effects to the environment that cannot be reduced to below a level of significance after the consideration of Project design features, compliance with applicable federal, State, and local regulations, and the application of feasible mitigation measures. These impacts are as follows:

- Greenhouse Gas Emissions (Threshold a): Significant Unavoidable Cumulatively Considerable Impact. After implementation of feasible mitigation measures, the Project's greenhouse gas (GHG) emissions are calculated to be 13,990.65 MT CO_2e per yr. Thus, the proposed Project's GHG emissions would exceed the SCAQMD screening threshold of 3,000 $MTCO_2e$ per year after mitigation. Although mobile vehicles (82 percent) are the main source of GHG emissions associated with Project operations, neither the Project Applicant nor the City can substantively or materially affect reductions in the Project's on-road mobile source emissions beyond what is already required by federal and State regulation. In effect, all Project traffic would need to be eliminated or be "zero GHG emissions sources" to achieve the SCAQMD's numeric threshold. There are no feasible means to or alternatives to eliminate all Project traffic, or to ensure that Project traffic would be zero GHG emissions sources. In terms of its practical application, this would constitute a "no build" condition. On this basis, even with implementation of applicable Project Design Features and Mitigation Measures, the Project would generate direct or indirect GHG emissions that would result in a significant impact on the environment. This is a significant and unavoidable impact. The no building condition is evaluated as the "No Development" Alternative.

This Section 6.0 identifies potential alternatives to the Project aimed at reducing or avoiding the Project's significant and unavoidable impacts and evaluates them, as required by CEQA. Key provisions of the State CEQA Guidelines on alternatives (Sections 15126.6[b]–15126.6[f]) are provided below to explain the foundation and requirements for the alternatives analysis in the EIR.

- The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objective or would be more costly (Section 15126.6[b]).
- The specific alternative of "no project" shall also be evaluated along with its impact (Section 15126.6[e][1]).

- The "no project" analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (Section 15126.6[e][2]).
- The range of alternatives required in an EIR is governed by the "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent) (Section 15126.6[f]).
- For alternative locations, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (Section 15126.6[f][2][A]).
- If the Lead Agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location (Section 15126.6[f][2][B]).
- An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (Section 15126.6[f][3]).

6.1 ALTERNATIVES UNDER CONSIDERATION

CEQA Guidelines Section 15126.6(e) requires that an EIR include an alternative that describes what would reasonably be expected to occur on the Project site in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., "No Project" Alternative). For projects that include a revision to an existing land use plan, the "No Project" Alternative may be the continuation of the existing land use plan into the future. For projects other than a land use plan (for example, a development project on an identifiable property), the "No Project" Alternative is considered to be a circumstance under which the project does not proceed (CEQA Guidelines Section 15126(e)(3)(A-B)). The potential scenario where the Project site remains in its current undeveloped condition is called the "No Development Alternative (NDA),"

which is the No Project Alternative. Should the proposed Project not be approved, the most likely outcome would be continuation of the existing condition of the property as vacant land.

In compliance with CEQA Guidelines Section 15126.6(a), an EIR must describe "a range of reasonable alternatives to the project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The EIR need not consider every conceivable alternative; rather it must consider a reasonable range of potentially feasible alternatives to the project, or to the location of the project, which would avoid or substantially lessen significant effects of the project, even if "these alternatives would impede to some degree the attainment of the project objectives or would be more costly" (CEQA Guidelines Section 15126.6(b)).

The following scenarios are identified by the City of Palmdale as potential alternatives to implementation of the proposed Project.

6.1.1 No Development Alternative (NDA)

The No Development Alternative (NDA), which serves as the "No Project Alternative" considers no development on the Project site beyond what occurs on the site under existing conditions. Under this Alternative, the 67 gross-acre vacant undeveloped site would remain undeveloped for the foreseeable future and would be subject to routine maintenance for weed abatement. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition.

6.1.2 Reduced Building Size and Trailer Lot Alternative (RBSTLA)

The Reduced Building Size and Trailer Lot Alternative (RBSTLA) considers a scenario where the Project site would be developed with two uses: one non-refrigerated high-cube fulfillment warehouse and a trailer parking lot. Under this alternative, a 500,000 s.f. warehouse building (including related site improvements such as paved areas for vehicle movement and parking, landscaping, and public utility connections, as described in EIR Section 3.0, *Project Description*) would be developed on the western portion of the Project site and a trailer parking lot would be developed on the eastern portion of the Project site. The building would include 490,000 s.f. of warehouse space and 10,000 s.f. of office space for a total of 500,000 s.f. of building area. One detention basin would be provided near the southeastern corner of the site, north of the future grade separator. A 28-foot fire lane would be provided around the perimeter of the building. The building would have a total of 74 dock and 314 parking stalls for passenger vehicles, electric vehicles, and accessible parking and a total of 733 truck trailer parking stalls. Access to the Project site would be accommodated by five driveways; two driveways connecting with Division Street, two driveways connecting with Avenue O-12, and one driveway connecting with West Rancho Vista Boulevard / East Avenue P. The central driveway on Division Street would accommodate access for passenger vehicles only. All other driveways would accommodate access for both passenger vehicles and trucks. The driveway on West Rancho Vista Boulevard / East Avenue P and the proposed southern driveway on Division Street would be restricted

access (right-in/right-out only) because medians restricting left turns would be installed as part of the Project along West Rancho Vista Boulevard / East Avenue P and Division Street. Under this alternative, the proposed building would be reduced in size and a truck trailer parking yard to service the building would be developed. This alternative was selected to evaluate a scenario that would reduce the total building area on the Project site relative to the proposed Project but still allow industrial use of the entire Project site and accommodate a building user that requires a substantial amount of on-site truck trailer storage space.

6.1.3 TRAILER LOT ALTERNATIVE (TLA)

The Trailer Lot Alternative (TLA) considers a scenario where the Project site is developed as a truck and trailer parking lot, accommodating approximately 1,326 truck trailer parking spaces. The entire Project site would be developed for parking, and landscaping would occur around the perimeter of the site for screening purposes. This alternative was selected to evaluate a scenario that would allow productive industrial use of the entire site while not developing a building structure other than security booths at the entrance and exit gates.

6.2 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the Project, CEQA Guidelines Section 15126.6(f)(1) notes:

> *"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"*

In determining an appropriate range of alternatives to be evaluated in this EIR, three alternatives were initially considered and, for a variety of reasons, rejected. The alternatives were rejected because either: 1) it could not accomplish the basic objectives of the Project, 2) it would not have resulted in a reduction of significant adverse environmental impacts, or 3) it was considered infeasible to construct or operate. A summary of the alternatives that were considered but rejected are described below.

6.2.1 ALTERNATIVE SITES

CEQA does not require that an analysis of alternative sites be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site, then an alternative sites analysis should be considered and analyzed in the EIR. In making the decision to include or exclude

an analysis of an alternative site, the "key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR" (CEQA Guidelines Section 15126.6(f)(2)). The City of Palmdale conducted a review of potential alternative site locations and identified no other sites of approximately the same size as the Project site that contain fewer environmental constraints.

The Project Applicant does not own or otherwise have control of any other properties in the City of Palmdale that are of similar size as the Project site and that are not already entitled for development with industrial uses. Furthermore, and based on the analysis presented in EIR Section 4.0, *Environmental Analysis*, the proposed Project would result in significant and unavoidable impacts due to GHG emissions that would exceed the SCAQMD screening thresholds. Because any alternative site would be developed in the same air basin, moving the Project to another location would not reduce GHG impacts Also, as discussed in EIR Subsection 4.7, *Greenhouse Gas Emissions*, GHG is a global issue; therefore, developing the same project in a different location would not materially reduce GHG emissions. As noted above, only locations that would avoid or substantially lessen a Project's significant environmental effects need to be considered in an EIR. Accordingly, because development of the Project site at an alternative site location would not reduce or avoid the Project's significant and unavoidable GHG impacts, a more detailed analysis of alternative site locations is not warranted.

6.3 ALTERNATIVE ANALYSIS

The discussion on the following pages compares the environmental impacts expected from each alternative considered by the Lead Agency relative to the impacts of the Project. A conclusion is provided for each topic as to whether the alternative results in one of the following: 1) reduction or elimination of the Project's impact, 2) a greater impact than would occur under the Project, 3) the same impact as the Project, or 4) a new impact in addition to the Project's impacts. Table 6-3, *Alternatives to the Project – Comparison of Environmental Impacts*, at the end of this section compares the impacts of each of the alternatives against those of the Project and identifies the ability of each alternative to meet the basic objectives of the Project.

The underlying purpose and goal of the proposed Project is to accomplish the development of vacant undeveloped property with an economically viable, employment-generating use that is compatible with the property's General Plan designation and zoning classification. This underlying goal aligns with various aspects of the SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); also referred to as "Connect SoCal"), particularly the facilitation of goods movement industries and the generation of local employment opportunities that can reduce the need for long commutes to and from work. The following objectives are intended to achieve these underlying purposes:

A. To develop a cross-dock industrial warehouse that attracts industrial users to the City of Palmdale;

B. To diversify the mix of developed land uses in the City of Palmdale to support the growing goods movement supply chain;

C. To develop supply chain uses in close proximity to designated truck routes and the State highway system to avoid or shorten vehicular trip lengths on other roadways;

D. To expand economic development, facilitate job creation, and increase the tax base for the City of Palmdale by accommodating and diversifying facilities needed to support the goods movement supply chain;

E. To attract new employment-generating businesses in the City of Palmdale, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment;

F. To develop a property that has access to available infrastructure, including roads and utilities.

6.3.1 NO DEVELOPMENT ALTERNATIVE (NDA)

The No Development Alternative (NDA), which serves as the "No Project Alternative" considers no development on the Project site beyond what occurs on the site under existing conditions. Under this Alternative, the 67 gross-acre vacant undeveloped site would remain undeveloped for the foreseeable future and would be subject to routine maintenance for weed abatement. This Alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project site in its existing condition. The NDA allows decision-makers to compare the environmental impacts of approving the Project, to the environmental impacts that would occur if the property were left in its existing vacant undeveloped condition for the foreseeable future. As discussed in EIR Section 2.0 *Project Description*, under existing conditions, the Project site is vacant. A dirt access road running north-south bisects the Project site. The access road forks in the northern portion of the Project site, with one road continuing north beyond the boundaries of the Project site, and the other road running northwest beyond the boundaries of the Project site. The majority of the Project site, other than the dirt access roads, is undisturbed. Refer to EIR Section 2.0, *Project Description* for a description of the Project's existing physical condition.

A. Aesthetics

The NDA would leave the Project site in its existing condition. As such, the site would remain vacant undeveloped land. Because the Project site does not comprise a scenic vista and no unique views to scenic vistas are visible from the property that are not also visible from other areas surrounding the site; neither the Project nor the NDA would impact a scenic vista; therefore, the level of no impact would be similar to the proposed Project. Because there are no designated or eligible State scenic

highways within the Project site's immediate vicinity; neither the Project nor the NDA would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway; therefore, the NDA's level of no impact would be similar to the proposed Project. Because no new development would be proposed under the NDA and the NDA would not include a Tentative Parcel Map, Site Plan Review, or Conditional Use Permit, the Project's less than significant impact with applicable zoning and other regulations governing scenic quality would be reduced to no impact under the NDA. Additionally, because the NDA would not introduce any new sources of light or glare to the site, the Project's less than significant impact would be reduced to no impact under the NDA.

B. Air Quality

Because the NDA would not involve construction activities, the NDA would not generate construction- or operational-related air pollutant emissions. The proposed Project would result in less than significant construction- and operational-related impacts after the implementation of mitigation measures. Because the Project site would remain vacant and undeveloped, the NDA would avoid all construction- and operational-related air quality impacts; thus, construction- and operational-related impacts would be reduced to no impact under the NDA. In addition, the proposed Project would result in less than significant construction and operational health risk impacts with implementation of mitigation measures. The NDA would avoid all construction and operational-related health risk impacts, and construction and operational-related health risk impacts would be reduced to no impact under the NDA.

C. Biological Resources

The NDA would leave the property in its existing condition and the site would continue to undergo periodic disturbances related to weed abatement and other routine on-site vegetative maintenance activities. Because the NDA would leave the property in its existing condition, the Project's less than significant impacts to biological resources with implementation of mitigation would be reduced to no impact under the NDA. The NDA would avoid direct and indirect impacts to sensitive plant species, including the western Joshua Tree and Wiggin's cholla, sensitive wildlife species, migratory birds under the MBTA, sensitive natural communities, and jurisdictional aquatic resources.

D. Cultural Resources

The NDA would leave the property in its existing condition and the site would continue to undergo periodic disturbances related to weed abatement and other routine on-site vegetative maintenance activities. No historic or prehistoric archaeological resources occur on site under existing conditions. Because no new ground disturbance would occur under the NDA, the NDA would avoid the Project's less than significant impacts (with mitigation) to significant historic and archaeological resources that may be buried beneath the ground surface. In addition, because no new ground disturbance would occur as part of the NDA, the NDA would avoid the Project's less than significant impacts to potential buried and undiscovered human remains that could be uncovered during site grading activities.

E. Energy

Under the NDA, because there would be no new development on the site, there would be no increase in demand from the Project site for energy resources. As such, the NDA would completely avoid the Project's less than significant impacts associated with the consumption of energy resources during construction and long-term operation. In addition, neither the Project nor the NDA would conflict with a State or local plan for renewable energy or energy efficiency, although impacts would be reduced under the NDA in comparison to the Project because the NDA would not result in an increase in the use of energy resources.

F. Geology and Soils

Under the NDA, there would be no grading or development on the site. There are no known faults on or trending towards the Project site; thus, impacts associated with rupture of a known fault would be less than significant and similar under the proposed Project and the NDA. However, because the Project would involve a substantial increase in the number of employees on site, the Project's less than significant impacts due to strong seismic ground shaking would be reduced under the NDA. Although the NDA would avoid the Project's less than significant construction-related impacts due to erosion or the loss of topsoil, because the Project site would not be covered with impervious surfaces under the NDA, the NDA would result in increased but less than significant impacts due to soil erosion under long-term conditions. Although the site is not located on a geologic unit or soil that is unstable, because no development would occur and no structures would be built under the NDA, the Project's less than significant impact to potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, would be reduced to no impact under the NDA. Because the Project site is not located on an expansive soil, neither the Project nor the NDA would create substantial direct or indirect risks to life or property as a result of being located on an expansive soil. Because neither the Project nor the NDA would result in grading that affects or negates subsurface sewage disposal systems, and neither the Project nor the NDA would require septic tanks or alternative wastewater disposal systems on unsuitable soils; no impact would occur. In addition, because no ground-disturbing activities would occur under the NDA, the NDA would avoid the Project's less than significant impacts (with mitigation) to unknown and potentially undiscovered paleontological resources that could be buried beneath the surface of the Project site.

G. Greenhouse Gas Emissions

Under the NDA, there would be no construction activities and no new development would occur on the Project site. As such, implementation of the NDA would avoid the Project's significant unavoidable cumulatively considerable impact due to GHG emissions during construction and long-term operation. Neither the Project nor the NDA would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

H. Hazards and Hazardous Materials

Because no development would occur under the NDA, the NDA would have no potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and would have no potential to 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; therefore, no impact would occur, and impacts would be reduced in comparison to the proposed Project. There are no existing or proposed schools within 0.25-mile of the Project site; therefore, no impact would occur under the Project or the NDA, although impacts would be reduced under the NDA because no new sources of potential hazardous materials would be introduced on site. Because the Project site is not located on any list of hazardous materials sites complied pursuant to Government Code Section 65962.5, neither the Project nor the NDA have the potential to create a significant hazard to the public or the environment due to existing site conditions; therefore, the level of impact would be similar. Additionally, since no new development would occur on site, the NDA also would avoid the Project's less than significant impact 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, to result in a safety hazard or excessive noise for people residing or working in the Project area. Neither the Project nor the NDA has the potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, no impact would occur under the Project or NDA, and the level of impact would be similar. Because the Project site is not located in close proximity to wildlands or areas with high fire hazards, neither the Project or the NDA would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires significant wildfire risk.

I. Hydrology and Water Quality

With respect to water quality, the NDA would not involve any new development on site. With the exception of erosion potential on site, the NDA would result in reduced impacts to hydrology and water quality as compared to the proposed Project's less than significant water quality impacts. While the risk of erosion would increase during construction of the proposed Project, under long-term operating conditions the Project would result in the introduction of impervious surfaces and landscaped areas; thus, long-term operational erosion impacts would be increased under the NDA due to the lack of vegetative cover on portions of the Project site. While the Project would result in less than significant impacts due to groundwater recharge, impacts to groundwater recharge would be reduced under the NDA because there would be no new impervious surfaces on site. Although the Project would result in less than significant impacts to the site's existing drainage pattern because there would be no changes to the site's drainage patterns under the NDA, impacts would be reduced in comparison to the proposed Project. Similarly, although the Project would not exceed the capacity of any existing or planned stormwater drainage systems, because there would be no changes to site drainage under the NDA, impacts would be reduced in comparison to the proposed Project. The Project site is not subject to flood hazards under existing conditions; thus, impacts under the NDA and proposed Project would be similar and would be less than significant. The Project site is not subject to inundation from tsunamis or seiches; thus, impacts would be less than significant and would be similar under the Project and

NDA. Neither the Project nor the NDA would conflict with a water quality control plan or sustainable groundwater management plan, and the level of impact would be the same.

J. Land Use and Planning

Neither the Project nor the NDA would disrupt or divide the physical arrangement of an established community. Similar to the proposed Project, the NDA would be consistent with the land use designations applied to the property by the General Plan

K. Noise

The NDA would avoid the Project's less than significant impacts due to construction-related and operational noise levels and would avoid the Project's less than significant impact due to traffic-related noise impacts to study area roadway segments because there would be no new development and no increase in traffic generated by the site under the NDA. Additionally, the NDA would avoid the Project's less than significant impacts due to construction- and operational-related vibration. Although the Project site is located within an Airport Influence Area (AIA), the Project's industrial land use is considered *normally acceptable* within the AIA; thus, impacts would be less than significant. However, because no development would occur under the NDA, there would be no potential to expose people residing or working in the Project area to excessive noise levels related to a private airstrip, airport land use plan or public airport our public use airport; therefore, the Project's less than significant impact would be reduced to no impact under the NDA.

L. Public Services

Because there would be no new development on site under the NDA, the Project site would not result in any physical impacts associated with new or altered public facilities associated with fire protection, police protection, schools, parks, or other public facilities. Implementation of the Project would not result in the need for new or altered facilities associated with fire protection, police protection, school services, parks, or other public facilities therefore the level of impact would be the same under the NDA alternative.

M. Transportation

Because there would be no new development on site under the NDA, there would be no increase in traffic associated with the site. Because no development would occur, the NDA would avoid the Project's less than significant impacts associated with consistency with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. In addition, because no new traffic would be generated under the NDA, the NDA would not add any vehicles to the transportation network and therefore would reduce the Project's less than significant VMT impact. Additionally, there would be no new land uses introduced on site under the NDA, nor would the NDA result in any changes to existing circulation facilities; thus, the NDA would avoid the Project's less than significant impacts due to transportation design features. Additionally, because there

would be no development on site under the NDA, the NDA would avoid the Project's less than significant impacts associated with emergency access.

N. Tribal Cultural Resources

There would be no ground-disturbing construction activities on site under the NDA. Accordingly, there would be no potential to encounter and potentially impact subsurface tribal cultural resources; therefore, the NDA would avoid the Project's less than significant impacts (after mitigation) to tribal cultural resources.

O. Utilities and Service Systems

No new development would occur on site under the NDA. As such, the NDA would completely avoid the Project's less than significant impacts due to the construction or expansion of water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities. In addition, the NDA would not result in any increases in demand for potable water; therefore, the NDA would completely avoid the Project's less than significant impacts to water supply. Similarly, because there would be no new development on site, the NDA would not result in the generation of wastewater requiring treatment; thus, the NDA would completely avoid the Project's less than significant impacts due to wastewater conveyance and treatment capacity. Likewise, the NDA would not result in the generation of any solid waste requiring disposal at area landfills, and as such the NDA would completely avoid the Project's less than significant impacts due to solid waste generation. The NDA also has no potential to conflict with federal, State, and local management and reduction statutes and regulations related to solid waste; thus, the NDA would avoid the Project's less than significant impacts due to compliance with such statutes and regulations.

P. Wildfire

The Project site is not located near state responsibility areas (SRAs) or lands classified as very high fire hazard severity zones; therefore, no impact would occur as a result of implementation of the proposed Project or the NDA.

Q. Conclusion

Implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. Almost all environmental effects of the proposed Project would be avoided or lessened by the selection of the NDA, although a few impacts, such as erosion and sedimentation impacts, would be increased under the NDA because no development would occur which would stabilize the site condition and reduce natural erosion and sedimentation effects that occur under the existing condition. Because the NDA would not result in developing the site, the NDA would fail to meet all of the Project's objectives. Specifically, the NDA would fail to develop a cross-dock industrial warehouse that attracts industrial users to the City of Palmdale. The NDA would not diversify the mix of developed land uses in the City of Palmdale to support the growing goods movement supply chain. The NDA would fail to develop supply chain uses in close proximity to designated truck routes

and the State highway system to avoid or shorten vehicular trip lengths on other roadways. The NDA would not expand economic development, facilitate job creation, or increase the tax base for the City of Palmdale by accommodating and diversifying facilities needed to support the goods movement supply chain. The NDA would also not attract new employment-generating businesses in the City of Palmdale, thereby growing the economy and providing a more equal jobs-housing balance in the local area that would reduce the need for members of the local workforce to commute outside the area for employment. Finally, the NDA would fail to develop a property that has access to available infrastructure, including roads and utilities.

6.3.2 REDUCED BUILDING SIZE AND TRAILER LOT ALTERNATIVE (RBSTLA)

The RBSTLA allows decision-makers to compare the environmental impacts of approving the Project to the environmental impacts that would occur if the property were developed with a smaller size warehouse building. The RBSTLA considers a scenario where the Project site would be developed with two uses: one non-refrigerated high-cube fulfillment warehouse and a trailer parking lot. Under this alternative, a 500,000 s.f. warehouse building (including related site improvements such as paved areas for vehicle movement and parking, landscaping, and public utility connections, as described in EIR Section 3.0, *Project Description*) would be developed on the western portion of the Project site and a trailer parking lot would be developed on the eastern portion of the Project site. The building would include 490,000 s.f. of warehouse space and 10,000 s.f. of office space for a total of 500,000 s.f. of building area. One detention basin would be provided near the southeastern corner of the site, north of the future grade separator. A 28-foot fire lane would be provided around the perimeter of the building. The building would have a total of 74 dock and 314 parking stalls for passenger vehicles, electric vehicles, and accessible parking and a total of 733 truck trailer parking stalls. Access to the Project site would be accommodated by five driveways; two driveways connecting with Division Street, two driveways connecting with Avenue O-12, and one driveway connecting with West Rancho Vista Boulevard / East Avenue P. The central driveway on Division Street would accommodate access for passenger vehicles only. All other driveways would accommodate access for both passenger vehicles and trucks. The driveway on West Rancho Vista Boulevard / East Avenue P and the proposed southern driveway on Division Street would be restricted access (right-in/right-out only) because medians restricting left turns would be installed as part of the Project along West Rancho Vista Boulevard / East Avenue P and Division Street. Under this alternative, the proposed building would be reduced in size and a truck trailer parking yard to service the building would be developed. This alternative was selected to evaluate a scenario that would reduce the total building area on the Project site relative to the proposed Project but still allow industrial use of the entire Project site and accommodate a building user that requires a substantial amount of on-site truck trailer storage space.

A. Aesthetics

Under the RBSTLA, the visual character and quality of the Project site would be similar as would occur under the proposed Project, except that a smaller building would be constructed. The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. As such, impacts to scenic vistas would be less than significant under both the Project and the RBSTLA. In

regard to the truck trailer parking area, the standard height of a truck trailer is approximately 13.5 feet when attached to a chassis and approximately 8.5 feet when not attached to a chassis. Therefore, truck trailers using the parking area servicing the warehouse would be much shorter in height than the building, the truck trailer parking area and the trailers that would be parked within that area would also not obstruct distant views of the mountains. There are no designated or eligible State scenic highways within the Project site's immediate vicinity; thus, neither the Project nor the RBSTLA would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway, and the level of impact would be similar. Like the proposed Project, the RBSTLA would not conflict with applicable zoning and other regulations governing scenic quality. Impacts due to a conflict with zoning or other regulations would not occur under either the Project or the RBSTLA, and the level of impact would be similar. Additionally, development of a smaller building and trailer parking lot would occur on site, the RBSTLA would have the same less than significant impact as would the Project resulting from the introduction of new sources of substantial light or glare.

B. Air Quality

Under the RBSTLA, the construction schedule would be reduced as compared to the proposed Project because a smaller building, with half the square footage as the Project, and a large truck trailer storage lot would be constructed. The construction of a parking lot involves less intense construction activity than does the construction of a building. As such, construction-related air quality emissions would occur over a slightly shorter period of time. Total daily emissions during construction activities on the Project site would be the same as the proposed Project's daily emissions reported in Subsection 4.2 of this EIR. Therefore, air quality pollutant emissions associated with short-term construction would be similar to the proposed Project. With mitigation, these impacts would be reduced to below a level of significance.

Under the RBSTLA, the truck trailer storage yard would be used by the building site and would not independently attract traffic; thereby, resulting in fewer daily vehicle trips generated, as compared to the proposed Project. As such, mobile source and energy source air emissions would be reduced as compared to the Project. Because this Alternative would generate less traffic than the proposed Project and build a smaller building, with mitigation, impacts associated with long-term operation of the building would be reduced to less than significant.

Neither the proposed Project nor the RBSTLA would produce the volume of traffic required to generate a CO "hot spot." As stated above, the RBSTLA would generate less traffic than the Project; therefore, with mitigation, health risk impacts associated with the RBSTLA would be reduced compared to the Project, and with mitigation, would be less than significant.

C. Biological Resources

The RBSTLA would develop the entire Project site and would result in identical impacts to biological resources as the Project. This Alternative would require the same mitigation as the Project and, after

mitigation, both the RBSTLA and the Project would result in less than significant impacts to biological resources.

D. Cultural Resources

The RBSTLA would develop the entire Project site and would result in identical impacts to cultural resources as the Project. This Alternative would require the same mitigation as the Project and, after mitigation, both the RBSTLA and the Project would result in less than significant impacts to cultural resources.

E. Energy

Similar to the proposed Project, development that would occur under the RBSTLA would consume energy resources, although energy consumption related to operation of the warehouse building would be less under this Alternative due to the smaller building size. The same or similar amount of daily fuel consumption would occur related to construction; however, due to the smaller building size, the construction schedule would be slightly reduced as compared to the Project. Long-term vehicular travel to and from the Project site would also be reduced due to fewer daily vehicle trips generated from the smaller building. As such, this Alternative would further reduce the Project's less than significant impacts associated with the consumption of energy resources during construction and long-term operation. Neither the Project nor this Alternative would conflict with a State or local plan for renewable energy or energy efficiency, although impacts would be reduced under this Alternative in comparison to the Project because the RBSTLA would result in a slight decrease in the use of energy resources.

F. Geology and Soils

The RBSTLA would disturb the same physical area as the Project and would, therefore, have the same potential for soil erosion during the construction phase as the Project. Soil erosion impacts would be less than significant under both the Project and this Alternative due to mandatory compliance with federal, State, and local water quality standards. The RBSTLA would be required to comply with the same mandatory regulatory requirements as the Project to preclude substantial hazards associated with seismic ground shaking and geologic hazards. The RBSTLA would result in a similar, less than significant impact to geology and soils as the Project.

The RBSTLA would develop the entire Project site and would result in identical impacts to paleontological resources as the Project. This Alternative would require the same mitigation as the Project and, after mitigation, both the RBSTLA and the Project would result in less than significant impacts to paleontological resources.

G. Greenhouse Gas Emissions

Because the RBSTLA would construct a smaller building and therefore, result in less total building floor area than the Project, this Alternative is expected to require slightly less energy to construct and

operate than the Project and, therefore, would result in a slight reduction of nonmobile source GHG emissions as compared to the Project. Additionally, this Alternative would result in an incremental reduction in mobile source GHG emissions due to a reduction in vehicle traffic. The RBSTLA would result in a slightly reduced significant unavoidable cumulatively considerable GHG impact.

H. Hazards and Hazardous Materials

Because the same physical extent of development would occur, the RBSTLA would have the same potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and would have the same potential to 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. There are no existing schools located within 0.25-mile of the Project site; thus, neither the Project nor this Alternative would have the potential to transport, use, or store hazardous materials within 0.25-mile of school. Because the Project site is not located on any list of hazardous materials sites complied pursuant to Government Code Section 65962.5, neither the Project nor this Alternative have the potential to create a significant hazard to the public or the environment due to existing site conditions, and the level of impact would be similar. The Project site is located approximately 1.8 miles southwest of USAF Plant 42 Runway 7; however, the Project site does not occur within the Planning Boundary/Airport Influence Area (AIA) of the Palmdale Regional Airport/USAF, or within any of the runway protection zones or inner safety zones of the airport. Airport-related impacts under the Project would be less than significant. The RBSTLA would have the same less than significant airport-related impacts as would the proposed Project.

I. Hydrology and Water Quality

Neither the Project nor the RBSTLA would result in substantial alterations to the drainage pattern of the site or result in substantial erosion effects. Accordingly, implementation of the Project and this Alternative would result in less than significant impacts to existing drainage patterns. During construction, potential hydrology and water quality effects on the Project site would be similar under this Alternative due to this Alternative and the Project both disturbing the same physical area. Similar the Project, the RBSTLA would be required to implement a Stormwater Pollution Prevention Plan (SWPPP) to ensure that stormwater runoff during construction does not contain substantial pollutant concentrations. Both the Project and this Alternative would result in less than significant construction-related impacts to hydrology and water quality.

In the long-term, potential hydrology and water quality effects on the site would be similar under both the RBSTLA and the Project due to this Alternative and the Project both providing a similar amount of non-pervious surfaces. Similar to the proposed Project, this Alternative would be required to implement a drainage plan to ensure that stormwater runoff is adequately treated and retained on site for percolation into the groundwater table. Both the Project and the RBSTLA would result in less than significant operational impacts to hydrology and water quality.

J. Land Use and Planning

Both the Project and the RBSTLA would require a Tentative Parcel Map, Site Plan Review, and Conditional Use Permit to develop the Project site with industrial land uses. Impacts associated with land use and zoning and division of a community would be less than significant under both this Alternative and the Project.

K. Noise

Noise associated with this Alternative would occur during short-term construction activities and under long-term operation. The types of daily construction activities conducted on the Project site would be similar (and less than significant) under both the RBSTLA and the Project, although the length of construction activities would be slightly decreased under this Alternative because less building floor area would be constructed on the site. Therefore, it is anticipated that the total duration of noise impacts during the building construction phase would be slightly decreased under this Alternative as compared to the Project and impacts would be less than significant. Under long-term operational conditions, although the Project and the RBSTLA would have similar operational practices (i.e., cargo loading/unloading activities), noise impacts from operations on the Project site (i.e., stationary noise) would be slightly reduced relative to the Project due to reduced daily heavy truck traffic volumes.

L. Public Services

Neither this Alternative nor the proposed Project would result in any physical impacts associated with new or altered governmental facilities associated with fire protection, police protection, schools, parks, or other public facilities; therefore the same less than significant impacts would occur.

M. Transportation

Similar to the proposed Project, the RBSTLA would not conflict with applicable programs, plans, ordinances or policies addressing the circulation system; would not create hazards through design; nor would the RBSTLA result in inadequate emergency access. Similar to the proposed Project, impacts under this Alternative would be less than significant.

Construction and operational-related vehicle trip volume would be reduced under the RBSTLA. Because the trailer lot would serve the building, the trailer lot would not generate any vehicle trips. Trip generation is based on land uses and its associated square footage. As shown on Table 6-1, *RBSTLA Trip Generation*, trip generation under the RBSTLA, with a 500,000 s.f. building, the RBSTLA is expected to generate 700 vehicle trips per day (870 passenger car equivalent (PCE) trips per day). Based on the reduced building size, daily net new vehicle trip-ends per day would be proportionally decreased by approximately 50 percent compared to the proposed Project. Additionally, because the RBSTLA would employ fewer people at the Project site than would the Project, the VMT per SP would be less than the Regional VMT per SP threshold, similar to the Project. As such, the RBSTLA would have similar less than significant transportation-related impacts as the proposed Project.

Table 6-1 RBSTLA Trip Generation

Project Trip Generation (Trips, by Vehicle Type)							
	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Passenger Cars	26	4	30	12	33	45	590
2-Axle Trucks	1	1	2	0	0	1	18
3-Axle Trucks	1	1	2	0	1	1	23
4+ -Axle Trucks	3	3	6	1	2	3	69
All Trucks	5	5	10	2	3	5	110
Total Vehicles	31	9	40	14	36	50	700
Project Trip Generation (Passenger Car Equivalent Trips, by Vehicle Type)							
Passenger Cars	26	4	30	12	33	45	590
Truck PCE							
2-Axle Trucks	1	2	3	1	1	2	28
3-Axle Trucks	2	2	4	1	1	2	46
4+ -Axle Trucks	9	9.5	19	4.5	5	9.5	206
Total Truck PCE							
Total PCE	39	17	56	18	40	58	870

Source: (Dudek, 2025)

N. Tribal Cultural Resources

The RBSTLA would develop the entire Project site and would result in identical potential impacts to tribal cultural resources as the Project. This Alternative would require the same mitigation as the Project and, after mitigation, both the RBSTLA and the Project would result in less than significant potential impacts to tribal cultural resources.

O. Utilities and Service Systems

Due to a reduced building area, the RBSTLA is expected to have a reduced demand for utilities and services systems, including water, sewer, storm water drainage service/facilities, and solid waste collection and disposal, as compared to the Project. However, similar to the proposed Project, the RBSTLA is expected to result in a less than significant impact to utilities and services systems.

P. Wildfire

The Project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Neither the RBSTLA nor the Project has the potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, no impact would occur under this Alternative or the Project, and the level of impact would be similar. Additionally, neither this Alternative nor the Project would require installation or maintenance of associated infrastructure that may exacerbate fire risk or result in impacts to the environment; thus, no impact would occur under this Alternative or the Project, and the level of impact would be the same. Neither the RBSTLA nor the Project has the potential to exacerbate wildfire risks or expose project

occupants to pollutant concentrations from a wildfire or to risk of a wildfire, or expose people or structures to significant risks as a result of wildfires, although the level of impact under this Alternative would be slightly reduced because fewer workers that could potentially be affected by wildfire would be employed on the Project site.

Q. Conclusion

Implementation of the RBSTLA would result in the same physical impacts as the Project, resulting in the same impacts to biological resources, cultural resources, geology and soils, hydrology and water quality, and tribal cultural resources. Although to a lesser degree, the RBSTLA would still result in a significant direct and unavoidable cumulatively considerable GHG impact. The RBSTLA would reduce the Project's less than significant impacts to aesthetics, air quality, energy, noise, transportation, utilities and service systems, and wildfire. All other impacts from this Alternative would be similar to the Project. The RBSTLA would meet all of the Project's objectives, but to a lesser degree than the Project.

6.3.3 TRAILER LOT ALTERNATIVE

The Trailer Lot Alternative (TLA) allows decision-makers to compare the environmental impacts of approving the Project to the environmental impacts that would occur if the property were developed with a 1,326-space truck and trailer parking lot serving a local business or businesses. The entire Project site would be developed for parking and landscaping would occur around the perimeter of the site for screening purposes. This alternative was selected to evaluate a scenario that would allow productive industrial use of the entire Project site while not developing a building structure other than security booths at the entrance and exit gates.

A. Aesthetics

Under the TLA, the visual character and quality of the Project site would change to a parking surface filled with trucks and trailers. The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. As such, impacts to scenic vistas would be less than significant under both the Project and TLA, although impacts would be reduced under this Alternative because only two small guard shacks would occur compared to the warehouse building of the Project, having much less potential to obstruct distant views of mountains. The standard height of a truck trailer is approximately 13.5 feet when attached to a chassis and approximately 8.5 feet when not attached to a chassis. Therefore, truck trailers using the parking area would be much shorter in height than warehouse building proposed under the Project. There are no designated or eligible State scenic highways within the Project site's immediate vicinity; thus, neither the Project nor this Alternative would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway, and the level of impact would be similar. Similar to the proposed Project, the Trailer Lot Alternative would not conflict with applicable zoning and other regulations governing scenic quality. Impacts due to a conflict with zoning or other regulations would not occur under either the Project or this Alternative, and the level of impact would be similar. Additionally, development of a trailer parking lot would also require lighting; therefore, this

Alternative would have the same less than significant impact as would the Project resulting from the introduction of new sources of substantial light. This Alternative would have less than significant glare producing potential due to lack of reflective building materials and reflective surfaces of a warehouse building. Trailers in California are required to have reflectors only on the tail, brake, and license plate lights and trailers do not contain glass that could be reflective and are most commonly painted in matte non-reflective marine grade paint.

B. Air Quality

Under the TLA, the Project site would be developed with a truck trailer parking lot, resulting in reduced air quality emissions compared to the Project due to lower traffic trip volumes and shorter truck trip lengths to serve a local use. Neither the proposed Project nor the TLA would conflict with the AVAQMD Rules and Regulations, the Federal Particulate Matter Attainment Plan or the Ozone Attainment Plan for the Antelope Valley. Both the proposed Project and the TLA would have the potential for exposing sensitive receptors to substantial pollutant concentrations; thus, this Alternative would not avoid or reduce the Project's less than significant localized air quality impacts. Furthermore, both the proposed Project and this Alternative would have less than significant impacts due to other emissions (such as those leading to odors) that could affect a substantial number of people.

C. Biological Resources

The TLA would develop the entire Project site and would result in identical impacts to biological resources as the Project. This Alternative would require the same mitigation as the Project and, after mitigation, both the TLA and the Project would result in less than significant impacts to biological resources.

D. Cultural Resources

The TLA would develop the entire Project site and would result in identical impacts to cultural resources as the Project. Although the depth of grading and therefore the potential to discover previously undiscovered resources may be less for the TLA versus that which would be needed to construct a building, this Alternative would require the same mitigation as the Project and, after mitigation, both the TLA and the Project would result in less than significant impacts to cultural resources.

E. Energy

Similar to the proposed Project, development that would occur under the TLA would consume energy resources, although energy consumption related to operation of the warehouse building would be omitted and replaced with a less energy use intensive local-serving truck trailer parking lot. Less fuel consumption would occur related to construction and long-term vehicular travel to and from the Project site. This Alternative would reduce the Project's less than significant impacts associated with the consumption of energy resources during construction and long-term operation. Neither the Project nor this Alternative would conflict with a State or local plan for renewable energy or energy efficiency,

although impacts would be reduced under this Alternative in comparison to the Project because TLA would result in a decrease in the use of energy resources.

F. Geology and Soils

Because a warehouse building would not be constructed under the TLA, the TLA would reduce the Project's less than significant impacts associated with seismic events. This Alternative would disturb the same physical area as the Project and would, therefore, have the same potential for soil erosion during the construction phase as the Project. Soil erosion impacts would be less than significant under both the Project and this Alternative due to mandatory compliance with federal, State, and local water quality standards. The TLA would be required to comply with the same mandatory regulatory requirements as the Project to preclude substantial hazards associated with seismic ground shaking and geologic hazards. The TLA would result in a similar, less than significant impact to geology and soils as the Project.

The TLA would develop the entire Project site and would result in identical impacts to paleontological resources as the Project. Although the depth of grading may be less for the TLA versus that which would be needed to construct a building, this Alternative would require the same mitigation as the Project and, after mitigation, both the TLA and the Project would result in less than significant impacts to paleontological resources.

G. Greenhouse Gas Emissions

Because the TLA would not entail the construction of a warehouse building, this Alternative is expected to require less energy to construct and operate than the Project and, therefore, would result in a reduction of non-mobile source GHG emissions as compared to the Project. Additionally, this Alternative would reduce mobile source GHG emissions due to a reduction in vehicle traffic and vehicle trip length. The TLA would result in a reduced significant unavoidable cumulatively considerable GHG impact.

H. Hazards and Hazardous Materials

Because the same physical extent of development would occur, the TLA would have the same potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and would have the same potential to 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. There are no existing schools located within 0.25-mile of the Project site; thus, neither the Project nor this Alternative would have the potential to transport, use, or store hazardous materials within 0.25-mile of school. Because the Project site is not located on any list of hazardous materials sites complied pursuant to Government Code Section 65962.5, neither the Project nor this Alternative have the potential to create a significant hazard to the public or the environment due to existing site conditions, and the level of impact would be similar. The Project site is located approximately 1.8 miles southwest of USAF Plant 42 Runway 7; however, the Project site does not occur within the Planning Boundary/AIA of the Palmdale Regional

Airport/USAF, or within any of the runway protection zones or inner safety zones of the airport. Airport-related impacts under the Project would be less than significant. The TLA would have the same less than significant airport-related impacts as would the proposed Project.

I. Hydrology and Water Quality

Neither the Project nor the TLA would result in substantial alterations to the drainage pattern of the site or would result in substantial erosion effects. Accordingly, implementation of the Project and this Alternative would both result in less than significant impacts to existing drainage patterns. During construction, potential hydrology and water quality effects on the Project site would be similar under both this Alternative and the Project due to both disturbing the same physical area. Similar to the proposed Project, the TLA would be required to implement a SWPPP to ensure that stormwater runoff during construction does not contain substantial pollutant concentrations. Both the Project and this Alternative would result in less than significant construction impacts to hydrology and water quality.

In the long-term, potential hydrology and water quality effects on the Project site would be similar under both the TLA and the Project due to both providing a similar amount of non-pervious surfaces. Similar to the proposed Project, this Alternative would be required to implement a drainage plan to ensure that stormwater runoff is adequately treated and retained on site for percolation into the groundwater table. Both the Project and the TLA would result in less than significant operational impacts to hydrology and water quality

J. Land Use and Planning

Both the Project and the TLA would require a Tentative Parcel Map and Site Plan Review to develop the Project site. The TLA would not require the Conditional Use Permit as no warehouse building would be constructed and therefore a CUP would not be needed for additional height. Impacts associated with land use and zoning and division of a community would be less than significant under both this Alternative and the Project.

K. Noise

Noise associated with the TLA would occur during short-term construction activities and under long-term operation. The types of daily construction activities conducted on the Project site would be similar (and less than significant) under both the Project and the TLA; however, under the TLA construction activities would be slightly decreased because a warehouse building would not be constructed on the site. Therefore, it is anticipated that the total duration of noise impacts during the building construction phase would be decreased under this Alternative as compared to the Project and impacts would be less than significant. Under long-term operational conditions, noise impacts from operations on the Project site (i.e., stationary noise) would be similar and less than significant relative to the Project due to relatively similar exterior operational practices (i.e., cargo loading/unloading activities) on the Project site. Off-site roadway noise contributions would be less but remain less than significant as would occur under the proposed Project.

L. Public Services

Neither the TLA nor the proposed Project would result in any physical impacts associated with new or altered public facilities associated with fire protection, police protection, schools, parks or other public facilities. The same less than significant impacts would occur.

M. Transportation

Similar to the proposed Project, the TLA would not conflict with applicable programs, plans, ordinances or policies addressing the circulation system; would not create hazards through design; and, would not result in inadequate emergency access. As with the Project, these impacts under this Alternative would remain less than significant.

Construction and operation-related vehicle trip volume would be reduced under the TLA. The length of truck trips would be reduced to serve a local origins and destinations and this Alternative would thus have the same less than significant VMT impact as would the proposed Project. Trip generation calculations under the TLA assume an average 25 percent utilization of the trailer lot and four employees. As shown in Table 6-2, *TLA Trip Generation*, the TLA would reduce the number of generated daily vehicle trips, with 336 vehicle trips generated per day (384 PCE trips per day). Daily net new vehicle trip-ends per day would be proportionally decreased by approximately 76 percent compared to the proposed Project. As such, the TLA would have similar less than significant transportation-related impacts as the proposed Project.

Table 6-2 TLA Trip Generation

Project Trip Generation (Trips, by Vehicle Type)							
	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Passenger Cars	1	1	2	1	1	2	4
2-Axle Trucks	26	5	31	9	29	37	279
3-Axle Trucks	1	1	2	0	0	1	9
4+ -Axle Trucks	1	1	8	1	1	3	44
All Trucks	28	7	41	10	31	41	332
Total Vehicles	29	8	43	11	32	43	336
Project Trip Generation (Passenger Car Equivalent Trips, by Vehicle Type)							
Passenger Cars	1	1	2	1	1	2	4
Truck PCE							
2-Axle Trucks	26	5	31	9	29	37	279
3-Axle Trucks	1	1	3	0	1	1	13
4+ -Axle Trucks	2	2	16	2	3	5	88
Total Truck PCE	29	8	50	11	32	44	380
Total PCE	30	9	52	12	33	46	384

Source: (Dudek, 2025)

N. Tribal Cultural Resources

The TLA would develop the entire Project site and would result in identical potential impacts to tribal cultural resources as the Project. Although the depth of grading and therefore the potential to discover previously undiscovered resources may be less for the TLA versus that which would be needed to construct a building, this Alternative would require the same mitigation as the Project and, after mitigation, both the TLA and the Project would result in less than significant potential impacts to tribal cultural resources.

O. Utilities and Service Systems

Because a warehouse building would not be constructed, the TLA is expected to have a reduced demand for utilities and services systems, including water, sewer, storm water drainage service/facilities, and solid waste collection and disposal, as compared to the Project. However, as with the Project, the TLA is expected to result in a less than significant impact to utilities and services systems.

P. Wildfire

The Project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Neither the TLA nor the Project has the potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, no impact would occur under this Alternative or the Project, and the level of impact would be similar. Additionally, neither this Alternative nor the Project would require installation or maintenance of associated infrastructure that may exacerbate fire risk or result in impacts to the environment; thus, no impact would occur under this Alternative or the Project, and the level of impact would be the same. Neither the TLA nor the Project has the potential to exacerbate wildfire risks or expose site occupants to pollutant concentrations from a wildfire or to risk of a wildfire, or expose people or structures to significant risks as a result of wildfires, although the level of impact under this Alternative would be reduced because fewer workers that could potentially be affected by wildfire would be employed on the Project site.

Q. Conclusion

Implementation of the TLA would result in the same physical impacts as the Project, resulting in the same impacts to biological resources, cultural resources, geology and soils, hydrology and water quality, and tribal cultural resources. Although to a lesser degree, the TLA would still result in a significant direct and unavoidable cumulatively considerable GHG impact. The TLA would reduce the Project's less than significant impacts to aesthetics, air quality, energy, land use and planning, noise, transportation, utilities and service systems, and wildfire. All other impacts from this Alternative would be similar to the Project. The TLA would only meet three of the Project's Objectives: Met to a lesser degree is Objective B - To diversify the mix of developed land uses in the City of Palmdale to support the growing goods movement supply chain; met to a lesser degree is Objective C - To develop supply chain uses in close proximity to designated truck routes and the State highway system to avoid or

shorten vehicular trip lengths on other roadways; and Objective F - To develop a property that has access to available infrastructure, including roads and utilities.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the CEQA Guidelines indicates that an analysis of alternatives shall identify an environmentally superior alternative among the alternatives evaluated in the EIR. In general, the environmentally superior alternative as defined by CEQA should minimize adverse impacts to the Project site and its surrounding environment. As discussed herein, implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. Because the NDA would avoid most of the Project's impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to CEQA Guidelines § 15126.6(e)(2), if a "no project" alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the Trailer Lot Alternative (TLA), as discussed above in Subsection 6.3.3, is identified as the Environmentally Superior Alternative, although it does not meet the Project objectives to the extent as the Project.

Table 6-3 Alternatives to the Project – Comparison of Environmental Impacts

Environmental Topic	Project Significance of Impacts after Mitigation	Level of Input Compared to the Proposed Project/Compliance with Project Objectives		
		No Development Alternative (NDA)	Reduced Building Size and Trailer Lot Alternative (RBSTLA)	Trailer Lot Alternative (TLA)
Aesthetics	Less than Significant	Reduced	Reduced	Reduced
Air Quality	Less than Significant	Reduced	Reduced	Reduced
Biological Resources	Less than Significant	Reduced	Similar	Similar
Cultural Resources	Less than Significant	Reduced	Similar	Similar
Energy	Less than Significant	Reduced	Reduced	Reduced
Geology and Soils	Less than Significant	Most Issues: Reduced Long-Term Erosion: Increased	Similar	Similar
Greenhouse Gas Emissions	Significant Unavoidable Cumulatively-Considerable Impact	Reduced	Reduced	Reduced
Hazards and Hazardous Materials	Less than Significant	Reduced	Similar	Similar
Hydrology and Water Quality	Less than Significant	Most Issues: Reduced Long-Term Erosion: Increased	Similar	Similar
Land Use and Planning	Less than Significant	Reduced	Similar	Reduced
Noise	Less than Significant	Reduced	Reduced	Reduced
Public Services	No Impact	Similar	Similar	Similar
Transportation	Less than Significant	Reduced	Reduced	Reduced
Tribal Cultural Resources	Less than Significant	Reduced	Similar	Similar
Utilities and Service Systems	Less than Significant	Reduced	Reduced	Reduced
Wildfire	No Impact	Similar	Reduced	Reduced
Ability to Meet Project Objectives				
Project Objectives		**No Development Alternative (NDA)**	**Reduced Building Size and Trailer Lot Alternative (RBSTLA)**	**Trailer Lot Alternative (TLA)**
A. To develop a cross-dock industrial warehouse that attracts industrial users to the City of Palmdale.		No	Yes, but to a lesser degree	No
B. To diversify the mix of developed land uses in the City of Palmdale to support the growing goods movement supply chain.		No	Yes	Yes, but to a lesser degree
C. To develop supply chain uses in close proximity to designated truck routes and the State highway system to avoid or shorten vehicular trip lengths on other roadways.		No	Yes	Yes, but to a lesser degree

D. To expand economic development, facilitate job creation, and increase the tax base for the City of Palmdale by accommodating and diversifying facilities needed to support the goods movement supply chain.	No	Yes	No
E. To attract new employment-generating businesses in the City of Palmdale, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment.	No	Yes, but to a lesser degree	No
F. To develop a property that has access to available infrastructure, including roads and utilities.	No	Yes	Yes

7.0 REFERENCES

7.1 PERSONS CONTRIBUTING TO EIR PREPARATION

7.1.1 CITY OF PALMDALE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT

- Brenda Magaña, Planning Manager
- Andrew Svitek, Senior Planner

7.1.2 T&B PLANNING, INC.

- Tracy Zinn, Principal
- Connie Anderson, Senior Project Manager
- Tracy Chu, Project Manager
- Tiffany Chao, Environmental Analyst
- Cristina Maxey, Graphics/GIS Specialist

7.2 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the City of Palmdale Department of Economic and Community Development at 38250 Sierra Highway Palmdale, CA 93550.

Appendix A: Notice of Preparation (NOP) and Written Comments on the NOP

Appendix B: Dudek, 2025a. *Air Quality, Greenhouse Gas Emissions, and Energy Technical Report.* March 2025.

Appendix C: Dudek, 2025b. *Biological Resources Technical Report*. October 2025.

Appendix D: Dudek, 2024. *Cultural Resources Assessment for the Pacific Palmdale Project, City of Palmdale, Los Angeles County, California.* September 9, 2024.

Appendix E2: Southern California Geotechnical, 2024. *Geotechnical Investigation.* February 28, 2024.

Appendix E2: Dudek, 2025c. *Paleontological Resources Review. February 10, 2025.*

Appendix F1: Hazard Management Consulting, Inc., 2024. *Phase I Environmental Site Assessment.* March 4, 2024.

Appendix F2: Federal Aviation Administration (FAA). 2025. *Determination of No Hazard Letters.* April 15, 2025.

Appendix G: Sikand Engineering Associates, Inc., 2024a. *Preliminary Drainage Report*. April 19, 2024.

Appendix H: Dudek, 2025d. *Noise Technical Report*. September 2025.

Appendix I1: Translutions, 2025a. *Traffic Impact Analysis.* October 13, 2025.

Appendix I2: Translutions, 2025b. *Vehicle Miles Traveled (VMT) Analysis.* February 14, 2025.

Appendix J: Sikand Engineering Associates, Inc., 2024b. Sewer Area Study Report. April 23, 2024.

Appendix K: Akel Engineering Group, Inc., 2025. *Water Supply Assessment for Pacific Industrial Development.* March 2025.

7.3 DOCUMENTS INCORPORATED BY REFERENCE

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

Cited As:	***Citation:***
City of Palmdale, 2023	City of Palmdale, 2023. *Palmdale Zoning Map*. June 9, 2023. Available on-line at: https://www.cityofpalmdaleca.gov/DocumentCenter/View/516/Zoning-with-street-labels-PDF?bidId=
PMC, 2025	Palmdale Municipal Code (PMC), 2025. *Palmdale Municipal Code*. Current through Ordinance 1653. Passed February 18, 2025. Available on-line at: https://www.codepublishing.com/CA/Palmdale/
City of Palmdale, 2023	City of Palmdale, 2023. *Palmdale 2045 (General Plan)*. October 22, 2022, Amended on March 15, 2023 (GPA 23-001). Available on-line at: https://palmdale2045gp.org/
City of Palmdale, 2022	City of Palmdale, 2022a. *City of Palmdale 2045 General Plan Update Final Environmental Impact Report SCH#2021060494*. August 2022. Available on-line at: https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/631fa8d1f119fa360cd7f0ee/1663019242025/Palmdale+2045+GPU+FEIR_reduce.pdf

7.4 DOCUMENTS, WEBSITES AND PERSONS CONSULTED

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and

supporting documentation is a matter of public record and is generally available to the public at the location listed.

Cited As:	***Citation:***
AVAQMD, n,d.	Antelope Valley Air Quality Management District, n.d. *About the District*. No date. Accessed March 20, 2023. Available on-line at: https://avaqmd.ca.gov/about-the-district
AVSD, n.d.	Antelope Valley Union High School District, n.d. *School Locator*. No date. Accessed February 6, 2025. Available on-line at: https://www.avdistrict.org/schools/boundary-map
AVTA, 2025	Antelope Valley Transit Authority, 2025. *Local Transit Service System Map*. 2025 Accessed March 28, 2025. Available on-line at: https://www.avta.com/downloads/System-Map-2025.pdf
BFFP, n.d.	Bureau of Forestry and Fire Protection, n.d. *State Responsibility Area (SRA Viewer).* No date. Accessed February 6, 2025. Available on-line at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=468717e399fa4238ad86861638765ce1
BLM, 2003	Bureau of Land Management (BLM), 2003. *Public Law 108-148, Healthy Forests Restoration Act*. December 3, 2003. Accessed July 13, 2023. Available on-line at: https://www.blm.gov/or/resources/51178s/files/HFRA_Law.pdf
BLM, 2017	Bureau of Land Management (BLM), 2017. *ASTM E1527-13*. February 8, 2017. Accessed September 27, 2023. Available on-line: https://www.ntc.blm.gov/krc/system/files?file=legacy/uploads/23284/E1527-13.pdf
BSC, n.d.	Building Standards Commission (BSC), n.d. *California Building Standards Code*. No date. Accessed October 18, 2023. Available on-line at: https://www.dgs.ca.gov/BSC/Codes
CA Legislative Info, n.d.	California Legislative Information, n.d. *HSC Chapter 2, Essential Services Building Seismic Safety Act (ESBSSA) [16000-16022]*. No date. Accessed February 10, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=12.5.&title=&part=&chapter=2.&article=
CA Legislative Info., n.d.	California Legislative Information, n.d. *HSC Division 7, Part 1, Chapter 2. General Provisions [7050.5-7055]*. Accessed February 28, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=7050.5
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 5. Chapter 1.75 Native American Historical, Cultural, and Sacred Sites [5097.9-5097.991]*. Accessed July 13, 2023. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=5097.98.
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 4. Part 2. Chapter 1. Article 1. Definitions [4101 - 4104].* No date. Accessed February 10, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=1.&article=1.
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 4. Part 2. Chapter 1. Article 3. Responsibility for Fire Protection [4127].* No date. Accessed February 6, 2025. Available on-line at:

	https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=1.&article=1.
CA Legislative Info., n.d.	California Legislative Information, n.d. *GOV. Title 5. Division 1. Part 1. Chapter 6.8 Moderate, High, and Very High Fire Hazard Severity Zones [51175 - 51189]*. No date. Accessed July 13, 2023. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=5.&part=1.&chapter=6.8.&article=
CA Legislative Info., n.d.	California Legislative Information, n.d. *Assembly Bill No. 16*. No date. Accessed February 6, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB16
CA Legislative Info., n.d.	California Legislative Information, n.d. *Senate Bill No. 50*. No date. Accessed February 6, 2025. Available on-line at: http://www.leginfo.ca.gov/pub/97-98/bill/sen/sb_0001-0050/sb_50_bill_19980827_chaptered.pdf
CA Legislative Info., n.d.	California Legislative Information, n.d. *GOV. Title 7 Division 2. Chapter 4. Article 3. Dedications [66475 - 66478]*. No date. Accessed February 6, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=66477.&lawCode=GOV
CA Legislative Info., n.d.	California Legislative Information, n.d. *Assembly Bill No. 2515*. No date. Accessed September 30, 2022. Available on-line at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB2515
CA Legislative Info., n.d.	California Legislative Information, n.d. *Senate Bill No. 2095*. No date. Accessed July 13, 20232. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=199920000SB2095
CA Legislative Info., n.d.	California Legislative Information, n.d. *GOV. Title 7. Division 2. Chapter 4. Article 1. General [66473 - 66474.10]*. No date. Accessed July 13, 2023. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=66473.7.&lawCode=GOV
CA Legislative Info., n.d.	California Legislative Information, n.d. *Senate Bill No. 610*. No date. Accessed July 13, 2023. Available on-line at: http://www.leginfo.ca.gov/pub/01-02/bill/sen/sb_0601-0650/sb_610_bill_20011009_chaptered.html
CA Legislative Info., n.d.	California Legislative Information, n.d. *Wat. Division 6. Part 2.6. Chapter 1 General Declaration and Policy [10610 - 10610.4]*. No date. Accessed July 13, 2023. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=WAT&division=6.&title=&part=2.6.&chapter=1.&article=
CA Legislative Info., n.d.	California Legislative Information, n.d. *Senate Bill No. 1374.* No date. Accessed February 14, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200120020SB1374
CA Legislative Info., n.d.	California Legislative Information, n.d. *Assembly Bill No. 1826.* No date. Accessed February 14, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1826
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 15. Chapter 4 Integrated Energy Policy Reporting [25300 - 25328]*. No date. Accessed February 14, 2025. Available on-line at:

	https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=15.&title=&part=&chapter=4.&article=
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 4. Part 2. Chapter 2. Hazardous Fire Areas [4251 - 4290.5]*. No date. Accessed July 13, 2023. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=2.&article=
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 4. Part 2. Chapter 3. Mountainous, Forest-, Brush- and Grass Covered Lands [4291-4299]*. No date. Accessed February 6, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PRC&division=4.&title=&part=2.&chapter=3.&article=
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 4. Part 2. Chapter 1.5 State Responsibility Area Fire Prevention Fees. Article 1. General Provisions [4210 - 4214]*. No date. Accessed February 6, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4213.
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 2. Chapter 7.5 Earthquake Fault Zoning [2621 - 2630]*. No date. Accessed February 10, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?division=2.&chapter=7.5.&lawCode=PRC
CA Legislative Info., n.d.	California Legislative Information, n.d. *CIV. Division 2. Part 4. Title 4. Chapter 2. Article 1.7. Disclosure of Natural and Environmental Hazards, Right-to-Farm, and Other Disclosures Upon Transfer of Residential Property [1103 - 1103.15]*. No date. Accessed February 10, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=1103.2.&lawCode=CIV
CA Legislative Info., n.d.	California Legislative Information, n.d. *HSC. Division 20. Chapter 6.5 Hazardous Waste Control [25100-25259]*. No date. Accessed February 12, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.5.&article=1.
CA Legislative Info., n.d.	California Legislative Information, n.d. *HSC. Division 20. Chapter 6.6 Safe Drinking Water and Toxic Enforcement Act of 1986 [25249.5 - 25249.14]*. No date. Accessed February 12, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title&part&chapter=6.6.&article
CA Legislative Info., n.d.	California Legislative Information, n.d. *Water Code*. No date. Accessed February 12, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=WAT&tocTitle=+Water+Code+-+WAT
CA Legislative Info., n.d.	California Legislative Information, n.d. *HSC. Division 20. Chapter 6.95. Article 1 Business and Area Plans [25500 - 25519]*. No date. Accessed February 12, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.95.&article=1.
CA Legislative Info., n.d.	California Legislative Information, n.d. *PRC. Division 13. Chapter 2.6 General [21080 - 21098]*. No date. Accessed July 13, 2023. Available on-line at:

	https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=21096.
CA Legislative Info., n.d.	California Legislative Information, n.d. *Senate Bill No. 1078*. No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1078
CA Legislative Info., n.d.	California Legislative Information, n.d. *Senate Bill No 107*. No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=200520060SB107
CA Legislative Info, n.d.	California Legislative Information, n.d. *Senate Bill No. 97*. No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB97
CA Legislative Info, n.d.	California Legislative Information, n.d. *Assembly Bill No. 1757*. No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB1757
CA Legislative Info, n.d.	California Legislative Information, n.d. *Senate Bill No. 905.* No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905
CA Legislative Info, n.d.	California Legislative Information, n.d. *Assembly Bill No. 1279*. No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279
CA Legislative Info, n.d.	California Legislative Information, n.d. *Senate Bill No. 1020*. No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020
CA Legislative Info, n.d.	California Legislative Information, n.d. *Senate Bill No. 32*. No date. Accessed March 7, 2025. Available on-line at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32
CA Legislative Info, n.d.	California Legislative Information, n.d. *Assembly Bill No. 1358*. No date. Accessed March 28, 2025. Available on-line at: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080AB1358
CA Legislative Info, n.d.	California Legislative Information, n.d. *Part 1. State Aeronautics Act*. No date. Accessed October 17, 2023. Available on-line at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=PUC&division=9.&title=&part=1.&chapter=&article=
CalEPA, 2023	California Department of Environmental Protection (CalEPA), 2023. *SB 535 Disadvantaged Communities (2022 Update)*. 2022. Accessed February 5, 2025. Available on-line at: https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/
CalEPA, n.d.	California Department of Environmental Protection (CalEPA), n.d. *Unified Program*. No date. Accessed February 12, 2025. Available on-line at: https://calepa.ca.gov/cupa/
CalFire, 2023	California Department of Forestry and Fire Protection (CalFire), 2023. *Frequently Asked Questions About: Fire Hazard Severity Zones*. July 27, 2023. Accessed February 7, 2025. Available on-line at: https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/2022-fhsz-faqs-july-27-2023.pdf
CAL FIRE, 2025	California Department of Forestry and Fire Protection, 2025a. *Fire Hazard Severity Zone Viewer*. 2025. Accessed June 9, 2025. Available on-line:

	https://experience.arcgis.com/experience/6a9cb66bb1824cd98756812af41292a0
CAL FIRE, 2025	California Department of Forestry and Fire Protection, 2025b. *California Historical Wildland Fire Perimeters Exploratory Map*. May 8, 2025. Accessed June 9, 2025. Available on-line: https://www.arcgis.com/apps/mapviewer/index.html?webmap=5e45da46469243adb490da1cf665aeb6
CA High Speed Rail Authority, 2021	California High Speed Rail Authority, 2021. *Bakersfield to Palmdale Project Section EIR/EIS. SCH Number 2009082062.* Accessed September 30, 2023. Available on-line at: https://ceqanet.opr.ca.gov/Project/2009082062
CA High Speed Rail Authority, 2023	California High Speed Rail Authority, 2023. *Project Stations*. Accessed September 30, 2023. Available on-line at: https://buildhsr.com/map/
CA High Speed Rail Authority, 2025	California High Speed Rail Authority, 2025. *2025 Project Update Report*. 2025. Accessed March 28, 2025. Available on-line at: https://hsr.ca.gov/about/project-update-reports/2025-project-update-report/
California ISO, n.d.	California Independent System Operator (California ISO), n.d. *California ISO*. No date. Accessed September 30, 2022. Available on-line at: https://www.caiso.com/Pages/default.aspx
CalRecycle, n.d.	CalRecycle, n.d. *SWIS Facility/Site Definitions*. No date. Accessed January 3, 2024. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Definition
CalRecycle, n.d.	CalRecycle, n.d. *History of California Solid Waste Law.* No date. Accessed February 14, 2025. Available on-line at: https://calrecycle.ca.gov/laws/legislation/calhist/
CalRecycle, n.d.	CalRecycle, n.d. *Mandatory Commercial Recycling.* No date. Accessed February 14, 2025. Available on-line at: https://calrecycle.ca.gov/Recycle/Commercial/
CalRecycle, n.d.	CalRecycle, n.d. *Mandatory Commercial Organics Recycling.* No date. Accessed February 14, 2025. Available on-line at: https://calrecycle.ca.gov/recycle/commercial/organics/
CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – Antelope Valley Public Landfill (19-AA-5624)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – Chiquita Canyon Sanitary Landfill (19-AA-0052)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – El Sobrante Landfill (33-AA-0217)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – Sunshine Canyon City/County Landfill (19-AA-2000)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – Victorville Sanitary Landfill (36-AA-0045)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search

CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – McKittrick Waste Treatment Site (15-AA-0105)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – Lancaster Landfill and Recycling Center (19-AA-0050)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
CalRecycle, 2024	CalRecycle, 2024. *SWIS Facility/Site Activity Details – Simi Valley Landfill & Recycling Center (56-AA-0007)*. February 7, 2025. Accessed February 7, 2025. Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search
Caltrans, n.d.	California Department of Transportation (CalTrans), n.d. *State Transportation Improvement Program (STIP)*. No date. Accessed March 28, 2025. Available on-line at: https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/state-transportation-improvement-program
Caltrans, n.d.	California Department of Transportation (CalTrans), n.d. *Transportation Development Act*. No date. Accessed March 28, 2025. Available on-line at: https://dot.ca.gov/programs/rail/transportation-development-act
Caltrans, 2013	California Department of Transportation (CalTrans), n.d. *Technical Noise Supplement to Traffic Noise Analysis Protocol*. September 2013. Accessed March 6, 2025. Available on-line at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf
Caltrans, 2019	California Department of Transportation, 2019. *California State Scenic Highway System Map*. 2019. Accessed March 13, 2025. Available on-line at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa
Caltrans, 2020	California Department of Transportation (CalTrans), n.d. *Transportation and Construction Vibration Guidance Manual*. April 2020. Accessed March 6, 2025. Available on-line at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf
Caltrans, 2024	California Department of Transportation, 2024. *California State Scenic Highways.* 2024. Accessed March 13, 2025. Available on-line at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways
CARB, n.d.	California Air Resources Board (CARB), n.d. *California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley)*. No date. Accessed March 7, 2025. Available on-line at: https://ww2.arb.ca.gov/californias-greenhouse-gas-vehicle-emission-standards-under-assembly-bill-1493-2002-pavley
CARB, 2023	California Air Resources Board (CARB), n.d. *Community Air Protection Program Blueprint 2.0*. Accessed June 2, 2025. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/2024-04/BP2.0_FULL_FINAL_ENG_2024_04_09.pdf
CARB, n.d.	California Air Resources Board (CARB), n.d. *Sustainable Communities and Climate Protection Program.* No date. Accessed March 7, 2025. Available on-line at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-climate-protection-program/about
CARB, 2007	California Air Resources Board (CARB), 2007. *Staff Report. California 1990 Greenhouse Gas Emission Level and 2020 Emissions Limit*. November 16, 2007. Accessed March 7,

	2025. Available on-line at: https://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf
CARB, n.d.	California Air Resources Board (CARB), n.d. *Air Quality Plans*. No date. Accessed October 25, 2023. Available on-line at: https://ww2.arb.ca.gov/our-work/topics/air-quality-plans
CARB, 2017	California Air Resources Board (CARB), 2017. *California's 2017 Climate Change Scoping Plan*. November 2017. Accessed March 7, 2025. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf
CARB, 2018	California Air Resources Board (CARB), 2018. *AB 32 Global Warming Solutions Act of 2006*. September 28, 2018. Accessed March 7, 2025. Available on-line at: https://ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006
CARB, 2023	California Air Resources Board (CARB), 2023. *Truck and Bus Regulation Compliance Requirement Overview*. March 16, 2023. Accessed October 25, 2023. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/2022-09/ComplianceOverview.pdf
CARB, 2021	California Air Resources Board (CARB), 2021. *Advanced Clean Trucks Fact Sheet*. August 20, 2021. Accessed October 25, 2023. Available on-line at: https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf
CA State Library, 2005	California State Library, 2005. *Executive Order S-3-05*. June 2, 2005. Accessed March 7, 2025. Available on-line at: https://www.library.ca.gov/Content/pdf/GovernmentPublications/executive-order-proclamation/5129-5130.pdf
CA State Library, 2007	California State Library, 2007. *Executive Order S-01-07*. January 22, 2007. Accessed March 7, 2025. Available on-line at: https://www.library.ca.gov/Content/pdf/GovernmentPublications/executive-order-proclamation/5107-5108.pdf
CA State Library, 2008	California State Library, 2008. *Executive Order S-14-08*. November 17, 2008. Accessed March 7, 2025. Available on-line at: https://www.library.ca.gov/Content/pdf/GovernmentPublications/executive-order-proclamation/38-S-14-08.pdf
CA State Library, 2015	California State Library, 2015. *Executive Order B-30-15*. 2015. Accessed October 30, 2023. Available on-line at: https://www.library.ca.gov/Content/pdf/GovernmentPublications/executive-order-proclamation/39-B-30-15.pdf
CBSC, 2022	California Building Standards Commission (CBSC), 2022. *California Building Standards Code, Title 24.* July 1, 2022. Accessed February 6, 2025. Available on-line at: https://www.dgs.ca.gov/BSC/Codes
CBSC, 2023	California Building Standards Commission (CBSC), 2023. *2022 California Green Building Standards Code*. 2022. Accessed February 14, 2025. Available on-line at: https://codes.iccsafe.org/content/CAGBC2022P1
CBSC, 2022	California Building Standards Commission (CBSC), 2022. *Guide to Title 24*. July 2022. Accessed February 10, 2025. Available on-line at: https://www.dgs.ca.gov/-/media/Divisions/BSC/05-Resources/Guidebooks/2022-Guide-toTitle-24-06-28-22-Final.pdf
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, Title 14, § 1427.* No date. Accessed March 3, 2025. Available on-line at: *https://govt.westlaw.com/calregs/Document/I48899BB35B4D11EC976B000D3A7C4BC3?vi*

	ewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, Title 14, § 4308, Archaeological Features*. No date. Accessed February 10, 2025. Available on-line at: https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-3-department-of-parks-and-recreation/chapter-1-general/section-4308-archaeological-features
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, PRC § 5097.5*. No date. Accessed July 13, 2023. Available on-line at: https://codes.findlaw.com/ca/public-resources-code/prc-sect-5097-5.html
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, PRC § 30244*. No date. Accessed February 10, 2025. Available on-line at: https://codes.findlaw.com/ca/public-resources-code/prc-sect-30244.html
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, HSC § 13143.9*. No date. Accessed February 12, 2025. Available on-line at: https://codes.findlaw.com/ca/health-and-safety-code/hsc-sect-13143-9.html
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, VEH § 32000.5*. No date. Accessed February 12, 2025. Available on-line at: https://codes.findlaw.com/ca/vehicle-code/veh-sect-32000-5.html
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, Title 14 Natural Resources*. No date. Accessed February 6, 2025. Available on-line at: https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IF7C3F7205B4C11EC976B000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)
CCR, n.d.	California Code of Regulations (CCR), n.d. *CCR, Title 20 Public Utilities and Energy and Title 24 Building Standards Code*. No date. Accessed July 13, 2023. Available on-line at: https://govt.westlaw.com/calregs/Index?bhcp=1&transitionType=Default&contextData=%28sc.Default%29
CCR, n.d.	California Code of Regulations (CCR), n.d. *California Noise Insulation Standards*. No date. Accessed July 13, 2023. Available on-line: https://pdf4pro.com/cdn/california-noise-insulation-standards-5b1acb.pdf
CDC, n.d.	California Department of Conservation (CDC), n.d. *Seismic Hazards Mapping Act*. No date. Accessed February 10, 2025. Available on-line at: https://www.conservation.ca.gov/cgs/shma
CDC, 2023	California Department of Conservation (CDC), 2023. *California Williamson Act Enrollment Finder.* 2023. Accessed February 10, 2025. Available on-line at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html
CDC, 2018	California Department of Conservation (CDC), 2018. *California Important Farmland Finder.* Los Angeles, 2018. Accessed February 10, 2025. Available on-line at: https://maps.conservation.ca.gov/DLRP/CIFF/
CDFW, n.d.	California Department of Fish and Wildlife (CDFW), n.d. *California Water Action Plan*. No date. Accessed February 14, 2025. Available on-line at: https://wildlife.ca.gov/Conservation/Watersheds/Instream-Flow/Action-Plan

CDFW, 2025	California Department of Fish and Wildlife (CDFW), 2025. NOP Comment Letter. February 26, 2025.
CEC, n.d.	California Energy Commission (CEC), n.d. Emissions Performance Standard – SB 1368. No date. Accessed March 7, 2025. Available on-line: http://www.energy.ca.gov/emission_standards/
CEC, n.d.	California Energy Commission (CEC), n.d. *Core Responsibility Fact Sheets.* No date. Accessed February 14, 2025. Available on-line at: https://www.energy.ca.gov/about/core-responsibility-fact-sheets
CEC, 2023	California Energy Commission (CEC), 2023. *2022 Building Energy Efficiency Standards*. 2023. Accessed February 14, 2025. Available on-line at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency
CEC, 2020a	California Energy Commission (CEC), 2020a. *Mapping Our Future – Electric Utility Service Areas.* May 21, 2020. Accessed May 6, 2025. Available on-line at: https://cecgis-caenergy.opendata.arcgis.com/pages/pdf-maps
CEC, 2020b	California Energy Commission (CEC), 2020b. *Mapping Our Future – Natural Gas Utility Service Area.* May 21, 2020. Accessed May 6, 2025. Available on-line at: https://cecgis-caenergy.opendata.arcgis.com/pages/pdf-maps
CGS, n.d.	California Geological Society (CGS), n.d. *Earthquake Zones of Required Investigation*. No date. Accessed February 10, 2025. Available on-line at: https://maps.conservation.ca.gov/cgs/EQZApp/app/
CGS, 2008	California Geological Society (CGS), 2008. *Guidelines for Evaluating and Mitigating Seismic Hazards in California.* 2008. Accessed February 10, 2025. Available on-line at: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Publications/SP_117a.pdf
City of Palmdale, n.d.	City of Palmdale, n.d. *Interactive Map Guide GIS Site*. No date. Accessed June 21, 2023. Available on-line at: http://maps.cityofpalmdale.org/FMv2/
City of Palmdale, n.d.	City of Palmdale, n.d. *Park Locations*. No date. Accessed February 5, 2025. Available on-line at: https://www.cityofpalmdaleca.gov/542/Park-Locations
City of Palmdale, 2003	City of Palmdale, 2003. *Storm Water Management Plan (SWMP)*. August 21, 2003. Accessed December 29, 2023. Available on-line at: https://palmdale2045gp.org/document-library/
City of Palmdale, 2014	City of Palmdale, 2014. *Palmdale Utilities Services Division: Sewer System Management Plan. March 20, 2009.* Revised May 2014. Accessed May 5, 2025. Available on-line at: https://www.cityofpalmdaleca.gov/DocumentCenter/View/130/Palmdale-Sewer-System-Management-Plan-PDF
City of Palmdale, 2020	City of Palmdale, 2020. Public Art Master Plan. June 2020. Accessed March 13, 2025. Available online: https://cityofpalmdale.org/DocumentCenter/View/8886/Palmdale-Public-Art-Master-Plan-PDF?bidId=
City of Palmdale, 2022	City of Palmdale, 2022b. *City of Palmdale 2023 Emergency Operations Plan*. August 2022. Accessed June 9, 2025. Available on-line:

	https://www.cityofpalmdaleca.gov/DocumentCenter/View/13804/City-of-Palmdale-Emergency-Operations-Plan-PDF
City of Palmdale Public Works Department, 2021	City of Palmdale Public Works Department, 2021. Local Hazard Mitigation Plan 2021-2026 Update. September 30, 2021. Accessed February 6, 2025. Available on-line: https://cityofpalmdale.org/DocumentCenter/View/10644/2021-Palmdale-LHMP---Final-Draft-for-Public-Comment?bidId=
CPUC, n.d.	California Public Utilities Commission (CPUC), n.d. *What is the California Public Utilities Commission?* No date. Accessed February 14, 2025. Available on-line at: https://www.cpuc.ca.gov/-/media/cpuc-website/about-cpuc/documents/transparency-and-reporting/fact_sheets/cpuc_overview_english_030122.pdf
Department of the Air Force, 2011	Department of the Air Force, 2011. *Air Installation Compatible Use Zone (AICUZ) Air Force Plant 42 Final Report*. December 2011.
DTSC, n.d.	Department of Toxic Substances Control (DTSC), n.d. *Official California Code of Regulations, Title 22, Division 4.5*. No date. Accessed February 12, 2025. Available on-line at: https://dtsc.ca.gov/title22/
DWR, n.d.	California Department of Water Resources (DWR), n.d. *Groundwater Sustainability Agencies*. No date. Accessed February 12, 2025. Available on-line at: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainable-Agencies
DWR, 2003	California Department of Water Resources (DWR), 2003. *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001.* October 8, 2003. Accessed September 27, 2023. Available on-line at: https://cawaterlibrary.net/wp-content/uploads/2017/06/guidebook.pdf
DWR, 2016	California Department of Water Resources (DWR), 2016. *2015 Urban Water Management Plans Guidebook for Urban Water Suppliers*. March 2016. Accessed September 27, 2023. Available on-line at: https://cawaterlibrary.net/wp-content/uploads/2017/06/UWMP_Guidebook_Mar_2016_FINAL.pdf
DWR, 2019	California Department of Water Resources (DWR), 2019. *California Water Plan Update 2018 Managing Water Resources for Sustainability*. June 2019. Accessed September 27, 2023. Available on-line at: https://water.ca.gov/Programs/California-Water-Plan/Update-2018
DWR, 2020	California Department of Water Resources (DWR), 2020. *Basin Prioritization*. May 1, 2020. Accessed March 13, 2025. Available on-line at: https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization
EDD, 2025	Employment Development Department (EDD), 2025. *Monthly Labor Force Data for Cities and Census Designated Places, December 2024.* January 24, 2025. Accessed February 10, 2025. Available on-line at: https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html
EPA, 2024a	United States Environmental Protection Agency (EPA), 2024. *Summary of the Clean Air Act*. July 31, 2024. Accessed March 7, 2025. Available on-line at: https://www.epa.gov/laws-regulations/summary-clean-air-act

EPA, 2024b	United States Environmental Protection Agency (EPA), 2024. *1990 Clean Air Act Amendment Summary: Title I*. November 12, 2024. Accessed March 7, 2025. Available on-line at: https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-i
EPA, 2024c	United States Environmental Protection Agency (EPA), 2024. *1990 Clean Air Act Amendment Summary: Title II*. December 17, 2024. Accessed March 7, 2025. Available on-line at: https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-ii
EPA, 2024d	United States Environmental Protection Agency (EPA), 2023i. *Summary of the Noise Control Act*. July 31, 2024. Accessed March 5, 2025. Available on-line at: https://www.epa.gov/laws-regulations/summary-noise-control-act
EPA, 2024e	United States Environmental Protection Agency (EPA), 2024e. *Summary of the Clean Water Act*. June 12, 2024. Accessed February 10, 2025. Available on-line at: https://www.epa.gov/laws-regulations/summary-clean-water-act
EPA, 2023f	United States Environmental Protection Agency (EPA), 2022f. *Summary of the Safe Drinking Water Act*. September 6, 2023. Accessed September 27, 2023. Available on-line at: https://www.epa.gov/laws-regulations/summary-safe-drinking-water-act
EPA, 2024g	United States Environmental Protection Agency (EPA), 2024g. *Summary of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)*. September 6, 2023. Accessed February 12, 2025. Available on-line at: https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act
EPA, 2024h	United States Environmental Protection Agency (EPA), 2024h. *Summary of the Resource Conservation and Recovery Act*. September 6, 2023. Accessed February 12, 2025. Available on-line at: https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act
EPA, 2024i	United States Environmental Protection Agency (EPA), 2022i. *Summary of the Occupational Safety and Health Act*. September 9, 2024. Accessed February 12, 2025. Available at: https://www.epa.gov/laws-regulations/summary-occupational-safety-and-health-act
EPA, 2024j	United States Environmental Protection Agency (EPA), 2022j. *Summary of the Toxic Substances Control Act*. September 9, 2024. Accessed February 12, 2025. Available at: https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act
EPA, 2025a	United States Environmental Protection Agency (EPA), 2025. *National Emission Standards for Hazardous Air Pollutants Compliance Monitoring*. January 14, 2025. Accessed March 7, 2025. Available on-line at: https://www.epa.gov/compliance/national-emission-standards-hazardous-air-pollutants-compliance-monitoring
EPA, 2025b	United States Environmental Protection Agency (EPA), 2025. *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act*. February 27, 2025. Accessed March 7, 2025. Available on-line at: https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a
EPIC, 2010	Energy Policy Initiatives Center, 2010. *California's Solar Shade Control Act*. March 2010. Accessed February 14, 2025. Available on-line at: https://cdnsm5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Roseville%20Electric%20Utility/Residential/Enviromental/Your%20Trusted%20Solar%20Advisor/Learn%20Solar%20Technology%20Basics/100329_SSCA_Final_000.pdf

EPIC, 2014	Energy Policy Initiatives Center, 2014. *California's Solar Rights Act*. December 2014. Accessed February 14, 2025. Available on-line at: https://ohp.parks.ca.gov/pages/1054/files/Solar%20Rights%20Act-A%20Review%20of%20Statutes%20and%20Relevant%20Cases.pdf
FAA, 2024	Federal Aviation Administration (FAA), 2024. *Determination of No Hazard to Air Navigation Letters for AVCC Buildings 1 through 11.* June 10, 2024.
FAA, 2023	Federal Aviation Administration (FAA), 2023. *Notification of Proposed Construction or Alteration on Airport Part 77*. June 13, 2023. Accessed February 12, 2025. Available on-line: https://www.faa.gov/airports/central/engineering/part77/
FEMA, 2008	Federal Emergency Management Agency (FEMA), 2008. *Flood Insurance Rate Map (FIRM) No. 06037C0657F*. 2008. Accessed March 12, 2025. Available on-line at: https://msc.fema.gov/portal/search?AddressQuery=E%20Ave%20O%208%2C%20Palmdale%2C%20CA%2093550
FEMA, 2021	Federal Emergency Management Agency (FEMA), 2021. *Executive Order 11988 Floodplain Management*. October 20, 2021. Accessed March 13, 2025. Available on-line at: https://www.fema.gov/glossary/executive-order-11988-floodplain-management
FEMA, 2025	Federal Emergency Management Agency (FEMA), 2025. *Flood Insurance*. January 24, 2025. Accessed March 13, 2025. Available on-line at: https://www.fema.gov/flood-insurance
FERC, 2023	Federal Energy Regulatory Commission (FERC), 2022. *About FERC*. April 13, 2023. Accessed September 27, 2023. Available on-line at: https://www.ferc.gov/what-ferc
FHWA, 2022	Federal Highway Administration, 2022. *Highway Traffic Noise*. June 15, 2022. Accessed March 5, 2025. Available on-line: https://www.fhwa.dot.gov/environment/noise/
FTA, 2006	Federal Transit Administration, 2006. *Transit Noise and Vibration Impact Assessment*. May 2006. Accessed March 5, 2025. Available on-line: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf
FTA, 2018	Federal Transit Administration, 2018. *Transit Noise and Impact Vibration Manual.* September 2018. Accessed March 5, 2025. Available on-line: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf
Google Earth, n.d.	Google Earth, n.d. Imagery Date 2025. Accessed February 5, 2025.
Google Maps, 2023	Google Maps, 2023. Imagery Date 2023. Accessed June 22, 2023.
LA County, 2010	Los Angeles County Solid Waste Management Committee, 2010. *Solid Waste Inside, Volume 61*. Winter 2010. Accessed February 14, 2025. Available on-line at: https://dpw.lacounty.gov/epd/tf/isw/isw_2010_01.pdf
LA County Library, n.d.	LA County Library, n.d. *Lancaster Library*. No date. Accessed July 13, 2023. Available on-line at: https://lacountylibrary.org/lancaster-library/
LA County Sheriff's Department, 2022	Los Angeles County Sheriff's Department (LA County Sheriff's Department), 2022. *Antelope Valley Stations Community Engagement Report*. 2022. Accessed February 6, 2025. Available on-line at: https://lasd.org/palmdale/#public_reports_on_av

LACSD, n.d.	Los Angeles County Sanitation Districts (LACSD), n.d. *Lancaster Water Reclamation Plant*. No date. Accessed September 27, 2023. Available on-line at: https://www.lacsd.org/services/wastewater-sewage/facilities/lancaster-water-reclamation-plant
LACWD, 2021	Los Angeles County Waterworks Districts (LACWD), 2021. *Final 2020 Urban Water Management Plan for Los Angeles County Waterworks District No. 40 Antelope Valley*. February 2017. Accessed March 13, 2025. Available on-line at: https://dpw.lacounty.gov/wwd/web/Documents/D40_AV2020_UWMP%20FINAL.pdf
LACWD, 2022	Los Angeles County Waterworks District (LACWD), 2022. *Water Shortage Contingency Plan*. November 22, 2022. Accessed February 14, 2025. Available on-line: https://dpw.lacounty.gov/wwd/web/Documents/newsletter/2020%20WSCP%20Amendments%202022.pdf
LADPW, n.d.	Los Angeles County Department of Public Works (LADPW), n.d. *Antelope Valley Watershed*. No date. Accessed March 13, 2025. Available on-line at: https://dpw.lacounty.gov/wmd/watershed/av/
LADPW, 2014	Los Angeles County Department of Public Works (LADPW), 2014. *Low Impact Development Standards Manual*. February 2014. Accessed March 13, 2025. Available on-line at: https://dpw.lacounty.gov/ldd/lddservices/docs/Low_Impact_Development_Standards_Manual.pdf
Lahontan RWQCB, 2021	Lahontan Regional Water Quality Control Board, 2021. *Water Quality Control for the Lahontan Region (Basin Plan)*. Plan effective March 31, 1995, including amendments effective August 1995 through September 22, 2021. Accessed March 13, 2025. Available on-line at: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.html
Los Angeles County ALUC, 2004	Los Angeles County Airport Land Use Commission (ALUC), 2004. *Los Angeles County Airport Land Use Plan*. December 1, 2004. Accessed February 6, 2025. Available on-line at: https://case.planning.lacounty.gov/assets/upl/data/pd_alup.pdf
NAHC, n.d.	State of California Native American Heritage Commission (NAHC), n.d. *State Laws and Codes*. No date. Accessed February 28, 2025. Available on-line at: https://nahc.ca.gov/codes/state-laws-and-codes/
Nevada DOT, n.d.	Nevada Department of Transportation (DOT), n.d. *Brightline West High Speed Rail Project*. No date. Accessed August 20, 2024. Available on-line at: https://www.dot.nv.gov/projects-programs/transportation-projects/brightline-west-high-speed-rail-project
NOAA, n.d.	National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management, n.d. *American Indian Religious Freedom Act*. No date. Accessed February 28, 2025. Available on-line at: https://coast.noaa.gov/data/Documents/OceanLawSearch/Summary%20of%20Law%20-%20American%20Indian%20Religious%20Freedom%20Act.pdf

NPS, 2024a	National Park Service (NPS), 2024a. *How to List a Property.* February 28, 2024. Accessed February 28, 2025. Available on-line at: https://www.nps.gov/subjects/nationalregister/how-to-list-a-property.htm
NPS, 2024b	National Park Service (NPS), 2024b *Fossils and Paleontology, Laws Regulations and Policies*. October 11, 2024. Accessed February 10, 2025. Available on-line at: https://www.nps.gov/subjects/fossils/fossil-protection.htm
NPS, 2024c	National Park Service (NPS), 2024c. *National Historic Landmarks Program*. December 16, 2024. Accessed February 28, 2025. Available on-line at: https://www.nps.gov/orgs/1582/index.htm
NPS, 2024d	National Park Service (NPS), 2024d. *Native American Graves Protection and Repatriation Act.* April 29, 2024. Accessed March 3, 2025. Available on-line at: https://www.nps.gov/subjects/nagpra/index.htm
NPS, 2025	National Park Service (NPS), 2025. *Antiquities Act of 1906.* February 10, 2025. Accessed February 28, 2025. Available on-line at: https://www.nps.gov/subjects/archeology/antiquities-act.htm
OAG, n.d.	Office of Attorney General, n.d. *SB 1000 – Environmental Justice in Local Land Use Planning*. No date. Accessed March 7, 2025. Available on-line at: https://oag.ca.gov/environment/sb1000
OEHHA, 2022	California Office of Environmental Health Hazard Assessment, 2022. *SB 535 Disadvantaged Communities*. May 2022. Accessed October 25, 2023. Available on-line: https://oehha.ca.gov/calenviroscreen/sb535
OEHHA, 2021	California Office of Environmental Health Hazard Assessment (OEHHA), 2021. *CalEnviroScreen 4.0.* 2021. Accessed February 5, 2025. Available on-line: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40
OHP, n.d.	Office of Historic Preservation (OHP), n.d. *California Register of Historical Resources*. No date. Accessed February 28, 2025. Available on-line at: http://ohp.parks.ca.gov/?page_id=21238
OPR, 2005	Governor's Office of Planning and Research (OPR), 2005. *Tribal Consultation Guidelines. Supplement to General Plan Guidelines*. April 15, 2005. Accessed February 25, 2025. Available on-line at: https://www.parks.ca.gov/pages/22491/files/tribal_consultation_guidelines_vol-4.pdf
OPR, 2017a	Governor's Office of Planning and Research (OPR), 2017a. *Technical Advisory AB52 and Tribal Cultural Resources in CEQA*. June 2017. Accessed February 28, 2025. Available on-line at: http://nahc.ca.gov/wp-content/uploads/2017/06/Technical-Advisory-AB-52-and-Tribal-Cultural-Resources-in-CEQA.pdf
OPR, 2017b	Governor's Office of Planning and Research (OPR), 2017b. *Proposed Updates to the CEQA Guidelines.* November 2017. Accessed October 6, 2022. Available on-line at: https://opr.ca.gov/docs/20171127_Comprehensive_CEQA_Guidelines_Package_Nov_2017.pdf
OPR, 2018	Governor's Office of Planning and Research (OPR), 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018. Accessed March 28, 2025. Available on-line at: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

OPR, 2025	Governor's Office of Planning and Research (OPR), 2025. *2025 CEQA Statue and Guidelines*. 2025. Accessed February 28, 2025. Available on-line at: https://www.califaep.org/statute_and_guidelines.php
OSHA, n.d.	Occupational Safety and Health Administration (OSHA), n.d. *Transporting Hazardous Materials*. No date. Accessed February 12, 2025. Available on-line at: https://www.osha.gov/trucking-industry/transporting-hazardous-materials#:~:text=The%20Hazardous%20Materials%20Transportation%20Act,health%20and%20safety%20or%20property.%22
OSHA, n.d.	Occupational Safety and Health Administration (OSHA), n.d. *State Plans: California*. No date. Accessed https://www.faa.gov/airports/central/engineering/part77. Available on-line at: https://www.osha.gov/stateplans/ca
OSHA, 2002	Occupational Safety and Health Administration (OSHA), 2002. *Hearing Conservation*. 2002. Accessed March 5, 2025. Available on-line at: https://www.osha.gov/sites/default/files/publications/osha3074.pdf
Palmdale School District, 2023	Palmdale School District, 2023. *School Locator*. 2023. Accessed September 27, 2023. Available on-line: http://gis.gdms-1.com/PSD/instruction-page.html
RWQCB, 2007	California Regional Water Quality Control Board (RWQCB), 2007. *Revised Water Quality Standards for Surface Waters of the Antelope Hydrologic Unit*. August 2007. Accessed March 13, 2025. Available on-line at: https://www.waterboards.ca.gov/lahontan/board_info/agenda/2007/nov/item17_enc4.pdf
SCAG, 2018	Southern California Association of Governments (SCAG), 2018. *Industrial Warehousing in the SCAG Region*. April 2018. Accessed October 17, 2023. Available on-line at: https://scag.ca.gov/sites/main/files/file-attachments/final_report_03_30_18.pdf?1604268012
SCAG, 2019	Southern California Association of Governments (SGAC), 2019. *Profile of the City of Palmdale*. May 2019. Accessed October 20, 2022. Available on-line at: https://scag.ca.gov/data-tools-local-profiles
SCAG, 2020b	Southern California Association of Governments (SCAG), 2020b. *Demographics and Growth Forecast Technical Report*. September 3, 2022. Accessed October 19, 2022. Available on-line at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579
SCAG, 2024a	Southern California Association of Governments (SCAG), 2024a. *Connect Socal – A Plan for Navigating to a Brighter Future*. Adopted April 4, 2024. Accessed February 5, 2025. Available on-line at: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1714175547
SCAG, 2024b	Southern California Association of Governments (SCAG), 2024b. *Freightworks*. 2024. Accessed February 5, 2025. Available on-line at: https://scag.ca.gov/freightworks
SCAQMD, n.d.	South Coast Air Quality Management District, n.d. *Authority*. No date. Accessed October 25, 2023. Available on-line: https://www.aqmd.gov/nav/about/authority
SVP, 2010	Society of Vertebrate Paleontology, 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. 2010. Acessed May 12, 2025. Available on-line at: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf

SWRCB, 2014	State Water Resources Control Board (SWRCB), 2014. *0A – Federal, State and Local Laws, Policy and Regulations*. June 23, 2014. Accessed February 10, 2025. Available on-line at: https://www.waterboards.ca.gov/water_issues/programs/nps/encyclopedia/0a_laws_policy.html
SWRCB, 2016	State Water Resources Control Board (SWRCB), 2016. *A Compilation of Water Quality Goals, 17th Edition*. January 2016. Accessed March 13, 2025. Available on-line at: https://www.waterboards.ca.gov/water_issues/programs/water_quality_goals/docs/wq_goals_text.pdf
SWRCB, 2025	State Water Resources Control Board (SWRCB), 2017. *Watershed Management*. January 16, 2025. Accessed March 13, 2025. Available on-line at: http://www.waterboards.ca.gov/water_issues/programs/watershed/
SWRCB, 2020	State Water Resources Control Board, 2020 (SWRCB). *Governor's Conservation Executive Orders and Proclamations*. July 27, 2020. Accessed September 27, 2023. Available on-line at: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/executive_orders.html
SWRCB, 2022a	State Water Resources Control Board (SWRCB), 2022a. *California 2020-2022 Integrated Report*. July 25, 2022. Accessed March 13, 2025. Available on-line: https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=6cca2a3a1815465599201266373cbb7b
SWRCB, 2022	State Water Resources Control Board (SWRCB), 2022. *California Statutes Making Conservation a California Way of Life*. July 7, 2022. Accessed September 27, 2023. Available on-line at: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/california_statutes.html
SWRCB, 2023	State Water Resources Control Board (SWRCB), 2023. *Drought Information - Governor's Drought Declaration*. February 23, 2023. Accessed September 26, 2023. Available on-line at: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/executive_orders.html
USACE, 2014	United State Army Corps of Engineers, 2014. *Approved Jurisdictional Determination Form*. May 5, 2014. Accessed March 13, 2025. Available on-line: https://www.spl.usace.army.mil/Portals/17/docs/regulatory/JD/AJD/2014/SPL201300507-SLP.pdf
UNFCCC, n.d.	United Nations Framework Convention on Climate Change (UNFCCC), n.d. *What is the Kyoto Protocol.* No date. Accessed March 7, 2025. Available on-line at: https://unfccc.int/kyoto_protocol
UNFCCC, n.d.	United Nations Framework Convention on Climate Change (UNFCCC), n.d. *The Paris Agreement.* No date. Accessed March 7, 2025. Available on-line at: https://unfccc.int/process-and-meetings/the-paris-agreement
USCB, 2023a	United States Census Bureau (USCB), 2023. *2020 Census Qualifying Urban Areas and Final Criteria Clarifications.* 2023. Accessed March 14, 2025. Available on-line at: https://www.federalregister.gov/documents/2022/12/29/2022-28286/2020-census-qualifying-urban-areas-and-final-criteria-clarifications

USCB, 2023b	United States Census Bureau (USCB), 2023. 2020 Census Urban Areas FAQs. 2023. Accessed March 14, 2025. Available on-line at: https://www2.census.gov/geo/pdfs/reference/ua/Census_UA_2020FAQs_Feb2023.pdf
USDA, n.d.	United States Department of Agriculture (USDA), n.d. *Web Soil Survey Viewer*. No date. Accessed May 6, 2025. Available on-line at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
USDA, 1970	United States Department of Agriculture (USDA), 1970. *Soil Survey Antelope Valley Area California*. January 1970. Accessed May 6, 2025. Available on-line at: https://archive.org/details/usda-soil-survey-of-antelope-valley-area-california-1970
USGS, 2025	United States Geological Survey (USGS), 2025. *Water-Level Studies in the Antelope Valley and Fremont Valley Groundwater Basins, Groundwater Basins Location Map.* 2025. Accessed June 10, 2025. Available on-line at: https://ca.water.usgs.gov/projects/antelope-valley/antelope-valley-study-area.html