# ENVIRONMENTAL IMPACT REPORT

## Parkway Village Specific Plan

*Prepared for*

**City of Lancaster**
**Planning Department**

*Prepared by*

Aspen environmental group

**September 2025**

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# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| AB | Assembly Bill |
| ACC | Advanced Clean Cars |
| ADA | American with Disabilities Act |
| AFY | Acre feet per year |
| AGL | Above ground level |
| ALUCP | California Airport and Use Compatibility Plan |
| ATC | Authority to Construct |
| ATCM | Airborne Toxic Control Measures |
| AVAQMD | Antelope Valley Air Quality Management District |
| AVEK | Antelope Valley-East Kern Water Agency |
| AVGB | Antelope Valley Groundwater Basin |
| AVPA | Antelope Valley Planning Area |
| AVRWMG | Antelope Valley Regional Water Management Group Regional Management Group |
| AVSWCA | Antelope Valley State Water Contractors Association |
| AVTA | Antelope Valley Transit Authority |
| AVUHSD | Antelope Valley Union High School District |
| BAC | Baltimore Aircoil Company |
| BACT | Best Available Control Technology |
| BGEPA | Bald and Golden Eagle Protection Act |
| BMPs | best management practices |
| BP | Before present |
| BTU | British Thermal Units |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| CAFE | Corporate Average Fuel Economy |
| CAFÉ | Corporate Average Fuel Economy |
| Cal-ARP | California Accidental Release Prevention Program |
| CAP | Climate Action Plan |
| CAPCOA | California Air Pollution Control Officers Association |
| CARB | California Air Resources Board |
| CBC | California Building Code |
| CCA | Community Choice Aggregator |
| CCR | California Code of Regulations |
| CDP | Census Designated Places |
| CE | Common Era |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CERS | California Environmental Reporting System |
| CESA | California Endangered Species Act |
| CFD | Community facilities district |
| CGC | California Government Code |
| CGS | California Geological Survey |
| CHP | California Highway Patrol |
| CHRIS | California Historical Resources Information System |
| CI | Coccidioides immitis |

| | |
|---|---|
| CNDDB | California Natural Diversity Database |
| CNEL | Community Noise Equivalent Level |
| CNPS | California Native Plant Society |
| CO | Carbon monoxide |
| COGs | Councils of governments |
| CPTED | Crime Prevention Through Environmental Design |
| CPUC | California Public Utilities Commission |
| CRC | California Residential Code |
| CRHR | California Register of Historical Resources |
| CUPA | Certified Unified Program Agency |
| CWA | Clean Water Act |
| CWC | California Water Code |
| DCP | Dust Control Plan |
| DDT | Dichloro-diphenyl-trichloroethane |
| DOGGR | Division of Oil, Gas, & Geothermal |
| DPM | Diesel particulate matter |
| DPR | Department of Park and Recreation |
| DTSC | Department of Toxic Substance Control |
| EAFB | Edwards Air Force Base |
| ECSZ | Eastern California Shear zone |
| EICs | Engineering and Institutional Controls |
| EIR | Environmental Impact Report |
| EISA | Energy Independence and Security Act of 2007 |
| EO | Executive Order |
| EOP | Emergency Operations Plan |
| ERIS | Environmental Risk Information Services |
| ESA | Endangered Species Act |
| FAA | Federal Aviation Administration |
| FAR | Federal Aviation Regulations |
| FEMA | Federal Emergency Management Agency |
| FHSZ | Fire Hazard Severity Zones |
| FHWA | Federal Highway Administration |
| FICAN | Federal Interagency Committee on Aviation Noise |
| FIRM | Flood Insurance Rate Map |
| FTA | Federal Transit Administration |
| FTIP | Federal Transportation Improvement Program |
| FY | Fiscal years |
| GC | Government Code |
| GHG | Greenhouse gas |
| GIS | Geographic Information Systems |
| GP | General Plan |
| GPA | General Plan Amendment |
| HAs | Hydrologic Areas |
| HCD | Housing and Community Development |
| HHMD | Health Hazardous Materials Division |
| HI | Hazard index |
| HMBP | Hazardous Materials Business Plan |
| HRA | Health Risk Assessment |
| HSC | Health and Safety Code |

| | |
|---|---|
| HSIP | Highway Safety Improvement Plan |
| HUD | Housing and Urban Development |
| HUs | Hydrologic Units |
| HVAC | Heat, ventilate, and air condition |
| HWCL | Hazardous Waste Control Law |
| I-5 | Interstate 5 |
| IBC | International Building Code |
| ICC | International Code Council |
| IGR | Intergovernmental Review |
| IPaC | IPaC Information for Planning and Consultation |
| IRWM | Integrated Regional Water Management |
| IRWMP | Integrated Regional Water Management Plan 2019 Update |
| ITP | Incidental Take Permit |
| LACDPW | Los Angeles County Department of Public Works |
| LACFD | Los Angeles County Fire Department |
| LACSD | Los Angeles County Sanitation District |
| LCE | Lancaster Choice Energy |
| LE | Lancaster Energy |
| LEV | Low-Emission Vehicle |
| LOS | Level of Service |
| LQG | Large Quantity Generators |
| LRA | Local Responsibility Area |
| LRSP | Local Roadway Safety Plan |
| LRWQCB | Lahontan Regional Water Quality Control Board |
| LSA | Lake and Streambed Alteration |
| LSAA | Lake or Streambed Alteration Agreement |
| LSD | Lancaster School District |
| LUST | Leaking Underground Storage Tank |
| LWRP | Lancaster Wastewater Reclamation Plant |
| MDAB | Mojave Desert Air Basin |
| MGD | million gallons/day |
| MICR | Maximum individual cancer risk |
| MLD | Most Likely Descendants |
| MM | Mitigation Measure |
| MPD | Master Plan of Drainage |
| MPO | Metropolitan planning organization |
| MRZ | Mineral Resource Zone |
| MSL | Mean sea level |
| MU-E | Mixed-Use Employment |
| MU-N | Mixed-Use Neighborhood |
| MW | Megawatts |
| NAAQS | National Ambient Air Quality Standards |
| NAGPRA | Native American Graves Protection and Repatriation Act |
| NAHC | Native American Heritage Commission |
| NFIP | National Flood Insurance Program |
| NG | Natural gas |
| NHTSA | National Highway Traffic Safety Administration |
| NIMS | National Incident Management System |
| NIOSH | National Institute for Occupational Safety and Health |

| | |
|---|---|
| NOI | Notice of Intent |
| NOP | Notice of Preparation |
| NOT | Notice of Termination |
| NPDES | National Pollutant Discharge Elimination System |
| NPDWR | National Primary Drinking Water Regulations |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NSDWR | National Secondary Drinking Water Regulations |
| NSR | New Source Review |
| NWPR | Navigable Waters Protection Rule |
| OHSA | Occupational Safety and Health Administration |
| OHWM | Ordinary high-water mark |
| OPR | Office of Planning and Research |
| PA | Participating Agency |
| PERP | Portable Equipment Registration Program |
| PFAS | per- and polyfluoroalkyl substances |
| PHEV | plug-in hybrid electric vehicles |
| PPV | Peak particle velocity |
| PRC | Public Resources Code |
| PSHM | Probabilistic Seismic Hazard Map |
| PTO | Permit to Operate |
| PVSP | Parkway Village Specific Plan |
| PWD | Palmdale Water District |
| Qa | Modern alluvium |
| QHWD | Quartz Hill Water District |
| RCP | Regional Comprehensive Plan |
| RCRA | Resource Conservation and Recovery Act |
| RCSD | Rosamond Community Services District |
| RFS | Renewable Fuel Standard |
| RHNA | Regional Housing Needs Assessment |
| ROG | Reactive organic gases |
| ROW | Right-of-way |
| RPS | Renewables Portfolio Standard |
| RTP | Regional Transportation Plan |
| RTP/SCS | Regional Transportation Plan/Sustainable Communities Strategy |
| RWQCB | Regional Water Quality Control Board |
| SAA | Streambed Alteration Agreement |
| SB | Senate Bill |
| SBX7-7 | Senate Bill 7 of Special Extended Session 7 |
| SCA | Society for California Archaeology |
| SCAG | Southern California Association of Governments |
| SCE | Southern California Edison |
| SCS | Sustainable Communities Strategy |
| SDWA | Safe Drinking Water Act |
| SEL | Sound Exposure Level |
| SEMS | Standardized Emergency Management System |
| SENL | Single event noise levels |
| SHTC | Sierra Highway Transportation Corridor |
| SP | Specific Plan |

| | |
|---|---|
| SPCC | Spill, Prevention, Control, and Countermeasure |
| SR | State Route |
| SR-14 | State Route 14 |
| SRAs | State responsibility areas |
| SSURGO | NRCS Soil Survey Geographic Soil Web Survey |
| SWMP | Storm Water Management Plan |
| SWP | State Water Project |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TACs | Toxic air contaminants |
| TC | Town Center |
| TCM | Transit and Congestion Management |
| TCRs | Tribal cultural resources |
| TDM | Transportation demand management |
| TDS | Total dissolved solids |
| TIA | Transportation Impact Analysis |
| TMDL | Total maximum daily load |
| TSCA | Toxic Substances Control Act |
| UBC | Uniform Building Code |
| UPRR | Union Pacific Railroad |
| USACE | United States Army Corps of Engineers |
| USAF | United States Air Force |
| USDA | U.S. Department of Agriculture |
| USDOT | United States Department of Transportation |
| USEPA | U.S. Environmental Protection Agency |
| USFWS | United States Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| USTs | Underground storage tanks |
| UWMP | Urban Water Management Plan |
| VHFHSZ | Very High Fire Hazard Severity Zones |
| VMT | Vehicle miles traveled |
| VOC | Volatile organic compounds |
| WDR | Waste Discharge Requirements |
| WEAP | Worker Environmental Awareness Program |
| WJTCA | Western Joshua Tree Conservation Act |
| WRP | Water Reclamation Plant |
| WSA | Water Supply Assessment |
| WSCP | Water Shortage Contingency Plan |
| ZEV | Zero-Emission Vehicle |

# EXECUTIVE SUMMARY

This summary is provided in accordance with Section 15123 of the California Environmental Quality Act (CEQA) Guidelines (State CEQA Guidelines) , which states that an environmental impact report (EIR) "shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical." This summary includes:

1. A description of the project;
2. The environmental impacts of the project and recommended mitigation measures, if applicable;
3. Areas of controversy known to the California Energy Commission (CEC) including issues raised by agencies and the public; and
4. Issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

## ES.1. Summary of Proposed Project

The Parkway Village Specific Plan (PVSP or Plan) is a plan developed by the City of Lancaster (City) pursuant to California Government Code Section 65450 to guide the future development of 434.7 acres (Plan area) located between 10th Street West and Sierra Highway and Avenue K and Avenue L in the City. The extent of the Plan area is shown on Figure ES-1 (Project Location Map).

The PVSP includes land use and circulation plans for the area and presents development standards and regulations to guide future development of the land within the Plan area. The area covered under the Plan will be known as Parkway Village. The PVSP provides a regulatory framework to for the development of a master-planned community that contains residential neighborhoods, parks and other recreational facilities, a school site, open space, and medical, office, and commercial uses. The Plan sets forth standards and guidelines to regulate development by establishing permitted uses, property development standards, and general development criteria.

Key features of the PVSP include development of:

- 3,462 residential units. Planning Areas 7 and 8 may include a transit hub.
- 130 hotel rooms in one or more hotels.
- 150,000 square feet of commercial uses in areas designated Town Center (TC).
- 415,000 square feet of office, medical office, assisted/supportive living, and uses supportive of office including restaurants, financial institutions, professional services, etc., in areas designated Business (B).
- 185,000 square feet of commercial uses including indoor technical schools, fitness centers and gymnasiums in areas designated Workshop (W).
- 8.7 acres for school uses.
- 27.8 acres for parks of varying sizes.
- A 200-bed hospital and up to 500,000 square feet of medical-related uses including skilled nursing and assisted living supporting Kaiser Permanente's needs.
- 10.2 acre aquatic center

**Figure ES-1. Project Location**



## ES.2. Areas of Controversy

In accordance with PRC Section 21092 and State CEQA Guidelines Section 15082, the City of Lancaster (City) issued a Notice of Preparation in February 2024, seeking input from responsible and trustee agencies and the general public regarding the scope and content of environmental topics to be addressed in the EIR. The City staff also hosted a scoping meeting on March 14, 2024, during which concerns about the environmental effects of the PVSP were heard. The City accepted comments on the scope of the EIR between February 27 and March 28, 2024. In total, 11 comment letters were received. No clear areas of controversy were reflected in these comments, but concerns raised included the following:

- The need to assess GHG impacts in accordance with Appendix D of the 2022 Scoping Plan for Achieving Carbon Neutrality
- Cumulative and Project impacts on biological resources
- The need to assess effects on Palmdale Regional Airport, including noise compatibility and housing
- Complete streets and pedestrian safety measures
- Tribal consultation with tribes affiliated with the geographic area
- The need to assess impacts related to erosion control, watershed management, rare and endangered species, brush clearance, vegetation management, fuel modification for Fire Hazard Severity Zones (FHSZs), archeological and cultural resources, and County Oak Tree Ordinance
- Expansions of Districts' facilities must be sized/phased in a manner that is consistent with Southern California Association of Governments (SCAG) regional growth forecasts
- The need to evaluate project water demand and effects on water supply. Water infrastructure improvements needed to meet domestic demand and the Fire Department's fire flow and duration requirements
- Concerns regarding what would happen to existing development located in the Plan area

## ES.3. Issues to be Resolved

There are no unresolved issues associated with the PVSP. Issues may arise in the future when individual development projects are proposed with the Plan area. These issues will be resolved through the City's normal development review process and through the application of existing City ordinances, fees, and standards. Application of the mitigation measures proposed in this EIR will also help resolve potential future issues associated with future land development and infrastructure in the Plan area.

## ES.4. Summary of Alternatives Analysis

The EIR includes detailed evaluations of the following action alternatives and an evaluation of a No Project Alternative, as required under CEQA.

- **Alternative 1 – No Project/No Development.** Under this alternative, no development would occur on the project site. The project site would remain in its current vacant condition.
- **Alternative 2 – No Project/Development Under Existing Zoning.** Under this alternative, development would occur on a project-by-project basis in accordance with the existing zoning applicable to the project site. The portion of the Plan area currently zoned as Specific Plan 07-01 (SP 07-01; Amargosa Creek Specific Plan) would ultimately be developed with a mix of commercial uses and the hospital for Kaiser Permanente. A small strip located between Avenue K and Avenue K-8, which is currently zoned Mixed Use-Neighborhood (MU-N), would be developed predominantly with residential uses. The remainder of the project site is currently zoned Mixed-Use Employment (MU-E). The intent would be to provide non-retail employment uses in close proximity to multi-family residential uses.

- **Alternative 3 – All Residential.** Under this alternative, 386.6 acres of the project site would be rezoned to allow for a variety of residential uses. The remaining 48.1 acres (owned by Kaiser Permanente) would be zoned Hospital (H) to allow for construction and operation of a proposed hospital and related medical uses. The residential zoning on the project site would include R-7,000 (single family residential, minimum lot size 7,000 square feet), R-10,000 (single-family residential, minimum lot size 10,000 square feet), MDR (moderate-density residential, 8.1-15 units to the acre), and HDR (high-density residential, 15.1-30 units to the acre). A maximum of 2,500 residential units would be constructed for an overall density of 6.7 units to the acre.

## ES.4.1. Alternatives Eliminated from Further Consideration

CEQA requires an EIR to consider a reasonable range of alternatives to a Project (in this case the PVSP) that would feasibly attain most of the basic objectives of the Project. In addition, CEQA requires the consideration of how to avoid or substantially lessen any adverse effects of a Project.

A number of potential alternatives to the PVSP were identified. Some of these alternatives did not have the potential to meet the PVSP objectives, or the potential to avoid or minimize adverse environmental effects. Initial evaluation revealed that others are infeasible. The following alternatives were considered but eliminated from further evaluation, for the reasons explained below:

- **Alternative Location.** An alternative location for the development of the specific plan was considered and ultimately dismissed. There are no other large, vacant areas of land within the central urban core of the City that could be considered for this type of development. There are many scattered undeveloped, smaller parcels located throughout the urban core that could be developed; however, these parcels are not of suitable size or in proximity to one another to create a cohesive, master planned community. Additionally, a large area of undeveloped land is bound by 8th Street West, Sierra Highway, Avenue L, and Avenue M. These parcels are currently undeveloped; however, many of them have been entitled for large distribution facilities, general industrial uses, and solar fields making them unavailable and unsuitable for residential development.
- **All Commercial**. The City considered allowing for the development of the entire PVSP area with commercial uses similar to what are currently allowed under the Amargosa Creek Specific Plan. This alternative would have allowed for the development of up to 9,467,766 square feet of commercial space (based on 50% lot coverage permitted by the Lancaster Municipal Code). This amount of commercial land uses is unsustainable in one concentrated location. This assumption is based on the limited amount of commercial development that has occurred within the Amargosa Creek Specific Plan area over the previous 17 years. Additionally, the alternative would not assist the City in meeting its Regional Housing Needs Assessment (RHNA) numbers/housing needs.
- **Industrial Development.** The City considered allowing for the development of the entire PVSP area with industrial uses to provide additional employment opportunities for City and area residents and to help meet the current demand for large industrial parcels. This alternative was ultimately dismissed due to the close proximity of existing sensitive receptors (e.g., church, park, residences, etc.).

## ES.4.2. Environmentally Superior Alternative

Section 15126.6 of the State CEQA Guidelines requires an EIR identify an “environmentally superior” alternative. If the “no project” alternative is the environmentally superior alternative, then the EIR must identify which of the other alternatives is environmentally superior.

As presented in the comparative analysis in Section 4, Alternatives, the environmentally superior alternative would be the No Project, No Development Alternative (Alternative 1). No substantially adverse and long-term impacts would occur to the environment under the No Project Alternative. The No Project

Alternative would also avoid the impacts from implementing the PVSP, as analyzed in Section 3. However, it would not meet any PVSP objectives.

The all-residential alternative (Alternative 3) would be the environmentally superior alternative resulting in fewer impacts to Noise and Transportation resources than the PVSP and the No Project/Development Under Existing Zoning Alternative (Alternative 2); although it would cause greater and slightly greater impacts to Aesthetics and Energy resources, respectively. Alternative 3 ,while marginally superior, would not meet PVSP objectives and would provide less housing than would occur under the PVSP.

## ES.5. Summary of Impacts and Mitigation Measures

The following summarizes the impacts and mitigation measures identified and analyzed in Section 3 of this EIR. Refer to the appropriate section for detailed information. Impacts can be categorized as either:

- No Impact,
- Less Than Significant (LTS),
- Less Than Significant with Mitigation, or
- Significant and Unavoidable.

**Table ES-1. Summary of Direct/Indirect Impacts and Mitigation Measures**

| Impact | Mitigation Measures | Conclusion |
|---|---|---|
| **Section 3.2 Aesthetics** | | |
| AE-1: Adverse effects on a scenic vista. | ■ None required. | LTS |
| AE-2: Damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. | ■ None required. | LTS |
| AE-3: Conflicts with applicable zoning and other regulations governing scenic quality. | ■ None required. | LTS |
| AE-4: New sources of light or glare which would adversely affect day or nighttime views in the area. | ■ None required. | LTS |
| **Section 3.3 Air Quality and Greenhouse Gases** | | |
| Impact AQ-1: Conflict with or obstruction of the implementation of the applicable air quality plan. | ■ None required. | No Impact |
| Impact AQ-2: Cumulatively considerable net increases of any criteria pollutant for which the PVSP region is non-attainment under an applicable federal or state ambient air quality standard. | ■ MM AQ-1. Operational Area Source Emission Reduction Plan. | Significant/ Unavoidable (*Operation*) |
| Impact AQ-3: Exposure of sensitive receptors to substantial pollutant concentrations. | ■ MM AQ-2. Control On-Site Off-Road Equipment Emissions.<br>■ MM AQ-3. Valley Fever Awareness and Prevention. | Significant/ Unavoidable (*Operation*) |
| Impact AQ-4: Emissions (such as those leading to odors) adversely affecting a substantial number of people. | ■ None required. | LTS |

| Impact | Mitigation Measures | Conclusion |
|---|---|---|
| Impact GHG-1: Generation of greenhouse gas emissions, either directly or indirectly, that may have an impact on the environment. | ■ None required. | LTS |
| Impact GHG-2: Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. | ■ None required. | No Impact |
| **Section 3.4 Biological Resources** | | |
| Impact BIO-1: Effects on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. | ■ MM BIO-1a. Nest Avoidance.<br>■ MM BIO-2. Western Burrowing Owl.<br>■ MM BIO-3. Crotch's Bumble Bee<br>■ MM BIO-4. Pre-construction Surveys and Construction Monitoring.<br>■ MM BIO-5. Worker Environmental Awareness Training.<br>■ MM BIO-6. Prevent Invasive Weed Introduction.<br>■ MM BIO-7. Manage Project Trash.<br>■ MM BIO-8. Hazardous Materials Best Management Practices.<br>■ MM BIO-9. Avoid Wildlife Hazards and Entrapment.<br>■ MM BIO-10. Western Joshua Tree | LTS w/ mitigation |
| Impact BIO-2: Effects on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS. | ■ None required. | LTS |
| Impact BIO-3: Effects on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. | ■ MM BIO-11 | LTS w/ mitigation |
| Impact BIO-4: Effects on native wildlife movement, established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites. | ■ None required. | LTS w/ mitigation |
| Impact BIO-5: Conflicts with local policies or ordinances protecting biological resources. | ■ None required. | No impact |
| Impact BIO-6: Conflicts with adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plans. | ■ None required. | No impact |
| **Section 3.5 Cultural Resources** | | |
| CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5. | ■ MM CUL-1. Worker Environmental Awareness Program.<br>■ MM CUL-2. Native American Monitoring.<br>■ MM CUL-3: Inadvertent Discovery of Human Remains.<br>■ MM CUL-4: Archaeological Monitoring Program. | LTS w/ mitigation |

| Impact | Mitigation Measures | Conclusion |
|---|---|---|
| CUL-2: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5. | ■ MM CUL-1. Worker Environmental Awareness Program.<br>■ MM CUL-2. Native American Monitoring.<br>■ MM CUL-3: Inadvertent Discovery of Human Remains.<br>■ MM CUL-4: Archaeological Monitoring Program. | LTS w/ mitigation |
| CUL-3: Disturbance of any human remains, including those interred outside of formal cemeteries. | ■ MM CUL-1. Worker Environmental Awareness Program.<br>■ MM CUL-2. Native American Monitoring.<br>■ MM CUL-3: Inadvertent Discovery of Human Remains.<br>■ MM CUL-4: Archaeological Monitoring Program.<br>■ MM CUL-5: Inadvertent Discovery of Cultural Resources | LTS w/ mitigation |
| **Section 3.6 Energy** | | |
| EN-1: Wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. | ■ None required. | No Impact |
| EN-2: Compliance with State or local plans for renewable energy or energy efficiency. | ■ None required. | LTS |
| **Section 3.7 Geology, Soils, and Paleontology** | | |
| GEO-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of an Alquist-Priolo zoned fault or other known active earthquake fault, strong seismic ground shaking, seismic related ground failure, including liquefaction, or landslides. | ■ MM GEO-1: Geotechnical Investigations. | No Impact *(Fault Rupture, Landslides)*<br>LTS w/ mitigation *(Ground Shaking)*<br>LTS w/ mitigation *(Ground Failure)* |
| GEO-2: Result in substantial erosion or loss of topsoil. | ■ None required. | LTS |
| GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and result in landslides, lateral spreading, subsidence, liquefaction, or collapse. | ■ MM GEO-1. Geotechnical Investigations. | No Impact *(Landslide, Lateral Spreading)*<br>LTS *(Subsidence)*<br>LTS w/ mitigation *(Liquefaction, Collapse)* |
| GEO-4: Be located on an expansive soil that could create adverse effects. | ■ MM GEO-1. Geotechnical Investigations. | LTS w/ mitigation |
| PALEO-1: Destruction of unique paleontological resources. | ■ MM PALEO-1. Paleontological Resource Awareness Plan (PRAP).<br>■ MM PALEO-2. Unanticipated Fossil Discovery. | LTS w/ mitigation |

| Impact | Mitigation Measures | Conclusion |
|---|---|---|
| **Section 3.8 Hazards and Hazardous Materials** | | |
| HAZ-1: Result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. | ■ None required. | LTS |
| HAZ-2: Result in a significant hazard to the public or the environment through release of hazardous materials into the environment. | ■ MM HAZ-1. Site Characterization.<br>■ MM HAZ-2. Unknown Contamination. | LTS w/ mitigation |
| HAZ-3: Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of and existing or proposed school. | ■ MM HAZ-1. Site Characterization. | LTS w/ mitigation |
| HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and could create a significant hazard to the public or the environment. | ■ None required. | LTS |
| HAZ-5: Be located within an airport land use plan or within two miles of a public airport or public use airport and could result in a safety hazard for people residing or working in the PVSP. | ■ None required. | LTS |
| HAZ-6: Impair implementation of or physically interfere with adopted emergency response or emergency evacuation plans. | ■ MM HAZ-3. Agency Construction Notification. | LTS w/ mitigation |
| HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. | ■ None required. | LTS |
| **Section 3.9 Hydrology and Water Quality** | | |
| Impact WQ-1: Violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. | ■ MM WQ-1. Stormwater Quality Plan. | LTS w/ mitigation |
| Impact WQ-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge. | ■ None required. | LTS |
| Impact WQ-3: Create or contribute to runoff water that would exceed the capacity of the existing or proposed stormwater drainage systems or create flooding off site. | ■ MM WQ-2. Hydrology Study. | LTS w/ mitigation |
| Impact WQ-4: Substantially alter the existing drainage pattern of the site or area. | ■ None required. | LTS |
| Impact WQ-5: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. | ■ None required. | LTS |

| Impact | Mitigation Measures | Conclusion |
|---|---|---|
| Impact WQ-6: Inundation by seiches, tsunami, or mudflow. | ■ None required. | No Impact |
| **Section 3.10 Land Use and Recreation** | | |
| LUR-1: Conflicts with local, regional, or state land use plans, policies, or regulations. | ■ None required. | No Impact *(Local Plans)*<br>LTS *(Regional Plans)* |
| LUR-2: Increased use of existing neighborhood and regional parks or other recreational facilities resulting in substantial physical deterioration of the facility. | ■ None required. | LTS |
| LUR-3: Construction or expansion of recreational facilities which might have an adverse physical effect on the environment. | ■ None required. | LTS |
| **Section 3.11 Noise** | | |
| Impact NOI-1a: Generation of a substantial temporary construction-related increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | ■ MM NOI-1. Reduce Short-Term Construction Noise. | LTS w/ mitigation |
| Impact NOI-1b: Generation of a substantial permanent increase in non-transportation ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | ■ MM NOI-2. Reduce Long-Term Noise Exposure from Stationary Equipment. | LTS (*Residential, Parks, Education*)<br>LTS w/ mitigation (*Commercial, Parking*) |
| Impact NOI-1c: Generation of a substantial permanent increase in transportation-related ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | ■ MM NOI-3. Land Use Compatibility Acoustical Analysis. | LTS w/ mitigation |
| Impact NOI-2: Generation of excessive groundborne vibration or groundborne noise levels. | ■ MM NOI-1. Reduce Short-Term Construction Noise. | LTS w/ mitigation |
| Impact NOI-3: Location 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 private-use airport, that exposes people residing or working in the project area to excessive noise levels. | ■ MM NOI-3. Land Use Compatibility Acoustical Analysis.<br>■ MM NOIS-4. Require Aviation Easements for Proposed Residential Land Uses. | LTS w/ mitigation |
| **Section 3.12 Population and Housing** | | |
| POP-1: Inducement of substantial unplanned population growth in an area, either directly or indirectly. | ■ None required. | LTS |
| POP-2: Displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. | ■ None required | No Impact |

| Impact | Mitigation Measures | Conclusion |
|---|---|---|
| **Section 3.13 Public Services, Utilities, and Service Systems** | | |
| PS-1: Substantial adverse physical effects associated with the provision of 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. | ■ None required. | LTS |
| PS-2: Exceedance of wastewater treatment requirements of the Regional Water Quality Control Board. | ■ None required. | LTS |
| PS-3: 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. | ■ None required. | LTS |
| PS-4: Availability of sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. | ■ None required. | LTS |
| PS-5: Adequacy of capacity to serve the project's projected demand in addition to the wastewater service provider's existing commitments. | ■ None required. | LTS |
| PS-6: Generation of solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or other impairment to the attainment of solid waste reduction goals. | ■ None required. | LTS |
| PS-7: Compliance with federal, state, and local management and reduction statutes and regulations related to solid waste. | ■ None required. | LTS |
| **Section 3.14 Transportation and Traffic** | | |
| TR-1: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. | ■ None required. | LTS |
| **Section 3.15 Tribal Cultural Resources** | | |
| TCR-1: Cause a significant impact to a Tribal Cultural Resource, Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9; 21074(a)(1); and 5024.1(c),). | ■ MM TCR-1. Worker Environmental Awareness Program.<br>■ MM TCR-2. Native American Monitoring.<br>■ MM CUL-2. Inadvertent Discovery of Cultural Resources.<br>■ MM CUL-3: Inadvertent Discovery of Human Remains. | LTS w/ mitigation |

| Impact | Mitigation Measures | Conclusion |
|---|---|---|
| Impact TCR-2: Cause a significant impact to Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1 or local register of historical resources as defined in Public Resources Code section 5020.1(k), including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.995). | ■ MM TCR-1. Worker Environmental Awareness Program.<br>■ MM TCR-2. Native American Monitoring.<br>■ MM CUL-2. Inadvertent Discovery of Cultural Resources.<br>■ MM CUL-3: Inadvertent Discovery of Human Remains. | LTS w/ mitigation |
| Impact TCR-3: Cause a significant impact to a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code section 5024.1(c). | ■ MM TCR-1. Worker Environmental Awareness Program.<br>■ MM TCR-2. Native American Monitoring.<br>■ MM CUL-2. Inadvertent Discovery of Cultural Resources.<br>■ MM CUL-3: Inadvertent Discovery of Human Remains. | LTS w/ mitigation |

# 1. INTRODUCTION

## 1.1. Purpose of the EIR

This Environmental Impact Report (EIR) has been prepared to evaluate the environmental impacts of the Parkway Village Specific Plan (PVSP) in accordance with the requirements of the California Environmental Quality [1] and the State CEQA Guidelines.[2] This EIR identifies the anticipated impacts on the physical environment from the implementation of the PVSP, as required by State CEQA Guidelines §15161. As described in State CEQA Guidelines §15121(a), the primary purposes of an EIR are to:

- Inform decision-makers and the public generally of the significant environmental effects of a project;
- Identify possible ways to minimize the significant effects of a project; and
- Describe a reasonable range of alternatives to a project.

This is considered a program EIR as described in Section 15168 of the State CEQA Guidelines. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically, (2) as logical parts in the chain of contemplated actions, (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

CEQA requires the identification and characterization of significant impacts to the physical environment caused by a project. The purpose is to inform government decision makers and the public about the possible significant environmental effects of proposed project activities, and to identify the ways to avoid or reduce environmental damage. A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. Environmental effects that are not significant need not be discussed in an EIR except to briefly indicate why such impacts would not be significant and, therefore, do not need to be discussed in detail. Per State CEQA Guidelines §15131, the economic or social effects of a project cannot be treated as significant, although economic or social information may be included in an EIR.

The mitigation measures that are identified in this EIR may be adopted as conditions of approval to avoid or minimize the significant adverse impacts that are anticipated from future development of the PVSP. A program for monitoring the implementation of adopted mitigation measures will need to be adopted at the time that the PVSP is approved.

The City of Lancaster is the lead agency for compliance with CEQA because it has the primary responsibility for approving the PVSP. Other public agencies (i.e., responsible and trustee) will use the information contained in this EIR as part of their decision-making process for required approvals or permit from those agencies. It is not always feasible to reduce environmental impacts to a level that is not significant. In those cases, impacts are considered to be significant and unavoidable. In accordance with State CEQA Guidelines §15093(b), if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency must state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. In these instances, State CEQA Guidelines §15093 requires a "statement of overriding considerations" to be adopted where the Lead Agency specifies that the public benefits of the project outweigh the significant impacts.

[1] Public Resources Code 21000–21189.
[2] California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387.

This EIR analyzes the project's environmental effects to the degree of specificity appropriate to the proposed actions, as required by State CEQA Guidelines §15146. The analysis considers the activities associated with the project to determine the short- and long-term effects associated with their implementation. This EIR discusses the project's direct and indirect impacts, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

## 1.2. The EIR Process and Compliance with CEQA

### 1.2.1. Notice of Preparation

In compliance with the State CEQA Guidelines, the City of Lancaster provided opportunities for various agencies and the public to participate in the environmental review process. During preparation of the Draft EIR, efforts were made to contact various state, regional, and local government agencies and other interested parties to solicit comments on the scope of review in this document. This included the distribution of a Notice of Preparation (NOP) to various responsible agencies, trustee agencies, and interested parties. In addition, notice of a public scoping meeting for the project was included in the NOP. The public scoping meeting was held on March 14, 2024, at the City of Lancaster Council Chambers, 44933 Fern Avenue, Lancaster, California, 93534.

Pursuant to State CEQA Guidelines §15082, the City of Lancaster circulated the NOP directly to public agencies (including the State Clearinghouse Office of Planning and Research), special districts, and members of the public who had requested such notice. The NOP was distributed on February 27, 2024, which initiated a 30-day public review period that ended on March 28, 2024.

The purpose of the NOP was to formally announce the preparation of a Draft EIR for the proposed project, and also announce that the City, as the Lead Agency, was soliciting input regarding the scope and content of the environmental information to be included in the EIR. The NOP provided preliminary information regarding the anticipated range of impacts to be analyzed within the EIR.

The public scoping meeting was held with the intent of affording interested individuals, groups, and public agencies a forum in which to orally present input directly to the Lead Agency in order to further refine the scope and focus of the EIR, as described in the NOP. The following summarizes the primary issues raised in the NOP comment letters and identifies where they are addressed in the EIR:

**Table 1-1. Scoping Comments**

| Commenter | Comment Date | Commenter Type | Comment Summary | Addressed in: |
|---|---|---|---|---|
| California Air Resources Board | March 28, 2024 | State Agency | Assess GHG impacts in accordance with Appendix D of the 2022 Scoping Plan for Achieving Carbon Neutrality. | Section 3.3 (Air Quality and GHG) |
| California Department of Fish and Wildlife | March 27, 2024 | State Agency | Evaluate cumulative impacts on biological resources and whether AVRCIS may apply. Evaluate effects on local wildlife movement. Evaluate effects on Crotch's bumble bee, desert tortoise, Mohave ground squirrel, western Joshua tree, rare plants, Species of Special Concern, nesting birds, and raptors. Assess whether a LSAA notification is appropriate. | Section 3.4 (Biological Resources) |

| Commenter | Comment Date | Commenter Type | Comment Summary | Addressed in: |
|---|---|---|---|---|
| California Department of Transportation, Aeronautics Program | March 26, 2024 | State Agency | Follow the California Airport Land Use Planning Handbook for assessing effects on Palmdale Regional Airport, including noise compatibility and housing. | Section 3.11 (Noise and Vibration) and Section 3.14 (Transportation) |
| California Department of Transportation, District 7 | March 26, 2024 | State Agency | Reminder to use VMT for the transportation analysis. Supports complete streets and pedestrian safety measures such as road diets and other traffic calming measures. Encourages TDM strategies and ITS applications. Recommends queuing analysis with signal timing for existing traffic conditions plus project trips at impacted off-ramps such as at I-14 and Avenue K and I-14 and West Ave L. | Section 3.14 (Transportation) |
| Native American Heritage Commission | February 27, 2024 | State Agency | Recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area as early as possible. | Section 3.5 (Cultural Resources) and Section 3.15 (Tribal Cultural Resources) |
| County of Los Angeles Fire Department | April 10, 2024 | County Agency | Reminder for the project to comply with applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants. Assess impacts related to erosion control, watershed management, rare and endangered species, brush clearance, vegetation management, fuel modification for FHSZs, archeological and cultural resources, and County Oak Tree Ordinance. | Section 3.13 (Public Services, Utilities, and Service Systems), Section 3.9 (Hydrology and Water Quality), and Section 3.4 (Biological Resources) |
| Los Angeles County Sanitation Districts | March 26, 2024 | County Agency | Wastewater will flow into local sewer lines, which are not maintained by the Districts. Wastewater will be treated at Lancaster Water Reclamation Plant. Provides an average daily wastewater flow estimate. All expansions of Districts' facilities must be sized/phased in a manner that is consistent with SCAG regional growth forecasts. | Section 3.13 (Public Services, Utilities, and Service Systems) |
| Los Angeles County Public Works Waterworks Districts | March 27, 2024 | County Agency | Discuss water supply sources/availability. Evaluate project water demand and effects on water supply. Water infrastructure improvements needed to meet domestic demand and the Fire Department's fire flow and duration requirements. | Section 3.13 (Public Services, Utilities, and Service Systems) and Water Supply Assessment |
| Andrea Bush, rep. Ann Parrish | March 14, 2024 | Public | Written comment card received at the scoping meeting. What would happen to the residents of the Sierra Retirement Home? | Sections 2.3.1 and 2.4.2 |

| Commenter | Comment Date | Commenter Type | Comment Summary | Addressed in: |
|---|---|---|---|---|
| Peter G. Haber (Gibbs Giden), rep. 3Gen Net Lease, LP | March 28, 2024 | Public | Requests that the EIR identify the Bowlero Lancaster as an existing legal use. | Sections 2.3.1 and 2.4.2 |
| Brian Jones, Bowlero Corp. | March 28, 2024 | Public | Opposed to taking of property. | Sections 2.3.1 and 2.4.2 |

Notes: AVRCIS = Antelope Valley Regional Conservation Investment Strategy
FHSZ = Fire Hazard Severity Zones
GHG = Greenhouse gases
ITS = Intelligent Transportation System
LSAA = Lake and Streambed Alteration Agreement
TDM = Transportation Demand Management
VMT = Vehicle Miles Travelled

### 1.2.2. Public Review of the Draft EIR

In accordance with State CEQA Guidelines §§ 15087 and 15105, this Draft EIR is being circulated for a 45-day public review period. Copies of the Draft EIR are available for review at the Lancaster City Hall, Community Development Division (44933 Fern Avenue, Lancaster, CA 93534) and online at:

https://www.cityoflancasterca.org/our-city/departments-services/development-services/planning/environmental-review/environmental-impact-reports-eirs

The public is invited to comment in writing on the information presented in the Draft EIR, specifically comments related to the project's significant environmental impacts, measures to reduce or avoid significant adverse impacts, and/or feasible alternatives that could reduce significant adverse impacts. Persons and agencies commenting are encouraged to provide relevant information that they believe is missing from the Draft EIR and to identify where the information can be obtained. All comment letters received before the close of the public review period will be responded to in writing, and the comment letters, together with the responses to those comments, will be included in the Final EIR.

Comment letters should be sent to:

City of Lancaster
Community Development Department
44933 Fern Avenue
Lancaster, CA 93534
Attn: Ms. Jocelyn Swain, Senior Planner
jswain@cityoflancasterca.org

### 1.2.3. The Final EIR

The Final EIR will consist of the Draft EIR, including any necessary revisions, and responses to all written comments addressing concerns raised in the comments of responsible agencies, the public, and any other reviewing parties. After the Final EIR is published, and at least ten days prior to the certifying the Final EIR, a copy of the response to comments made by public agencies on the Draft EIR will be provided to the commenting agencies.

Prior to taking any action to approve the PVSP, the City of Lancaster City Council will certify that: the Final EIR was completed in compliance with CEQA, the decision-makers reviewed and considered the information contained in the Final EIR, and the Final EIR reflects the City's independent judgment and analysis.

In order to ensure that the mitigation measures to reduce or avoid environmental impacts are implemented, the City of Lancaster will adopt a monitoring or reporting program for mitigation measures in the Final EIR that are adopted as conditions of project approval.

## 1.3. Responsible and Trustee Agencies

Certain projects or actions undertaken by a Lead Agency require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Such other agencies are referred to as Responsible Agencies and Trustee Agencies. Pursuant to CEQA Guidelines §§ 15381 and 15386, as amended, Responsible Agencies and Trustee Agencies are respectively defined as follows:

A Responsible Agency is defined in State CEQA Guidelines § 15381 as a public agency that has responsibility for carrying out or approving a project (as defined by CEQA) for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. The term Responsible Agency includes all public agencies other than the Lead Agency that have discretionary approval power over the project. No agencies have been identified other than the City of Lancaster that need to issue discretionary approvals for the adoption of the PVSP; however, various responsible agencies may need to issue discretionary permits or approvals for individual projects proposed within the PVSP area in the future. Those agencies could include the California Department of Fish and Wildlife, Lahontan Regional Water Quality Control Board, and Antelope Valley Air Quality Management District, among others.

A Trustee Agency is defined in State CEQA Guidelines § 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. Trustee Agencies include the: California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California with regard to sites within the Natural Land and Water Reserves System. The only Trustee Agency identified for the proposed PVSP is the California Department of Fish and Wildlife.

## 1.4. Organization of the EIR

The Draft EIR is organized into the following sections:

- **Summary.** A summary description of the proposed Project and its anticipated environmental impacts are included. A summary table lists impacts and the associated mitigation measures for each significant impact identified for the proposed Project.
- **Chapter 1: Introduction.** An overview of the purpose of the EIR and EIR process are presented, including a description of how to submit comments on the EIR.
- **Chapter 2: Project Description.** A detailed description of the characteristics of the proposed Project is presented, including a listing of the objectives of the Project.
- **Chapter 3: Environmental Setting, Analysis, and Mitigation Measures.** Descriptions of existing environmental conditions in the Project area and a summary of relevant laws and regulations is presented for each technical issue area. The description of existing conditions serves as the baseline environmental conditions against which the environmental effects of the Project are evaluated. Each technical issue area section provides an analysis of the proposed Project's direct, indirect, and cumulative impacts along with a conclusion regarding the significance of each identified impact. Mitigation measures are proposed to reduce or avoid significant impacts anticipated to result from Project implementation.
- **Chapter 4: Alternatives.** This chapter describes the process for the selection of Project alternatives and the rationale used to exclude certain alternatives from further analysis. The impacts of the alternatives carried forward for analysis are described, but in less detail than the impacts of the proposed Project.

- **Chapter 5: Other CEQA Considerations.** This chapter discusses certain long-term implications associated with Project implementation, including growth-inducing impacts.
- **Chapter 6: References.** This chapter provides a listing of information sources used in preparation of the EIR, as cited in each of the EIR chapters.
- **Chapter 7: Consultation and EIR Preparers.** This chapter identifies the agencies and persons contacted for information used in the preparation of the EIR. The preparers of the EIR and their roles are also listed.
- **Appendices.** Technical appendices are provided (Appendices A through E), along with the NOP and scoping comments (Appendix F).

## 1.5. Incorporation by Reference

Pertinent documents relating to this EIR have been cited in accordance with State CEQA Guidelines §15150, which encourages incorporation by reference as a means of reducing redundancy and the length of environmental reports. The following documents are incorporated by reference into this EIR. Information contained within these documents has been utilized for each section of this EIR. Copies of these documents are available for review or purchase at the City of Lancaster (44933 Fern Avenue, Lancaster, CA 93534) and on the City's website (http://www.cityoflancasterca.org). A brief synopsis of the scope and content of these documents are provided below.

- **Lancaster General Plan 2030 (General Plan), adopted July 14, 2009.** The Lancaster General Plan is a policy document, designed for the City's long-term outlook for future growth. The Lancaster General Plan includes the following elements: Plan for Natural Environment, Plan for Public Health and Safety, Plan for Active Living, Plan for Physical Mobility, Plan for Physical Development (Community Design subsection), Plan for Economic Development, Plan for Municipal Services and Facilities, and the Housing Element. The Safety Element was updated in 2022, and the Housing and Environmental Justice Elements were adopted in 2022. The Lancaster General Plan identifies the types of development that will be allowed, the spatial relationships among land uses, and the general pattern of future development. It presents the issues which face the City of Lancaster as well as the goals, objectives, policies, and specific actions which the City will pursue to resolve those issues. All development projects including subdivisions, public works, redevelopment projects, zoning decisions, and other various implementation tools must be consistent with the General Plan.
- **Lancaster General Plan 2030 Program Environmental Impact Report, certified July 14, 2009.** The General Plan EIR is intended to provide decision-makers and the public with information concerning the environmental effects of implementation of the General Plan. The General Plan EIR includes background data, analyzes potential environmental impacts, identifies General Plan strategies and actions that serve as mitigation, and identifies additional mitigation measures to reduce potentially significant effects due to implementation of the General Plan. The General Plan EIR determined that implementation of the General Plan would result in various irreversible environmental changes in the area including soil erosion associated with grading and construction activities, alteration of the human environment as a consequence of the development process, increased usage of public services and utilities during and after construction, temporary and permanent commitment of energy and water resources as a result of construction, operation, and maintenance of new developments, utilization of various new raw materials for construction, and incremental increased in vehicular activity within the City. Other significant environmental effects include increased traffic and circulation impacts, depletion of groundwater resources, additional air and noise pollution emissions, and increased consumption of natural resources such as water supply.

- **Lancaster General Plan 2030 Master Environmental Assessment, dated April 2009.** The Master Environmental Assessment was developed as part of the Lancaster General Plan 2030 update. The purpose of the Master Environmental Assessment is to provide existing baseline conditions within the City of Lancaster General Plan study area. Physical, environmental, cultural, social and economic conditions for the study area are identified in the Master Environmental Assessment to establish where the City is today and to help formulate goals and policies that will guide the City into the future. The Master Environmental Assessment provides the City with baseline data for EIRs and all project and policy related CEQA documents. Additionally, it provides the baseline environmental information for Initial Studies to help the City determine whether significant impacts will occur with the development of individual projects.
- **Lancaster Municipal Code codified through Ordinance No. 1130, updated May 27, 2025.** The Lancaster Municipal Code provides regulations for governmental operations, development, infrastructure, public health and safety, and business operations within the City. Title 17, Zoning, of the Municipal Code represents the City's Zoning Ordinance. The Zoning Ordinance is established to protect the public health, safety, and general welfare of the visitors to and residents of the city, to regulate the use of buildings, structures, and land for residential, commercial, industrial and institutional purposes, to regulate location, height, bulk, and area covered by buildings and structures, and to control lot size, yards, intensity of land use, signs and off-street parking.

# 2. PROJECT DESCRIPTION

## 2.1. Introduction

The Parkway Village Specific Plan (PVSP or Plan) is a plan developed by the City of Lancaster (City) pursuant to California Government Code Section 65450 to guide the future development of 434.7 acres (Plan area) located between 10th Street West and Sierra Highway and Avenue K and Avenue L in the City. The extent of the Plan area is shown on Figure 2-1 (Regional Location Map). A more detailed map of the Plan area is presented in Figure 2-2 (Project Vicinity Map). (Figures are at the end of this section.)

The PVSP proposes land use and circulation plans for the area and presents development standards and regulations to guide future development of the land within the Plan area. The overall area will be known as Parkway Village. The PVSP provides a regulatory framework to for the development of a master-planned community that contains residential neighborhoods, parks and other recreational facilities, a school site, open space, and medical, office, and commercial uses. The Plan sets forth standards and guidelines to regulate development by establishing permitted uses, property development standards, and general development criteria.

The following is a summary of the key features of the PVSP:

- 3,462 residential units. Planning Areas 7 and 8 may include a transit hub.
- 130 hotel rooms in one or more hotels.
- 150,000 square feet of commercial uses in areas designated Town Center (TC).
- 415,000 square feet of office, medical office, assisted/supportive living, and uses supportive of office including restaurants, financial institutions, professional services, etc., in areas designated Business (B).
- 185,000 square feet of commercial uses including indoor technical schools, fitness centers and gymnasiums in areas designated Workshop (W).
- 8.7 acres for school uses.
- 27.8 acres for parks of varying sizes.
- A 200-bed hospital and up to 500,000 square feet of medical-related uses including skilled nursing and assisted living.
- 10.2 acre aquatic center.

The PVSP is consistent with the applicable goals and policies of the City of Lancaster General Plan.

## 2.2. Project Objectives

As described in Section 1.3 of the Plan, the vision for the PVSP is to create a new community of neighborhoods, offering a mix of residential, recreation and school opportunities, and commercial, office, and medical use destinations. The Plan presents an approach for planning future development that is intended to result in a high-quality community. These objectives are listed below:

- Provide a range of residential, commercial, recreational, office, and medical uses within an underutilized area in the central portion of the City of Lancaster.
- Provide a variety of housing types and styles, including those not typically found in the City of Lancaster, ranging from conventional single-family homes and detached cluster homes to townhomes and apartments.
- Provide business and employment opportunities to promote a strong and diversified economy.

- Incorporate a variety of parks, paseos, parkways, trails, and open space features that serve the recreational needs of community residents.
- Use the existing Amargosa Creek channel alignment as open space connections for pedestrian and non-motorized mobility, and storm flow conveyance.
- Accommodate the expansion of medical-related and health and wellness uses on property under the current ownership of Kaiser Permanente.
- Establish a distinctive community character through place-making elements.

## 2.3. Plan Area Description

The Plan area is located in the southern central portion of the City of Lancaster, which is in the Antelope Valley region of northern Los Angeles County. The Antelope Valley is a high-elevation desert at the western tip of the Mojave Desert, with the San Gabriel Mountains bordering the valley to the south and the Tehachapi Mountains forming the boundary to the north. The Antelope Valley is primarily an illuviated desert plain containing bedrock hills and low mountains. The area ranges from 2,300 to 3,500 feet above sea level and is cut by numerous small, mostly dry creeks and washes that drain in an easterly direction toward several dry lakebeds. The western portion of the valley is characterized by relatively flat-lying topography and valley fill deposits.

The Antelope Valley is located within the juncture of different ecological regions including the Northern Great Basin, Transverse and Coast Ranges; West Mojave and Sonoran deserts; Tehachapi and Sierra Nevada Mountains; and Great Central Valley. It supports a variety of native and introduced plants and wildlife. The area has been subject to repeated disturbance from historic land uses such as farming, grazing, mining, infrastructure construction, and urban development.

### 2.3.1. Current Site Conditions

The Plan area is relatively flat and largely undeveloped, with land elevation gradually increasing from the northwestern corner to the southeastern corner of the site. Existing development within the Plan area includes the Kaiser Permanente Antelope Valley Medical Offices and various commercial and storage uses located along the southern site boundary (Avenue L); a church located at the southwestern corner of 5$^{th}$ Street West and Avenue K along the northern site boundary; a mix of retail and restaurant uses, a retirement village, a bowling alley, a recreational vehicle and trailer park, and a transitional housing facility located along the eastern site boundary (Sierra Highway); and an auto repair shop and solar farm along the western site boundary. A 1.3-acre parcel along the 5$^{th}$ Street West right-of-way (ROW) is owned by Los Angeles County and contains a small waterworks facility. Amargosa Creek is a dry wash which has been undergrounded through the Plan area from roughly the southern portion of the site toward the northwestern corner. Existing development within the Plan area is expected to remain and is not proposed to be demolished or removed due to the implementation of the PVSP.

### 2.3.2. Surrounding Land Uses

Section 3.2 of the PVSP document provides the following description of current land uses surrounding the Plan area.

- South: A two-story apartment complex (Montecito Apartments) and a low-density mix of commercial uses, industrial uses, and undeveloped, vacant land.
- North: Along Avenue K are low and moderate density residential uses and a mix of retail and restaurant uses. Along Avenue K-8 are two-story garden apartment complexes and a car dealership.

- West: Along 10th Street West is the Sgt. Steven Owen Memorial Park, a commercial shopping center, a YMCA, a bus transfer center, and a park-and-ride lot. A gas station is located along the western site boundary to the south of Avenue K-8. Apartment homes are located along the western site boundary between Avenue K-8 and Avenue K.
- East: Along Sierra Highway is a mix of light industrial, institutional uses and business park uses, the Southern Union Pacific Railroad, and undeveloped, vacant land. A high-speed rail line is planned in this corridor.

## 2.4. Plan Elements

The PVSP was developed based on a vision provided by CSA Partners. The vision of the Plan area is shown in Figure 2-3. The PVSP implements the vision and provides the necessary details, standards, and regulations to see the vision come to life.

The PVSP contains two primary elements, a Land Use Plan and a Circulation Plan, which are guided by a District Framework Plan that describes four types of development districts along with a development concept for the Sierra Highway Transportation Corridor (SHTC). Each district is comprised of smaller Planning Areas with specified land use mixes and development densities. These Planning Areas are described in Section 2.4.2.

### 2.4.1. District Framework Plan

The four districts of the District Framework Plan and the SHTC are described below. A map of the District Framework Plan is presented in Figure 2-4.

- **Town Center District** fronts on 10th Street West, Avenue K-8, and Avenue L. The focal point the district is a commercial/residential mixed-use development and a centralized plaza and sports park to provide living and gathering spaces intended to help cultivate community engagement along with a new aquatics center and potential transit hub. These focal points will provide opportunities for social interaction, community events, and recreational activities. The Town Center District integrates a network of walkable streets as well as pathways to create a pedestrian-friendly environment for residents and visitors. The Town Center District also includes a designated area for a potential new medical technology campus. The district includes:
  - Mixed-Use-Town Center (TC): Planning Areas 1-6
  - Residential: Planning Areas 7-10
  - Medical: Planning Areas O
  - Parks: Planning Areas A-E
  - School: Planning Area F
- **Business (B) District** is along Avenue L and incorporates Planning Areas 15, 42, and 43. The Business (B) District is planned for various healthcare services, comprehensive office facilities, and supportive living arrangements. It is designed to focus on accessibility and transit convenience, and promote economic activity associated with small businesses and professional health and business services.
- **Workshop District** is located along Avenue K on the north side of the Plan area. The Workshop (W) District includes a blend of different types of businesses and services in Planning Areas 25 and 26.
- **Residential District** is the largest of the Plan Districts and is planned to contain a range of housing types and includes green spaces and parks to serve residents by providing aesthetic appeal and opportunities for outdoor recreation. The district includes:
  - Suburban Density (S): Planning Areas 19, 20, 22, 28-30, and 33-35
  - Neighborhood Density (N): Planning Areas 11-14, 17, 18, 27, 27, and 36-39

- Urban Density (U): Planning Areas 16, 40, and 41
- Corridor Density (C): Planning Areas 21, 23, 31, and 32
- Parks: Planning Areas G, H, J, K, L, and M

- **Sierra Highway Transportation Corridor (SHTC)**. A portion of the SHTC is positioned adjacent to the existing Sierra Highway, acting as a buffer to minimize any potential disruptions to Plan area residents should the California High Speed Rail be constructed through Lancaster. Existing development within the SHTC is expected to remain and is not proposed to be demolished or removed due to the implementation of the PVSP. Existing development will be considered legal nonconforming uses, and any modification is subject to Article VII (Nonconforming Uses and Structures) of the Lancaster Municipal Code. This area is planned to serve as public open space, offering opportunities for passive recreation. Another section of the SHTC transects the Residential District. In the event that the California High Speed Rail is implemented, roadways within this portion of the SHTC can be improved to accommodate additional car movement redirected from Sierra Highway within the Plan area, if deemed necessary.

## 2.4.2. Land Use Plan

The Districts in the Plan include various Planning Areas. A Planning Area is a geographic area in which land uses are identified and required development standards are uniform. Each Planning Area is assigned a primary land use, such as Residential, Mixed Use, Medical, School, or Parks and Plaza. Throughout the Planning Areas, amenity elements are expected to be incorporated into development projects beyond what the Planning Areas specify for parks and plaza. Existing legal uses in these areas will remain and can continue operation under this Specific Plan; however, all legal but nonconforming uses are subject to Article VII (Nonconforming Uses and Structures) of the Lancaster Municipal Code.

The location and types of land uses within the Plan area are depicted in Figure 2-5, Conceptual Land Use Plan. Table 2-1, Land Use Summary, provides an overview of each land use category, including acreage, density range, maximum number of dwelling units, and maximum building floor area. Table 2-2, Statistical Summary by Planning Area, presents details for each Planning Area. Descriptions of the PVSP land use categories are presented in the subsections that follow.

**Table 2-1. Land Use Summary**

| Land Use Category | Gross Area (acres)[1] | Density Range (units/acre) | Maximum Dwelling Units | Maximum Building Floor Area (s.f.) |
|---|---|---|---|---|
| Suburban Density (S) | 60.6 | 6.0 – 8.0 | 487 | N/A |
| Neighborhood Density (N) | 79.2 | 8.1 – 15.0 | 1,190 | N/A |
| Urban Density (U) | 36.4 | 15.1 – 40.0 | 1,456 | |
| Corridor Density (C) | 8.6 | 15.1 – 30 | 329 | |
| **Residential Subtotal** | **184.8** | **18.7 (avg.)** | **3,462** | **N/A** |
| Town Center (TC)[2] | 23.6 | 15.1 – 30.0 | 705 | 150,000 |
| Business | 18.9 | N/A | N/A | 415,000 |
| Workshop | 9.7 | 6.0 – 8.0 | 79 | 185,000 |
| **Mixed-Use Subtotal** | **52.2** | **15.1 (avg.)** | **784** | **750,000** |
| Existing Kaiser/Expansion[3] | 48.1 | – | N/A | 650,000 |
| School | 8.7 | – | N/A | – |
| Parks and Plazas | 27.8 | – | N/A | – |
| Existing Facilities | 1.2 | – | N/A | – |

| Land Use Category | Gross Area (acres)[1] | Density Range (units/acre) | Maximum Dwelling Units | Maximum Building Floor Area (s.f.) |
|---|---|---|---|---|
| SHTC | 71.8 | – | N/A | – |
| Circulation/Parkways | 40.2 | – | N/A | – |
| **Specific Plan Total** | **434.7** | **9.8** | **4,246** | **1,400,000** |

Source: Parkway Village Specific Plan.
Notes: 1. Planning area acreages are approximate and will be verified during final engineering and design implementing development projects.
2. Town Center allows for a total of 130 hotel rooms and a new aquatic center.
3. Existing Kaiser/Expansion allows for up to a 200-bed hospital and up to 500,000 square feet of medical-related uses.

**Table 2-2. Statistical Summary by Planning Area**

| Planning Area | Land Use Category | Gross Area (acres)[1] | Density Range (units/acre) | Maximum Dwelling Units |
|---|---|---|---|---|
| 1 | Town Center (TC)[2] | 3.6 | 15.1 – 30.0 | 108 |
| 2 | Town Center (TC)[2] | 3.2 | 15.1 – 30.0 | 96 |
| 3 | Town Center (TC)[2] | 3.4 | 15.1 – 30.0 | 102 |
| 4 | Town Center (TC)[2] | 2.1 | 15.1 – 30.0 | 63 |
| 5 | Town Center (TC)[2] | 3.4 | 15.1 – 30.0 | 102 |
| 6 | Town Center (TC)[2] | 7.8 | 15.1 – 30.0 | 234 |
| 7 | Urban Density (U) | 8.7 | 15.1 – 40.0 | 348 |
| 8 | Urban Density (U) | 7.2 | 15.1 – 40.0 | 288 |
| 9 | Urban Density (U) | 3.7 | 15.1 – 40.0 | 148 |
| 10 | Neighborhood Density (N) | 3.4 | 8.1 - 15.0 | 51 |
| 11 | Neighborhood Density (N) | 8.7 | 8.1 - 15.0 | 131 |
| 12 | Neighborhood Density (N) | 8.7 | 8.1 – 15.0 | 131 |
| 13 | Neighborhood Density (N) | 5.8 | 8.1 – 15.0 | 87 |
| 14 | Neighborhood Density (N) | 12.2 | 8.1 – 15.0 | 183 |
| 15 | Business (B) | 4.5 | N/A | N/A |
| 16 | Urban (U) | 5.9 | 15.1 – 40.0 | 236 |
| 17 | Neighborhood Density (N) | 3.6 | 8.1 – 15.0 | 54 |
| 18 | Neighborhood Density (N) | 4.8 | 8.1 – 15.0 | 72 |
| 19 | Suburban Density (S) | 4.2 | 6.0 – 8.0 | 34 |
| 20 | Suburban Density (S) | 7.0 | 6.0 – 8.0 | 56 |
| 21 | Corridor Density (C) | 3 | 15.1 – 30.0 | ±115 |
| 22 | Suburban Density (S) | 10.0 | 6.0 – 8.0 | 80 |
| 23 | Corridor Density (C) | 1.5 | 15.1 – 30.0 | ±57 |
| 24 | N | 6.9 | 8.1 – 15.0 | 104 |
| 25 | Workshop (W) | 5.4 | 6.0 – 8.0 | 44 |
| 26 | Workshop (W) | 4.3 | 6.0 – 8.0 | 35 |
| 27 | Neighborhood Density (N) | 7.8 | 8.1 – 15.0 | 117 |
| 28 | Suburban Density (S) | 9.7 | 6.0 – 8.0 | 78 |
| 29 | Suburban Density (S) | 7.0 | 6.0 – 8.0 | 56 |
| 30 | Suburban Density (S) | 5.2 | 6.0 – 8.0 | 42 |
| 31 | Corridor Density (C) | 3.0 | 15.1 – 30.0 | ±115 |

| Planning Area | Land Use Category | Gross Area (acres)[1] | Density Range (units/acre) | Maximum Dwelling Units |
|---|---|---|---|---|
| 32 | Corridor Density (C) | 1.1 | 15.1 – 30.0 | ±42 |
| 33 | Suburban Density (S) | 5.5 | 6.0 – 8.0 | 44 |
| 34 | Suburban Density (S) | 6.8 | 6.0 – 8.0 | 55 |
| 35 | Suburban Density (S) | 5.2 | 6.0 – 8.0 | 42 |
| 36 | Neighborhood Density (N) | 4.2 | 8.1 – 15.0 | 63 |
| 37 | Neighborhood Density (N) | 5.8 | 8.1 – 15.0 | 87 |
| 38 | Neighborhood Density (N) | 3.3 | 8.1 – 15.0 | 50 |
| 39 | Neighborhood Density (N) | 4.0 | 8.1 – 15.0 | 60 |
| 40 | Urban Density (U) | 5.1 | 15.1 – 40.0 | 204 |
| 41 | Urban Density (U) | 5.8 | 15.1 – 40.0 | 232 |
| 42 | Business (B) | 6.5 | N/A | N/A |
| 43 | Business (B) | 7.9 | N/A | N/A |
| A | Plaza | 1.8 | – | – |
| B | Park | 0.6 | – | – |
| C | Park | 0.6 | – | – |
| D | Park | 1.8 | – | – |
| E | Park | 11.0 | – | – |
| F | School | 8.7 | – | – |
| G | Park/Paseo | 0.3 | – | – |
| H | Park | 1.2 | – | – |
| I | Park/Paseo | 0.5 | – | – |
| J | Park | 1.1 | – | – |
| K | Park | 1.2 | – | – |
| L | Park | 1.8 | – | – |
| M | Park | 5.1 | – | – |
| N | Linear Park | 0.8 | – | – |
| O | Existing Kaiser /Expansion Area[3] | 48.1 | | |
| P | Los Angeles County Waterworks Facility | 1.2 | | |
| Q | SHTC | 71.8 | | |
| | Circulation and Parkways | 40.2 | | |
| **Totals** | | **434.7** | **9.8** | **4,246** |

Source: Parkway Village Specific Plan.

Notes: 1. Planning area acreages are approximate and will be verified during final engineering and design implementing development projects.
2. Town Center allows for a total of 130 hotel rooms and a new aquatic center.
3. Existing Kaiser/Expansion Area allows for up to a 200-bed hospital and up to 500,000 square feet of medical-related uses.

### 2.4.2.1. Residential Uses

The PVSP provides for a maximum of 3,462 residential dwelling units within the 184.8 acres designated for residential uses, resulting in a gross target density of 18.7 dwelling units per acre. The Land Use Plan establishes four residential categories, described below. The Plan proposes variation in housing types within the residential categories to provide a range of housing options. The permitted residential housing types are discussed in detail in Chapter 6 of the Plan and include: detached and attached single-family units, condominium/apartment, townhomes, duplexes, and live/work units.

### Suburban Density (S) (6.0-8.0 du/ac)

The Suburban Density (S) category includes a maximum of 487 dwelling units on approximately 60.6 acres at an average density of 7.0 dwelling units per acre. The S category provides for development of detached and attached single-family dwellings.

### Neighborhood Density (N) (8.1-15.0 du/ac)

The Neighborhood Density (N) land use category includes a maximum of 1,190 dwelling units on approximately 79.2 acres at an average density of 15.0 dwelling units per acre. The N category provides for development of detached and attached single-family and multi-family homes, townhouses, condominiums, and duplexes.

### Urban Density (U) (15.1-40.0 du/ac)

The Urban Density (U) land use category includes a maximum of 1,456 dwelling units on approximately 36.4 acres at an average density of 40.0 dwelling units per acre. The U category provides for development of attached multi-family homes such as townhouses, condominiums, and apartments. Planning Areas 7 and 8 has the option to be converted into a transit hub at the discretion of the Community Development Director.

### Corridor Density (C) (15.1-30.0 du/ac)

The Corridor Density (C) land use category includes a maximum of 329 dwelling units on approximately 8.6 acres at an average of 38.3 dwelling units per acre. The C category provides for a mix of higher density residential and some commercial to provide a buffer between the relocated Sierra Highway and the lower density residential uses to the east and west.

## 2.4.2.2. Mixed Uses

The Land Use Plan encompasses three mixed-use categories, allowing a maximum of 784 dwelling units across the 52.2-acre planning areas and a maximum of 750,000 square feet of non-residential building development. Each of the mixed-use categories are described below.

### Mixed-Use Town Center (15.1-30.0 du/ac)

The Town Center (TC) land use category includes a maximum of 705 dwelling units on approximately 23.6 acres at an average density of 30.0 dwelling units per acre. The TC category provides for development of townhouses, condominiums, apartments, and duplexes. Additionally, it allows for up to 150,000 square feet of commercial development, 130 hotel rooms, and a new aquatic center. The TC planning areas are located in the center of the Town Center District, along 10$^{th}$ Street West.

### Mixed-Use Business

The 18.9-acre Business (B) land use category includes up to 415,000 square feet of office, medical office, assisted/supportive living and other sub-medical uses. Uses supportive of office space are allowed, including but not limited to, small restaurants, financial institutions, office supply retail, and professional services. The B planning areas are located along Avenue L.

### Mixed-Use Workshop

The Workshop (W) land use category includes a maximum of 79 dwelling units on approximately 9.7 acres at an average density of 8.1 dwelling units per acre. The W category provides for development of detached and attached single-family dwellings, and up to 185,000 square feet of commercial space, including indoor

technical schools, fitness centers, and gymnasiums. Planning Areas 25 and 26 are located along Avenue K, and Planning Area 26 includes the existing commercial buildings near Sierra Highway.

#### 2.4.2.3. Medical Uses

Planning Area O, approximately 48.1 acres, provides for the continued operation of the existing Kaiser Permanente Antelope Valley Medical Offices which are located to the north of Avenue L. This planning area also provides for the expansion of Kaiser's operations including a 200-bed hospital and associated medical offices, labs, or research institutions.

#### 2.4.2.4. Parks and Plaza

Approximately 27.8 acres of the overall Plan area are designated for Parks and Plazas. Several types of parks are planned, including an Open-Air Plaza (Planning Area A), Community Park (Planning Area E), Neighborhood Parks (Planning Areas B, C, H, J, K and M), and Linear Parks (Planning Areas D, G, I, L, and N).

#### 2.4.2.5. School

Planning Area F is planned for an 8.7-acre school site. Planning Area F is located at the northeast corner of the Town Center District, at the southwest corner of Avenue K-8 and 5$^{th}$ Street West. The site provides for the development of public, charter, private, or nursing schools. Should Planning Area F not be developed as a school facility, related institutional uses such as libraries, museums, and other public-serving uses would be allowed.

#### 2.4.2.6. Sierra Highway Transportation Corridor

Planning Area Q is designated for the 71.8-acre Sierra Highway Transportation Corridor (SHTC). A portion of Planning Area R is west of the existing Sierra Highway, and another section of Planning Area Q bifurcates the Residential District. The SHTC acts as a buffer to mitigate potential disturbances to residents from the California High Speed Rail or the existing Sierra Highway and offers a prospective site for the realignment of Sierra Highway. Planning Area Q may contain trails, roadway, open space, and enhanced drought tolerance landscape. In the event that the High-Speed Rail is not implemented, and Sierra Highway is not realigned, the eastern portion of the SHTC shall remain as open space use. Existing development within the SHTC is expected to remain and would not be demolished or removed due to the implementation of the PVSP.

#### 2.4.2.7. Existing Facilities

Approximately 13.8 acres of the Planning Area O contains the existing Kaiser Permanente facilities. Kaiser Permanente's Antelope Valley Offices are situated at the southeastern edge of the Town Center District, adjacent to Avenue L. Additional existing buildings include a church situated on approximately 4.1 acres at the northern edge of the Plan area, adjacent to Avenue K and within Planning Area 14, and the approximately 1.2-acres of commercial lots situated at the northeastern corner of the Plan area, located at the southwest corner of Avenue K and Sierra Highway and within Planning Area 26. All existing legal uses within this area would remain and could continue operation under this plan, subject to all applicable requirements.

### 2.4.3. Circulation Plan

The PVSP Circulation and Access Plan is designed to provide direct, safe, and convenient movement for residents, employees, and visitors to and from the Plan area. The components of the Circulation and Access Plan are discussed below.

### 2.4.3.1. Vehicular Circulation

Under existing conditions, the Plan area is bounded by Avenue K to the north, Sierra Highway to the east, Avenue L to the south, and 10th Street West to the west. In addition, 5th Street West, Gadsden Avenue, Avenue K-4, Avenue K-6, and Avenue K-8, and Avenue K-15 also provide direct access to the Plan area.

As shown in Figure 2-6, Street Hierarchy Plan, interior access within the Plan area is planned to include the future Sierra Highway, General Collectors, Urban Collectors with parking on both sides, Urban Collectors with no parking, Local Streets, Plaza Streets, and Mixed-Use Streets. The ultimate alignment of the interior streets will be determined during the final design of implementing projects. Final intersection designs, intersection spacing, intersection rights-of-way, and traffic controls must conform to all applicable City Standards and to the satisfaction of the City Engineer. Roadway details can be found in Section 4.3.1 of the Plan document.

#### Future Sierra Highway

Sierra Highway is a regional corridor that connects Lancaster with surrounding communities and provides direct access to the Plan area from the east. Future Sierra Highway will be designed as proposed in the PVSP; however, if the California High Speed Rail is implemented, Sierra Highway will need to be expanded to accommodate the additional vehicular traffic through the Plan area. Should the Sierra Highway realignment take place, the intersection of Avenue K and Sierra Highway would shift approximately 600 feet to the west of its current location and travel in a north/south alignment through the Plan area.

#### Urban Collectors

Two configurations of Urban Collectors are envisioned. Under Variation A, Urban Collectors are located primarily within the southwestern section of the Plan area. Variation A is shown as Urban Collector (Parking) on Figure 2-6. Variation A of the Urban Collectors provides for pedestrian crossing opportunities as well as rainwater harvesting (bioswale) and sidewalk connections within the ROW. Opportunities for on-street parallel parking also are provided. Variation A of the Urban Collectors will have a 100-foot-wide ROW and include either one of the following configurations, with Section A occurring where there is a planting island adjacent to the drive lane and Section B occurring where there is parallel parking adjacent to the drive lane.

Variation B of the Urban Collector is located within the western-central portion of the Plan area near the Urban Density planning area (Planning Area 8), Park D and E, and the proposed school. Variation B is shown as Urban Collector (No Parking) on Figure 2-6. Variation B of the Urban Collector does not include on-street parking because it is situated near the proposed school site. The ROW provides opportunity for rainwater harvesting (bioswale) and sidewalk connections. Variation B of the Urban Collector will have a 100-foot-wide ROW.

#### General Collectors

General Collectors provide the primary connections within the Plan area between the residential neighborhoods and the Mixed-Use and Town Center areas. The General Collectors are designed to be extensions of the existing Avenue K-8 and 5th Street West into the Plan area. Avenue K-8 will terminate at the eastern boundary of the Plan area. General Collector streets will have an 80-foot-wide ROW. Beyond the 80-foot-wide ROW, a 10-foot-wide landscaped setback will be provided in a public easement on each side of the street, making the total width, including the additional landscaping, 100 feet wide.

#### Minor Collectors

Minor Collectors provide connections between the residential planning areas within the Plan area, and are planned to be an extension of Avenue K-4 and Avenue K-6. Minor Collector streets will have a 60-foot-wide

ROW. In addition to the 60-foot-wide ROW, an additional 10-foot-wide setback will be provided in a public easement that will contain the remaining portions of the meandering sidewalk and additional landscaped setback, making the total width, inclusive of the setback, 80 feet wide.

### Local Streets

Local Streets provide access between residential neighborhoods within the Plan area. The Local Streets are located primarily on the east side of the Plan area, connecting the residential and the Mixed-Use planning areas. The Local Streets are designed to have a 60-foot-wide ROW. Local Streets are intended to be privately maintained but will comply with all applicable City of Lancaster requirements.

### Plaza Street

Plaza Street is a one-way loop road that provides circulation around Plaza A of the Plan area. Access to the Plaza Street will be from both the eastern and the western portion of the Plaza. A 68-foot-wide plaza is designed, around which Plaza Street will have a 56-foot-wide ROW. In addition to the 56-foot-wide ROW, an additional 10-foot-wide building setback for additional pedestrian circulation will be provided beyond the ROW, making the total width 66 feet.

### Mixed Use Streets

Mixed-Use Streets provide access between the Mixed-Used planning areas within the southwestern portion of the Plan area. The Mixed-Use Streets also provide opportunities for rainwater harvesting (bioswale) and sidewalk connections. Mixed-Use Streets will have a 52-foot-wide ROW and include one of either two configurations, with one configuration occurring where there is parallel parking adjacent to the drive lane or a configuration occurring where there would be no parallel parking. In addition to the 52-foot-wide ROW, an additional 10-foot-wide building setback will be provided beyond the ROW on each side of the street to provide opportunities for additional pedestrian circulation and building canopies, making the total width 72 feet.

### Private Drive Aisles

Private Drive Aisles connect individual planning areas to the roadways described above and provide vehicular and pedestrian access within each planning area. Within each planning area, Private Drive Aisles provide vehicular access for vehicles to parking and loading areas serving residential units and non-residential uses. The locations, alignments, and widths of Private Drive Aisles will be determined in conjunction with the approval of designs and plans for implementing development projects. Private Drive Aisles will be privately maintained.

## 2.4.3.2. Non-Vehicular Circulation

The PVSP encourages access and circulation by non-motorized means. Pedestrian circulation is encouraged within the Plan area through a network of sidewalks. Bicycling is encouraged through a system of bike lanes. As shown in Figure 2-7, Non-Vehicular Circulation, the PVSP provides for sidewalks along all public streets. Bike lanes are provided in streets with Collector classifications and higher. Shared pedestrian and bicycle paths will occur within the parks. Class I, II, III, and IV bike facilities can be provided within the Plan area, which are defined below:

- Class I – Bike Paths, commonly referred to as shared-use or multiuse trails, are fully separated bike facilities, exclusively for the use of bike and pedestrians. There is some interaction with vehicles which is limited to trail crossing with the roadway.
- Class II – Bike lanes, are a portion of the roadway that is striped for one-way bike travel. Buffered bike lanes also fall into this category; this is when a bike lane is accompanied by a painted striped buffer between the bike lane and parking or travel lane.

- Class III – Bike Routes that are shared facilities with pedestrian or motor vehicle traffic. The primary purpose is to provide a connection to other bicycle facilities (typically Class II) or designate preferred bike routes. Bike routes are indicated by bike route signs and shared roadway markings along the route.
- Class IV – Separated bikeways, sometimes referred to as protected bike lanes or cycle tracks, provides a bikeway for the exclusive use by bicycles. What differentiates this from a Class I or a Class II is that it cannot be used by pedestrians or vehicles and it must include a horizontal and/or vertical separation. These horizontal and vertical separators can include flexible posts, on-street parking, grade separation, railing or planters.

Public transport in the Plan area vicinity is currently provided by the Antelope Valley Transit Authority (AVTA) and Kern Transit. Local access within the Antelope Valley is provided by AVTA and bus stops are provided along Avenue K, 10th Street West, Avenue L, and at the Owen Memorial Park Transfer Station. Regional access is provided by Kern Transit at the Owen Memorial Park Transfer Station. The Owen Memorial Park Transfer Station is immediately west of the Plan area and provides commuters access to Bakersfield and California City. At the discretion of the Director of Community Development or his/her designee, Planning Area 43 can provide an additional transit center for commuters. In addition to bus stops and passenger loading areas, a transit center within Planning Area 43 can provide ticketing kiosks, bicycle storage/parking area, and an operator building for staff and drivers.

## 2.5. Design Guidelines

The PVSP presents the community, architectural, streetscape, and landscape design guidelines for the Plan area. The Plan indicates that the design guidelines are intended to ensure that the Plan area develops as a quality master-planned community with consistent design elements. The design guidelines provide general direction for planners, builders, architects, landscape architects, engineers, and other design professionals involving in implementing the PVSP.

The objectives of these design guidelines are as follows:

- To create dense, compact development patterns that support a diverse mix of land uses, define public spaces, and encourage pedestrian activity.
- To provide well-designed, attractive high quality buildings that establish distinctive character and are sustainable.
- To enliven streets in the community core by including design elements that complement ground-level retail, dining and entertainment uses, outdoor public spaces, and pedestrian-friendly streetscape amenities.
- To encourage the construction of mixed-use and commercial buildings that are thoughtfully integrated with other land uses such as residential, medical, and recreation.
- To encourage open-air spaces such as parks and plazas that are pedestrian-friendly and act as focal points for surrounding development, providing centralized and well-connected gathering spaces through a “People First” approach.
- To embrace sustainable design practices, including but not limited to energy-conserving buildings, low-water use landscaping, and community design elements that promote walking and biking over driving.

### 2.5.1. Community Design Overview

Parkway Village is envisioned as a master-planned community comprised of several interconnected districts designed to seamlessly blend with each other and integrate into the surrounding area of the City. The community and residential neighborhood entrances will feature thematic landscape treatments,

distinctive architectural features, and unique lighting arrangements to serve as notable landmarks. These elements are intended to contribute to each neighborhood's overall charm and identity, thereby creating a sense of place and enhancing community aesthetics.

The Town Center District is located along 10th Street West. This location offers convenient access to nearby community features and facilities, such as commercial retail nodes, a city park, and the Owen Memorial Park Transfer Center. A unique and distinctive design concept is presented for the Town Center District with the intent of creating a community focal point where people can live, shop, dine, work, and engage in recreational activities. The Town Center District includes parks, plazas, and courtyards throughout the area. These spaces are intended to serve as gathering spots for residents and visitors. The emphasis is on creating inviting public areas that promote a lively and interconnected community. The Town Center District features a centralized plaza and community park, serving as a venue for special events. Activities such as art and craft fairs, farmers markets, festivals, and other agri-commercial and community-based events can be organized in these spaces. Additionally, the Town Center District includes a new state-of-the-art aquatic center and a potential transit center.

The Mixed Use-Business District is located along Avenue L with the intent of serving as a hub for connectivity and enhanced mobility within the City. This district will provide a variety of office and commercial uses, providing commerce and employment opportunities. The intent of this strategic placement is to facilitate efficient mobility and also create an urban environment that fosters a vibrant community and supports sustainable transportation options. The Mixed Use-Business District also has the potential to provide an additional transit-hub for the City to enhance local and regional access. The Mixed Use-Workshop District includes a blend of residential and commercial spaces, distinguished by prominent "destination features" and communal gathering spots. Commercial elements are strategically positioned along Avenue K with the intent of enhancing the streetscape with the use vertical, multi-story structures constructed closer to the front property line.

The Residential District is intended to provide diverse housing options that incorporate green spaces. The broad range of housing options will help provide suitable homes for individuals and families with varying needs and budgets. Parks and green spaces will serve as communal spaces for recreational activities, relaxation, and social interaction.

### 2.5.2. Architectural Design Guidelines

The Parkway Village architectural design guidelines provide a framework for achieving innovative high-quality design for structures within the Plan area. The intent of the design guidelines is to provide compatibility with overall community character through the use of complementary architectural styles. Guidance is provided for site plans, roof forms, building materials, colors, and other design features to promote neighborhood appeal and contribute to the overall character of the surrounding community.

To establish diversity of form and aesthetic while maintaining a unified visual theme within Parkway Village, the architectural guidelines provide design direction and design criteria for residential architectural design. The design guidelines include photos and graphics intended to serve as general visual aids for understanding the intent of the design guidelines and to assist in their implementation. With the design guidelines, Parkway Village aims to achieve a cohesive and high-quality aesthetic that will enhance the overall character of the community.

The PVSP provides separate architectural design guidelines for the Mixed-Use Districts, Residential Architecture, and Architectural Styles. The full architectural design guidelines are presented in Section 5.3 of the Plan.

### 2.5.3. Streetscapes

Streetscape landscaping guidelines are provided in the PVSP to promote a sense of place and an overall design theme for the Plan area. Within the Plan area, streetscapes will be planted with a combination of trees, shrubs, and masses of groundcovers with the intent of creating a visually appealing view for pedestrians and motorists. Conceptual streetscape treatments for streets within the Plan area are presented in Section 5.4 of the Plan, including guidance for Sierra Highway, Urban Collectors, General Collectors, Minor Collectors, Local Streets, the Plaza Street, and Mixed-Use Streets.

### 2.5.4. Landscape Design Guidelines

The PVSP includes landscape design guidelines to establish landscape principles and standards applicable to all of the Planning Areas. The design guidelines are intended to ensure that plant materials, entry signs, streetscapes, and other landscape features are consistent with the overall design theme for the PVSP. All individual development projects with the Plan area will have a common landscape design. The landscape design is intended to establish an identity for the Plan area that is contemporary, visually appealing, and contextually sensitive to the surrounding area.

The landscape design guidelines are not a set of rigid landscape requirements, but instead provide some flexibility to adapt to parcel-specific or user-identity requirements. As such, the guidelines are intended to be flexible and may be modified over time. Any deviations from the landscape design guidelines will need to be in consistent with the overall design themes described in the Design Guidelines section of PVSP in order to provide a cohesive and unified landscape concept for the Plan area.

The landscape design guidelines present an overall theme for landscape design referred to as the Blended Mojave Desert concept that draws inspiration from the natural colors and materials of the Mojave Desert. The landscape design guidelines provide guidance for the design of wall, fences, entry and monument signs, parks, plazas, public art, outdoor lighting, irrigation, plant palette, and the SHTC.

The full landscape design guidelines are presented in Section 5.5 of the Plan.

## 2.6. Development Regulations

Chapter 6 of the Plan sets forth the development regulations and standards for uses allowed in the Plan area. The development regulations and standards establish and classify the permitted land uses, and regulate the type, height, and bulk of buildings and structures. The intention of the development regulations and standards is to promote public health, safety, and welfare, and safeguard the appearance and quality of development. They are also intended to promote orderly, planned use of the land within the Plan area.

The development regulations set forth in the PVSP apply to all development plans or agreements, parcel maps, tract maps, site plans, and other actions requiring administrative or discretionary approval to implement the PVSP. Any development standards, conditions, or situations not specifically addressed herein shall be subject to the applicable requirements of the Lancaster Municipal Code. Whenever the development standards herein differ from those in the Lancaster Municipal Code, the provisions of the PVSP will take precedence.

The PVSP development regulations identify the permitted land uses for each Planning Area, including the uses that require approval of a Conditional Use Permit, Minor Use Permit, or approval by the Director of Community Development (see PVSP Table 6-1).

Except as provided for in State law, for all uses and developments, the developer, property owner, or authorized agent shall determine the number of parking spaces sufficient for the proposed use in order

to adequately facilitate operations and shall provide justification acceptable to the Director of Community Development and/or the Planning Commission to support the determination.

Development standards are provided for each Planning Area. These include lot (parcel) specifications, including minimum lot size, minimum lot width, as well as standards for maximum floor area, maximum building height, minimum landscape requirements, and minimum front, side, and rear setbacks for residential and non-residential uses.

## 2.7. Plan Administration and Implementation

The PVSP will be administered by the City of Lancaster's Community Development Department in accordance with all governing and applicable State and federal laws, the City of Lancaster General Plan, and the City of Lancaster Municipal Code.

All development in the Plan area will be required to comply with the requirements and standards set forth in the PVSP and approved Mitigation Monitoring and Reporting Program. If approved, the Specific Plan will supersede the relevant provisions of the Lancaster Municipal Code, as they currently exist or may be amended in the future. If any applicable development regulations or construction requirements are not addressed in the PVSP, then the City's adopted codes and regulations will apply.

The PVSP is an implementation tool for the Lancaster General Plan and will service as the zoning regulations for the Plan area. The City will enforce the provisions of the Specific Plan in the same manner that the City enforces the provisions of the Lancaster General Plan and Municipal Code.

In instances where any section, subsection, sentence, clause, phrase, portion, or word contained within this Specific Plan is undefined, unclear or vague, the Director of Community Development or his/her designee will ascertain all pertinent facts concerning such ambiguity and make a determination as to the meaning and intent of any disputed item, taking into consideration the purpose and intent of the PVSP. The Director of Community Development may also elect to forward an item requiring interpretation to the Planning Commission for determination. Both the Director's and Planning Commission determinations are subject to appeal to the City Council.

If modifications to the PVSP are needed in the future, such modifications will occur in accordance with one of the procedures and its associated application, described in Chapter 7 of the PVSP. Modifications to the PVSP may occur through two distinct procedures: (1) a "Substantial Conformance" and (2) a "Specific Plan Amendment." To qualify for consideration as a Substantial Conformance, the proposed modifications must be found by the Director of Community Development to be a non-substantial modification of a diagram or text of the Specific Plan that does not change the basic design or improvements required and is consistent with the original resolution adopting the PVSP, the conditions of approval, and vision and objectives described in Section 2 of the PVSP.

The maximum number of residential dwelling units for the entire Plan area shall not exceed 4,246 units. However, an individual developer can acquire a higher density for a given planning area beyond their standard allotment through the options listed below, with approval of a Minor Use Permit:

1. Build a park in a non-adjacent planning area or beyond what is required by the PVSP.
2. Provide additional private amenities in the proposed community beyond what is required by the PVSP and the Lancaster Municipal Code.
3. Build out additional Planning Areas at the discretion of the Director of Community Development or his/her designee.
4. Complete additional public improvements including but not limited to streets, street-oriented landscaping, and walking and biking infrastructure.

Additional units available for re-assignment may include excess units from developments within the Plan area that entitled and recorded fewer residential units than the maximum permitted dwelling unit count provided in PVSP Table 3-2, Statistical Summary by Planning Area. Reallocation of residential units shall be approved by the Director of Community Development or his/her designee.

## 2.8. Intended Uses of this Environmental Impact Report

The information in this EIR will be considered by the City of Lancaster Planning Commission and City Council in their deliberations on whether to approve the PVSP. The Final EIR will need to be certified by the City Council prior to taking any action to approve the PVSP. The completion of the EIR process through the certification of the Final EIR and the adoption of associated findings of fact will provide environmental clearance for the approval of the PVSP in compliance with the requirements of the California Environmental Quality Act (CEQA). No additional CEQA environmental review will be required unless changes to the PVSP are proposed that were not evaluated in this EIR and that would either result in a new significant adverse impact on the environment or substantially increase the severity of a previously identified significant impact.

This EIR is intended to provide environmental clearance in accordance with the requirements of CEQA for all discretionary actions needed for approval of the PVSP. As a result, the EIR provides environmental clearance for all the discretionary actions required by the City of Lancaster for approval of the PVSP. This EIR also provides environmental clearance for all other discretionary permits and approvals that may need to be issued by responsible agencies for approval of the PVSP. Responsible agencies will need to consider the information presented in this EIR in making their decisions to issue required permits or approvals for the PVSP.

**Table 2-3. Required Approvals and Permits**

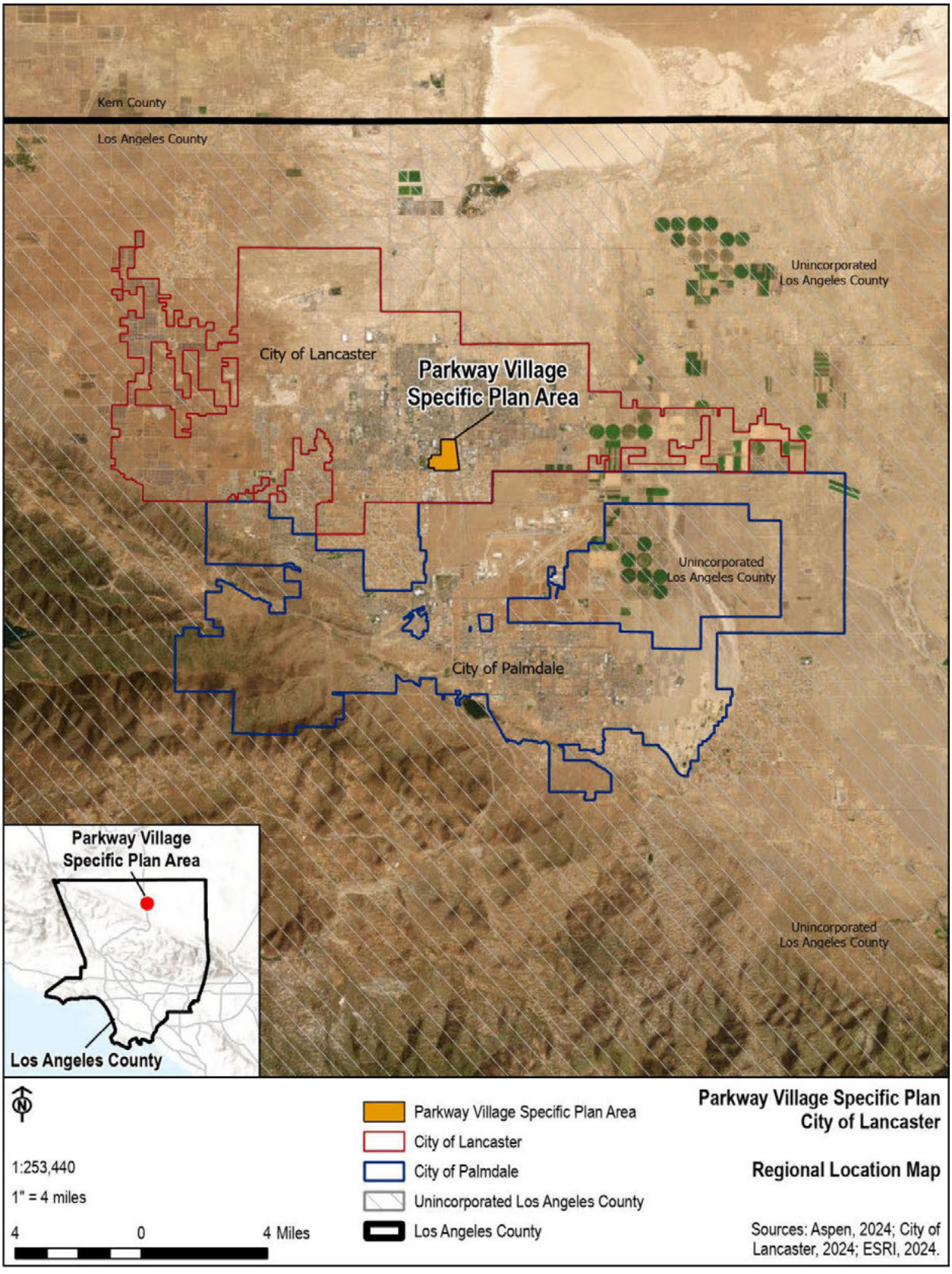
| Permit/Approval | Agency | Description |
|---|---|---|
| Parkway Village Specific Plan | City of Lancaster | Adoption by ordnance of the Specific Plan consistent with California Government Section 65451. |
| General Plan Amendment | City of Lancaster | To change the land use designation of the Specific Plan area from Specific Plan and Mixed Use to Specific Plan. |
| Zone Change | City of Lancaster | To change the zoning designation of the Specific Plan area from Specific Plan, Mixed-Use Employment (MU-E), and Mixed-Use Neighborhood (MU-N) to Specific Plan. |

If the PVSP is approved, the City will process development proposals for future projects in the Plan area using its existing procedures and requirements for discretionary and ministerial approvals and permits, including Director's Review, Site Plan Reviews, Conditional Use Permits, Tentative Parcel/Tract Maps, and other standard approvals. Projects that are consistent with the PVSP will not require additional review under CEQA unless a discretionary approval is needed that triggers CEQA's requirement for additional environmental review as described in State CEQA Guidelines sections 15162 and 15163.

Because this is a program EIR per State CEQA Guidelines section 15168, it can be used to simplify the task of preparing environmental documents for later projects in the Plan area. The program EIR can:

- Provide the basis in an Initial Study for determining whether the later projects may have any significant effects.
- Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the Plan area as a whole.
- Focus an EIR on a later project to permit discussion solely of new effects which had not been considered before.

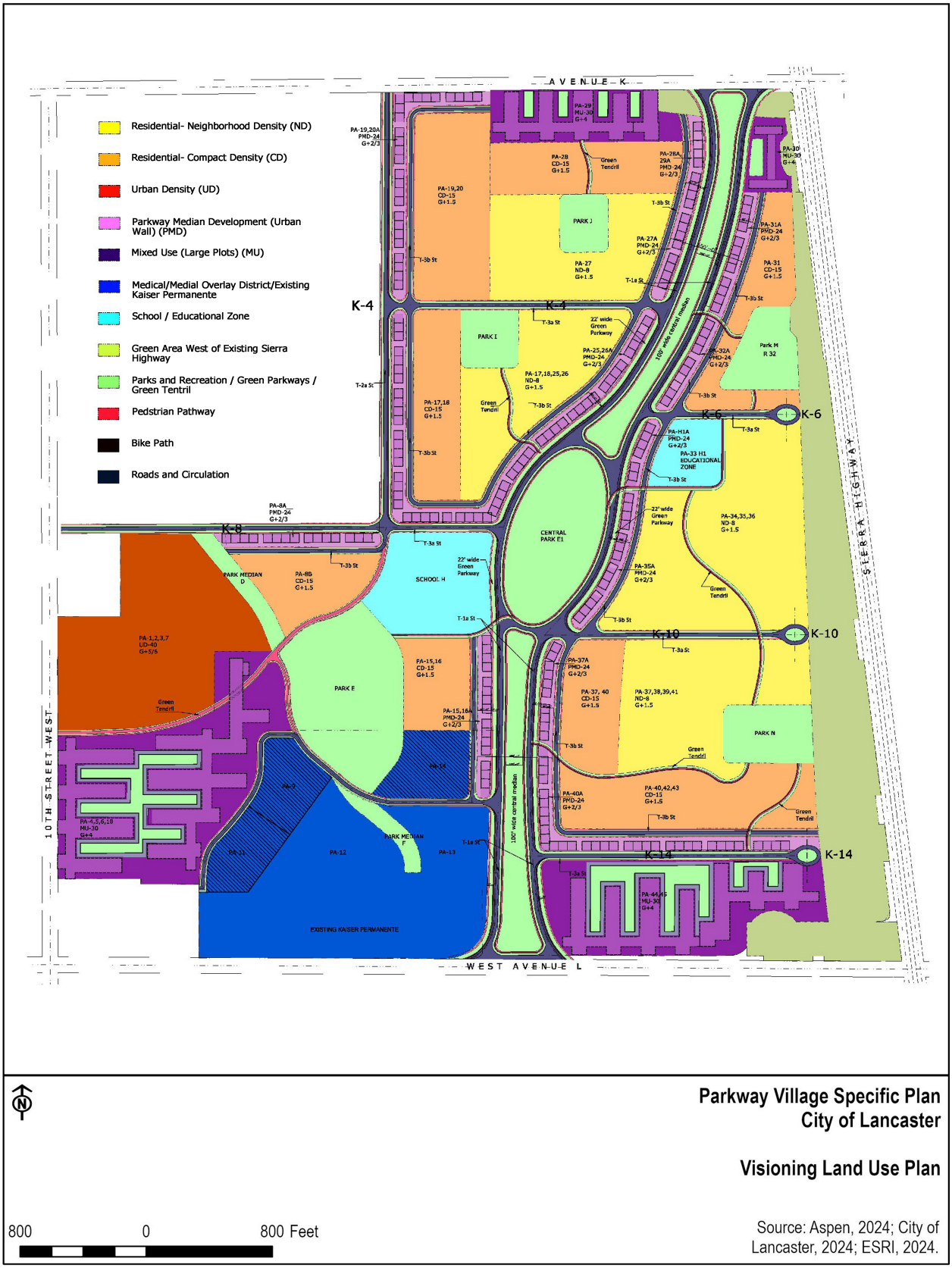
## Figure 2-1. Regional Location Map



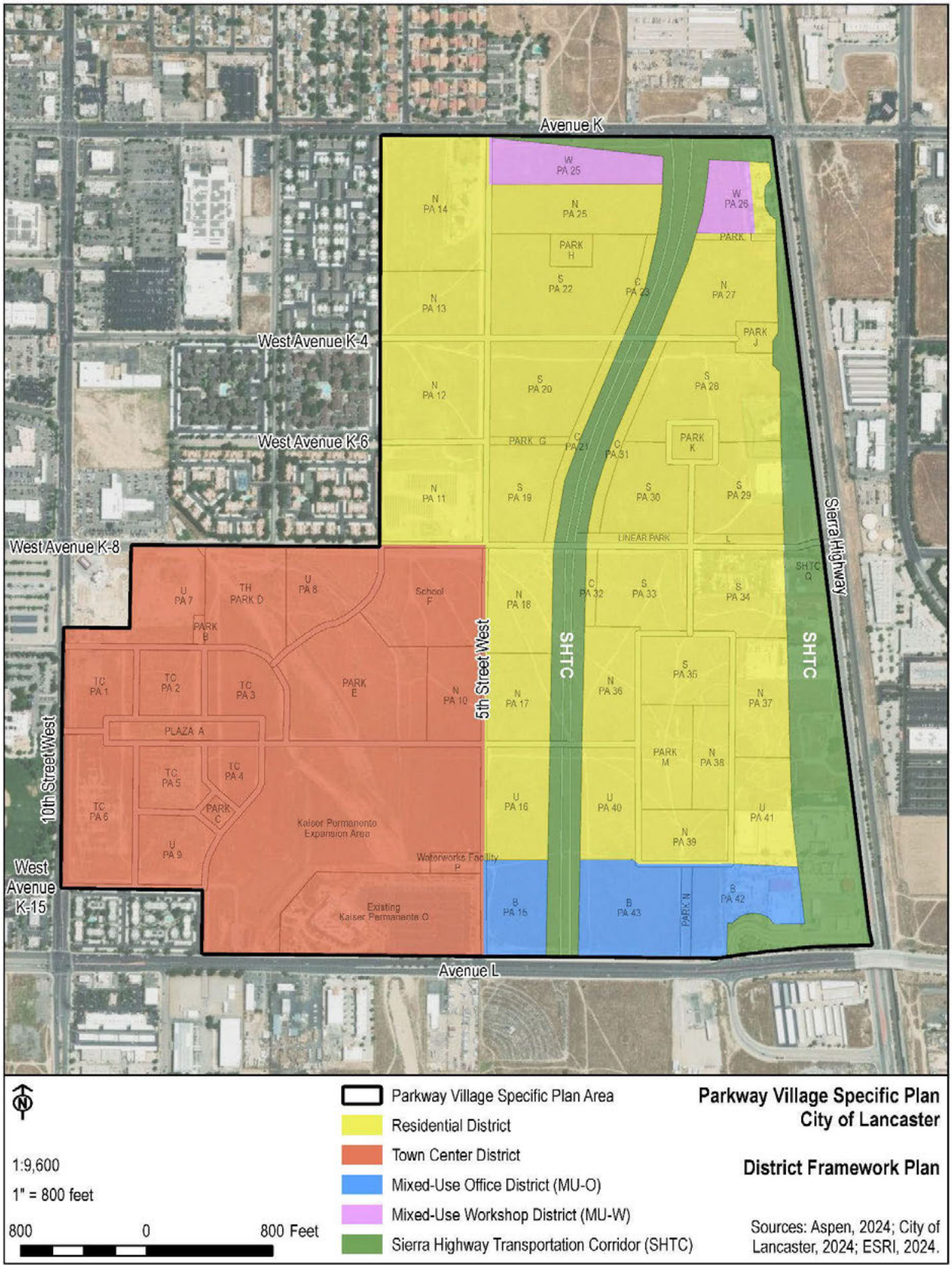
## Figure 2-2. Project Vicinity Map



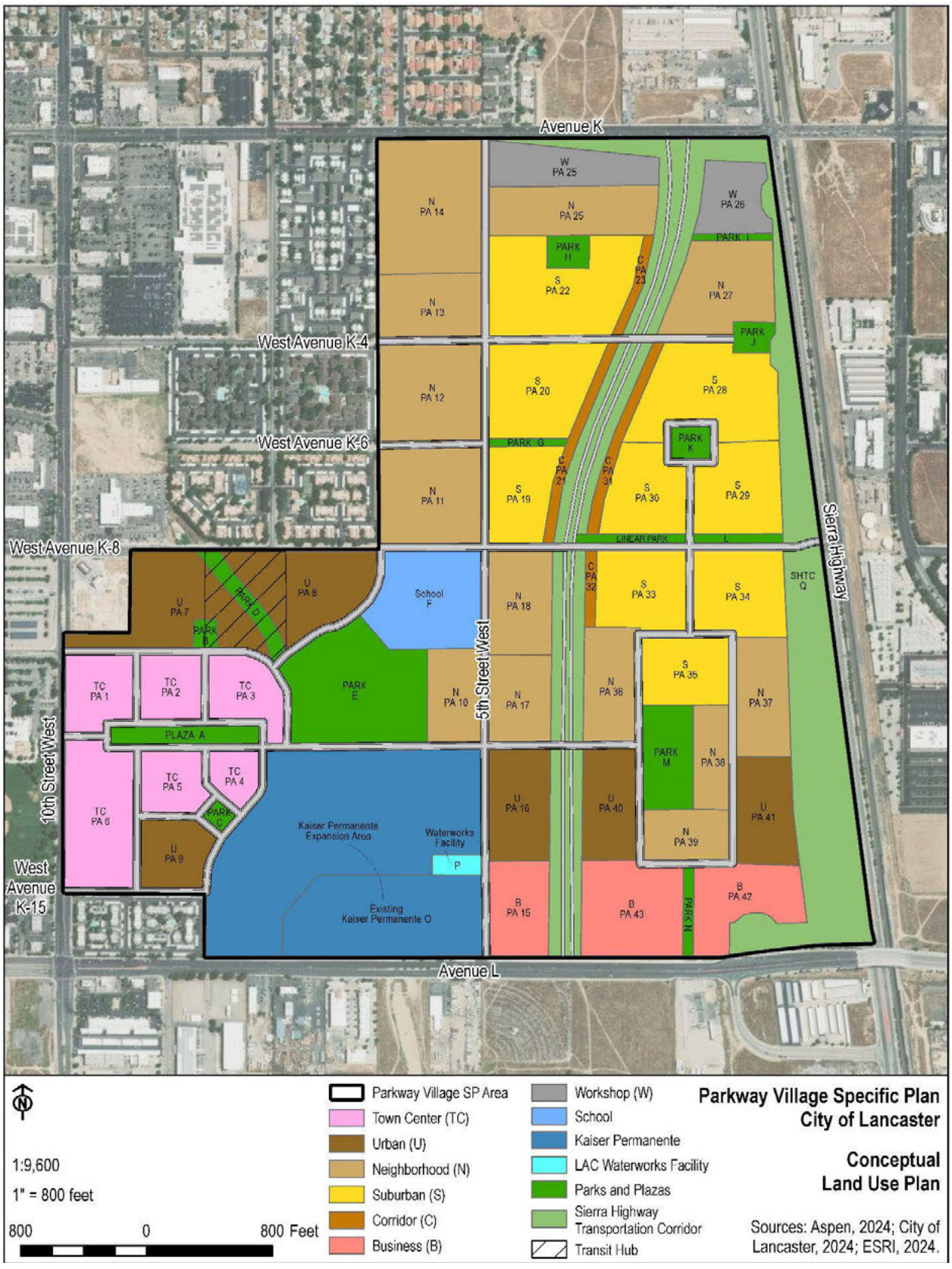
## Figure 2-3. Visioning Land Use Plan



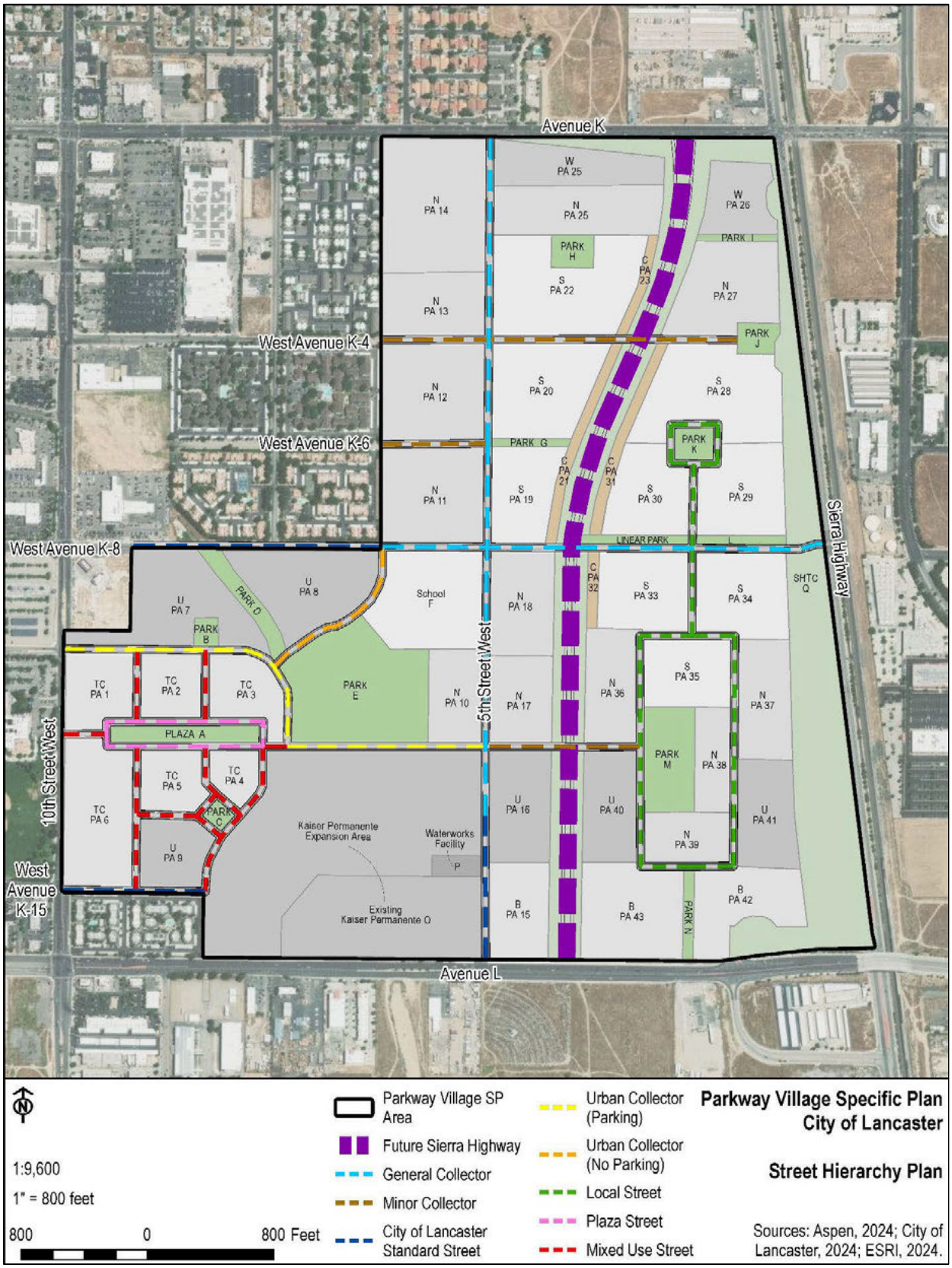
## Figure 2-4. District Framework Plan



## Figure 2-5. Conceptual Land Use Plan



## Figure 2-6. Street Hierarchy Plan



## Figure 2-7. Non-Vehicular Circulation Plan



# 3. ENVIRONMENTAL SETTING, ANALYSIS, AND MITIGATION MEASURES

## 3.1. Introduction to Environmental Analysis

The following subsections of the Environmental Impact Report (EIR) contain a detailed environmental analysis of the affected environment and environmental consequences associated with the Parkway Village Specific Plan (PVSP or Plan) and alternatives for 14 resource areas. This Section analyzes those environmental issue areas where potentially significant impacts may occur, as stated in the Notice of Preparation.

Environmental resource areas evaluated in detail in the EIR include:

- Aesthetics/Visual
- Air Quality/Greenhouse Gas
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils and Paleontology
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use, Planning, and Recreation
- Noise and Vibration
- Population and Housing
- Public Services and Utilities
- Transportation
- Tribal Cultural Resources

As indicated in the Notice of Preparation, no significant impacts with respect to agriculture and forestry resources, mineral resources, or wildfire are anticipated. As a result, these issue areas are addressed in Section 3-16, Effects Not Found to be Significant.

### 3.1.1. Environmental Assessment Methodology

Each potentially significant environmental issue area is addressed in a separate section of the EIR and is organized into subsections, as follows:

- **Environmental Setting.** This section describes the physical conditions that exist at the present time and that may influence or affect the issue under investigation.
- **Regulatory Setting.** This section lists and describes the laws, ordinances, regulations, and standards that apply to the project.
- **Impact Thresholds and Significance Criteria.** This section provides the thresholds that are the basis of conclusions of significance, which are primarily the criteria in Appendix G of the CEQA Guidelines (14 California Code of Regulations §§ 15000 – 15387).
- **Environmental Impacts and Mitigation.** This section describes potential environmental changes to the existing physical conditions that may occur if the PVSP is implemented. Evidence, based on factual and scientific data, is presented to show the cause and effect relationship between the project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant; all of the potential direct and reasonably foreseeable indirect effects are considered. Impact classifications are described in the following section.

  Mitigation measures are measure that would be required of the project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.

- **Cumulative Impact Analysis.** This section describes potential environmental changes to the existing physical conditions that may occur as a result of implementing the PVSP together with all other reasonably foreseeable, planned, and approved future projects producing related or cumulative impacts.

### Impact Classification

The PVSP is subject to state environmental review requirements; documentation is prepared in compliance with CEQA. CEQA determines impact significance on whether an action can be mitigated to a level that is less than significant on the environment, whether an action cannot be mitigated, or whether no mitigation is required. If the proposed action may have a significant effect on any environmental resource, an EIR is required and must disclose each significant effect on the environment and the planned mitigation, if feasible.

While the criteria for determining significant impacts are unique to each issue area listed above, the classification of the impacts was uniformly applied in accordance with the following definitions:

- **Significant Impact:** Significant impact; cannot be mitigated to a level that is less than significant.
- **Less Than Significant with Mitigation:** Significant impact; can be mitigated to a level that is less than significant through the implementation of recommended mitigation measures.
- **Less than Significant:** Adverse impact; but less than significant so mitigation is not normally recommended.
- **No Impact**. No adverse impacts and no mitigation needed.

## 3.1.2. Cumulative Scenario and Methodology

The area within which a cumulative effect can occur varies by resource or issue. For example, air quality impacts tend to disperse over a large area, while noise impacts are typically more localized. For this reason, the geographic scope for the analysis of cumulative impacts must be identified for each issue area.

The analysis of cumulative effects considers a number of variables, including geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is based on the topography surrounding the PVSP and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects, but not beyond the scope of the indirect effects of the PVSP. In addition, each project (see Table 3.1-1), has its own implementation schedule, which may or may not coincide or overlap with the PVSP's schedule. The timing of specific projects developed under the PVSP is unknown and depends on future actions by individual project developers.

Cumulative impacts evaluated in this EIR would likely represent a "worst-case" scenario for the following reasons:

- Not all of the related projects will be approved and built.
- Some related projects may be completed prior to approval of the PVSP or prior to construction of new development projects in the Plan area; and
- Related projects would likely be, or have been, subject to unspecified mitigation measures, which would reduce potential impacts.

The analysis focuses on addressing the following: (1) the area(s) in which the effects of implementing the PVSP would occur (i.e., the geographic scope); (2) the effects that are expected in the area(s) from the PVSP area projects; (3) past, present, and reasonably foreseeable future projects that have or that are expected to have impacts in the same area; (4) the impacts or expected impacts from these other projects; (5) and the overall impact(s) that can be expected if the individual impacts are allowed to accumulate.

### CEQA Requirements

Pursuant to State CEQA Guidelines § 15130(a), a project's cumulative impacts must be discussed when they are "cumulatively considerable," as defined in State CEQA Guidelines § 15065(a)(3). Chapter 3 of this EIR assesses the cumulative impacts for each applicable environmental issue and does so to a degree that reflects each impact's severity and likelihood of occurrence. As indicated above, a cumulative impact involves two or more individual effects. Per State CEQA Guidelines §15130(b), the discussion of cumulative impacts is guided by the standards of practicality and reasonableness, and should include the following elements:

1. Either:
    A. 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, or
    B. A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projects may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.
2. When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.
3. Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.
4. A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and
5. A reasonable analysis of the cumulative impacts of the relevant projects, including examination of reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

### Cumulative Development Scenario

The California Department of Finance estimates that the City of Lancaster had a population of 172,631 in January 2024 (CA Dept. of Finance 2024). The City's current General Plan, which was adopted in 2009, projected that the City would have a population of 259,696 by 2030 (General Plan, Introduction, Table 1-2). The source of that projected estimate was the Southern California Association of Governments' 2004 Regional Transportation Plan. However, the City of Lancaster's population growth has slowed over the past decade, making it unlikely that the City will achieve the forecast population size presented in the General Plan. A draft forecast developed by SCAG in 2023 projected that Lancaster's population will increase to 181,800 by the year 2035 (SCAG 2023). If that population size were to be realized by 2035, it would represent an increase of approximately 5.3% over the Department of Finance's 2024 population estimate.

For preparation of the cumulative projects list, the City compiled a current list of projects within its jurisdiction. Other relevant previously prepared documents were consulted to ensure completeness of

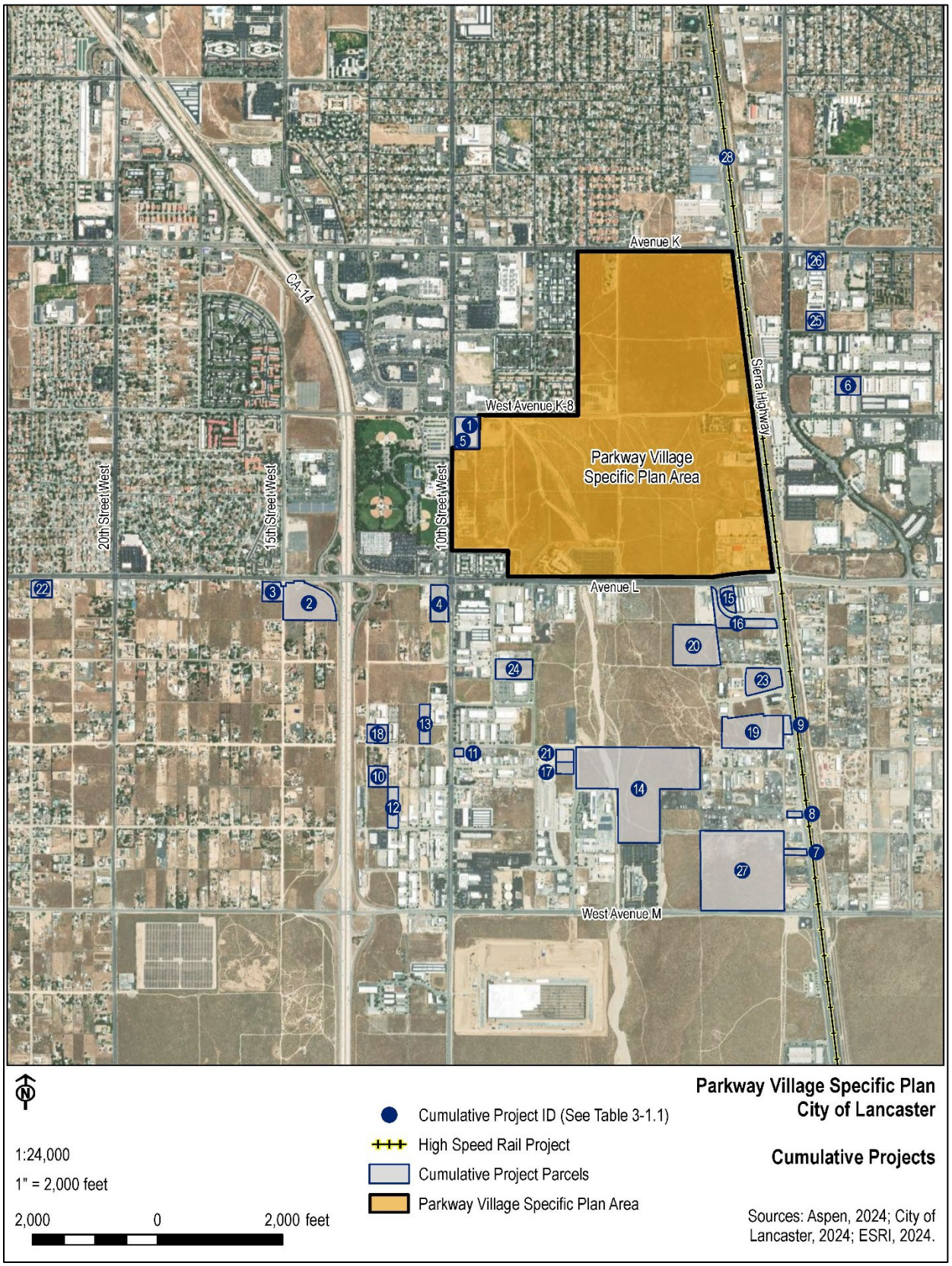
the cumulative project list, presented in Table 3.1-1 below. Some of the growth forecast for the City of Lancaster could occur via development within the boundaries of the Plan Area; however, the types and locations of specific development associated with the City's future growth cannot be identified beyond the list of current and foreseeable listed in Table 3.1-1.

**Table 3.1-1. Cumulative Project List**

| Project | Type and Size | Location | Status | Map No. |
|---|---|---|---|---|
| City of Lancaster | | | | |
| Conditional Use Permit No. 19-12 | Gas Station/Retail Center with 28,075 sf commercial/retail space | Southeast corner of 10th Street West & Avenue K-8 | Gas Station is operational, retail uses under construction | 1 |
| Conditional Use Permit No. 21-01 | Mixed use development with 181 apartment units, 235 room hotel, 12,800 sf of retail/ restaurant space and 3,800 sf clubhouse | Southeast corner of 15th Street West & Avenue L | Under Review | 2 |
| Conditional Use Permit No. 23-018 | Maverik fueling station with 5,637 sf convenience store with alcohol | Southwest corner of 15th Street West & Avenue L | Denied (Maybe resubmitted) | 3 |
| Conditional Use Permit No. 23-020 | Commercial center with 2,900 sf Raising Canes; 3,600 sf Quick Quack Car Wash and EV charg-ing facility with 40 charging stations | Southwest corner of Avenue L & 10th Street West | Approved | 4 |
| Director's Review No. 24-028 | Hydrogen fueling station within an existing gas station/retail center | 43144 10th Street West | Approved | 5 |
| Director's Review No. 24-046 | 2 industrial buildings (42,122 sf total) | South side Avenue K-6, east of Division Street | Under Review | 6 |
| Director's Review No. 24-061 | Convert existing Sahara Motel into Permanent Supportive Housing under Project Homekey | 42137 Sierra Highway | Approved | 7 |
| Director's Review No. 24-062 | Convert existing T-Bird Motel into Permanent Supportive Housing under Project Homekey | 42233 Sierra Highway | Approved | 8 |
| Director's Review No. 24-063 | Convert existing Bon Aire Motel into Permanent Supportive Housing under Project Homekey | 42445 Sierra Highway | Approved | 9 |
| Site Plan Review No. 20-05 | Construction of 3 industrial buildings totaling 40,894 sf | 42320 12th Street West | Approved; in plan check | 10 |
| Site Plan Review No. 21-01 | 4,700 sf auto repair building with 5 bays (including 530 sf of office space) | Southeast corner of Avenue L-8 & 10th Street West | Under Review | 11 |
| Site Plan Review No. 21-016 | 3 industrial buildings (19,488 sf total) | Avenue L-12 between 10th St West and 12th Street West | Approved; In grading plan check | 12 |
| Site Plan Review No. 21-05 | 4 warehouse buildings (37,000 sf total) | Northwest corner of Avenue L-8 & 10th Street West | Approved | 13 |

| Project | Type and Size | Location | Status | Map No. |
|---|---|---|---|---|
| Site Plan Review No. 21-07 | 5.72 megawatt photovoltaic solar facility with battery storage to support AVTA | Southeast corner of 6th Street West & Ave L-8 | Approved | 14 |
| Site Plan Review No. 22-002 | 28,705 sf industrial warehouse | Southwest corner of Avenue L & Sierra Highway | Approved; In grading plan check | 15 |
| Site Plan Review No. 22-003 | 96,124 sf mini-storage building with caretakers unit | Sierra Highway & Avenue L | Approved | 16 |
| Site Plan Review No. 22-007 | 2 industrial buildings totaling 17,000 sf | West side of 6th St W, south of Avenue L-8 | Approved | 17 |
| Site Plan Review No. 22-008 | 20,872 sf industrial warehouse | Northeast corner of 12th Street West & Avenue L-8 | Under Review | 18 |
| Site Plan Review No. 22-011 | 2 industrial buildings totaling 233,600 sf | Forbes Street, South of Enterprise Parkway | Approved | 19 |
| Site Plan Review No. 22-014 | 217,650 sf industrial distribution/ warehouse | Northside of Avenue L-4, west of Sierra Highway | Approved | 20 |
| Site Plan Review No. 22-016 | 15,000 sf industrial building | Southwest corner of 6th Street West & Avenue L-8 | Approved | 21 |
| Site Plan Review No. 23-001/ Site Plan Review No. 24-006 | Modification of SPR 23-001 for a 130,456 sf mini-storage facility | Southeast corner of 22nd Street West & Avenue L | Under Review | 22 |
| Site Plan Review No. 23-007 | 2 industrial buildings totaling 96,634 sf | Sierra Highway & Avenue L-4 | Under Review | 23 |
| Site Plan Review No. 23-014 | 92,528 sf industrial warehouse bldg | 8th Street West north of Avenue L-6 | Under Review | 24 |
| Site Plan Review No. 23-016 | 10,030 sf auto repair bldg | Northeast corner of Avenue K-4 & Sahuayo Street | Under Review | 25 |
| Site Plan Review No. 24-002 | 12,400 sf commercial/retail with 2 drive-thru restaurants | Southeast corner of Avenue K & Division Street | Under Review | 26 |
| Site Plan Review No. 24-003 | 2 industrial buildings totaling 807,968 sf | Northwest corner of Division Street & Avenue M | Under Review | 27 |
| High-Speed Rail Project, Bakersfield to Palmdale Section | High-speed rail system running from San Francisco to the Los Angeles basin. | Sierra Highway | ROD published August 2021 | 28 |

**Figure 3.1-1. Cumulative Projects**



# 3.2. Aesthetics/Visual

This section evaluates the potential aesthetics and visual impacts associated with implementation of the proposed Parkway Village Specific Plan (PVSP or Plan). The analysis considers potential effects on scenic vistas, visual character and quality, as well as light and glare. The assessment is based on field observations, review of project materials, analysis of applicable policies and regulations, and standard CEQA assessment methodologies.

## 3.2.1. Environmental Setting

### 3.2.1.1. Regional Context

The area included in the PVSP (Plan area) is located in the southern central portion of the City of Lancaster, within the Antelope Valley region of northern Los Angeles County. The Antelope Valley is characterized by high-elevation desert terrain at the western edge of the Mojave Desert, with the San Gabriel Mountains bordering the valley to the south and the Tehachapi Mountains to the north.

### 3.2.1.2. Local Context

The 434.7-acre PVSP area is situated in a transitional zone between urban/suburban development and undeveloped desert. The site is relatively flat, with elevations gradually increasing from the northwestern corner to the southeastern corner. Amargosa Creek, a dry wash that has been undergrounded through the Plan area, extends from roughly the southern portion of the site toward the northwestern corner. As the creek infrastructure is entirely underground, it does not contribute to the visual character of the Plan area.

### 3.2.1.3. Existing Visual Character

The area included in the PVSP is primarily undeveloped, with existing development along some streets along the Plan area edges. See Figure 3.2-1, which shows an aerial view of the Plan area, demonstrating the mostly vacant landscape. Figures are at the end of this section. The undeveloped landscape consists primarily of desert scrub vegetation and bare soil. See Figure 3.2-2, which shows across the Plan area looking toward the existing Kaiser facilities on Avenue L.

Key existing built elements in the visual environment include:

- Kaiser Permanente Antelope Valley Medical Offices and commercial/storage uses along Avenue L
- A church at the corner of 5th Street West and Avenue K
- Retail, restaurants, a retirement village, bowling alley, RV/trailer park, and motel along Sierra Highway
- An auto repair shop and solar farm along the western boundary

### 3.2.1.4. Scenic Highways, Vistas, and Resources

Within the City of Lancaster, distant views are available of the San Gabriel Mountains to the south, , and the Tehachapi Mountains to the northwest. There are no designated or eligible State scenic highways present in or near the City of Lancaster. The nearest officially designated State scenic highway is State Route 2 (Angeles Crest Scenic Highway), located on the north side of the San Gabriel Mountains, approximately 28 miles to the south of the City.[3]

The City of Lancaster General Plan 2030 identifies several important scenic resources within and surrounding the City. These include long-range views of the San Gabriel Mountains and desert expanses, local views of the surrounding buttes and Quartz Hill, and the State Route 14 (SR-14) corridor. SR-14 is designated by the City as a local scenic route, offering travelers views of the San Gabriel Mountains to the

[3] https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

south and the Tehachapi Mountains to the northwest as well as more distant views of the San Bernardino Mountains to the southeast. These mountain ranges contribute to the visual character of the region.

While these mountain ranges provide scenic backdrops, there are no officially designated scenic vistas within or immediately adjacent to the Plan area, the relatively flat topography and largely undeveloped nature of the Plan area itself allows for expansive views across the area and to surrounding areas. Notable views from the Plan area include views of the surrounding mountain ranges as well as view of urbanized areas surrounding the largely vacant Plan area.

The project site does not contain significant scenic resources such as notable trees, rock outcroppings, or historic buildings. The site consists mainly of desert scrub vegetation and bare soil, typical of the local environment.

#### 3.2.1.5. Light and Glare

Existing sources of light and glare vary considerably throughout the Plan area vicinity. Substantial ambient lighting exists along the major arterials bordering the Plan area, including 10th Street West, Avenue K, Avenue L and Sierra Highway. These roadway corridors feature street lighting, traffic signals, and lighting from adjacent commercial and residential development. Vehicle headlights along these arterials also contribute to nighttime lighting conditions.

Within the Plan area, existing light sources are associated with scattered commercial and institutional development around the edge of the Plan area, including security lighting, building-mounted lighting, and interior illumination. While the undeveloped portions of the site do not contain direct sources of light or glare, they receive ambient lighting from the surrounding urban development and roadway network.

Sources of glare in the area primarily include reflective surfaces associated with existing buildings and vehicles along the major roadways. The intensity of glare conditions varies throughout the day depending on sun angle and weather conditions.

### 3.2.2. Regulatory Setting

#### 3.2.2.1. State Regulations

Because there are no designated State scenic highways near the Plan area, there are no state regulations directly applicable to aesthetics and visual resources.

#### 3.2.2.2. Local Regulations and Plans

**City of Lancaster General Plan 2030**

The Natural Environment Element of the General Plan contains objectives, policies, and actions to preserve scenic resources within the City, including scenic corridors. According to the Natural Environment Element, the City of Lancaster's major visual resources include local views of the surrounding buttes, Quartz Hill, and long-distance panoramas of the San Gabriel Mountains and desert expanses. The applicable General Plan 2030 objectives, policies, and specific actions for aesthetics/light and glare are as follows:

- **Objective 3.8:** Preserve and enhance important views within the City, and significant visual features which are visible from the City of Lancaster.
  - **Policy 3.8.1:** Preserve views of surrounding ridgelines, slope areas and hilltops, as well as other scenic vistas (see also Policy 19.2.5).

- **Specific Action 3.8.1(a):** Encourage the creation of vistas and view corridors of community or neighborhood value during the development review process, through the siting of buildings to avoid blocking views and view corridors.

- **Objective 19.2:** Integrate new development with established land use patterns through quality infill to enhance overall community form and create a vibrant sense of place.
  - **Policy 19.2.5:** Create a network of attractive paths and corridors that encourage a variety of modes of transportation within the city. (see also Policy 3.8.1)
    - **Specific Action 19.2.5(a):** Review and update all street standards, as appropriate, to support design features that will create an attractive and safe environment for pedestrians, transit users, and bicyclists.
    - **Specific Action 19.2.5(b):** Through the development review process, in conformance with Community Design criteria, the Master Plan of Trails, the Transportation Master Plan and the Parks, Recreation, Open Space and Cultural Master Plan, create linkages between separate districts with bike paths, pedestrian trails, medians and parkway landscaping in connecting streets and other physical improvements (see also policies and action programs in the Plan for Physical Mobility and the Plan for Active Living).

### City of Lancaster Municipal Code

Nighttime lighting is regulated within the City of Lancaster in Chapter 17.08, Residential Zones, § 17.08.140, Outdoor Lighting, of the City's Zoning Code which allows lighting in a manner that provides for proper illumination without producing an adverse impact on neighboring property. This Municipal Code Section states: "exterior lighting of the building and site shall be provided, maintained, and utilized during the hours of darkness in accordance with the following requirements for outdoor lighting in general:

1. Lighting shall be part of the architectural concept. Fixtures, standards, and all exposed accessories shall be compatible with the building design.
2. Lighting shall be placed to provide adequate illumination for security and safety.
3. Lighting used to illuminate the premises shall be directed away from adjacent properties.
4. Lighting shall be designed and located in a manner that prevents glare onto adjacent properties."

## 3.2.3. Environmental Impacts and Mitigation Measures

In accordance with Appendix G of the State CEQA Guidelines, the PVSP would have a significant impact related to aesthetics if it would:

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

### Impact Assessment Methodology

The assessment of aesthetic impacts is inherently subjective. However, this analysis applies standard, accepted visual assessment methods to evaluate the visual character of the area, anticipate potential changes resulting from implementation of the PVSP, and identify any significant impacts. The methodology includes:

- Describing the existing visual character of the Plan area and surroundings.
- Identifying key viewing locations and sensitive receptors.
- Evaluating the Project's potential effects on visual character, scenic vistas, and light/glare conditions.
- Assessing the Project's consistency with relevant plans and policies.
- Determining impact significance based on the established thresholds.
- Recommending mitigation measures, where appropriate, to reduce significant impacts.

### Environmental Impact Analysis

**Impact AE-1: Adverse effects on a scenic vista.**

While the Tehachapi Mountains and San Gabriel Mountains provide scenic backdrops to the City and Plan area, the City of Lancaster General Plan does not designate any scenic vistas as being located on or near the Plan area. Buildout of the PVSP would alter existing views across the largely vacant site but would not substantially obstruct views of the mountain ranges from surrounding public viewpoints.

The PVSP includes height limitations for all land use categories, with a maximum of 50 feet allowed for most development; the height can exceed 50 feet with a Conditional Use Permit. These height limits are consistent with surrounding development and would not significantly impair views of the distant mountains. Furthermore, the circulation plan and open space network are designed to maintain view corridors through the site.

The PVSP demonstrates compliance with City of Lancaster General Plan 2030 Objective 3.8 and Policy 3.8.1 through the following features:

1. Building height limitations that preserve views of distant mountains, including the Tehachapi Mountains to the north and the San Gabriel Mountains to the south.
2. Circulation plan and open space network designed to maintain view corridors, aligning with Action 3.8.1(a) by creating vistas and view corridors of community value.
3. Landscape design guidelines that complement the natural desert landscape, enhancing the overall visual quality of the area.

The PVSP includes policies to enhance views, such as creating vistas and view corridors of community value through thoughtful siting of buildings. This approach directly supports Policy 3.8.1 and Action 3.8.1(a) by avoiding the blocking of significant views and view corridors.

Therefore, while implementation of the PVSP would alter existing views across the undeveloped site, it would not substantially obstruct or degrade scenic vistas of the surrounding mountains and would be consistent with relevant General Plan policies. Impacts would be less than significant.

**Impact AE-2: Damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.**

While there are no officially designated state scenic highways in the vicinity of the project site, State Route 14 (SR-14), located approximately 0.3 miles west of the Plan area, is identified in the City of Lancaster General Plan 2030 as a locally designated scenic route. The General Plan recognizes SR-14's significance as a scenic corridor that provides travelers with views of the San Gabriel Mountains and Tehachapi

Mountains, as well as more distant views of the San Bernardino Mountains. Within the City of Lancaster (between Avenues A and M), this route offers long-range views of these mountain ranges and provides travelers with their primary introduction to the visual character of the Lancaster area.

The Plan area is not visible from a State scenic highway. The nearest designated State scenic highway is State Route 2 (Angeles Crest Highway), located approximately 28 miles southeast of the Plan area.[4]

The Plan area, while visible from portions of SR-14, does not contain significant scenic resources such as notable trees, rock outcroppings, or historic buildings. The Plan area is primarily undeveloped, with scattered existing development and typical desert vegetation. Development as proposed in the PVSP would be visually consistent with existing urban development along the SR-14 corridor and would not substantially degrade the scenic quality of views from this locally designated scenic route.

Therefore, while development in the Plan area would alter views from SR-14, these changes would be consistent with the existing urban development pattern along the corridor and would not substantially damage scenic resources visible from either a state-designated scenic highway or locally designated scenic route. The impact would be less than significant.

**Impact AE-3: Conflicts with applicable zoning and other regulations governing scenic quality.**

The Plan area is located within an urbanized area as defined by State CEQA Guidelines Section 15387. Therefore, this analysis focuses on whether the implementation of the PVSP would conflict with applicable zoning and other regulations governing scenic quality.

The PVSP would transform the primarily undeveloped site into a master-planned community with a mix of residential, commercial, office, recreational, and medical uses. While this represents a substantial change from the current visual character, the PVSP has been designed to create a cohesive, high-quality visual environment that is compatible with surrounding development in adjacent parts of the City.

The PVSP includes comprehensive design guidelines and development standards to ensure visually appealing and contextually appropriate development throughout the Plan area. Key elements include:

- Architectural design guidelines for various land use types and styles
- Streetscape and landscape design standards
- Requirements for community gathering spaces and recreational amenities
- Policies to create distinctive neighborhood identities and entry features

The PVSP emphasizes creating a pedestrian-friendly environment, particularly in the Town Center and mixed-use areas. The incorporation of approximately 27.8 acres of parks, plazas, and open spaces throughout the development would provide visual relief and enhance the overall aesthetic quality.

The PVSP has been designed to be consistent with the City of Lancaster's zoning regulations and other applicable standards governing scenic quality. Specifically:

1. The Plan complies with the City's General Plan land use designations and zoning for the site, which allow for mixed-use development.
2. The PVSP's design guidelines and development standards are consistent with and, in some cases, more stringent than the City's existing regulations for visual quality and community design.

[4] https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

3. The Plan demonstrates compliance with City of Lancaster General Plan 2030 policies related to scenic quality, including:
    - Policy 3.8.1 and Action 3.8.1(a) by preserving views and creating valuable view corridors through thoughtful building siting.
    - Policy 19.2.5 by creating a network of attractive paths and corridors that encourage various modes of transportation.
4. The PVSP incorporates Action 19.2.5(a) and (b) by including:
    - Street standards that support design features creating an attractive and safe environment for pedestrians, transit users, and bicyclists.
    - A comprehensive network of bike paths, pedestrian trails, and landscaped medians and parkways that create linkages between separate districts within the development.
5. The PVSP's architectural guidelines, landscaping standards, and open space provisions align with the City's goals for high-quality visual environments and contribute to creating a vibrant sense of place, as outlined in Objective 19.2.

Given the Plan's consistency with applicable zoning and other regulations governing scenic quality, including the highlighted General Plan policies and actions, impacts would be less than significant.

**Impact AE-4: New sources of light or glare which would adversely affect day or nighttime views in the area.**

While the surrounding area is predominantly developed with urban uses, the Plan area itself remains largely undeveloped. Implementation of the PVSP would introduce new sources of light and glare to the currently undeveloped portions of the local landscape, adding to the existing urban lighting context of the area. New lighting sources would include street lighting, exterior building illumination, parking lot lighting, illuminated signage, interior lighting visible through windows, and potential glare from reflective building materials. These new lighting sources and their effects would be similar in character and intensity to those found in the existing developed areas surrounding the Plan area.

The PVSP includes lighting guidelines that are consistent with and expand upon the requirements of Lancaster Municipal Code Section 17.08.140. The Project's lighting design adheres to the following Municipal Code requirements:

1. Lighting is integrated into the architectural concept, with fixtures and accessories compatible with building designs throughout the PVSP area.
2. Lighting is strategically placed to provide adequate illumination for security and safety in public areas, parking lots, and along pedestrian pathways.
3. All lighting used to illuminate the premises is directed away from adjacent properties to minimize light trespass.
4. Lighting is designed and located to prevent glare onto adjacent properties, using shielding and directional fixtures as necessary.

In addition to complying with these Municipal Code requirements, the PVSP's lighting guidelines include the following measures:

- Parking lot lighting utilizes full cut-off fixtures and is designed to provide the minimum illumination necessary for safety and security.

- Pedestrian-scale lighting is provided along walkways and in public gathering areas, contributing to an attractive and safe environment for various transportation modes, aligning with General Plan Action 19.2.5(a).
- Building-mounted lighting is shielded and directed downward to minimize light spill and glare.
- Illuminated signage uses the minimum brightness necessary for legibility and is designed to prevent light trespass onto adjacent properties.

The Plan also calls for the use of low-glare building materials to minimize daytime glare impacts.

Given the Project's compliance with Municipal Code Section 17.08.140 and its incorporation of comprehensive lighting guidelines that meet or exceed these standards, the impact related to light and glare would be less than significant. The PVSP's approach to lighting design ensures that development would provide proper illumination for safety and functionality while minimizing adverse impacts within the Plan area and on neighboring properties.

### Mitigation Measures

Based on the analysis of potential aesthetic impacts, all potential impacts (AES-1 through AES-4) were determined to be less than significant. Compliance with existing City of Lancaster General Plan policies and Municipal Code requirements, and the comprehensive design guidelines and standards incorporated into the PVSP are sufficient to ensure that potential aesthetic impacts are at to a less-than-significant level. Therefore, no mitigation measures are required for aesthetic impacts.

## 3.2.4. Cumulative Impact Analysis

### Geographic Extent

The geographic scope for the analysis of cumulative aesthetic impacts includes the PVSP area and surrounding lands within the viewshed of the Plan area. This encompasses an area generally within a 3-mile radius of the Plan area, including portions of central and southern Lancaster. This area was selected because it represents the viewshed within which development under the PVAP could contribute to cumulative visual impacts.

### Cumulative Effects of the Proposed Project

Cumulative development in the Plan area vicinity would continue to alter the visual character of the area to a more urbanized landscape through new development and redevelopment. The PVSP, in combination with other planned development, would contribute to this cumulative change in aesthetic character.

However, the PVSP and other development projects in Lancaster are subject to the City's design review process and must comply with applicable General Plan policies and development standards related to aesthetics and visual quality. The PVSP's emphasis on high-quality design, integrated open spaces, and pedestrian-friendly environments is consistent with the City's vision for future development.

Specific cumulative effects to which the Plan implementation could contribute include:

1. Changes to scenic vistas: While implementation of the PVSP would not significantly impact scenic vistas, the cumulative effect of development in the area could incrementally reduce the visibility of distant mountain ranges from some vantage points.
2. Alterations to visual character: The cumulative transformation of undeveloped land to suburban and urban uses would substantially alter the visual character of the area. However, this change is consistent with the City's planned growth and development patterns.

3. Increased light and glare: Cumulative development would introduce new sources of light and glare to the area. However, all projects would be required to comply with the City's lighting standards, which would minimize the cumulative effect.

The PVSP's compliance with City of Lancaster General Plan policies and Municipal Code requirements related to aesthetics and visual quality, as well as its incorporation of comprehensive design guidelines, ensures that future development of the Plan area would not make a substantial contribution to cumulative aesthetic impacts. Therefore, impacts would not be cumulatively considerable. The overall cumulative impact is considered less than significant.

## 3.2.5. Level of Significance After Mitigation

All identified aesthetic impacts would be less than significant without mitigation. Compliance with existing City of Lancaster General Plan policies and Municipal Code requirements, combined with the comprehensive design guidelines and standards incorporated into the PVSP, are sufficient to ensure that potential aesthetic impacts are minimized. Plan implementation would alter the visual character of the site but would do so in a manner consistent with the City's long-term vision for the area and would incorporate design features to maintain visual quality and minimize adverse effects related to light and glare.

**Figure 3.2-1 Aerial View of Plan Area**

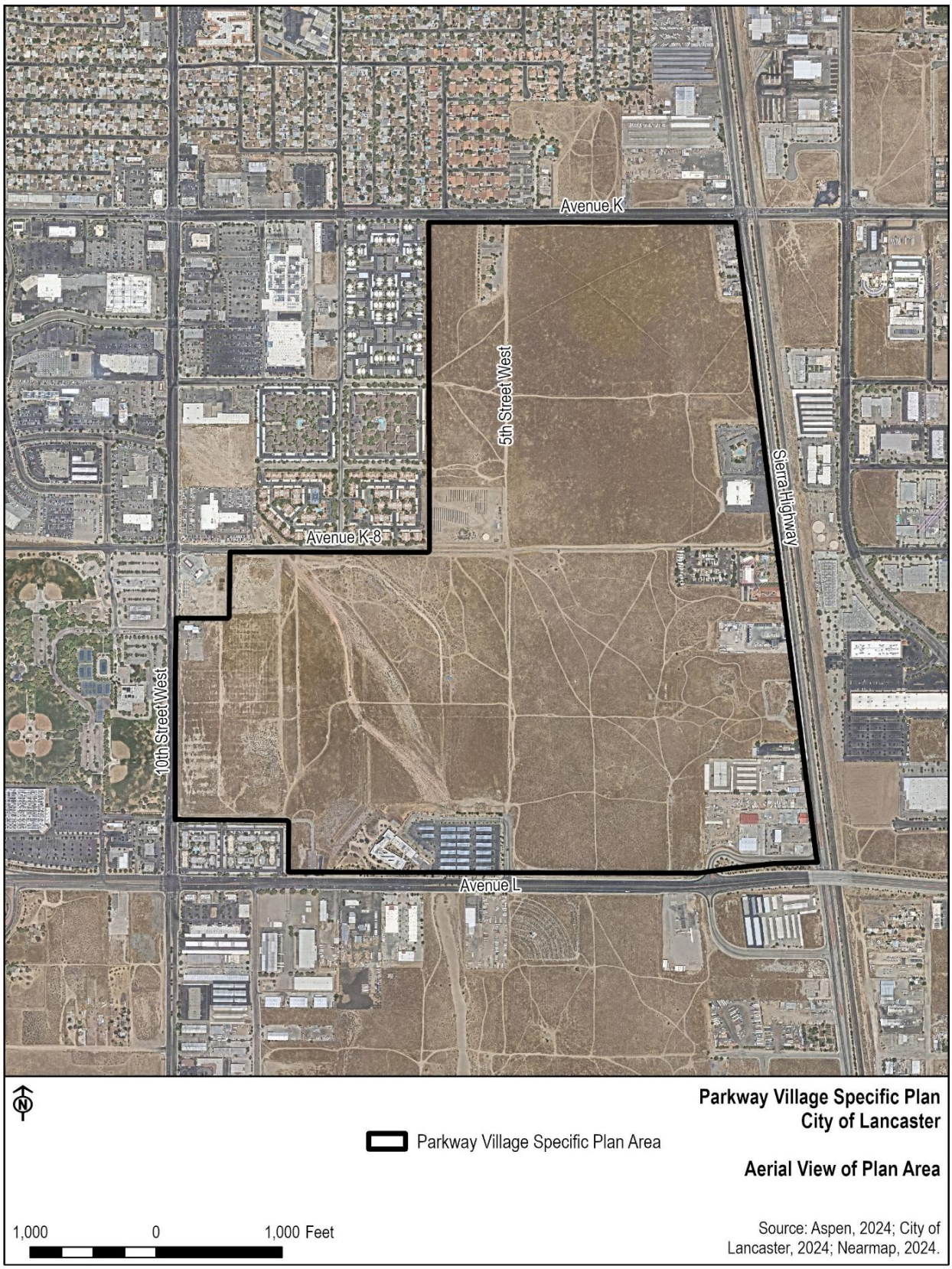


**Figure 3.2-2 Typical Plan Area Landscape Looking South**



# 3.3. Air Quality and Greenhouse Gases

The Parkway Village Specific Plan (PVSP or Plan) is a plan for the development of a 434.7-acre area in the City of Lancaster. The development planned for this area includes a mix of residential types and densities, parks, schools, commercial, and medical/office land uses. The development under the PVSP would also require installation of utilities (water, power, sewer, etc.), roads, and landscaping.

The PVSP is located in the Antelope Valley area of the Mojave Desert Air Basin (MDAB). The Plan area has a desert climate with hot summers, cool winters, and limited seasonal precipitation. The PVSP area is generally undeveloped, flat land. This general area has a mix of residential, recreational, commercial, medical, and rural/undeveloped land uses. The nearest sensitive receptors for impacts are residences that are adjacent to the PVSP site boundary on the south, west, and north. Other sensitive receptors include schools and a hospital, are located within a half mile of the Plan area.

Air quality in the region is regulated under multiple government levels, including the United States Environmental Protection Agency (U.S. EPA), the California Air Resources Board (CARB), and the Antelope Valley Air Quality Management District (AVAQMD), which has local jurisdiction responsibility for the permitting of stationary sources. Development actions under the PVSP would be required to comply with the applicable rules and regulations of each of these regulatory agencies. The region is nonattainment for federal and state ozone ambient air quality standards and for state respirable particulate matter ($PM_{10}$) standard.

A detailed description of the environmental and regulatory setting for the PVSP area is presented in the Air Quality Technical Report (Appendix A).

## 3.3.1. Environmental Setting

The PVSP area is located within the western portion of the MDAB and is under the local air quality jurisdiction of the AVAQMD. The air quality in the PVSP area is highly influenced by the transport of air pollutants from the San Joaquin Valley Air Basin from the west and the South Coast Air Basin from the south. The following provides a summary of the regional climate and meteorology, and representative recent local ambient air quality conditions.

**Meteorology**. The PVSP area is located in the high desert and has a climate that is characterized by warm, dry summers and cool winters with a small amount of seasonal precipitation that occurs primarily during the winter months. Summers typically have clear skies and dry, hot temperatures. Prevailing winds in the MDAB, and at the Plan area, are out of the west and southwest with high-wind events occurring frequently.

**Criteria Air Pollutants**. Air quality is determined by measuring ambient concentrations of certain criteria air pollutants including ozone, respirable particulate matter ($PM_{10}$), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), and lead. Ozone is an example of a secondary pollutant that is not emitted directly from a source (e.g., an automobile tailpipe), but it is formed in the atmosphere by chemical and photochemical reactions. Reactive organic gases (ROG), including volatile organic compounds (VOC), are regulated as precursors to ozone formation.

The CARB and the U.S. EPA have independent authority to develop and establish health-protective ambient air quality standards. The California air quality standards are set at levels to adequately protect the health of the public, including infants and children, with an adequate margin of safety (California Health and Safety Code Section 39606), and in general, the California Ambient Air Quality Standards (CAAQS) are more stringent than the corresponding health-protective National Ambient Air Quality Standards (NAAQS).

Monitored levels of the pollutants are compared to the current NAAQS and CAAQS to determine degree of existing air quality degradation. The standards currently in effect in California are shown in Table 3.3-1.

**Table 3.3-1. National and California Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standards | National Standards |
|---|---|---|---|
| Ozone | 1-hour | 0.09 ppm | — |
| | 8-hour | 0.070 ppm | 0.070 ppm |
| Respirable Particulate Matter ($PM_{10}$) | 24-hour | 50 µg/$m^3$ | 150 µg/$m^3$ |
| | Annual Mean | 20 µg/$m^3$ | — |
| Fine Particulate Matter ($PM_{2.5}$) | 24-hour | — | 35 µg/$m^3$ |
| | Annual Mean | 12 µg/$m^3$ | 9.0 µg/$m^3$ |
| Carbon Monoxide (CO) | 1-hour | 20 ppm | 35 ppm |
| | 8-hour | 9.0 ppm | 9 ppm |
| Nitrogen Dioxide ($NO_2$) | 1-hour | 0.18 ppm | 0.100 ppm |
| | Annual Mean | 0.030 ppm | 0.053 ppm |
| Sulfur Dioxide ($SO_2$) | 1-hour | 0.25 ppm | 0.075 ppm |
| | 24-hour | 0.04 ppm | 0.14 ppm |
| | Annual Mean | — | 0.030 ppm |

Notes: ppm=parts per million; µg/$m^3$= micrograms per cubic meter; "—" =no standard
Source: CARB (https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf), July 2024.

**Ambient Air Quality Attainment Status and Air Quality Plans**. The U.S. EPA, CARB, and the local air district classify an area as attainment, unclassified, or nonattainment with regard to certain pollutants, and these designations dictate the air quality management planning activities needed to make future air pollutant reductions. The classification depends on whether the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively.

Table 3.3-2 summarizes attainment status for criteria pollutants in comparison with both the state and federal standards, for the Antelope Valley portion of the MDAB.

**Table 3.3-2. Attainment Status for AVAQMD**

| Pollutant | Federal Designation | California Designation |
|---|---|---|
| Ozone | Nonattainment/Severe | Nonattainment |
| $PM_{10}$ | Attainment | Nonattainment |
| $PM_{2.5}$ | Attainment | Attainment |
| $NO_2$ | Attainment | Attainment |
| CO | Attainment | Attainment |
| $SO_2$ | Attainment | Attainment |

Source: Antelope Valley AQMD Attainment Status, 2017.

**Toxic Air Contaminants**. Toxic air contaminants (TACs) are air pollutants that may lead to serious illness or increased mortality, or which may pose a present or potential hazard to human health (California Health and Safety Code Section 39655), even when present in relatively low concentrations.

Potential human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another's. TACs do not have ambient air quality standards but are regulated by the local air districts using a risk-based approach. Local air districts review new or modified stationary sources for potential TACs emissions when issuing permits and require controls for larger stationary sources of diesel particulate matter (DPM), including standby diesel-fueled engines.

### Valley Fever

*Coccidioidomycosis*, often referred to Valley Fever, is an infectious disease caused by a fungus that lives in the soil, commonly in hot dry areas with alkaline soil. This disease affects both humans and animals and

is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and may be stirred up and become airborne by wind, vehicles, excavation, or other ground-disturbing activities.

Construction workers and others who work outdoor are at risk for Valley Fever, especially when disturbing soil, operating heavy machinery, or working under windy conditions. By California law (under Assembly Bill 203 of 2019), construction employers who work in counties with high rates of Valley Fever must annually train employees on minimizing the risk of Valley Fever (CDPH, 2022). Steps that can be taken to limit workers' exposure to dust, such as watering the soil before digging, reduce the risk of Valley Fever (CDPH, 2019). Valley Fever is highly endemic in Antelope Valley, meaning that the annual incidence rate of Valley Fever is greater than 20 cases per 100,000 persons per year (Cal. Labor Code section 6709).

## 3.3.2. Regulatory Setting

### Air Quality

#### *Federal Regulations*

**Federal Clean Air Act (CAA).** The Federal Clean Air Act was enacted in 1970, and the act established the NAAQS for criteria air pollutants. With AVAQMD and CARB, the U.S. EPA shares the responsibility to establish regulations, enforce air pollution control requirements, and develop the necessary air quality management to achieve the NAAQS. The U.S. EPA implements most aspects of the CAA, and reviews local and state air quality management plans and regulations to ensure attainment with the NAAQS.

#### *State Regulations*

**California Clean Air Act.** The California Clean Air Act is implemented by the CARB. This act established broad authority for California to regulate emissions from mobile sources and requires regions to develop and enforce strategies to attain CAAQS. Each regional air district is responsible for demonstrating how these standards are met.

**U.S. EPA/CARB Off-Road Mobile Sources Emission Reduction Program.** The California Clean Air Act mandates that CARB achieve the maximum degree of emission reductions from all off-road mobile sources in order to attain the state ambient air quality standards. Off-road mobile sources include construction equipment. The earliest (Tier 1) standards for large compression-ignition engines used in off-road mobile sources became effective in California in 1996. Since then, the Tier 3 standards for large compression-ignition engines used in off-road mobile sources went into effect in California for most engine classes in 2006, and Tier 4 or Tier 4 Interim (4i) standards apply to all off-road diesel engines model year 2012 or newer. These standards and standards applicable to fleets that are already in-use provide comprehensive regulation and control to reduce NOx and toxic particulate matter emissions from diesel use throughout the State.

**CARB In-Use Off-Road Diesel Fueled Fleets Regulation.** The regulations for in-use off-road diesel equipment are designed to reduce NOx and toxic DPM. Depending on the size of the fleet of equipment, the owner would need to ensure that the average emissions performance of the fleet meets certain statewide standards. In lieu of improving the emissions performance of the fleet, electric systems can be installed to replace diesel equipment in the fleet average calculations. Presently, all equipment owners are subject to a five-minute idling restriction in the rule (13 California Code of Regulations [CCR], Chapter 10, Section 2449).

**CARB Portable Equipment Registration Program (PERP).** This program allows owners or operators of portable engines and associated equipment commonly used for construction or farming to register their units under a statewide portable program. This program allows them to operate their equipment throughout California without having to obtain individual permits from local air districts.

**CARB Airborne Toxic Control Measures (ATCM).** Diesel engines on portable equipment and vehicles are subject to various ATCM that dictate how diesel sources must be controlled statewide to protect public health. For example, the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling generally limits idling of commercial motor vehicles (including buses and trucks) within 100 feet of a school or residential area for more than five consecutive minutes or periods aggregating more than five minutes in any one hour (13 CCR, Chapter 10, Section 2485). Diesel engines used in portable equipment fleets are subject to stringent DPM emissions standards, generally requiring use of only newer engines or verified add-on particulate filters (17 CCR §93116).

### *Local Regulations and Plans*

#### AVAQMD Rules and Regulations

The AVAQMD has primary responsibility for regulating stationary sources of air pollution situated within its jurisdictional boundaries. By adopting rules and regulations consistent with the air quality management programs to achieve state and federal mandates, the AVAQMD protects air quality by directly overseeing the air pollution sources owned by businesses or individuals in its jurisdiction. The AVAQMD rules and regulations pertinent to the proposed project include:

- *Regulation II, Permits and Regulation XIII, New Source Review*. The AVAQMD New Source Review (NSR) program requires any facility with stationary sources of emissions to obtain an Authority to Construct (ATC) prior to the building, erecting, installation, alteration or replacement of any source of emissions, which may act as a temporary Permit to Operate (PTO).
- *Rule 401, Visible Emissions*. This rule specifies 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 the rule.
- *Rule 402, Nuisance*. Rule 402 states that a person shall not discharge from any source whatsoever such quantities of 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 such persons or the public or that cause or have a natural tendency to cause injury or damage to business or property.
- Rule 403, Fugitive Dust. The purpose of this rule is to reduce the amount of Particulate Matter entrained in the ambient air as a result of man-made Fugitive Dust sources by requiring actions to prevent, reduce or mitigate Fugitive Dust emissions. The rule specifies requirements for active operation of construction, excavation, extraction and other earth-moving activities, demolition, and bulk storage or materials. Requires AVAQMD approval of a site-specific Dust Control Plan (DCP) prior to the start of any construction activity on any site that will include ten acres or more for residential developments, or five acres or more for non-residential development.
- *Rule 1146, Limits on $NO_x$ for Boilers, Steam Generators, and Process Heaters*. This rule limits $NO_x$ emissions (not to exceed 40 parts per million (ppm)) and CO emissions (not to exceed 400 ppm) and requires monitoring of the heat input derived from each fuel stream used in the boiler.
- *Rule 1302, NSR Procedure and Rule 1303, NSR Requirements*. Requires installation of the Best Available Control Technology (BACT) for any new or modified emissions unit with the potential to emit more than 25 pounds (lb)/day of any nonattainment pollutant; and requires any facility to obtain offsets if the potential to emit exceeds: 15 tons per year (tpy) $PM_{10}$; 25 tpy $NO_x$, VOC, or $SO_x$.

- *Rule 1401, New Source Review for Toxic Air Contaminants*. This rule requires pre-construction review of all new or modified facilities that have the potential to emit hazardous air pollutants or TACs. Requires Best Available Control Technology for Toxics for any emission unit that could cause a "significant health risk," which is an impact where maximum individual cancer risk (MICR) is greater than or equal to ten (10) in a million (or 1 x $10^{-5}$) or a hazard index (HI) is greater than or equal to one (1), as determined by a Health Risk Assessment (HRA) Report.

**City of Lancaster**

The City of Lancaster's General Plan (City of Lancaster, 2009a) contains several policies to protect local air quality, including the following:

- Policy 3.3.1 – Minimize the amount of vehicular miles traveled.
- Policy 3.3.2 – Facilitate the development and use of public transportation and travel modes such as bicycle riding and walking.
- Policy 3.3.3 – Minimize air pollutant emissions generated by new and existing development.
- Policy 3.3.4 – Protect sensitive uses such as homes, schools and medical facilities, from the impacts of air pollution.
- Policy 3.3.5 – Cooperate with the AVAQMD and other agencies to protect air quality in the Antelope Valley.

The General Plan's Environmental Impact Report City of Lancaster 2009b) includes mitigation measures for development projects. The mitigation measures are as follows:

- AQ-1: For projects that may exceed daily construction emissions established by the AVAQMD, Best Available Control Measures shall be incorporated to reduce construction emissions to below daily emission standards established by the AVAQMD. Project proponents shall prepare and implement a Construction Management Plan which shall include, Best Available Control Measures among others. Appropriate control measures shall be determined on a project-by-project basis and would be specific to the pollutant for which the daily threshold is exceeded.
- AQ-3: The City of Lancaster shall require that all new dwelling units install Energy Star rated appliances and the most energy-efficient water heaters and air conditioning systems that are feasible. The City of Lancaster shall also require all new buildings and major renovations to use energy efficient lighting (indoor and outdoor) that reduce electricity use substantially more than current State Building Code requirements.

## Greenhouse Gases

### *State Regulations*

**California Global Warming Solutions Act of 2006.** The California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) required that California's greenhouse gas (GHG) emissions be reduced to 1990 levels by 2020. The reduction is being accomplished through an enforceable statewide cap on global warming emissions beginning in 2012. AB 32 directs the CARB to develop regulations and a mandatory reporting system to track and monitor global warming emissions levels (AB 32, Chapter 488, Statutes of 2006). AB 32 requires CARB to update the Scoping Plan at least every five years. Accordingly, the CARB released a 2022 Scoping Plan Update in November 2022 (ARB 2022).

In passing AB 32, the California Legislature found that:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and

supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

**California Governor's Executive Order B-30- 15 and Senate Bill 32**. Executive Order (EO) B-30-15 (April 2015) establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. One purpose of this interim target of this executive order is to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. This executive order also specifically addresses the need for climate adaptation and directs state agencies to update the California Climate Adaptation Strategy to identify how climate change will affect California infrastructure and industry and what actions the state can take to reduce the risks posed by climate change. Senate Bill (SB) 32 of 2016 codifies this GHG emissions target to 40 percent below the 1990 level by 2030.

### *Local Regulations and Plans*

#### City of Lancaster Climate Action Plan (CAP)

The City of Lancaster adopted a Climate Action Plan (CAP) in March 2017, which identifies projects that would help further reduce GHG emissions (City of Lancaster, 2017). Sixty-one projects were identified across eight sectors: traffic, energy, municipal operations, water, waste, built environment, community, and land use. The CAP also evaluates different future scenarios with the proposed measures and found the use of the measures in all future scenarios meet the 2020 target and make substantial progress towards achieving the post-2020 reduction targets.

## 3.3.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

All construction- and operation-related emissions were quantified based on the best available forecast of activities. This analysis uses the California Emissions Estimator Model (CalEEMod; version 2022.1.1.28) software developed by the California Air Pollution Control Officers Association (CAPCOA). This is the most recent version of the CalEEMod software, and it relies upon mobile source emission factors from the CARB OFFROAD inventory and EMFAC2021 models. Where project-specific design features are not yet defined, default and typical settings from CalEEMod are used. Default emission factors used in this analysis appear in the CalEEMod User's Guide Appendix D (April 2022).

### *AVAQMD's Significance Thresholds*

Significance thresholds established by AVAQMD for air pollutant emissions from individual projects are presented in Table 3.3-3 below.

**Table 3.3-3. AVAQMD Significance Thresholds**

| Pollutant | Annual Threshold (tons/year) | Daily Threshold (lbs/day) |
|---|---|---|
| Carbon Monoxide (CO) | 100 | 548 |
| Nitrogen Oxides ($NO_x$) | 25 | 137 |
| Volatile Organic Compounds (VOC) | 25 | 137 |
| Sulfur Oxides ($SO_x$) | 25 | 137 |
| Particulate Matter ($PM_{10}$) | 15 | 82 |
| Particulate Matter ($PM_{2.5}$) | 12 | 65 |
| Hydrogen Sulfide | 10 | 54 |
| Lead | 0.6 | 3 |

Source: Antelope Valley Air Quality Management District 2016.

### *CEQA Significance Criteria*

Appendix G of the State CEQA Guidelines describes thresholds of significance, and as such, air quality impacts resulting from the PSVP's implementation may be considered significant if they would:

- Conflict with or obstruction of the implementation of the applicable air quality plan;
- Cause cumulatively considerable net increases of any criteria pollutant for which the PVSP region is non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people;
- Generate greenhouse gas emissions, either directly or indirectly, that may have an impact on the environment;
- Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Based on these criteria, the PSVP's effects are categorized as Less than Significant, Less than Significant with Mitigation, or Significant and Unavoidable. Mitigation measures are recommended for impacts that are not Less than Significant.

## Environmental Impact Analysis

### *Air Quality*

**Impact AQ-1: Conflict with or obstruction of the implementation of the applicable air quality plan.**

The AVAQMD is responsible for managing local air quality and administering the State and federal air quality control programs to ensure implementation of applicable air quality management plans. State-level air quality planning strategies to attain CAAQS are implemented through rules, regulations, and programs adopted by AVAQMD and CARB to control ozone precursors, $PM_{10}$, and $PM_{2.5}$. The AVAQMD has adopted a Federal Ozone Attainment Plan, with the most recent Plan being adopted in 2023. The attainment plan relies on the established rules and regulations and control measures for emission sources within the AVAQMD jurisdiction, including the New Source Review program with a 25 ton per year major source level for ozone precursors (AVAQMD, 2023). All construction and project development-related activities, including operation and maintenance, would comply with the applicable rules, regulations, and programs.

All construction and operation activities would be required to comply with applicable AVAWMD Rules. Currently, l construction and operation activities would comply with AVAQMD's Rules 201, 203, and 209. Additionally, activities would comply with AVAQMD Rules 401, 402, 403, 461, and 481 which prevent nuisance and regulate fugitive dust emissions. These or similar Rules would be in effect during Plan build-out. Development within the Plan area would also need to conform to the federal and state Clean Air Act requirements by complying with the rules and regulations that are contained in the air quality plan. Because The PVSP-related stationary sources would be subject to the AVAQMD permitting authority for avoiding substantial emissions increases of ozone precursors, the PVSP would not conflict with or obstruct implementation of the applicable air quality plan. Therefore, no impacts would occur.

**Impact AQ-2: Cumulatively considerable net increases of any criteria pollutant for which the PVSP region is non-attainment under an applicable federal or state ambient air quality standard.**

#### Construction

Construction would generate emissions at the PVSP site and off site along the roadways traveled by construction traffic. Construction emissions would be caused by exhaust from vehicles and equipment (this

includes ozone precursors VOC or ROG and NOx, CO, and particulate matter [$PM_{10}$ and $PM_{2.5}$]) and fugitive dust/particulate matter from ground-disturbing activities and travel on unpaved surfaces and on paved roads.

To minimize the amount of fugitive dust from unpaved surfaces and emissions from other ground-disturbing activities during the site preparation period, all construction activity would be required to comply with local air district rules regarding dust control (AVAQMD Rules 401, 402, 403). Diesel and gasoline-powered construction equipment would be classified as portable or as mobile sources (off-road equipment), and these sources are subject to statewide registration and fleet requirements. On-road motor vehicle emissions would occur primarily off site. The on-road sources include the heavy-duty trucks to deliver equipment, concrete, water, and other materials, and light-duty vehicles carrying crews and medium-duty deliveries.

Emission sources would be dispersed across the site and not always used continuously or at the same time. Substantial or adverse levels of localized ground-level concentrations would be unlikely with construction because pollutants would be emitted from several pieces of equipment dispersed over large areas. Dust control and engine exhaust would be subject to AVAQMD rules and regulations to avoid adverse levels of air pollutant concentrations. Emissions were estimated by assuming an average amount of emissions that may occur in a day during over the 20-year buildout. Common construction phase types and their typical offroad equipment types and quantity were used to estimate maximum potentially daily emissions. Table 3.3-4 summarizes the maximum daily emissions for anticipated construction, without potential mitigation, assuming construction commences in 2030. Table 3.3-5 summarizes the maximum annual emissions rates anticipated for construction. Daily and yearly emission maximums are due to the most intensive phase. More detailed discussion regarding emissions estimates including by year and phase are located in Appendix A.

**Table 3.3-4. Parkway Village Project: Construction, Daily Emissions**

| | Maximum Daily Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **$NO_x$** | **CO** | **$SO_x$** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Maximum Daily Emissions** | 23.62 | 26.44 | 31.71 | 0.07 | 80.41 | 17.17 |
| **AVAQMD Daily Thresholds (Construction)** | **137** | **137** | **548** | **137** | **82** | **65** |
| **Exceedance (Y/N)** | **N** | **N** | **N** | **N** | **N** | **N** |

Source: Appendix A, AQ/GHG Emissions.

As seen in Table 3.3-4, maximum daily emissions would not exceed AVAQMD significance thresholds for any criteria pollutants.

Table 3.3-5 summarizes the maximum annual emissions rates anticipated with any construction phase.

**Table 3.3-5. Parkway Village Project: Construction, Annual Emissions**

| | Maximum Annual Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **$NO_x$** | **CO** | **$SO_x$** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Maximum Annual Emissions** | 3.08 | 3.26 | 3.95 | 0.01 | 9.62 | 1.84 |
| **AVAQMD Yearly Thresholds (Construction)** | **25** | **25** | **100** | **25** | **15** | **12** |
| **Exceedance (Y/N)** | **N** | **N** | **N** | **N** | **N** | **N** |

Source: Appendix A, AQ/GHG Emissions.

Table 3.3-5 shows that the maximum annual emissions during operation would not exceed the AVAQMD annual thresholds for VOCs, CO, and $PM_{10}$. Area sources are responsible for the majority of VOC emissions, while traffic emissions are responsible for the majority of the CO and $PM_{10}$ emissions.

### Operation

Operations-related emissions would be caused by area sources, energy use, and mobile sources from increased traffic. After the development of the Plan area, there would be area sources and energy use from newly developed residences, offices, schools, parks, medical centers and more. Additionally, emissions would stem from increased traffic associated with new housing, offices, schools and retail.

Development of the PVSP would occur through implementation of individual projects, each of which would contribute to the overall operational emissions of the PVSP, commencing when each individual project starts operations. For this analysis, the estimated emissions from complete buildout and operation of the entire PVSP site were compared against the AVAQMD thresholds for individual projects. Operational emissions of PVSP development in year 2050 would exceed some of the thresholds. These thresholds are recommended by AVAQMD for use in project-level evaluations and are shown here because AVAQMD does not have quantitative recommended thresholds for plan-level evaluation. Table 3.3-6 summarizes the maximum annual emissions rates anticipated after the proposed plan is fully built out.

**Table 3.3-6. Parkway Village Specific Plan: Operation, Annual Emissions without Mitigation**

| | Maximum Annual Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| **Source Type** | **VOC** | **$NO_x$** | **CO** | **$SO_x$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Mobile | 17.70 | 12.51 | 115.00 | 0.32 | 14.70 | 3.91 |
| Area | 21.17 | 0.95 | 24.64 | 0.01 | 0.08 | 0.07 |
| Energy | 0.61 | 5.36 | 3.24 | 0.03 | 0.42 | 0.42 |
| **Maximum Total Emissions** | 39.49 | 18.82 | 142.88 | 0.35 | 15.20 | 4.40 |
| **AVAQMD Yearly Thresholds (Operation)** | **25** | **25** | **100** | **25** | **15** | **12** |
| **Exceedance (Y/N)** | **Y** | **N** | **Y** | **N** | **Y** | **N** |

Source: Appendix A, AQ/GHG Calculations.

Table 3.3-6 shows that the maximum annual emissions during operation would exceed the AVAQMD annual thresholds for VOCs, CO, and $PM_{10}$. The large increase in vehicular traffic attributed to population growth in the Plan area is mostly responsible for CO and $PM_{10}$ exceedances, while area sources and transportation contribute to the VOC exceedance.

To reduce emissions associated with area sources, this analysis recommends Mitigation Measure AQ-1. Additionally, the project includes non-vehicular circulation, encouraging pedestrian circulation via sidewalks and bicycling through bike lanes. There will be sidewalks along all public streets, and bike lanes in street with classifications of collector and higher.

**Table 3.3-7. Parkway Village Specific Plan: Operation, Annual Emissions with Mitigation**

| | Maximum Annual Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| **Source Type** | **VOC** | **$NO_x$** | **CO** | **$SO_x$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Mobile | 16.54 | 11.69 | 107.45 | 0.29 | 13.74 | 3.65 |
| Area | 16.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 0.25 | 2.31 | 1.94 | 0.01 | 0.18 | 0.18 |
| **Maximum Total Emissions** | 33.67 | 14.00 | 109.39 | 0.31 | 13.91 | 3.82 |
| **AVAQMD Yearly Thresholds (Operation)** | **25** | **25** | **100** | **25** | **15** | **12** |
| **Exceedance (Y/N)** | **Y** | **N** | **Y** | **N** | **N** | **N** |

Source: Appendix A, AQ/GHG Calculations.

After implementation of MM AQ-1, quantified emissions would be largely decreased, and less than the threshold for $PM_{10}$, but still in exceedance of the VOC and CO thresholds. Impacts would be significant and unavoidable.

### Recommended Mitigation for Operation-Phase Emissions

**MM AQ-1** **Operational Area Source Emission Reduction Plan.** The PSVP shall implement energy-efficient heating and cooling systems to decrease reliance on natural gas. This may include using electric alternatives in residences, including installing electric hearths and stoves instead of natural gas or wood stoves and hearths. Additionally, the project owner may utilize low VOC paints and cleaning supplies where applicable.

**Impact AQ-3: Exposure of sensitive receptors to substantial pollutant concentrations.**

### Construction

The proposed Plan would not directly result in any activities that generate TAC emissions. However, construction activities associated with new development would generate DPM emissions and other air toxics from gasoline-fueled equipment that would cause some increase in TAC health risks. Proper implementation of Mitigation Measure AQ-2 would reduce future development health risks, and impacts would be less than significant with mitigation.

**Valley Fever.** CI spores are found in the top few inches of soil and may be stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Construction workers and others who work outdoors are at risk for Valley Fever, especially when disturbing soil, operating heavy machinery, or working under windy conditions. Valley Fever is highly endemic in Antelope Valley, meaning that the annual incidence rate of Valley Fever is greater than 20 cases per 100,000 persons per year (Cal. Labor Code section 6709). By California law (under AB 203 of 2019), construction employers who work in counties with high rates of Valley Fever must annually train employees on minimizing the risk of Valley Fever (CDPH, 2022). Steps that can be taken to limit workers' exposure to dust, such as watering down the soil before digging, reduce the risk of Valley Fever. Since the plan Area is in an area where Valley Fever is endemic, and workers as well as receptors in the area could be exposed to the spores during construction activities mitigation is required to minimize impacts. With implementation of Mitigation Measure AQ-3, impacts would be less than significant.

### Recommended Mitigation for Construction-Phase Emissions

**MM AQ-2** **Control On-Site Off-Road Equipment Emissions.** The project owner, when entering into construction contracts or when procuring off-road equipment or vehicles for on-site construction or operation & maintenance (O&M) activities, shall ensure that only new model year equipment or vehicles are obtained. The following measures would be included with contract or procurement specifications:

- All construction diesel engines not registered under California Air Resources Board's Statewide Portable Equipment Registration Program, with a rating of 50 horsepower (hp) or higher shall meet the Tier 4 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort demonstrates that such engine is not available for a particular item of equipment. In the event that a Tier 4 engine is not available for any off-road equipment larger than 100 hp, a Tier 3 engine shall be used or that equipment shall be equipped with retrofit controls to reduce exhaust emissions of NOx and DPM to no more than Tier 3 levels unless certified by the engine manufacturers that the use of such devices is not practical for specific engine types.

- All diesel-fueled engines used during construction shall have clearly visible tags showing that the engine meets the standards of this measure.
- All equipment and trucks used during construction shall be properly maintained and the engines tuned to the engine manufacturer's specifications.
- All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.

**MM AQ-3** **Valley Fever Awareness and Prevention.** Prior to ground disturbance activities, the project operator shall provide evidence to the Community Development Director that the project operator and/or construction manager has developed a "Valley Fever Training Handout", training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the training session materials, handout(s) and schedule shall be submitted to the Community Development Director within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Community Development Director regarding the "Valley Fever Training Handout" and Session(s) shall include the following:

- A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.
- Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.
- Training on methods that may help prevent Valley Fever infection.
- A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the county. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.

The project operator also shall consult with the Los Angeles County Public Health to develop a Valley Fever Dust Management Plan that addresses the potential presence of the Coccidioides spore and mitigates for the potential for Coccidioidomycosis (Valley Fever). Prior to issuance of permits, the project operator shall submit the Plan to the Los Angeles County Public Health for review and comment. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential Coccidioides spores. Measures in the Plan shall include the following:

- Provide HEP-filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Cause contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.
- Provide communication methods, such as two-way radios, for use in enclosed cabs.

- Require National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process.
- Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144).
- Provide separate, clean eating areas with hand-washing facilities.
- Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.
- Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor.
- Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever.
- Work with a medical professional, in consultation with the Los Angeles County Public Health, to develop an educational handout for on-site workers and surrounding residents within three miles of the project site, and include the following information on Valley Fever: what are the potential sources/ causes, what are the common symptoms, what are the options or remedies available should someone be experiencing these symptoms, and where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the project operator and reviewed by the project operator and reviewed by the Community Development Director. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within a specified radius of the project boundaries as determined by the Community Development Director. The radius shall not exceed three miles and is dependent upon the location of the project site.
- When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.
- Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities.
- Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection.
- Audit and enforce compliance with relevant Cal OSHA health and safety standards on the job site.

**Operation**

As discussed in Impact AQ-2, the main contributor to threshold exceedances during operations is mobile sources. The PVSP would generate emissions from area, energy, and mobile sources, though the source of concern for exposing sensitive receptors to substantial pollutant concentrations would be mobile sources, and more specifically CO, VOC, and PM10 (Fugitive Dust) emissions. Impacts would be significant and unavoidable.

**Impact AQ-4: Emissions (such as those leading to odors) adversely affecting a substantial number of people.**

Development with the Plan area could generate potentially objectionable odors that would be temporarily created during construction activities, primarily from paving operations associated with the construction of future development. However, these asphalt odors would be temporary, not overly offensive or regularly experienced in an urban/suburban setting. Other minor odor sources during construction and operation include tailpipe emissions from off-road equipment and on-road vehicles used during construction and new development operation, and odors from new restaurants. Therefore, impacts would not be significant.

### Greenhouse Gases

**Impact GHG-1: Generation of greenhouse gas emissions, either directly or indirectly, that may have an impact on the environment.**

The PVSP construction activities include mobilizing construction equipment, crews, and materials, excavating, and installing concrete foundations and equipment. These activities during construction would cause GHG emissions due to fuels used by the construction vehicles and equipment. Diesel and gasoline-powered construction equipment would include trucks for materials and crews, and the following types of equipment: grader, bulldozer, front-end loader, excavator, and a crane. Equipment and motor vehicles would directly emit carbon dioxide ($CO_2$), methane ($CH_4$), and nitrous oxide ($N_2O$) due to fuel use and combustion.

The resulting one-time aggregate quantity of GHG emitted during the 20-year period of construction would be approximately 7,434 MTCO2e (metric tons of carbon dioxide equivalent) (Appendix A, Air Quality and GHG Emissions). This equates to roughly 372 MTCO2e per year if averaged over the twenty-year construction period.

Table 3.3-8 summarizes the GHG emissions during construction overall and as an annualized sum equally distributed over the 20-year buildout schedule. Additional information regarding GHG emission calculations can be found in Appendix A, Air Quality Technical Report.

**Table 3.3-8. Parkway Village Specific Plan: GHG Emissions Unmitigated**

| Activity | During Construction (MTCO2e) | Construction and Operations, Annualized (MTCO2e per year) | PVSP GHG Emissions (MTCO2e per year) |
|---|---|---|---|
| **Total, Duration of Construction** | **7,434** | — | — |
| Construction Total, 20-year Annualized | — | 372 | 372 |
| Operations | — | 45,623 | 45,623 |
| **Total GHG, Construction and Operations** | | | **45,995** |

Source: Attachment 1, AQ/GHG Emissions Inventory.

After a full build out of the project area, operational emissions including area, energy, and mobile sources would be approximately 45,623 MTCO2e/yr. When added to the amortized construction emissions, the total yearly GHG emissions would be approximately 45,995 MTCO2e which is below the AVAQMD threshold of 100,000 MTCO2e/yr, and as such, impacts would not be significant.

**Impact GHG-2: Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.**

The PVSP would include the construction and operation of residences, commercial buildings, parks (including a new aquatic center), medical uses, and school that would be required to comply with the most recent California Building Code, including Title 24, Part 6 of the CCR, known as the Energy Efficiency Standards for Residential and Nonresidential Buildings. These standards require new construction to incorporate energy efficiency technologies and methods to reduce energy consumption throughout the State. The CALGreen Code (Title 24, Part 11) was incorporated into the CBC in 2010 to add further energy-efficiency building standards through which the Plan's energy consumption, while also reducing GHG emissions.

The City of Lancaster CAP documents the City's GHG emissions inventories and the progress the City has made through its alternative energy and sustainability programs. It also outlines how the City would meet the State GHG reduction targets for 2020 and make substantial progress towards achieving the post-2020 targets. Numerous measures within the CAP are applicable to the PVSP, and the Plan's consistency with the applicable CAP measures is as follows:

4.1.2b: Bike Lanes. Installation of Class I, Class II, and Class III bike lanes to provide safe cycling facilities for residents.

- The PVSP includes a network of bikeways including Class I, II and III bike lanes throughout the Plan area. Thus, the Plan would be consistent with measure 4.1.2.b.

4.1.2c: Pedestrian Amenities. Provide pedestrian amenities throughout the City to encourage walking instead of driving.

- The PVSP includes a network of pedestrian access, including multi-use trails and multi-purpose pathways. Sidewalks and traffic calming measures would also be incorporated to improve pedestrian accessibility and safety throughout the project site and surrounding areas. Thus, the Plan would be consistent with CAP Measure Code 4.1.2c.

4.8.1d: Infill Development Opportunities. Provide incentives to encourage developers to build on infill sites.

- The current site on which the PVSP will be built out is currently largely undeveloped and located near the urban city core. While the Plan would impact vacant, undeveloped land, the land uses proposed within the plan would be consistent with surrounding existing land uses including single- and multi-family residences, schools, commercial uses, and medical uses. The Plan would be consistent with CAP Measure Code 4.1.2d. Additionally, impact fees are waived for developments within this area of the City to encourage infill development within the urban core.

Development within the Plan area would need to comply with the plans, policies, and regulations described above for reducing greenhouse gas emissions. Therefore, no impact would occur.

### *Mitigation Measures*

None required.

## 3.3.4. Cumulative Impact Analysis

### Air Quality

The PVSP would be a project of regional significance according to CEQA Guidelines Section 15206, Projects of Statewide, Regional or Areawide Significance. As stated above, implementation of the PVSP would be consistent with the federal, state, and regional plans, including City of Lancaster General Plan and the AVAQMD Rules and Regulations. Furthermore, all future projects in the Plan area and vicinity would be evaluated for consistencies with the established goals, policies, regulations and guidelines of the City's General Plan 2030 and Municipal Code.

### Greenhouse Gases

The cumulative impact of GHG emissions contributes towards global climate change. Because the direct environmental effect of GHG emissions is to influence global climate change, GHG emissions are by their nature inherently a cumulative concern with a cumulatively global scope.

No single project could, by itself, result in a substantial change in the global climate. As the analysis for this Project addresses the cumulative global impact, there is no separate cumulative impact discussion for global climate change. This evaluation considers the contribution of the GHG emissions from PVSP implementation and demonstrates that the quantity of GHG emissions would not have a significant impact on the environment and would not conflict with GHG reduction goals. The Incremental contribution to GHG emissions would therefore not be cumulatively considerable.

## 3.3.5. Level of Significance After Mitigation

After mitigation, Impact AQ-2: Cumulatively considerable net increases of any criteria pollutant for which the PVSP region is non-attainment under an applicable federal or state ambient air quality standard and Impact AQ-3: Exposure of sensitive receptors to substantial pollutant concentrations, would continue to be significant and unavoidable during the operational phase of the project. The AVAQMD thresholds are project-level and were used in absence of plan level thresholds. Since the Plan includes multiple developments over a 20-year period, rather than a single, smaller project, the operation phase emissions are much higher. Increased traffic from new residences, offices, medical buildings, school, parks (including aquatic center), etc. all contribute to the VOC and CO emissions that exceed the applicable threshold. All other identified air quality and greenhouse gas impacts would be less than significant or less than significant with mitigation.

# 3.4. Biological Resources

This section describes the biological resources within the Parkway Village Specific Plan (PVSP or Plan), identifies the environmental and regulatory setting for the construction and operation of developments within the boundaries of the PVSP, evaluates potential impacts to biological resources, and recommends measures to mitigate impacts below a level of significance as needed.

## 3.4.1. Environmental Setting

The Plan area is located in the southern half of the City of Lancaster, within Los Angeles County, and is situated in the Antelope Valley region of the western Mojave Desert. In general, the Antelope Valley is an internally drained basin that flows to the northeast and is bordered by mountains to the west and south. In the lowest portions of the Antelope Valley, the landscape becomes a mosaic of playas, depressions, and small dune systems that lie within the historic Rosamond and Rogers Dry Lakes. Much of the Antelope Valley was historically cultivated with alfalfa and small grain crops before groundwater withdrawal was reduced in the 1950s. The establishment of Edwards Air Force Base then spurred urban growth in Lancaster throughout the remainder of the century. Solar- and wind-generating facilities now dominate the landscape in the northern and western portions of the valley.

The Plan area consists of 434.7 acres of primarily vacant and disturbed open space, bordered by a mix of residential and commercial developments both within and immediately surrounding the PVSP area. Existing developments within the PVSP boundary include St. Paul's Episcopal Church that fronts on Avenue K (north), a permanent support housing development, and other commercial land uses along the Sierra Highway frontage (east), Kaiser Permanente Medical Offices and parking lot (south), an auto repair business along 10th Street West (west), and a small solar facility and bike path within the interior of the PVSP area.

The elevation of the Plan area ranges from approximately 2,420 to 2,470 feet above sea level. The site is relatively flat, but slopes slightly north towards Avenue K and west towards 10th Street West. The dominant drainage in the vicinity of the Plan area is Amargosa Creek. At the southern edge of the Plan area south of W Avenue L, Amargosa Creek enters a below-ground storm drain that crosses the Plan area from south to north entirely below ground before daylighting just north of W Avenue K 8, outside of the Plan limits. Amargosa Creek eventually reaches Rosamond Dry Lake roughly 10 miles north of the Plan site.

Vegetation within the Plan area includes several shrublands and woodland types typical of the broader region as well as herbaceous plant communities commonly found in areas with prior disturbances or human land use. The climate of Lancaster is characterized by hot, dry summers and mild winters. Average annual rainfall recorded at the Lancaster weather station, located approximately 1.5 miles to the north of the Plan area is 7.38 inches (U.S. Climate Data, 2024). Seasonal rainfall variability is extremely high in the region. On average, the low and high temperatures in the area range from approximately 35 to 60°F in the winter to 60 to 95°F in the summer (U.S. Climate Data, 2024).

Prior to completing biological surveys, available literature was reviewed to identify special-status biological resources known from the vicinity of the Plan area. The literature and databases listed below were reviewed:

- Data from the California Natural Diversity Database (CNDDB) Rarefind 5 (CDFW, 2024a) was reviewed for the following USGS 7.5-minute topographic quadrangles (topo quads): Little Buttes, Rosamond, Rosamond Lake, Del Sur, Lancaster West, Lancaster East, Sleepy Valley, Ritter Ridge, and Palmdale. CNDDB search results are provided in Attachment 2 of Biological Resources Technical Report (Appendix B).

- California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2024), for the same topographic quads
- United States Fish and Wildlife Service (USFWS) database of designated Critical Habitat (USFWS, 2024b)
- IPaC Information for Planning and Consultation (IPaC) (USFWS, 2024a)
- iNaturalist Online Database (iNaturalist, 2024)
- eBird website (eBird, 2024)
- Natural Resource Conservation Service, Web Soil Survey (NRCS, 2024)
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory, Wetland Mapper (USFWS, 2024c)

Based on review of the literature and databases listed above, and on local expertise with the flora and fauna of the Antelope Valley, lists of special-status plants (Table 3.4-1) and wildlife (Table 3.4-2) with potential to occur on the Plan area or in the Plan vicinity were compiled.

Surveys were conducted for biological resources, including a focused botanical survey, special-status species survey, and habitat assessment of the Plan area on April 10, 15, and 22, 2020. An additional focused biological survey was conducted on April 24, 2024. During the surveys, biologists walked along transects throughout all accessible portion of the Plan area to search for plants and animals. The Plan area was revisited on May 8, and July 1, 2024, to complete botanical surveys, verify vegetation mapping, and investigate aquatic resources. During all surveys a species list of all plants and animals was maintained.

During the biological surveys, vegetation was mapped using an Arrow 100 GPS unit and identified on aerial photographs. Field maps were digitized using Geographic Information Systems (GIS) and field verified at the Plan area. The smallest mapping units were approximately 0.05 acre and most mapped vegetation boundaries are accurate to within approximately 5 feet. Any vegetation map is subject to imprecision for several reasons including: vegetation types tend to intergrade on the landscape so that there are no true boundaries in the vegetation itself, vegetation types as they are named and described tend to intergrade; and vegetation tends to be patchy, so depending on minimum mapping units some patches may or may not be included. Vegetation nomenclature follows A Manual of California Vegetation, Second Edition (Sawyer et al., 2009).

During the site visit on July 1, 2024, hydrology was mapped using an Arrow 100 GPS unit and identified on aerial photographs. Field maps were digitized using GIS and field verified at the Plan area. Non-wetland "waters of the U.S." were delineated based on the limits of the ordinary high-water mark (OHWM) as determined by changes in physical and biological features, such as bank erosion, deposited vegetation or debris, and vegetative characteristics. Jurisdictional wetlands were delineated using a routine determination according to the methods outlined in the USACE Wetland Delineation Manual (1987) and the Arid West Supplement (2008) based on three wetland parameters: dominant hydrophytic vegetation, wetland hydrology, and hydric soils. Amargosa Creek is now underground and not jurisdictional and wouldn't be impacted. There is a separate storm drain near the Kaiser building at the south end of the Plan area that is above ground and flows north into the below ground storm drain. This small feature is likely jurisdictional. CDFW jurisdiction was delineated to the top of the banks of the channel.

After vegetation and hydrology data were collected, GIS files with the permanent and temporary impacts from implementing the PVSP were overlaid to determine the temporary, permanent, and total impacts to each vegetation type and jurisdictional feature. These are presented below in Impact BIO-2 for vegetation and Impact BIO-3 for hydrology. The temporary and permanent impact acreages provided are independent from one another.

### 3.4.1.1. Vegetation and Other Cover Types

Vegetation on the Plan area is dominated by extensive fields of non-native grasses and forbs. Much of the Plan area, particularly boundary area, shows evidence of both current and past man-made disturbances. While remnants of native vegetation communities remain, they are limited in extent and also support non-native plants.

**Big Sagebrush Scrub (*Artemisia tridentata* Shrubland Alliance).** Big sagebrush scrub is a shrubland vegetation type dominated by big sagebrush (*Artemisia tridentata*). Additional species such as rubber rabbitbrush (*Ericameria nauseosa)*, four-wing saltbush (*Atriplex canescens*), and gumweed (*Grindelia camporum*) are also present in low numbers. Big sagebrush scrub is present in the western half of the Plan area near the location of the former Amargosa Creek channel. Big Sagebrush Shrubland has a State rank of S5 and therefore is not recognized as a sensitive natural community by CDFW (CDFW, 2024a).

**Joshua tree woodland (*Yucca brevifolia* Woodland Alliance).** Joshua tree woodland is a desert woodland community dominated by Joshua trees (*Yucca brevifolia*). In many areas of the Antelope Valley, Joshua tree woodland habitat intergrades (merges in a series of stages) with creosote bush scrub habitat. Additional species such as creosote bush (*Larrea tridentata*), boundary ephedra (*Ephedra aspera*), Anderson box-thorn (*Lycium andersonii*), and peach desert thorn (*Lycium cooperi*) are also present in low numbers. Joshua tree woodland is located in the southeastern portion of the Plan area, where several homeless encampments and large patches of garbage are present, directly impacting several individual Joshua trees and their associated habitat.

**Non-native Red Brome or Mediterranean Grass Grassland (*Bromus rubens – Schismus [arabicus, barbatus*] Herbaceous Semi-Natural Alliance).** This vegetation type is the most prevalent within the Plan area, found primarily in the northeastern portion of the area as well as within the center of the Joshua tree woodland in both the southern and central sections. This vegetation community is dominated by ripgut brome (*Bromus diandrus*) and red brome (*Bromus rubens*). Other non-native species such as foxtail barley (*Hordeum murinum*), black mustard (*Brassica nigra*) and tumble mustard (*Sisymbrium altissimum*) are also present. Red Brome or Mediterranean Grass Grassland has a State rank of SNA (State Not Recognized) and is therefore not recognized as a sensitive natural community by CDFW (CDFW, 2024a).

**Rubber rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance).** Rubber rabbitbrush scrub is a scrub community dominated by sparse rubber rabbitbrush. Other species such as big sagebrush and four-wing saltbush are also present in low numbers. Much of the understory of the rubber rabbitbrush scrub is dominated by non-native herbs and it is most common in disturbed portions of the Plan area, including the former Amargosa Creek channel. Rubber rabbitbrush scrub has a State rank of S5 and is therefore not recognized as a sensitive natural community by CDFW (CDFW, 2024a).

**Upland Mustard and Star-thistle fields (*Brassica nigra – Centaurea* [S*olstitialis*, *melitensis*] Herbaceous Semi-Natural Alliance).** This upland vegetation type occurs in the western portion of the Plan area. The vegetation type is dominated by non-native annual herbs such as tumble mustard, London rocket (*Sisymbrium irio*), tocalote *(Centaurea melitensis*) and black mustard. This vegetation type surrounds the former Amargosa Creek channel. This habitat also surrounds the single drainage feature on the Plan area which is shown on Figure 3.4-1. This vegetation type is generally found in fallow fields, rangelands, grasslands, roadsides, levee slopes, disturbed coastal scrub, cleared roadsides, and waste places. Upland mustards or star-thistle fields has a State rank of SNA and is therefore not recognized as a sensitive natural community by CDFW (CDFW, 2024a).

**Disturbed/Developed.** This cover types includes disturbed and developed areas within the Plan area including dirt roads, paved roads, concrete flood control structures, old irrigation structures, and other structures. These areas are largely unvegetated and the few plants that are present are weedy species

such as tumble mustard, long-beak filaree (*Erodium botrys*), redstem filaree (*Erodium cicutarium*), and several species of grass.

### 3.4.1.2. Sensitive Natural Communities

One sensitive natural community is present on the Plan area, Joshua tree woodland. Joshua tree woodland has a State rank of S3.2, indicating the community is vulnerable in the state, and is therefore recognized as a sensitive natural community by CDFW (CDFW, 2024a). It is also recognized as a sensitive habitat by the City of Lancaster (City of Lancaster, 2009). This vegetation community is described above.

### 3.4.1.3. Special-Status Plants

Table 3.4-1 lists the special-status plant species from the region and summarizes their habitat and distribution, conservation status, and potential for occurrence on the Plan area. The potential for occurrence of each species is assessed based on the following criteria, but may be modified based on professional judgement of the surveying biologist:

- **Present:** Observed on the Plan area during surveys or previously documented on the Plan area.
- **High:** Documented in the Plan vicinity (within about 5 miles) and suitable habitat found on the Plan area, but not detected on the Plan area during Plan-specific biological surveys.
- **Moderate:** Either documented in the Plan vicinity (within about 5 miles), or suitable habitat found on the Plan area and the Plan area is within species' geographic range.
- **Low:** There are no records in the Plan vicinity (within about 5 miles), the habitat is marginal, or the species is conspicuous and was not detected during biological surveys.
- **Minimal:** There are no records in the Plan vicinity (within about 5 miles) and the area lacks suitable habitat.

A list of species considered but determined to be unlikely to occur in the Plan area is included in Attachment 3 of the Biological Resources Technical Report (Appendix B), along with the rationale for rejecting these species.

**Table 3.4-1. Special-Status Plants Potentially Occurring in the Plan Area**

| Species Name | Habitat Requirements | Flowering or Activity Season | Conservation Status | Potential to Occur Relative to Plan Area |
|---|---|---|---|---|
| *Calochortus striatus* **Alkali mariposa lily** | Perennial bulbiferous herb; alkaline, mesic habitats; chaparral, chenopod scrub, Mojavean desert scrub, meadows and seeps; Prefers loam and sandy loam (moderately saline soils), 229-5,232 ft. elevation.; desert habitats Kern to San Bernardino County and Inyo County, CA; Tulare County., NV. | Apr - Jun | Fed: None<br>CA: S2S3<br>CRPR: 1B.2 | **Low.** Marginal habitat and soils are present within the Plan area. Recent records from within the last 10 years from within roughly 1 mile of the Plan area. |
| *Calystegia peirsonii* **Peirsons morning-glory** | Perennial herb; chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland; 100-5,000 ft. elevation.; Kern, Los Angeles, and Ventura counties. | Apr-Jun | Fed: None<br>CA: S4<br>CRPR: 4.2 | **Low.** Minimally suitable habitat present; records from within 5 miles. Not observed during surveys. Species typically occurs further south in the foothills of the San Gabriel Mountains. |

| Species Name | Habitat Requirements | Flowering or Activity Season | Conservation Status | Potential to Occur Relative to Plan Area |
|---|---|---|---|---|
| *Canbya candida* **White pygmy-poppy** | Annual herb, gravelly; sandy, granitic places within Joshua tree woodland, Mojavean desert scrub and pinyon/ juniper woodland; about 2,000 to 4,400 ft. elevation.; western Mojave Desert and adjacent Sierra Nevada foothills. | Mar-Jun | Fed: None CA: S3S4 CRPR: 4.2 | **Low.** Marginally suitable habitat for the species occurs on the Plan area, but the Joshua tree habitat is degraded. Known to occur south of Lancaster around Lake Los Angeles. |
| *Castilleja plagiotoma* **Mojave Indian paintbrush** | Perennial herb; Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, and pinyon/ juniper woodland; 1,000-8,200 ft. elevation.; San Luis Obispo County south to San Bernardino County | Apr-Jun | Fed: None CA: S4 CRPR: 4.3 | **Moderate.** Suitable habitat is present within survey area; historical records from 1918 within 1 mile. |
| *Chorizanthe parryi* var. *parryi* **Parry's spineflower** | Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 295-4,002 ft. | Apr-Jun | Fed: None CA: S2 CRPR: 1B.1 | **Low.** No recent records of the species in the vicinity of the Plan area. Species typically occurs at lower elevations. |
| *Chorizanthe spinosa* **Mojave spineflower** | Annual herb. The species prefers gravelly or sandy soils (moderately saline), in habitat including deserts, alkali playa, Chenopod scrub, Joshua tree woodlands at elevations between about 1,000 and 4,200 ft. elevation. | Mar-Jul | Fed: None CA: S4 CRPR: 4.2 | **Moderate.** There are many observation records for the species 5 miles north of the Plan area north of Apollo Community Park. Suitable soils occur on site. |
| *Goodmania luteola* **Golden goodmania** | Annual herb; alkaline or clay habitats of Mojavean desert scrub, meadows and seeps, playas, and valley and foothill grassland; 0-7,217 ft. elevation; Occurs in sandy loam. Found from Fresno County to Los Angeles and Inyo Counties, CA and east into Nevada. | Apr - Aug | Fed: None CA: S3 CRPR: 4.2 | **Moderate.** Suitable habitat is present within survey area; historical records from within 1 mile. |
| *Loeflingia squarrosa* var. *artemisiarum* **Sagebrush loeflingia** | Annual herb; found in sandy soils of desert dunes, Great Basin scrub, and Sonoran Desert scrub; 4,625 to 4,920 ft. elevation.; found from Kern and Lassen Counties to Los Angeles and San Bernardino Counties; also present in other states NV, OR, UT, WY. | Apr - May | Fed: None CA: S2 CRPR: 2B.2 | **Low.** Minimally suitable habitat present; historical record from 2005 from within 1.5 miles. Not observed during surveys. Species typically occurs at higher elevation ranges in Kern and San Bernardino Counties. |
| *Lycium torreyi* **Torrey's box-thorn** | Mojavean desert scrub and Sonoran desert scrub. Rocky and sandy areas including washes and streambanks; -165 - 4,005 ft. | Mar - Jun | Fed: None CA: S3 CRPR: 4.2 | **Low.** Suitable habitat present on the Plan area. Not observed during focused surveys and no recent records in the area. |

| Species Name | Habitat Requirements | Flowering or Activity Season | Conservation Status | Potential to Occur Relative to Plan Area |
|---|---|---|---|---|
| *Monardella exilis* **Mojave monardella** | Annual herb. Found in chenopod scrub, desert dunes Native to California. Occurs in loam, sandy loam, or loamy sand. Elevation 2,360 to 7,940 ft.. | Apr-Sept | Fed: None CA: S3 CRPR: 4.2 | **Moderate.** Suitable habitat is present, known from within 5 miles southwest of the Plan area in the vacant land south of Avenue L, adjacent to the former streambed of Amargosa Creek. |
| *Muilla coronata* **Crowned muilla** | Occurs in loam, sandy loam and sand. Prefers very slightly saline soils. Elevation 2,330 to 6,825 feet. | Mar-Apr | Fed: None CA: S3 CRPR: 4.2 | **Low.** Four historical records from as recently as 1991 known from Lancaster within 4 miles of the Plan area. Suitable sandy loam, slightly saline soils on site. |
| *Yucca brevifolia* **Western Joshua tree** | Joshua tree woodland, montane chaparral, pinyon and juniper wood-land, Sonoran and Mojavean desert scrub, 1,300 to 8,200 ft. in elev. Mojave Desert. Blooms Mar-May. | Mar-May | Fed: None CA: **CAN,** SNR CRPR: None | **Present.** A total of 103 trees observed in the Plan area. |

General references (botany): Baldwin et al., 2012; CDFW, 2024a; CDFW, 2024b; CNPS, 2024; and CCH, 2024.

**Conservation Status**

***Federal designations (Fed):*** (federal ESA, USFWS).
- END: Federally listed, endangered.
- THR: Federally listed, threatened.
- **CAN:** Sufficient data are available to support federal listing, but not yet listed.
- BGEPA: Bald and Golden Eagle Protection Act

***State designations (CA):*** (CESA, CDFW)
- END: State listed, endangered.
- THR: State listed, threatened.
- **CAN:** Sufficient data are available to support state listing, but not yet listed.
- RARE: State listed as rare (applied only to certain plants).
- SSC: California Species of Special Concern. Considered vulnerable to extinction due to declining numbers, limited geographic ranges, or ongoing threats.
- WL: Species that were either previously listed as SC and have not been state listed under CESA; or were previously state or federally listed and now are on neither list; or are on the list of "Fully Protected" species.
- FP: Fully protected. May not be taken or possessed without permit from CDFW.
- SA: Special animal. Tracked by the CNDDB as species of conservation concern.

***CDFW Natural Diversity Data Base Designations:*** Applied to special-status plants and sensitive plant communities; where correct category is uncertain, CDFW uses two categories or question marks.
- S1: Fewer than 6 occurrences or fewer than 1000 individuals or less than 2000 acres.
- S2: 6-20 occurrences or 1,000-3,000 individuals or 2,000-10,000 acres (decimal suffixes same as above).
- S3: 21-100 occurrences or 3,000-10,000 individuals or 10,000-50,000 acres (decimal suffixes same as above).
- S4: Apparently secure in California; this rank is clearly lower than S3, but factors exist to cause some concern, i.e., there is some threat or somewhat narrow habitat. No threat rank.
- SNR: Unranked; under assessment.

***California Rare Plant Rank designations.*** Note: According to the California Native Plant Society (http://www.cnps.org/cnps/rareplants/ranking.php), plants ranked as CRPR 1A, 1B, and 2 meet definitions as threatened or endangered and are eligible for state listing. That interpretation of the state Endangered Species Act is not in general use.
- 1B: Plants rare and endangered in California and throughout their range.
- 2B: Plants rare, threatened or endangered in California but more common elsewhere in their range.
- 3: Plants about which we need more information; a review list.
- 4: Plants of limited distribution; a watch list.

***California Rare Plant Rank Threat designation extensions:***
.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Fairly endangered in California (20 80% occurrences threatened)
.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

**Definitions of occurrence probability:** Estimated occurrence probabilities are based on literature sources cited earlier, field surveys, and habitat analyses reported here.

**Present:** Taxon was observed within the Plan area during recent botanical surveys or population has been documented by CDFW, USFWS, or local experts.

**High:** Both a documented recent record (within 10 years) exists of the taxon within the Plan area or immediate vicinity (approximately 5 miles) and the environmental conditions (including soil type) associated with presence of the taxon occur within the Plan area.

**Moderate:** Both a documented recent record (within 10 years) exists of the taxon within the Plan area, or the immediate vicinity (within approximately 5 miles) and the environmental conditions associated with taxa presence are marginal and/or limited within the Plan area, or the Plan area is located within the known current distribution of the taxon and the environmental conditions (including soil type) associated with presence of the taxon occur within the Plan area.

**Low:** A historical record (over 10 years old) exists of the taxon within the Plan area or general vicinity (within approximately 10 miles) and the environmental conditions (including soil type) associated with presence of the taxon are marginal and/or limited within the Plan area.

**Listed Threatened or Endangered Plant Species.** No Federal- or state-listed threatened or endangered plants were observed during the field surveys. However, one state candidate for listing was detected during the field surveys, western Joshua tree (*Yucca brevifolia* var*. brevifolia*). No other listed species or candidates for listing have potential to occur on the Plan area. The Plan area is not within designated critical habitat for any federally listed threatened or endangered plant species (USFWS, 2024b).

Western Joshua tree is a state candidate for listing under the California Endangered Species Act (CESA) and is managed under the Western Joshua Tree Conservation Act (WJTCA) (Fish & Game Code §1927), passed in July of 2023 (CDFW, 2023a). The western Joshua tree is predominantly found in the Mojave Desert, with its northern range extending into Nevada and its southern range extending into the San Gabriel Mountains (USFWS, 2018). They can be found in desert grasslands and shrublands within alluvial fans, plains, bajadas, mesas, and gentle slopes (Gucker, 2006). Western Joshua trees are usually associated with creosote bush and white bursage scrublands at lower elevations (2,461 feet) and with juniper and pinyon woodlands at higher elevations (7,218 feet) (USFWS, 2018). Soils in prime habitat include silts, loams, and/or sands, which are variously described as fine, loose, well drained, and/or gravelly (Gucker, 2006). During surveys 96 live and 7 dead western Joshua trees were observed within the southeastern portion of the Plan area.

**Other Special-Status Plant Species.** No other special-status plants were observed on the Plan area during surveys. However, four CRPR Rank 4 species have a moderate potential to be present on the Plan area: Mojave Indian paintbrush (*Castilleja plagiotoma*), Mojave spineflower (*Chorizanthe spinosa*), golden goodmania (*Goodmania luteola*), and Mojave monardella (*Monardella exilis*). Suitable habitat is present in the Plan area and there are records of these species occurring nearby. Although there is suitable habitat for several additional special-status plant species, their likelihood of occurrence is low (see Table 3.4-1).

### 3.4.1.4. Common Wildlife

Common wildlife species found in the Plan area include side-blotched lizard (*Uta stansburiana*), common raven (*Corvus corax*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), California ground squirrel (*Otospermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*), and black-tailed jackrabbit (*Lepus* californicus). Other wildlife species common in developed landscapes and open sparsely vegetated habitats throughout the region are also likely to be present but were not observed.

### 3.4.1.5. Nesting Birds

Nesting birds are protected under the federal Migratory Bird Treaty Act and California Fish and Game Code. The Plan area has many trees, shrubs, and open areas that may provide nesting habitat for common birds of the region. Four special-status bird species, Cooper's hawk (*Accipiter cooperii*), western burrowing

owl (*Athene cunicularia hypugaea*), Costa's hummingbird (*Calypte costa*), and loggerhead shrike (*Lanius ludovicianus*) may nest in portions of the Plan area.

### 3.4.1.6. Special-Status Wildlife

Table 3.4-2 lists the special-status wildlife species known from the region and summarizes their habitat, conservation status, and potential for occurrence in the Plan area. The potential for occurrence is assessed based on the same criteria as listed under Special-Status Plants above. A list of special-status wildlife considered but determined to be unlikely to occur in the Plan area is included in Attachment 3 of the Biological Resources Technical Report (Appendix B) along with the rationale for excluding each species from further discussion.

**Table 3.4-2. Special-Status Wildlife Potentially Occurring on the Plan Area**

| Species Name | Habitat Requirements | Flowering or Activity Season | Conservation Status | Potential to Occur Relative to Plan Area |
|---|---|---|---|---|
| **INVERTEBRATES** | | | | |
| *Bombus crotchii* **Crotch's bumble bee** | Range extends from coastal California east to the Sierra-Cascade crest, and south into Mexico; common where food plants are abundant which includes Antirrhinum sp., Phacelia sp., Clarkia sp., etc.; nests underground. | Apr-Aug | Fed: None CA: **CAN,** S2 | **High.** Not observed, Suitable habitat and food plants present; record from 2020 within 1 mile northwest of the Plan area near Sunnydale Elementary and a record from 2024 within 2.5 miles of the Plan area at Antelope Valley College. |
| *Danaus plexippus* pop 1 **Monarch (overwintering)** | Insect: occurs throughout much of California and requires milkweeds for caterpillar food. Overwinters in Eucalyptus and other trees along the immediate coast and forages throughout much of California. | Year-round | Fed: **CAN** CA: S2, SA | **Moderate (foraging only).** Suitable foraging habitat present within the Plan area, known from within 2 miles of the Plan area. Overwintering habitat is absent. |
| **REPTILES** | | | | |
| *Anniella pulchra* **Northern California legless lizard** | Moist loose soils, sparsely vegetated areas of chaparral, pine-oak woodland, desert scrub, sandy washes, and stream terraces, suitable habitat has leaf litter under trees and shrubs, can be found under surface objects like logs or rocks. Contra Costa County south to the Ventura County | Year-round | Fed: None CA: S2S3, SSC | **Moderate.** Suitable habitat is present within the Plan area, not observed during surveys, several recent records within 5 miles north of the Plan area (iNaturalist). |
| **BIRDS** | | | | |
| *Accipiter cooperii* **Cooper's hawk** | Raptor found in woodlands of open, interrupted, or marginal types, nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains as well as live oaks. Moves downslope and south from areas of heavy snow in autumn and returns in spring | Year-round | Fed: None CA: S4, WL | **Present.** Observed flying over area during 2020 surveys; suitable foraging and nesting habitat is present but limited. |

| Species Name | Habitat Requirements | Flowering or Activity Season | Conservation Status | Potential to Occur Relative to Plan Area |
|---|---|---|---|---|
| *Aquila chrysaetos* **Golden eagle** | Nests in remote trees and cliffs; forages over shrublands and grasslands; breeds throughout western North America, winters to east coast. | Year-round | Fed: BGEPA CA: SSC, FP | **Minimal (Nesting), Low (Foraging);** No suitable nesting habitat present, Suitable foraging habitat present. Known from several records within 5 miles of the Plan area within the last 5 years. |
| *Athene cunicularia hypugaea* **Western burrowing owl** | Nests mainly in rodent burrows, usually in open grassland or shrubland; forages in open habitat; increasingly uncommon in southern California.; through western United States and Mexico. | Year-round | Fed: None CA: **CAN,** S2, SSC | **High.** Not observed during surveys; Suitable habitat is present; known from within about 3 miles of the Plan area. Evidence of whitewash on 3 burrows detected in 2020. |
| *Buteo regalis* **Ferruginous hawk** | Breeds in open habitats (e.g., grassland), Central Valley and West Mojave Desert (Calif.) and east to central. United States, Southern Canada, New Mexico; winters in South America. lone tree, cliff, utility structure, outcrop, boulder, shrub, knoll, or haystack. Nest height varies considerably, from more than 65 feet high all the way down to ground level. | Winter | Fed: None CA: S3S4, WL | **High (Wintering);** Suitable wintering habitat present, minimal suitable foraging habitat present. Known from several records in the Lancaster area within 5 miles of the Plan area within the last 5 years. |
| *Buteo swainsoni* **Swainson's hawk** | Swainson's hawk favor open habitats for foraging. Breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannahs. They primarily eat mammals and insects. Breeds in open habitats (e.g., grassland), Central Valley and West Mojave Desert (Calif.) and east to central United States, Southern Canada, New Mexico; winters in South America. | Spring–Summer | Fed: None CA: THR, S4 | **Low (Nesting); Present (migration/foraging only).** Suitable foraging habitat present only; migrates through the region. Has been detected several times in the vicinity of the Plan area. Was observed during 2020 surveys flying overhead. |
| *Calypte costa* **Costa's hummingbird** | Primarily occurs in desert wash, edges of desert riparian and valley-foothill riparian, coastal scrub, desert scrub, and low-elevation chaparral. Female Costa's Hummingbirds typically build a nest 3–7 feet above the ground in palo verde, ironwood, cholla, acacia, graythorn, and other shrubs. | Spring–Summer | Fed: None CA: S4 | **High;** Suitable nesting and foraging habitat present. Multiple recent records within 5 miles of the Plan area. |
| *Charadrius montanus* **Mountain plover** | Nest in shortgrass prairie and grassy semidesert with scattered saltbush, sage, prickly pear, and yucca at elevations ranging from 2100-10663 ft. Winter in desert scrub habitats November through March. | Winter | Fed: None CA: S2S3, SSC | **Minimal (Nesting), Low (Foraging);** No suitable nesting habitat present, minimal suitable foraging habitat present. Known from several records within 5 miles southwest of the Plan area. |

| Species Name | Habitat Requirements | Flowering or Activity Season | Conservation Status | Potential to Occur Relative to Plan Area |
|---|---|---|---|---|
| *Circus hudsonius* **Northern harrier** | Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas. Breeds in wetland areas and grasslands with thick vegetation, high desert shrub steppe, and riverside woodlands across Canada. In winter, the species utilizes a wide range of habitats with low vegetation. | Spring–Summer | Fed: None CA: S3, SSC | **Minimal (Nesting), Low (Foraging);** Suitable nesting habitat is absent, suitable foraging habitat present. Known from several records within 5 miles of the Plan area. |
| *Falco columbarius* **Merlin** | Nests near forested openings, fragmented woodlots, near rivers, lakes or bogs, on lake islands, and in urban parks. Will winter in a variety of habitats in Southern California, though an uncommon wintering species in Southern California desert and valleys (breeds in northern North America and Eurasia). Wintering only. | Winter | Fed: None CA: S3S4, WL | **High (Wintering);** Suitable wintering habitat present. Multiple recent records are present within 5 miles. |
| *Lanius ludovicianus* **Loggerhead shrike** | Woodlands, shrublands, open areas with scattered perch sites; not dense forest; widespread in North America; valley floors to about 7,000 ft. elev. year-around. | Spring–Summer | Fed: None CA: S4, SSC | **Moderate.** Suitable nesting and foraging habitat present, and species is known from numerous locations within 5 miles of the Plan area. |
| **MAMMALS** | | | | |
| *Corynorhinus townsendii* **Townsend's big-eared bat** | Coastal conifer and broadleaved forests, oak and conifer woodlands, arid grasslands and deserts, and high-elevation forests and meadows. Primarily roosts in caves and abandoned mines, but may roost in buildings, bridges, rock crevices, and hollow trees in many habitat types. | Year-round | Fed: None CA: S2, SSC | **Minimal (Roosting), Low (Foraging);** suitable roosting habitat is absent and foraging habitat is limited. No recent occurrence records for the species within 10 miles of the Plan area. |
| *Taxidea taxus* **American badger** | Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils; require sufficient food source, friable soils, and open, uncultivated ground; prey on burrowing rodents. | Year-round | Fed: None CA: S3, SSC | **Low**; Minimal suitable habitat present; no sign observed during the survey. Residential and commercial development nearby likely excludes them from the region. |

Key to status codes, designations, and definitions of occurrence probability at bottom of Table 3.4 1.

General references (wildlife): American Ornithologists' Union, 1998 (including supplements through 2013); Barbour and Davis, 1969; CDFW, 2024a; CDFW, 2024d; eBird, 2024; Feldhamer et al., 2003; Garrett and Dunn, 1981; Hall, 1981; Jennings and Hayes, 1994; Stebbins, 2003; Wilson and Ruff, 1999; and Zeiner et al., 1990.

**Listed Threatened or Endangered Wildlife Species.** One state listed species, Swainson's hawk (*Buteo swainsoni*), was observed flying overhead outside the Plan area during the field surveys in 2020. No other Federal- or state-listed threatened or endangered wildlife species were observed. Aside from Swainson's hawk, three candidate species for Federal- or state-listing, western burrowing owl, Crotch's bumble bee, and monarch, also have potential to occur in the Plan area. No other candidate species have potential to occur. There is no designated critical habitat for any federally listed species in the Plan area.

Swainson's hawks are listed as threatened under the CESA (CDFW, 2024a). In California, they nest in the San Joaquin Valley, western Antelope Valley, western Mojave Desert, and Owens Valley. They migrate to South America every fall and return to California every spring. The foraging habitat is relatively open stands of grass-dominated vegetation and relatively sparse shrublands. Trees are typically widely scattered or found in bands along riparian corridors. Much of the original habitat has been converted to either urban development or cultivated agricultural uses. Swainson's hawks forage in agricultural fields with many types of crops. However, some studies have found that this species is more abundant in areas of moderate agricultural development than in either grassland or areas of extensive agricultural development. Alfalfa fields are routinely used by foraging Swainson's hawks. The primary nest trees in the western Mojave Desert are Joshua trees and Fremont cottonwoods (*Populus fremontii*), but other large trees could also be used, especially were planted in narrow bands such as agricultural windbreaks.

Swainson's hawks are observed occasionally in the vicinity of the Plan area during migration; and were observed during the 2020 surveys. Several Swainson's hawks have been reported from the region during the nesting season including observations at the Amargosa Creek Flood Basin to the north, Apollo Park to the northwest, the Prime Desert Woodland Preserve to the west, and numerous records near agricultural lands east of the Plan area (eBird, 2024). The Plan area provides suitable nesting habitat; however, the site receives regular disturbance from the public and recreational vehicles and is surrounded by commercial and residential development. Because of the high level of disturbance that occurs in the Plan area, Swainson's hawks have a low potential to nest and high potential forage within 0.5-miles of the Plan area.

Crotch's bumble bee is a State candidate for listing under the CESA. Crotch's bumble bee is a widespread but secretive species, that has been observed within the vicinity of the Plan area including an observation near Sunnydale Elementary in 2020 and an observation near Antelope Valley College in 2024 (iNaturalist, 2024). Additionally, numerous observations have been made at the Antelope Valley California Poppy Preserve west of Lancaster and at the Phacelia Wildlife Sanctuary east of Lancaster. It is typically found in openings in grassland and scrub habitats where it burrows into the ground and lives in colonies. It feeds on native plants such as milkweed, pincushion, lupine, phacelia, sage, snapdragon, clarkia, bush poppy, and buckwheat, some of which are present within the Plan area and surrounding areas. Crotch's bumble bee has a high potential to occur within the Plan area, as suitable foraging and nesting habitat is present.

Western burrowing owl is State candidate for listing under the CESA and is considered a species of special concern by the CDFW. It is a small, terrestrial owl of open country. During the breeding season, it ranges throughout most of the western U.S. It occurs year-round in southern California, but may be more numerous during fall and winter, when migratory individuals from farther north join the regional resident population. Western burrowing owl favors flat, open annual or perennial grassland or gentle slopes and sparse shrub or tree cover. It uses the burrows of ground squirrels and other rodents for shelter and nesting, and availability of suitable burrows is an important habitat component. Where ground squirrel burrows are not available, the owl may use alternate burrow sites or man-made features such as drainpipes, debris piles, or concrete slabs. The nearest record of western burrowing owl is about 3 miles northwest of the Plan area, less than one mile west of Lancaster High School. No Western burrowing owls were observed on the Plan area; however, whitewash was observed on three suitable burrows within the Plan area during the 2020 surveys. No western burrowing owl sign (e.g., whitewash, pellets) were observed during the 2024 surveys; however, suitable burrows were observed. There is a high potential for western burrowing owls to be present.

Monarch is listed as a candidate species under the Federal Endangered Species Act (ESA). Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. The black border has a double row of white spots, present on the upper side of the wings. Adult monarchs are sexually dimorphic, with males having narrower wing venation and scent patches. The bright coloring of a monarch serves as a warning to predators that eating them can be toxic. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily *Asclepias* spp.).

In many regions where monarchs are present, monarchs breed year-round. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. This migration can take monarchs distances of over 2,000 miles and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again. No suitable wintering habitat occurs in the Plan area. Critical features of winter sites are conifers and eucalyptus groves near water sources. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. The species is not expected to roost in the Plan area but may be observed migrating through the Plan area on their way to over-wintering habitat along the coast. Monarchs have been observed in the vicinity of the Plan area during the fall months and has a moderate potential to occur within the Plan area.

**Other Special-status Wildlife Species.** One special-status species was also observed during the field surveys, Cooper's Hawk (*Accipter cooperii*). In addition, numerous other California Species of Special Concern, CDFW Watchlist Species, Fully Protected species, and Special Animals have at least a moderate potential for occurrence.

Cooper's hawk is a CDFW Watch List species. The species occurs in mature forest, open woodlands, wood edges, river groves; and nests in coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Nest sites are chosen within trees approximately 20 to 50 feet above the ground. The species is found year-round within California. The diet of Cooper's hawks consists primarily of small mammals, such as squirrels and bats, and medium-sized birds such as mourning doves and quail (Kennedy, 1980). Cooper's hawk was observed flying over the area during 2020 Aspen surveys. The Plan area offers limited suitable nesting habitat, but suitable foraging habitat for the species is widespread across the Plan area. The species is not expected to nest within the Plan area but has a high potential to forage within the Plan area.

Other California Species of Special Concern with a moderate or high potential to occur on the Plan area are northern California legless lizard (*Anniella pulchra*) and loggerhead shrike (*Lanius ludovicianus*). One CDFW special animal, Costa's hummingbird (*Calypte costa*), also has a high potential to occur. Two CDFW watchlist species, ferruginous hawk (*Buteo regalis*) and merlin (*Falco columbarius*), have potential to utilize the Plan area for wintering only. The golden eagle (*Aquila chrysaetos*), protected under the Bald and Golden Eagle Protection Act (BGEPA), is classified as both a Fully Protected Species and a California Species of Special Concern. Golden eagles are known from the region including a 2008 observation near 15th Street W and Avenue J, a 2011 observation near Avenue D west of Highway 14, a 2021 observation near Piute Pond, and a 2023 observation near Elizbeth Lake Rd. (iNaturalist.org, 2024). Although no suitable nesting habitat is present, golden eagles have a low potential to occur in the area to forage within the limited suitable habitat available. There is suitable habitat for several additional special-status wildlife species in the area; however, their likelihood of occurrence is either low or minimal because of lack of suitable sheltering, nesting, or foraging habitat (see Table 3.4-2).

### 3.4.1.7. Wildlife Movement

The ability for wildlife to move freely among populations is important to long-term genetic variation and demography. Fragmentation and isolation of natural habitat may cause loss of native species diversity in fragmented habitats. In the short term, wildlife movement may also be important to individual animals' ability to occupy their home ranges, if their ranges extend across a potential movement barrier. These considerations are especially important for rare, threatened, or endangered species, and wide-ranging species such as large mammals, which exist in low population densities.

The Essential Connectivity Map (Caltrans and CDFW, 2010) identifies the Tehachapi Mountains to the north and west of the Plan area (approximately 31 to 35 miles), and the Sierra Pelona Mountains to the

southwest (approximately 10 to 15 miles) as designated essential connectivity areas. These ranges, in addition to a portion of the Edwards Air Force Base (approximate 18 to 22 miles northeast), Saddlerock Butte State Park (approximately 18 miles east), and Los Angeles National Forest in the San Gabriel Mountains (approximately 25 miles south), are considered natural landscape blocks. These areas support the movement of wildlife species between central and northern California with southern California. The PVSP is within a developed area City of Lancaster and the Plan area is not connected to other wildlife areas. The Plan would not present a barrier to any terrestrial wildlife movement or result in a change from existing conditions, which do not provide for wildlife movement between areas.

The Plan area is not located within any identified Essential Habitat Connectivity Areas or Natural Landscape Blocks. The Plan area is more likely to support more localized movement within the region, with some species such as coyotes (*Canis latrans*), black-tailed jackrabbits (*Lepus californicus*), and desert cottontails (*Sylvilagus audubonii)* occupying the Plan area and radiating out into the adjacent development to forage.

#### 3.4.1.8. Jurisdictional Waters and Wetlands

A delineation of jurisdictional waters and wetlands was conducted on July 1, 2024, and concluded jurisdictional waters are present, and are likely to be regulated by the CDFW. At the southwestern corner of the Plan area, west of the Kaiser Permanente Medical Offices, a man-made earthen drainage channel begins flowing north through the Plan area. After traveling approximately 1000 feet through the area, the drainage then empties into a storm drain carrying flows north underground below the Plan area before exiting the area at Avenue K-8. The banks of the deeply incised channel are predominantly vegetated by upland vegetation, except for one Freemont cottonwood (Populus fremontii) in relatively poor condition. Approximately 932 feet of this system was delineated as jurisdictional waters of the State, with 0.13 acres falling under the jurisdiction of the CDFW, and 0.07 acres under the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB). No jurisdictional wetlands or waters of the United States were identified. As State jurisdictional features will be impacted by development activities in this area, developers in this portion of the PVSP will need to obtain a Lake and Streambed Alteration (LSA) permit from the CDFW, and Waste Discharge Requirements (WDR) from the RWQCB as required in Mitigation Measure (MM) BIO-11.

### 3.4.2. Regulatory Setting

#### 3.4.2.1. Federal Regulations

**Federal Endangered Species Act**

The federal ESA and its subsequent amendments protect plants and wildlife (and their habitats) listed as endangered or threatened by the USFWS and National Marine Fisheries Service. Section 9 of the ESA specifically prohibits the taking of ESA-protected wildlife and lists prohibited actions. The ESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 Code of Federal Regulations [CFR] 17.3). The ESA also governs the removal, possession, malicious damage, or destruction of endangered plants on federal land. Pursuant to the requirements of the ESA, an agency proposing a project or reviewing a proposed project within its jurisdiction (action agency) must determine whether any federally listed species may be present in the study area and determine whether the proposed Project will have a significant effect upon such species or its habitat. The action agency is also encouraged to determine whether the project is likely to jeopardize any proposed or candidate species in an effort to avert any potential future conflict.

**Bald and Golden Eagle Protection Act**

The Bald Eagle Protection Act of 1940 (16 U.S.C. 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties

for violation of this Act. Take of bald and golden eagles is defined as follows: "disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior'' (72 FR 31132; 50 CFR 22.3).

The USFWS is the primary federal authority charged with the management of bald and golden eagles in the United States. USFWS guidance on the applicability of current Eagle Act statutes and mitigation is currently under review. On November 10, 2009, the USFWS implemented new rules (74 FR 46835) governing the "take" of golden and bald eagles. The new rules were released under the existing Bald and Golden Eagle Act which has been the primary regulation protection unlisted eagle populations since 1940. All activities that may disturb or incidentally take an eagle or its nest as a result of an otherwise legal activity must be permitted by the USFWS under this act.

### Section 404 of the Clean Water Act

Section 404 of the CWA regulates the discharge of dredged material, placement of fill material, or certain types of excavation within "waters of the U.S." (resulting in more than incidental fallback of material) and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Permits can be issued for individual projects (individual permits) or for general categories of projects (general permits). The definition of federally jurisdictional wetlands and "waters of the U.S." have changed several times recently and the latest interpretation of the CWA is discussed below.

In 2020, the U.S. Environmental Protection Agency (USEPA) updated the CWA and its definition of navigable waters (USACE and USEPA, 2020). The Navigable Waters Protection Rule (NWPR) revised the definition of "Waters of the U.S." to encompass traditional navigable waters; perennial and intermittent tributaries that contribute surface waters flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters. Ephemeral waters were not included in the NWPR definition of "Waters of the U.S." In 2021, the USEPA and USACE were directed by the Biden Administration and the U.S. District Court to vacate the 2020 NWPR and revert to the pre-2020 rule. On January 18, 2023, the USEPA published the "Revised Definition of 'Waters of the United States'" (the January 2023 Rule), with a definition of "Waters of the U.S" that reutilized the 2006 Rapanos ruling's permanent and significant nexus standards.

Most recently on May 25, 2023, the U.S. Supreme Court decision in *Sackett v. Environmental Protection Agency* concluded that the significant nexus standard is inconsistent with the CWA. On August 29, 2023, the USACE and USEPA issued a prepublication of the final rule to amend the January 2023 Rule and define "Waters of the U.S." as follows, once again not including ephemeral waters:

- Traditional navigable waters, the territorial seas, and interstate waters (referred to as "(a)(1) waters").
- Impoundments of "Waters of the U.S.", other than impoundments of waters identified under paragraph (a)(5) (referred to as "(a)(2) waters").
- Tributaries to traditional navigable waters, the territorial seas, and interstate waters that are relatively permanent, standing or continuously flowing bodies of water (referred to as "(a)(3) waters" or "jurisdictional tributaries").
- Wetlands adjacent to and having a continuous surface connection with (a)(1) waters or relatively permanent, standing or continuously flowing (a)(2) waters (referred to as "jurisdictional adjacent wetlands").
- Intrastate lakes and ponds not identified as (a)(1) through (4) waters that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to (a)(1) or (a)(3) waters.

### 3.4.2.2. State Regulations

#### Porter Cologne Water Quality Control Act and Section 401 of the Clean Water Act

The RWQCB regulate activities affecting "waters of the State" according to the Porter-Cologne Water Quality Control Act and Section 401 of the federal CWA. The Porter-Cologne Act defines waters of the State as all surface and subsurface waters (Water Code §13050[e]), including all waters of the U.S. (23 CCR §3831[w]). The RWQCBs may issue permits (called Waste Discharge Requirements or WDRs) or may issue a waiver for a given application. In addition, the RWQCB recently started to implement a new regulatory program for all waters of the State. The Plan area is within the jurisdictional boundaries of the Lahontan RWQCB.

On April 2, 2019, the State Water Resources Control Board (SWRCB) adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Waters of the State are typically delineated based on the ordinary high-water mark (OHWM) in the field as defined by federal guidelines (SWRCB, 2022; see also USACE, 2008) as the limits of jurisdiction. However, waters of the State include isolated waters and need not have downstream surface connection to federally jurisdictional waters. The adopted definition and procedures allow for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland. Based on these criteria, certain unvegetated sites (e.g., mud flats or playas) may be defined as wetlands based on only the soils and hydrology criteria. "Waters of the State" include the following wetland types under the adopted definition:

1. Natural wetlands,
2. Wetlands created by modification of a surface water of the state,
3. Artificial wetlands meeting the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other waters of the State, except where the mitigation is explicitly identified as being of limited duration,
    b. Specifically identified in a water quality control plan as a wetland or other water of the state,
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape,
    d. Greater than or equal to one acre in size, unless it was constructed, and is currently used and maintained, primarily for the following purposes: industrial or municipal wastewater treatment or disposal; sediment settling; management (e.g., detention, infiltration, etc.) of stormwater runoff and other pollutants as part of a stormwater permitting program; surface water treatment; agricultural irrigation or stock watering; fire suppression; industrial processing or cooling; or active surface mining.

The State Definition and Procedures states that an artificial wetland less than one acre in size that does not satisfy the criteria defined in definitions 2, 3.a., 3.b., or 3.c. is not a water of the state.

Section 401 of the CWA requires that:

> *…any applicant for a Federal permit for activities that involve a discharge to "waters of the State," shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.*

Therefore, before the USACE may issue a Section 404 permit, a permittee must apply for and receive a Section 401 Water Quality Certification from the RQWCB. The RWQCB may add conditions to their certification to remove or mitigate potential impacts to water quality standards.

## 3.4.3. Section 1602 of the California Fish and Game Code

Section 1602 of the California Fish and Game Code requires any person, State or local governmental agency, or public utility which proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or use materials from a streambed, or result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake, to first notify the CDFW of the proposed project. Notification is generally required for any project that will take place in a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. CDFW may also exert jurisdiction over storm drains or concrete channels that convey flows from one jurisdictional feature to another. Based on the notification materials submitted, the CDFW will determine if the proposed project may impact fish or wildlife resources.

If the CDFW determines that a proposed project may substantially adversely affect existing fish or wildlife resources, a Lake or Streambed Alteration Agreement (SAA) will be required. A completed CEQA document must be submitted to CDFW before an SAA will be issued.

### Local Regulations and Plans

The PVSP does not conflict with any local regulations, policies, or ordinances concerning biological resources. However, development within the boundaries of the PVSP is subject to the City of Lancaster Ordinance No. 848, Biological Impact Fee, which requires the payment of $770 per acre to help offset the cumulative loss of biological resources in the Antelope Valley as a result of development.

## 3.4.4. Environmental Impacts and Mitigation Measures

This section evaluates the Plan's potential direct and indirect effects to biological resources and describes feasible mitigation measures to reduce these impacts to less-than-significant levels. The impact analysis is based on the biological resources described above and Plan description in Chapter 2.

A significant impact is defined under CEQA as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (State CEQA Guidelines Section 15382). The State CEQA Guidelines define direct impacts as those impacts that result from the project and occur at the same time and place. Indirect impacts are caused by the project but can occur later in time or farther removed in distance and are still reasonably foreseeable and related to the operation of the project. The significance thresholds for biological resources from Appendix G of the State CEQA Guidelines are addressed in the impact analysis that follows. In accordance with these thresholds, a significant impact on biological resources would occur if the Plan would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- 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;

- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

### Impact Assessment Methodology

#### *Environmental Impact Analysis*

**Impact BIO-1: Effects on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.**

Construction of individual projects within the PVSP would result in vegetation removal (including western Joshua Trees) and ground-disturbing activities over a majority of the Plan area, which could directly affect nesting birds, Crotch's bumble bee, western burrowing owls, and other special-status species that have potential to occur. These species may be affected by temporary or permanent loss or modification of habitat, the introduction, or proliferation of invasive species, disturbance from dust, construction noise, vibration, entrapment in constructional materials or excavations, exposure to hazardous substances accidentally released by vehicles or other equipment, and displacement, injury, or morality from project-related construction activities. These activities could also indirectly impact other special-status species by disrupting the potential use of the area for foraging by monarch, golden eagle, Swainson's hawk, and for wintering by merlin and ferruginous hawk. The potential impacts to nesting birds and special-status wildlife, should they occur, would be significant without mitigation. For special-status plants ranked CRPR 4 with potential to occur in the Plan area, these impacts would likely be less than significant, as these species are not listed under the ESA or CESA and are unlikely to be abundant in the Plan area.

**Western Burrowing Owl.** A majority of the Plan area provides suitable habitat for western burrowing owl, especially the northern portion of the area. If western burrowing owl is present within the Plan area, it may be affected by permanent loss of habitat, loss of suitable nesting sites, disturbance from fugitive dust, noise, vibration, and exposure to hazardous substances, which could cause nest failure, injury, or mortality from project-related construction activities, particularly during the removal of vegetation and initial grading. While adult western burrowing owl are likely to flee the Plan area during active disturbances, adults may readily abandon nesting or roosting burrows in response to human disturbance, increasing the likelihood of mortality and/or predation for adults and chicks. Absent mitigation, these impacts would be significant.

If western burrowing owl are present in the Plan area and are either still a candidate for listing or have become a listed species, an Incidental Take Permit (ITP) for this species shall be required to proceed with construction activities. The developer would be required to implement all terms or conditions of the permits and comply with any additional avoidance or mitigation measures that are identified by CDFW.

BIO-1 (Nest Avoidance), MM BIO-2 (Western Burrowing Owl), MM BIO-4 (Pre-construction Surveys and Construction Monitoring) would require protocol-level, focused, and general surveys for nesting birds, western burrowing owls, and special-status wildlife prior to the start of construction activities. Additionally, a qualified biologist would be required to monitor vegetation removal and initial ground-disturbing activities. Implementation of these measures should adequately detect western burrowing owl, active burrows, or nesting activity and respond accordingly (MM BIO-2) to avoid impacts to this species.

Additionally, MM BIO-5 (Worker Environmental Awareness Training) would require the developer to present an environmental-education program to workers on sensitive biological resources which would allow them to recognize these species on the Plan area and know to avoid them. MM BIO-7 (Manage Project Trash), MM BIO-8 (Hazardous Materials Best Management Practices), and MM BIO-9 (Avoid Wildlife Hazards and Entrapment) would further minimize impacts to western burrowing owl by requiring a speed limit, as well as restrictions on trash, dust, and the appropriate handling of hazardous materials to reduce potential harm or mortality to western burrowing owl. With the implementation of these measures, the potential adverse effects to this species would be avoided or minimized to a less-than-significant impact.

**Crotch's bumble bee.** The Plan area provides suitable nesting and foraging habitat for the Crotch's bumble bee and supports numerous food plants. If Crotch's bumble bee is present within the Plan area, it may be affected by permanent loss of foraging habitat and food plants, loss of suitable nesting sites, disturbance from fugitive dust, noise, and possible exposure to hazardous substances, which could cause injury, or mortality from project-related construction activities, particularly during the removal of vegetation and initial grading. While foraging or dispersive individuals may leave the area during disturbance, underground nesting colonies or overwintering queens (Hatfield et al., 2015), if they are present in the area, would be more readily impacted by vegetation removal and initial grading. Absent mitigation, these impacts would be significant.

To minimize impacts to Crotch's bumblebees, each Applicant that may impact Crotch bumblebees would obtain an Incidental Take Permit for this species. The land developer would be required to implement all terms or conditions of the permits and comply with any additional avoidance or mitigation measures that are identified by the CDFW.

MM BIO-3 (Crotch's Bumble Bee) and MM BIO-4 (Pre-construction Surveys and Construction Monitoring) would require protocol-level and general surveys for Crotch's bumble bee and special-status wildlife prior to the start of construction activities. Additionally, a qualified biologist would be required to monitor vegetation removal and initial ground-disturbing activities. Implementation of these measures should adequately detect individuals or nesting colonies of Crotch's bumble bee and respond accordingly to avoid impacts to this species (MM BIO-3).

MM BIO-5 (Worker Environmental Awareness Training) would require the Applicant to present an environmental-education program to workers on sensitive biological resources which would allow them to recognize these species on the Plan area and know to avoid them. MM BIO-6 (Prevent Invasive Weed Introduction) and MM BIO-7 (Hazardous Materials Best Management Practices) would further minimize impacts to Crotch's bumble bee by requiring restrictions on herbicide application and the appropriate handling of hazardous materials to reduce potential harm or mortality to Crotch's bumble bee. With the implementation of these measures, the potential adverse effects to this species would be avoided or minimized to a less-than-significant impact.

**Other Special-Status Raptors.** Several other special-status raptors have at least a moderate potential to occur in the Plan area during construction. These include the State listed Swainson's hawk, the CDFW Watchlist Species Cooper's hawk, ferruginous hawk, and merlin, as well as the California Species of Special concern and Fully protected Species, golden eagle. Suitable foraging, migration, and/or wintering habitat for these species is present; however, none are expected to nest in the Plan area due to the lack of appropriate nesting sites. If these species are present on the Plan area or in the vicinity, they may be affected by the temporary or permanent loss or modification of habitat, reductions in prey availability, or disturbance from fugitive dust, noise, and vibrations. These impacts, should they occur, would be adverse but less than significant because of these species ability to leave the area and utilize other similar habitat that is abundant throughout the vicinity of the Plan area.

**Other Special-Status Birds.** The CDFW Special Animal, Costa's Hummingbird and the CDFW Species of Special Concern, loggerhead shrike, have at least a moderate potential to be occur, as suitable foraging and nesting habitats are present within the Plan area. If present, these species may be affected by the temporary or permanent loss or modification of habitat, reductions in the availability of food resources, or disturbance from fugitive dust, noise, and vibrations. Such disturbances may also result in nest failure for these species. MM BIO-1 (Nest Avoidance) and MM BIO-2 (Pre-construction Surveys and Construction Monitoring) would require the Applicant to identify nests through pre-construction surveys in order to avoid take of active bird nests, either through scheduling of construction activities outside the nesting season or through clearance surveys and implementation of no-disturbance buffers for nesting birds prior to initial ground disturbance and vegetation removal. With implementation of these measures, potential adverse effects would be avoided or minimized and would reduce impacts to these species to a less-than-significant level.

**Monarch.** The monarch is a Federal candidate for listing under the ESA. The species has a moderate potential to occur in the Plan area, as it may travel through the vicinity of the Plan area during migration events. No overwintering habitat, foraging habitat, or host-plants necessary for the reproduction of this species (Walker et al., 2022) are present. This species, should they be present during construction, may be affected by disturbance from fugitive dust, and injury or mortality from project-related construction activities. These impacts, should they occur, would be adverse but less than significant because of the species ability to leave the area and utilize other open spaces in the vicinity of the Plan area for a migration corridor.

**Northern California Legless Lizard.** The northern California legless lizard is a CDFW Species of Special Concern. Some suitable habitat for this species is present in the Plan area and it has a moderate potential for occurrence. This species may be affected by temporary or permanent loss or modification of habitat, disturbance from noise and vibration, entrapment in construction materials or excavations, exposure to hazardous substances, and injury or mortality from project-related construction activities. Absent mitigation, these impacts would be significant.

MM BIO-4 (Pre-construction Surveys and Construction Monitoring) would require pre-construction surveys and biological monitoring during initial impacts. If Northern California legless lizards are found within the Plan area, they will be relocated to nearby open space that provided suitable habitat. Additionally, BIO-9 (Avoid Wildlife Hazards and Entrapment) would further minimize impacts to northern California legless lizard by requiring general avoidance measures for the potential injury or entrapment of wildlife species. With the implementation of these measures, the potential adverse effects to this species would be avoided or minimized to a less-than-significant impact.

**Western Joshua Tree.** Construction activities within the boundaries of the PVSP could also directly impact 96 live western Joshua trees and 7 dead western Joshua trees, requiring their removal. No individual western Joshua trees were identified within 50 feet of the Plan area boundary, so indirect impacts to western Joshua tree or its seedbank are not expected to occur. To ensure compliance with the California Endangered Species Act (CESA) and the Western Joshua Tree Conservation Act (WJTCA), an ITP will need to be obtained from the CDFW for the loss of western Joshua tree and their habitat within the Plan area. If the California Fish and Game Commission decides not to list western Joshua tree under CESA, and the CDFW determines that the species' status is secure and does not require an ITP to remove under the WJTCA in the future, these permits will no longer be required. In addition to the potential direct impacts to nesting birds and special-status species from vegetation removal, the removal of western Joshua trees would also result in the loss of habitat for various associated common and special-status wildlife species, including loggerhead shrike, small mammals, reptiles, generalist pollinators, and the specialist pollinator of western Joshua trees, the yucca moth (*Tegeticula synthetica*). The Joshua tree woodland in the Plan area is already visibly degraded by the presence of non-native vegetation, homeless encampments, and non-project-related human activities, such as off-road driving, trash dumping, etc.. Although the direct and indirect impacts to this sensitive community from project activities will be adverse, the poor condition

of the Joshua tree woodland on the Plan area, along with the small acreage of impacted habitat compared to the communities' broad and relatively abundant distribution across the Mojave Desert, suggests that this impact would be less than significant.

With implementation of MM BIO-1 through MM BIO-9 (which require pre-construction surveys for nesting birds, western burrowing owls, Crotch bumble bee, and other special-status wildlife species, construction monitoring during vegetation removal, Worker Environmental Awareness Training, prevention of invasive weed introduction, trash management, hazardous materials best management practices, and avoidance of wildlife hazards and entrapment) implementation of the PVSP would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species. This is because measures would be implemented to mitigate, avoid, and minimize potential impacts to a less-than-significant level. In addition, the development within the boundaries of the PVSP would be subject to Ordinance No. 848, Biological Impact Fee, which requires the payment of $770 per acre to help offset the cumulative loss of biological resources in the Antelope Valley as a result of development. Therefore, the PVSP would have a less-than-significant impact with mitigation incorporated.

### Mitigation Measures

**MM BIO-1** **Nest Avoidance.** A nesting bird and raptor survey shall be conducted by a qualified biologist within 7 days prior to the start of construction/ground disturbing activities. The qualified biologist shall survey the entire project site and areas within a biologically defensible buffer zone surrounding the project site. If project activities are delay or suspended for more than 7 days during the nesting season, the nesting bird and raptor survey shall be repeated. If active bird nests are identified during the survey, the species shall be identified, and a no-disturbance buffer shall be established around the active nest. At a minimum, a buffer of 500 feet around active raptor nests and 100 feet around other migratory bird species nests shall be established. Personnel working on the project, including all contractors working onsite, shall be instructed on the presence of nesting birds, restricted areas, and adherence to no-disturbance buffers. A qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the "no-disturbance" buffer disturbs the birds and if the buffer shall be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.

**MM BIO-2** **Western Burrowing Owl.** A pre-construction burrowing owl clearance survey shall be conducted no more than 14 days prior to any vegetation removal or ground disturbing activities to avoid impacts to burrowing owls and/or occupied burrows. The pre-construction clearance survey shall be conducted by a qualified biologist and in accordance with the methods outlined in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012). Documentation of surveys and findings shall be submitted to the City of Lancaster for review and file. If no burrowing owls or occupied burrows are detected, project activities may begin, and no additional avoidance and minimization measures shall be required.

If an occupied burrow is found outside, but within 500 feet, of the development footprint, the qualified biologist shall establish a "no-disturbance" buffer around the burrow location(s). The size of the "no-disturbance" buffer shall be determined in consultation with CDFW and be based on the species status (i.e., breeding, non-breeding) and proposed level of disturbance. If an occupied burrow is found within the development footprint,

the qualified biologist shall prepare an Impact Assessment and Burrowing Owl Mitigation Plan in accordance with the 2012 Staff Report on Burrowing Owl Mitigation. The project applicant shall contact CDFW to develop appropriate mitigation and management procedures and a final Burrowing Owl Mitigation Plan shall be submitted to the City and CDFW for review and approval prior to project activities.

If burrowing owl presence is confirmed, the project applicant shall offset impacts by acquiring CDFW-approved mitigation lands for the species. The potential mitigation land shall have the following: 1) have presence of burrowing owl; 2) replace the impacted burrowing owl habitat at a minimum of 2:1 ratio to ensure no net loss of habitat; and 3) be of equivalent or greater habitat value than that of the project site. Prior to acquisition of potential mitigation land, the project applicant shall provide CDFW with the appropriate documentation for property eligibility. Requested documentation may include, but is not limited to, a biological report, preliminary title report, mineral risk assessment report, and Phase I Environmental Assessment report. Following CDFW written approval of potential mitigation land, the project applicant shall protect the land in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094. Recordation of the conservation easement shall occur prior to commencement of project activities. An appropriate endowment, to be determined by CDFW, shall also be provided for the long-term monitoring and management of mitigation lands.

Each applicant or developer that has a potential to impact western burrowing owl would need to obtain an Incidental Take Permit from CDFW to ensure compliance with the California Endangered Species Act.

**MM BIO-3** **Crotch's Bumble Bee.** Protocol-level surveys in the appropriate season (CDFW, 2023c) shall be conducted for Crotch's bumble bee prior to the commencement of any ground-disturbing activities. If foraging individuals are found on a project site, a biologist will monitor construction activities to ensure that bees are not impacted by construction activities, vehicles, or any other potential activities. If a nesting colony is identified on the project site, a buffer encompassing the nest and adequate foraging resources will be established by a qualified biologist. The no-activity buffer shall be maintained until the end of flight season or once the nest is deemed inactive and unoccupied by a qualified biologist. If the nest is unavoidable, the Applicant will obtain an Incidental Take Permit from CDFW for impacts to this species. If the California Fish and Game Commission decides not to list Crotch's bumble bee under CESA, this measure will no longer be required.

**MM BIO-4** **Pre-construction Surveys and Construction Monitoring.** To avoid or minimize impacts to Northern California legless lizard, loggerhead shrike, monarch, golden eagle, Swainson's hawk, Cooper's hawks, ferruginous hawk, merlin, and Costa's hummingbird, Applicants will assign one or more qualified biological monitors to conduct a pre-construction biological survey and monitor all initial ground-disturbing activities and vegetation removal within each specific portion of the Plan area. The pre-construction survey shall be conducted within 72 hours prior to the start of construction activities in any given portion of the Plan area. The qualified biologist shall survey the proposed impacts areas and a 50-foot buffer. The pre-construction surveys shall incorporate appropriate methods and timing to detect these species, including individuals that could be concealed in burrows, beneath leaf litter, or in loose soil. If a special-status species is found, the qualified biologist shall contact CDFW, and the species shall be passively ushered out of harm's way to an area that is unaffected by the project. If the project requires any of the above-listed species to be removed, disturbed, or otherwise handled, the qualified biologist shall

obtain all appropriate permits and prepare a list or plan of proper handling and passive relocation protocols. The list or plan of protocols shall be implemented during project construction activities and biological construction monitoring. The qualified biologist shall coordinate with CDFW to prepare a relocation plan which shall be submitted to CDFW for review and comment prior to implementing project ground-disturbing activities.

Monitors will be responsible for ensuring that impacts to special-status wildlife species are avoided to the extent possible. Monitors will also inform on-site construction personnel of applicable mitigation measures, environmental commitments, permit conditions, and any potential for infraction. Once vegetation removal and initial ground disturbance are completed, and no nesting birds or special-status wildlife species are present on site, a qualified biological monitor will no longer be required to oversee construction activities.

**MM BIO-5** **Worker Environmental Awareness Training.** Prior to construction, a personnel education program shall be conducted in reference to all sensitive environmental resources potentially affected by site work and the measures associated with their protection (i.e., mitigation measures and applicable laws and regulations).

**MM BIO-6** **Prevent Invasive Weed Introduction.** Construction equipment shall be cleaned of mud or other potential sources of weed seeds before it arrives at the project site. Only weed-free straw or mulch will be used. In addition, if problematic weed species are detected in specific portions of the Plan area prior to construction activities, the Applicant will have a licensed herbicide applicator apply herbicide to the treat and weed species in a manner that minimizes risk to wildlife and non-target vegetation.

**MM BIO-7** **Manage Project Trash.** All trash and food-related waste shall be contained in vehicles or covered trash containers inaccessible to ravens, coyotes, or other wildlife and removed from the site on a regular and reoccurring schedule.

**MM BIO-8** **Hazardous Materials Best Management Practices.** No raw cement, concrete or washings thereof, asphalt, paint, oil, solvents, or other petroleum products, pesticides, or any other substances that would be hazardous to vegetation or wildlife resources, will be disposed of on-site or allowed to spill onto soil. Spills or leaks of such substances will be promptly corrected and cleaned up according to applicable requirements. Vehicles will be properly maintained to prevent spills or leaks.

**MM BIO-9** **Avoid Wildlife Hazards and Entrapment.** Potential wildlife pitfall (trenches, bores, or other excavations) shall be securely covered at the end of each workday and backfilled at the completion of work. If covering is not feasible, these potential pitfalls will be sloped at a 3:1 ratio at the ends as wildlife escape ramps. Project workers or construction monitors will inspect all potential pitfalls daily.

All pipes or other construction materials or supplies will be covered or capped in storage or laydown areas. No pipes or tubing will be left open either temporarily or permanently, except during use or installation. Any construction pipe, culvert, or other hollow materials will be inspected for wildlife before it is moved, buried, or capped.

Project-related vehicle access, construction activities, and equipment storage will be restricted to established roads, designated access roads, construction rights-of-way, and designated construction, storage, staging, and parking areas. Off-road traffic outside of these designated areas will be prohibited.

**MM BIO-10** **Western Joshua Tree.** Applicants that may impact western Joshau trees within the Plan area will comply with the WJTCA. Applicants will obtain an Incidental Take Permit (ITP)

from CDFW that accounts from the loss of all live and dead western Joshua trees within the specific portion of the Plan area. The Applicants will comply with all (ITP) permits conditions.

**Impact BIO-2: Effects on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.**

Based on the series of focused biological surveys conducted in April 2020 and 2024, as well as site visits on May 8, and July 1, 2024, vegetation and cover types within the Plan area include native desert shrubland, Joshua tree woodland, fields of non-native grasses and forbs, and disturbed or developed areas.

Natural communities on the Plan area include the following: Big Sagebrush Scrub, Joshua tree woodland, Non-native red brome/Mediterranean grass grassland, rubber rabbitbrush scrub, upland mustard and star-thistle fields, and disturbed/developed. These communities are described in detail in Section 3.4.1.1.

The Plan area lacks riparian habitat, and Joshua tree woodland is the only sensitive natural community present. The development within the boundaries of the PVSP would directly and permanently impact all 2.94 acres of Joshua tree woodland from construction activities. These include vegetation removal, mass grading, paving and compaction of natural substrates, and the establishment of permanent structures during construction. The removal of Joshua woodland would result in the loss of sheltering, nesting, and foraging habitat for many common and special-status wildlife species, including loggerhead shrike, small mammals, reptiles, pollinating insects, and several species of raptor. Additionally, this habitat supports several special-status plant species, including white pygmy-poppy, Mojave Indian paintbrush, and Mojave spineflower, each of which have at least a moderate potential to occur in the area. While these species were not observed, the removal of Joshua tree woodland could result in their direct impact and contribute to the overall decline of suitable habitat for them, and other species associated with this habitat type. No individual western Joshua trees were identified within 50 feet of the Plan boundary, so indirect impacts to Joshua tree woodland are expected to occur from the PVSP.

The Joshua tree woodland in the Plan area is already visibly degraded by the presence of non-native vegetation, homeless encampments, and non-Project-related human activities, such as off-road driving, trash dumping, and the felling of individual western Joshua trees. Although the direct and indirect impacts to this sensitive community from project activities will be adverse, the poor condition of the Joshua tree woodland on the Plan site, along with the small acreage of impacted habitat compared to the communities' broad and relatively abundant distribution across the Mojave Desert, suggests that this impact would not be significant. Therefore, the Plan's overall impact on sensitive communities as identified in local or regional plans, policies, and regulations or by the CDFW or USFWS are likely to be less than significant.

**Impact BIO-3: Effects on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.**

The delineation of jurisdictional features in the Plan area identified one State jurisdictional feature. No federal jurisdictional features or wetlands are present at the Plan area. Projects affecting waters of the State are subject to permitting under the California Fish and Game Code and the Clean Water Act. Each project applicant must prepare and submit appropriate applications, notifications, and fees to the CDFW (according to Sections 1600-1616 of the California Fish and Game Code), and the RWQCB (according to Section 401 of the CWA).

Future project construction may permanently impact one small drainage not exceeding 0.13 acres. Portions of this feature could lose function entirely while others may still convey water but would no longer be vegetated or provide habitat for wildlife. This feature is present in a disturbed and developed

landscape located within the City of Lancaster. Although this feature is a remnant tributary of Amargosa Creek, it has been artificially channelized and is highly modified. The channel is deeply incised and does not readily support wetland habitat or riparian vegetation. Instead, it is dominated by upland species, including non-native grasses and herbs. Because of this, it is unlikely to support ecological functions similar to even small patches of riparian habitats. Therefore, the impacts to 0.13 acres and 0.07 acres of State waters, under the jurisdiction of the CDFW and the Lahontan RWQCB, respectively, are expected to be less than significant with mitigation incorporated.

### Mitigation Measures

**BIO-11** **Regulatory Permits.** Applicants that may impact the jurisdictional drainages within the Plan area, specifically the mapped feature west of the Kaiser Permanente Medical Offices, will need to obtain regulatory permits from resources agencies as applicable. Based on current regulations, this is expected to include obtaining a LSA from the CDFW and a WDR from the RWQCB. Permitting with the USACE is not expected but may change as regulations from the federal government changes. No impacts to the mapped feature will occur without obtaining the proper permits.

**Impact BIO-4: Effects on native wildlife movement, established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites.**

The California Essential Habitat Connectivity Project was commissioned by the California Department of Transportation (Caltrans) and CDFW to create a statewide assessment of essential habitat connectivity to be used for conservation and infrastructure planning (Caltrans and CDFW, 2010). One of its goals was to create the Essential Connectivity Map, which depicts large, relatively natural habitat blocks that support native biodiversity (natural landscape blocks) and areas essential for ecological connectivity between them (essential connectivity areas). The Plan area is not identified on the Essential Connectivity Map. In addition, no perennial water bodies are located on the Plan area.

Except to the south, lands around the PVSP area are largely developed. While the Plan area is not within any designated wildlife corridors, the Plan area may provide localized wildlife movement within the region. The Plan area is likely to be used as a forage or dispersal area for wildlife in the immediate vicinity. In addition, the Plan area has many shrubs and open areas that may provide nesting habitat. Numerous common species of birds are known to nest in the region and are likely to nest in the Plan area. Regardless, development within the boundaries of the PVSP would not interfere substantially with the movement of wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Therefore, the project would have a less-than-significant impact.

**Impact BIO-5: Conflicts with local policies or ordinances protecting biological resources.**

The PVSP would not conflict with any local policies or ordinances, such as a tree preservation policy, protecting biological resources. Development projects within the Plan area would be subject to Ordinance No. 848, Biological Impact Fee, which requires the payment of $770 per acre to help offset the cumulative loss of biological resources in the Antelope Valley as a result of development. This fee is required of all projects occurring on previously undeveloped land regardless of the biological resources present and is utilized to enhance biological resources through education programs and the acquisition of property for conservation. The Lancaster Municipal Code does not include any other policies or ordinances that protect biological resources in the Plan area. Therefore, no impact would occur.

**Impact BIO-6: Conflicts with adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plans.**

No Habitat Conservation Plans or Natural Communities Conservation Plans have been adopted for the Plan area or vicinity (CDFW, 2024c). No other local, regional, or State habitat conservation plan have been approved for the Plan area and surrounding area. The West Mojave Coordinated Habitat Conservation Plan only applies to federal land, specifically land managed by the Bureau of Land Management. In conjunction with the Coordinated Managed Plan, a Habitat Conservation Plan was proposed which would have applied to all private properties within the Plan Area. However, this HCP was never approved by the California Department of Fish and Wildlife nor was it adopted by the local agencies (counties and cities) within the HCP area. As such, implementation of the PVSP would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, no impacts would occur.

## 3.4.5. Cumulative Impact Analysis

### Geographic Extent

The geographic extent for the analysis of cumulative impacts related to biological resources is limited to the Plan area and the immediate vicinity surrounding the area. These geographic limits are appropriate to consider the potential cumulative impacts as impacts associated with the PVSP are limited to the Plan area and immediately adjacent properties and biological resources. Similar impacts of other past, present, and reasonably foreseeable future projects that would have the potential to occur would be limited to their respective project sites and immediately adjacent properties.

### Cumulative Effects of the Proposed Project

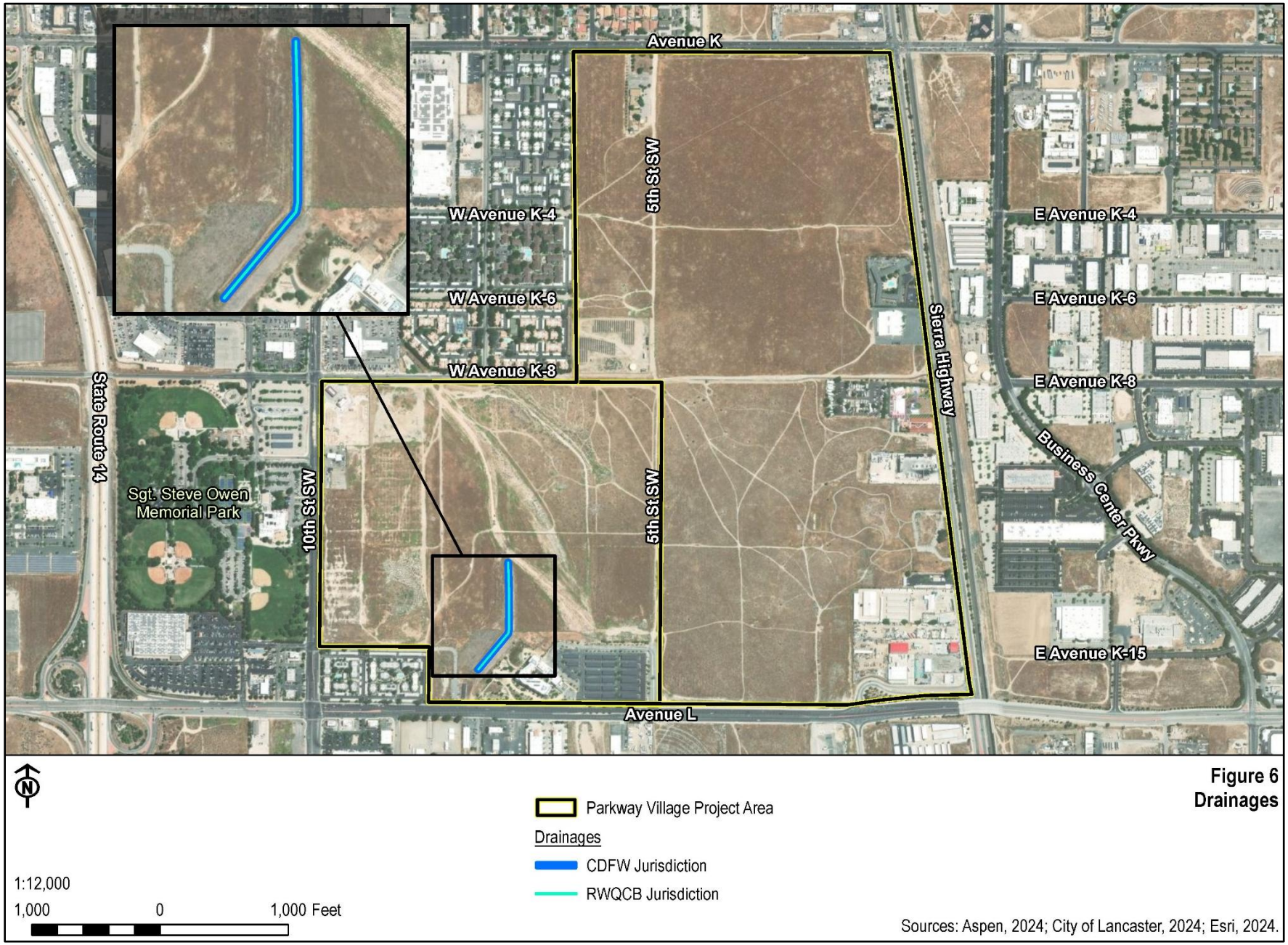
As discussed in Subsection 3.4.4, several special-status plants and wildlife species are present or have a potential to be present within the Plan area. These include western Joshua tree, Mojave Indian paintbrush, Mojave spineflower, golden goodmania, Mojave monardella, monarch, western burrowing owl, Crotch's bumble bee, golden eagles, northern California legless lizard, loggerhead shrike, Swainson's hawk, Cooper's hawks, Ferruginous hawk, merlin, and Costa's hummingbird. These species occur elsewhere in the Antelope Valley and in the vicinity of the Plan area, but extensive habitat is still present in the region. Any other projects in the region would also need to comply with applicable federal, state, and local regulations.

As discussed in Subsection 3.4.4, riparian vegetation is absent from the Plan area, but one sensitive natural community is present. Joshua tree woodland is present but sparse within the Plan area but is abundant in the region, therefore no cumulative impacts are expected. Federally protected wetlands are absent within the Plan area and therefore no cumulative impacts are expected. Construction activities are not expected to impact wildlife movement or impede the use of native wildlife nursery sites; therefore, no cumulative impacts are expected. Additionally, construction activities will have no impacts to local policies or ordinances protecting biological resources or conflict with adopted Habitat Conservation Plans and Natural Community Conservation Plans. Therefore, the PVSP's potential to contribute to a cumulatively impact associated with biological resources would not be considerable.

## 3.4.6. Level of Significance After Mitigation

Compliance with applicable regulations would avoid any conflict with local policies or ordinances protecting biological resources, resulting in a less-than-significant impact. The development within the PVSP would have a less-than-significant impact on wildlife movement and the use of wildlife nursery sites. All other significant impacts would be reduced to a less-than-significant level with implementation of mitigation measures.

**Figure 3.4-1. Drainages**



# 3.5. Cultural Resources

Cultural resources reflect the history, diversity, and culture of the region and people who created the resources. They are unique in that they often are the only remaining evidence of activity that occurred in the past. Cultural resources can be natural or built, purposeful or accidental, physical or intangible. They encompass archaeological, traditional, and built environmental resources, including buildings, structures, objects, districts, and sites. This section evaluates the potential impacts of implementation of the PVSP to these resources.

The following discussion is based on the confidential cultural resources technical report prepared for the PVSP: *Cultural Resources Assessment for the Parkway Village Project* (DeOliveira et al., 2024), unless otherwise referenced.

## 3.5.1. Environmental Setting

### Natural Setting

The Plan area is within the Antelope Valley portion of the western Mojave Desert. The Antelope Valley represents an extremely large, nearly flat physiographic feature consisting of amalgamated alluvial fans formed over thousands of years from the surrounding mountains. The southern border is comprised of the Sierra Pelonas, which give way to the San Gabriel Mountains at Soledad Pass (marking the Antelope Valley's midpoint) and continues to the east, while the Tehachapi Mountains form the northern boundary. Both ranges meet at the western tip of the Antelope Valley and contribute to climate patterns that form the desert climate of the region. The Antelope Valley is considered "high desert," with elevations of around 3,050 ft. above mean sea level (amsl) in the southern foothills, and roughly 2,270 ft. amsl along the playas of Rosamond and Rogers Dry Lakes.

Amargosa Creek runs through southwestern portion of the Plan area. Amargosa Creek, which was undergrounded in the Plan area in 2008/2009, is known to be a source of resources for the native peoples of this area of the high desert (Earle, 2005); (Sutton, Et Al, 2011).

### Precontact Setting

Southern California's desert region has a long history of human occupation. Precontact material culture within this region has been organized according to periods or patterns that define technological, social, economic, and ideological elements. Within these periods, archaeologists have defined a chronology specific to the prehistory of the desert region, including the Plan area.

The Mojave Desert region is divided into four major periods; Paleoindian Period, Lake Mojave Period, Pinto Period, and the Late Holocene which includes the Gypsum, Rose Springs, and Late Precontact complexes, the time periods of which are presented in calibrated years before present (BP) or Common Era (CE). Each of these is briefly described below.

#### *Paleoindian Period (>10,000 to 8,000 BP)*

The only cultural complex dating to the Pleistocene that has been confidently identified in the Mojave Desert is Clovis (10,000 to 8000 years BP). It is marked by the characteristic fluted projectile points of the same name. Fluted points appear more often in the north and west than in other sectors of the Mojave, with concentrations in the drainage basins of Pleistocene China Lake and Thompson Lake. These are areas of substantial external stream runoff that would have been well watered into the Early Holocene. The nature of Paleo-Indian cultural systems remains poorly defined, but they were probably a highly mobile people, living in small, temporary camps near permanent water sources.

### *Lake Mojave Period (8,000 to 5,000 BP)*

Most Lake Mojave Period sites within the northern Mojave Desert and southwestern Great Basin are early Holocene lakeshore occupations. Sutton stated that the subsistence strategy during this period was presumably one of hunting and utilization of lacustrine resources. The best examples of sites from this period are associated with the shoreline of Pleistocene Lake Mojave. Artifacts include percussion-flaked foliate points and knives, Lake Mojave and Silver Lake projectile points, and an unspecialized tool kit of scrapers, gravers, and perforating tools. Extra local materials are common and suggest extensive annual foraging ranges; marine shell beads likewise imply wide spheres of interaction. Small numbers of groundstone implements occur regularly within these components, although wear on these tools is often light and suggests there was little reliance on vegetal resources.

### *Pinto Period (5,000 to 2,000 BP)*

The Pinto complex has the most widespread expression of any of the early cultural complexes. There appears to be a broad continuity in the flaked stone technologies of the Lake Mojave and Pinto complexes, both of which are characterized by extensive use of stones tools, and by the regular use of bifacial and unifacial core/tool forms. The signature stemmed, indented-base Pinto series projectile points show high levels of blade reworking and appear to have used the tips for thrusting spears rather than as darts. Reduced stone tool diversity may indicate a reduction in foraging range, meanwhile the continuing presence of marine shell indicates regular interaction with coastal groups.

The most important distinction between the Lake Mojave and Pinto assemblages relates to the prevalence of ground stone implements. Milling tools are moderately abundant in nearly all known Pinto deposits and sometimes occur in high frequency. This is a characteristic of a subsistence shift that occurred during this period, with a great focus on the exploitation of plants. Revised dating indicates that intensive levels of plant processing began by about 7,000 years BP. This coincides with the emergence of similar economies along the coast.

### *Late Holocene; Gypsum Complex (2,000 BP to 1,800 BP)*

The Gypsum complex is defined by the presence of a range of corner-notched (Elko), concave base (Humboldt) and well-shouldered contracting-stemmed (Gypsum) point forms. The most confounding aspect of the Gypsum complex is its evident scarcity in the southern and eastern reaches of the desert. The Gypsum complex emerged during a time when conditions were somewhat wetter and cooler than during the Middle Holocene. During the early part of this complex, it is thought that settlement and subsistence were centered near streams. At the same time, it appears that there were increases in trade and social complexity. Gypsum sites are more numerous than those of preceding occupations and are found over a more diverse array of locations. Artifact assemblages include evidence of ritual activities including quartz crystals, paint and rock art, as well as numerous bifaces. Exploitation of deer, jackrabbits, cottontails, and rodents is also evident.

### *Late Holocene; Rose Springs Complex (1,800 BP to 900 BP)*

The Rose Springs complex is marked by the regional appearance of the bow and arrow beginning about 200 CE. Common artifacts include Eastgate and Rose Springs series projectile points, stone knives, drills, pipes, bone awls, various milling implements, marine shell ornaments, and large quantities of obsidian. Rose Springs sites are commonly found near springs, along washes, and sometimes along lakeshores. Evidence of architecture includes wickiups, pit houses, and other types of structures suggesting intensive occupation. Populations in the desert appear to have reached their peak during this time. Most of the obsidian has been sourced to the Coso Volcanic Field demonstrating either travel to the southern Owens Valley or trade with people living in that vicinity. Animal exploitation was dominated by the use of jackrabbits, rabbits, and rodents. As lakes began to dry up, settlement patterns seem to have shifted from

association with permanent water sources to more ephemeral ones. By approximately 1100 CE, Numic and Takic speaking began to spread across much of the Great Basin.

Projectile points from this period include the Rose Spring, Cottonwood, and Desert Side-Notched series. It has been argued that assemblages with Cottonwood points and no Desert Side-Notched points represent an earlier occupation than sites with both Cottonwood and Desert Side-notched points and that the earlier occupation is associated with the Hakataya influence from the Southwest. In the western Mojave Desert, diagnostic materials from this period include various types or examples of poorly understood brownware pottery and desert side notch series projectile points.

### *Late Holocene; Late Precontact Complex (900 BP to Contact)*

After about 1100 CE, environmental conditions continued to deteriorate, populations appear to have declined, new technologies were introduced, and several separate cultural complexes emerged that are believed to represent the precontact aspects of known ethnographic groups. Late Precontact occupation sites represent a variety of types including a few major villages with associated cemeteries, special purpose sites, and seasonal sites. Artifact assemblages consist of Desert Side-notched series projectile points, buffware and brownware ceramics, shell and steatite beads, slate pendants, incised stones and a variety of milling tools. Obsidian use dropped off, while the use of cryptocrystalline silica increased.

This period reflects a continuation of cultural developments established during the previous period, but with adaptive modifications. Trade along the Mojave River likely affected the people of the eastern Antelope Valley, allowing active groups to acquire considerable amounts of wealth. Socioeconomic and sociopolitical organizations continued to increase in complexity. However, most Antelope Valley groups appear to have developed stronger ties with coastal groups rather than those of the eastern desert and Great Basin. By approximately 1300 CE, the Hakataya expansion reached its western extreme. Warren interprets the paucity of ceramic ware in Antelope Valley village sites as evidence that Hakatayan influence upon local groups was minimal.

## Historic Setting

### *Spanish Period (1542 to 1821)*

In 1542, Spanish exploration of the California coast began with the expedition of Juan Rodríguez Cabrillo, whose crew first came ashore at the present-day harbor of San Diego. Cabrillo's expedition then sailed north to the Los Angeles area, passing San Pedro Bay. Cabrillo visited Santa Catalina Island during this time and made peaceful contact with the native inhabitants present there. In 1602, another Spanish expedition led by Sebastián Vizcaíno also had a peaceful encounter with the Tongva on Catalina Island. While these early Spanish expeditions and others made initial contact with the local Native Californians and facilitated trade networks, Spanish colonization did not fully commence until 1769 with the expeditions of the Franciscan administrator Junipero Serra and the Spanish military, under the command of Gaspár de Portola in San Diego. The encounters continued to be peaceful, but conflicts would arise soon after. In 1772, Padro Fages, with a small force of Spanish soldiers became the first Europeans to set foot in the Antelope Valley.

These expeditions preceded the Spanish missionization efforts, which involved the establishment of 21 California Missions whose purpose was to “convert” the Native Californians to Catholicism within 10 years, and then return the mission lands to them. To support the Spanish settlements, missions used Native Californians to work on the local farms and ranches. The San Fernando Mission was the seventeenth mission founded in California in September of 1797 in present-day Mission Hills, Los Angeles County, California by Father Fermín Lasuén. The Mission’s influence extended into the traditional home of the Tataviam people, which greatly affected their traditional way of life. By 1810, nearly all of the Tataviam had been baptized at the San Fernando Mission and by 1834 the descendants of the missionized Tataviam

had married into other groups within the Mission or in the Tejon region. Interestingly, during the post-mission period, the Tataviam intermarried with the Kitanemuk, despite having been described as "foreign" to each other at the time of European contact.

From 1784 to 1821, land grants were given out to wealthy Hispanic settlers as concessions from the Spanish Crown, giving settlement and grazing rights on specific tracts of land while the crown retained the title. Within the Los Angeles, Orange, Riverside, and San Bernardino Counties, eleven main ranchos were established containing numerous subdivisions. The primary use of these lands was for cattle and sheep ranching.

### *Mexican Period (1821 to 1848)*

The year 1821 marks the beginning of the Mexican Period and is concurrent with Mexico's independence from Spain. Mexico became California's new ruling government, and at first little changed for California Native Americans. The Franciscan missions continued to utilize the unpaid labor the natives provided, despite the Mexican Republic's 1824 Constitution that declared Indians to be Mexican citizens. This monopoly of Native American labor by a system that accounted for nearly one-sixth of the land in the state angered the newly land-granted colonial citizens. During this period, extensive land grants were established in the interior regions to spread the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary Southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of non-native inhabitants increased during this period because of the influx of explorers, trappers, and ranchers.

Independence from Spain in 1821 also brought an end to the ban on foreign trade in California. This brought merchants and immigrants to the state, and whaling became an important industry in Southern California. By 1840, Los Angeles had become the most populated area in Southern California. After 1834, during the secularization of the missions, plots of land were carved out of the mission lands and sold to individuals. The ranchos replaced the missions as California's primary land institutions. Rather than returning land to Native Americans, the Mexican government allowed the padres to keep the church, priests' quarters, and gardens of each mission.

During the Mexican-American War, the Mexican army defeated U.S. forces at the Battle of the Old Woman's Gun in Dominguez Hills, the Battle of Chino, and the Siege of Los Angeles south of the Plan area. But the hope of a Mexican victory faded, and the Mexican forces surrendered in exchange for pardons at Cahuenga in January 1847. This ended the resistance to the U.S. takeover of the territory and ushered in the American Period.

### *American Period (1847 to Present)*

In February 1848, California became a U.S. holding with the signing of the Treaty of Guadalupe Hidalgo. This treaty ended the Mexican-American War and ceded much of the southwest (California, Nevada, Utah, and portions of Arizona, New Mexico, Colorado, and Wyoming) to the United States. Los Angeles County was officially established in 1850 with statehood and included portions of present-day Kern, San Bernardino, Orange, and Riverside Counties. San Bernardino County separated in 1853, Kern County in 1866, and Orange County in 1889. Riverside County was created in 1893.

In 1848, gold was discovered at Sutter's Mill near Coloma on the south fork of the American River. By 1849, the rush to California's gold had begun. The southern route to reach California came by way of Santa Fe or Salt Lake City and essentially followed the Old Spanish Trail to cross the Mojave Desert and enter the southern California valley through Cajon Pass. This trail had previously been used to trade goods from Santa Fe and Mexican horses and mules from Los Angeles. In the 1850s and 1860s, the eastern and

western Mojave Desert was home to ranchers raising beef and sheep; gold, silver, lead, and borax miners; and small settlements of homesteaders and merchants.

Not long after California joined the Union in 1850, the U.S. Congress directed the United States Army to send teams of skilled land surveyors to investigate potential railroad routes not only to connect the east to the west but other routes as well. For two years, from 1853 to 1854, Lieutenant Robert Stockton Williamson of the United States Army Corps of Topographical Engineers and his team surveyed all the potential wagon road and railroad routes on the Pacific Coast between the Columbia River and San Diego. After the Central Pacific Railroad and Union Pacific Railroad collaborated to construct a transcontinental line to connect the east to the west in 1869, the newly formed Southern Pacific Railroad ran a line from its terminal in Lathrop (south of Sacramento), through the Tehachapi Mountains east to Barstow, and then south through the Cajon Pass to their switching station in Colton, San Bernardino County. The Southern Pacific Railroad connected northern and southern California in 1876, effectively joining the San Joaquin Valley to the Los Angeles Basin.

The railroads brought a real estate boom that caused Los Angeles County, as well as nearby Kern and San Bernardino Counties, to create new tracts and construct new businesses and buildings. During the Great Depression, in-migration to Southern California was significant with the loss of agricultural enterprises in the American Midwest due to severe drought and poor farming practices. While most migrants headed to the fertile farmlands of the Los Angeles Basin and Orange County, the Antelope Valley became the center of production for alfalfa crops, primarily due to improvements in irrigation technology. Following World War II, Muroc Army Airfield (renamed Edwards Air Force Base in 1949) became a center for the aerospace and defense industry. Chuck Yeager famously broke the sound barrier here in 1947. As agriculture declined, the aerospace testing and manufacturing dominated the economy of the Antelope Valley, attracting an increasing number of workers.

Before the construction of the Southern Pacific Railway in 1876, the Antelope Valley was nearly uninhabited and primarily characterized by people's efforts to simply pass through it. At the time, activity within the Valley was primarily limited cattle grazing, hunting expeditions, and sparse small-scale prospecting. The railroad established a string of evenly spaced sidings and water stops across the desert, including one at present-day Lancaster. Originally, this stop consisted of a station house, locomotive watering facilities, and section gang house. In 1882, real estate developer Moses Landley Wicks initiated a Scottish settlement of approximately 150 individuals close to this railroad stop. In 1884, Wicks purchased six sections of land from the Southern Pacific Railroad, totaling 640 acres, and founded the townsite now named Lancaster. The origin of the moniker "Lancaster" is not entirely known. It may be named after the surname of a railroad clerk, a name given at random by railroad officials, or after Lancaster, Pennsylvania, Wicks' hometown. The discovery of artesian wells encouraged the new settlers' belief in the agricultural potential of the area. Within a few years, the town had a post office, two stores, a telegraph office, newspaper, the Western Hotel (formerly known as the Gilwyn), and several private residences.

In the late 1880s, Wicks sold Lancaster to James P. Ward, and the town experienced its first land boom. Settlers began pouring in establishing successful alfalfa and barley fields, orchards, and other small farms, encouraged by years of ample rainfall. Questionable and shady schemes were also used to entice people into the Valley, as several additional settlements expanded nearby. However, a 10-year drought starting in 1894 completely devastated the area. These early settlers had little practical knowledge of the desert environment, as crop after crop failed and large swaths of people simply abandoned their land. By 1900, much of Lancaster and the Antelope Valley were considered worthless, and ownership of many parcels reverted to the state.

By 1904, improvements in irrigation technology, including gasoline-powered water pumps, helped to resurrect the agricultural industry. From 1908 to 1914, Lancaster became a boomtown, housing workers building the Los Angeles Aqueduct. In 1914, electricity reached Lancaster. With the drought broken and a

combination of electric water pumps and improved dry farming techniques, agriculture recovered, particularly alfalfa.

During the late 1920s and early 1930s, the region saw the introduction of a large-scale military presence. Muroc Army Air Base, later designated Edwards Air Force Base, was established just north of Lancaster. As World War II commenced, the period saw dynamic local changes with substantial military training, research, and development efforts. By the end of the war, almost half the population of Lancaster was involved in the aerospace and military industries. The economic importance of agriculture gradually diminished. The development of Air Force Plant 42 in 1958, as well as Lockheed Aircraft's Plant 10 in the 1960s, created tens of thousands of jobs in the Lancaster area. While the defense and aerospace industries continued to play a major role in the local economy, Lancaster experienced another population boom in the late 20th and early 21st centuries. The town became transformed again as a bedroom commuter community for Los Angeles, bringing massive housing developments, a spike in the service industry, and an overall suburban feel.

The City of Lancaster formally incorporated in 1977. Over the last 50 years, as the cost of housing in the greater Los Angeles area has increased, Lancaster and the nearby City of Palmdale have become bedroom communities for commuters. This has resulted in significant growth, particularly in the housing development, and an exponential increase in population. In 1977, Lancaster contained approximately 37,000 people. Currently, the population exceeds 160,000 people.

**Methodology and Results of Data Collection**

The cultural resources study was intended to locate and document previously recorded and new cultural resources, including archaeological sites, features, isolates, and historic buildings, that exceed 45 years in age within defined project site boundaries. The Plan area was examined using systematic pedestrian field survey methods. The study was intended to determine whether cultural resources are located within the project site boundaries, whether any cultural resources are significant pursuant to the above-referenced regulations and standards, and to develop specific mitigation measures that will address potential impacts to existing or potential resources. Tasks pursued to achieve that end include:

- Cultural resources records search to review any studies conducted and the resulting cultural resources recorded within a one quarter-mile radius of the project site boundaries.
- Additional research through various local and regional resources.
- Systematic pedestrian survey of the project site.
- Evaluation of California Register of Historical Resources (California Register) eligibility for any cultural resources discovered.
- Development of recommendations for cultural resources documented within the project boundaries, following CEQA guidelines.
- Completion of Department of Park and Recreation (DPR) 523 forms for any discovered cultural resources.

**Background Research and Record Search**

On May 9, 2024, a Cultural Specialist from Aspen Environmental Group conducted a search of the cultural resource records and files at the California Historical Resources Information System (CHRIS) facility at the University of California Riverside. In addition, the Aspen staff searched the following online resources: National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks, Society for California Archaeology (SCA), California Points of Historical Interest, and historic aerial photographs. This search compiled information on known cultural resources and previously conducted cultural resource studies pertinent to the location of the PVSP.

The records search identified 36 previous studies within a 0.25-mile of the Plan area. Of these 36 previous reports, 8 of them encompass portions of the Plan area. Additionally, based upon the records search, 11 previously documented cultural resources were recorded within the 0.25-mile study area radius, three of which are located within the Plan area. These three known resources are historic in age consisting of building foundations and refuse scatters. These resources have been previously recommended as not eligible to the CRHR and therefore not considered historical resources under CEQA.

**Pedestrian Survey**

In July 2020, Aspen cultural resources specialists intensively surveyed the Plan area. In July of 2024, the Plan area was resurveyed to determine if site conditions had changed since the original survey. The western portion of the Plan area has been heavily graded with no resources occurring there. Ground visibility was 5% - 15% due to a high volume of weeds.

After completing the survey, the three previously recorded sites, 4 newly discovered historic age sites, and 9 historic-age built environment resources were identified within the Plan area. DPR 523 field forms were completed for each new resource. Each resource is described in further detail below.

The three previously documented resources were formally recorded within the last 10 years and appear to hold the same integrity as when they were originally recorded. Therefore, no updated DPR forms were completed for the previously documented resources. Lastly, these three resources were previously recommended as not eligible for the CRHR, which was concurred with based on the recent pedestrian survey. Therefore, these resources are not considered historical resources under CEQA.

P-19-001990 is described as the Winchester Property. This property contains a number of buildings including a main house, rear outbuilding, adobe apartments, storage shed, and guest house.

P-19-004790 is described as an historic age foundation, well, and fence as well as a refuse scatter.

P-19-004974 is described as an historic age refuse scatter.

**Archaeological Resources**

As described above, four newly identified historic age resources were recorded and evaluated as part of this study, each of which are described below.

**3591-1**- is a historic age agricultural site which includes 19 Features and two Loci mainly comprised of irrigation lines, capped well heads, irrigation valves, aeration pipes, standpipes, concrete foundations, and the remains of a residential lot.

**3591-2**- is a historic age can scatter of about 15 cans a majority of which are sanitary cans, and Hole-In-Top evaporated milk cans.

**3591-3**- is a historic age can scatter of about 20 cans a majority of which are sanitary cans, and includes Hole-In-Top evaporated milk cans, and bottle bases of Owens-Illinois Glass Company and Anchor Hocking Glass Corporation.

**3591-4**- is a historic age can scatter of about 15 cans a majority of which are sanitary cans, and includes Hole-In-Top evaporated milk cans, pull-tab cans, and Owens-Illinois Glass Company bottle bases.

<u>CRHR Evaluation</u>

After completing historical background research, neither of the four recorded resources appear to be associated with events that made a contribution to the broad patterns of our history (Criterion 1), associated with the lives of significant persons of the past (Criterion 2), embody distinct characteristics of a time, period, or method of construction (Criterion 3) or represent the work of a master. They are unlikely to yield information important about our history or prehistory, as the four resources appear to be superficial

in nature with limited artifact types (Criterion 4). Therefore, resources 3591-1 to 3591-4 are not recommended as eligible to the CRHR and are not considered historical resources under CEQA.

**Historic Built Environment Resources**

The 9 historic built environment resources identified along the PVSP's perimeter have been previously documented and evaluated by the California High-Speed Rail Authority in the report titled Bakersfield to Palmdale Project Section from February 2017. During this evaluation all potentially historic built environment resources within the Project area were either found to be under the 45-year age requirement, or did not meet eligibility standards for inclusion on the CRHR. Therefore, no built environment resources identified within the Project area are considered historical resources under CEQA.

MR099 – Large single story concrete building constructed in 1958.

MR100 – The Shady Elms RV and Trailer Park with three permanent structures and several temporary structures constructed in 1952.

MR101 – Three permanent structures constructed in 1949, 1954, and 1956.

MRS235 – Single permanent structure built in 1958.

MRS236 – Permanent structure built in 1950.

MS237 - Single permanent structure built in 1953.

MS238 – Single permanent structure built in 1952, and expanded in 1972 for use as a hotel.

MS239 – Two permanent structures built in 1951 and 1952.

MS240 – Two permanent structures built in 1956 and 1981.

## 3.5.2. Regulatory Setting

Numerous laws and regulations require federal, state, and local agencies to consider the effects a project may have on cultural resources and tribal cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies.

### State Regulations

**California Environmental Quality Act of 1970.** The California Environmental Quality Act of 1970 (CEQA) states that it is state policy to "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. If a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered. CEQA includes paleontological, archaeological, and historic resources as integral features of the environment.

As of 2015, CEQA established 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" (Public Resources Code (PRC), § 21084.2). 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.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. 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. PRC §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider for avoiding or minimizing impacts to tribal cultural resources.

**California Register of Historical Resources.** The CRHR (PRC §5024.1) is a listing of properties that are to be protected from substantial adverse change. It includes properties that are listed, or have been formally determined to be eligible for listing in the NRHP, State Historical Landmarks, and eligible Points of Historical Interest under CEQA, cultural resources listed in, or determined to be eligible for listing in, the CRHR or a local register meet the CEQA definition of "historical resources" and must be given consideration in the CEQA process. Effects on historical resources may be considered impacts of the Proposed Project. Under the California Code of Regulations, Title 14, Chapter 11.5, properties listed on or formally determined to be eligible for listing in the NRHP are automatically eligible for listing in the CRHR. A resource is generally considered to be historically significant under CEQA if it meets the criteria for listing in the CRHR. These criteria are essentially the same as the eligibility criteria for the NRHP. In addition to being at least 50 years old, a resource must meet at least one (and may meet more than one) of the following four criteria:

- Criterion 1, is associated with events that have made a significant contribution to the broad patterns of our history;
- Criterion 2, is associated with the lives of persons significant in our past;
- Criterion 3, embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values; or
- Criterion 4, has yielded, or may be likely to yield, information important to history or prehistory.

In addition, historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association.

**Unique Archaeological Resources.** Additionally, CEQA states that it is the responsibility of the lead agency to determine whether the project will have a significant effect on "unique" archaeological resources. An archaeological artifact, object, or site can meet CEQA's definition of a unique archaeological resource even if it does not qualify as a historical resource (PRC 21083.2[g]; 14 CCR 15064.5[c][3]). An archaeological artifact, object, or site is considered a unique archaeological resource if "it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC 21083.2[g]):

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information
- Has a special and particular quality such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person
- If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be taken to preserve these resources in place or provide mitigation measures.

**California Health and Safety Code.** Section 7050.5(b) of the California Health and Safety Code requires that in the event of discovery of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected

to overlie adjacent human remains until the County coroner has been notified. The coroner will determine whether or not the remains are subject to the provisions of §27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains. The coroner shall make his or her determination within two working days from the time of notification.

**California Native American Graves Protection and Repatriation Act.** Section 8010 brands this chapter of the code as the California Native American Graves Protection and Repatriation Act of 2001. Section 8011 establishes the state repatriation policy. The Act:

- Ensures that a consistent state policy is followed with respect to handling of all California Indian human remains and cultural items, and that the state's repatriation policy is applied consistently with the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) (25 USC Section 3001 et seq.);
- Facilitate implementation of the provisions of NAGPRA with respect to publicly funded agencies and museums in California and encourages voluntary disclosure and return of remains and cultural items by agencies and museums;
- Provides a mechanism whereby lineal descendants and culturally affiliated California Indian tribes that file repatriation claims for human remains and cultural items under NAGPRA or under this chapter with California state agencies and museums may request assistance from the commission in ensuring that state agencies and museums are responding to those claims in a timely manner and in facilitating the resolution of disputes regarding those claims; and
- Provides a mechanism whereby California tribes that are not federally recognized may file claims with agencies and museums for repatriation of human remains and cultural items.

PRC, Section 5097.98(b) and (e) requires a landowner on whose property Native American human remains are found, to limit further development activity in the vicinity until he or she confers with the Native American Heritage Commission-identified Most Likely Descendants (MLD) to consider treatment options. In the absence of MLDs or of a treatment acceptable to all parties, the landowner is required to re-inter the remains elsewhere on the property in a location not subject to further disturbance. Section 5097.99 establishes as a felony the acquisition, possession, sale, or dissection with malice or wantonness Native American remains or funerary artifacts. Finally, Section 5097.991 establishes as state policy the repatriation of Native American remains and funerary artifacts.

Health and Safety Code (HSC), Section 7050 makes it a misdemeanor to mutilate, disinter, wantonly disturb, or willfully remove human remains found outside a cemetery and further requires a project owner to halt construction if human remains are discovered and to contact the county coroner.

## Local Regulations and Plans

**City of Lancaster General Plan 2030** states as Objective 12.1, "Identify and preserve and/or restore those features of cultural, historical, or architectural significance," and Policy 12.1.1, to "Preserve features and sites of significant historical and cultural value consistent with their intrinsic and scientific values. Five cultural resources Specific Actions are established:

12.1.1(a) As part of the CEQA review process, require site-specific historical, archaeological, and/or paleontological studies when there exists a possibility that significant environmental impacts might result or when there is a lack of sufficient documentation on which to determine potential impacts.

12.1.1(b) Include a condition of approval on all development projects that addresses State and Federal regulations with respect to the disposition of cultural resources.

12.1.1(c) Process requests for inclusion in state and federal historic registers those historic and precontact sites and features which meet state or federal criteria.

12.1.1(d) Prior to permitting demolition of any historic structure, require that an evaluation of the condition of the structure, potential adaptive reuse of the structure, and the cost of rehabilitation be undertaken.

12.1.1(e) Work with area school districts and historical/archaeological/paleontological preservation support groups to establish educational programs related to all phases of Lancaster's cultural and historical heritage.

In addition, the General Plan 2030 establishes Policy 19.3.4 for historic resources, "Preserve and protect important areas of historic and cultural interest that serve as visible reminders of the City's social and architectural history. Specific Action 19.3.4(a) states,

> "Through the development review process, apply Community Design guidelines that incorporate site-sensitive building design techniques into developments that shall integrate harmoniously into the community to preserve areas of historic and cultural interest."

## 3.5.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

Impacts to cultural resources tend to be site specific and are analyzed based on impact criteria. The criteria listed below are used to determine whether a project or alternatives would result in significant impacts under CEQA related to cultural resources. These criteria are also from the State CEQA Guidelines Appendix G. Under CEQA, the project would cause a significant impact if it caused a substantial adverse change in the significance of a historical resource, an archeological resource, or a tribal cultural resource as defined under CCR, Title 14, Chapter 3, Section 15064.5.

The project would have a significant impact on these cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5
- Disturb any human remains, including those interred outside of formal cemeteries.

### Environmental Impact Analysis

**Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5.**

As discussed above, the Plan area is vacant with little remaining evidence of agricultural activity. No above-ground historical resources were identified on the PVSP site during background research or field surveys conducted in 2020 and 2024. Therefore, there is no reasonable potential for the Project's activities to impact known historical resources.

As with any project that involves ground-disturbing activity, it is possible that unknown buried resources that qualify as historical resources maybe encountered, especially given that Amargosa Creek runs through the southwestern portion of the Plan Area. These unanticipated discoveries could be significantly impacted without mitigation in place. Therefore, compliance with MM CUL-1 through MM CUL-4 will ensure a less-than-significant impact to unanticipated cultural resources.

**Impact CUL-2: Cause a substantial adverse change in the significance of an archaeogical resource pursuant to § 15064.5.**

As discussed above, the Plan area is vacant with little remaining evidence of agricultural activity and appears to be heavily disturbed. No archaeological resources that qualify as unique archaeological resources under CEQA were identified on the PVSP site during background research or field surveys conducted in 2020 and 2024. Therefore, there is no reasonable potential for the activities resulting from Plan implementation to impact known archaeological resources. However, as with any action that involves ground-disturbing activity, it is possible that unknown buried resources that qualify as unique archaeological resources maybe encountered. For example, although undergrounded in 2008/2009, Amargosa Creek was utilized by Native Americans, increasing the possibility for unanticipated archaeological discoveries. These unanticipated discoveries could be significantly impacted without mitigation in place. Therefore, compliance with MM CUL-1 through MM CUL-4 will ensure a less-than-significant impact to unanticipated cultural resources.

**Impact CUL-3: Disturbance of any human remains, including those interred outside of formal cemeteries.**

Through background research and a pedestrian survey, the Plan area does not contain a formal cemetery and there is no evidence to suggest that the Plan area would contain human remains. Therefore, there is low potential that human remains may be unearthed during grading and excavation activities associated with a future development project.

As with any project that involves ground-disturbing activity, it is possible that human remains could be encountered. In the unlikely event of the discovery of human remains, compliance with MM CUL- 1 through MM CUL-5 will ensure a less-than-significant impact.

## Mitigation Measures

**MM CUL-1** **Worker Environmental Awareness Program**. Prior to the start of construction, a Qualified representative, procured by the Fernandeño Tataviam Band of Mission Indians and retained by the Project Applicant, shall conduct a Tribal Cultural Resources Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the aspects of Tribal Cultural Resources and the procedures for notifying the Fernandeño Tataviam Band of Mission Indians should Tribal Cultural Resources be discovered by construction staff.

**MM CUL-2** **Native American Monitoring**. The project applicant shall retain a professional Tribal Monitor procured by the Fernandeño Tataviam Band of Mission Indians, and Yuhaaviatam of San Manuel Nation if they elect to participate in monitoring, to observe all ground disturbing activities including, but not limited to, clearing, grubbing, grading, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, augering, blasting, stripping topsoil or similar activity. Tribal Monitoring Services will continue until confirmation is received from the project applicant, in writing, that all scheduled activities pertaining to Tribal Monitoring are complete. If the Project's scheduled activities require the Tribal Monitor(s) to leave the Project for a period of time and return, confirmation shall be submitted to the Tribe(s) by Client, in writing, upon completion of each set of scheduled activities and 5 days' notice (if possible) shall be submitted to the Tribe(s) by project applicant, in writing, prior to the start of each set of scheduled activities. If cultural resources are encountered, the Tribal Monitor(s) will have the authority to request that ground-disturbing activities cease within 60 feet of discovery.

**MM CUL-3** **Inadvertent Discovery of Cultural Resources**. If archaeological resources are encountered during ground disturbing activity, all activity within a 60-foot radius of the find shall be stopped, the City of Lancaster shall be notified, and a qualified archaeologist will examine the find. The archaeologist and Tribal monitors will evaluate the find to determine if it meets the definition of a historical, unique archaeological, or potential Tribal Cultural Resource, and make appropriate recommendations regarding the disposition of such find(s) prior to the continuation of any construction work occurring within the above-referenced 60-foot radius. If the find is determined to potentially be a Tribal Cultural Resource, the Fernandeño Tataviam Band of Mission Indians and the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department shall be notified and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. If the find(s) do(es) not meet the definition of a historical, unique archaeological, or Tribal Cultural Resource, no further study or protection is necessary prior to project implementation. If the find meets the definition of a historical, unique archaeological, or Tribal Cultural Resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in accordance with the recommendations of the archaeologist and Tribal representatives, as needed. Recommendations will include collection, recordation, analysis of any significant cultural materials and possible monitoring of the remainder of ground disturbing activity. A report of findings documenting any data recovery shall be submitted to the City of Lancaster, Native American Heritage Commission (Tribal Cultural Resources), the Fernandeño Tataviam Band of Mission Indians, the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department and the South Central Coastal Information Center.

The project applicant will ensure that construction personnel do not collect or move any cultural material during implementation of the project

**MM CUL-4** **Archaeological Monitoring Program.** Archaeological monitoring will be conducted under the supervision of a Secretary of the Interior qualified archaeologist during the initial phases of all ground disturbing activities, to include grading, trenching, grubbing and clearing, and any other ground disturbances.

**MM CUL-5** **Inadvertent Discovery of Human Remains.** If human remains are discovered during excavation or grading of the site, all activity within a 100-foot radius of the find will be stopped. The Los Angeles County Coroner shall be notified immediately and will make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding proper burial (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The archaeologist and Tribal monitors will recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the City of Lancaster, NAHC, and the South Central Coastal Information Center.

## 3.5.4. Cumulative Impact Analysis

### Geographic Extent

For the purposes of this cumulative impact analysis, Table 3.1-1 lists 28 projects within 1 mile of the Plan area, where there is the potential for impacts related to cultural resources to combine with those of the Project. The 28 identified projects generally include commercial uses, residential buildings, gas station development, and industrial buildings. This geographic scope of analysis is appropriate because the cultural resources within this area are expected to be similar to those that occur on the PVSP site. Their proximity and similarity in environments would result in similar land-use, and thus, site types. Cumulative impacts could occur if other projects, in conjunction with the PVSP, would have impacts on cultural resources that, when considered together, would be significant.

### Cumulative Effects of the Proposed Project

Impacts to cultural resources tend to be site specific and are assessed on a site-by-site basis. Implementation of mitigation measures would MM CUL-1 (*Workers Environmental Awareness Program*), MM CUL-2 (*Native American Monitoring*), MM CUL-3 (*Inadvertent Discovery of Human Remains*), MM CUL-4 (Archaeological Monitoring Program) and MM CUL-5 (Inadvertent Discovery of Cultural Resources) would lessen the overall impact to unknown buried cultural resources. As identified in Table 3.1-1, the cumulative projects that are within the geographic extent for cultural resources include 28 identified projects which generally include commercial uses, residential buildings, gas station development, and industrial buildings. These projects all likely involve ground-disturbing activity to some degree, which has the potential to impact buried cultural resources, and it is assumed that each project will implement similar inadvertent discovery mitigation measures to reduce impacts to buried unknown resources. Therefore, the Project would not make a considerable contribution any cumulative impacts on archaeological resources.

Lastly, as no eligible built environment resources were identified within the Plan area, implementation of the PVSP would not contribute any cumulative impacts on built environment resources. Therefore, the Project would not have cumulatively considerable impacts on historic-age built environmental resources, and no additional mitigation is required.

# 3.6. Energy

Energy use in the City of Lancaster is typically associated with the construction and operations of various land uses as well as transportation. Construction energy relates to a one-time energy expenditure primarily associated with the consumption of fuel used to operate construction equipment. Energy related to the operation of a land use is typically associated with the energy required to heat, ventilate, and air condition (HVAC) building spaces. Transportation energy use is generally categorized by direct and indirect energy. Direct energy relates to energy consumption used to operate a vehicle. Indirect energy relates to the long-term indirect energy consumption of equipment, such as maintenance activities.

Although historically the State has relied heavily on oil- and gas-fired plants to generate electricity, more recent regulatory measures and tax incentives have driven California's electrical system into becoming more reliant on renewable energy resources. Influenced by the overwhelming need to reduce reliance on fossil fuels that emit greenhouse gases (the leading cause of global warming), accompanied with the increase in efficiencies involved in the transportation of grid electricity from sources such as cogeneration, wind, solar and geothermal energy, conversion of biomass, transformation plants, and small hydroelectric plants over petroleum production that is typically tied to the location of the fuel source, the State has taken measures to ramp up renewable energy production. The generating capacity of a unit of electricity is expressed in megawatts (MW), while generation itself is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh). Net generation refers to the gross amount of energy produced by a unit minus the unit's energy consumption.

## 3.6.1. Environmental Setting

Energy sources for the City of Lancaster primarily include electricity provided by the Southern California Edison (SCE) and Lancaster Choice Energy (LCE), and natural gas provided by Southern California Gas Company (SoCalGas). Non-transportation energy is largely derived from natural gas, nuclear, fossil fuels, hydropower, solar, and wind. The primary use of energy resources in the City is to operate residential and commercial buildings. According to the California Energy Commission's (CEC) California Energy Consumption Database, the State consumed 287,220 GWh of electricity in 2022, with electricity demand projected to rise to 339,160 GWh in 2030, based on currently available projections (CEC, 2024a). The Plan area and City are located within the SCE planning area, which encompasses 15 million people and 50,000 square miles of central, coastal, and southern California.

The PVSP would encompass approximately 437 acres of largely vacant land with some existing development around its borders. Under the Plan new development would include a mix of high-density, mixed-use commercial, and residential development (see Figure 2-4, Conceptual Land Use Plan). The PVSP requires the approval of a General Plan Amendment (GPA) to change the existing land use designation from Specific Plan and Mixed Use to Specific Plan and the coinciding Zone Change from Specific Plan 07-01, Mixed-Use Employment (MU-E), and Mixed-Use Neighborhood (MU-N) to SP 24-001. Any future development proposed would be subject to the City of Lancaster's existing procedures and requirements for discretionary and ministerial approvals.

As described in Section 2.0, Project Description, the existing Plan area contains several existing developments, primarily along the Plan area boundary, including St. Paul's Episcopal Church that fronts on Avenue K to the north; a supportive housing development (formerly a motel) and other commercial land uses along Sierra Highway street frontage to the east; Kaiser Permanente Medical Offices and parking lot to the south; an auto repair business along 10th Street West to the west, and a small solar facility and bike path within the Plan boundary. All existing uses in the Plan area would remain and be able to continue their current operations with the caveat that all legal but nonconforming uses be subject to Article VII

(Nonconforming Uses and Structures) of the City's Municipal Code. The vacant areas within the Plan's boundaries do not currently consume electricity, natural gas, or automotive fuel.

## Electricity

LCE, a Community Choice Aggregator (CCA), provides electric generation services in the City with higher renewable energy content. LCE is supported by SCE who continues to deliver the electricity, provide billing, customer service, and power line maintenance and repair. LCE only replaces the electric generation services with higher renewable energy content at more affordable rates. Electricity provided by LCE is delivered via SCE's network of high-voltage transmission lines.

SCE provides electrical services to the City through state-regulated public utility contracts. SCE, a subsidiary of Edison International, serves 15 million people in a 50,000 square mile and service area that includes approximately 180 cities in 15 counties across central and Southern California (SCE, 2024). According to the CEC, approximately 85,869 GWh of electricity were used in SCE's service area in 2022 (CEC, 2024b). This is approximately 30 percent of the State's total system electric generation of 287,826 GWh in 2022, which was a 7,646-GWh increase from the previous year. Los Angeles County's total electricity consumption in 2022 (residential and non-residential combined) was approximately 68,485 GWh (CEC, 2024c). SCE distributes electricity to the City through a series of 66 kilovolt (kV) transmission lines. The closest lines to the Plan area are located site-adjacent along Avenue K, running east-west parallel to the site's northern boundary, and another 66kV line along 10$^{th}$ Street West at the western boundary of the Plan area.

## Natural Gas

SoCalGas, a subsidiary of Sempra, is the nation's largest natural gas distribution utility and provides services to the City of Lancaster and the Plan area. SoCalGas's territory encompasses approximately 24,000 square miles in Central and Southern California, from Visalia to the Mexican border and delivers gas services to 21.1 million consumers through 5.9 million meters (SoCalGas, 2024a).

Natural gas (NG) is a hydrocarbon fuel, composed primarily of methane ($CH_4$). NG is mainly used for residential and commercial space and water heating, process heating and electricity generation, and as a transportation fuel. As it is a relatively clean alternative to fossil fuels and coal, the use of NG to generate electricity is expected to increase in coming years. Interest in the importing of liquefied NG has recently spiked in California and much of the western U.S. with the increase in new electrical generation plants that are fired by NG are being brought online in many locations. Nearly 40 percent of the electricity consumed in California was generated using natural gas in 2023 (US EIA, 2024a). California is the nation's second-largest natural gas consumer. Only Texas uses more. In 2023, about 32% of the natural gas delivered to California consumers went to the State's electric power sector, where it fuels about two-fifths of the State's total electricity generation. While the supply of natural gas in the United States and production has increased greatly, California produces little, and imports 90 to 95 percent of its natural gas.

The nearest high pressure natural gas distribution line to the Plan area runs along 10th Street West, adjacent to the Plan's western boundary, with another line along Avenue L, adjacent to the Plan's southern boundary (SoCalGas, 2024b). Low-pressure distribution lines are anticipated to be located along local roadways within the Plan area.

## Automotive Fuel/Diesel

The primary energy resource for the U.S. is petroleum (crude oil), which is refined to produce fuels such as gasoline, diesel, and jet fuel. Petroleum is a finite, nonrenewable energy source. California used approximately 628 million barrels of petroleum in 2022, with the majority (534 million barrels) being used

by the transportation sector (US EIA, 2024a). This equates to approximately 1.7 million barrels of petroleum per day.

The projected buildout year for the PVSP is 2050. Petroleum-based fuels accounted for 85 percent of California's transportation energy sources as recently as 2022. However, the State is working on developing flexible strategies to reduce petroleum use. Several regulations adopted by California to reduce greenhouse gas (GHG) emissions, such as Senate Bill (SB) 375, have the added benefit of reducing the State's demand on petroleum-based fuels by requiring reductions in vehicle miles traveled (VMT) and by reducing the carbon intensity of transportation fuels. The CEC predicts that the demand for gasoline will continue to decline, and there will be an increase in the use of alternative fuels.

### 3.6.1.1. Energy Usage

Energy usage is typically quantified using the British Thermal Unit (Btu). In 2022, the most recent year with available state usage data, California consumed a total of 6,882 trillion Btu (EIA 2024a), making the State the third largest consumer of electricity, behind Texas and Florida. But, the State uses less electricity per capita than any other state except than Hawaii. California's total energy usage by sector is 42.4% transportation, 22.4% industrial, 17.3% commercial, and 17.5% residential. Electricity and natural gas in California are generally consumed by stationary users such as residences, and commercial and industrial facilities, whereas petroleum consumption is generally transportation-related (CDTFA 2024).

The energy sources that make up the mix of power supplied to LCE's customers, relative to the 2022 California power mix, are summarized from utility-specific Power Content Label data gathered by the CEC, shown in Table 3.6-1 (CEC, 2024e).

**Table 3.6-1. Energy Sources of Electricity Supplied to Customers (2022 Power Content)**

| Energy Resources | 2022 Clear Choice Power Mix | 2022 Smart Choice Power Mix | 2022 California Power Mix |
|---|---|---|---|
| **Eligible Renewable** | **33.5%** | **34.7%** | **35.7%** |
| Biomass & biowaste | 1.1% | 5.8% | 2.1% |
| Geothermal | 0% | 0% | 4.7% |
| Eligible hydroelectric | 0% | 0% | 1.1% |
| Solar | 15.1% | 28.9% | 17.0% |
| Wind | 17.3% | 0% | 10.8% |
| Coal | **0%** | **0%** | **2.1%** |
| Large Hydroelectric | **0.4%** | **0%** | **9.2%** |
| Natural Gas | **0%** | **0%** | **36.4%** |
| Nuclear | **9.7%** | **0%** | **9.2%** |
| Other | **0%** | **0%** | **0.1%** |
| Unspecified sources of power* | **56.4%** | **65.3%** | **7.1%** |
| **Total** | **100%** | **100%** | **100%** |

* "Unspecified sources of power" means electricity from open market transactions that are not traceable to specific generation sources.

Source: CEC, 2024e; 2022 Power Content Label for LCE.

For recent years including 2021, the average annual electricity consumption served to SCE customers has grown to approximately 83,330 million kWh. Table 3.6-2 shows the baseline electricity consumption by the SCE loads over the prior 5 years, separated by customer classes.

**Table 3.6-2. Electricity Consumption for Load Served by SCE (million kWh per year)**

| Sector, Served by SCE | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| Ag & Water Pump | 2,978 | 3,208 | 2,812 | 3,112 | 3,274 |
| Commercial Building | 31,916 | 31,427 | 30,659 | 28,800 | 29,008 |
| Commercial Other | 4,326 | 4,407 | 4,450 | 4,449 | 5,212 |
| Industry | 13,128 | 13,315 | 13,197 | 12,450 | 12,878 |
| Mining & Construction | 2,424 | 2,418 | 2,379 | 1,822 | 1,564 |
| Residential | 28,948 | 28,398 | 28,985 | 32,475 | 30,758 |
| Streetlight | 625 | 577 | 453 | 426 | 636 |
| **SCE Total Usage** | 84,345 | 83,750 | 82,935 | 83,534 | 83,330 |

Note: Usage expressed in millions of kWh (one million kWh equals one gigawatt-hour or GWh).
Source: CEC, 2024b; Electricity Consumption by Entity.

Electricity consumption in Los Angeles County between 2012 and 2022 is shown in Table 3.6-3. As indicated in Table 3.6-3, electricity consumption in Los Angeles County remained relatively steady between 2012 and 2016, decreased between 2017 and 2020, and has increased between 2020 and 2022.

**Table 3.6-3. Electricity Consumption for Los Angeles County**

| | Los Angeles County Electricity Consumption Expressed in Millions of kWh (GWh) | | |
|---|---|---|---|
| **Year** | **Non-Residential** | **Residential** | **Total** |
| 2022 | 45,229.47 | 23,255.48 | 68,484.95 |
| 2021 | 43,910.86 | 22,092.42 | 66,003.28 |
| 2020 | 42,662.55 | 22,903.70 | 65,566.25 |
| 2019 | 46,054.26 | 20,687.72 | 66,741.98 |
| 2018 | 47,310.94 | 20,523.19 | 67,834.13 |
| 2017 | 47,918.36 | 20,673.08 | 68,591.44 |
| 2016 | 49,064.06 | 20,300.47 | 69,364.53 |
| 2015 | 49,017.13 | 20,443.49 | 69,460.62 |
| 2014 | 49,109.50 | 20,750.28 | 69,859.78 |
| 2013 | 47,662.08 | 20,618.15 | 68,280.23 |
| 2012 | 48,088.38 | 21,079.24 | 69,167.62 |

Source: CEC, 2024c; Electricity Consumption by County

The natural gas consumption in Los Angeles County between 2012 and 2022 is shown in Table 3.6-4, Natural Gas Consumption in Los Angeles County, 2012-2022. As shown in Table 3.6-4, natural gas consumption in Los Angeles County for both residential and non-residential users remained relatively constant between 2012 and 2022.

**Table 3.6-4. Natural Gas Consumption for Los Angeles County 2012-2022**

| | Los Angeles County Natural Gas Consumption Expressed in Millions of Therms | | |
|---|---|---|---|
| **Year** | **Non-Residential** | **Residential** | **Total** |
| 2022 | 1,698.03 | 1,122.26 | 2,820.29 |
| 2021 | 1,745.19 | 1,137.58 | 2,882.77 |

| Year | Los Angeles County Natural Gas Consumption Expressed in Millions of Therms | | |
|---|---|---|---|
| | Non-Residential | Residential | Total |
| 2020 | 1,698.69 | 1,238.00 | 2,936.69 |
| 2019 | 1,812.59 | 1,235.73 | 3,048.32 |
| 2018 | 1,813.72 | 1,107.78 | 2,921.50 |
| 2017 | 1,840.58 | 1,115.46 | 2,956.04 |
| 2016 | 1,766.99 | 1,110.87 | 2,877.86 |
| 2015 | 1,676.34 | 1,084.70 | 2,761.04 |
| 2014 | 1,715.22 | 1,078.65 | 2,793.87 |
| 2013 | 1,743.55 | 1,321.88 | 3,065.43 |
| 2012 | 1,704.43 | 1,280.72 | 2,985.15 |

Source: CEC, 2024f; Gas Consumption by County

Automotive fuel consumption in Los Angeles County between 2012 and 2022 is shown in Table 3.6-5, Automotive Fuel Consumption in Los Angeles County, 2011-2021. As shown in Table 3.6-5, although varying year-to-year, heavy-duty vehicle fuel consumption in Los Angeles County declined slightly while automotive fuel consumption increased slightly over the 10 year period.

**Table 3.6-5. Automotive Fuel Consumption for Los Angeles County**

| Year | On-Road Automotive Fuel Consumption (Gallons) | Heavy-Duty Vehicle/Diesel Fuel Consumption (Gallons) |
|---|---|---|
| 2022 | 4,178,999,328 | 32,149,756 |
| 2021 | 4,210,700,392 | 32,157,481 |
| 2020 | 3,771,819,086 | 32,159,072 |
| 2019 | 4,224,146,430 | 38,507,112 |
| 2018 | 4,296,200,079 | 37,712,716 |
| 2017 | 4,355,287,992 | 36,890,912 |
| 2016 | 4,368,369,952 | 36,026,490 |
| 2015 | 4,220,086,868 | 35,135,804 |
| 2014 | 4,108,296,736 | 34,199,540 |
| 2013 | 4,071,125,826 | 33,240,503 |
| 2012 | 4,042,963,890 | 32,222,770 |

Source: CARB, 2024a, EMFAC2021; CARB 2024b, OFFROAD

## 3.6.2. Regulatory Setting

### Federal Regulations

#### *Federal Energy Policy and Conservation Act*

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the United States would meet certain fuel economy goals (EPA, 2024a). Through this act, the U.S. Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA), which is part of the United States Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per

gallon (mpg). Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States. The Corporate Average Fuel Economy (CAFE) program, administered by the USEPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards (EPA, 2024b). The USEPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

### *Energy Policy Act of 2005*

The Energy Policy Act of 2005 was signed into law on August 8, 2005. The act provides for 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 (EPA 2024a).

### *Energy Independence and Security Act*

The Energy Independence and Security Act of 2007 (EISA) facilitates the conservation of energy resources by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of renewable fuel in 2022, with at least 16 billion gallons from cellulosic biofuels and a cap of 15 billion gallons for corn-starch ethanol;
- 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 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and the NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

## State Regulations

### *Warren-Alquist Act*

The Warren-Alquist Act of 1975 established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The act established a state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately owned utilities in the energy, rail, telecommunications, and water fields (CEC, 2024g).

### *Senate Bill 1389 and the California Energy Commission Integrated Energy Policy Report*

In 2002, the California State legislature adopted SB 1389 that requires the CEC to adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years for electricity, natural

gas, and transportation fuels. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety. The CEC prepares updates to these assessments and associated policy recommendations in alternate years (PRC Section 25302[d]). Preparation of the Integrated Energy Policy Report involves close collaboration with federal, State, and local agencies and a wide variety of stakeholders in an extensive public process to identify critical energy issues and develop strategies to address those issues. The 2018 Integrated Energy Policy Report Update addresses the State's implementation of SB 350, integrated resource planning, distributed energy resources, transportation electrification, electricity system resilience and efficiency, barriers faced by disadvantaged communities, demand response, renewable energy, natural gas supplies, preliminary transportation energy demand forecast, and climate adaptation and resiliency.

The CEC adopted the Integrated Energy Policy Report (2021 IEPR) Volume I, II, and IV in February 2022, and Volume III in March 2022. This report provides the results of the agency's assessments of a variety of energy issues facing California, many of which will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. The year of 2021 was unprecedented as the State continues to face the impacts and repercussions of challenging events, including the continued effects of the COVID-19 pandemic, extreme summer weather, and drought conditions. In addition to the unprecedented impacts and repercussions as a result of the continued effects of the COVID-19 pandemic, the 2021 IEPR covers a broad range of topics that include building decarbonization, energy efficiency, challenges with decarbonizing California's gas system, quantifying the benefits of the Clean Transportation Program, and the California Energy Demand Forecast. The 2021 IEPR identifies ways that the State and others can reinforce energy resiliency, reduce GHG emissions, improve air quality, and contribute to a more equitable future for the generations to come.

In February of 2024, the latest update to the Integrated Energy Policy Report (2023 IEPR) went into effect (CEC, 2024). The report highlights the need for the state to accelerate its efforts in the connection of clean energy resources by expanding proactive investment in electric grid infrastructure, facilitate flexible service connections and temporary power solutions while more permanent infrastructure is constructed, explore alternative sources of funding, increase transparency into grid capacity through publicly available tools, and support faster permitting decisions. The report emphasizes the state's energy demand forecasting to grow to 350,700 GWh of electricity sales by 2040, with a managed system peak forecasted to be 63,204 MW by that time. SB 1075 directed the CEC to study and model potential growth of hydrogen in decarbonizing the electric power and transportation sectors as part of the 2023 IEPR. Future analysis would be expanded in the upcoming 2025 IEPR to include biomass feedstocks and requirements and costs associated with future hydrogen delivery and storage infrastructure.

### *SB 100 and Renewable Portfolio Standard*

SB 100 (Chapter 312, Statutes of 2018) 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 kilowatt-hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. SB 100 requires the CPUC, CEC, and all other State agencies incorporate this policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and other agencies utilize programs authorized under existing statutes to achieve such renewable energy goals.

As amended by SB 350 (De León, 2015), California's Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 40 percent of total retail sales by 2024, 45 percent of total retail sales by 2027, and 50 percent of total retail sales by 2030. SB 100, signed September 10, 2018, is the 100 Percent

Clean Energy Act of 2018. SB 100 updates the goals of California's RPS and SB 350 to the following: achieve 50 percent renewable resources target by December 31, 2026, and achieve a 60 percent target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

### *California Code of Regulations Title 13, Section 2449(d)(3) and 2485*

The California Air Resources Board (CARB) is responsible for enforcing CCR Title 13 Sections 2449(d)(3) and 2485, which limit idling from both on-road and off-road diesel-powered equipment to no greater than 5 minutes at any location. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

### *California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24)*

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2016 Building Energy Efficiency Standards (2016 Building Standards) were approved in January of 2016 and made effective on January 1, 2017. The 2019 California Building Standards Code (Cal. Code Regs., Title 24) was published July 1, 2019, with an effective date of January 1, 2020.

In August of 2021, the CEC adopted the 2022 Title 24 Standards and in December 2021, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. These standards encourage efficient electric heat pumps, establishes electric-ready requirements for new homes, expands the use of solar photovoltaic and battery storage standards, strengthens heating, ventilation and air conditioning (HVAC) standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Title 24 Standards. As of August 14, 2024, the 2025 Title 24, Part 6 standards have been adopted and go into effect on January 1, 2026.

### *California Green Building Code*

The California Green Building (CALGreen) Code (California Code of Regulations, Title 24, Part 11) is a Statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. On January 1, 2023, the most recent update to the CALGreen Code was went into effect. New buildings are required to employ water efficiency and conservation, divert construction waste from landfills, increase building system efficiencies (e.g., lighting, HVAC, and plumbing fixtures, etc.), and incorporate electric vehicles charging infrastructure. Developers and retailers are recognizing that sustainable construction is not prohibitively expensive, and that significant cost-savings potential in green building practices and materials are a result in implementing these measures.

### *Executive Order S-03-05 and the California Global Warming Solutions Act (AB 32)*

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order (EO) S-03-05 mandating that California emit 80 percent fewer GHGs in 2050 than it emitted in 1990. Energy efficiency and reduced VMT would play important roles in achieving this goal. As previously mentioned, GHG reduction efforts increase energy efficiency which also reduces the consumption of petroleum-based fuels. In 2006, the Governor and the State Legislature passed AB 32 – Nunez, also known as the California Global Warming

Solutions Act, to cap GHG levels outlined in EO S-03-05. The passage of this bill laid the foundation for the CARB's Scoping Plan to be developed.

### *California Air Resources Board*

In 2012, CARB approved the Advanced Clean Cars (ACC) program, an emissions-control program for passenger vehicles and light-duty trucks for model years 2017–2025, thereby continuing the regulatory framework established under the Pavley standards beyond model year 2016 (CARB, 2024d). The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles. The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulations, which require manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. Consistent with the other State reduction policies geared to reducing GHG emissions, the efforts to speed up integration of ZEVs and PHEVs would reduce the consumption of petroleum-based fuels. The Advanced Clean Cars II regulations were adopted in 2022, imposing the next level of low-emission and zero-emission vehicle standards for model years 2026-2035 that contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets. By 2035 all new passenger cars, trucks and SUVs sold in California will be zero emissions. The Advanced Clean Cars II regulations take the state's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augments them to meet more aggressive tailpipe emissions standards and ramp up to 100% zero-emission vehicles (CARB, 2024d).

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, CCR Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by this class of vehicles (CARB, 2024e).

The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles (Title 13, CCR Division 3, Chapter 1, Section 2025) was adopted to reduce emissions of diesel particulate matter, oxides of nitrogen (NOx) and other criteria pollutants from in-use diesel-fueled vehicles. This regulation is phased, with full implementation by 2023 with compliance resulting in this class of vehicles using petroleum-based fuel in a more efficient manner thereby reducing diesel fuel consumption (CARB, 2024f).

### *Sustainable Communities Strategy*

SB 375 (Steinberg, 2008), the Sustainable Communities and Climate Protection Act, coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. These actions achieve their objectives in part through increased energy efficiency. The Sustainable Communities Strategy (SCS) focuses on energy conservation, electric vehicles, natural gas vehicles, transit/rail, and more compact development patterns that reduce vehicle travel and demand less energy per capita. Reducing vehicle travel also reduces energy related to producing and distributing fuels and vehicles as well as the construction and maintenance of roads.

## Local Regulations and Plans

### *Southern California Association of Governments*

As discussed in Section 3.10, Land Use and Planning and Recreation, of this EIR, the Southern California Association of Government's (SCAG's) 2024 Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) presents the region's long-term transportation vision through the year 2050 (SCAG, 2024). The plan encompasses a holistic approach to programs and strategies that support success of the RTP/SCS, such as workforce development, broadband and mobility hubs. The 2024 Connect SoCal includes land use strategies and goals that focus on urban infill growth and walkable, mixed-use communities in existing urbanized and opportunity areas. Development consisting of mixed-use, urban infill development would be expected to accommodate future growth in more energy-efficient residential and commercial building types. More compact development patterns that reduce vehicle travel, while increasing more pedestrian and alternative zero-emission means of transportation, also demand less water per capita and reduce conversion of natural and working lands.

Furthermore, Connect SoCal includes transportation investments and land use strategies that encourage carpooling, increase transit use, active transportation opportunities, and promote more walkable and mixed-use communities, aimed at reducing vehicle travel and ultimately reducing the consumption of petroleum-based fuels. The RTP/SCS seeks to continue the region's efforts of reducing the energy demands necessary for producing and distributing fuels and vehicles, including the construction and maintenance of roadways. Additionally, the regional plan focuses on a more prosperous mobile approach through implementing planning strategies that focus on transportation networks. The 2024-2050 RTP/SCS centers on elevating the management of the transportation network for the purpose of moving people and goods, while expanding mobility choices by locating residential uses closer to employment opportunities and public transit, while increasing investment in transit and Complete Streets.

### *City of Lancaster General Plan 2030*

The City of Lancaster 2030 General Plan, adopted in July of 2009, includes multiple plans that aim to guide the development of the City through 2030 (City of Lancaster, 2009). The Plan for the Natural Environment, which addresses energy resources, comprises of objectives, policies, and specific actions that are applicable to the PVSP, including:

Objective 3.6: Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation practices into new and existing development, and appropriate use of alternative energy.

> Policy 3.6.1: Reduce energy consumption by establishing land use patterns which would decrease automobile travel and increase the use of energy efficient modes of transportation.
>
> > Specific Action 3.6.1(a): Require the inclusion, where feasible, of provisions for energy efficient modes of transportation and fixed facilities which establish transit, bicycle, equestrian, and pedestrian modes as desirable alternatives.
> >
> > Specific Action 3.6.1(b): Through appropriate zoning, encourage mixed-use development to locate in proximity to transit connections and facilities in order to promote walking, bicycling and increased transit use.
>
> Policy 3.6.2: Encourage innovative building, site design, and orientation techniques which minimize energy use.
>
> Policy 3.6.3: Encourage the incorporation of energy conservation measures in existing and new structures.

Policy 3.6.4: Support state and federal legislation that would eliminate wasteful energy consumption in an appropriate manner.

Policy 3.6.6: Consider and promote the use of alternative energy such as wind energy and solar energy.

Specific Action 3.6.6(a): Work with utility companies and private enterprises in their efforts to incorporate alternative energy resources including, but not limited to, wind and solar energy.

### *City of Lancaster Municipal Code*

The 2022 California Building Codes, including the Building Code, Residential Code, Electrical Code, Mechanical Code, Plumbing Code, Energy Code, Fire Code, and the Green Building Standards Code, became mandatory throughout the State of California on January 1, 2023 (City of Lancaster, 2024). Lancaster has amended these codes and adopted them as the Lancaster Codes for Buildings and Construction through Ordinance Number 1094, adopted November 8, 2022.

## 3.6.3. Impact Thresholds and Significance Criteria

State CEQA Guidelines Appendix F: Energy Conservation and Appendix G: Environmental Checklist require EIRs to include a discussion of potential significant impacts. Consequently, a project (or plan )may cause a significant adverse environmental impact is it would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; and
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Appendix F of the State CEQA Guidelines states that an EIR's analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project.

Appendix F of the CEQA Guidelines provides a list of energy-related criteria that may be discussed in the analysis of an EIR, where topics are applicable or relevant to the project, and include the following:

***Criterion 1***. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;

***Criterion 2***. The effects of the project on local and regional energy supplies and on requirements for additional capacity;

***Criterion 3***. The effects of the project on peak and base period demands for electricity and other forms of energy;

***Criterion 4***. The degree to which the project complies with existing energy standards;

***Criterion 5***. The effects of the project on energy resources;

***Criterion 6***. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

## 3.6.4. Environmental Impacts and Mitigation Measures

The PVSP provides design standards and guidelines to assist future development of the 434.7-acre master-planned community. As described in Section 2.0 Project Description, subsection 2.5, Design Guidelines, , the PVSP's objectives include sustainable design practices, including but not limited energy-conserving buildings, low-water use landscaping, and community design elements that promote walking and biking over driving. Chapter 6 of the Plan provides the development regulations and standards for the future community. The City of Lancaster 2030 General Plan offers the vision, goals, objectives and policies for development within the City's boundaries and the Lancaster Municipal Code is the tool in which the City implements their adopted laws and regulations that all future development is required to comply with.

### Impact Assessment Methodology

Approval of the PVSP does not include approval of any specific projects, but rather sets up the standards with which all future construction would be required to comply. Therefore, this EIR does not address potential construction impacts, as the existing construction codes and regulations have been designed to reduce potentially significant environmental impacts associated with wasteful, inefficient, or unnecessary consumption of energy resources.

### Environmental Impact Analysis

**Impact EN-1: Wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation,**

As discussed in Section 2.0, Project Description, future development within the PVSP area would adhere to all applicable federal, state, and local requirements for energy efficiency, including the Lancaster Municipal Code and the design standards and development regulations established in Chapters 5 and 6 of the PVSP.

Compliance with the City's Municipal Code would ensure compliance with the State energy code, Title 24. The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial development, which would include future development within the PVSP area, to comply with mandatory measures that were designed to minimize potential environmental impacts associated with the construction and operation of buildings. These measures are categorized into five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. An updated version of both the California Building Code and CALGreen (2022 CALGreen Code) went into effect on January 1, 2023. Compliance with these measures would ensure that development within the Plan area is in alignment with the City's Climate Action Plan.

As such, the proposed Plan would not result in the inefficient, wasteful, or unnecessary consumption of energy. No impacts would occur.

**Impact EN-2: Compliance with State or local plans for renewable energy or energy efficiency.**

As stated above, all future development in the Plan area would require approval by the City. Each development project would be required to adhere to all applicable local, regional, and State standards, laws, policies, ordinances, and regulations of the City of Lancaster 2030 General Plan and Municipal Code. On November 8, 2022, the City adopted the 2022 California Building Codes, including the 2022 CALGreen Code that addresses renewable energy and energy efficiency measures for building development in the state. This includes all renewable energy or energy efficiency measures outlined in the PVSP, such as the requirement of solar energy systems on all future residential and commercial buildings.

As discussed in Section 3.10, Land Use, Planning, and Recreation, of this EIR, the City of Lancaster is a member of SCAG which projects future growth in the region. The 2024 Connect SoCal RTP/SCS outlines energy efficiency measures in relation to transportation in the Southern California region. SCAG works directly with its member cities to ensure that planning efforts of each of the cities are in alignment with the regional goals of reducing GHG emissions. The City of Lancaster, and all other SCAG city-members, develop their general plans to reflect these regional goals and plan for future growth projections. Therefore, by adhering to the existing laws, standards, policies, ordinances, and regulations that have been developed by the City and outlined in the General Plan and Municipal Code, the future development in the PVSP would be in compliance with the regional 2024 Connect SoCal RTP/SCS with respect to energy efficiency.

Thus, adoption of the PVSP would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and the project would result in a less-than-significant impact in this area.

### Mitigation Measure

No mitigation measures are required.

## 3.6.5. Cumulative Impact Analysis

As discussed previously, the PVSP would be a project of regional significance according to CEQA Guidelines Section 15206, Projects of Statewide, Regional or Areawide Significance. Along with the City of Lancaster, SCAG has a responsibility for addressing and evaluating all cumulative projects or regional significance to determine each project's level of significance in the region. As noted above, implementation of the PVSP would be consistent with the regional plans, including the 2024 Connect SoCal RTP/SCS, that address projected growth patterns in the region. Furthermore, all future projects in the Plan's vicinity would be evaluated for consistencies with the established goals, policies, regulations and guidelines of the City's General Plan 2030 and Municipal Code.

# 3.7. Geology, Soils, and Paleontology

This section describes the existing geologic, soil, and paleontological resource conditions at and near the Plan area and evaluates the potential for geologic hazard impacts and paleontological resources impacts resulting from implementation the PVSP. The analysis presents an overview of existing geologic, soil, and paleontological resource conditions, describes the applicable regulations, identifies the criteria used for determining the significance of environmental impacts, and describes the potential impacts to and from geologic and soils hazards and conditions and to paleontological resources due to implementation of the Plan. The information in this section is based in part on a desktop study titled, "Geology and Soils Discussion," prepared by Earth Systems, dated August 29, 2024, and appended to this EIR as Technical Appendix C (Earth Systems, 2024). Additional information for the Plan area was sourced from the U.S. Geological Survey (USGS), California Geological Survey (CGS), U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), and other online reference materials. Paleontological resource information was primarily derived from a paleontology record search by the Western Science Center, dated August 30, 2024, and geologic information for the PVSP area from online sources.

## 3.7.1. Environmental Setting

### Regional Geology

The City of Lancaster and the PVSP area are located in the Antelope Valley, which is situated near the southwestern edge of the Mojave Desert Geomorphic Province. The Mojave Desert Geomorphic Province is a wedge-shaped structural block bounded on the north and northeast by the Garlock fault and the Tehachapi Mountains, along the southwest by the San Andreas rift zone and Transverse Ranges, and the eastern boundary has been arbitrarily mapped as the Colorado River and the Nevada state line (Earth Systems, 2024; Norris and Webb, 1976). The Mojave Desert Geomorphic Province is a broad interior region of isolated mountain ranges separated by desert plains and basins. Regional features of the western Mojave Desert include the alluvial-filled Antelope Valley, the Rosamond Hills, Rosamond Lake, Little Rock Wash, and Big Rock Creek (Earth Systems, 2024).

The Antelope Valley is located along the western edge of the Mojave Desert and consists primarily of elevated alluviated desert plains. The PVSP area is within the south-central portion of the Antelope Valley in an area characterized by relatively flat-lying topography and valley alluvial and playa deposits. Lithologic units exposed in this area consist predominantly of Quaternary sediments, including both lacustrine and alluvial deposits (Earth Systems, 2024).

### Local Geology

The Plan area is entirely underlain by Quaternary alluvial sediments ranging in age from Holocene to late Pleistocene (CGS, 2010). The geologic units underlying the PVSP area consist of wash deposits (late Holocene), modern alluvium (Holocene), modern alluvial fan deposits (Holocene), younger alluvial fan deposits (Holocene to late Pleistocene), and younger alluvial fan deposits, clay rich (Holocene to late Pleistocene) (CGS, 2010), as shown in Figure 3.7-1. Summary descriptions of these units are provided below.

- Wash deposits (Qw) – Wash deposits consist of unconsolidated fine- to medium-grained sand, with some coarse sand and fine gravel, and silt located primarily within active channels and drainages. The deposits are generally pale-brown, angular to sub-angular grains, derived from local bedrock, or reworked from other local Quaternary sources. These deposits are subject to localized reworking and new sediment deposition during storm events. Wash deposits are mapped where the Amargosa Creek channel crosses the southwestern portion of the PVSP site.
- Modern alluvium (Qa) – Modern alluvium is characterized as loose, unconsolidated to weakly consolidated, fluvial gravel, sand, and silt and is primarily located along and near channels and drainages.

Sediments in this unit are generally yellowish-gray to brown and consist of predominately of moderately sorted, medium- to very coarse-grained arkosic sand, with some silt, and pebble-cobble gravel (CGS, 2010). Modern alluvium is mapped in the southwestern portion of the site on either side of the Amargosa Creek channel.

- Modern alluvial fan deposits (Qf) – Modern alluvial fan deposits consist of unconsolidated to weakly consolidated, poorly sorted, rubble, gravel, sand, and silt deposits on active, essentially undissected, alluvial fans. Includes broad aprons of coarse debris adjacent to mountain fronts. Modern alluvial fan deposits are mapped underlying the northern and eastern portions of the PVSP area.
- Younger alluvial fan deposits (Qyf) – The younger alluvial fan deposits are found on slightly dissected, elevated alluvial fans and consist of unconsolidated to weakly consolidated, dark-yellowish-brown, fine- to medium-grained arkosic sand with fine gravel. The gravels are primarily from granitic sources, with many subangular quartz fine gravel clasts. This unit is found underlying a small portion of the PVSP area near the southwestern corner of the area.
- Younger alluvial fan deposits, clay rich (Qyfc) – The younger alluvial fan deposits, clay rich consist of consolidated, dark-yellowish-brown silty, fine arkosic sand with clay and calcium carbonate content and are generally distal fan sediments near edges of the former late Pleistocene Lake Thompson shorelines. The calcium carbonate was likely deposited during fluctuating groundwater conditions of former pluvial lake stands. This unit underlies a small portion of the PVSP area along its southwestern boundary.

**Soils**

Nearby explorations and literature review indicate that the native soils within the PVSP area are alluvial and the soils identified typically consist of interbedded layers of silty sand, sand with varying amounts of silt, sandy silt, and silt with lesser interbedded silty clay and clay lenses (Earth Systems, 2024). The site was used for agricultural purposes from prior to 1948 to around 1974, so it is anticipated that some of surficial soils will consist of artificial fill associated with this farming. It is anticipated that the upper four to five feet will be loose, becoming medium-dense to dense below five feet (Earth Systems. 2024).

Soils within the PVSP area reflect the underlying rock type, the extent of weathering of the rock, the degree of slope, and the degree of human modification. The NRCS Soil Survey Geographic (SSURGO) Soil Web Survey was reviewed to identify soil units underlying the PVSP area (NRCS, 2024). Five soil units were identified as underlying the Plan area, consisting of Cajon loamy sand, 0 to 2 percent slopes (CaA), Hesperia fine sandy loam, 0 to 2 percent slopes (HkA), Hesperia loamy fine sand, 0 to 2 percent slopes (HgA), Rosamond fine sandy loam (Ro), and Rosamond loam (Rp) (Earth Systems, 2024; NRCS, 2024), shown in Figure 3.7-2. A loam is a soil with approximately equal proportions of clay, silt, and sand. Summaries of the significant characteristics of the soils underlying the PVSP area are presented below.

- Cajon loamy sand, 0 to 2 percent slopes (CaA) – This soil unit underlies approximately 50 percent of the Plan area and consists of loamy sand, fine sand, and sand. It is found on alluvial fans with 0 to 2 percent slope, is excessively drained, and is formed in alluvium primarily derived from granite. Erosion potential for this soil is high for wind and low to moderate for sheet and rill erosion by water. Expansive potential of this soil is low, and the corrosion potential is moderate for uncoated steel and low for concrete (NRCS, 2024).
- Hesperia fine sandy loam, 0 to 2 percent slopes (HkA) – The Hesperia fine sandy loam, 0 to 2 percent slopes underlies approximately 43 percent of the Plan area and consists of fine sandy loam and sandy loam on alluvial fans. The soil is formed primarily in alluvium derived from granite and is well drained. Erosion potential for this soil is moderate to high for wind and moderate for sheet and rill erosion by water. Expansive potential of this soil is low, and the corrosion potential is moderate for both uncoated steel and concrete (NRCS, 2024).

- Hesperia loamy fine sand, 0 to 2 percent slopes (HgA) – The Hesperia loamy fine sand, 0 to 2 percent slopes underlies less than a half of a percent of the Plan area and consists of loamy fine sand, fine sandy loam, and sandy loam formed on alluvial fans. The soil is formed primarily in alluvium derived from granite and is well drained. Erosion potential for this soil is high for wind and moderate for sheet and rill erosion by water. Expansive potential of this soil is low, and the corrosion potential is moderate for both uncoated steel and concrete (NRCS, 2024).
- Rosamond fine sandy loam (Ro) – the Rosamond fine sandy loam underlies approximately 4 percent of the Plan area and consists of fine to very fine sandy loam, silty clay loam, sandy clay loam, and loam formed on alluvial fans. The soil is formed primarily in alluvium derived from granite and is well drained. Erosion potential for this soil is moderate to high for both wind and for sheet and rill erosion by water. Expansive potential of this soil is low to moderate, and the corrosion potential is high for uncoated steel and moderate for concrete (NRCS, 2024).
- Rosamond loam (Rp) – the Rosamond loam underlies approximately 3.5 percent of the Plan area and consists of loam, very fine sandy loam, silty clay loam, and sandy clay loam formed on alluvial fans. The soil is formed primarily in alluvium derived from granite and is well drained. Erosion potential for this soil is moderate for wind and moderate to high for sheet and rill erosion by water. Expansive potential of this soil is low to moderate, and the corrosion potential is high for uncoated steel and moderate for concrete (NRCS, 2024).

### *Soil Hazards*

Soil erosion is the removal of material from the surface soil. Erosion processes involve detachment and short transport of particles from the soil surface, most commonly by wind and water. Potential soil erosion hazards vary depending on the use, conditions, and textures of the soils. Erodibility is determined by considering slope and soil texture. Ground disturbance that loosens the soil increases the susceptibility of a soil to erosion.

Soils containing high percentages of fine sands and silt and that are low in density, are generally the most susceptible to wind erosion. As the clay and organic matter content of soils increases, the potential for wind erosion decreases. Clays act as a binder to soil particles, thus reducing the potential for erosion. Susceptibility of soils to wind erosion range from low to moderate within the PVPS area (NRCS, 2024).

The properties of soil that influence erosion by water (rainfall and runoff) are ones that affect the infiltration capacity of a soil, and those that affect the resistance of a soil to detachment and being carried away by falling or flowing water. Soils on steeper slopes would be more susceptible to erosion due to the effects of increased surface flow (runoff) on slopes where there is little time for water to infiltrate before runoff occurs. Sheet erosion occurs when water runs over a large uniform area picking up and distributing soil particles. Rill erosion occurs as concentrated surface runoff begins to remove soil along concentrated zones which form numerous small, but conspicuous, water channels or tiny rivulets. Susceptibility to sheet and rill erosion from water for soils underlying the Plan area ranges from low to high (NRCS 2024).

Expansive soils are characterized by their ability to undergo significant volume change (shrink and swell) due to variations in soil moisture content. Expansive soil behavior is a condition where clay soils react to changes in moisture content by expanding or contracting. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater. Expansive soils are typically very fine grained with a high to very high percentage of clay; poorly drained fine-grained soils typically have greater shrink-swell potential. Soils with moderate to high shrink-swell potential would be classified as expansive soils. Expansion potential for soils underlying the Plan area ranges from low to moderate (NRCS, 2024).

Corrosive soils can have a detrimental effect on concrete and metals. Corrosivity of soils is generally related to the following key parameters: soil resistivity; presence of chlorides and sulfates; oxygen

content; and pH. Typically, the most corrosive soils are those with the lowest pH and highest concentration of chlorides and sulfates. High sulfate soils are corrosive to concrete and may prevent complete curing reducing its strength considerably. Low pH and/or low resistivity soils could corrode buried or partially buried metal/steel structures. Corrosion potential of the soils underlying the PVSP area range from moderate to high for uncoated steel and low to moderate for concrete (NRCS, 2024).

Collapsible soils, also known as soils susceptible to hydroconsolidation, are geologically young, unconsolidated, low density, loose, dry, fine-grained granular soils commonly present in arid to semi-arid regions (CLADPW, 2017) with a high void ratio and low clay content that may collapse or undergo appreciable loss of volume upon wetting, load application, or both (NRCS, 2004). The collapse or rapid settlement is due to rearrangement of the soil particles when they become saturated under relatively low loads. Collapsible soils are soils susceptible to large volumetric changes when they become saturated. Collapsible soils are quite sensitive to either a rise in the groundwater table or increased surface water infiltration. Soils susceptible to hydroconsolidation within the County of Los Angeles are generally found in the Antelope Valley (CLADPW, 2017). Soils with low clay content formed on alluvial fans are mapped within the PVSP area and may be susceptible to collapse/hydroconsolidation.

### Slope Stability

Important factors that affect the slope stability of an area include the steepness of the slope, the relative strength of the underlying rock material, and the thickness and cohesion of the overlying colluvium. The steeper the slope and/or the less strong the rock, the more likely the area is susceptible to landslides. The steeper the slope and the thicker the colluvium, the more likely the area is susceptible to debris flows. A common indication of unstable slopes is the presence of old or recent landslides or debris flows. Landslides are the downslope movement of earth materials (rock, debris, and soil) at rates that range from inches per year to tens of miles per hour. The term landslide includes a wide range of ground movements, such as rock falls, deep failure of slopes, and shallow debris flows.

The Plan area is located on a flat to gently sloping alluvial plain with elevations ranging from 2420 to 2480 feet above mean sea level (MSL) across the site. Slope stability issues such as landslides are not expected to occur on this flat to gently sloping site.

### Subsidence

Subsidence is the gradual settling or sudden sinking of the Earth's surface due to subsurface movement of earth materials. It can result in the loss of aquifer storage, increased flooding, cracks and fissures at the land surface, damage to man-made structures, and associated economic costs. One of the principal causes of land subsidence is the gradual compaction of susceptible aquifer systems that can accompany groundwater-level declines caused by groundwater pumping (Earth Systems, 2024). Most of the subsidence in California is due to excessive groundwater pumping. Land subsidence can occur in valleys containing aquifer systems that are, in part, made up of fine-grained sediments and that have undergone extensive groundwater development and groundwater level declines. As the groundwater is withdrawn, the pore-fluid pressure in the sediments decreases allowing the weight of the overlying sediment to permanently compact or compress the fine-grained units. This effect is most pronounced in younger, unconsolidated sediments. Land subsidence is generally characterized by a broad zone of deformation where differential settlements are small.

The USGS has documented areas of land subsidence in in the Antelope Valley in the vicinity of the PVSP area; the Plan area lies south of an area of mapped land subsidence (Earth Systems, 2024). In 2011, the Los Angeles County Superior Court of California ruled that the Antelope Valley groundwater basin is in overdraft, with groundwater extractions in excess of safe yield of the groundwater basin (identified as 110,000 acre-ft/year by the Los Angeles County Superior Court of California). A 2014 USGS study of groundwater flow and subsidence in the Antelope Valley identified significant dewatering of the Antelope

Valley groundwater basin between 1915 and 1996 that resulted in groundwater level declines of more than 270 feet in some areas of the basin and of at least 100 feet in most of the Antelope Valley (Earth Systems, 2024). The 2014 USGS investigation found that as much as 6.6 feet of subsidence had occurred in the Antelope Valley between 1930 and 1992 due to excessive groundwater pumping in the Antelope Valley groundwater basin. Based on data in the 2014 USGS study, Earth Systems estimated that over the 62-year study period only a total of approximately 1 foot of subsidence (an average of approximately 0.2 inches per year) had occurred just north of the Plan area (Earth Systems, 2024). The 2014 USGS study also included evaluation of groundwater management models and scenarios that limit groundwater pumping to the identified safe yield amount for the basin. The models for the groundwater management scenarios indicated that under each scenario basin subsidence would continue to occur, but at reduced magnitudes for most of the scenarios (Siade et al, 2014).

Structures and paving in areas of subsidence could be subject to minor fissures due to tensional stress near the ground surface due to subsidence over the long term. However, the PVSP area is outside of the currently mapped subsidence area and no obvious evidence of fissuring was observed during Earth Systems review of historical aerial photographs of the project area (Earth Systems, 2024). Additionally, there is no available documented evidence of structural damage to structures in the PVSP area attributed to ground fissures and subsidence.

### Seismicity and Seismic Hazards

The PVSP area is in the Mojave Desert, which is a geologically complex and seismically active region. The seismicity of the Mojave Desert area is dominated by the intersection of the east-west trending Garlock fault system and the northwest-southeast trending San Andreas fault system. Both systems are responding to strain produced by the relative motions of the Pacific and North American Tectonic Plates. This strain is relieved by right-lateral strike-slip faulting on the San Andreas and related faults, left-lateral strike-slip displacement on faults in the Garlock fault zone, predominantly right-lateral strike-slip displacement on the Eastern California Shear zone (ECSZ), and by vertical, normal-slip faults in the Owens Valley-Sierra Nevada boundary (Stevens et al, 2013). The effects of this strain and deformation includes mountain building, basin development, deformation of Quaternary alluvial fans and volcanic deposits, widespread regional uplift, and generation of earthquakes.

The Mojave Desert is characterized by numerous geologically young faults. These faults can be classified as historically active, active, potentially active, or inactive, based on the following criteria (CGS, 1999):

- Faults that have generated earthquakes accompanied by surface rupture during historic time (approximately the last 200 years) and faults that exhibit a seismic fault creep are defined as Historically Active.
- Faults that show geologic evidence of movement within Holocene time (approximately the last 11,000 years) are defined as Active.
- Faults that show geologic evidence of movement during the Quaternary time (approximately the last 1.6 million years) are defined as Potentially Active.
- Faults that show direct geologic evidence of inactivity during all of Quaternary time or longer are classified as Inactive.

Although it is difficult to quantify the probability that an earthquake will occur on a specific fault, this classification is based on the assumption that if a fault has moved during the Holocene epoch, it is likely to produce earthquakes in the future. The PVSP area will be subject to ground shaking associated with earthquakes on faults of the ECSZ system, the San Andreas system, the Garlock system, and local faults in the Sierra Nevada. Since periodic earthquakes accompanied by surface displacement would be expected to continue in the Lancaster area through the lifetime of the PVSP development components, the effects

of strong ground shaking and fault rupture are of primary concern to safe and reliable use of the PVSP development components.

Approximately 34 active faults or seismic zones lie within 50 miles of the Plan area, including faults of the San Andreas system, the Garlock fault zone, and the ECSZ (USGS, 2024a).

Active faults of the San Andreas system are predominantly strike-slip faults accommodating translational movement. The San Andreas fault zone is a 680-mile active right-lateral strike-slip complex of faults that has been responsible for many of the damaging earthquakes in Southern California in historical times. The San Andreas fault zone is the longest active fault in California and represents the boundary between the Pacific and North American plates.

The Garlock fault is predominantly left-lateral strike-slip, approximately 185 miles long, and is a major east-west fault zone stretching between the San Andreas fault and Death Valley. The Garlock fault has been relatively quiet for the past 500 years, but since the Ridgecrest Earthquake Sequence in July 2019 that occurred on the Airport Lake fault zone, the Garlock fault has begun creeping as a result of strain placed on it from these earthquakes. The fault exhibited approximately 0.8 inches (2 centimeters) of creep at the surface in the 3 months following the Ridgecrest earthquakes (JPL, 2019).

The ECSZ is a region of active, predominantly strike-slip deformation east of the San Andreas fault that extends from the southern Mojave Desert and up along the east side of the Sierra Nevada. Faults of the ECSZ accommodates approximately 20 to 25 percent of relative plate motion between the Pacific and North America plates and is bounded on the east by the diffuse extensional deformation of the Basin and Range region and in the Mojave area by the San Andreas fault zone on the west (Frankel et al., 2008). Local faults in the southern part (Mojave Desert) of the ECSZ include the Lenwood-Lockhart, the Helendale-South Lockhart, the Calico-Hidalgo fault zone, the Pisgah-Bullion, the Hector Mine (Lavic Lake), and the Camp Rock-Emerson-Copper Mtn. fault zones.

### *Fault Rupture*

Fault rupture is the surface displacement that occurs when movement on a fault deep within the earth breaks through to the surface. Fault rupture and displacement almost always follows preexisting faults, which are zones of weakness; however, not all earthquakes result in surface rupture (i.e., earthquakes that occur on blind thrusts do not result in surface fault rupture). Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. In addition to damage caused by ground shaking from an earthquake, fault rupture is damaging to buildings and other structures due to the differential displacement and deformation of the ground surface that occurs from offset/ground displacement across the fault. In California, Alquist-Priolo Earthquake Fault (Alquist-Priolo) Zones have been defined by the California Geological Survey (CGS) along active faults with the potential for surface rupture. However, not all active faults have been zoned, as the criteria specifies that a fault must be shown to be “sufficiently active” and “well defined” by detailed site-specific geologic explorations in order to determine whether an Alquist-Priolo Earthquake Hazard Zone can be established with associated building setbacks. Many known active faults are not sufficiently “well defined” at the surface to qualify to be Alquist-Priolo zoned but could still cause significant surface fault rupturing. The presence of these mapped zones indicates significant potential for fault rupture in the areas where the project crosses the “zones”. However, no known active faults or Alquist-Priolo Earthquake Fault Zones are located crossing or in the immediate vicinity of the Plan area (Earth Systems, 2024). The closest fault to the PVSP area is the Mojave segment of the San Andreas fault which is located approximately 5.9 miles southwest of the Plan area.

### *Ground Shaking*

The primary seismic hazard to the PVSP are strong ground shaking from earthquakes along regional faults including the San Andreas fault, Garlock fault, Eastern California shear zone, and the many faults within the Los Angeles basin and Inland Empire.

The intensity of the seismic shaking, or strong ground motion, during an earthquake is dependent on the distance between the project area and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the project area. Earthquakes occurring on faults closest to the PVSP area would most likely generate the largest ground motion. Earthquake shaking hazards are commonly calculated by projecting earthquake rates based on earthquake history and fault slip rates, the same data used for calculating earthquake probabilities. The Probabilistic Seismic Hazard Map (PSHM) for California was used to estimate ground shaking hazards near the PVSP area (CGS, 2016). The PSHM for California shows the relative intensity of ground shaking from relatively long-period (1.0 second) earthquake shaking related to anticipated future earthquakes. Long-period (1.0 second) shaking affects tall, relatively flexible buildings, but also correlates well with overall earthquake damage. The shaking potential is calculated as the level of ground motion that has a 2% chance of being exceeded in 50 years, which is the same as the level of ground-shaking with about a 2500-year average repeat time. The intensity of earthquake-induced ground motions can be described using ground accelerations, which are represented as a fraction of the acceleration of gravity (g). Although the greatest ground shaking hazards are in areas of highest intensity, no region is immune from potential earthquake damage related to ground shaking. The estimated intermediate-period (1.0 second) ground accelerations for the PVSP area range from 1.15g to 1.25g, which represents a potential for very strong to severe ground shaking at the site.

A review of historic earthquake activity from 1850 to 2024 indicates approximately 30 earthquakes of magnitude (M) 5.5 or greater have occurred within 60 miles of the PVSP site, with 7 of these earthquakes being greater than or equal to M6.0 (USGS, 2024b). These large earthquakes also had numerous aftershocks, with some measuring greater than M 5.5, which caused further damage in the affected areas. Significant regional earthquakes include large aftershocks of up to M6.3 from the M7.9 1857 Fort Tejon earthquake, the M7.5 1952 Kern County earthquake, the M6.6 1971 San Fernando, large aftershocks of up to M5.7 from the M7.3 1992 Landers earthquake, and the M6.7 1994 Northridge earthquake.

### *Liquefaction*

Liquefaction is the loss of soil strength from sudden shock (usually earthquake shaking), causing the soil to become a fluid mass. Liquefaction describes a phenomenon in which saturated soil loses shear strength and deforms as a result of increased pore water pressure induced by strong ground shaking during an earthquake. Dissipation of the excess pore pressures will produce volume changes within the liquefied soil layer, which can cause settlement. Shear strength reduction combined with inertial forces from the ground motion may also result in lateral spreading in areas with significant slope grade or free faces slopes. Factors known to influence liquefaction include soil type, structure, grain size, relative density, confining pressure, depth to groundwater, and the intensity and duration of ground shaking. Soils most susceptible to liquefaction are saturated, loose sandy soils and low plasticity clay and silt. In general, for the effects of liquefaction to be manifested, groundwater levels typically must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction.

Based on the geology and existing area studies, Earth Systems (see Appendix C) anticipates that the soils within the Plan area will generally range from non-plastic silts, sands, to clays with low plasticity. Earth Systems concludes that the potential for liquefaction to occur throughout most of the PVSP area is low due to historic groundwater depths of greater than 100 feet below ground surface (bgs) in the area. Where the Amargosa Creek crosses the southwestern portion of the PVSP location, there is a small area along the former channel that is mapped as a potential liquefaction zone mapped by the CGS (CGS 2005). Liquefaction zones mapped by the CGS define areas where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements and where mitigation would be required (Earth Systems, 2024; CGS, 2005). However, the CGS mapping is dated 2005 and in 2008/2009 the Amargosa Creek channel was transformed into an underground culvert across the Plan area and no longer causes or would cause perched groundwater in the area

from infiltration and therefore would not contribute to liquefaction potential along the former channel alignment. No structures would be developed over the underground culvert. The remainder of the site is not in a CGS mapped liquefaction hazard zone and the potential for perched water to develop on an aerial basis across the PVSP area is very low.

The potential for lateral spreading is considered low due to non-liquefiable conditions and lack of descending slopes in the proximity of the PVSP area (Earth Systems, 2024).

### *Seismically Induced Landslides*

Other forms of seismically induced ground failures which may affect a site include seismically induced landslides and other slope movements such as rockfalls. Slope failures triggered by earthquakes have been a significant cause of earthquake damage. In Southern California, large earthquakes such as the 1971 San Fernando, 1994 Northridge, and the July 2019 Ridgecrest earthquakes triggered landslides that were responsible for destroying or damaging numerous structures, blocking major transportation corridors, and damaging life-line infrastructure. Areas that are most susceptible to earthquake-induced landslides are steep slopes in poorly cemented or highly fractured rocks, areas underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits.

The PVSP area and surrounding vicinity have generally flat to gently sloping terrane; therefore, seismically induced landslides are not likely to impact the PVSP area. No landslide hazard zones are mapped on the CGS's Seismic Hazard Zone map in the area.

## Paleontology

Paleontological resources are any fossilized remains, traces, or imprints of organisms that are preserved in the Earth's crust and are of paleontological interest and provide information about the history of life on Earth. Fossil remains may include bones, teeth, shells, leaves, and wood. They are found in geological deposits within which they were originally buried. Paleontological resources include not only the actual fossils, but also the collecting localities and the geological deposits that contain the fossils. Paleontological resources are considered nonrenewable resources because the organisms they represent no longer exist. Thus, once destroyed, these resources can never be replaced. Paleontological resources are considered significant if they provide new data on fossil animals, distribution, evolution, or other scientifically important information.

The PVSP area is primarily underlain by younger Quaternary alluvial units including modern (Holocene) wash deposits, alluvial deposits, and alluvial fan deposits, and young (Holocene to late Pleistocene) alluvial fan deposits. The top several feet of the soils at the Plan area have been disturbed by a variety of activities, including agricultural use, and these disturbed soils have no to low paleontological sensitivity. A paleontological resource record search for the Plan area conducted by the Western Science Center (2024) did not identify any fossil localities in the PVSP area or within 1 mile of the area. Additionally, a paleontology survey conducted for the Amargosa Creek Specific Plan, which covered the southern portion of the PVSP area, did not identify any paleontological resources within its study boundaries (City of Lancaster,2007).

A paleontological study conducted for the City of Lancaster 2030 General Plan Master Environmental Assessment (City of Lancaster, 2009) did not identify any known fossil localities within the City; however, it did note that fossil localities containing significant fossils such as extinct mastodon and horse, as well as a diverse collection of bird, carnivore, rabbit, and rodent fossils had been found in older Quaternary sediments similar to those within the City of Lancaster. No significant fossils were identified in younger Quaternary sediments, except in areas underlain by lacustrine deposits; no lacustrine deposits are located at or near the PVSP area.

Young alluvial sediments generally unlikely to have significant paleontological resources due to their age and are considered to have low potential to contain significant paleontological resources. The Holocene

to late Pleistocene aged surficial alluvial sediments at the Plan area have low potential to contain significant paleontological resources, however they are likely underlain by older Pleistocene sediments at unknown depths that have moderate to high potential to contain significant paleontological resources such as Pleistocene age vertebrate fossils.

## 3.7.2. Regulatory Setting

### Geology

#### *Federal Regulations*

**International Building Code (IBC).** Published by the International Code Council (ICC), the purpose of the IBC is to establish minimum structural requirements to provide a reasonable level of safety, public health and general welfare through structural strength, and safety to life and property from fire and other hazards attributed to the built environment. The provisions of the IBC apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of buildings or structures, as well as any appurtenances connected to applicable buildings or structures. The IBC also incorporates the requirements and regulations set forth in several other ICC codes including the International Energy Conservation Code, the International Existing Building Code, the International Fire Code, and the International Fuel Gas Code. The IBC is in use or adopted in all 50 states of the U.S. and is updated every 3 years to ensure that new construction methods and technologies are incorporated into existing codes. The IBC has replaced the Uniform Building Code (UBC) as the basis for the California Building Code (CBC).

**Clean Water Act.** The Clean Water Act (CWA) (33 U.S. Code § 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of waters of the U.S. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain non-point-source discharges to surface water. Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate point-source discharges of pollutants into waters of the U.S. Discharges or construction activities that disturb 1 or more acres are regulated under the NPDES stormwater program and are required to obtain coverage under a NPDES Construction General Permit. The Construction General Permit establishes limits and other requirements, such as the implementation of a Storm Water Pollution Prevention Plan (SWPPP), which would further specify best management practices (BMPs) and other measures designed to avoid or eliminate pollution discharges in waters of the U.S. The NPDES Program is a federal program which has been delegated to the State of California for implementation through the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB). The Lahontan RWQCB has oversight over the PVSP project area.

#### *State Regulations*

**California Building Code (CBC) and California Residential Code (CRC).** The CBC and the CRC are promulgated under the California Code of Regulations, Title 24, Parts 2 (California Building Code) and Part 2.5 (California Residential Code) and are administered by the California Building Standards Commission. The PVSP is subject to the applicable sections of the CBC. The CBC and CRC contain administrative regulations for the California Building Standards Commission and for all State agencies that implement or enforce building standards. Local agencies must ensure that development complies with the guidelines contained in the current CBC and CRC. Cities and counties have the ability to adopt additional building standards beyond the current CBC and CRC requirements. The City of Lancaster has adopted the CBC and CRC into their Building Code and has oversight in enforcing compliance with these codes in the Lancaster area. The PVSP would comply with applicable seismic and construction design criteria of the most recent CBC and CRC standards.

The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure, or any appurtenances connected or attached to such buildings or structures, throughout California. Chapter 16 of the CBC contains specific requirements for seismic safety. Chapter 18 of the CBC regulates excavation, foundations, and retaining walls. Chapter 33 of the CBC contains specific requirements pertaining to site demolition, excavation, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. Chapter 70 of the CBC regulates grading activities, including drainage and erosion. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching, as specified in the State of California Division of Occupational Safety and Health (commonly called Cal/OSHA) regulations (Title 8 of the CCR) and in Section A33 of the CBC.

**The Alquist-Priolo Earthquake Fault Zoning Act**. The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Sections 2621–2630), was passed in 1972 to mitigate the hazard of surface faulting to structures used for human occupancy. The main purpose of the Act is to prevent the construction of buildings used for human occupancy on the traces of active faults. Although the Act addresses the hazards associated with surface fault rupture, it does not address other earthquake related hazards, such as seismically induced ground shaking or landslides. The law requires the State Geologist to establish regulatory setback zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults which have been shown to be “sufficiently active” and “well defined” by detailed site-specific geologic explorations, and to publish appropriate maps that depict these setback zones. Cities and counties affected by the zones must regulate certain development “projects” within the zones. They must withhold development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

**Seismic Hazards Mapping Act**. The Seismic Hazards Mapping Act of 1990 (CA Pub. Res. Code § 2690 et. Seq.) is a statewide seismic hazard mapping and technical advisory program aid in reducing the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. The Act directs the California Department of Conservation, Division of Mines and Geology [now called California Geological Survey (CGS)] to delineate Seismic Hazard Zones or Zones of Required Investigation. Zones of Required Investigation referred to as "Seismic Hazard Zones" in CCR Section 3722, are areas shown on Seismic Hazard Zone Maps where site investigations are required to determine the need for mitigation of potential liquefaction and/or earthquake-induced landslide ground displacements. A geotechnical investigation of the site must be conducted, and appropriate mitigation measures incorporated into the project design before development permits may be granted. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects within seismic hazard zones. Seismic hazard mapping has been conducted for the PVSP area by the CGS and is included on the 2005 CGS Earthquake Zones of Required Investigation Lancaster West Quadrangle Map (CGS, 2005).

### *Local Regulations and Plans*

**Lancaster Municipal Code.** Title 15 of the Lancaster Municipal Code provides regulations regarding buildings and construction, including Chapter 15.08 - Building Code and Chapter 15.09 – Residential Code, that contain the presiding building codes that apply in the City of Lancaster for purposes of regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversions, occupancy, height, area maintenance of all structures and certain equipment therein. The Building Code also provides penalties for violations. Section 15.08.010 – California Building Code Provisions adopted by reference adopts the CBC and CRC, respectively, by reference with amendments as the City of Lancaster Building Code.

Municipal Code Section 8.16.030 - Disturbing Surface of Land or Causing Wind Erosion Prohibited. This section prohibits the disturbance of land, depositing of soil on land, or any act that contributes to dust erosion or wind erosion of the land. Further, no person should cause or aggravate an existing dust or wind erosion condition without providing sufficient protection to prevent said land from being eroded or creating dust.

**City of Lancaster General Plan 2030.** The City of Lancaster General Plan 2030 Plan for the Natural Environment (adopted in 2009) evaluates the natural and human-induced environments within the City with policies and actions for maintenance and protection of natural and energy resources and includes polices pertaining to soils. The General Plan Safety Element (adopted in 2022) includes a discussion of hazards related to geology and seismicity and includes policies and actions to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from geologic and seismic hazards. The following policies and specific actions are applicable to the PVSP:

- **Policy 3.5.1.** Minimize erosion problems resulting from development activities.
- **Specific Action 3.5.1 (a).** Concurrent with the submittal of a grading plan, require the submittal and approval by the appropriate City departments of erosion control plans prior to the approval of the grading plan.
  - Erosion control plans shall be prepared and shall cover all areas impacted by the proposed grading.
  - The erosion control plans shall address methods of control (i.e. detention basins, check dams, sandbagging, etc.), and interim storm drain construction if required.
- **Specific Action 3.5.1 (b).** Require that erosion control measures be in place prior to the rainy season.
- **Specific Action 3.5.1 (c).** Require implementation of erosion control measures as soon as possible during the grading operation, and require that they remain in operation until improvement construction has begun within the controlled area.
- **Specific Action 3.5.1 (e).** Require that grading plans include appropriate and feasible measures to minimize fugitive dust. Potential measures include:
  - Regular watering of cleared areas.
  - Minimizing the extent of cleared areas at any given time.
  - Establishing of vegetative cover as soon as possible after grading is completed.
  - Using soil tackifiers, soils stabilization mulches, and/or oil emulsions, where feasible.
- **Policy 3.5.2.** Since certain soils in the Lancaster study area have exhibited shrink-swell behavior and a potential for fissuring, and subsidence may exist in other areas, minimize the potential for damage resulting from the occurrence of soils movement.
- **Specific Action 3.5.2(a).** As part of the environmental review process, require the applicant to prepare geotechnical/soils studies evaluating the shrink-swell potential of soils and the potential for fissuring or subsidence. If necessary, require implementation of appropriate mitigation measures.
- **Policy 4.1.1.** Facilitate rapid physical and economic recovery following an earthquake by identifying and recognizing potentially hazardous conditions and implementing effective standards for seismic design of structures.
- **Specific Action 4.1.1(b).** Require all new developments, redevelopments, and major remodels to comply with the most recent California Building Code seismic design standards and such other supplemental design criteria.

- **Policy 4.1.2.** Require development in areas with potential slope stability or soil constraints that may impact construction to conduct engineering studies to determine appropriate structural design criteria and effective construction standards to mitigate these conditions.
- **Specific Action 4.1.2(a).** Require specialized soil reports in areas suspected of having problems with bearing strength, expansive soils, soil settlement, and subsidence.
- **Specific Action 4.1.2(b)** Through the Development Review Process, ensure that any new development proposal located within an area determined by the State of California to be a seismic hazard zone is conditioned for appropriate mitigation.

### Paleontology

#### *State Regulations*

**California Environmental Quality Act of 1970.** The California Environmental Quality Act of 1970 (CEQA) states that it is state policy to "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. If a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered. CEQA includes paleontological, archaeological, and historic resources as integral features of the environment.

**California Administrative Code, Title 14, Section 4307.** This section states that “No person shall remove, injure, deface or destroy any object of paleontological, archaeological or historical interest or value.”

#### *Local Regulations and Plans*

**City of Lancaster General Plan 2030.** The City of Lancaster General Plan 2030 Plan for Active Living includes an objective “to identify and preserver and/or restore those features of cultural, historical, or architectural significance” (Objective 12.1) and includes the following policy and specific action relevant to paleontological resources and the PVSP.

- **Policy 12.1.1.** Preserve features and sties of significant historical and cultural value consistent with their intrinsic and scientific values.
- **Specific Action 12.1.1(a).** As part of the CEQA review process, require site-specific historical, archaeological, and/or paleontological studies when there exists a possibility that significant environmental impacts might result or when there is a lack of sufficient documentation on which to determine potential impacts.

## 3.7.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

A wide range of potential impacts, including geologic and seismic hazards and impacts to paleontological resources, were considered in this analysis. Geologic conditions were evaluated with respect to the impacts, implementation of projects under the PVSP may have on local geology, soils, and paleontology as well as the impact that specific geologic and soils hazards may have upon the projects developed under the PVSP.

Section VIII, Geology and Soils, of Appendix G of the State CEQA Guidelines was used to define thresholds of significance. Impacts associated with geology, soils, and paleontology may be considered significant if they would result in the following:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.
- Result in substantial soil erosion or the loss of topsoil.
- 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.
- Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (1994), creating substantial risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (This significance criterion is not addressed in the impact analysis below because the PVSP would not use septic tanks or alternative wastewater disposal systems. The PVSP developments would include wastewater disposal systems connected to the local treatment plant (Lancaster Wastewater Reclamation Plant) (Refer to Section 8.0, Effects Found Not to be Significant).
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

**Environmental Impact Analysis**

**Impact GEO-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of an Alquist-Priolo zoned fault or other known active earthquake fault, strong seismic ground shaking, seismic related ground failure, including liquefaction, or landslides.**

***Fault Rupture***

The PVSP area is not crossed by or adjacent to any known active faults or a delineated Alquist-Priolo Earthquake Fault Zones (Earth Systems, 2024). The nearest mapped fault to the PVSP area is the Alquist-Priolo zoned Mojave segment of the San Andreas fault zone, located approximately 5.9 miles southwest of the Plan area. Fault rupture in the PVSP area would therefore be unlikely and no impacts would occur from fault rupture.

***Ground Shaking***

The Plan area is in a seismically active area of Southern California that is expected to experience moderate to large regional earthquakes within the lifetime of the PVSP developments that would generate moderate to severe ground shaking at the site. This risk of seismically induced ground shaking in the PVSP region would not be increased by projects developed under the PVSP. Seismically induced ground shaking has the potential to cause damage to PVSP development components; however, each of the PVSP developments would be required to comply with Lancaster Municipal Code Title 15, Chapter 15.08, Building Code and Chapter 15.09, Residential Code for design of development structures, which would reduce the potential for risk of loss during a strong seismic ground shaking event. The City of Lancaster Building and Residential Codes, and by association the CBC and CRC, provide standards that must be met to safeguard life or limb, health, property, and public welfare by controlling the design, construction, quality of mater-

ials, use and occupancy, location, and maintenance of all buildings and structures, and include design requirements that have been specifically tailored for California earthquake conditions. Implementation of Mitigation Measure (MM) GEO-1 would require that each PVSP development project conduct a geotechnical investigation and that project design comply with the recommendations of the geotechnical investigation to address seismic parameters and project specific conditions, thus reducing the potential for adverse effects from seismically induced ground shaking. Implementation of MM GEO-1 and compliance with City of Lancaster Building and Residential Code requirements would reduce the impact from seismically induced ground shaking to a less-than-significant level.

### Mitigation Measure

**MM GEO-1** **Geotechnical Investigations.** Prior to submittal of grading and/or building plans, or at the request of the City Engineer, a geotechnical investigation and associated report shall be completed by a licensed geotechnical engineer. The report shall identify geologic and geotechnical hazards at the subject site, such as unsuitable soil conditions (including expansive soils) and seismic hazards such as seismically induced ground shaking and liquefaction. The report shall provide recommended measures to reduce impacts from any identified geologic or seismic hazards at the subject site. The geotechnical report shall also provide grading recommendations for any grading required at the subject development site. These recommendations shall be incorporated into the final design for each subject development. Each geotechnical report shall be provided to the City of Lancaster Building Official or designee for review prior to commencement of any subject development site grading or construction activities.

A final written report summarizing and verifying of compliance with the recommendations of each the subject project geotechnical reports shall be submitted to the City of Lancaster Building Official or designee for review after completion of the subject development construction.

#### *Seismic Related Ground Failure*

Due to anticipated depth of groundwater at greater than 100 feet, the potential for liquefaction to occur on sites within the PVSP area is low (Earth Systems, 2024). Additionally, the potential for lateral spreading is considered low due to the low potential for liquefaction and lack of descending slopes in the proximity of the PVSP for lateral spreading to occur on. Although, the CGS has mapped a narrow zone of liquefaction along in the area where Amargosa Creek is mapped across the southwestern portion of the site, (CGS, 2005), Amargosa Creek currently traverses the PVSP area in an underground culvert that prevents infiltration of water along the creek channel in this area and significantly reduces the potential for formation of shallow perched groundwater along the channel alignment that could potentially lead to liquefaction. Therefore, the potential for liquefaction to occur in the area previously mapped as potentially liquefiable by the CGS is low. Additionally, the PVSP identifies uses of the area over the buried Amargosa Creek culvert as open space connections for pedestrian and non-motorized mobility, and storm flow conveyance; no structures for human occupancy would be built over the buried creek channel. The potential for lateral spreading to occur is negligible due to the lack of liquefiable conditions and lack of significant descending slopes in the proximity of the site (Earth Systems, 2024). The limited potential for liquefaction at the PVSP area would be further reduced by required compliance with City of Lancaster Building and Residential Codes and MM GEO-1 which requires a geotechnical investigation and compliance with geotechnical recommendations for each PVSP development project. Any potential adverse impacts related to seismic ground failures and liquefaction would be less than significant with mitigation incorporated.

### *Landslides*

The PVSP area and vicinity are relatively flat to gently sloping and would not be subject to landslides or other slope failures. Additionally, the PVSP area is not located within or near an area mapped by the CGS as having the potential for earthquake induced landslides. The implementation of the PVSP would not result in the creation of any new slopes onsite. Thus, no impact would occur from landslides.

**Impact GEO-2: Result in substantial erosion or loss of topsoil.**

### *Construction*

The PVSP area is comprised primarily of previously disturbed land. The PVSP allows for the construction of a master-planned community that contains residential neighborhoods, parks and other recreational facilities, a school site, open space, and medical, office, and commercial uses. Construction within the Plan area would require ground-disturbing activities that would loosen site soils. Construction-related ground disturbance would include grading and excavation for roads, utilities, parking areas, parks, and commercial and residential structure foundations. Disturbed and exposed soils would be subject to erosion during rainfall events and high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water. The most likely time for erosion to occur is soon after initial disturbance and before establishment of vegetative cover or placement of impervious surfaces or structures. Some of the soils in the PVSP area have moderate susceptibility to wind erosion and moderate to high susceptibility to sheet and rill erosion by water.

Each of the development projects under the PVSP would be required to obtain, under Clean Water Act regulations, a NPDES General Permit for Storm Water Discharges Associated with Construction Activity. A NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least 1 acre of total land area. Compliance with the NPDES would require that each project submit a project specific SWPPP. The SWPPP would require identification of erosion sources development and implementation of BMPs to minimize and control erosion, which would reduce the potential for construction to trigger erosion. Each project would be required to comply with Section 8.16.030, Disturbing Surface of Land or Causing Wind Erosion Prohibited, of the City of Lancaster Municipal Code Section 8.16.030 requires protection against erosion and creating dust. Additionally, erosion and loss of topsoil as a result of wind (fugitive dust) would be minimized with required compliance with Antelope Valley Air Quality Management District (AVAQMD) Rules 401, 402, and 403; refer to Section 3.3, Air Quality and Greenhouse Gases for further discussion of fugitive dust. Compliance with AVAQMD requirements and preparation of an AVAQMD-approved Dust Control Plan, AVAQMD requirements, NPDES requirements, and the Lancaster Municipal Code would ensure that erosion effects from development and impacts related to erosion would be less than significant.

## Mitigation Measure

### *No mitigation required.*

### *Operation*

Following construction of each project in the PVSP area, wind and water erosion on the developed portion of the PVSP area would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces, and drainage would be controlled through the storm drain and storm water flow systems which would reduce the potential for erosion. Therefore, impacts would be less than significant.

**Impact GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and result in landslides, lateral spreading, subsidence, liquefaction, or collapse.**

### *Landslide*

The PVSP area and vicinity are relatively flat and would not be subject to earthquake-induced or naturally occurring landslides or other ground failures.

### *Lateral Spreading*

As discussed above, the PVSP area is relatively flat without any significant downslope grades and generally has low liquefaction potential due to groundwater depths of greater than 100 feet below ground surface. Therefore, lateral spreading would not occur.

### *Subsidence*

Although the PVSP area is located in the vicinity of a mapped subsidence zone due to ground water extraction from the Antelope Valley ground water basin, no subsidence or subsidence related features have been noted in the PVSP area. Estimated subsidence north of the PVSP site was only about 0.2 inches/year between 1930 and 1992 and this small amount of subsidence outside of the PVSP area is unlikely to cause adverse impacts to development under the PVSP. Therefore, impacts would be less than significant.

### *Liquefaction*

As discussed above, most of the PVSP area is considered to have low potential for liquefaction (Earth Systems, 2024); however, a small area of liquefaction potential has been identified by the CGS along the Amargosa Creek channel which crosses the southwestern portion of the PVSP area. The creek has subsequently been put in an underground culvert, reducing potential liquefaction in the creek vicinity. Implementation of MM GEO-1 (Geotechnical Investigations) and compliance with Lancaster Building and Municipal Codes would reduce potential adverse impacts form liquefaction to a less-than-significant level.

### *Collapse*

Soils susceptible to collapse/hydroconsolidation are found in the Antelope Valley. Most of the soils underlying the PVSP area consist of fine-grained granular sediments that may be prone to hydroconsolidation (collapse) if wetted and subject to loading from structured developed under the PVSP. Implementation of MM GEO-1 (Geotechnical Investigations) and compliance with Lancaster Building and Municipal Codes would reduce potential adverse impacts associated with collapse to a less-than-significant level.

### Mitigation Measures

Compliance with MM GEO-1, Geotechnical Investigations, listed above shall be required.

**Impact GEO-4: Be located on an expansive soil that could create adverse effects.**

Most of the PVSP area is underlain by sandy soils with low expansion potential (Cajon and Hesperia soils); however, two of the soil units, the Rosamond fine sandy loam and the Rosamond loam, have low to moderate expansion potential. Soils with moderate expansion potential are considered expansive and could potentially cause adverse effects to roads, foundations, and structures due to shrinking and swelling with changes in water moisture. Each development under the PVSP would be required to comply with City of Lancaster Building and Residential Codes, which include provision for expansive soil testing, and implementation of MM GEO-1, which requires a geotechnical investigation and compliance with geotechnical recommendations for each PVSP development project, would reduce potential impacts in areas of

expansive soil. Any potential adverse impacts related to expansive soil would be less than significant with mitigation incorporated.

### Mitigation Measures

Compliance with MM GEO-1, Geotechnical Investigations, listed above shall be required.

**Impact PALEO-1: Destruction of unique paleontological resources.**

The near surface geologic units underlying the PVSP area consist of disturbed surface soils with no potential for significant paleontological resources overlying young Quaternary (Holocene and Holocene to late Pleistocene in age) alluvial and wash sediments with low potential for paleontological resources. Older Pleistocene-age alluvium with moderate to high potential for significant paleontological resources likely underlay the younger alluvial sediments at unknown depths and could potentially be encountered during construction activities. The older Pleistocene-age alluvial soils at depth have a moderate to high potential to contain significant vertebrate fossils. Thus, deeper excavations that extend down into older deposits, could potentially uncover significant fossil vertebrate remains. Mitigation Measure PALEO-1 would provide procedures to alert workers to the potential for fossils to be encountered in deeper excavations and MM PALEO-2 would provide procedures to follow in the event fossils are encountered during construction activities. Implementation of MMs PALEO-1 and PALEO-2 would ensure that potential impacts to paleontological resources are less than significant.

### Mitigation Measure

**MM PALEO-1** **Paleontological Resource Awareness Plan.** Prior to the start of any ground disturbing construction activities, the developer for the subject project shall retain a qualified professional paleontologist to prepare a Paleontological Resource Awareness Plan. The qualified professional paleontologist shall also provide training related to the plan to all workers and staff who will be onsite during excavation activities. The plan shall, at a minimum, provide information on and show what local Pleistocene fossils look like in general, where they may be encountered in the project excavation, and how to proceed should material suspected to be a fossil is encountered.

**MM PALEO-2** **Unanticipated Fossil Discovery.** In the event fossil remains are encountered during excavation activities associated with project development, the contractor shall cease all earth-disturbing activities within a 100-meter radius of the area of discovery, notify the City and the qualified professional paleontologist shall be contacted to come to the site to evaluate the significance of the find and recommend an appropriate course of action. Where warranted, fossils will be excavated or otherwise recovered. Field data forms shall be used to record pertinent geologic data; stratigraphic sections shall be measured, and appropriate sediment samples will be collected and submitted for analysis from each fossil locality. Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in an accredited and permanent scientific institution for the benefit of current and future generations. Work within the potential fossil discovery area shall resume only after the resource has been appropriately identified and collected, if appropriate.

## 3.7.4. Cumulative Impact Analysis

### Geographic Extent

#### *Geology and Soils*

The geographic extent for the consideration of cumulative effects of and to geology and soils, with the exception of erosion, is the PVSP area boundary. This geographic extent is appropriate as most geology and soils impacts are localized in nature and are generally impacts to and not from a project at a particular site. The geographic extent for cumulative impacts related to soil erosion is the PVSP boundary and a 1,000-foot buffer around the PVSP area. The buffer size corresponds with impacts resulting from erosion of disturbed soils at and near the PVSP area. Impacts resulting from erosion are also localized in nature and unlikely to extend much beyond the actual PVSP boundary and adjacent areas of other projects unless an extreme event results in substantial downstream/downwind erosion for soil.

#### *Paleontology*

The geographic extent for cumulative impacts to paleontological resources considers development of the PVSP area in conjunction with other development projects in the Antelope Valley that are located in similar geologic units as the PVSP area and could potentially damage or destroy significant paleontological resources.

### Cumulative Effects of the Proposed Project

#### *Geology and Soils*

With the exception of erosion hazards, potential geologic and soils effects 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, issues including fault rupture, strong seismic ground shaking, liquefaction, landslides and expansive soils, would involve effects to (and not from) the proposed development and are specific to onsite 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.

With respect to soil resources and the potential for erosion and loss of topsoil, impacts to soil erosion triggered by construction activities could combine with the effects of construction of other projects if they were adjacent to or near each other and ground disturbing activities were occurring at the same time.

Erosion impacts related to ground-disturbing construction activities for any PVSP project or development would be less than significant through compliance with federal, State, and local regulations. Projects within the PVSP area would be required to obtain a NPDES General Permit for Storm Water Discharges Associated with Construction Activity and prepare a project specific SWPPP which would include BMPs to minimize and control erosion and to comply with local regulations regarding fugitive dust and erosion. Other developments and projects in the PVSP vicinity would likely be required to comply with the same or similar regulations to minimize and control erosion and fugitive dust and, therefore, soil erosion impacts would not be cumulatively considerable.

During operation of developments, the presence of design features of the developments such as land-scaping, impervious surfaces, and storm water flow control features would protect the underlying soils and minimize the potential for erosion of the soils by wind or water. Other cumulative projects would likely have similar design features to prevent erosion during project operation. Impacts from erosion during project operation would not be cumulatively considerable.

### *Paleontology*

Development in the Antelope Valley has the potential to destroy paleontological resources, particularly during activities such as grading and excavation. Where these activities occur in areas containing Pleistocene sediments, which typically contain a moderate to high potential for significant paleontological resources, resource destruction may occur. In areas of high potential for significant paleontological resources collection of fossil materials, dislodging of fossils from their preserved environment, and/or physical damage of fossil specimens could also adversely affect paleontological resources. Together these potential impacts associated with development in the cumulative scenario could result in a cumulatively significant impact to paleontological resources.

As discussed in Section 3.7.2, there is a low potential for significant paleontological resources in the young Quaternary (Holocene and Holocene to late Pleistocene) alluvial sediments underlying the PVSP; however, older Pleistocene sediments with moderate to high potential to significant paleontological resources may be encountered in deeper excavations. With Implementation of MMs PALEO-1 and PALEO-2, paleontological resource impacts would be reduced to a less-than-significant level. Should paleontological resources be discovered in similar sediments to those underlying the PVSP area, they would be subject to the same requirements and would likely implement mitigation measures similar to MMs PALEO-1 and PALEO-2. This would reduce the effects of their impacts to a less-than-significant level. Paleontological resource impacts would not be cumulatively considerable.

## 3.7.5. Level of Significance After Mitigation

Identified geology and soils impacts, GEO-1 through GEO-4 and PALEO-1, would be less than significant with the implementation of mitigation measures. Compliance with existing City of Lancaster General Plan policies and Municipal Code requirements, and State building codes, combined with the PVSP incorporated comprehensive design guidelines and standards, along with the listed mitigation measures would ensure that potential geology and soils and paleontological resources impacts are minimized.

**Figure 3.7-1 Local Geology Map**

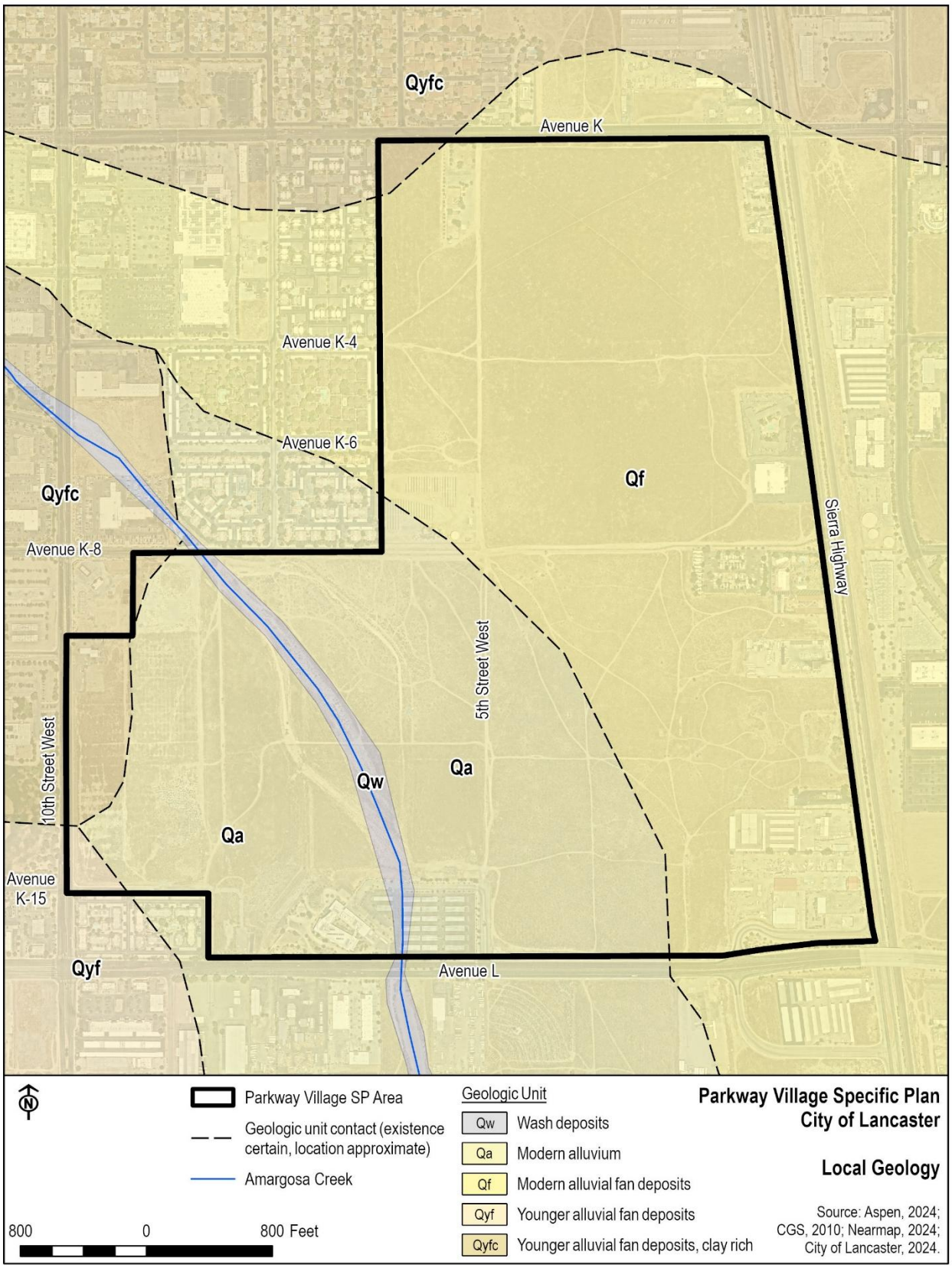
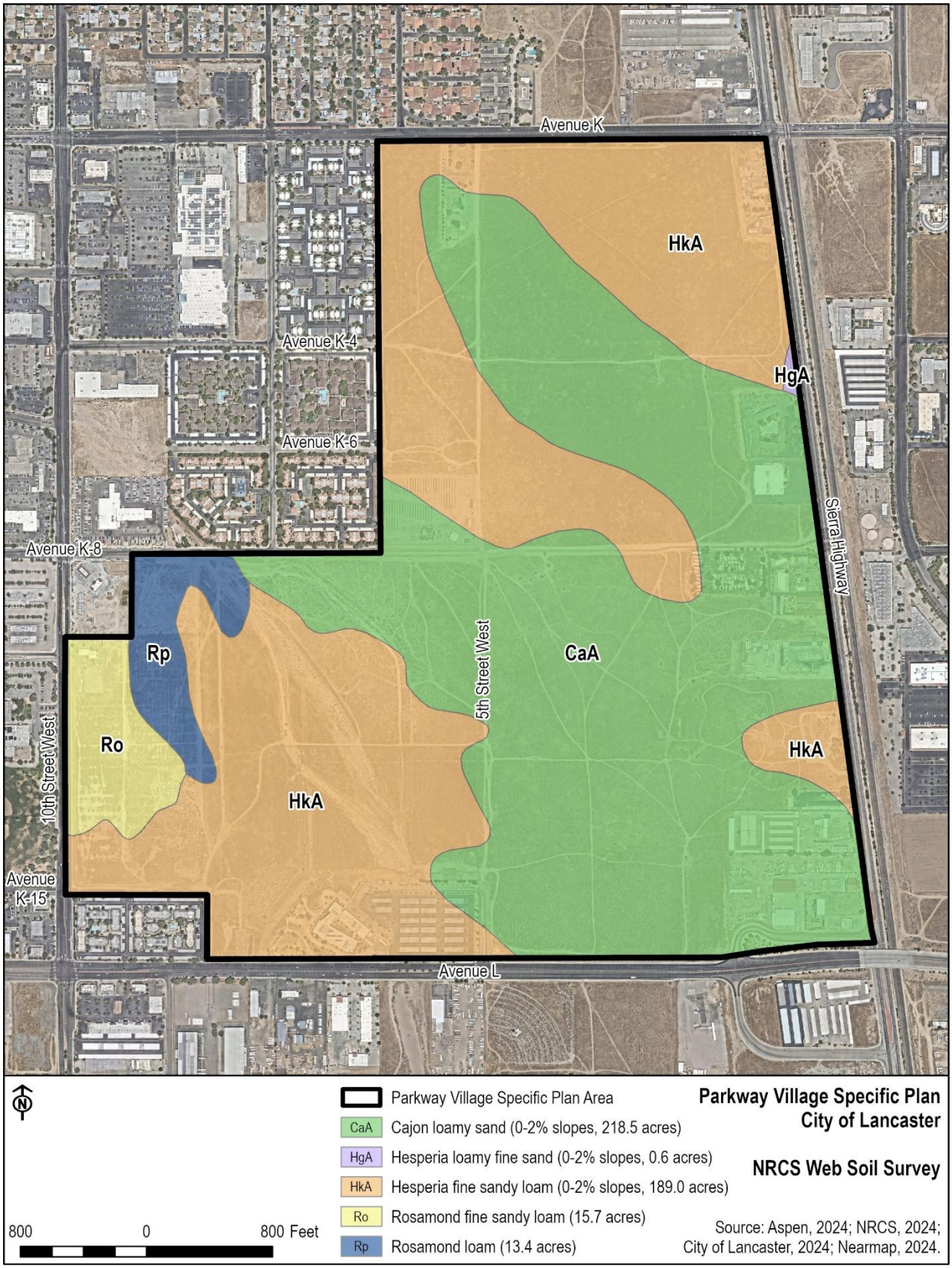


**Figure 3.7-2 NRCS Soil Map**



# 3.8. Hazards/Hazardous Materials

This section evaluates the impacts from hazards and hazardous materials resulting from implementation of the Parkway Village Specific Plan (PVSP or Plan). The analysis in this section presents an overview of existing conditions that influence risks associated with hazards and hazardous materials; describes the applicable regulations; identifies the criteria used for determining the significance of environmental impacts; and describes the potential impacts from hazards and hazardous materials of the PVSP. Impacts evaluated in this section include physical hazards and hazardous materials, including environmental contamination that would be caused by implementation of the PVSP.

The information in this section is based in part on a hazardous materials desktop study titled, "Hazardous Materials Records Search and Summary," prepared by Earth Systems, dated August 28, 2024 (Earth Systems, 2024). Additional information for the PVSP site and surrounding area was sourced from California State Water Resources Control Board (SWRCB) Geotracker, Department of Toxic Substance Control (DTSC) Envirostor, aerial photographs, and other online reference materials.

## 3.8.1. Environmental Setting

### Hazardous Materials

Hazardous materials are defined by federal and State regulations that aim to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties that cause them to be considered hazardous. The term "hazardous materials" refers to both hazardous substances and hazardous wastes. Under federal and State laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). Hazardous materials are defined in the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 101(14), and in the California Code of Regulations (CCR), Title 22, Chapter 11, Article 2, Section 66261, which provides the following definition:

> *A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.*

Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazards to human health and the environment can occur during production, storage, transportation, use, or disposal of hazardous materials.

The proposed construction and operation of residential, commercial, medical, office, and park/open space uses within the PVSP area would not involve the routine transport, use, or disposal of substantial quantities of hazardous materials. Construction would require the use of typical hazardous materials used in construction activities such as gasoline and diesel fuel, oils and lubricants, hydraulic fluid, solvents, batteries, paints and coatings, and glycol-based antifreeze.

Small quantities of other materials such as pesticides, fertilizers, paints, lubricants and fuels, cleaners and solvents, and miscellaneous chemicals may be used during operation of PVSP parks, including the new aquatics center, and residential properties. Commercial properties may use various hazardous materials, but depending on volumes and types of hazardous material, would be required to comply with State and local storage and use regulations. Medical facilities may use and store various hazardous materials and

generate hazardous material waste and would be required to store and dispose of these materials in compliance with local and State regulations.

## Land Use

Existing and past land use activities are commonly used as indicators of sites or areas where hazardous material storage and use may have occurred or where potential environmental contamination may exist. For example, many historic and current industrial sites have soil or groundwater contaminated by hazardous substances. Other hazardous materials sources include leaking underground tanks in commercial and rural areas, contaminated surface runoff from polluted sites, and contaminated groundwater plumes. Current and former agricultural properties commonly have herbicide, pesticide, and/or fumigant soil contamination.

The PVSP site is primarily undeveloped former agricultural land and is bounded by Avenue K on the north, a residential development and 10th Street West on the west, Avenue L and an apartment complex on the south, and Sierra Highway along the eastern site boundary. Other existing land uses and developments within the PVSP include a church at the corner of 5th Street West and Avenue K; an auto repair shop and a gas station near the corner of 10th Street West and Avenue K-8; an small solar facility along the western boundary just north of Avenue K-8; Kaiser Permanente Medical Offices and various commercial and storage uses along Avenue L, and a mix of retail and restaurant uses, a retirement village, a bowling alley, an RV & trailer park, and a supportive housing development (formerly a motel) along Sierra Highway. The PVSP site is traversed by numerous dirt path and roads and appears to have a few small remnant paved areas. The buried channel of Amargosa Creek crosses the southwest portion of the PVSP site.

As is common on undeveloped properties in the Lancaster area, miscellaneous debris is visible as being present on portions of the site in aerial photos. The debris appears to include soil stockpiles, stockpiled concrete and construction waste materials, and scattered miscellaneous trash. Several potential homeless encampments are also visible within the PVSP site on aerial photos (Google Earth, 2024).

Historic aerial photographs from Environmental Risk Information Services (ERIS) (ERIS, 2020) for the PVSP and surrounding area were reviewed for potential historical land uses and conditions that could indicate the presence of hazardous materials and a summary the observations are presented in Table 3.8-1.

**Table 3.8-1. Historic Aerial Photo Summary**

| Date | Discussion |
|---|---|
| 1927 | In 1927, the northeast, southwest, and southeast quadrants of the site, appeared to be mainly used for agriculture. There were three structures adjacent to the agricultural land, one in the northeast quadrant and two in the southeast quadrant. Due to the scale of the photograph, buildings were visible but could not be clearly identified. Besides the building and land used for agriculture, the rest of the property contains barren land. The northwest quadrant of the property was not being utilized. The vicinity was largely agricultural in usage, and barren land. Dirt roads outlined the property along the northern, western, and southern boundary. The eastern boundary was a paved street, now known as Sierra Hwy. |
| 1948 | By 1948, the barren land in the northern half of the site, as well as the southwest quadrant, had become developed into agricultural land. There were two structures in the center of the property and one in the southeast quadrant that were not therein previous photos. Avenue L had been constructed along the southern boundary of the site. |
| 1956 | The northern half of the site and the southwest quadrant of the site appeared to be generally unchanged. The southeast quadrant of the site contained a new facility along Sierra Hwy, an addition to the buildings in the southeast quadrant from 1927 (possible parking lot), and a facility in the northeast corner. Avenue K and 10th Street West became paved roads on the northern and western boundary, respectively. An above-ground storage tank is located off-site across Sierra Highway, near the center of the eastern boundary. Noticeable development of residentials surrounding the site to the north, across from Avenue K. |

| Date | Discussion |
|---|---|
| 1965 | Agricultural land repurposed in various sections of the site. The northwest corner appears to have been repurposed to a parking lot with a building. Another section of agricultural land in the northern half along Avenue K has been repurposed. Along Sierra Highway, near the center of the eastern portion of the site, there is a new facility. In the southeast quadrant, there is a new facility as well as visible expansion of existing buildings. Expansion of storage tanks located across Sierra Highway. |
| 1974 | The land used for agriculture has decreased. Several structures located near the agricultural land have disappeared: 2 structures in the northwest quadrant from 1948, 2 structures in the southwest quadrant from 1948, and a structure in the northeast quadrant from 1927. The facility in the northeast corner and the facility along Avenue K appear to have been expanded. Increased development of facilities in the southeast quadrant and the northwest quadrant. the south portion was agricultural. |
| 1980 | By 1980, there is no longer any agricultural land visible and most of the site appears to be undeveloped vacant land. There is a noticeable paved area in the northwest quadrant. The facility in the northeast corner, along with the facilities in the southeast quadrant, have disappeared. Increased development to the south, across from Avenue L. |
| 1987 | Development onsite appears to have increased. An expansion of the facility in the northwest quadrant, as well as an addition of a new residential area just to the west. New facilities in the southwest and southeast quadrants. Increased development of areas adjacent to the site. |
| 1994 | The site and immediate vicinity appeared to be generally unchanged, except for expansion of the residential area on the west, and what appears to be an above ground storage tank, potentially a water tank, near the west central part of the site |
| 2003 | A new building in the southwest quadrant. Rest of site appear to be unchanged. |
| 2005 | Further development of the facility just west of the site, which appears to be a commercial center x=such a large shopping center with a large parking lot. Rest of site appear to be unchanged. |
| 2010 | The shopping center to the west of the site has expanded with additional buildings and a larger parking lot. The former Amargosa Creek channel, running through the southwest quadrant of the site, is no longer visible and a large, graded area that follows the creek's former alignment is visible. |
| 2012 | The site and vicinity appeared to be generally unchanged except the large lot contains no cars, and the former Amargosa Creek channel area now appears as a roughly linear, unvegetated area. |
| 2014 | A new small solar facility is in the center of the property and the Kaiser medical offices have been constructed along the southern boundary of the property. Rest of site appear to be unchanged. The Amargosa channel appears to cross beneath the Kaiser parking area, potentially in a culvert in this area. |
| 2016 | The PVSP site and immediate surrounding area appears unchanged |
| 2018 | The site appears generally unchanged. |

Source: ERIS, 2020

## Transportation of Hazardous Materials

The transportation of hazardous materials within the State of California is subject to various federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery or the loading of such materials (California Vehicle Code §§ 31602[b], 32104[a]). The California Highway Patrol (CHP) designates routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users. The Antelope Valley Freeway is designated by the CHP for explosive transport. Separated from the PVSP site by Sierra Highway and located approximately 0.5 miles east of the PVSP site, the Union Pacific Railroad (UPRR) handles and transports hazardous materials.

## Environmental Contamination

Research of sites with known and potential contamination within and nearby the PVSP site was conducted by Earth Systems (2024) to better define the areas where contaminated sites may impact construction activities. The primary reason to define potentially hazardous sites is to protect worker health and safety and to minimize public exposure to hazardous materials during construction and waste handling. Where encountered, contaminated soil may qualify as hazardous waste, thus requiring handling and disposal according to local, State, and federal regulations. Earth Systems acquired and reviewed a report summarizing the information available from regulatory agency databases regarding sites that generate, store, use, and/or have released hazardous materials (Earth Systems, 2024). The database search identified 17 sites within the project site boundary; however, upon review, Earth Systems concluded that 14 of the 17 sites do not appear to pose a threat to the PVSP due to the type of listing and/or the nature of the issues at the identified hazardous material sites (such as registered USTs with no significant violations, or an inactive status or hazardous waste generators with no reported problems or violations). The 3 remaining hazardous material sites that were identified as having potential environmental concern to the PVSP site are summarized below:

**California Compaction Corporation/Ralph Miller Property - 42851 Sierra Highway**

- This site is listed in the California Environmental Reporting System Tanks (CERS TANK) database, which lists facilities that contain either aboveground petroleum storage and/or underground storage tanks (USTs). Such sites are regulated by the California Environmental Protection Agency (Cal EPA). This facility has been in violation of CERS guidelines a total of 14 times between 2018 and 2021. The violations primarily regard improper storage of waste materials and lack of adequate documentation for the handling of waste materials (Earth Systems, 2024).
- This site is also listed on the Leaking Underground Storage Tank (LUST) database which is a list of LUST sites within the Cleanup Sites data in the SWRCB GeoTracker database. In 1995, a LUST was reported at the site to have released gasoline to soils. The leak is listed as having been remediated and as of 1996 the LUST case was closed by the Lahontan Regional Water Quality Control Board (RWQCB).

**Kaiser Permanente - 615 Avenue L**

- The Kaiser facility is listed in the Resource Conservation and Recovery Act (RCRA) Large Quantity Generators (LQG) database which lists facilities that generate 1,000 kilograms per month or more of hazardous waste or one kilogram per month of acutely hazardous waste. This facility is listed as actively generating and disposing of large quantities of pharmaceutical waste and a variety of chemical wastes. No violations are noted for this site.

**Carlon Auto Sales – 43555 Sierra Highway**

- This site is listed on the Underground Storage Tanks Statewide Environmental Evaluation and Planning System (UST SWEEPS) database which lists sites with active or inactive underground storage tanks. This facility is listed as actively maintaining an UST under regulation of the SWRCB.

Earth Systems (2024) concluded that, in general, the sites identified in the agency database review do not appear to be of significant concern for the project because any use, storage, or disposal of hazardous chemicals and waste materials at properties on the PVSP site appear to generally be handled in accordance with applicable regulations and the one instance of known environmental contamination has been cleaned up/remediated to regulatory agency requirements and is now case closed and therefore does not pose a significant environmental threat.

Engineering and Institutional Controls (EICs) (e.g., deed restrictions and restrictive zoning) were not identified for the PVSP site in the agency database search report. However, deed/land-use restrictions

were identified off site at 660 Avenue L within 0.01 mile south of the project site boundary. The site was listed due to contaminated soil identified during the removal of an UST in 1997. The case is considered closed as of 2007 with land-use restrictions (Earth Systems, 2024). The site is currently occupied by a mobility transportation service and a pallet and crate manufacturing facility.

A review of the California DTSC EnviroStor and SWRCB GeoTracker websites (DTSC, 2024; SWRCB, 2024) did not identify any hazardous material or environmentally contaminated sites that were not previously identified in the 2024 Earth Systems report.

The California Department of Conservation, Division of Oil, Gas, & Geothermal (DOGGR) maps on the DOGGR website were reviewed for information regarding historic oil-well or geothermal drilling activities near the site. The maps and databases did not depict any permitted oil or geothermal wells on the PVSP site or within 1 mile of the site (Earth Systems, 2024).

Past agricultural uses of the PVSP site may have resulted in minor localized soil contamination resulting from application of pesticides and herbicides. The most currently used agricultural chemicals do not persist for extended periods of time if applied appropriately; however, some historically used pesticides and herbicides persist for a significant time in soil. There is no evidence of past use of underground storage tanks that could affect construction and possibly result in soil contamination if the tanks are accidentally damaged during construction. However, USTs were commonly used to store fuel for use by farm equipment and may have been present in those areas associated with the prior farm buildings.

## Airports

Hazards associated with airports are generally related to 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 nearest airport to the PVSP site is the United States Air Force (USAF) Plant 42 Airport, located approximately 2 miles to the southeast. The USAF Plant 42 Airport is currently owned and operated by the USAF and is primarily used for military official business, although the airport does allow public use with permission (AIRNAV, 2024). The airport was previously leased by County of Los Angeles Department of Airports Los Angeles World Airports and operated sporadically as a passenger and as a commercial airport under joint operation between the U.S. Air Force and Los Angeles World Airports until 2008. In 2013, the City of Palmdale took over the lease for the airport and is currently coordinating with the USAF to build facilities on City of Palmdale owned land and bring back commercial operations (City of Palmdale, 2024). The southeast corner of the PVSP is located within the Planning Boundary/Airport Influence Area as identified in the Los Angeles County Airport Land Use Plan (LACALUC, 2004).

Other airports in the Lancaster area include the General William J. Fox Airfield located approximately 6 miles northeast of the PVSP. The General William J. Fox Airfield is a public airport owned and operated by Los Angeles County. The PVSP site is not located within or near the airport influence areas for this airport. (City of Lancaster, 2017)

## Schools

There is one school within 0.25-mile of the PVSP site, Assurance Learning Academy – Lancaster at 43145 Business Center Parkway Suites 102-103. The Assurance Learning Academy is a year-round charter high school serving grades 9-12 located approximately 320 feet east of the eastern PVSP site boundary and is separated from the PVSP site by Sierra Highway and the UPRR tracks. Additionally, the Plan also includes planned construction and operation of a school site. The planned school site is near the middle of the PVSP site and is adjacent to planned residential use areas and a planned community park.

### Emergency Evacuation Routes

Although routes to be used for an evacuation would depend on the location of an incident, generally evacuation routes would include major arterials and regional routes. For the City of Lancaster, evacuation routes include both major north-south arterials and east-west arterials. The regional evacuation routes for the Lancaster area include SR-14, Sierra Highway, and SR-138 (City of Lancaster, 2022). The 2022 General Plan Safety Element identifies evacuation routes in the PVSP area, which include SR-14, Sierra Highway, 10th Street West, Division Street, Avenue J, Avenue K, and Avenue L. The closest emergency evacuation routes to the PVSP site are Sierra Highway, Avenues K and L, and 10th Street West.

Additionally, as discussed in Section 3.14, Transportation, the proposed access and circulation features within the PVSP would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. These facilities would provide access to all areas of the PVSP and each development project would include emergency access features that would be subject to review and approval by the Los Angeles County Fire Department (LACFD) and the City's Community Development Department.

### Wildfire Hazards

The California Department of Forestry and Fire Protection (Cal Fire) identifies and maps areas of significant fire hazards based on fuels, terrain, and other relevant factors. The maps identify this information as a series of Fire Hazard Severity Zones (FHSZ), which are progressively ranked in severity as un-zoned, moderate, high, and very high. State responsibility areas (SRAs) are locations where the State of California is responsible for wildland fire protection. Local responsibility areas (LRAs) are locations where the responding agency is the local county or city. LRA FHSZ are mapped as either Very High Fire Hazard Severity Zones (VHFHSZ) or as Non-VHFHSZs.

The Cal Fire maps for Los Angeles County (CALFIRE, 2023) indicate that the PVSP site is located in an LRA. Within the LRA, the PVSP site falls within an area mapped as a Non-VHFHSZ (CALFIRE, 2011). The PVSP site is within an urban environment that includes areas of scattered to dense development and undeveloped areas of sparce desert vegetation. Once developed, the PVSP would add to the area's urban environment with planned and engineered landscaping, design, and architecture that complies with State and local fire codes and design requirements. The City of Lancaster General Plan Safety Element identifies the PVSP area as having moderate wildfire risk (City of Lancaster, 2022). The few areas of sparce desert vegetation that would remain in the PVSP area would be less prone to wildfires than other heavily brushed areas of Southern California (City of Lancaster, 2022). The urbanized areas near the PVSP are unlikely to be exposed to wildland fires due to the lack of wildlands in the vicinity.

The LACFD provides fire protection services to the Antelope Valley, which includes the City of Lancaster and the surrounding unincorporated area. The LACFD provides wildland and structural fire protection. The City of Lancaster is a member of the consolidated Fire Protection District and maintains a contract with the County of Los Angeles to receive staff and fire protection services.

## 3.8.2. Regulatory Setting

### *Federal Regulations*

**United States Environmental Protection Agency.** The United States Environmental Protection Agency (USEPA) was established in 1970 in response to the growing public demand for cleaner water, air and land. The USEPA was established to consolidate in one agency a variety of federal research, monitoring, standard-setting, and enforcement activities to ensure environmental protection. The USEPA's mission is to protect human health and to safeguard the natural environment — air, water, and land — upon which

life depends. The USEPA works to develop and enforce regulations that implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. Where national standards are not met, the USEPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality.

The Federal Toxic Substances Control Act (TSCA) (1976) and the Resource Conservation and Recovery Act of 1976 established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law (United States Code [USC] Title 42, Chapter 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enables the revision of the National Contingency Plan. The National Contingency Plan (Title 40, Code of Federal Regulations [CFR], Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The National Contingency Plan also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

Other federal regulations overseen by the USEPA relevant to hazardous materials and environmental contamination include Title 40 CFR Chapter I, Subchapter D – Water Programs and Subchapter I – Solid Wastes. Title 40 CFR Chapter I, Subchapter D Parts 116 and 117 designate hazardous substances under the Federal Water Pollution Control Act and set forth a determination of the reportable quantity for each substance that is designated as hazardous in Title 40 CFR Part 116. Title 40 CFR 117 applies to quantities of designated substances equal to or greater than the reportable quantities that may be discharged into Waters of the United States.

**Federal Aviation Administration.** Title 14, Part 77 of the Code of Federal Regulations (14 CFR 77) requires Federal Aviation Administration (FAA) notification for any construction or alteration of structures that would affect navigable airspace, includes standards and processes used to determine obstructions and effects of obstructions to air navigation, and navigational and communication facilities, and includes the process to petition the FAA for discretionary review of determinations, revisions, and extensions of determinations. Part 77.9 (Construction or Alteration Requiring Notice) of 14 CFR 77 lists requirements for when a project is required to file notice with the FAA for review. Under Part 77.9 a project must file notice with the FAA for any construction or alteration exceeding 200 feet above ground level (AGL). It also requires notification for construction or alterations for any project that exceeds the imaginary surface extending upwards and outwards from an airport if:

- it is within 20,000 feet of an airport runway of more than 3,200 feet in length and the height of the construction or alteration exceeds a slope of 100 to 1 extending outward and upward from the nearest point of the nearest runway of the airport;
- it is within 10,000 feet of an airport runway and the height of the construction or alteration exceeds a slope of 50 to 1 extending outward and upward from the nearest point of the nearest runway of the airport; or

- is within 5000 feet of a heliport and the height of the construction or alteration exceeds a slope of 25 to 1 extending outward and upward of the nearest point of the heliport's nearest landing and takeoff area.

If a project's height exceeds 200 feet or exceeds the above listed imaginary surfaces, the project applicant must submit a copy of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the FAA.

### *State Regulations*

**California Hazardous Waste Control Law.** The California Hazardous Waste Control Law (HWCL) is administered by CalEPA to regulate hazardous wastes. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

**California Department of Toxic Substance Control.** The California Department of Toxic Substances Control (DTSC) is a department of CalEPA and is the primary agency in California that regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code. The hazardous waste regulations overseen by DTSC establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous waste that cannot be disposed of in landfills.

**Unified Hazardous Waste and Hazardous Materials Management Regulatory Program.** Regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) address six elements: hazardous waste generators and hazardous waste on-site treatment; underground storage tanks; aboveground storage tanks; hazardous materials release response plans and inventories; risk management and prevention programs; and Unified Fire Code hazardous materials management plans and inventories. The Unified Program requires CalEPA to certify local government agencies, known as Certified Unified Program Agencies (CUPAs) as able to implement all the required environmental programs and to consolidate, coordinate and make them consistent within their jurisdiction. State partner agencies involved in the implementation of the Unified Program and providing technical assistance to CUPAs include CalEPA, CalFire, DTSC, and SWRCB. The CUPA for the project area is the Los Angeles County Fire Department, Health Hazardous Materials Division.

**Hazardous Materials Release Response Plans and Inventory Law.** The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act, Health and Safety Code §25500 et seq.) requires businesses that store or use hazardous materials to prepare a Hazardous Materials Business Plan (HMBP) and submit it to the CUPA. An HMBP includes details of a facility and business conducted at the site, an inventory of hazardous materials that are handled and stored on-site, an emergency response plan, and a safety and emergency response training program for new employees with an annual refresher course.

**The Aboveground Petroleum Storage Act Program.** The aboveground program requires tank facilities storing greater than 1,320 gallons of petroleum that stores any amount of petroleum, to develop and implement the Spill, Prevention, Control, and Countermeasure (SPCC) Plan requirements (CFR 2023). A tank facility is any tank or tanks that are aboveground, including connected piping, that contain petroleum and are used by an owner or operator at a single location or site, is in secondary containment, and it is used to hold oil. The CUPA regulates businesses storing petroleum in aboveground containers or tanks (California Health & Safety Code, Chapter 6.67, Sections 25270-25270.13).

**Porter-Cologne Water Quality Act.** The Porter-Cologne Water Quality Act is a state law that provides a comprehensive water quality management system for the protection of California waters. The act designated the SWRCB as the ultimate authority over state water rights and water quality policy, and also established nine RWQCBs to oversee water quality on a day-to-day basis at the local and regional level.

**California Department of Industrial Relations, Division of Occupational Safety and Health Administration.** The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety. They oversee the handling and use of hazardous materials (8 CCR Sections 5139-5223) and, and the protection of workers exposed to wildfire smoke (8 CCR Section 5141.1). Cal/OSHA standards are generally more stringent than federal regulations. Under Sections 337-3339, employers are required to monitor worker exposure to listed hazardous substances and notify workers of exposure. The regulations under Sections 337-339 specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. Section 5141.1 requires identification or harmful exposures, a system for communicating wildfire smoke hazards, and training and instruction about wildfire smoke hazards.

**California Office of Emergency Services.** In order to protect the public health and safety and the environment, the California Office of Emergency Services is in charge of establishing and managing statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Basic information on the location, type, quantity, and the health risks of hazardous materials handled, used, stored, or disposed of in the State, which could be accidentally released into the environment, needs to be made available to firefighters, health officials, planners, public safety officers, health care providers, regulatory agencies, and other interested parties. These regulations are covered under Chapter 6.95 of the California Health and Safety Code Article 1 – Hazardous Materials Release Response and Inventory Program (Sections 25500-25520), and Article 2 – Hazardous Materials Management (Sections 25531-25543.3). Code of California Regulations (CCR) Title 19, Public Safety, Division 2, Office of Emergency Services, Chapter 4 – Hazardous Material Release Reporting, Inventory, And Response Plans, Article 4 (Minimum Standards for Business Plans) establishes minimum statewide standards for Hazardous Materials Business Plans.

**California Highway Patrol.** The CHP is the primary agency responsible for enforcing the regulations related to the transport of hazardous materials on California roads and highway (13 CCR 1160-1167). The CHP and California Department of Transportation (Caltrans) are responsible for enforcing federal and state regulations governing the transport of hazardous materials through the state, and for responding to hazardous material transportation emergencies.

**California Occupational Safety and Health Administration.** The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (Title 8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. Title 8 CCR, Chapter 4, Subchapter 7, Group 14 and 15, and Group 16, Articles 107, 109, and 110 sets forth the Permissible Exposure Limit, the exposure, inhalation, or dermal permissible exposure limit for numerous chemicals. It is the responsibility of Cal/OSHA to ensure that compliance with the provisions of the Hazard Communication Standard. California Labor Code Sections 6360 through 6399.7 and Title 8 CCR Sections 5191 and 5194 are intended to ensure that both employers and employees understand how to identify potentially hazardous substances in the workplace, understand the health hazards associated with these chemicals, and follow safe work practices. This is accomplished by preparation of a Hazard Communication Plan.

**Office of Environmental Health Hazard Assessment.** Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted as a ballot initiative in November 1986. Proposition 65 was intended by its authors to protect California citizens and the State's drinking water sources from chemicals known to cause cancer, birth defects, or other reproductive harm, and to inform citizens about exposures to such chemicals. Proposition 65 requires the Governor to publish, at least annually, a list of chemicals known to the State to cause cancer or reproductive toxicity. The Office of Environmental Health Hazard Assessment has established safe harbor levels (levels of exposure that trigger the warning requirement) for some, but not all, listed chemicals. Businesses that cause exposures greater than the safe harbor level must provide Proposition 65 warnings. These safe harbor levels are available in the October 2007 Status Report available at http://www.oehha.ca.gov/prop65/pdf/October2007StatusRpt.pdf. If there is no safe harbor level for a chemical, businesses that knowingly expose individuals to that chemical would generally be required to provide a Proposition 65 warning, unless the business could show that risks of cancer or reproductive harm resulting from the exposure would be below levels specified in Proposition 65 and its accompanying regulations.

### *Local Regulations and Plans*

**Los Angeles County CUPA.** The Los Angeles County Fire Department, Health Hazardous Materials Division (HHMD) is the Certified Unified Program Agency (CUPA) that administers the following CUPA programs: Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, California Accidental Release Prevention Program (Cal-ARP), Aboveground Storage Tank Program, and Underground Storage Tank Program. The Los Angeles County CUPA has jurisdiction in all unincorporated and incorporated areas unless a city is a Participating Agency (PA) or a CUPA. The City of Lancaster falls under the oversight of the Los Angeles County CUPA.

The County of Los Angeles Department of Public Works, Environmental Programs Division (DPW EPD) is a PA with the CUPA and through the UST Program, permits and inspects underground storage tanks and permits closures of USTs, and responds to unauthorized releases within the unincorporated areas of Los Angeles County and 77 cities, including Lancaster. The UST Program regulates all unauthorized releases from underground storage tanks.

**City of Lancaster General Plan Safety Element.** The General Plan Safety Element (adopted in 2022) identifies and discusses hazards of concern for the City, including Air Installation Land Use Compatibility, Hazardous Materials, Fire Prevention and Suppression Services, and Disaster Preparedness and Evacuation, and provides policies and actions to reduce the potential risk of death, injuries, property damage, and economic and social dislocation. Policies and specific actions in the Safety Element that are relevant to these hazards and that are applicable to the PVSP are provided below.

- **Policy 4.4.2.** Limit the uses surrounding airport facilities at Fox Field and Plant 42 to ensure their continued safe operation.
- **Specific Action 4.4.2(a).** Review and route through appropriate agencies individual development proposals in the vicinity of Fox Field and Air Force Plant 42 for compliance with Federal Aviation Regulations (FAR) Part 77 height limitations; ensure that new development complies with FAR Part 77.
- **Policy 4.4.3.** Ensure that adequate public notification regarding aircraft activities is provided to new residents in areas subject to aircraft overflights around Plant 42 and Fox Field.
- **Specific Action 4.4.3(a).** For new residential development require that avigation easements be granted to the following entities in the specific situations specified below:
  - To Air Force Plant 42 and the Los Angeles Department of Airports: Lands within the projected 65 CNEL, the accident potential zone (APZ- II), and the designated Overflight Area.

  - To Los Angeles County or any successor in interest therein: Lands within the projected 65-CNEL noise contour of Fox Field

- **Policy 4.5.1.** Ensure that the transport, use, storage, and disposal of hazardous materials occurs in a responsible manner that protects residents' and businesses' public health and safety.
- **Specific Action 4.5.1(b).** Coordinate with Los Angeles County to ensure that commercial and industrial activities comply with all federal, state, county, and local laws regulating hazardous materials and wastes.
- **Specific Action 4.5.1(c).** Require that any business that uses, generates, processes, stores, treats, emits, or discharges a hazardous material shall submit a Hazardous Materials Business Plan, including a Hazardous Waste Contingency Plan, to Los Angeles County as required by law.
- **Policy 4.7.2.** Ensure adequate fire prevention and suppression infrastructure (fire stations, firefighting equipment) and personnel are available to protect the citizens and businesses of the City of Lancaster.
- **Specific Action 4.7.2(c).** Involve Fire Department personnel in the development review process for all new developments, redevelopments, and major remodels through participation in the Development Review Committee and by referring development requests to the Los Angeles County Fire Department for review and comment.
- **Action 4.7.2(d).** Adopt State Fire Safe Regulations as necessary for new development and require verification of adequate water supply, adequate ingress/egress for evacuation purposes, proper use of building design and materials, and proper treatment of fuels to reduce fire vulnerability.
- **Policy 4.7.3.** Ensure that new development incorporates the recommended design strategies to minimize the potential for fire.
- **Specific Action 4.7.3(a).** Require the use of fire-resistant roofs in residential developments.
- **Policy 4.9.1.** Ensure city residents and businesses can effectively evacuate during or after an emergency/ hazard event, if necessary.
- **Specific Action 4.9.1(c).** Ensure all new development and redevelopment provides adequate ingress/ egress for emergency access and evacuation.

**Lancaster Hazard Mitigation Plan.** The 2013 City of Lancaster Hazard Mitigation Plan (Hazard Mitigation Plan) provides a list of activities designed to assist the City in reducing risk and preventing losses from future hazard events. The strategies address multi-hazard issues, as well as hazard specific activities for windstorms, earthquakes, fires, flooding, landslide, and terrorism.

**Lancaster Emergency Operations Plan.** The Emergency Operations Plan (EOP) addresses the City's planned response and recovery to emergencies associated with natural disasters and technological incidents. It provides an overview of operational concepts, identifies components of the City's emergency management organization within the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), and describes the overall responsibilities of the Federal, State and County entities and the City for protecting life and property and assuring the overall well-being of the population.

## 3.8.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

The potential for hazardous materials on the PVSP site and for the likely use of hazardous materials during construction and operation of the PVSP to result in adverse impact to the environment and to workers and the public was assessed based on reviews of site land use, environmental agency databases, and likely

potential for some commercial properties developed as part of the PVSP to use hazardous materials. Others would be stored and used on site during operation. Potential and existing physical hazards such as aviation hazards and wildfire are assessed based on review of information from online sources and from local and state agency databases and maps for the PVSP site and are analyzed based on construction, operation, and potential areas of impact.

The criteria used to determine the significance of potential hazards and hazardous materials impacts are based on Appendix G of the State CEQA Guidelines. The PVSP would result in a significant impact under CEQA related to hazards and hazardous materials if the Plan would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- 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.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

## Environmental Impact Analysis

**Impact HAZ-1: Result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

### *Construction*

During construction within the PVSP area, common hazardous substances typical of construction projects would be transported to, used, and stored at the project site. Hazardous materials such as gasoline and diesel fuel, oils and lubricants, hydraulic fluid, solvents, batteries, paints and coatings, and glycol-based antifreeze would likely be used in construction activities, construction equipment, and vehicles. 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 PVSP 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, which would minimize the potential for adverse effects from routine transport, use, or disposal of hazardous materials during construction activities.

### *Operation*

Operation of developments within the PVSP may include transportation, use, and disposal of hazardous materials. residential uses may utilize household products that contain toxic substances, such as cleansers, paints, adhesives, and solvents; however, these products are usually in low concentration and small in amount and would not pose a significant risk to humans or the environment during transport to/from or use at individual properties. Pursuant to State law and local regulations, residents would be required to dispose of household hazardous waste (e.g., batteries, used oil, paint, etc.) at a permitted household hazardous waste collection facility.

Commercial uses may store, handle, and/or transport hazardous materials. However, these uses would be required to procure business plans and adhere to strict procedures enforced by the City and HHMD. Any business that handles a hazardous material and/or hazardous waste of quantities at any one time during a year equal to, or greater than a total volume of 55 gallons, a total weight of 500 pounds, or 200 cubic feet of a compressed gas is a hazardous materials handler and must report Owner/Operator, Business Activities, Inventory, Site Map, and Emergency Response and Contingency Plan and Employee Training Plan information in the California Environmental Reporting System (CERS).

Compliance with existing Federal, State, and local hazardous materials regulations would minimize the potential for adverse impacts to the public or environment due to the routine transportation, use, and disposal of hazardous materials during operation of the completed PVSP developments. Thus, potential impacts would be less than significant.

**Impact HAZ-2: Result in a significant hazard to the public or the environment through release of hazardous materials into the environment.**

### *Construction*

As noted above, construction activities would use typical construction-related hazardous materials that could cause adverse effects to worker and the environment if spills or leaks were to occur through improper handing or accident. Construction activities will be required to comply with applicable Federal, State, and local regulations regarding handling and storage of hazardous materials, including a NPDES Construction General Permit and associated SWPPP. BMPs that are required as part of the project specific SWPPP would include measures that limit discharges of pollutants that are present on a property and prevent them from coming into contact with storm water discharges.

Construction activities would result in ground-disturbing activities in areas previously used for agricultural activities. Much of the SVSP site was historically farmed; historic aerial photos indicate the presence of several farms on the site with row crops and associated farm residences and outbuildings between at least 1927 and 1974. Two potential environmental conditions that are typically associated with agricultural properties that may be present on the PVSP site are: (1) residual pesticide onsite soil contamination from historical use of dichloro-diphenyl-trichloroethane (DDT) and related pesticides, due to the land being farmed prior to these pesticides being banned; and (2) USTs were commonly used to store fuel on the farms for use by the farm equipment and may have been improperly abandoned and left in place.

To reduce the potential impacts of contaminated soil and historic USTs, Mitigation Measure (MM) HAZ-1 requires a site characterization study prior to issuance of a grading permit to determine if residual pesticides/herbicides are present in the soil above DTSC regulatory thresholds for residential uses and if historical USTs are onsite, and associated remediation of contaminated soil and removal of USTs, if needed. Mitigation Measure HAZ-2 would be required to ensure that in the event unknown hazardous materials or waste are encountered during project construction that appropriate procedures are in place to prevent adverse effects to workers or the environment. Implementation of MMs HAZ-1 and HAZ-2 would reduce impacts from release of hazardous materials to less than significant.

## Mitigation Measures

**MM HAZ-1** **Site Characterization.** Prior to issuance of a grading permit for a PVSP development, a site characterization study of the development site shall be conducted by a qualified Phase II/Site Characterization specialist. The site characterization study shall include sampling and testing of onsite soils to determine if pesticide/herbicide residues are present in the soil above Department of Toxic Substances Control hazardous material regulatory thresholds and/or risk assessment screening levels as appropriate to the anticipated land uses, i.e. residential, or commercial, or industrial uses. Sampling shall be conducted by a qualified Phase II/Site Characterization specialist and testing shall be conducted a licensed laboratory. If the sampling results identify contaminants above DTSC regulatory thresholds or the associated land use screening levels, further site characterization and remedial activities shall be conducted.

Additionally, the characterization study shall also determine whether or not underground storage tanks (USTs) were present within the development site. The characterization study shall include additional desktop studies and file review, site reconnaissance, and soil sampling and testing if suspect UST sites are identified.

If any evidence of historical USTs is noted, the qualified specialist shall conduct sampling at and near the historical UST location to determine if any contaminates are present in soils above regulatory thresholds for residential use. For any historic USTs identified as remaining onsite, the developer shall obtain appropriate permits from the DPWEPD, prior to removing any existing USTs, per the Underground Storage Tank Program. The developer shall conduct soil/groundwater testing during UST removal, as requested by the DPWEPD. If soil contamination above regulatory thresholds is present in the soil near historic UST tank locations or in soils where historic USTs are being removed, the developer shall remediate the site as directed by the DPWEPD. The DPWEPD has the option to refer the case to another regulatory agency (e.g., the Department of Toxic Substances Control, or Regional Water Quality Control Board, etc.), in which case the applicant shall comply with any specific remediation regulations identified by the respective regulatory agency.

**HAZ-2** **Unknown Contamination.** If unknown wastes or suspect materials (including undocumented underground storage tanks [USTs]) are discovered during construction, the contractor shall comply with the following:

- Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area;
- Notify the City Engineer;
- Secure the area as directed by the City Engineer; and
- Notify the Los Angeles County Health Hazardous Materials Division. The Health Hazardous Materials Division shall advise the developer of further actions that shall be taken, if required.

**Impact HAZ-3: Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of and existing or proposed school.**

There is one school site within 0.25-mile of the PVSP site, Assurance Learning Academy located approximately 320 feet east of the eastern PVSP site boundary and is separated from the PVSP site by Sierra Highway and the UPRR tracks. Additionally, development of the project, includes planned construction of

a new school within PVSP. The project would construct new commercial uses within 0.25-mile of the Assurance Learning Academy and the proposed new school site which could result in the handling of hazardous materials, substances, or wastes near the proposed school facilities. As discussed in Impact HAZ-1 and HAZ-2 above, common hazardous materials such as fuels, lubricants, solvents, and paints would be transported to, used, and stored at the project site during development construction activities, however the 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 materials, reducing impacts to less than significant. As discussed in HAZ-1, future commercial uses developed at the site that store, handle, and/or transport hazardous materials would be required to procure business plans and adhere to strict procedures enforced by HHMD. With compliance with HHMD regulations pertaining to the storing/handling of hazardous materials, future on-site PVSP commercial uses would not result in significant impacts pertaining to the handling of hazardous materials near a school facility.

Implementation of MM HAZ-1, which would require a site characterization study and remediation of any contamination above regulatory thresholds, and compliance with local and State regulations would further ensure no impacts related to hazardous materials at or near the PVSP proposed new school site. Additionally, if the PVPS proposed new school is designated a public school, additional environmental review would be required by the under the oversight of the DTSC Brownfields Restoration and School Evaluation Branch. The Branch ensures that selected public school properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school. Through this environmental review process, the DTSC would ensure the protection of children, staff, and the environment from the potential effects of exposure to previously existing hazardous materials contamination as a result of development of the new school facility at the project site.

Therefore, hazardous material use with 0.25-mile of a school would be a less-than-significant impact with implementation MM HAZ-1 And compliance with applicable Federal, State, and local regulations.

### Mitigation Measures

Compliance with MM HAZ-1, Site Characterization, listed above shall be required.

**Impact HAZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and could create a significant hazard to the public or the environment.**

A review of agency environmental databases identified at least 17 hazardous material sites on the PVSP site; however, all of the sites were determined to not be of significant environmental concern due to type of listing or listing status (Earth Systems, 2024). One of the sites is LUST case related to a leaking gasoline tank that has been remediated and is listed as case closed by the DTSC. Therefore, there is a less-than-significant impact to development within the PVSP from listed hazardous material sites.

**Impact HAZ-5: Be located within an airport land use plan or within two miles of a public airport or public use airport and could result in a safety hazard for people residing or working in the PVSP.**

Under the PVSP, some residential and commercial uses would be constructed within the current Planning Boundary/Airport Influence Area of the USAF Plant 42 Airport and could be within revised future airport influence areas if and when future planned development of the airport by the City of Palmdale occurs. However, the Plan does not change the height limits that currently apply to both existing and new uses in these areas. Compliance with existing regulations, including polices in the California Airport and Use Compatibility Plan (ALUCP), would reduce potential hazards. According to the Federal Code of Regulations, 14 CFR 77 would require the proponent of any planned development to file notice with the FAA for any

construction or alteration that exceeds an imaginary surface extending outward and upward from the airport runways or heliports as described in 14 CFR 77.9. However, if future development of the PVSP in the vicinity of the Palmdale USAF Plant 42 Airport/Palmdale Regional Airport airport influence zones 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. Compliance with 14 CFR 77, under its applicable conditions, and existing regulations that establish local consistency with the California ALUCP would reduce impacts related to aviation hazards to a less-than-significant level.

**Impact HAZ-6: Impair implementation of or physically interfere with adopted emergency response or emergency evacuation plans.**

The PVSP site would continue to be accessed via Sierra Highway, 10th Street West, Avenue L, and Avenue K, and Avenue K-8. Construction activities could affect access along these streets during construction as short-term, temporary lane closures could occur. However, during these temporary lane closures, access to surrounding land uses would remain open and accessible at all times. The applicants would be required to provide route detour plans with a tentative schedule of planned closures prior to the beginning of construction. Further, implementation of MM HAZ-3 would ensure that these activities would not impede emergency access. Implementation of MM HAZ-3 would reduce potential impacts in this regard to less-than-significant levels.

Although routes to be used for an evacuation would depend on the location of an incident, in general evacuation routes include City of Lancaster major arterials and regional routes. Additionally, the City of Lancaster classifies all of the major north-south arterials between 50th Street West and 10th Street East and all of the major east-west arterials between Avenues H and L as local emergency evacuation routes. The regional evacuation routes for the Lancaster area include SR-14, Sierra Highway, and SR-138. The closest local evacuation routes to the PVSP, as designated by the City of Lancaster General Plan, are Sierra Highway, Avenues K and L, and 10th Street West. These routes would continue to be available for access during PVSP construction and operation.

During construction and long-term operation, the PVSP would be required to maintain adequate access for emergency vehicles. As part of the City's discretionary review process, the City would review the individual project to ensure that appropriate ingress and egress would be available. The developer would be required to coordinate with the LACFD as part of the subdivision tentative map and building permit stages, for each site plan for future development on a project-by-project basis, which would ensure that adequate emergency access is provided in compliance with applicable design standards, and code and ordinance requirements. Therefore, the PVSP would not substantially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and a less-than-significant impact would occur.

## Mitigation Measures

**MM HAZ-3** **Agency Construction Notification.** Prior to issuance of the street improvement encroachment permit, the applicant shall obtain approval of a temporary traffic control plan and allowable working hours, as directed by the Public Works Director.

**Impact HAZ-7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.**

According to CALFIRE, the PVSP site lies within a LRA Non-VHFHSZ (CalFire, 2011); however, the City of Lancaster General Plan Safety Element maps the PVSP area as having moderate wildfire risk. The current PVSP site is mostly undeveloped, previously disturbed land that is dominated by bare areas of disturbed

soil and scattered grasses and scrub brush. There are no wildlands near or adjacent to the PVSP site and the surrounding area is developed as either commercial, industrial, or residential properties.

Regardless of the PVSP site's susceptibility to wildland fire risk, development within the Plan area would be required to be constructed in accordance with all applicable fire safety standards. The Los Angeles County Fire Department sets fire-flow standards (such as gallons per minute [gpm]) and water-duration flows to ensure that adequate water is available in a firefighting situation. All development in the City of Lancaster, including the PVSP, is required to meet established fire-flow requirements. Development within the City of Lancaster also is subject to compliance with all relevant LACFD general requirements, which address adequate ingress and egress access for emergency response, emergency access and fire and life safety requirements during construction, water mains, fire flows and fire hydrant spacing, access roadways to Fire Department apparatus, and maintenance of access roads and fire sprinkler systems. The LACFD establishes specific requirements based on the type of land use, including fire flow, fire hydrant location and spacing, access, street and driveway width and length specifications and identification of fire lanes, Developments are required to obtain approval from the LACFD as a Standard Condition of Approval from the City. Mandatory compliance with LACFD Standard Conditions of Approval related to fire hazards would ensure that the any development's potential to expose people or structures to substantial risks associated with fire would be less than significant.

In addition, a number of California regulations, including Public Resources Code (PRC) §§ 4290-4299 and California Government Code (CGC) § 51178, would apply to the PVSP developments and would address fire safety. In particular, these sections require minimum state-wide fire safety standards pertaining to roads for fire equipment access; signage for identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fire fuel breaks. In addition, they set fire safety standards for all buildings and structures in or adjoining mountainous areas, or forest-, brush- or grass-covered lands, or any land covered with flammable material to protect property from wildland fires. Mandatory compliance with California regulations related to fire hazards would reduce the Project's potential to expose people or structures to fire hazard risks to less than significant.

Accordingly, there would be a less-than-significant potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fire.

## 3.8.4. Cumulative Impact Analysis

### Geographic Extent

The geographic extent for the analysis of cumulative impacts related to hazards and hazardous materials is limited to the PVSP site and the immediate vicinity surrounding the site. These geographic limits are appropriate to consider the potential cumulative impacts as the PVSP impacts are limited to the PVSP development sites and immediately adjacent properties and hazards and similar impacts of other past, present, and reasonably foreseeable future projects that would have the potential to occur would be limited to their respective project sites and immediately adjacent properties.

### Cumulative Effects of the Proposed Project

As discussed in Subsection 3.8.3, pursuant to State law and local regulations, residents of the PVSP site would be required to dispose of household hazardous waste (e.g., batteries, used oil, paint) at a permitted household hazardous waste collection facility. Similarly, any other developments in the area proposing land uses with the potential for use, storage, or transport of hazardous materials also would be required to comply with applicable federal, state, and local regulations. Therefore, the Project's potential to contribute to a cumulatively considerable impact associated with hazardous materials would be less than significant.

Impacts related to hazardous material use and the potential to encounter hazardous materials or waste during construction is specific to each component/development of the PVSP and would occur only at the subject development site. Therefore, impacts related to hazardous material use or the presence of hazardous materials or waste would have no potential to contribute to effects of cumulative project's Impacts.

PVSP development could involve the emission or handling of hazardous materials within 0.25-mile of an existing school and the planned school site. Hazardous materials used during construction activities would comply with local, state, and federal regulations regarding transport, storage, handling, and disposal of hazardous materials resulting in a less-than-significant impact. Any future commercial uses that store, handle, and/or transport hazardous materials would be required to procure business plans and adhere to strict regulations and procedures enforced by HHMD, resulting in a less-than-significant impact. Based on the proposed location of the PVSP proposed school site and the size of the PVSP site, it is unlikely that any future projects or developments not part of the PVSP would be within 0.25-mile of the existing or proposed school, and if so any future developments would be subject to the same regulations regarding the transportation, use, storage, and disposal of hazardous materials and the PVSP project, and therefore there would be no cumulative impact.

During construction and operation, the development within the PVSP would be required to maintain adequate access for emergency vehicles. Compliance with City standards, codes, and ordinances, and implementation MMs would reduce impacts related to emergency access and evacuation to less than significant. MM HAZ-3 would ensure adequate access during project construction. Any future development or other cumulative projects would be required to comply with the same standards and regulations regarding emergency access and would have access to the similar evacuation routes and, as such, cumulatively considerable impacts would not occur.

The PVSP development and all other future area developments and projects near to USAF Plant 42 Airport (with planned future commercial use as Palmdale Regional Airport) would be required to comply with FAA regulations to reduce aviation hazards if located with the airports influence zone. Impacts would not be cumulatively considerable.

There are no wildlands near or adjacent to the PVSP site and the surrounding area is either developed, bare, or comprised of desert scrub vegetation that has a fairly low level of combustion due to the type and spacing of the plants. Once developed the SVSP site would be an urban environment with landscaping, parks, roads, and buildings and limited flammable vegetation. As such, cumulatively significant impacts associated with wildland fires would not occur.

## 3.8.5. Level of Significance After Mitigation

Impacts HAZ-2, HAZ-3, and HAZ-6 would be less than significant with the implementation of mitigation measures. Identified hazards and hazardous materials The Project's compliance with existing City of Lancaster General Plan policies and Municipal Code requirements, and applicable local, State, and Federal regulations, combined with the PVSP incorporated comprehensive design guidelines and standards, along with the listed mitigation measures would ensure that potential hazards and hazardous materials impacts are minimized to less-than-significant levels. Impacts HAZ-1, HAZ-4, HAZ-5, and HAZ-7 would be less than significant with compliance with local, State, and Federal regulations, standards, and guidelines and would not require mitigation.

# 3.9. Hydrology/Water Quality

This section describes the water resource qualities in the vicinity of the PVSP; including groundwater basin characteristics and supply, surface hydrology, water quality, and flooding; evaluates the type and significance of impacts that may occur as a result of the PVSP; and identifies measures to avoid or substantially lessen any impacts found to be potentially significant. The following impact analysis relies on the Water Supply Assessment, Parkway Village Specific Plan (WSA) prepared by Michael Baker International in September 2024 (MBI, 2024), the Antelope Valley Integrated Regional Water Management Plan 2019 Update (IRWMP) (LA County Public Works, 2019), the 2020 Urban Water Management Plan for Los Angeles County Waterworks District No. 40 Antelope Valley (LA County Public Works, 2021), and other available online resources.

## 3.9.1. Environmental Setting

### Climate and Precipitation

Located in the southwestern portion of the Mojave Desert, the Antelope Valley Region, the climate is characterized by hot summer days, cool summer nights, cool winter days, and cool winter nights. Typical of a semiarid region, mean daily summer Antelope Valley temperatures range from 64 degrees Fahrenheit (°F) to 96°F, and mean daily winter temperatures range from 35°F to 60°F. The growing season is primarily from April to October, though vegetation may begin to grow as early as January as the ground temperature increases (LA County Public Works, 2019).

Precipitation ranges from less than 4 inches on the valley floor to 20 inches in the mountains, running off the surrounding mountains through a number of canyons and watersheds. Most rainfall occurs between December and March, with little to no precipitation falling in summer months, meaning cultivated crops and non-native plants must rely heavily on irrigation. Rainfall records indicate that some runoff may be available for artificial groundwater recharge use (LA County Public Works, 2019).

### Regional Hydrology

#### *Surface Water*

The Antelope Valley is a closed topographic basin with no outlet to the ocean. All water that enters the Valley Region either infiltrates into the groundwater basin, evaporates, or flows toward the three dry lakes on Edwards Air Force Base (EAFB): Rosamond Lake, Buckhorn Lake, and Rogers Lake. In general, water flows northeasterly from the mountain ranges to the dry lakes. Stormwater runoff that doesn't percolate into the ground eventually ponds and evaporates in the dry lake beds on the valley floor.

Surface water flows in the Antelope Valley are carried by ephemeral streams that only convey flows in direct response to precipitation events. The ephemeral streams originate in the surrounding mountains and meander across the alluvial fans that make up the valley floor. According to the 2019 IRWMP, the most hydrologically significant streams in the area begin in the San Gabriel Mountains on the southwestern edge of the Antelope Valley Region and include Big Rock Creek, Little Rock Creek, and Amargosa Creek (LA County Public Works, 2019). Surface water flows in Little Rock Creek are captured at Little Rock Reservoir. Big Rock Creek and Amargosa Creek are not diverted for supply as of 2019. These streams begin as well-defined channels in the San Gabriel Mountains and become broad, ephemeral washes as they flow northeast onto the Antelope Valley floor towards Rosamond Dry Lake.

### *Groundwater*

The PVSP is located in the western Antelope Valley, which is a desert environment underlain by a closed groundwater basin, the Antelope Valley Groundwater Basin (AVGB). The AVGB is a closed basin, meaning that it has no natural outlet to the ocean, which restricts the removal of runoff to percolation or evaporation. (City of Lancaster, 2009) The AVGB covers a surface area of 1,580 square miles in Kern, Los Angeles, and San Bernardino Counties. The basin underlies an extensive alluvial valley and consists of two main aquifers: an upper aquifer and a lower aquifer. The upper aquifer, which is the primary source of groundwater for the valley, is generally unconfined whereas the lower aquifer is generally confined. An unconfined aquifer is an aquifer which has the water table as its upper boundary. Unconfined aquifers occur near the ground surface. A confined aquifer is an aquifer that is bounded above and below by confining beds. Confined aquifers generally occur at significant depth below the ground surface (USBR 2021). Recharge to the basin is primarily from runoff from surrounding mountains and hills. The estimated storage of the basin is 70,000,000 acre-ft (MBI, 2024).

## PVSP Site Hydrology

### *Surface Water*

The PVSP site is located within the Amargosa Creek watershed within the Antelope Valley hydrologic region and Amargosa Creek flows north across the PVSP site. Amargosa Creek is a stream system that starts at Elizabeth Lake in the San Andreas rift system and flows southeast towards Palmdale and Lancaster before turning north and terminating at Rosamond Dry Lake. In the PVSP area, Armargosa Creek is an intermittent/ephemeral stream, with flows limited to the rainy season and during large storm events. The magnitude of flows in Amargosa Creek range from a low of 50 to 100 cubic feet per second (cfs) in dry years to 12,000 to 15,000 cfs during very large storm events (City of Lancaster, 2007).

At the PVSP, Armargosa Creek crosses the western portion in an approximately NW-SE direction in an underground culvert. The PVSP proposes to use the area over the Armargosa Creek underground culvert as an open space with parks and for storm flow conveyance; no structures will be built above the creek culvert.

### *Groundwater*

The Los Angeles County Department of Public Works (LACDPW) maintains two groundwater monitoring wells within the PVSP site and groundwater levels recently measured in the wells in January 2024 were at depths of 364.10 feet and 350.7 feet below ground surface. The highest groundwater level for the wells was measured at a depth of 286 feet in May 1998. The historic shallowest groundwater underlying the PVSP site is 286 feet below ground surface (Earth Systems, 2024). Seasonal perched groundwater, particularly near Amargosa Creek, may have considerably shallow groundwater levels during and just after the wet season.

## Water Quality

The PVSP site is located within the South Lahontan Hydrologic Region and is subject to the objectives and limits of the Water Quality Control Plan for the Lahontan Region (Basin Plan) under the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB). Hydrologic Regions are subdivided into Hydrologic Units (HUs), and further into Hydrologic Areas (HAs). The study area is in the Antelope HU and within the Lancaster HA.

The Regional Water Quality Control Board (RWQCB) assesses surface water quality and prepares a list of waters considered to be impaired by pollutants, in accordance with section 303(d) of the Clean Water Act. The list of 303(d) water-quality-limited segments defines waters for which impairment may result from

point-source and non-point source pollutants. Based on a review of the Clean Water Act (CWA) 303d list (LRWQCB, 2018), Palmdale Lake, is the closest impaired waterbody. Palmdale Lake is approximately 7.3 miles to the south. Palmdale Lake is an artificial lake that receives water from the California State Water Project (SWP) and serves as one of the main surface water sources for the Palmdale Water District. Palmdale Lake is not connected to the Amargosa Creek waterbody. Palmdale Lake is listed on the 303d list for elevated dieldrin (pesticide) and is listed as needing development of a total maximum daily load (TMDL).

Groundwater quality is excellent within the AVGB principal aquifer but degrades toward the northern portion of the dry lake areas. Considered to be generally suitable for domestic, agricultural, and industrial uses, the water in the principal aquifer has a total dissolved solids (TDS) concentration ranging from 200 to 800 milligrams per liter (mg/L). The deeper aquifers typically have higher TDS levels. Hardness levels range from 50 to 200 mg/L and high fluoride, boron, and nitrates are problematic in some areas of the basin. Salts and nutrients are partially responsible for higher TDS levels in the AVGB. Sources of salts and nutrients in the basin include imported water, recycled water, surface recharge, and several others. The Antelope Valley Salt and Nutrient Plan was developed in 2014 and provides information for sources of salt and nutrient loading in the AVGB, models various loading scenarios, develop a monitoring plan, and provide implementation measures to reduce salt and nutrient levels and protect the water quality in the AVGB (District 40 et al, 2014).

**Beneficial Uses.** The Lahontan RWQCB has developed a Water Quality Control Plan (Basin Plan) that recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions and problems. The Lahontan Basin Plan identifies beneficial uses for waters within the Lahontan Region. A beneficial use is one of the various ways that water can be used for the benefit of people and/or wildlife. Although more than one beneficial use may be identified for a given waterbody, the most sensitive use must be protected. Beneficial uses of desert washes (ephemeral streams) such as those on the PVSP area include groundwater recharge, non-contact water recreation, and wildlife habitat. These surface water beneficial uses are classified as intermittent. Beneficial uses of groundwater in the PVSP area include municipal supply, industrial, and agricultural. The Basin Plan identifies the following beneficial uses for the Lancaster HA (Minor Surface Waters): MUN – Municipal and Domestic Supply, AGR – Agricultural Supply, GWR – Ground Water Recharge, REC-1 – Water Contact Recreation, REC-2 – Noncontact Water Recreation, COMM – Commercial and Sportfishing, WARM – Warn Freshwater habitat, COLD – Cold Freshwater Habitat, and WILD – Wildlife Habitat (LRWQCB, 2005).

## Antelope Valley Groundwater Basin Adjudication

The Antelope Valley Groundwater Basin was adjudicated in December of 2015 after 15 years of complex proceedings among more than 4,000 parties. The adjudication defined the basin boundaries, considered hydraulic connection throughout the basin, established a safe yield, and quantified groundwater production. The basin was determined to be in a state of overdraft as a result of these considerations (LA County Public Works, 2019).

In an adjudicated area, the groundwater rights of all the overlying parties and appropriators are determined by the Court. Overlying parties are property owners that possess land above the aquifer. Appropriators, also called non-overlying parties, encompass public users, such as municipalities, that are entitled to the use of the surplus of water available after overlying parties' rights are satisfied (MBI, 2024).

The adjudication identified the basin in a state of overdraft, which it seeks to resolve through four phases of evaluation:

- Defined the boundaries of the Basin
- Considered hydraulic connection throughout the Basin
- Established the safe yield
- Quantified groundwater production.

The primary method for overcoming the overdraft is the establishment of the safe yield during Phase 3. The adjudication has determined, in the Phase 3 trial decision, that the minimum safe yield is 110,000 acre feet per year (AFY), which will vary annually depending on the volume of water that is imported. District 40's ability to produce groundwater is subject to the 2015 judgment. District 40 has non-overlying production rights of 6,789 acre-feet, approximately 3,500 acre-feet of unused federal reserve rights and return flows equivalent to 39% of the District 40's 5-year average of purchased SWP water supply (LA County Public Works, 2020). Federal reserve rights are allocations of water set aside by the federal government when it reserves land for the public domain. Return flow is water that is returned to the surface or groundwater (MBI, 2025).

As part of the 2015 judgment, a "Watermaster" board was appointed by the Court to implement and enforce the judgment. The Watermaster board is empowered to impose a replacement fee on any party that pumps more than its allocated right (MBI, 2025).

## Water Supply

The PVSP is located in an area that is currently serviced by Los Angeles County Waterworks District 40 (District 40) water system. District 40 is operated by the Los Angeles County Public Works, is governed by the Los Angeles County Board of Supervisors, and was formed to supply water throughout the Antelope Valley area. The District 40 service area is approximately 232 square miles and serves customers in Lancaster, Palmdale, and the unincorporated communities of Pearblossom, Littlerock, Sun Village, Rock Creek, Northeast Los Angeles County, and Lake Los Angeles (LA County Public Works, 2021).

The District 40 water supply is sourced from a combination of purchased imported water and groundwater. District 40 purchases its imported water from the Antelope Valley-East Kern Water Agency (AVEK); District 40 is AVEK's largest municipal customer. AVEK is a regional water wholesaler that supplies surface water to portions of Los Angeles, Kern, and Ventura County. The majority of AVEK's water is received as imported water from the SWP (MBI, 2025). Per the agreement between AVEK and District 40, any "carry over" water, water that is allocated to District 40 but not used in a given year, must be transferred to District 40 (MBI, 2025).

Although District 40's groundwater non-overlying production groundwater rights from the underlying AVGB are limited per the 2015 Antelope Valley Groundwater Basin Adjudication to 6,789 AFY, they also have rights to use groundwater from unused Federal Reserve Rights, return flows of based on District 40's use of SWP water supply, and leases of approximately 2,600 acre-feet of groundwater rights from AVEK; this equaled a total of 23,298 acre-feet of groundwater available for production in 2020 (MBI, 2025). Groundwater volume produced by District 40 between 2016 and 2020 using these rights varied from 12,813 AFY to 17,397 AFY, with the highest volume in 2017 and the lowest volume in 2019. Groundwater from the AVGB is an important source and has historically been District 40's secondary supply source.

Although District 40 has a considerable groundwater supply allocated to it, it does not yet have infrastructure available to extract all the allocated supply. Additional groundwater extraction capacity is needed to reach the planned groundwater production values. Furthermore, District 40's groundwater extraction capacity will be impacted due to the imminent changes to drinking water standards, particularly related to per- and polyfluoroalkyl substances (PFAS) and Chromium-6. District 40 has developed a Water

Shortage Contingency Plan (WSCP) that proposes to increase its infrastructure in response to the growing demands and changing regulations. District 40 will implement measures in their WSCP to meet future gaps between water supply and demand during drought scenarios (MBI, 2025).

To prepare for dry years when water demand cannot be met by normal supply, District 40 works to increase its local groundwater supplies through carryover water reserved in the basin. District 40 works with AVEK to use more surface water during wet years to allow AVEK to recharge and "bank" additional groundwater supplies. Water banking involves storing water in the aquifer during wet years and drawing it out during dry years. This opportunity exists inside and outside of the Antelope Valley. However, water banking inside the Antelope Valley is preferred because it minimizes the risks of conveyance interruptions. AVEK has developed and is planning several groundwater banks to maximize the use of its supply, including the Westside Water Bank, Eastside Water Bank, Upper Amargosa Creek Recharge Project, and High Desert Water Bank (MBI, 2025).

District 40's retail water supplies in 2020 from purchased water, groundwater, and recycled water were 48,178 acre-feet. According to the WSA, District 40's projected annual water supply from 2025 to 2045, which includes water from AVEK, District 40 groundwater production imported water return flows rights, and District 40's imported water flow returns, and recycled water, is estimated to range from 79,000 AFY to 83,000 AFY in a normal water year (MBI, 2025). In the normal dry-year scenario, groundwater production would remain unchanged based on District 40's water rights and leased water rights. For a single-dry-year scenario, annual water supply is estimated to drop to 55,200 AFY to 67,600 AFY between 2025 and 2045 even with use of the banked groundwater supplies and for a the multiple-dry-year scenario supply estimates are similar to the single-dry-year scenario with a larger use of the banked groundwater supplies (MBI, 2025).

The PVSP will also have access to recycled water from the Lancaster Water Reclamation Plant (WRP) for non-potable uses during construction and operation of the PVSP. Recycled water for PVSP construction and operation may be accessed through trucked-in water from the WRP or from the Division Street Corridor Recycled Water Project which includes recycled water pipelines in the vicinity of the PVSP along 10$^{th}$ Street West. The Lancaster WRP produced approximately 14 million gallons/day (MGD) (15,683 AFY) of recycled water in fiscal year 2021-2022 (LACSD, 2022).

### *Water Demand*

Water demand for the PVSP consists of commercial, residential, medical, and open space/public uses. The water demand was calculated based on demand factors for each land use. To conserve potable water use, the PVSP should consider utilizing recycled water for non-drinking construction activities such as dust control and soil compaction. The estimated total water demand for the of the PVSP is 4,125 AFY based on land use categories and assumed building densities and uses (MBI, 2025). This estimated total water demand does not include water needs during PVSP construction; no water demand estimates have been provided for construction water needs.

As discussed in Section 3.13, Public Services and Utilities, projected demand in the City of Lancaster and in District 40 is estimated to increase comparable to population growth and increased development. Water demand for District 40 in 2020 was 45,818 acre-feet. Estimated water demand for District 40 is estimated to grow from 54,400 AFY to 66,300 AFY between 2025 and 2045 (MBI, 2025). District 40 has stated they have sufficient supply to meet the current and projected demand during normal, single-dry, and multiple-dry years. In single-dry and multiple-dry years, AVEK, the primary supply of District 40, can meet District 40's demand together with the Project's demand by pumping groundwater from its banked supplies (MBI, 2025). The WSA noted that though District 40's Urban Water Management Plan concludes there are sufficient supplies to meet demand, District 40's water supply is very near the limit of what the

region is able to accommodate, and that the District relies heavily on its water-saving conservation actions in its WSCP and water banking to make up the difference in multiyear drought periods (MBI, 2025).

District 40 has a total of 23,298 AF of groundwater available for production from through the AVGB through water rights and leases and the groundwater volume produced by District 40 between 2016 and 2020 using these rights/leases varied from 12,813 AFY to 17,397 AFY, with the highest volume in 2017 and the lowest volume in 2019.

### Flood Hazards

Large portions of the City of Lancaster are subject to flooding due to uncontrolled runoff from the San Gabriel Mountains flowing across the flat desert basin, and most localized drainage problems correspond closely to natural tributaries. Most areas in the City of Lancaster are subject to sheet flow, which is the type of flooding in which water flows over large areas with a depth of only a few inches. City streets convey water runoff which tends to flow in sheets over paved surfaces and collect in low-lying areas. In many areas, City streets are designed to accommodate 10-year and/or 25-year storm flows within the right-of-way. In addition, the City has a number of existing local and regional flood control facilities, including channels, storm drains, and retention basins. (City of Lancaster, 2009).

A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06037C0420F (FEMA, 2008), which covers the PVSP site, show that most of the PVSP site is mapped as Zone X representing area determined to be outside of the 0.2 percent (500-year) annual chance floodplain. Although, a small narrow zone along the mapped Armargosa Creek channel is mapped as a special flood hazard area subject to inundation by the 1 percent (100-year) annual chance flood (FEMA, 2008), the portion of Amargosa Creek crossing the PVSP no longer flows on the surface; and flow from Amargosa Creek in the vicinity of the PVSP site was transferred to an underground culvert that crosses the site in 2088/2009. Therefore, the PVSP is not likely to be subject to inundation from surface floods from this section of Amargosa Creek.

## 3.9.2. Regulatory Setting

### *Federal Regulations*

**Clean Water Act (CWA) (33 USC § 1251 et seq.).** Formerly the Federal Water Pollution Control Act of 1972, the CWA was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA authorizes the USEPA to implement federal water pollution control programs such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling point and nonpoint source pollution. At the federal level, the CWA is administered by the USEPA and United States Army Corps of Engineers (USACE). However, the CWA gives states the primary responsibility for protecting and restoring surface water quality. At the state and regional levels, the Act is administered and enforced by the State Water Resources Control Board (SWRCB) and the nine RWQCBs.

Section 402 of the CWA provides that the discharge of pollutants to Waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits contain industry-specific, technology-based limits and may include additional water quality-based limits, and pollutant-monitoring requirements. An NPDES permit may include discharge limits based on federal or state water quality criteria or standards. Amendments to the CWA added a framework for regulating municipal and industrial stormwater discharges, as well as stormwater discharges from construction sites. In California, the SWRCB and the nine RWQCBs have been delegated permitting authority for discharges regulated by NPDES permits. The PVSP is located in the

jurisdictional area of the Lahontan Regional Water Quality Control Board (LRWQCB), which has primary responsibility for the protection of water quality.

The LRWQCB administers the NPDES stormwater permitting program. Construction activities disturbing one acre or more of land are subject to the permitting requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit, Order 2009 0009 DWQ as amended by Orders 2010 0014 DWQ and 2012 0006 DWQ).

Section 404 of the CWA authorizes the USACE to regulate the discharge of dredged or fill material to the waters of the U.S. and adjacent wetlands. Filling of waters of the U.S. must be avoided where possible and minimized and mitigated where avoidance is not possible. Permits are issued by the USACE.

Section 401 of the CWA requires that any applicant for a federal license or permit to conduct an activity that may result in a discharge into waters of the U.S. obtain a certification from the State in which the discharge originates that the discharge will comply with the applicable provisions of CWA Sections 301, 302, 303, 306, and 307. This certification ensures that the proposed activity complies with state water quality standards.

**Federal Emergency Management Agency (FEMA).** To protect the public from flood hazards, FEMA maps local floodways and flood zones. Through its flood hazard mapping program, FEMA identifies flood hazards, assesses flood risks, and partners with states and communities to provide accurate flood hazard and risk data to guide them to mitigation actions. Flood hazard mapping is an important part of the National Flood Insurance Program (NFIP), as it is the basis of the NFIP regulations and flood insurance requirements. FEMA maintains and updates data through FIRMs and risk assessments. FIRMs include statistical information such as data for river flow, storm tides, hydrologic/hydraulic analyses and rainfall and topographic surveys.

**National Flood Insurance Act/Flood Disaster Protection Act.** The National Flood Insurance Act of 1968 made flood insurance available for the first time. The Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for the protection of property located in Special Flood Hazard Areas. These laws led to mapping of regulatory floodplains and to local management of floodplain areas according to federal guidelines which include prohibiting or restricting development in flood hazard zones.

### *State Regulations*

**California Streambed Alteration Agreement**. Sections 1600–1616 of the California Fish and Game Code require that any entity that proposes an activity that will substantially divert or obstruct the natural flow of any river, stream, or lake, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit material into any river, stream, or lake, must notify the CDFW. If CDFW determines the proposed alteration will impact a jurisdictional river, stream or lake, a Lake or Streambed Alteration Agreement (LSAA) shall be prepared. The LSAA applies to any stream, including ephemeral streams and desert washes. Amargosa Creek is jurisdictional "waters of the State" and is under the jurisdiction of CDFW. However, Amargosa Creek is covered through the PVSP area and a LSAA was previously obtained from CDFW to cover the creek.

**California Porter-Cologne Water Quality Control Act.** The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code § 13000 et seq.) establishes the SWRCB and each RWQCB as the principal state agencies with primary responsibility to coordinate and control water quality in California, in accordance with Section 303 of the CWA. The SWRCB establishes statewide policy for water quality control and provides oversight of the RWQCBs' operations. The RWQCBs have jurisdiction over specific geographic areas that are defined by watersheds. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the State could cause pollution or nuisance, including impacts to public

health and the environment. Waters of the State is defined by the Porter-Cologne Water Quality Control Act as "any surface water or groundwater, including saline waters, within the boundaries of the State."

Actions that involve or are expected to involve discharge of waste to waters of the State (other than into a community sewer system) may be subject to Water Discharge Requirements (WDRs) under the Porter-Cologne Act. The Act requires anyone proposing to discharge waste that could affect the quality of the waters of the State to submit an application to the appropriate RWQCB. The RWQCB staff will review the application and determine whether to propose adoption of WDRs to regulate the discharge, prohibit the discharge, or waive the WDRs. The Porter-Cologne Act also provides a variety of civil and criminal enforcement tools.

**State Water Resources Control Board.** The SWRCB administers water rights, water pollution control, and water quality functions throughout the State, while the RWQCBs conduct planning, permitting, and enforcement activities. Development projects typically result in the disturbance of soil that requires compliance with the NPDES General Permit, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activities. This Statewide General Construction permit regulates discharges from construction sites that disturb one or more acres of soil. By law, all stormwater discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre of total land area must comply with the provisions of this NPDES Permit, and develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required to contain a site map(s), which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project.

The SWPPP is required to list BMPs the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. A project applicant must submit a Notice of Intent (NOI) to the SWRCB, to be covered by the NPDES General Permit, and prepare the required SWPPP before beginning construction or a project. Implementation of a plan starts with the commencement of construction and continues through the completion of the project. Upon completion of a project, the applicant must submit a Notice of Termination (NOT) to the SWRCB to indicate that construction is completed.

**Lahontan Regional Water Quality Control Board.** The SWRCB oversees the nine RWQCBs in the State of California. The City of Lancaster is within the jurisdiction of the LRWQCB. The LRWQCB is responsible for establishing water quality standards and objectives that protect the beneficial uses of various waters in their region. The LRWQCB is also responsible for protecting surface and ground waters from both point and non-point sources of pollution. Water quality standards and control measures for surface and ground waters of the Lahontan Region are contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan). The Basin Plan designates beneficial uses for water bodies and establishes water quality objectives, waste discharge prohibitions, and other implementation measures to protect those beneficial uses.

Section 303 of the federal CWA (as well as the Porter-Cologne Water Quality Control Act, discussed above) requires that states adopt water quality standards. Water quality standards consist of designated beneficial uses, numeric and narrative water quality criteria (also referred to as "water quality objectives" under state law) that protect beneficial uses, as well as the state and federal antidegradation policies. Section 303(d) establishes a Total Maximum Daily Load (TMDL) program, which sets the maximum quantity of a particular contaminant that a water body can maintain without experiencing adverse effects, to guide the application of State and regional water quality standards. Section 303(d) also requires the State to identify "impaired" streams (water bodies affected by the presence of pollutants or contaminants) and

to establish the TMDL of each pollutant for each identified stream. Each RWQCB has a Water Quality Control Plan (Basin Plan) that designates beneficial uses, establishes water quality objectives to protect the beneficial uses, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan.

The LRWQCB sets water quality objectives to ensure the protection of beneficial uses and the prevention of nuisance, although it is understood that water quality can be changed to some degree without unreasonably affecting beneficial uses (RWQCB, 2005). Current objectives for surface water in the area include those for aesthetic qualities, tainting substances, toxicity, temperature, pH, dissolved oxygen, suspended and settleable solids, dissolved solids, bacteria, biostimulatory substances, sediment, turbidity, radioactivity, chemical constituents, and pesticide wastes. Groundwater objectives include those for taste and odors, bacteriological quality, chemical and physical quality, brines, and radioactivity.

**California Water Code.** Senate Bill (SB) 610, passed in 2002, amended the California Water Code (CWC) Sections 10910 and 10912 to require detailed analysis of water supply availability for certain types of development projects, and to improve the link between information on water supply availability and certain land use decisions made by cities and counties. It requires detailed information regarding water availability to be provided to city and county decisionmakers prior to approval of specified large development projects. The CWC SB 610 amendments require that a project be supported by a Water Supply Assessment if the project is subject to the California Environmental Quality Act, and would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling-unit project. According to SB 610 Guidelines, one dwelling unit typically consumes 0.3 to 0.5 acre-feet per year (AFY), which would amount to 150 to 250 AFY for 500 units.

### *Local Regulations and Plans*

**Antelope Valley Integrated Regional Water Management Plan.** The Antelope Valley IRWMP was prepared by the Antelope Valley Regional Water Management Group Regional Management Group (AVRWMG) which consists of 11 public agencies, including the AVEK, Antelope Valley State Water Contractors Association (AVSWCA), City of Lancaster, City of Palmdale, Littlerock Creek Irrigation District, Los Angeles County Sanitation District (LACSD) Nos. 14 and 20, Los Angeles County Waterworks District No. 40 (District 40), Palmdale Water District (PWD), Quartz Hill Water District (QHWD), and Rosamond Community Services District (RCSD). The IRWMP was developed to address regional concerns about water supply reliability, water quality, flood protection, environmental resources, and land use management in the Antelope Valley. The IRWMP provides a mechanism for: 1) coordinating, refining and integrating existing planning efforts within a comprehensive, regional context; 2) identifying specific regional and watershed-based priorities for implementation projects; and 3) providing funding support for the plans, programs, projects and priorities of existing agencies and stakeholders. The IRWMP was most recently updated in 2019.

**Lancaster Master Plan of Drainage.** In 1992, the City of Lancaster adopted its Master Plan of Drainage (MPD) based on the Antelope Valley Comprehensive Plan; it is periodically updated to document updated drainage conditions, facilities, and drainage fee schedules and was last updated in 2020 (City of Lancaster, 2020). The City of Lancaster has a development fee schedule that funds all MPD facilities through the collection of Drainage Impact Fees and Drainage Maintenance Fees. These fees are used to build regional storm drain facilities; developers are responsible for project-specific drainage facilities. Through this program, the City can assure that sufficient improved storm drain facilities are in place as new development occurs. The design of drainage facilities shall be in accordance with the latest City of Lancaster Engineering Design Guidelines. Additionally, the City may require that other criteria be met in order to accommodate design conditions that are unique to any given facility (City of Lancaster, 2020).

For large projects (equal to or greater than 100 lots) such as the PVSP project, the City's design guidelines require the construction of local retention or detention basins until the regional system can be built. New local flood control facilities are presently built on an individual, project-by-project basis and are required to be designed for the Capital Flood Protection. The MPD defines the Capital Flood as the runoff produced by a 50-year frequency design storm falling on a saturated watershed (soil moisture and field capacity). A 50-year frequency design storm has a one in 50 probability of being equaled or exceeded in any year. New developments that fall under the Capital Flood Protection criteria are thus required to design their storm drain plan based on a 50-year storm frequency, which frequently require the installation of detention basins. As the regional system is built, these basins may be eliminated or converted to detention basins for peak flows only. The lowest finish floor elevation of all habitable structures is required to be a minimum of one foot above maximum water level resulting from a Capital Flood (City of Lancaster, 1997).

For smaller projects (less than 100 residential units/lots, regardless of size), streets are considered the primary stormwater conveyance facility. Local streets currently direct much of the stormwater flows to the few existing improved storm drain structures. Existing City standards are to maintain a 50-year storm within the right-of-way. The City's Master Plan of Drainage calls for containment of 25-year and/or 10-year storm flows within the curbs of the streets. In portions of the City with no Master Plan of Drainage facilities, streets act as the primary local flood control program and new residential structures are usually built two to three feet above street grade (City of Lancaster, 1997).

**Lancaster Storm Water Management Plan.** The City of Lancaster is designated as a regulated Small Municipal Separate Storm System by the U.S. EPA pursuant to 40 CFD 122.322(a)(1). The City of Lancaster filed a Notice of Intent (NOI) to comply with the SWRCB Small MS4 General Permit in lieu of obtaining an individual permit. On April 20, 2003, NPDES General Permit No. CAS000004 was adopted and most recently renewed on May 21, 2013 (NPDES Permit No. PAG133577). The objective of the City's Storm Water Management Plan (SWMP) is to establish ordinances, policies, procedures, and practices to manage and control the quality of stormwater runoff in the City.

**Lancaster Municipal Code.** Lancaster Municipal Code 15.64.060, Drainage/Flood Control Improvements Fee, imposes a drainage/flood control improvements fee on all new development in the City pursuant to Article II of Chapter 13.04, to mitigate the stormwater runoff impacts caused by new development.

**City of Lancaster 2030 General Plan.** The Plan for The Natural Environment (2009) includes policies and specific actions related to water resources and water quality. The 2030 General Plan Safety Element (2022) and Plan for Municipal Services and Facilities (2009) include policies and specific actions related to flooding, flood control and drainage. Policies and specific actions of these Plans that are applicable to the PVSP are listed below:

- **Policy 3.1.1.** Ensure that development does not adversely affect the groundwater basin.
- **Specific Action 3.1.1(b).** Through the development review process, evaluate proposals under the California Environmental Quality Act (CEQA) to identify potential negative impacts on existing watershed areas, and to ensure inclusion of appropriate mitigation measures.
- **Specific Action 3.1.1(d).** To ensure that the potential effect on the groundwater basin from proposed land use changes is appropriately evaluated, the applicants for all general plan and zoning ordinance amendments shall provide a factual statement of:
  - Current Water Demand: the amount of water necessary to support development under the existing general plan and zoning designations;
  - Proposed Water Demand: the amount of water necessary to support development under the proposed general plan and/or zoning designations;

- Potential Conservation: the amount of water that can be conserved by application of water conservation techniques in the proposed project; and
- Water from New Sources: the amount of water from new sources that can be specifically committed to this project.

- **Policy 3.1.** Encourage the use of recycled tertiary treated wastewater when possible.
- **Specific Action 3.1.3(f).** As part of the development review process, condition new development where appropriate to implement recycled water systems and/or measures.
- **Policy 3.2.1.** Promote the use of water conservation measures in the landscape plans of new developments.
- **Specific Action 3.2.1 (a).** Through the landscape plan check process, require the provision of drought-tolerant landscaping and water-saving irrigation systems for new residential, commercial, and industrial developments in accordance with City landscape ordinances.
- **Specific Action 3.2.1(d).** As a condition of tentative map approval for new single family residential subdivisions, require developers to install drought tolerant and low water using plants and to landscape all model homes with drought tolerant and low water using species consistent with State legislation.
- **Policy 4.2.3**. Retain undeveloped or vacant land within the 100-year floodplain as very low-density rural uses or open space uses where plans for the construction of flood control facilities are absent. **Specific Action 4.2.3 (a).** Require development within the 100-year floodplain to submit a 100-year base flood elevation certification by a qualified civil or hydrological engineer.
- **Specific Action 4.2.3 (b).** Require drainage studies that identify the necessary facilities to ensure proposed development is adequately protected from flooding and will not create or increase downstream or upstream flood hazards.
- **Policy 4.2.4**. Require new development, redevelopment, or major remodels to reduce on-site drainage flows below existing levels and increase groundwater recharge where appropriate.
- **Specific Action 4.2.4 (a).** Encourage the use of permeable paving materials in hardscape areas; swale designs in landscape or grassy areas; and the discharge of roof drainage into pervious, greenbelt, and seepage pit areas to slow runoff, maximize infiltration, and reduce downstream impacts from development.
- **Policy 4.2.5.** Design storm drainage infrastructure to accommodate existing and anticipated storm flows associated with changing climatic conditions.
- **Specific Action 4.2.5 (a).** Require that street and storm drain flood control systems be designed to accommodate 10 percent above identified storm flows.
- **Policy 15.1.4.** Ensure that mitigation is provided for all development in recognized flood prone areas. Any mitigation of flood hazard in one area shall not exacerbate flooding problems in other areas.
- **Specific Action 15.1.4(a).** As part of the development review process, require individual developments to install sufficient drainage facilities to provide all-weather access and protection as per FEMA requirements.

## 3.9.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

The impact analysis analyzes potential direct, indirect, and cumulative impacts of the PVSP on water resources, including the Plan's potential to adversely affect groundwater supplies, modify drainage and

flooding conditions, induce erosion and sedimentation, and degrade water quality. The analysis also considers the potential for incremental impacts of the Plan to combine with impacts of other projects and activities to adversely affect water resources. Mitigation measures to avoid or reduce significant impacts are identified, as needed.

The criteria used to determine the significance of potential hydrology and water quality impacts are based on Appendix G of the State CEQA Guidelines. The Project would result in a significant impact under CEQA related to hydrology and water quality if the Project would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - result in substantial erosion or siltation on or off site;
  - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
  - create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
  - impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## Environmental Impact Analysis

**Impact WQ-1: Violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.**

### *Construction*

Construction activities within the PVSP would involve clearing, grading, paving, utility installation, landscaping activities and the building of various structures, which would generate potential water quality pollutants with the potential to adversely affect water quality. Construction-related ground-disturbing activities could result in soil erosion and lowered water quality through increased turbidity and sediment deposition into local ephemeral streams. Accidental spills or disposal of harmful materials used during construction could wash into and pollute surface waters. Materials that could contaminate the construction area or spill or leak include diesel fuel, gasoline, lubrication oil, cement slurry, hydraulic fluid, anti-freeze, transmission fluid, lubricating grease, and other fluids. As such, short-term water quality impacts have the potential to occur during construction activities associated with PVSP developments in the absence of any protective or avoidance measures.

The dry nature of the PVSP site surface, the surrounding area surface area, and lack of active drainages or other water features on or near the PVSP other than the buried Amargosa Creek culvert, is such that should harmful material spills occur during construction, it is unlikely that hazardous materials would

spread to surface water and spills could easily be cleaned up prior to any surface runoff that would transport contaminant offsite or before the spills could percolate to the underlying groundwater. Storage procedures for hazardous materials during any construction would be dictated by the required Hazardous Materials Business Plan (HMBP) and Spill Prevention Control and Countermeasure Plan (SPCC) that would be prepared prior to any construction activities. Additionally, in compliance with LRWQCB and City of Lancaster regulatory requirements, each development project would be required to obtain a NPDES Construction General Permit for construction activities. A NPDES Construction General Permit is required for all projects that ground-disturbing activities of 1 or more acres. As part of the NPDES requirements, a NOI would be required to be submitted to the SWRCB providing notification and intent to comply with the State of California general permit, and a project specific SWPPP for construction-related activities would need to be prepared. The required project-specific SWPPP would include BMPs to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to leaving the PVSP site. Therefore, water quality impacts associated with construction activities would not be significant.

Contractors for PVSP construction projects would likely obtain water for construction activities from either: potable water supplies from District 40 , which could come from a variety of sources including AVGB groundwater resources; and/or recycled water from the City of Lancaster WRP via water trucks or the recycled water line on 10$^{th}$ Street West. However, District 40's groundwater extraction volumes are regulated and limited by the Antelope Valley Groundwater Basin Adjudication. In addition, construction projects would be required to comply with the provisions of the Lahontan Region Basin Plan and the Antelope Valley IRWMP, which both contain water quality objectives for protection of the surface water and groundwater in the region. The Water Quality Control Plan describes implementation plans and other control measures designed to ensure compliance with statewide plans and policies and documents comprehensive water quality planning. Therefore, construction of the PVSP would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

### *Operation*

Stormwater pollutants commonly associated with the land uses proposed by the Plan commonly include bacterial indicators, nutrients, pesticides, sediments, trash/debris, and oil/grease. Stormwater would be collected by roadway curbs and gutters and conveyed into the PVSP's onsite drainage system. Each completed development would be required to comply with the Lancaster Stormwater Management Plan and the Lancaster Master Plan of Drainage and the associated design requirements, codes, and practices for control of stormwater runoff water quality. However, the potential for stormwater pollutants to enter the stormwater system could potentially violate water quality standard; therefore, Mitigation Measure (MM) WQ-1 is proposed to reduce impacts related to potential water quality violations.

The PVSP would not include any groundwater wells on site and water for the PVSP developments would be supplied by District 40, which complies with and implements the Antelope Valley Groundwater Basin Adjudication, the Lahontan RWQCB Basin Plan, and the Antelope Valley Integrated Regional Water Management Plan as related to water usage and water quality in the Lancaster area. Therefore, the PVSP impacts related to conflicts with water quality control plans or sustainable groundwater management plans would be less than significant.

## Mitigation Measure

**MM WQ-1** **Stormwater Quality Plan.** Prior to approval of each development application filed for the PVSP, a stormwater quality plan shall be prepared by a qualified professional for the development and approved by the City of Lancaster. The plan shall include provisions to reduce discharge of pollutants from the development site to the maximum extent practical

using management practices, controls techniques and systems, and engineering methods, and other physical means that are appropriate to the development plans. Applicable post-construction measures may include, but are not limited to:

- Control for impervious area runoff, including installation of detention basins, retention area, filtering devices, energy dissipaters, pervious drainage systems, porous pavement alternative;
- Regular sweeping of impervious surfaces;
- Efficient irrigation practices to reduce runoff;
- Infiltration basins;
- Vegetated swales and strips;
- Xeriscape or other landscape design that minimized use of fertilizer;
- Covered outdoor storage, including for trash containers; and
- Berms around trash container areas to contain runoff.

The Stormwater Quality Plan shall include an inspection and maintenance program that includes a provision to prevent clogged discharge orifice that would permit standing water or flooding.

**Impact WQ-2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge.**

Developments within the PVSP would not directly extract groundwater; no ground water wells are proposed for the PVSP. Water for the PVSP projects would likely be supplied by District 40, which relies on a mix of purchased water, groundwater from the AVGB, and recycled water for their retail supply. Additionally, the AVGB is an adjudicated basin, per the 2015 Antelope Valley Groundwater Basin Adjudication. The adjudication limits the amount of groundwater that can be pumped from AVGB to ensure the protection and safe yield of the basin. District 40 produced significantly less groundwater annually between 2016 and 2020 than their allocated water rights for the AVGB. Estimated water demand for the full build out of the PVSP is 1,742 AFY. Based on the WSA, projected increased water demands due to anticipated population growth in the area can be met by District 40 water production rights using imported water, groundwater, and recycled water, and in the event of dry years use of banked groundwater supplies (MBI, 2024). Therefore, The PVSP would not substantially affect groundwater supplies in the AVGB and would result in a less-than-significant impact.

The AVGB is recharged principally by deep percolation of precipitation and runoff from the surrounding mountains and hills (AVRWMG, 2019). Other sources of recharge to the basin include artificial recharge and return flows from agricultural irrigation, urban irrigation, and wastewater management activities. Depending on the thickness and characteristics of the unsaturated zone of the aquifer, these sources may or may not contribute to recharge of the groundwater. However, according to the Antelope Valley IRWMP, little percolation occurs in the Antelope Valley Region other than near the base of the surrounding mountains due to impermeable layers of clay overlying the groundwater basin. Groundwater recharge for the AVGB is accomplished through approximately 400 acres of groundwater infiltration basins via the Water Supply Stabilization Project (also known as Westside Water Bank) and six acres of groundwater infiltration basins via the Eastside Water Banking and Blending Project.

Although development of the PVSP site would increase impervious surfaces and decrease surface infiltration, as noted above, there is little recharge of the underlying AVGB aquifers from the area. The

future development would not remove existing groundwater infiltration basins and, as such, would not decrease recharge of the AVGB through operations of the Water Supply Stabilization Project or the Eastside Water Banking and Blending Project. Thus, the PVSP would result in less-than-significant impacts to groundwater recharge.

**Impact WQ-3: Create or contribute to runoff water that would exceed the capacity of the existing or proposed stormwater drainage systems or create flooding off site.**

The PVSP would convert the project site from a vacant, permeable surface that could accommodate water infiltration to a planned community that would include large amounts of impermeable surfaces such as roads, paved areas, and roofs. This would result in increased storm water runoff due to development of the site. Stormwater drainage for the PVSP site would be designed and implemented consistent with requirements of the Lancaster Stormwater Management Plan and the Lancaster Master Plan of Drainage. Implementation of Mitigation Measure WQ-2 (Hydrology Study) is needed to determine needed capacity and to allow for proper design of the drainage system structures prior to approval of the first development application for the PVSP.

### Mitigation Measure

**MM WQ-2** **Hydrology Study.** If requested by the City Engineer, a hydrologic study shall be conducted for individual development projects in the PVSP area. The study shall be reviewed and approved by the City Engineer prior to project approval. The hydrologic study shall be prepared in accordance with the City of Lancaster's latest Engineering Design Guidelines, as well as the Los Angeles County Department of Public Works Hydrology and Sedimentation Manual as adopted by the City of Lancaster. The hydrology study shall include specifications for on-site stormwater conveyances and drainage features.

**Impact WQ-4: Substantially alter the existing drainage pattern of the site or area.**

Existing drainage up- and downstream of the PVSP area consists of Armargosa Creek. Armargosa Creek is an ephemeral creek that currently crosses northwards across the southwestern portion of the PVSP site. Adjacent to and across the PVSP site, Amargosa Creek has been undergrounded and crosses the area within a buried culvert. No other significant drainage features cross or are near the PVSP. The PVSP proposes to use the area above the undergrounded Armargosa Creek channel as an open space with parks and for storm flow conveyance. Therefore, alterations to the drainage pattern of the upstream area would be less than significant as the buried channel for Amargosa Creek would not be affected by the PVSP site development and remain in its current location and continue to be used for drainage from the creek.

**Impact WQ-5: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.**

Most of the PVSP site lies in an area determined by FEMA to be outside a designated flood hazard zone except a narrow area along Armargosa Creek that is within a mapped special flood hazard area subject to inundation by the 1 percent (100-year) annual chance flood (FEMA, 2008). However, Armargosa Creek was undergrounded across the PVSP site in 2008/2009 and there is currently no active surface channel on the PVSP site that could result in surface flooding or inundation. Additionally, according to the PVSP proposed plans, the area above the Amargosa Creek buried channel cannot have structures placed on it and this area would have primarily park land uses and open space connections for pedestrian and non-motorized mobility, and storm flow conveyance. Therefore, there the PVSP would not place housing within a 100-year flood hazard area and impacts would be less than significant.

**Impact WQ-6: Inundation by seiches, tsunami, or mudflow.**

The PVSP does not propose to construct any large bodies of water that could be affected by a seiche or tsunami, nor does the Project propose to construct slopes that could be subjected to mudflow.

No significant bodies of water with dams are located upstream of the PVSP that would have potential to result in inundation of the PVSP site due to dam failure. Additionally, as the PVSP site is not located in close proximity to any large water bodies, impacts associated with a seiche would be unlikely. The PVSP site is not near the coast and would not be subject to tsunamis. The PVSP site is flat to gently sloping and is not near any slopes that generate mudslides. In summary, the Project would not be subject to inundation by dam failures, seiches, tsunami, or mudflow; therefore, no impact would occur.

## 3.9.4. Cumulative Impact Analysis

### Geographic Extent

The geographic scope for the cumulative analysis includes the water resources that would be affected by the PVSP and cumulative projects within the Antelope Valley basin. The area of analysis for surface water cumulative impacts is the Armargosa Creek watershed in the Antelope Valley. The area for analysis for cumulative impacts for groundwater is the AVGB as it is the groundwater source for the water agencies and suppliers in the region.

### Cumulative Effects of the Proposed Project

#### *Surface water*

Cumulative impacts to hydrology and water quality include the impacts of the SVSP together with cumulative projects within the Lancaster Hydrologic Unit with the Antelope Valley. These cumulative projects have the potential to contribute to cumulative hydrologic and water quality impacts in the Antelope Valley. These cumulative projects have the potential to introduce new or exacerbate existing pollutant generation associated with construction and operation and could contribute to increased runoff due to increases in impervious surfaces. Cumulative projects that are crossed by watercourses could generate flooding, with similar flooding impacts as described for the proposed Project.

All foreseeable future projects in the Antelope Valley would be subject to similar measures as the proposed Project when obtaining the required permits that implement compliance with local, state and federal clean water regulations and stormwater and drainage plans and regulations. As all projects would go through an environmental review process, they would be subject to similar mitigation measures as those proposed to address potential water quality impacts for the PVSP. Individual cumulative project impacts related to drainage and flooding are expected to be reduced to less than significant through compliance with regulations and mitigation. Therefore, the combined effects to water quality and drainage flow from the cumulative projects within the geographic scope would not be considered cumulatively significant and the proposed Project would not make a considerable contribution to cumulative impacts.

The PVSP would not place housing or other occupied structures within a regulated 100-year special flood hazard zone. The PVSP would not make a considerable contribution to flood impacts at other project sites.

#### *Groundwater*

The AVGB is an adjudicated basin with limits on groundwater production rights. The PVSP and any future developments would not be able to extract more groundwater from the AVGB than what has been determined to be the safe yield. Therefore, impacts from groundwater withdrawal would be less than significant for all projects and would not be cumulatively considerable.

## 3.9.5. Level of Significance Ater Mitigation

Impacts found to be potentially significant would be reduced to less-than-significant levels with implementation of mitigation measures. The Project's compliance with local State, and federal policies, regulations, and guidelines, along with the listed mitigation measures as appropriate, would ensure that all the above identified potential Hydrology and Water Quality impacts would be less than significant.

# 3.10. Land Use and Planning and Recreation

This section analyzes potential impacts related to land use and planning, agriculture, and recreational resources associated with implementation of the proposed Parkway Village Specific Plan (PVSP or Plan). The following discussion addresses the existing environmental conditions in the affected area, identifies and analyzes environmental impacts for the proposed Plan, and as applicable, recommends measures to reduce or avoid anticipated adverse impacts. The discussion also describes existing Federal, State, and local laws and regulations relevant to land use and planning, agriculture, and recreation. In some cases, compliance with these existing laws and regulations would serve to reduce or avoid certain impacts that would otherwise occur.

### Land Use and Planning

The PVSP would identify the desired land use goals, policies, and development standards for 434.7 acres of vacant and partially developed properties within the Plan boundary in the City of Lancaster. The PVSP is anticipated to guide development of the project area through the year 2050. The PVSP establishes land use designations and provides design guidelines and development standards for how an area will be developed, and generally determines the character and density of development in an area. Proposed land use goals, policies, and development standards would allow for mixed-use commercial and residential development as well as components such as a walkable and bikeable corridor. Land use zones, established by the adopted PVSP, would provide specific restrictions for what can and cannot be developed on a property within the Plan area. The following discussion will analyze the PVSP's impacts to existing land use and planning laws and regulations as well as evaluate its relation to the City of Lancaster's existing land use and planning standards.

### Recreation

The PVSP would include recreational land uses within the Plan boundary. Recreational components would include an Open-Air Plaza in Planning Area A, a Community Park in Planning Area E, several Neighborhood Parks scattered throughout the PVSP and located in Planning Areas B, C, H, J, K, and M and Linear Parks located in Planning Areas D, G, I, L, and N. The following discussion evaluates the proposed Plan's impacts to existing and future recreational uses.

## 3.10.1. Environmental Setting

### Land Use and Planning

The City of Lancaster is located approximately 70 miles north of the City of Los Angeles, within the Mojave Desert. The City of Palmdale is located approximately one mile to the south adjacent to the City of Lancaster. The proposed Plan would encompass approximately 437 acres of vacant and partially developed land in the City of Lancaster and would contain a mix of high-density mixed-use commercial and residential development (Figure 2-4, Conceptual Land Use Plan). The existing Plan area is primarily vacant, with some existing uses within the plan area as discussed in Section 2. The approximate alignment of Amargosa, which is located underground where it traverses the Plan area, is shown on Figure 2-2. Key existing developments within the Plan boundary include St. Paul's Episcopal Church that fronts on Avenue K to the north; a supportive housing development (formerly a motel) and other commercial land uses along the Sierra Highway street frontage to the east; Kaiser Permanente Medical Offices and parking lot to the south; an auto repair business along 10th Street West to the west, and a small solar facility and bike path within the Plan boundary. Figure 2-2 identifies the existing land uses within and surrounding the Plan boundary. According to the City of Lancaster General Plan (GP) Land Use Map, land uses within the Plan boundary include MU (Mixed Use), C (Commercial), and H (Health Care). The areas surrounding the

Plan boundary consist of commercial, urban residential, open space, multi-residential, and light industrial land uses.

## Recreation

The City of Lancaster developed and adopted the Parks, Recreation, Open Space, and Cultural Master Plan in 2007 (City of Lancaster, 2007a). This plan presents goals for the Parks Department and for the community for the next 20 to 25 years after adoption; describes current and future needs; and develops a process for managing the Parks Department's commitments. Policy and programs pertaining to the Parks, Recreation, Open Space, and Cultural Master Plan are primarily contained in the Plan for Active Living in Section 3.10.2, Regulatory Setting, below.

The areas surrounding the Plan boundary are predominantly for commercial and residential use. The nearest park is Sgt. Steve Owen Memorial Park, located on 10th Street West adjacent to the southwest boundary of the project area and within an Open Space land use designation. No other parks or major recreational areas are located in the vicinity of the project area. As depicted on Figure 2-4, the Plan proposes several parks and a plaza within the PVSP area, with a total of 27.8 acres of Parks and Plaza land uses upon buildout. The SHTC areas within the site establishes a buffer zone to minimize effects of the neighboring railroad/High-Speed Rail and would include outdoor open space for recreational activities as well.

Section 4.5.4, *Parks and Plaza,* of the PVSP discusses in detail the proposed Community Park (Park E), the six Neighborhood Parks (Parks B, C, H, J, K, and M), the six Linear/Trail System Parks (Parks D, G, I, L, and N), and the one Plaza (Plaza A). The parks and plaza would be linked together through a series of on and off-street trails, with the Community Park being a focal point.

The Community Park and Neighborhood Parks would include active and passive recreational opportunities for residents and visitors, consistent with the required and encouraged amenities shown in Tables 5-1 and 5-2 of the PVSP. Both the Community and Neighborhood Parks would be privately owned and maintained by the developers or property owners' association and are to be completed concurrently with or before development of the first abutting planning area.

Linear/Trail System Parks would be designed to provide multiple modes of transportation within the Plan area that encourage biking, running, and walking. Extra amenities may be added that include fixed exercise stations and moveable seating. The Plaza, planned to be centrally located in the Town Center District, may provide a mix of moveable and stationary furniture as well as recreational activities such as ping-pong, chess, and cornhole to attract residents and visitors to the Plaza. All final design and amenities within the parks and plaza area would be reviewed and approved by the Director of Community Development or his/her designee. Additionally, the SHTC provides for additional biking and pedestrian trails within the buffer zone. Chapter 5 of the PVSP contains design guidelines to direct future development of the parks, plaza, and SHTC areas of the Plan and include the following:

1. Where feasible, provide shading via shade trees or shade structures in public gathering areas to provide a pleasant climate.
2. Shade structures shall be made from durable materials that are resistant to high winds and fluctuating day and night temperatures.
3. Plant trees near pedestrian and bicycle paths to provide shade and comfort.
4. Placement of active and passive spaces should allow for the simultaneous occurrence of diverse activities and diverse user groups participating in both planned activities and free play.
5. Locate restroom buildings within a 150-foot radius of recreation fields and a 100-foot radius of children play areas.
6. Arrange activity areas to encourage casual interaction among users by introducing transitional areas for lounging and providing visual access from one area into another.

7. Locate parking facilities near major park site features to assist the park user, who may be carrying equipment and/or coolers to their destination.
8. Landscape designs must be sensitive and appropriate for the site to minimize disruption to existing plant habitats. Use climate appropriate drought tolerant plants to support the design intent. Planting designs should incorporate biodiversity and water conservation.
9. Provide well-placed signage and wayfinding points in linear parks to ensure that pedestrians can safely move through the parks.

SHTC guidelines, with respect to recreational space within the Plan area, include the following:

- Where feasible, provide shading via shade trees or shade structures in public gathering areas to provide a pleasant climate.
- Shade structures shall be made from durable materials that are resistant to high winds and fluctuating day and night temperatures.
- Plant trees near pedestrian and bicycle paths to provide shade and comfort.

## 3.10.2. Regulatory Setting

### Regional Regulations

#### *Southern California Association of Governments Plans*

The PVSP is in the planning area of SCAG, the designated metropolitan planning organization (MPO) for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 15 million persons in an area of more than 38,000 square miles. As the designated MPO, Southern California Association of Governments (SCAG) is mandated by the federal government to research and develop regional plans for transportation, growth management, hazardous waste management, and air quality. As the MPO, SCAG administers the state-mandated Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), designed to address the regional impact of urban congestion.

**Regional Comprehensive Plan.** SCAG's Regional Comprehensive Plan (RCP) contains a general overview of federal, State, and regional plans applicable to the Southern California region and serves as a comprehensive planning guide for future regional growth (SCAG, 2008). The Guiding Principles of the RCP are as follows:

- Improve mobility for all residents. Improve the efficiency of the transportation system by strategically adding new travel choices to enhance system connectivity in concert with land use decisions and environmental objectives.
- Foster livability in all communities. Foster safe, healthy, walkable communities with diverse services, strong civic participation, affordable housing and equal distribution of environmental benefits.
- Enable prosperity for all people. Promote economic vitality and new economies by providing housing, education, and job training opportunities for all people.
- Promote sustainability for future generations. Promote a region where quality of life and economic prosperity for future generations are supported by the sustainable use of natural resources.

SCAG member agencies adopted the RCP in 2008 to set broad goals for the Southern California region and identify strategies for agencies at all levels of government to use in their decision making. It includes input from each of the 13 subregions that make up the Southern California region.

**SCAG's Connect SoCal (Regional Transportation Plan/Sustainable Communities Strategy).** SCAG's Connect SoCal (2024-2050 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]), adopted

on April 4, 2024, provides the overall transportation and land use goals that satisfy the vision of the RCP (SCAG, 2024a). The RTP portion of the RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area. The SCS portion of the RTP/SCS presents an overall land use concept for the region with increasing focus on densification of urban areas and development around transit stations, as well as an emphasis on use of transit, active transportation, and the reduction of greenhouse gas emissions from cars and light duty trucks.

**SCAG's Intergovernmental Review**. The Intergovernmental Review (IGR) Program provides informational resources to regionally significant plans, projects and programs, per CEQA Guidelines, to ensure consistency of projects with SCAG's adopted regional plan. SCAG helps lead agencies to identify a project's impact on a regional scale and how each project contributes to the region's plan and vision. Information from the goals and strategies of the Connect SoCal, jurisdictional-level growth forecast, and mitigation measures contained in the Connect SoCal Program Environmental Impact Report, guide lead agencies during project development. Additionally, the IGR Program functions as a clearinghouse for federal grant and financial assistance program applications, federally required state plans, federal development activities, and federal environmental documents (SCAG, 2024b).

## Local Regulations

The City of Lancaster is the lead agency for the proposed Plan and oversees implementation of the goals, policies, and programs set forth by the City's GP. In addition, State and regional agencies with roles in influencing land use policies in the City of Lancaster include the SCAG and the Antelope Valley Air Quality Management District (AVAQMD). The proposed project is subject to State and regional land use regulatory plans and policies established by each of these agencies that affect land use planning in the project area, which are discussed below.

### *City of Lancaster General Plan - Plan for Active Living*

The City's GP contains the Plan for Active Living to provide plans and programs for the provision of quality living environments. It addresses parks, recreation, and other community services. This plan correlates with the State-mandated Open Space Element and other optional issues, including recreation, as well as the City of Lancaster Parks, Recreation, Open Space, and Cultural Master Plan (City of Lancaster, 2009b). The Plan for the Active Living includes goals, objectives, policies that apply to recreation in the proposed Plan area, which are outlined below.

**Goal 10:** To provide a park, recreation and open space system which enhances the livability of urban and rural areas by providing parks; establishing a comprehensive trails system and meeting the open space and recreational needs of Lancaster residents.

Objective 10.1: Provide sufficient neighborhood and community park facilities such that a rate of 5.0 acres of park land per 1,000 residents is achieved and distributed so as to be convenient to Lancaster residents.

Policy 10.1.1: Provide opportunities for a wide variety of recreational activities and park experiences, including active recreation and passive open space enjoyment within a coordinated system of local, regional, and special use park lands areas.

Objective 10.2: Through the adoption and implementation of a Master Plan of trails, establish and maintain a hierarchical system of trails (including equestrian, bicycle, and pedestrian trails) providing recreational opportunities and an alternative means of reaching schools, parks and natural areas, and places of employment, and connecting to regional trail systems.

Policy 10.2.1: Establish and maintain a Master Plan of Trails which designates trail status and approximate locations, providing for the following types of trails:

- Urban Trails: multi-purpose pedestrian/ bicycle trails which connect residential areas to other residential areas, regional and community parks, schools, and commercial and industrial employment areas.
- Rural Trails: multi-purpose equestrian/ pedestrian/ bicycle trails which connect residential areas to other residential areas, regional and community parks, schools, and commercial and industrial employment areas.
- Bicycle Right-Of-Way: integrates with the urban and rural trails and provides additional access to residential, recreational, educational, and commercial/industrial employment areas.

Policy 10.2.2: Establish and acquire rights-of-way for master planned trails.

Policy 10.2.4: Facilitate the use of bicycles as an alternative form of transportation, as well as a form of recreation.

**Goal 11:** To enhance the quality of life for Lancaster residents by providing opportunities for social interaction and participation in a wide range of cultural activities.

Objective 11.1: Pursuant to the direction of the Parks, Recreation, Open Space and Cultural Master Plan, promote and provide cultural and art programs, as well as the availability of public and private cultural facilities, museums, and (indoor and outdoor) performing arts facilities to meet the needs of Lancaster residents.

Policy 11.1.1: Emphasize the downtown area as the cultural center of the City of Lancaster and the Antelope Valley by maintaining and expanding existing cultural facilities.

Policy 11.1.2: Encourage a wide variety of performing and visual arts programs, productions and exhibits within the City of Lancaster.

### *City of Lancaster General Plan - Plan for Physical Development*

The City's GP contains the Plan for Physical Development to guide the City's physical environment into a logical, functional, and aesthetic pattern consistent with the community's long-term vision. This plan correlates with the State-mandated Land Use Element and other optional issues. This plan meets the California Government Code land use element mandate to designate the proposed general distribution, general location, and extend of the uses of land for housing, business, industry, and open space (City of Lancaster, 2009b). The Plan for Physical Development includes goals, objectives, and policies that apply to land use and development in the proposed Plan area, which are outlined below.

**Goal 17:** To establish a variety of land uses which serve to develop Lancaster into a balanced and complete community in which people live work, shop, and play.

Objective 17.1: Designate adequate land for a balanced mix of rural and urban residential and non-residential uses.

Policy 17.1.1: Maintain an adequate inventory of land for residential, commercial, employment, quasi-public, public and open space uses.

Policy 17.1.2: Provide sufficient land to accommodate a variety of housing types meeting the economic, lifestyle, and social needs of current and future residents.

Policy 17.1.3: Provide a hierarchical pattern of attractive commercial developments which serve regional, community, and neighborhood functions with maximum efficiency and accessibility.

Policy 17.1.4: Provide for office and industrial-based employment-generating lands which are highly accessible and compatible with other uses in the community.

Policy 17.1.5: Provide sufficient lands for the conduct of public, quasi-public, institutional, cultural, educational, and recreational activities.

Policy 17.1.6: Revise the zoning ordinance to conform with the GP text and map and to address changing conditions with new concepts that will allow both flexibility in application as well as a pleasing and attractive built environment.

**Goal 18:** To manage development by planning the location and intensity of urban and rural uses to create a comprehensive structure.

Objective 18.1: Prevent future discordant land uses, and where possible reconcile existing discordant land uses, by establishing appropriate interface among conflicting uses and functions.

Policy 18.1.1: Cooperate with other jurisdictions and communities in developing compatible land uses on lands adjacent to the Lancaster GP study area.

Policy 18.1.2: Encourage development that is compatible with the City's designated rural and non-urban areas.

Policy 18.1.3: Ensure that land use map designations are compatible with adjacent proposed land uses, surrounding developments, existing infrastructure, the roadway system, and Redevelopment Project Areas.

Policy 18.1.4: Encourage the long-term maintenance of new residential development.

Policy 18.1.5: Employ transitional or graduated density zoning patterns, alternative development standards, or design techniques to mitigate the interface between higher and lower intensity land uses.

Objective 18.2: Encourage the location of new urban growth so that the provision of services to new development is not a burden to existing residents.

Policy 18.2.1: Encourage appropriate infill development.

Policy 18.2.2: Encourage appropriate development to locate so that municipal services can be efficiently provided.

**Goal 19:** To achieve an attractive and unique image for the community by creating a sustainable, cohesive and enduring built environment.

Objective 19.1: Promote the long-term image and livability of Lancaster as a unique community with a strong sense of place through the development and application of comprehensive community design guidelines.

Policy 19.1.1: Develop and apply a comprehensive set of community design standards and guidelines in conformance with the goals, objectives, policies and action programs contained in the Community Design subsection of the Plan for Physical Development.

Objective 19.2: Integrate new development with established land use patterns through quality infill to enhance overall community form and create a vibrant sense of place.

Policy 19.2.1: Promote a diversity of neighborhood environments, from the traditional downtown core to well-integrated new growth areas.

Policy 19.2.2: Create walkable, mixed-use, transit-accessible neighborhoods and commercial districts that provide opportunities for young and old to live, work, shop, and recreate.

Policy 19.2.4: Provide buffers to soften the interface between conflicting land uses and intensities.

Policy 19.2.5: Create a network of attractive paths and corridors that encourage a variety of modes of transportation within the city.

Policy 19.2.6: Minimize the visual impacts of utility corridors and their associated equipment.

Policy 19.2.9: Promote the neighborhood as the basic building block of urban design to achieve a sustainable community form, providing for the needs of existing residents and businesses while preserving choices for future generations.

Objective 19.3: Improve the city's visual identity by utilizing design standards that instill a sense of pride and well-being in the community.

Policy 19.3.1: Promote high quality development by facilitating innovation in architecture/ building design, site planning, streetscapes, and signage.

Policy 19.3.2: Enhance the livability of Lancaster by creating attractive, safe, and accessible gathering spaces within the community.

Policy 19.3.3: Establish a system of gateways and landmarks that will contribute to the character and image of Lancaster.

**Goal 20:** To promote a regional perspective in land use decisions affecting the residents of Lancaster.

Objective 20.1.1: Coordinate planning efforts and development decisions between Lancaster, Palmdale, Los Angeles County, Kern County, San Bernardino County, including County unincorporated areas, regional, state and federal agencies and representative town councils.

Objective 20.1.2: Maintain active participation in the regional planning programs intended to serve SCAG.

### *City of Lancaster Parks, Recreation, Open Space, and Cultural Master Plan*

The Parks, Recreation, Open Space, and Cultural Master Plan, adopted in 2007, represents the first master plan developed for the Lancaster Department of Parks, Recreation and Arts (City of Lancaster, 2007a). The plan aims to present a long-term vision and goals for the Parks Department and for the community for the next 20 to 25 years. It describes current and future needs, interests, and community preferences for parks, recreation, arts programs, and facilities; and presents a process and priorities for managing the Parks Department's commitments so that new requests and initiatives are considered in light of existing commitments. The Parks, Recreation, Open Space, and Cultural Master Plan includes policies, recommendations, and actions that apply to recreation in the PVSP area, which are outlined below and closely correlate with the Plan for Active Living of the City of Lancaster's GP 2030.

**Goal 1**: Provide safe, clean and well-maintained facilities that meet the diverse needs of a growing community.

Policy 1.1: Develop parks consistent with the park standards described in Table 4-1 (of the Master Plan).

Policy 1.2: Pursuant to the Lancaster GP, a standard of five (5) acres of parkland per 1,000 residents shall be applied to all development projects.

1.2.1. Include acreage dedicated to public park use accomplished through long-term joint use agreements with school districts and other agency partners when calculating City standards.

Policy 1.3: Provide park design and maintenance standards for developers to encourage provision of turn-key parks in lieu of fees.

Policy 1.4: Develop new neighborhood parks adjacent to or jointly with new schools where possible.

Policy 1.5: Develop neighborhood parks to include open areas that can be used for informal sports and team play; these areas will be available on a first-come, first-served basis.

Policy 1.6: Where a community park also serves as the neighborhood park for a designated service area, provide amenities consistent with those provided within a neighborhood park.

Policy 1.7: Encourage the use of irregular, surplus parcels as open space and community gathering spaces.

1.7.1 Acquire irregular, surplus parcels located in retail and commercial areas for use as open space, plazas and community gathering spaces.

1.7.2 Evaluate maintenance and safety impacts and compatibility with surrounding uses before assuming responsibility for these areas.

Policy 1.8: Conduct maintenance consistent with the established standards and level of service requirements described in this plan.

Policy 1.9: Increase and enhance safety in all parks.

1.9.1 Develop or designate perimeter trails with mileage markers around parks to encourage regular use by the community.

1.9.2 Add lighting to perimeter trails to increase safety and extend evening hours of park usage.

1.9.3 Work with the Sheriff's Department to review and refine park and landscaping designs to deter crime through environmental design.

1.9.4 Install surveillance cameras to support user safety and law enforcement goals.

Policy 1.10: Cooperate with other public agencies to ensure that the parks, recreation, and arts needs of Lancaster residents are met.

Policy 1.11: Support nonprofit and agency partner efforts to acquire conservation and open space areas.

1.11.1 The City will proactively work with partner agencies and conservation organizations to secure funding from grants and other sources to acquire and preserve quality desert habitat.

Policy 1.12: Provide designated areas for off-leash dog walking.

1.12.1 Review existing neighborhood and community parks to identify opportunities for designated, off-leash dog-walking areas.

1.12.2 Continue enforcement of "leash law" policies.

**Goal 3**: Support and encourage residents in pursuing healthy, active lifestyles.

Policy 3.3: Expand trail connections and pathways.

3.3.1 Develop or designate perimeter trails with mileage markers and lighting around parks to encourage regular use for fitness.

3.3.2 Complete trail connections between neighborhoods, schools, and employment areas to encourage walking or bicycling to school and work.

3.3.3 Where possible, encourage trail connections with other communities and to the Los Angeles County Regional Trail System.

**Goal 9**: Encourage the integration of parks and trails into overall community design, planning, and development decisions.

Policy 9.1: Pursue the development of a trails network that would connect destinations throughout Lancaster, including local schools and parks, places of business, and transit stops.

9.1.1 Work closely with developers to identify park and trail needs, required acreage, and facility standards.

9.1.2 Provide guidelines and standards for developers to encourage the development of internal pathways and trails within developments and identify, where possible, opportunities to connect with established trails and pathways.

9.1.3 Provide amenities such as par courses, frisbee golf courses, interpretive signage, and benches to encourage broader use of linear parks and trails.

9.1.4 Work with City departments to adopt a citywide master plan of trails pursuant to the General Plan.

9.1.5 Where possible, plan and develop trail connections with other communities and to the Los Angeles County Regional Trail System.

9.1.6 Involve community members and representatives from pedestrian, bicycling and equestrian organizations in trails planning activities.

### *City of Lancaster Municipal Code*

Title 17, Zoning, of the City of Lancaster Municipal Code contains the Zoning Codes for all properties in the City of Lancaster. Title 17 establishes the zones and their allowable activities, standards, restrictions, and limitations. Title 15, Buildings and Construction, consists of Building Codes for all future development in the City and includes Chapter 15.64, Development Impact Fees, of which all future development (including the development of recreational facilities) are required to comply with (City of Lancaster Municipal Code, 2024).

### *Zoning Designations*

Existing zoning designations for the PVSP area, including the area designated as the Amargosa Specific Plan Area, includes MU-E (Mixed Use-Employment), MU-N (Mixed Use-Neighborhood), and SP (Specific Plan). There are currently 40 acres designated MU-N, 252 acres designated MU-E, and 124 acres designated SP (City of Lancaster, 2024).

## 3.10.3. Environmental Impacts and Mitigation Measures

The PVSP would provide the regulatory framework for the future development of a 434.7-acre master-planned community within the City of Lancaster. The Plan establishes development standards and design guidelines that aim to help developers navigate the City's existing rules and regulations, as well as ensuring consistency within the Plan area, within the City, as well as consistency with State and regional plans. The vision of the PVSP is to create a broadened mixed-use community, filled with residential neighborhoods, schools, commercial and offices uses, to incorporate existing and future medical facilities, with a smattering of parks and recreational areas throughout. As indicated in Figure 2-2, the Plan area currently has a mix of existing uses that include dining, automotive repair, storage, commercial retail, a place of worship, industrial and utility uses, and a medical facility. All existing legal uses in the Plan area would remain and

be able to continue their current operations with the caveat that all legal but nonconforming uses be subject to Article VII (Nonconforming Uses and Structures) of the City's Municipal Code.

There would be four districts within the overall Plan area, the Town Center District, Business District, Workshop District, and Residential District. These four districts make up the District Framework Plan. Within each of the four districts are Planning Areas 1-43 and A-M. Table 2-1, Land Use Summary, provides a summary table of the various land use categories, gross acreage, density ranges, maximum dwelling units and building floor areas, as applicable. Table 2-2, Statistical Summary by Planning Area, provides a breakdown of the individual Planning Areas, their Land-Use Categories, gross acreage, and density range and maximum dwelling units as applicable. Additionally, a segment of the Sierra Highway Transportation Corridor (SHTC) has a designated buffer zone positioned along the eastern boundary of the Plan area.

Chapter 5 of the PVSP establishes design standards and regulations relating to recreation in the proposed parks, plaza, and SHTC buffer zone, while Chapter 6 establishes permitted land uses, uses that require approval of Conditional Use Permits, Minor Use Permits, or the approval by the Director of Community Development. Chapter 6 also contains the development standards for the PVSP area. With the approval of the GP Amendment to change the existing land use designation from Specific Plan and Mixed Use to Specific Plan and the coinciding Zone Change from Specific Plan (SP) 07-01, Mixed-Use Employment (MU-E), and Mixed-Use Neighborhood (MU-N) to SP 24-001, any future development proposed would be subject to the City of Lancaster's existing procedures and requirements for discretionary and ministerial approvals. This would include Director's Review, Site Plan Reviews, Conditional Use Permits, Tentative Parcel/Tract Maps, and other standard approvals. As the PVSP area becomes developed, each of the Planning Areas, and all future development, would be required to conform to all development standards and regulations promulgated in Chapters 5 and 6 of the Plan, the City of Lancaster's Municipal Code, and the City of Lancaster General Plan.

## Impact Assessment Methodology

The following thresholds of significance are based on Appendix G of the State CEQA Guidelines. For purposes of this Draft EIR, implementation of the proposed Plan may have a significant adverse impact on land use and planning and recreation if it would:

### *Land Use*

- Physically divide an established community
- 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

### *Recreation*

- 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
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

The PVSP would be located in an area of the City that has been previously disturbed, is mostly vacant aside from a small number of existing uses and is generally flat, undeveloped, and all previously disturbed infill land. As addressed above and in Section 2.3.2, the site is surrounded by undeveloped, developed, or developing land consisting of low to moderate density residential uses, commercial retail, restaurants, industrial, and recreational park uses. Additionally, the SHTC along the eastern portion of the site consists of some existing light industrial, residential, and commercial uses along with undeveloped land. Additional institutional and business park uses, along with the Union Pacific Railroad are located on the east side of

Sierra Highway outside of the project site. Situated in the southwestern portion of the Plan area is the Amargosa Creek Specific Plan area that would be superseded by the PVSP master-planned community.

The PVSP Area is located within, and surrounded entirely by, the City of Lancaster and is proposed to be developed as a new master-community within the City. The plan area is bound by existing, major roadways including Avenue K to the north, Sierra Highway to the east, 10th Street West to the west, and Avenue L to the south. A large portion of the plan site is vacant with dirt roads and pathways connecting the existing uses. The PVSP does not include features such as a new highway, new aboveground infrastructure, or an easement through an established neighborhood, which are features that may result in physical divisions within a community. For these reasons, the PVSP's impacts would be less than significant. Therefore, this analysis focuses solely on impacts associated with the second, third, and fourth criterion above.

## Environmental Impact Analysis

### *Impacts associated with the construction of the proposed Parkway Village Specific Plan*

The Project does not include construction activities that would cause impacts associated with Land Use and Planning or Recreation within the Plan area. All future construction within the Plan Area boundaries would be required to comply with all applicable local, regional, and state laws, ordinances, and regulations relating to construction activities.

**Impact LUR-1: Conflicts with local, regional, or state land use plans, policies, or regulations.**

### *Consistency with the City of Lancaster Municipal Code*

As described above, Title 17, Zoning, of the City of Lancaster Municipal Code contains the Zoning Codes for all properties in the City of Lancaster. Title 17 establishes the zones and their allowable activities, standards, restrictions, and limitations. As mentioned above, the proposed Plan requires the approval of a zone change, to amend the City's Zoning Map for the Plan area from SP, MU-E, and MU-N to SP. This includes Amargosa Creek Specific Plan area in the southwestern portion of the site. Chapter 17.20 – Public, Open Space and Special Purpose Zones, Article VII of the Lancaster Municipal Code, "Specific Plan (SP) Zone" establishes the purpose and intent of the SP zone. The SP zone provides the City with the means necessary to implement the City GP and is intended to be in accordance with applicable goals, objectives, policies and specific actions set forth by the GP. All future development in the Plan area would therefore be at the discretion of the City of Lancaster's Community Development Department. This zone change would allow the City to impose existing standards and regulations that have already been established through efforts made by the planning body of the City. Thus, the proposed Plan would be consistent with the City's existing plans, policies, and regulations by the action of approving the Plan's zone change and thus, would be consistent with the City's GP.

### *Consistency with the City of Lancaster General Plan*

The City of Lancaster GP is the City's overall vision for development within Lancaster. Specific plans such as the PVSP are the City's tools to implement the goals and policies found within the GP. As described above, the City's GP is divided into multiple elements that establish objectives for the City's future planning efforts. The PVSP's consistency with existing General Plan Goals, Objectives, Policies, and Specific Actions has been analyzed throughout the Draft EIR under the respective resource areas. Based on this analysis, the PVSP is consistent with all applicable General Plan policies.

Objective 17.1 aims to designate land within Lancaster to provide a balanced mix of rural and urban residential and non-residential uses; Objective 19.1 promotes the City's long-term image and livability as a unique community through the development and application of comprehensive community design and

guidelines; and Objective 19.3 endeavors to improve Lancaster's visual identity through design standards focused on instilling a sense of pride and well-being in the community.

### *SCAG's Regional Comprehension Plan, 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction and Connect SoCal RTP/SCS.*

As addressed above, SCAG's Intergovernmental Review (IGR) Program provides informational resources to regionally significant plans as part of State CEQA Guidelines. State CEQA Section 15206 defines projects of statewide, regional, or areawide significance. The guidelines stipulate that the lead agency shall determine that a proposed project is of statewide, regional, or areawide significance if the project meets any of the following criteria:

> (1) A proposed local GP, element, or amendment thereof for which an EIR was prepared. If a negative declaration was prepared for the plan, element, or amendment, the document need not be submitted for review.
>
> (2) A project has the potential for causing significant effects on the environment extending beyond the city or county in which the project would be located. Examples of the effects include generating significant amounts of traffic or interfering with the attainment or maintenance of state or national air quality standards. Projects subject to this subdivision include:
>
> (A) A proposed residential development of more than 500 dwelling units.

As addressed in Section 2.4, Plan Elements, the proposed PVSP Residential District, the largest of the Plan Districts, proposes to include the following residential land use designations and their corresponding Planning Areas:

- Suburban Density (S): Planning Areas 19, 20, 22, 28, 29, 30, 33, 34, and 35
- Neighborhood Density (N): Planning Areas 11, 12, 13, 14, 17, 18, 24, 27, and 36-39
- Urban Density (U): Planning Areas 16, 40, and 41

The above residential Planning Areas would include an approximate 3,133 dwelling units, well above the State CEQA Guidelines section 15206 criteria to define the proposed Plan as being of regional significance and thus requires conformity with SCAG's 2024-2050 Connect SoCal RTP/SCS. Additionally, more residential dwelling units would be provided in the mixed-use areas of the PSVP bringing the total dwelling units in the Plan area to 4,246. As Lancaster is a member-city of SCAG, planning for future growth within the City is done so in conjunction with the progression of SCAG's regional planning. Growth forecasts for the region's municipalities are updated regularly and guide the goals and policies associated with land use and planning. According to the SCAG 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction, the population of Lancaster towards the end of the Plan's build-out period is projected to be approximately 209,900 residents, living in 65,300 houses and 59,600 of these individuals would be employed (SCAG, 2016). The PVSP would be consistent with the City's General Plan, which is consistent with the projected growth forecasts of SCAG's regional plans. As outlined in Section 3.12, Population and Housing, which addresses impacts associated with future population, housing, and employment growth in the Plan area, the PVSP would be consistent with SCAG's 2024-2050 Connect SoCal RTP/SCS, the 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction, and therefore the Regional Comprehension Plan. Therefore, the Plan would satisfy the SCAG IGR Program by ensuring the Plan's consistency with SCAG's adopted regional plans. There would be a less than significant impact with respect to land use as a result of the implementation of the Plan.

**Impact LUR-2: Increased use of existing neighborhood and regional parks or other recreational facilities resulting in substantial physical deterioration of the facility.**

As stated above, the PVSP includes several Planning Areas that would include six Neighborhood Parks, six Linear/Trail System Parks, a Community Park, and a Plaza to accompany many residential Planning Areas located within the Residential District and some contained in the other Planning Areas. Additionally, the plan allows for the development of a new aquatics center in the Town Center District. The individual residential developments would also be required to provide both public and private open space. With the forecasted growth expected in the city, consistent with SCAG's Connect SoCal RTP/SCS growth for the region, it is anticipated that the existing neighborhood and regional parks in the Plan vicinity would experience physical deterioration of their facilities. However, as discussed previously, future development in the Plan area would be required to comply with and be consistent with the City's GP and Municipal Code.

**Impact LUR-3: Construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

The Plan proposes several parks and recreational facilities that would be designed in accordance with the design standards of Chapter 5 of the PVSP. The existing Plan area is an infill segment of land located within the city that has been previously disturbed, with little to no existing habitats of concern. By approving the proposed land use designation and zone changes addressed above, the Plan area would be consistent with the City's goals promulgated in the General Plan, the Parks, Recreation, Open Space, and Cultural Master Plan, and municipal code. This includes the construction of many pedestrian and non-motorized vehicle recreational amenities that aim to fulfill the City's goals of planning for an active community. One of the benefits of planning for recreational uses, that do not include the use of petroleum-based vehicles, is the reduction in GHGs that would result in healthier air quality and promotes individuals to pursue a healthy, active lifestyles. Furthermore, as outlined in Chapter 5 of the Plan, the proposed parks and green spaces would include the planting of trees and vegetation that would attract wildlife to the area and sequester GHGs such as $CO_2$. More detailed discussions of potential air quality, biological and hydrological impacts associated with the construction of future recreational facilities are addressed in Sections 3.3, Air Quality; 3.4, Biological Resources; and 3.9, Hydrology-Water Quality, of this EIR. Finally, all future development of recreational facilities in the Plan area would be required to comply with all local, regional, and state regulations that are established to reduce impacts that would otherwise have adverse physical effects on the environment. Therefore, the PVSP would have a less-than-significant impact with respect to the construction of future recreational facilities.

### Mitigation Measures

No mitigation measures are required.

## 3.10.4. Cumulative Impact Analysis

### Cumulative Effects of the Proposed Project

As discussed previously, the proposed PVSP would be a project of regional significance according to State CEQA Guidelines Section 15206. SCAG is responsible for addressing and evaluating all cumulative projects to determine each project's level of significance in the region. As stated above, implementation of the PVSP would be consistent with the regional plans, including the 2024 Connect SoCal RTP/SCS, that address projected growth patterns in the region. Furthermore, all future projects in the Plan's vicinity would be evaluated for consistencies with the established goals, policies, regulations and guidelines of the City's GP 2030 and Municipal Code. Therefore, approval of the Land Use and Zone changes proposed would not

result in cumulative impacts associated with land use and growth forecasts in the Plan area, as well as future recreational facilities that would accompany the development of the Plan area.

## 3.10.5. Level of Significance After Mitigation

All of the impacts related to land use, planning, and recreation discussed above are less than significant. Because no significant impacts have been identified, no mitigation measures are needed to reduce the severity of the PVSP's impacts. The PVSP's impacts related to land use, planning, and recreation would not be significant.

# 3.11. Noise and Vibration

This section describes the fundamentals of noise, the existing environmental setting for noise, applicable regulations associated with noise, thresholds for significant noise impacts, the sound levels that may result in short-term construction-related impacts, as well as future buildout conditions, and any necessary mitigation measures that would reduce these impacts. The analysis is based on the Lancaster Parkway Village Noise Impact Assessment (October 2024) prepared by Ambient Air Quality & Noise Consulting and included in Appendix D.

### Parkway Village Specific Plan

The Parkway Village Specific Plan (PVSP or Plan) is a plan developed by the City of Lancaster pursuant to California Government Code Section 65450 to guide the future development of a 434.7-acre area located between 10th Street West and Sierra Highway and Avenue K and Avenue L in the City. The Project's Local Vicinity, District Framework, and Conceptual Land Use maps, as well as the proposed Street Hierarchy Plan, are depicted in Figures 2-2 through 2-5, respectively.

The PVSP proposes land use and circulation plans for the area and presents development standards and regulations to guide future development of the land within the Specific Plan Area. The PVSP provides a regulatory framework for the development of a master-planned community that contains residential neighborhoods, parks and other recreational facilities, a school site, open space, and medical, office, and commercial uses. The Plan sets forth standards and guidelines to regulate development by establishing permitted uses, property development standards, and general development criteria. The PVSP is more fully described in Chapter 2, Project Description.

### Noise Fundamentals

Sound is defined as any pressure variation in air that the human ear can detect. Noise may be described as an unwanted sound and is usually objectionable because it is disturbing or annoying. The objectionable nature of sound can be due to its pitch or its loudness. Pitch is related to the frequency of the vibrations by which sound is produced; in general, intermediate-pitched signals sound louder to humans than sounds with a lower or higher pitch. Loudness is the amplitude or intensity of sound waves combined with the reception characteristics of the ear; the higher the amplitude, the louder the sound.

Technical acoustical terms commonly used in this section are defined in Table 3.11-1. The fundamental model of acoustics consists of a sound (i.e., noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors, which affect the propagation path to the receptor, determine the sound level and the characteristics of the noise perceived by the receptor.

The amplitude of pressure waves from a noise source determines loudness. Sound pressure amplitude is measured in micropascals (mPa), but because of the large range of values (from less than 100 to 100,000,000 mPa), a logarithmic scale, expressed as decibels (dB), is typically used to describe sound pressure levels.

The dB scale alone does not adequately characterize how humans perceive noise. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, based on human sensitivity to those frequencies. The common measure is the A-weighted sound level (dBA), which approximates the response of the average young ear to most ordinary sounds. Peoples' judgments regarding the relative loudness or annoyance of a sound tend to correlate well with the A-scale sound levels of those sounds.

Because decibels are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy produces a 3-dB increase in sound level, so that when two identical sources are each producing equivalent sound energy, their combined sound level at a given distance would be 3 dB higher than either source under the same conditions. For example, if one excavator produces a sound pressure level of 80 dBA at a given listener location, two excavators at the same location would not produce 160 dBA at the listener location. Rather, they would combine to produce 83 dBA. The cumulative sound level of any number of sources, such as excavators, can be determined using logarithmic decibel addition. Typical noise levels in the human environment are presented in Table 3.11-1.

**Table 3.11-1. Typical Noise Levels in the Environment**

| Common Outdoor Noise Source | Noise Level (dBA) | Common Indoor Noise Source |
|---|---|---|
| | 120 dBA | |
| Jet fly-over at 984 ft | | Rock concert |
| | 110 dBA | |
| Pile driver at 100 feet | 100 dBA | |
| | | Night club with live music |
| | 90 dBA | |
| Large truck passes by at 50 feet | | |
| | 80 dBA | Noisy restaurant |
| | | Garbage disposal at 3 feet |
| Gas lawn mower at 100 feet | 70 dBA | Vacuum cleaner at 10 feet |
| Commercial/Urban area daytime | | Normal speech at 3 feet |
| Suburban expressway at | 60 dBA | |
| Suburban daytime | | Active office environment |
| | 50 dBA | |
| Urban area nighttime | | |
| | 40 dBA | |
| Suburban nighttime | | |
| Quiet rural areas | 30 dBA | Library |
| | | Quiet bedroom at night |
| Wilderness area | 20 dBA | |
| | 10 dBA | Quiet recording studio |
| Threshold of human hearing | 0 dBA | Threshold of human hearing |

Source: Caltrans 2013

Environmental sounds are commonly described in terms of an average level that has the same acoustical energy as the summation of all the time varying events. This average level is referred to as the equivalent-continuous sound level, or Leq. A common averaging period is hourly, but the Leq can describe any series of noise events of any duration. The Leq and two additional noise metrics used in this report, the Ldn and CNEL, are defined in Table 3.11-2.

**Table 3.11-2. Definitions of Acoustical Terms**

| Acoustical Term | Definition |
|---|---|
| Sound | A vibratory disturbance created by a vibrating object, which when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism such as the human ear or a microphone. |
| Noise | Typically defined as sound that is undesirable. |
| Sound Pressure Level | Sound pressure level is the quantity that is measured directly by a sound level meter. Noise sources are often described using a sound pressure level in dBA at a specified distance. |
| Decibel (dB) | A unit describing the amplitude of sound equal to 20 times the logarithm to base 10 of the ratio of the pressure of the sound measured to a reference pressure. The reference pressure for air is 20 mPa. |
| Frequency, Hertz (Hz) | The number of complete pressure fluctuations per second above and below atmospheric pressure. |
| A-Weighted Sound Level (dBA) | The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. |
| Equivalent-Continuous Sound Level (Leq) | The energy-averaged A-weighted noise level during the measurement period. The hourly Leq is used for this report. |
| Community Noise Equivalent Level (CNEL) | The energy-averaged A-weighted noise level during a 24-hour day, which is obtained by adding 5 dB to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and 10 dB to sound levels between 10:00 p.m. and 7:00 a.m. |
| Day/Night Sound Level (Ldn) | The energy-averaged A-weighted noise level during a 24-hour day, which is obtained by adding 10 dB to sound levels measured at night between 10:00 p.m. and 7:00 a.m. |

### *Noise Attenuation*

When noise propagates over a distance, the noise level reduces, or attenuates, with distance depending on the type of noise source and the propagation path. Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as "spherical spreading." The rate of sound attenuation for a point source, such as a piece of mechanical or electrical equipment (such as an HVAC unit) or idling vehicle (tractor, semi-truck), is 6 dBA per doubling of distance from the noise source to the receptor over acoustically "soft" sites. Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the reduction in noise levels with distance (drop-off rate) is simply the geometric spreading, provide an excess ground attenuation value of 1.5 dBA (per doubling distance). For example, an outdoor condenser fan that generates a sound level of 60 dBA at a distance of 50 feet from the point source at an acoustically hard site would attenuate to 54 dBA at a distance of 100 feet from the point source and attenuate to 48 dBA at 200 feet from the point source.

Natural topography (such as hills, ravines, or berms) and barriers (structures and walls) that obstruct the line-of-sight between the noise producing source and a receptor further reduces the noise level if the receptor is located with the "shadow" of the obstruction, such as behind a sound wall. This type of sound attenuation is known as "barrier insertion loss." If a receptor is located behind the wall but still has a view of the source, barrier insertion loss would still occur but to a lesser extent. Noise barriers can provide noise level reductions ranging from approximately 5 dBA (where the barrier just breaks the line-of-sight) to an upper range of 20 dBA with a larger barrier (Caltrans, 2013).

### Human Responses to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases. The acceptability of noise and the threat to public well-being are the basis for land use planning policies preventing exposure to excessive community noise levels.

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted: the so-called "ambient" environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise would be judged. Regarding increases in A-weighted noise levels, knowledge of the following relationships will help understand this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans;
- Outside of the laboratory, a 3-dB change is considered a just-perceivable difference;
- A change in a level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial;
- A 10-dB change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

#### *Effects of Noise on Human Activities*

The extent to which environmental noise is deemed to result in increased levels of annoyance, activity interference, and sleep disruption varies greatly from individual to individual depending on various factors, including the loudness or suddenness of the noise, the information value of the noise (e.g., aircraft overflights, a child crying, fire alarm), and an individual's sleep state and sleep habits. Over time, adaptation to noise events and increased levels of noise may also occur. In terms of land use compatibility, environmental noise is often evaluated in terms of the potential for noise events to result in increased levels of annoyance, sleep disruption, or interference with speech communication, activities, and learning. Noise-related effects on human activities are discussed in more detail, as follows (Caltrans 2011).

##### Speech Communication

For most noise-sensitive land uses, an interior noise level of 45 dB Leq is typically identified for the protection of speech communication in order to provide for 100-percent intelligibility of speech sounds. Assuming an average 20-dB reduction in sound level between outdoors and indoors (which is an average amount of sound attenuation that assumes windows are closed), this interior noise level would equate to an exterior noise level of 65 dBA Leq. For outdoor voice communication, an exterior noise level of 60 dBA Leq allows normal conversation at distances up to 2 meters with 95 percent sentence intelligibility. Based on this information, speech interference begins to become a problem when steady noise levels reach approximately 60 to 65 dBA.

**Annoyance and Sleep Disruption**

With regard to potential increases in annoyance, activity interference, and sleep disruption, land use compatibility determinations are typically based on the use of the cumulative noise exposure metrics (i.e., CNEL or Ldn). Perhaps the most comprehensive and widely accepted evaluation of the relationship between noise exposure and the extent of annoyance was one originally developed by Theodore J. Schultz in 1978. In 1978 the research findings of Theodore J. Schultz provided support for Ldn as the descriptor for environmental noise. Research conducted by Schultz identified a correlation between the cumulative noise exposure metric and individuals who were highly annoyed by transportation noise. The Schultz curve, expressing this correlation, became a basis for noise standards. When expressed graphically, this relationship is typically referred to as the Schultz curve. The Schultz curve indicates that approximately 13 percent of the population is highly annoyed at a noise level of 65 dBA Ldn. It also indicates that the percentage of people describing themselves as being highly annoyed accelerates smoothly between 55 and 70 dBA Ldn. A noise level of 65 dBA Ldn is a commonly referenced dividing point between lower and higher rates of people describing themselves as being highly annoyed.

The Schultz curve and associated research became the basis for many of the noise criteria subsequently established for federal, state, and local entities. Most federal and California regulations and policies related to transportation noise sources establish a noise level of 65 dBA CNEL/Ldn as the basic limit of acceptable noise exposure for residential and other noise-sensitive land uses. For instance, with respect to aircraft noise, both the Federal Aviation Administration (FAA) and the State of California have identified a noise level of 65 dBA Ldn as the dividing point between normally compatible and normally incompatible residential land use generally applied for the determination of land use compatibility. For noise-sensitive land uses exposed to aircraft noise, noise levels in excess of 65 dBA CNEL/Ldn are typically considered to result in a potentially significant increase in levels of annoyance.

Allowing for an average exterior-to-interior noise reduction of 20 dB, an exterior noise level of 65 dBA CNEL/Ldn would equate to an interior noise level of 45 dBA CNEL/Ldn. An interior noise level of 45 dB CNEL/Ldn is generally considered sufficient to protect against activity interference at most noise-sensitive land uses, including residential dwellings, and would also be sufficient to protect against sleep interference. Within California, the California Building Code establishes a noise level of 45 dBA CNEL as the maximum acceptable interior noise level for residential uses (other than detached single-family dwellings). Use of the 45 dBA CNEL/Ldn threshold is further supported by recommendations provided in the State of California Office of Planning and Research's General Plan Guidelines (2017), which recommend an interior noise level of 45 dB CNEL/Ldn as the maximum allowable interior noise level sufficient to permit normal residential activity.

The cumulative noise exposure metric is currently the only noise metric for which there is a substantial body of research data and regulatory guidance defining the relationship between noise exposure, people's reactions, and land use compatibility. However, when evaluating environmental noise impacts involving intermittent noise events, such as aircraft overflights and trains passing by, the use of cumulative noise metrics may not provide a thorough understanding of the resultant impact. The general public often finds it difficult to understand the relationship between intermittent noise events and cumulative noise exposure metrics. In such instances, supplemental use of single-event noise metrics, such as the Sound Exposure Level (SEL) descriptor (a metric that describes the total acoustic energy of a single noise event), may be helpful as a means of increasing public understanding regarding the relationship between these metrics and the extent of the resultant noise impact.

Although the use of supplemental noise descriptors can provide an increased understanding of intermittent noise events and their relationship to the cumulative noise metrics, current environmental regulations do not identify quantitative criteria, metrics, or computation methods pertaining to single-event noise exposure for the determination of land use compatibility. However, with regard to aircraft noise

exposure, the Federal Interagency Committee on Aviation Noise (FICAN) has provided non-regulatory guidance for estimating the expected percent of awakenings that may result from single aircraft noise events (FICAN, 1997). For example, at an indoor sound exposure of SEL 80 dBA, the FICAN data indicates that approximately 10 percent of exposed individuals would be awakened. Although some estimates of the percentage of people expected to be awakened when exposed to specific single-event noise levels inside a home have been provided, no quantitative determination as to what frequency of awakening would be acceptable has been made by Federal, State, or local entities. Although no quantitative thresholds have yet been identified with regard to single-event noise exposure, the indication from several studies is that the noise threshold for significant occurrence of sleep disruption is higher than for speech interference.

### Groundborne Vibration

Groundborne vibration is an oscillatory motion of the soil with respect to the equilibrium position. As with sound, the frequencies of vibration are described in hertz (Hz). The amplitude of vibration is typically described either as peak particle velocity (PPV) in units of inches per second (in/sec) or in decibels of vibration velocity, abbreviated as VdB.

It can be a serious concern for nearby neighbors of activities that cause buildings to shake and rumbling sounds to be heard, but it is unusual for vibration from sources such as buses and trucks on smooth roads to be perceptible, even in nearby locations. Most perceptible indoor vibration is caused by sources within buildings, such as equipment operation, movement of people, or slamming doors. Typical outdoor sources are heavy construction equipment and activities (such as blasting and pile driving), steel-wheeled trains, and heavy trucks on rough roads.

Table 3.11-3 summarizes common sources of groundborne vibration velocity levels (measured in decibel units [VdB]) and average response to vibration by a person at rest in quiet surroundings (tolerance to vibration increases considerably during physical activity). The duration of the vibration event affects human response, as does its frequency of occurrence: increases in both result in decreased tolerance. Typical background vibration levels in residential areas are usually 50 VdB or lower, well below the threshold (65 VdB) of perception for most humans.

Groundborne noise is a secondary phenomenon of groundborne vibration. When a building or structure vibrates, noise radiates into the building, possibly producing rattling of windows, doors, stacked dishes, etc. Low-frequency vibration can produce groundborne noise perceived as a low rumble. Groundborne noise is quantified by the A-weighted sound level (dBA; Table 3.11-1) inside the building and is generally 25 to 40 dBA lower than the vibration velocity level in VdB. Groundborne vibration levels of 65 VdB can result in groundborne noise levels up to 40 dBA, which can disturb sleep. Groundborne vibration levels of 85 VdB can result in groundborne noise levels up to 60 dBA, which can be annoying to daytime noise sensitive land uses such as schools (FTA, 2018).

**Table 3.11-3. Typical Levels of Groundborne Vibration**

| Human or Structural Response | Vibration | Human or Structural Response |
|---|---|---|
| Threshold for minor cosmetic damage to fragile buildings | 100 | Blasting, pile driving, vibratory compaction equipment |
| Difficulty with tasks such as reading a video or computer screen | 90 | Heavy tracked vehicles (bulldozers, cranes, drill rigs) |
| Threshold for residential annoyance for infrequent events (e.g., commuter rail) | 80 | Freight rail, typical Commuter rail, upper range |
| | 70 | Rapid transit, upper range |
| Threshold for residential annoyance for frequent events (e.g., rapid transit) | 60 | Commuter rail, typical |

| Human or Structural Response | Vibration | Human or Structural Response |
|---|---|---|
| Approximate threshold for human perception of vibration Limit for vibration sensitive equipment | 50 | Bus or truck over bump or on rough roads. Rapid transit, typical |
| | | Typical bus or truck on public road |
| | | Typical background vibration |

Source: FTA, 2018

## 3.11.1. Environmental Setting

### Existing Noise Environment

To document the existing noise environment in the vicinity of the PVSP area, seven short-term noise measurements were conducted. Ambient noise measurement surveys were conducted on August 14, 2024, by Ambient Consulting, using a Larson Davis LxT Type I sound-level meter. Noise measurement locations are depicted in Figure 5 of Appendix D. Measured short-term noise measurements are summarized in Table 3.11-4. As noted in Table 3.11-4, measured short-term daytime average-hourly noise levels in the project area generally range from approximately 44.3 dBA Leq to approximately 75.4 dBA Leq. Nighttime noise levels are typically 5-10 dBA lower than daytime noise levels. Existing ambient noise levels are primarily influenced by vehicular traffic on area roadways, including Avenue K to the north, the Sierra Highway to the east, Avenue L to the south, 10th Street West to the west, and Avenue K-8 along the northern boundary of the southwest portion of the plan area. The noise associated with these sources usually represent a continuous occurrence.

**Table 3.11-4. Short-Term Noise Measurement Data**

| Measurement Identifier | Measurement Period | Measurement Location | Major Noise Sources Noted | Average-Hourly Noise Level (dBA Leq) |
|---|---|---|---|---|
| ST1 | 10:20-10:40 | 10th Street West, east side of the road on the roadway sidewalk. | Roadway traffic noise along 10th Street West. | 68.8 |
| ST2 | 10:45-10:55 | Avenue K-4 end of the cul-de-sac. | Landscaping in Distance. | 49.3 |
| ST3 | 11:00-11:15 | Avenue K-8, south side of the road along the roadway edge. | Roadway traffic noise along Avenue K-8. | 64.8 |
| ST4 | 11:20-11:35 | Avenue K, south side of the road on the roadway sidewalk. | Roadway traffic along Avenue K | 67.8 |
| ST5 | 11:45-12:00 | Sierra Highway, west side of the highway on the sidewalk. | Roadway traffic noise from Sierra Highway and aircraft overflight in the distance. | 75.4 |
| ST6 | 12:10-12:25 | Avenue L, north side of the road on the roadway sidewalk. | Roadway traffic noise along Avenue L. | 67.9 |
| ST7 | 12:40-12:55 | Bike and pedestrian path between Sierra Highway and Avenue K-8. | Distant Traffic | 44.3 |

Noise measurements were conducted on August 15, 2024, by Ambient Consulting, using a Larson Davis LxT Type I sound-level meter. Refer to Figure 5 of Appendix D for measurement locations.

### Roadway Traffic Noise

Existing roadway traffic noise levels were calculated using the Federal Highway Administration (FHWA) Roadway Noise Prediction Model (FHWA RD-77-108) based, in part, on traffic data obtained from the traffic analysis prepared for this project (Garland, 2024). Predicted traffic noise levels and distances to projected traffic noise contours for major roadways are summarized in Table 3.11-5. It is important to note that projected traffic noise contours do not include attenuation or shielding provided by intervening

structures. Based on the modeling conducted, existing traffic noise levels along area roadways range from approximately 57 to 73 dBA CNEL at 50 feet from the near-travel-lane centerline.

**Table 3.11-5. Existing Roadway Traffic Noise Levels and Contour Distances**

| Roadway Segment | CNEL at 50 ft. from Near-travel-lane Centerline | Distance to CNEL Contour (Feet from Road Centerline) | | |
|---|---|---|---|---|
| | | 70 | 65 | 60 |
| **Avenue K** | | | | |
| 10th Street West to 5th Street West | 68.1 | 66 | 128 | 267 |
| 5th Street West to Sierra Highway | 70.3 | 88 | 178 | 378 |
| **Avenue L** | | | | |
| 10th Street West to 5th Street West | 73.3 | 145 | 301 | 643 |
| 5th Street West to Sierra Highway | 73.3 | 144 | 299 | 638 |
| **10th Street W** | | | | |
| Avenue K to Avenue K-8 | 70.8 | 92 | 187 | 398 |
| Avenue K-8 to Avenue L | 70.1 | 84 | 170 | 361 |
| **Gadsden Avenue** | | | | |
| North of Avenue K | 57.0 | 0 | 0 | 0 |
| South of Avenue K | 61.6 | 0 | 0 | 78.4 |
| **Sierra Highway** | | | | |
| Avenue K to Avenue K-8 | 72.0 | 94 | 199 | 427 |
| Avenue K-8 to Avenue L | 72.0 | 94 | 199 | 427 |

Traffic noise levels for area roadways were calculated by Ambient Consulting (October 2024) and based on data obtained from the traffic analysis prepared for this project (Garland, 2024). Predicted noise contours do not include shielding by intervening structures.

### Stationary Noise Sources

The existing Plan area is primarily vacant, with a mix of different existing land uses within the Plan area. Notable existing developments within the Plan area boundary include St. Paul's Episcopal Church that fronts on Avenue K to the north; a supportive housing (formerly a motel) and other residential/commercial land uses along the Sierra Highway street frontage to the east; Kaiser Permanente Medical Offices and parking lot to the south; an auto repair business along 10$^{th}$ Street West to the west, and a small solar facility and bike path within the Plan area boundary. Figure 2-2 identifies the existing land uses within and surrounding the Plan area boundary. The primary sources of stationary noise in the vicinity are urban-related activities (e.g., mechanical equipment associated with residential, commercial, and medical facilities). The noise associated with these sources may represent a single-event or a continuous occurrence.

### Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

Nearby off-site noise-sensitive land uses in the vicinity include but are not limited to single-family and multi-family residential dwellings, churches, and the Sgt. Steve Owen Memorial Park. The nearest existing residential land uses include multi-family apartments located south of Avenue K adjacent to the project site and the multi-family apartments located at the northeast corner of Avenue L and 10th Street West. These existing multi-family residential land uses are shielded from the Plan Area by an existing approximately 6-foot-high masonry block wall. On-site noise-sensitive existing land uses include the Kaiser Permanente Antelope Valley Medical Offices, a retirement village, a trailer park, and a supportive residential housing use (formerly a motel). In addition, St. Paul's Episcopal Church is located along the northern boundary of the Plan Area, along Avenue K. Worship services at St. Paul's Episcopal Church are typically held on Sunday mornings (St. Paul's Episcopal Church, 2024). Existing development within the Plan Area is expected to remain and is not proposed to be demolished or removed due to the implementation of the PVSP. Nearby land uses are depicted in Figure 2-2.

**Groundborne Vibration**

No major existing sources of groundborne vibration were identified in the Plan area. Vehicle traffic on area roadways, particularly heavy-duty trucks, can result in increased groundborne vibration. However, groundborne vibration levels associated with vehicle traffic are typically considered minor and would not exceed applicable criteria at the Plan Area boundaries.

## 3.11.2. Regulatory Setting

### 3.11.2.1. Noise

**Federal Regulations**

***Department of Housing and Urban Development***

The U.S. Department of Housing and Urban Development (HUD) indicates that an exterior noise level of 65 dBA CNEL is a desirable maximum standard for residential uses developed under HUD funding. While HUD does not specify acceptable interior noise levels, standard construction of residential uses constructed typically provides an excess of 20 dBA of attenuation with the windows closed. Based on this premise, the interior CNEL should not exceed 45 dBA CNEL.

***Noise Control Act of 1972***

The Noise Control Act of 1972 (42 USC 4910) establishes a national policy to promote an environment for all Americans to be free from noise that jeopardizes their health and welfare. The Act establishes a means for the coordination of federal research and activities in noise control, authorizes the establishment of federal noise emissions standards for products distributed in commerce, and provides the noise-emission and noise-reduction characteristics of such products to the public.

***United States Environmental Protection Agency, Environmental Noise Levels***

The United States Environmental Protection Agency (USEPA) provided guidance on environmental noise levels in Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety (USEPA, 1974), commonly referenced as the "Levels Document." The document establishes an Ldn of 55 dBA as the requisite level, with an adequate margin of safety, for areas of outdoor uses, including residences and recreational areas. The Levels Document does not constitute USEPA regulations or standards but identifies safe levels of environmental noise exposure without consideration of technical or economic feasibility for achieving these levels or other potentially relevant considerations.

### *Occupational Safety and Health Administration, Occupational Noise Exposure*

Occupational Safety and Health Administration (OHSA), Occupational Noise Exposure; Hearing Conservation Amendment (Federal Register 48 [46], 9738–9785, 1983) stipulates that protection against the effects of noise exposure shall be provided for employees when sound levels exceed 90 dBA over an 8-hour exposure period. Protection shall consist of feasible administrative or engineering controls. If such controls fail to reduce sound levels to within acceptable levels, personal protective equipment shall be provided and used to reduce exposure of the employee. Additionally, a Hearing Conservation Program must be instituted by the employers whenever employee noise exposure equals or exceeds the action level of an 8-hour time-weighted average sound level of 85 dBA Leq (8-hour). The Hearing Conservation Program requirements consist of periodic area and personal noise monitoring, performance and evaluation of audiograms, provision of hearing protection, annual employee training, and record keeping.

## State Regulations

California Government Code Title 7, Division 1, Chapter 3, section 65302, encourages each local government entity to implement a noise element as part of its general plan. In addition, the California Governor's Office of Planning and Research has developed guidelines for preparing noise elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure. According to the State, an exterior noise environment up to 60 dBA CNEL and 65 dBA CNEL is "normally acceptable" for single- and multifamily residential uses, respectively, without special noise insulation requirements. In addition, noise levels up to 75 dBA CNEL are "conditionally acceptable" with special noise insulation requirements, while noise levels at 75 dBA CNEL and above are "clearly unacceptable" for residential uses. These guidelines apply to noise sources such as vehicular traffic, aircraft, and rail movements. The City of Lancaster has developed land use compatibility guidelines that are described under local regulations.

### *California Code of Regulations (CCR)*

California Code of Regulations (CCR) Title 24 establishes the California Building Code (CBC). The most recent building standard adopted by the legislature that will be used throughout the State is the 2022 version, which took effect on January 1, 2023. The State of California's noise insulation standards are codified in the CBC. These noise standards are for new construction in California for the purposes of interior compatibility with exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residences, schools, or hospitals, are near major transportation noises, and where such noise sources create an exterior noise level of 60 dBA CNEL, or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

## Local Regulations and Plans

### *The City of Lancaster General Plan*

A major focus of the City's General Plan Safety Element is to define "quiet" and set standards that would ensure an appropriately quiet environment for the Lancaster various land uses proposed within the General Plan study area, recognizing the varying noise sensitivity of these uses" (City of Lancaster, 2022). The Noise section contained within the Safety Element specifies the maximum exterior and interior levels allowable for new developments and establishes several goals, policies, and actions aimed at protecting noise-sensitive land uses. The Air Installation and Land Use Compatibility section within the Safety Element contains goals, policies, and actions aimed at ensuring the safety of Lancaster residents and the compatibility of land uses with airport operations, consistent with the noise-related policies identified in

the Los Angeles County Airport Land Use Plan. Goals, policies, and action items relevant to the proposed Plan include, but are not limited to, the following:

The following 2022 Safety Element policies and specific actions are applicable to the Plan area:

**Objective 4.3**: Promote noise compatible land use relationships by implementing the noise standards identified in Table 4-3 (Table 3.11-6, Noise Compatible Land Use Objectives, below) to be utilized for design purposes in new development and establishing a program to attenuate existing noise problem[s].

Policy 4.3.1 Ensure that noise-sensitive land uses and noise generators are located and designed in such a manner that City noise objectives will be achieved.

Action 4.3.1(a) Require a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design for the following:

- Where new development is proposed for areas within which the exterior or interior noise levels outlined in Table 4-3 of Goal 4.3 are likely to be exceeded by existing or planned land uses; and
- When proposed projects include uses that could be potentially significant noise generators.

Action 4.3.1(b) Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design.

- Consideration shall be given to the location of truck routes, effects of truck mix, and future motor vehicle volumes on noise levels adjacent to master-planned roadways when improvements to the circulation system are planned.
- Traffic volumes and speed through residential neighborhoods shall be minimized.
- Street or street improvements that exceed the ultimate right-of-way width specified in the City of Lancaster Transportation Master Plan shall be required to evaluate potential noise impacts on existing and future land uses in the area.
- The City will work closely with Caltrans in the early stages of freeway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the city.

Action 4.3.1(c) Ensure that new commercial and industrial activities (including the placement of mechanical equipment) are designed so that activities comply with the maximum noise level standards at the property line of adjacent uses, thereby minimizing impacts on adjacent uses (see Table 3.11-6 below).

Action 4.3.1(d) Ensure that the design and placement of air conditioning units and pool equipment within residential areas is accomplished in a manner that does not intrude upon the peace and quiet of adjacent noise-sensitive areas.

**Table 3.11-6 Noise Compatible Land Use Objectives**

| Land Use | Maximum Exterior CNEL | Maximum Interior CNEL |
|---|---|---|
| Rural, Single Family, Multiple Family Residential | 65 dBA | 45 dBA |
| **Schools** | | |
| Classrooms | 65 dBA | 45 dBA |
| Playgrounds | 70 dBA | — |

| Land Use | Maximum Exterior CNEL | Maximum Interior CNEL |
|---|---|---|
| Libraries | — | 50 dBA |
| **Hospitals/Convalescent Facilities** | | |
| Living Areas | — | 50 dBA |
| Sleepings Areas | — | 40 dBA |
| Commercial and Industrial | 70 dBA | — |
| Office Areas | — | 50 dBA |

Source: City of Lancaster General Plan, Table 3-1: Noise Compatible Land Use Objectives

Policy 4.3.2 Wherever feasible, manage the generation of single event noise levels (SENL) from motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities such that SENL levels are no greater than 15 dBA above the noise objectives included in the Plan for Public Health and Safety.

Specific Action 4.3.2(d) As a condition of approval, limit non-emergency construction activities to daylight hours between sunrise and 8:00 PM.

Policy 4.3.3 Ensure that the provision of noise attenuation does not create significant negative visual impacts.

Specific Action 4.3.3(a) In reviewing noise impacts, utilize site and architectural design features to mitigate impacts on sensitive land uses in conjunction with the provision of noise barriers. Design techniques to be considered in mitigating potential noise impacts include:

***Site Design***

- The use of building setbacks, landscaping and walls and dedication of noise easements to increase the distance between the noise source and receiver.
- The location of uses and orientation of buildings which are compatible with higher noise levels adjacent to noise generators or in clusters to shield more noise sensitive areas and uses.
- The placement of noise tolerant land uses, such as parking areas, between the noise source and receiver.
- The placement of noise tolerant structures such as garages or carports to shield noise-sensitive areas.
- Clustering of office, commercial, or multiple family residential structures to reduce interior open space noise levels.

***Architectural Design***

- The use of dense building materials, tight-fitting doors, ceilings, and floors.
- The use of noise reducing windows and the placement of entry doors on the side of the building facing away from the major roadway.
- Avoid balconies and patio areas facing major transportation routes.

Specific Action 4.3.3(b) Whenever feasible, require the use of noise barriers (walls, berms, or a combination thereof) to reduce significant noise impacts.

- Noise barriers must be massive enough to prevent significant noise transmission and high enough to shield the receiver from the noise source.
- The barrier must be carefully constructed so that there are no cracks or openings.
- Require landscaping treatment to be provided in conjunction with noise barriers to provide visual relief and to reduce aesthetic impacts.

**Air Installation and Land Use Compatibility**

**Goal 4.4**: Establish procedures for compatibility between land uses in the City of Lancaster and air operations from U.S. Air Force Plant 42 (Palmdale Regional Airport), Fox Field, and Edwards Air Force Base.

Policy 4.4.1: Limit the type and intensity of development surrounding Air Force Plant 42, consistent with the recommendations of the Joint Land Use Committee's study and the AICUZ Report for Plant 42.

Action 4.4.1(b): To protect residents from aircraft-generated noises prohibit the redesignation of land within the 65-CNEL contour and the Overflight Area currently designated industrial or commercial on the General Plan map to residential or other incompatible land uses.

Action 4.4.1(c): Discourage the development of noise-sensitive receptors, such as hospitals and schools, within the 65-CNEL contour and the Overflight Area.

Action 4.4.1(d): Discourage higher-density residential uses and encourage, in order of priority, industrial, commercial, and low-density residential land use designations within the 65-CNEL contour and the Overflight Area.

Policy 4.4.3: Ensure that adequate public notification regarding aircraft activities is provided to new residents in areas subject to aircraft overflights around Plant 42 and Fox Field.

Action 4.4.3(a): For new residential development require that avigation easements be granted to the following entities in the specific situations specified below:

- To Air Force Plant 42 and the Los Angeles Department of Airports: Lands within the projected 65 CNEL, the accident potential zone (APZ- II), and the designated Overflight Area.
- To Los Angeles County or any successor in interest therein: Lands within the projected 65- CNEL noise contour of Fox Field.

### *City of Lancaster Municipal Code*

The City's standards governing environmental noise are set forth in Chapter 8.24, Noise Regulations, of the Municipal Code, Section 8.24.010 to Section 8.24.070. Specifically, Section 8.24.040 Loud, unnecessary and unusual noises prohibited – Construction and Building prohibits construction or repair work of any kind which makes loud noises within 500 feet of any occupied dwelling, apartment, hotel, mobile home, or other place of residence at any time on Sunday or holidays or any day between the hours of 8:00 p.m. and 7:00 a.m. Construction or repair work includes any earth excavating, filling or moving where any of the foregoing entails the use of any air compressor, jack hammer, power-driven drill, riveting machine, excavator, diesel powered truck, tractor, or other earth-moving equipment, hard hammers on steel or iron or any other machine tool, device or equipment which makes loud noises (City of Lancaster, 2024).

### *Los Angeles County Airport Land Use Plan*

The Los Angeles County Airport Land Use Plan was developed to "protect the public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public use airports" (County of Los Angeles, 2004). The Los Angeles County Airport Land Use Plan establishes policies and programs to ensure the compatibility of nearby land uses with airport noise. The City of Lancaster General Plan avigation-related noise policies and standards are consistent with the policies identified in the Los Angeles County Airport Land Use Plan. Refer to the above discussion of relevant Air Installation and Land Use Compatibility policies and noise standards identified in the City of Lancaster General Plan.

## 3.11.2.2. Vibration

### Federal Regulations

### *U.S. Federal*

The U.S. Federal Transit Administration (FTA) has adopted vibration criteria for assessment of vibration from construction and operational activities, both for human perception and damage to structures (FTA, 2018). The criteria are summarized in Tables 3.11-7 and 3.11-8.

**Table 3.11-7. FTA Construction Vibration Damage Criteria**

| Building Category/Structural Category | PPV, in/sec | Approximate LV (VdB re 1 µin/sec rms) |
|---|---|---|
| I. Reinforced concrete, steel or timber (no plaster) | 0.5 | 102 |
| II. Engineered concrete and masonry (no plaster) | 0.3 | 98 |
| III. Non-engineered timber and masonry buildings | 0.2 | 94 |
| IV. Buildings extremely susceptible to vibration damage | 0.12 | 90 |

VdB re 1 µin/sec rms = Vibration decibels referenced to one micro-inch per second root mean square

**Table 3.11-8. FTA Indoor Ground-Borne Vibration Impact Criteria for General Vibration Assessment**

| | Ground-Borne Vibration Impact Levels (VdB re 1 µin/sec rms) | | |
|---|---|---|---|
| Land Use Category | Frequent Events[a] | Occasional Events[b] | Infrequent Events[c] |
| Category 1: Buildings where vibration would interfere with interior operations | 65 VdBd | 65 VdBd | 65 VdB[d] |
| Category 2: Residences and buildings where people normally sleep | 72 VdB | 75 VdB | 80 VdB |
| Category 3: Institutional land uses with primarily daytime use | 75 VdB | 78 VdB | 83 VdB |

a) More than 70 events per day
b) 30-70 events per day
c) Fewer than 30 events per day
d) From FTA, 2018: "This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes."

### State Regulations

### *Caltrans*

Caltrans has developed vibration criteria based on potential structural damage risks and human annoyance. Caltrans-recommended criteria for the evaluation of groundborne vibration levels, with regard to structural damage and human annoyance, are summarized in Table 3.11-9. The criteria apply to continuous

vibration sources, which include vehicle traffic and most construction activities. All damage criteria for buildings are in terms of ground motion at the buildings' foundations. No allowance is included for the amplifying effects of structural components (Caltrans, 2020). As shown in Table 3.11-9, the criteria for structural damage commonly applied to construction activities is a peak particle velocity (ppv) of 0.25 inches/sec (in/sec) for historic structures, 0.3 in/sec ppv for older residential structures, and 0.5 in/sec ppv for newer structures. Groundborne vibration levels of 0.2 in/sec ppv may result in increased levels of annoyance for people in buildings (Caltrans, 2020).

**Table 3.11-9. Summary of Groundborne Vibration Levels and Potential Effects Associated with Typical Construction Activities**

| Potential Impact | Maximum Groundborne Vibration Level (in/sec ppv) |
|---|---|
| **Structural Damage Risk** | |
| Extremely fragile historic buildings, ruins, ancient monuments | 0.08 |
| Fragile buildings | 0.1 |
| Historic and some old buildings | 0.25 |
| Older residential structures | 0.3 |
| New residential structures | 0.5 |
| Modern industrial/commercial buildings | 0.5 |
| **Human Response** | |
| Barely perceptible | 0.01 |
| Distinctly perceptible | 0.04 |
| Strongly perceptible Level may begin to annoy people in outdoor areas | 0.1 |
| Level may begin to annoy people in buildings | 0.2 |
| Severe | 0.4 |

Note: The vibration levels are based on peak particle velocity in the vertical direction for continuous vibration sources, which includes most construction activities.
Source: Caltrans, 2020

## 3.11.3. Environmental Impacts and Mitigation Measures

### Standards of Significance

Criteria for determining the significance of noise impacts were developed based on information contained in the State CEQA Guidelines (Appendix G). According to those guidelines, a project may have a significant effect on the environment if it would result in the following conditions:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
2. Generation of excessive groundborne vibration or groundborne noise levels; or
3. 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 private-use airport, that exposes people residing or working in the project area to excessive noise levels.

The State CEQA Guidelines do not define the levels at which temporary and permanent increases in ambient noise are considered "substantial." As discussed previously in this section, a noise level increase of 3 dBA is barely perceptible to most people, an increase of 5 dBA is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. For purposes of this analysis, a substantial increase

in ambient noise levels associated with long-term operational activities would be defined as an increase of 3 dBA, or greater.

As per Policy 4.3.2 in the City's General Plan, noise levels associated with single-event noise sources, including construction activities, shall be limited to no greater than 15 dBA above the noise objectives specified in Table 3.11-6 (City of Lancaster, 2022). Accordingly, construction-generated instantaneous noise levels that exceed 15 dBA above the exterior noise objectives outlined in Table 3.11-6 at nearby noise-sensitive land uses would be determined to potentially have a significant impact. For instance, with regard to existing residential land uses, predicted exterior construction-generated noise levels in excess of 80 dBA Lmax at nearby existing residential land uses would be considered to have a potentially significant impact.

Exposure to non-instantaneous, non-transportation noise generated by stationary sources would be considered significant if predicted noise levels would exceed applicable City noise exposure standards (refer to Table 3.11-6). The City's General Plan establishes exterior and interior noise standards. These noise exposure standards are based on average-daily noise levels (i.e., CNEL). As previously noted, the CNEL noise descriptor is more commonly used to characterize noise sources/events that occur over a 24-hour period. Applying the CNEL descriptor to assess impacts associated with noise sources whose operational characteristics are typically limited to certain periods of the day, rather than over a 24-hour period, may result in an under-representation of operational noise levels. In such instances, predicted operational noise levels for a given period of time may be higher than the overall 24-hour average. For this reason, and to be conservative, the standards in Table 3.11-6 are adapted to an average-hourly (Leq) noise descriptor for the evaluation of non-instantaneous, non-transportation (i.e., stationary) noise sources. Exposure to non-instantaneous noise from stationary sources would be considered significant if predicted non-instantaneous noise levels would exceed the City's noise objectives outlined in Table 3.11-6, based on an average-hourly (Leq) noise descriptor. Exposure to instantaneous noise from stationary sources would be considered significant if predicted instantaneous noise levels would exceed 15 dBA Lmax above the noise objectives outlined in Table 3.11-6.

Noise Goal 4.3 of the City's General Plan aims to promote noise-compatible land-use relationships by implementing the noise standards identified in Table 3.11-6 to be utilized for design purposes in new development and establishing a program to attenuate the existing noise problem (City of Lancaster, 2022). For the determination of land use compatibility with roadway traffic, predicted future-year traffic noise levels at proposed land uses that would exceed the City's noise-compatible land use objectives would be considered to have a significant impact (refer to Table 3.11-6).

Land use compatibility with aircraft noise was determined by assessing consistency with the County's Airport Land Use Plan and the City's Air Installation and Land Use Compatibility policies and noise standards. Accordingly, proposed noise-sensitive land uses located within the projected 65 dBA CNEL noise contour of an airport or that would conflict with the applicable City/County noise-related policies would be considered to have a significant impact.

Groundborne vibration levels would be considered significant if predicted short-term construction or long-term operational groundborne vibration levels attributable to the proposed PVSP would exceed normally applied groundborne vibration criteria at nearby structures (refer to Table 3.11-9). No existing historic or fragile structures were identified in the PVSP area. Therefore, for purposes of this analysis, groundborne vibration levels would be considered to have a significant impact if predicted levels would exceed 0.2 in/sec ppv with regard to human annoyance or 0.5 in/sec ppv for structural damage

## Impact Assessment Methodology

### *Construction Impacts*

Short-term noise impacts associated with construction activities were analyzed based on typical construction equipment noise levels and distances to the nearest noise-sensitive land use. Noise levels were predicted based on representative off-road equipment noise levels derived from the Federal Highway Administration's (FHWA) Roadway Construction Noise Model based on average equipment usage rates and assuming a noise-attenuation rate of 6 dB per doubling of distance from the source. Predicted groundborne vibration levels were assessed based on typical construction equipment vibration levels and evaluation criteria. Predicted construction vibration levels are included in Appendix A of the Noise Impact Assessment (Appendix D of this EIR).

### *Operational Impacts*

Stationary source (non-transportation) operational noise levels were predicted based on representative noise levels for similar activities/equipment and assuming an average noise-attenuation rate of 6 dB per doubling of distance from the source. Noise levels associated with proposed parking lots were modeled using the Federal Transit Administration's Noise Impact Assessment Spreadsheet, version 1/29/2019.

Traffic noise levels were calculated using the Federal Highway Administration roadway prediction model (FHWA RD-77-108), based on California vehicle reference noise levels and traffic data obtained from the traffic analysis prepared for this Project (Garland, 2024). Additional input data included day/night percentages of autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway widths. The Project's contribution to traffic noise levels along area roadways was determined by comparing the predicted noise levels with and without project-generated traffic for Existing and Buildout year conditions. The compatibility of proposed land uses with roadway traffic noise was evaluated based on a comparison of predicted future-year traffic noise levels at on-site proposed land uses with the City's applicable noise-compatible land use standards (refer to Table 3.11-6). The compatibility of proposed noise-sensitive land uses with aircraft noise was assessed based on consistency with the City's Air Installation and Land Use Compatibility standard of 65 dBA CNEL for noise-sensitive land uses.

## Environmental Impact Analysis

**Impact NOI-1a: Generation of a substantial temporary construction-related increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

### Short-term Exposure to Construction Noise

Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading, excavation, and erection) of construction. Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Although noise ranges were found to be similar for all construction phases, the initial site preparation phase tended to involve the most equipment.

Typical noise levels associated with construction equipment are summarized in Table 3.11-10. As noted in Table 3.11-10, instantaneous noise levels generated by individual pieces of construction equipment typically range from approximately 78 to 85 dBA Lmax at 50 feet. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings. Assuming the loudest piece of equipment could be operating, noise levels associated with construction could reach up to 85 dBA Lmax at 50 feet. Construction would be temporary and episodic, occurring at various locations throughout the PVSP

area. Predicted construction-generated noise levels would vary depending on multiple factors, such as the equipment being used, and activities being conducted.

**Table 3.11-10. Typical Construction Equipment Noise Levels**

| | Noise Level (dBA at 50 feet) | |
|---|---|---|
| **Equipment** | **Lmax** | **Leq** |
| Backhoes | 78 | 74 |
| Bulldozers | 82 | 78 |
| Excavator | 81 | 77 |
| Generator | 81 | 78 |
| Gradall | 83 | 79 |
| Grader | 85 | 81 |
| Front End Loaders | 79 | 75 |
| Pneumatic Tools | 85 | 82 |
| Scrapers | 84 | 80 |
| Tractor | 84 | 80 |
| Compressor | 80 | 73.7 |

Based on measured instantaneous noise levels (Lmax), average equipment usage rates, and calculated average hourly (Leq) noise levels derived from the FHWA Road Construction Noise Model (FHWA, 2008)

As previously noted, nearby existing noise-sensitive land uses consist predominantly of residential land uses. Other nearby noise-sensitive land uses include a church, medical offices, and a supportive housing development (formerly a motel). Depending on the final site design, construction activities could occur within 50 feet of existing noise-sensitive land uses. Predicted noise levels at sensitive land uses within 50 feet of construction activities could potentially exceed the City's applicable exterior noise standard of 80 dBA Lmax. With regard to nearby existing residential land uses and motel, construction activities occurring during the more noise-sensitive evening and nighttime hours could result in increased levels of annoyance and potential sleep disruption to building occupants. In addition, construction-generated noise occurring on Sundays could potentially interfere with worship services at nearby churches. This impact could be reduced to a less-than-significant level with the implementation of Mitigation Measure (MM) NOI-1.

### Mitigation Measures

Implementation of MM NOI-1 would reduce the potential for noise exposure, including the use of alternatively powered equipment, exhaust mufflers, and engine shrouds. Implementation of these noise-reduction features can reduce construction noise levels by approximately 10 dBA, or more (FHWA, 2017). With the implementation of MM NOI-1, predicted construction noise levels at nearby noise-sensitive land uses would not exceed the City's applicable noise standards or hourly restrictions. With mitigation and given that construction activities would be short-term, Impact NOI-1a would be considered less than significant.

**MM NOI-1** **Reduce Short-Term Construction Noise.** The following measures shall be implemented to reduce short-term construction noise impacts:

(a) The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process to the owner shall be established prior to construction commencement that will allow for resolution of noise problems that cannot be immediately solved by the site supervisor.

(b) Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.

(c) Material stockpiles and mobile equipment staging, parking and maintenance areas shall be located as far away as practicable from noise-sensitive receptors.

(d) The use of noise producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only.

(e) No project-related public address or music system shall be audible at any adjacent receptor.

(f) All noise producing construction equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors, etc.) shall be equipped with shrouds and noise control features that are readily available for the type of equipment.

(g) Construction equipment shall be properly maintained and equipped with exhaust mufflers and engine shrouds in accordance with manufacturers' recommendations.

(h) When not in use, all construction equipment shall be turned off and shall not be allowed to idle. Provide clear signage that posts this requirement for workers at the entrances to the site.

**Impact NOI-1b: Generation of a substantial permanent increase in non-transportation ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

### Long-term Exposure to Non-Transportation Noise

The PVSP includes a variety of proposed land uses, including residential land uses, commercial land uses, a school, parks and plazas, and medical/office uses. A discussion of noise sources commonly associated with these land uses and potential impacts to nearby noise-sensitive land uses is provided below:

#### *Residential Land Uses*

The PVSP includes the development of various residential land uses such as single-family units, condominiums/apartments, townhomes, duplexes, and live/work units. Exterior noise sources commonly associated with residential developments include air conditioning units. Residential air conditioning units typically operate within a range of 50-75 dBA Leq at 3 feet (Carrier, 2022). Typical operational cycles for residential units occur for periods of approximately 10- to 30-minute intervals. When averaged over an hour, taking into account normal operating cycles, a residential-use air conditioner typically averages approximately 60-65 dBA Leq at 3 feet (Ambient, 2016). As noted in the residential architectural design guidelines found in the PVSP, all exposed residential-use air conditioning equipment shall be hidden from view in vaults, wells, enclosures, behind walls/fences, or screened by the landscape. Given this requirement and typical building setbacks, predicted noise levels from residential AC units at nearby noise-sensitive land uses would not exceed the City's minimum exterior noise standard of 65 dBA. Assuming a maximum exterior noise level of 65 dBA Leq and a typical average exterior-to-interior noise reduction of 25 dBA, predicted interior noise levels at the nearest existing land uses would be 40 dBA Leq, or less. Predicted interior noise levels at nearby existing land uses would not exceed the City's interior noise standards of 45 dBA for residential land uses or 40 dBA at the nearby medical offices. As a result, this impact would be considered less than significant.

#### *Commercial Land Uses*

The PVSP includes the development of various commercial land uses including office, workshop, and medical land uses as well as a hotel. Noise sources commonly associated with these land uses include commercial air conditioning units/chillers, mechanical equipment (e.g., trash compactors, generators),

and material unloading and loading activities. Noise levels commonly associated with these sources and associated noise impacts are discussed, as follows:

- **Commercial Air Conditioning Units**: Commercial-use air conditioning units and chillers typically generate noise levels of approximately 68-88 dBA at 3 feet (Rheem, 2019; BAC, 2007). Assuming a maximum operational noise level of 88 dBA Leq at 3 feet predicted operational noise levels could exceed 65 dBA Leq at approximately 40 feet. The final location of the proposed commercial air conditioning units and chillers has not yet been determined. Depending on the final project site design and the type and size of equipment installed, predicted noise levels at nearby noise-sensitive land uses could exceed the City's exterior and interior noise standards. As a result, this potential impact would be considered significant.
- **Mechanical Equipment**: Mechanical equipment commonly associated with commercial uses includes trash compactors and back-up power generators. Noise levels associated with mechanical equipment can range from approximately 68 to 73 dBA Leq at 5 feet (Marathon, 2022). Assuming a maximum operational noise level of 73 dBA Leq at 5 feet predicted average-hourly operational noise levels could exceed the City's minimum exterior noise standard of 65 dBA at approximately 11 feet from the source. Depending on the final site design, location, and equipment installed, predicted operational noise levels at nearby noise-sensitive land uses could potentially exceed the City's exterior and interior noise standards. As a result, this potential impact would be considered significant.
- **Unloading and Loading Activities**: Average-hourly noise levels associated with commercial material handling activities can generate noise levels of approximately 65 dBA Leq at 50 feet. Material handling activities may also be a source of instantaneous noise, such as the sounding of truck backup alarms and the release of air brakes. Instantaneous noise levels associated with material handling activities can reach levels of approximately 90 dBA Lmax at 50 feet (Ambient, 2018). Based on the noise levels noted above, predicted average-hourly operational noise levels could exceed the City's minimum exterior noise standard of 65 dBA at approximately 47 feet from the source. Predicted instantaneous noise levels could exceed the City's minimum exterior noise standard of 80 dBA at approximately 149 feet from the source. The location of the proposed material loading and unloading areas has not yet been determined. Depending on the final site design, predicted operational noise levels at nearby noise-sensitive land uses could potentially exceed the City's exterior and interior noise standards. As a result, this potential impact would be considered significant.

### *Parks And Plazas*

The PVSP includes the development of various parks and plazas such as an Open-Air Plaza, Neighborhood Parks, Linear Parks, and an aquatic center. A larger community park featuring a centralized plaza and sports park is also proposed. (The conceptual design of this park is depicted in Figure 2-4.) Noise sources commonly associated with these land uses include recreational noise associated with playgrounds at neighborhood parks and the use of sports fields and ball courts at larger community parks. Plazas may also be a source of noise associated with the occasional use of amplified sound systems. Noise levels and associated impacts associated with these land uses are discussed, as follows:

- **Neighborhood Parks**: Noise generated by smaller neighborhood parks are typically associated with the use of playgrounds. Noise associated with playgrounds typically includes elevated children's voices and occasional adult voices. Noise levels associated with small playgrounds can generate intermittent noise levels of approximately 55-60 dBA Leq at 50 feet (Ambient, 2017). Assuming a maximum operational noise level of 60 dBA Leq at 50 feet, predicted operational noise levels could exceed 65 dBA Leq at approximately 26 feet. Given this distance, predicted 65 dBA noise contours for neighborhood parks are typically confined to within the park boundaries. In addition, noise generated by neighborhood parks would not be uncharacteristic of noise commonly associated with residential land uses, would be

intermittent, and would be limited primarily to the daytime hours. For these reasons, this impact would be considered less than significant.

- **Community Park**: The proposed community park (Planning Area E) includes the development of a centralized plaza and sports park. Sports parks typically include ball courts and ball fields. Based on noise measurements conducted for similar projects, average-hourly noise levels associated with recreational-use facilities, including ball fields and ball courts, typically average 60 dBA Leq, or less, at the field edge and at approximately 50 feet from spectator areas. Intermittent noise events typically associated with such uses include individuals yelling and the intermittent sound of the hitting and bouncing of balls. The nearest existing noise-sensitive land uses are residential apartments located to the north of Avenue K-8 approximately 550 feet or more from the proposed community park. Based on this distance and assuming an uninterrupted noise level of 60 dBA Leq at 50 feet from the site boundary, predicted recreational noise levels at the exterior of the nearest noise-sensitive land uses would be 39 dBA Leq, or less, and would be largely masked by existing ambient noise levels. Assuming a maximum exterior noise level of 39 dBA Leq and an average exterior-to-interior noise reduction of 25 dBA, predicted interior noise levels at these nearest residential land uses would be 14 dBA Leq and would not exceed the City's interior standards. Predicted noise levels would not exceed the City's exterior or interior noise standards of 65 dBA and 45 dBA, respectively. As a result, this impact would be considered less than significant.
- **Plazas (Special Events)**: The centralized plaza and community park are also intended to serve as a venue for special events. These areas may include activities such as art and craft fairs, farmers markets, festivals, and other agri-commercial and community-based events. It is anticipated that some onsite events may also include the use of portable amplified sound systems. Based on measurements obtained from similar events with live amplified music, measured noise levels were approximately 86 dBA Leq at 50 feet (Ambient, 2024a). Assuming a maximum operational noise level of 86 dBA Leq at 50 feet, predicted operational noise levels could exceed 65 dBA Leq at approximately 529 feet. As noted above, the nearest noise-sensitive land uses are existing residential dwellings located approximately 550 feet north of the proposed community park. Based on this distance, predicted noise levels from event noise would be 65 dBA Leq, or less, at these residential dwellings. Predicted noise levels would not exceed the City's exterior noise standard of 65 dBA. Assuming a maximum exterior noise level of 63 dBA Leq and an average exterior-to-interior noise reduction of 25 dBA, predicted interior noise levels at these nearest residential land uses would be 40 dBA Leq and would not exceed the City's interior standards. As a result, this impact would be considered less than significant.

### *Educational Land Uses*

The PVSP includes the development of an 8.7-acre school site (Planning Area F). This planning area provides for the development of public, charter, private, or nursing schools. Noise sources commonly associated with schools typically include noise generated by playgrounds and exterior air conditioning units.

- **School Playgrounds**: Noise generated by playgrounds typically includes elevated children's voices and occasional adult voices. Noise levels associated with playgrounds can generate intermittent noise levels of approximately 55-60 dBA Leq at 50 feet (Ambient, 2017). The nearest noise-sensitive land uses are residential apartments located approximately 130 feet, or more, from the edge of the proposed school planning area. Based on this distance and assuming a maximum operational noise of 60 dBA Leq at 50 feet, predicted noise levels at the nearest existing dwellings would be approximately 52 dBA Leq and would not exceed the City's exterior noise standard of 65 dBA. Assuming a maximum exterior noise level of 52 dBA Leq and an average exterior-to-interior noise reduction of 25 dBA, predicted interior noise levels at the nearest residential dwelling would be approximately 27 dBA Leq. Predicted interior noise levels at the nearest existing residential dwelling would not exceed the City's interior noise standard of 45 dBA. As a result, this impact would be considered less than significant.

- **Air Conditioning Units**: As noted above, larger commercial-grade air conditioning units typically generate noise levels of up to 88 dBA Leq at 3 feet when operating. The nearest existing noise-sensitive land uses are residential land uses located approximately 130 feet from the proposed school property. Based on this distance and a maximum operational noise level of 88 dBA Leq at 3 feet, predicted noise levels associated with educational use of exterior air conditioning units would be 55 dBA Leq, or less, at the nearest existing noise-sensitive land use. Assuming an exterior noise level of 55 dBA Leq and an average exterior-to-interior noise reduction of 25 dBA, predicted interior noise levels at these nearest residential land uses would be 30 dBA Leq, or less. Predicted noise levels would not exceed the City's exterior or interior standards of 65 dBA and 45 dBA, respectively. As a result, this impact would be considered less than significant.

### *Parking Areas*

The PVSP would allow for include parking dispersed throughout the project site although there are no set locations for the parking to occur or minimum parking standards. Noise levels associated with parking areas typically include vehicle operations, the opening and closing of vehicle doors, and the operation of vehicle sound systems. Parking lot noise levels can vary depending on a number of factors, including the number of parking spaces and site design. Parking areas for commercial and public land uses generally range from approximately 50 to 200 parking spaces. Assuming that all spaces would be accessed over an approximate one-hour period, average-hourly noise levels would range from approximately 52 to 58 dBA Leq at 50 feet. Assuming a maximum noise level of 58 dBA Leq at 50 feet, parking lot noise levels could exceed 65 dBA Leq at approximately 21 feet. Parking lots are also a source of instantaneous noise, associated with the opening and closing of vehicle doors, car alarms, and the operation of vehicle sound systems. Based on a noise measurement survey conducted, maximum intermittent noise levels can range from 67 to 81 dBA Lmax at 50 feet associated with the occasional sounding of car alarms and amplified music (Ambient, 2024b). Based on a reference level of 81 dBA Lmax at 52 feet, predicted instantaneous noise levels could exceed the City's minimum exterior noise standard of 80 dBA at approximately 55 feet. Depending on the final design, the proximity to nearby noise-sensitive land uses, and the size of proposed parking areas, predicted parking area noise levels could potentially exceed the City's exterior and interior noise standards at the nearest existing land uses. As a result, this potential impact would be considered significant.

## Mitigation Measures

MM NOI-2 would require acoustical assessments for proposed commercial land uses and that noise-reduction measures be incorporated sufficient to demonstrate compliance with applicable City noise standards. As noted above, such measures may include but are not limited to the installation of noise barriers, setbacks, and site design features. Noise-reduction measures can reduce operational noise levels by approximately 5 dBA, or more, depending on the measures selected. With the implementation of MM NOI-2, Impact NOI-1b would be considered less than significant.

**MM NOI-2** **Reduce Long-Term Noise Exposure from Stationary Equipment.** Prior to the issuance of a building permit, an acoustical analysis shall be prepared to evaluate potential noise impacts associated with proposed commercial land uses. The analysis shall be performed by an individual with experience related to the assessment of noise-related impacts. The analysis shall, at a minimum, include an evaluation of commercial parking areas, commercial mechanical equipment (e.g., compactors, generators), air conditioning equipment, and material loading/ unloading areas. Noise-reduction measures shall be incorporated sufficiently to ensure that operational noise levels would not exceed applicable City noise standards at primarily affected existing land uses (refer to Table 3.11-6). Such measures may include, but are not limited to, the installation of noise barriers, setbacks, and site design features.

**Impact NOI-1c: Generation of a substantial permanent increase in transportation-related ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**

### Long-term Exposure to Increased Roadway Traffic Noise

Predicted traffic noise levels and increases attributable to the PVSP for existing year 2024 and future-year buildout conditions, are discussed, as follows:

#### *Existing Year 2024 Conditions*

Predicted traffic noise levels and increases attributable to the PVSP for existing year 2024 conditions are summarized in Table 3.11-11. As depicted in Table 3.11-11, implementation of the proposed Plan would result in predicted increases in existing traffic noise levels of approximately 2 dBA CNEL/Ldn along 10th Street West. Predicted increases along other area roadways would be less. In comparison to existing conditions, implementation of the proposed Plan would not result in substantial increases in traffic noise levels (i.e., 3 dBA, or greater) along area roadways. As noted earlier in this report, perceptible changes in ambient noise levels do not typically occur at levels below 3 dBA. As a result, this impact would be considered less than significant.

**Table 3.11-11. Predicted Increases in Existing (2024) Roadway Traffic Noise Levels**

| Roadway/Roadway Segment | Predicted CNEL/Ldn, 50 Feet from Near-Travel Lane Centerline | | Predicted Change | Substantial Increase? |
|---|---|---|---|---|
| | Without Project | With Project | | |
| **Avenue K** | | | | |
| 10th Street West to 5th Street West | 68.1 | 68.7 | 0.6 | No |
| 5th Street West to Sierra Highway | 70.3 | 70.9 | 0.6 | No |
| **Avenue L** | | | | |
| 10th Street West to 5th Street W | 73.3 | 74.8 | 1.4 | No |
| 5th Street West to Sierra Highway | 73.3 | 73.7 | 0.5 | No |
| **10th Street West** | | | | |
| Avenue K to Avenue K-8 | 70.8 | 72.7 | 1.9 | No |
| Avenue K-8 to Avenue L | 70.1 | 72.2 | 2.0 | No |
| **Gadsden Avenue** | | | | |
| North of Avenue K | 57.0 | 57.8 | 0.8 | No |
| South of Avenue K | 61.6 | 61.7 | 0.1 | No |
| **Sierra Highway** | | | | |
| Avenue K to Avenue K-8 | 72.0 | 72.5 | 0.5 | No |
| Avenue K-8 to Avenue L | 72.0 | 72.3 | 0.4 | No |

Traffic noise levels were calculated using the FHWA traffic noise prediction model (FHWA RD-77-108) based on data obtained from the traffic analysis prepared for this project. Substantial increase is defined as an increase of 3 dBA, or greater.

#### *Future Buildout Year Conditions*

Predicted traffic noise levels and increases attributable to the proposed Plan for future buildout year conditions are summarized in Table 3.11-12. As depicted in Table 3.11-12, implementation of the proposed Plan would result in increased traffic noise levels of up to approximately 1.7 dBA CNEL along 10th Street W. Predicted increases along other area roadways would be less. In comparison to no-project conditions, implementation of the PVSP would not result in substantial increases in traffic noise levels (i.e., 3 dBA, or greater) along area roadways. As a result, this impact would be considered less than significant.

### Compatibility of Proposed Land Uses with Roadway Traffic Noise

The compatibility of proposed land uses with roadway traffic noise was determined based on predicted traffic noise levels for future-year buildout conditions with implementation of the proposed Plan. Predicted future-year traffic noise levels and distances to projected traffic noise contours for area roadways are depicted in Table 3.11-12. It is important to note that projected traffic noise contours do not include attenuation or shielding provided by intervening structures. As depicted in Table 3.11-12, predicted future-year traffic noise levels would range from approximately 58 to 75 dBA CNEL at 50 feet from the near-travel-lane centerline of nearby roadways.

**Table 3.11-12. Predicted Increases in Buildout Year Roadway Traffic Noise Levels**

| | Predicted CNEL/Ldn, 50 Feet from Near-Travel Lane Centerline | | | |
|---|---|---|---|---|
| **Roadway/Roadway Segment** | **Without Project** | **With Project** | **Predicted Change** | **Substantial Increase?** |
| **Avenue K** | | | | |
| 10th Street West to 5th Street West | 68.2 | 68.8 | 0.6 | No |
| 5th Street West to Sierra Highway | 70.8 | 71.3 | 0.5 | No |
| **Avenue L** | | | | |
| 10th Street West to 5th Street West | 73.7 | 75.1 | 1.3 | No |
| 5th Street West to Sierra Highway | 73.7 | 74.1 | 0.4 | No |
| **10th Street West** | | | | |
| Avenue K to Avenue K-8 | 71.6 | 73.2 | 1.6 | No |
| Avenue K-8 to Avenue L | 71.2 | 72.8 | 1.7 | No |
| **Gadsden Avenue** | | | | |
| North of Avenue K | 57.4 | 58.1 | 0.8 | No |
| South of Avenue K | 62.0 | 62.1 | 0.1 | No |
| **Sierra Highway** | | | | |
| Avenue K to Avenue K-8 | 74.1 | 74.4 | 0.3 | No |
| Avenue K-8 to Avenue L | 74.1 | 74.3 | 0.2 | No |

Traffic noise levels were calculated using the FHWA traffic noise screening tool noise prediction model (FHWA RD-77-108) based on data obtained from the traffic analysis prepared for this project.
Buildout year is estimated to occur between the years 2040 and 2050.
Substantial increase is defined as an increase of 3 dBA, or greater.

**Table 3.11-13. Buildout Year Roadway Traffic Noise Levels and Contour Distances**

| | | Distance to CNEL Contour (Feet from Road Centerline) | | |
|---|---|---|---|---|
| **Roadway/Roadway Segment** | **CNEL at 50 ft. from Near-travel-lane Centerline** | **70** | **65** | **60** |
| **Avenue K** | | | | |
| 10th Street West to 5th Street West | 68.8 | 71 | 140 | 295 |
| 5th Street West to Sierra Highway | 71.3 | 100 | 204 | 435 |
| **Avenue L** | | | | |
| 10th Street West to 5th Street West | 75.1 | 185 | 390 | 837 |
| 5th Street West to Sierra Highway | 74.1 | 161.8 | 338 | 724 |
| **10th Street W** | | | | |
| Avenue K to Avenue K-8 | 73.2 | 128.5 | 270 | 577 |
| Avenue K-8 to Avenue L | 72.8 | 122 | 255 | 546 |
| **Gadsden Avenue** | | | | |
| North of Avenue K | 58.1 | 0 | 0 | 0 |

| Roadway/Roadway Segment | CNEL at 50 ft. from Near-travel-lane Centerline | Distance to CNEL Contour (Feet from Road Centerline) | | |
|---|---|---|---|---|
| | | 70 | 65 | 60 |
| South of Avenue K | 62.1 | 0 | 0 | 84.4 |
| **Sierra Highway** | | | | |
| Avenue K to Avenue K-8 | 74.4 | 135 | 288 | 619 |
| Avenue K-8 to Avenue L | 74.3 | 133 | 285 | 612 |

Traffic noise levels for area roadways were calculated based on data obtained from the traffic analysis prepared for this project (Garland, 2024). Predicted noise contours do not include shielding by intervening structures or terrain. Refer to Figure 3.11-1 for predicted noise contours. Buildout Year is estimated to occur between the years 2040 and 2050.

Figure 3.11-1 depicts predicted traffic noise contours at the Project site for future-year buildout conditions. As depicted in Figure 3.11-1 and provided in Table 3.11-13, predicted roadway traffic noise levels along the Project boundaries could reach levels of approximately 70 dBA CNEL, or more. As previously noted, the City's land use compatibility noise standards for proposed land uses would range from 65 dBA CNEL for residential and school land uses to 70 dBA CNEL for commercial land uses (refer to Table 3.11-6). Depending on the final site design, traffic noise levels at proposed onsite land uses could potentially exceed the City's noise standards for land use compatibility (Refer to Table 3.11-6). As a result, this impact would be considered significant.

**Figure 3.11-1. Roadway Traffic Noise Contours (Buildout Year With Project)**




Locations are approximate. Not to Scale. Depicts noise contours for future Buildout year. Buildout year estimated to occur between the years 2040 and 2050.

### Mitigation Measures

Implementation of the MM NOI-3 would require the preparation of acoustical assessments for proposed land uses located within areas that could potentially exceed applicable City noise standards. Noise-reduction measures would be incorporated sufficient to demonstrate consistency with the City's applicable noise standards for land use compatibility. As noted above, such measures may include, but are not limited, to the installation of noise barriers, setbacks, and site design features. Noise-reduction measures can reduce operational noise levels by approximately 5 dBA, or more, depending on the measures selected. With the incorporation of MM NOI-3, Impact NOI-1c would be considered less than significant.

**MM NOI-3** **Land Use Compatibility Acoustical Analysis.** Prior to the issuance of a building permit, an acoustical analysis shall be prepared to evaluate the compatibility of proposed residential land uses located within the projected 65 dBA CNEL noise contour of area roadways, proposed residential land uses located within the projected 65 dBA CNEL noise contour of the Palmdale Regional Airport/USAF Plant 42, as well as commercial land uses located within the projected 70 dBA CNEL noise contour of area roadways. The analysis shall be performed by an individual with experience related to the assessment of noise-related impacts. Noise-reduction measures shall be incorporated sufficient to ensure that operational noise levels would not exceed applicable City noise standards at primarily affected existing land uses (refer to Table 3.11-6). Such measures may include but are not limited to the installation of noise barriers, building setbacks, and site design features.

**Impact NOI-2: Generation of excessive groundborne vibration or groundborne noise levels.**

Increases in groundborne vibration levels attributable to the proposed Plan would be primarily associated with short-term construction activities. Implementation of the proposed Plan would not result in the addition of major stationary sources of groundborne vibration, that would result in the long-term exposure of existing land uses to unacceptable levels of ground vibration. However, construction activities associated with the proposed Plan would require the use of various tractors, trucks, and jackhammers that could result in intermittent increases in groundborne vibration levels. The use of major groundborne vibration-generating construction equipment/processes (i.e., blasting, pile driving) is not anticipated to be required for the construction of future on-site land uses. Groundborne vibration levels commonly associated with construction equipment are summarized in Table 3.11-14.

**Table 3.11-14. Representative Vibration Source Levels for Construction Equipment**

| Equipment | Peak Particle Velocity at 25 Feet (In/Sec) |
|---|---|
| Large Bulldozers | 0.089 |
| Loaded Trucks | 0.076 |
| Jackhammer | 0.035 |
| Small Bulldozers | 0.003 |

Source: FTA, 2018; Caltrans, 2020

As identified in Table 3.11-14, groundborne vibration levels generated by construction equipment would be approximately 0.089 in/sec ppv, or less, at 25 feet. Based on a maximum level of 0.089 in/sec ppv at 25 feet, predicted vibration levels could potentially exceed the threshold for human annoyance of 0.2 in/sec ppv at approximately 13 feet and the threshold for potential structure damage of 0.5 in/sec ppv at approximately 6 feet from construction activities. Major construction activities involving the use of heavy-duty off-road equipment would not be anticipated to occur within 6 feet of existing occupied structures. As a result, construction activities would not exceed the commonly applied threshold for structural damage of 0.5 in/sec ppv. However, predicted vibration levels at the nearest occupied structures located within 13 feet of onsite construction activities could potentially exceed the commonly applied criteria for

the human annoyance of 0.2 in/sec ppv. As a result, construction of the PVSP could result in increased levels of annoyance to occupants of nearby structures. With regard to existing residential land uses and the existing motel, increases in groundborne vibration levels during the more sensitive nighttime hours could result in increased levels of sleep disruption. As a result, this potential impact would be considered significant, but could be reduced to a less-than-significant level with implementation of MM NOI-1.

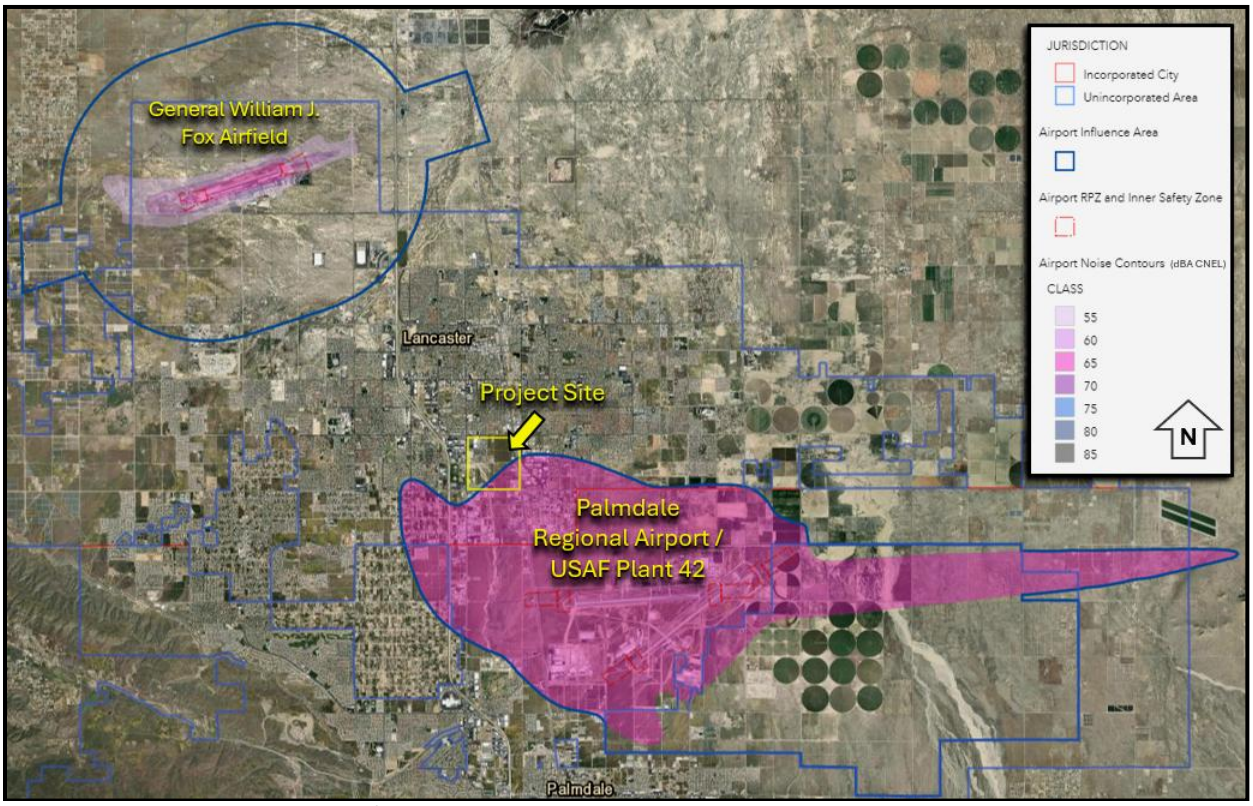
### Mitigation Measures

Implementation of the MM NOI-1 would require construction equipment and material staging areas to be located at the furthest distance possible from nearby residential land uses. With the implementation of MM NOI-1, Impact NOI-2 would be considered less than significant.

**Impact NOI-3: Location 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 private-use airport, that exposes people residing or working in the project area to excessive noise levels.**

The PVSP area is not located within two miles of a public airport or private use airstrip. The nearest airport/airstrip is the Palmdale Airport/USAF Plant 42 which is located approximately 2.5 miles south of the project site. As depicted in Figure 3.11-2, the PVSP area is located within the Palmdale Airport planning boundary. The PVSP area is not located within the planning boundary or influence area of any other nearby airports.

**Figure 3.11-2. Palmdale Airport / USAF Plant 42 Airport Influence Area**



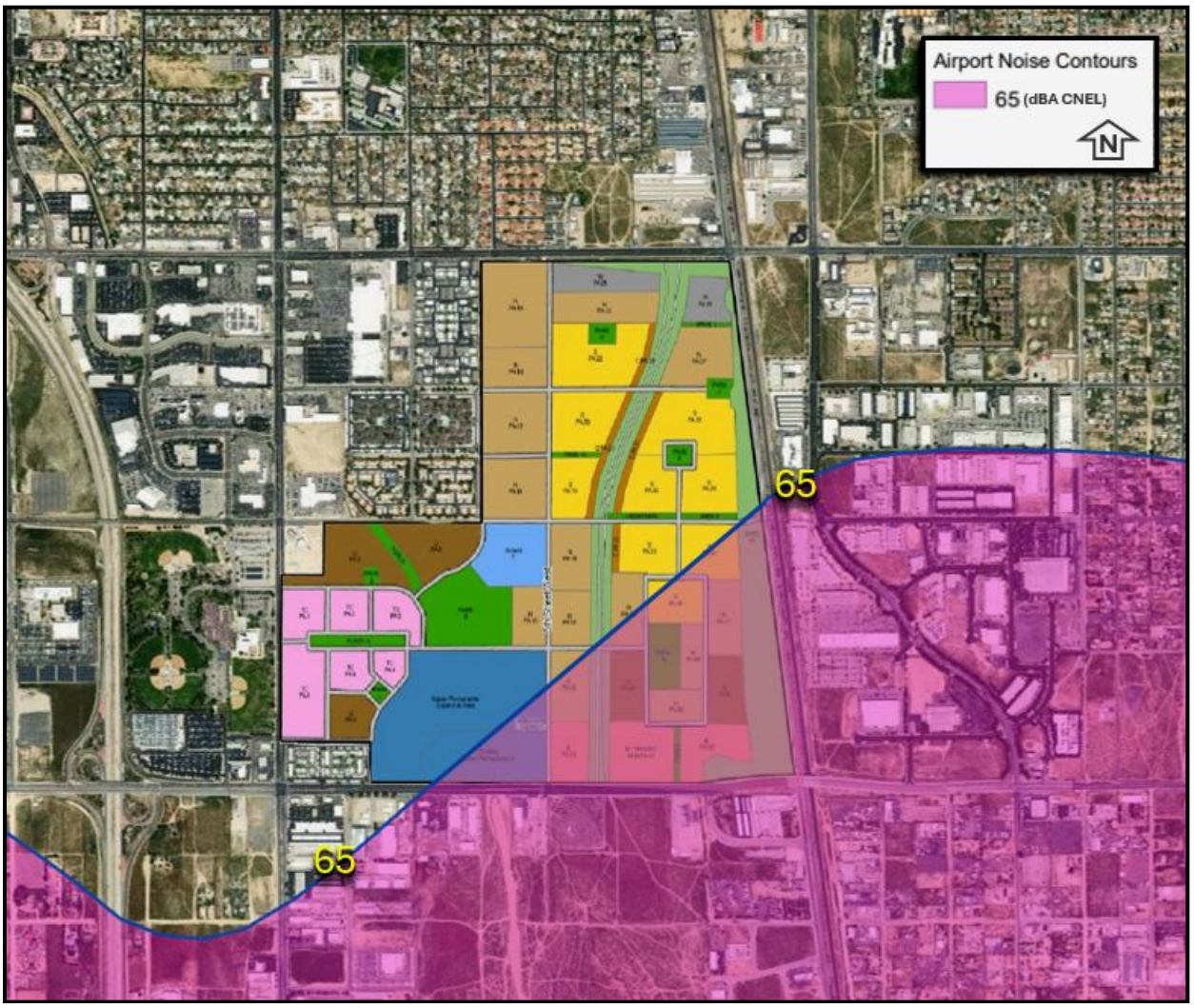

Locations are approximate. Not to Scale.

The predicted 65 dBA CNEL noise contour for the Palmdale Regional Airport/USAF Plant 42 is depicted in Figure 8 (LA County Planning, 2024). As shown in Figure 3.11-3, the southern portion of the PVSP is within the 65 dBA CNEL contour. Noise-sensitive land uses proposed within the 65 dBA CNEL contour include a

mix of residential land uses including but not limited to single-family homes, townhouses, condominiums, and apartments, as well as the Kaiser Permanente Antelope Valley Medical Offices. Predicted exterior aircraft noise levels at these proposed land uses could exceed the City's exterior standard of 65 dBA CNEL. In addition, these land uses could be subject to exterior instantaneous noise levels associated with aircraft overflights that could potentially exceed the City's applicable noise standards. Noise from aircraft overflights in a common occurrence across the Antelope Valley.

With regard to aircraft noise, residential land uses within the 65 dBA CNEL noise contour would typically be considered incompatible if predicted interior noise levels would exceed 45 dBA CNEL. With compliance with current building insulation standards, exterior to interior noise levels are typically reduced by approximately 25-30 dBA. Assuming a maximum exterior noise level of 65 dBA CNEL and a minimum exterior-to-interior reduction of 25 dBA, predicted interior aircraft noise levels would be approximately 40 dBA CNEL, or less. Predicted interior noise levels would not exceed the commonly applied interior noise standard of 45 dBA CNEL. Nonetheless, implementation of the proposed Plan could expose workers or residents to aircraft noise levels in excess of the City's applicable standards. As a result, this potential impact would be considered significant.

**Figure 3.11-3. Palmdale Airport/USAF Plant 42 65 CNEL Noise Contour**




Locations are approximate. Not to Scale.

### Mitigation Measures

With the implementation of the proposed MM NOI-3, an acoustical assessment would be required to evaluate the compatibility of proposed land uses, including residential land uses, located within the projected 65 dBA CNEL noise contour of Palmdale Regional Airport/USAF Plant 42. In addition, avigation easements shall be required for residential developments within the 65 CNEL contour of Palmdale Regional Airport/USAF Plant 42 with the implementation of MM NOI-4. With the incorporation of MM NOI-3 and MM NOI-4, Impact NOI-3 would be considered less than significant.

**MM NOI-4** **Require Aviation Easements for Proposed Residential Land Uses**. In accordance with City General Plan Policy 4.4.3, the Project shall require avigation easements for proposed residential land uses located within the 65 dBA CNEL contour of Palmdale Regional Airport/ USAF Plant 42.

## 3.11.4. Cumulative Impact Analysis

### Geographic Extent

For the purposes of cumulative noise impact analysis, the area of influence includes those sensitive receptors closest to the Project site that might be affected by construction noise or noise associated with traffic generated by the proposed Plan, as well as sensitive receptors along major transportation corridors serving the Plan area.

When considering cumulative impacts, only past, current, and reasonably foreseeable future projects that are close enough to the proposed PVSP site to contribute to cumulatively significant noise levels at sensitive receivers are considered. Noise levels that result from distant projects are diminished by geometric spreading, ground attenuation, and line-of-sight obstructions, as explained above in Section 3.11.1. Projects are considered to be too far away when the impacts that they would have on the cumulative noise level in the Plan area are too small to cause a substantial increase in the cumulative noise level. Table 3.1-1 in Section 3.1.3, Cumulative Scenario and Methodology, provides a list of all cumulative projects in the Plan area.

As addressed above, implementation of the PVSP could result in construction through the year 2050, along with the operations of land uses as construction of the various Planning Areas are completed. For onsite construction noise, complying with local regulations and implementing MM NOI-1 would ensure this cumulative impact would remain less than significant. However, increased traffic volumes from cumulative projects, in combination with traffic related to operation of the proposed Plan area, would permanently increase noise levels which may result in a cumulative impact that would be significant under CEQA. Although project-level mitigation measures would reduce the noise effects of the Plan area and other projects in the vicinity (it is assumed that other projects in the area would include similar mitigations), such as limiting construction periods; the use of noise-reducing equipment; requiring shielding to block the line of site of construction equipment and operational noise sources; site design features such as setbacks, sound barriers, and other noise attenuating techniques; as well as requiring individual projects undergo an acoustical analysis, the proposed Plan, in combination with cumulative projects, would still have the potential to exceed thresholds for noise related to the increase in traffic near sensitive receptors.

As addressed in Section 3.14, Transportation, the proposed Plan would be considered a regionally significant project according to State CEQA Guidelines Section 15206. The Southern California Association of Governments (SCAG) is responsible for addressing and evaluating all cumulative projects to determine each project's level of significance in the region. Implementation of the PVSP would be consistent with the regional plans, including the 2024 Connect SoCal RTP/SCS, that address projected growth patterns in the region. Furthermore, all future projects in the Plan's vicinity would be evaluated for consistencies with the established goals, policies, regulations and guidelines of the City's GP 2030 and Municipal Code.

Nonetheless, despite the imposition of mitigations, under CEQA, the project's incremental contribution to impacts related to increased ambient noise levels from project-related traffic on the Plan's vicinity roadways could be cumulatively considerable.

## 3.11.5. Level of Significance After Mitigation

All identified noise and vibration impacts would be less than significant with the imposition of mitigation measures MM NOIS 1 through MM NOIS 4. The Project's compliance with existing City of Lancaster General Plan policies and Municipal Code requirements, combined with the comprehensive design guidelines and standards incorporated into the PVSP, along with the aforementioned mitigation measures would ensure that potential noise and vibrational impacts are minimized. The Project would temporarily and permanently alter the ambient noise levels in the vicinity of the site but would do so in a manner consistent with the City's adopted standards for the various land uses and would incorporate design features to minimize adverse effects related to noise and vibrations.

# 3.12. Population and Housing

This section describes the existing environmental conditions and evaluates the impacts on population and housing resulting from implementation of the Parkway Village Specific Plan (Plan or PVSP). The analysis presents an overview of existing conditions that influence population and housing, describes the applicable regulations, identifies the criteria used for determining the significance of environmental impacts, and describes the potential impacts to population and housing from implementation of the Plan.

## 3.12.1. Environmental Setting

### Current Population

#### *County of Los Angeles*

The County encompasses approximately 4,750 square miles. It is bordered by Kern County to the north, San Bernardino County to the east, Orange County to the southeast, the Pacific Ocean to the south, and the Ventura County to the west. As of January 2024, the County of Los Angeles had a population of 9,824,091 people. This represents a decrease of approximately 1.9 percent over the County's 2020 population of 10,014,009 (CDF, 2024).

The Southern California Association of Governments (SCAG) serves as the Metropolitan Planning Organization (MPO) for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. Generally, SCAG serves as the regional planning organization for growth management, transportation, and a range of additional planning and environmental issues within southern California. SCAG develops, refines, and maintains SCAG's regional and small area socio-economic forecasting/allocation models. Every four years, SCAG updates Connect SoCal, the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), as required by federal and state regulations. As part of its forecasting, SCAG projects that the County's population will reach 10,449,000 by 2035 and 10,793,000 by 2050 (SCAG, 2024).

#### *City of Lancaster*

Table 3.12-1 provides a summary of both 2020 and 2024 population estimates for Los Angeles County and the City of Lancaster. On a local level, the Lancaster's January 2024 population was 172,631. This represents a decrease of approximately 1.4 percent compared to the City's 2020 population of 175,077.

SCAG projects that the City's population will reach 163,390 by 2035 and 167,285 by 2050.

**Table 3.12-1. Population Estimates**

| Year | County of Los Angeles | City of Lancaster |
|---|---|---|
| 2020 Census | 10,014,009 | 175,077 |
| January 2024 | 9,824,091 | 172,631 |
| 2020-2024 Change (%) | -189,918 (-1.9%) | -2,446 (-1.4%) |
| 2035 SCAG Forecasts[1] | 10,449,000 | 163,390 |
| 2024-2035 Change (%) | 624,909 (6.0%) | -9,241 (-5.7%) |
| 2050 SCAG Forecasts[1] | 10,793,000 | 167,285 |
| 2024-2050 Change (%) | 968,909 (9.0%) | -5,346 (-3.2%) |

Sources: CDF, 2024, and SCAG, 2024
Notes:
1 - SCAG forecasts for City of Lancaster represent a rough estimate of the future jurisdiction-level population based on Connect SoCal's household forecast, derived using a county-level Population to Housing ratio from TABLE 12 of the Demographics and Growth Forecast Technical Report, and applying it to a jurisdiction's future household growth.

## Housing

### *County of Los Angeles*

Table 3.12-2, Housing Estimates, provides a summary of housing estimates for Los Angeles County and the City of Lancaster. The County's housing stock was estimated to be 3,696,408 units in January 2024, with 3,518,197 occupied housing units. This represents an increase of approximately 2.8 percent over the estimated 3,591,981 units, 3,420,628 occupied housing units reported in 2020. The vacancy rate in January 2024 was estimated to be approximately 4.8 percent, and the persons per household estimate for occupied units was approximately 2.73 (CDE, 2024). SCAG projections indicate that the number of households within the County will increase to 3,933,000 in 2035 and to 4,155,000 in 2050 (SCAG 2024).

### *City of Lancaster*

The City's housing stock was estimated to be 56,257 units in January 2024 with 54,362 households (occupied housing units). This represents an increase of approximately 2 percent over the estimated 55,137 units and 53,280 occupied housing units reported in 2020. The vacancy rate in January 2024 was estimated to be approximately 3.4 percent, with the persons per household estimate for occupied units being 3.06. According to SCAG projections, the number of households in the City is expected to be 61,500 in 2035 and 64,400 in 2050.

**Table 3.12-2. Housing Estimates**

| | County of Los Angeles | | City of Lancaster | |
|---|---|---|---|---|
| **Year/Description** | **Dwelling Units** | **Occupied Households** | **Dwelling Units** | **Occupied Households** |
| Census 2020 | 3,591,981 | 3,420,628 | 55,137 | 53,280 |
| January 2024 | 3,696,408 | 3,518,197 | 56,257 | 54,362 |
| 2020-2024 Change (%) | 104,427 (2.8%) | 97,569 (2.8%) | 1,120 (2.0%) | 1,082 (2.0%) |
| 2024 Vacancy Rate | 4.8% | -- | 3.4% | -- |
| 2024 Persons per Household | -- | 2.73 | -- | 3.06 |
| 2035 SCAG Forecasts[1/2] | 4,121,784 | 3,933,000 | 63,591 | 61,500 |
| 2024-2035 Change (%) | 425,376 (10.3%) | 414,803 (10.5%) | 7,334 (11.5%) | 7,138 (11.6%) |
| 2050 SCAG Forecasts[1/2] | 4,354,440 | 4,155,000 | 66,590 | 64,400 |
| 2024-2050 Change (%) | 658,032 (15.1%) | 636,803 (15.3%) | 10,333 (15.5%) | 10,038 (15.6%) |

Sources: CDF, 2024, and SCAG, 2024

Notes:

1 - SCAG forecasts for City of Lancaster represent a rough estimate of the future jurisdiction-level population based on Connect SoCal's household forecast, derived using a county-level Population to Housing ratio from TABLE 12 of the Demographics and Growth Forecast Technical Report, and applying it to a jurisdiction's future household growth.

2 - SCAG forecasts for dwelling units were unavailable.

## Employment

### *County of Los Angeles*

According to the California Employment Development Department, the annual average civilian labor force within Los Angeles County totals approximately 5,090,600 as of August 2024, with employment at 4,750,900. An estimated 6.7 percent of the County's workforce (339,700 persons) was unemployed (EDD, 2024). SCAG projections indicate that the number of jobs within the County will be 5,386,000 in 2035 and 5,461,000 in 2050 (SCAG, 2024).

### *City of Lancaster*

According to the California Employment Development Department, the annual average civilian labor force within the City of Lancaster totals approximately 64,800 persons as of August 2024. An estimated 8.9 percent of the City's workforce (5,700 persons) was unemployed (EDD, 2024). SCAG projections indicate that the number of jobs within the City will be 64,500 in 2035 and 65,400 in 2050 (SCAG, 2024).

## 3.12.2. Regulatory Setting

### Local Regulations and Plans

#### Southern California Association of Governments

SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local governments from Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. The City of Lancaster is located in the North Los Angeles County Subregion. SCAG's demographic data is developed to enable the proper planning of infrastructure and facilities to adequately meet the needs of the anticipated growth. Growth forecasts contained in the Regional Transportation Plan (RTP) for Los Angeles County and the City of Lancaster are used as the basis of analysis for housing, population, and employment forecasts in this section.

Connect SoCal is SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated every four years. Connect SoCal 2024 outlines a vision for a more resilient and equitable future, with investment, policies and strategies for achieving the region's shared goals through 2050.

#### Regional Housing Needs Assessment (RHNA)

State law requires that jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the State-wide housing need. In cooperation with HCD, local governments and councils of governments (COGs) are charged with making a determination of the existing and projected housing need as a share of the State-wide housing need for their city or region. Until recently, the housing construction need was determined based on four broad household income categories: very low (households making less than 50 percent of median family income), low (50-80 percent of median family income), moderate (80-120 percent of median family income), and above moderate (more than 120 percent of median family income). Going forward, two new household income categories will be considered: acutely low income (0-15 percent of median family income) and extremely low income (15-30 percent of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

SCAG adopted its most recent RHNA in March 2021, which covers the planning period of October 2021 through October 2029 (SCAG, 2021a). The allocation plan identified that the City needs 9,023 housing units (SCAG 2021b).

#### City of Lancaster Housing Element

The City's current Housing Element (adopted in 2022 and certified by HCD on February 10, 2023) includes an inventory of available housing and an assessment of housing needs based on local and regional population and employment trends. As required by California housing law, the City of Lancaster General Plan Housing Element outlines existing needs within the City based on SCAG projections and identifies strategies that the City will employ to achieve its housing objectives. The Housing Element establishes policies that will guide City decision making and sets forth a strategy and programs to implement housing goals.

## 3.12.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

Appendix G of the State CEQA Guidelines identifies two questions to consider when evaluating population and housing impacts. These are whether the project would:

- Impact POP-1. 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)?
- Impact POP-2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

These are impacts that, if they were to occur, could themselves result in environmental impacts. The key concerns are (1) induced population growth resulting from development of buildings or infrastructure and (2) whether housing and people would be displaced, requiring construction of replacement housing. These are changes that could in themselves create environmental impacts as a result of implementing the PVSP. For example, construction of replacement housing for persons displaced by a project could have its own environmental impacts, which would be an outcome of approving the original project creating the displacement.

### Environmental Impact Analysis

**Impact POP-1: Inducement of substantial unplanned population growth in an area, either directly or indirectly.**

The PVSP would allow direct future development of the Specific Plan Area. The PVSP proposes approximately 4,246 new dwelling units, along with other land uses that would increase the population and employment in the Plan area. This number of new dwelling units is well above the State CEQA Guidelines section 15206 criteria to define the PVSP as being of regional significance and thus requires conformity with SCAG's 2024-2050 Connect SoCal RTP/SCS. The PVSP would not induce substantial unplanned population growth, because the growth is accounted for and consistent with the projections forecasted by SCAG.

As Lancaster is a member-city of SCAG, planning for future growth within the City is done so in conjunction with the progression of SCAG's regional planning. Growth forecasts for the region's municipalities are updated regularly and guide the goals and policies associated with land use and planning. The proposed Plan would be consistent with the City's GP, of which is consistent with the projected growth forecasts of SCAG's regional plans. SCAG projects that the County's population will increase to 10,449,000 by 2035 and 10,793,000 by 2050. In contrast, the City's population is projected to decrease from its current estimated population of 172,631 in 2024, to 163,390 in 2035, and 167,285 in 2050 (SCAG, 2024).

Indirectly, extension of roads and development of other infrastructure or facilities could induce population growth; however, the proposed Plan includes housing units to provide for this population growth. Policies identified in the General Plan would ensure that necessary services and infrastructure would be available to accommodate the proposed growth. Therefore, impacts would not be significant.

**Impact POP-2. Displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.**

The Plan Area includes mostly vacant land, with some existing housing units, including a Sierra Retirement Village, the PV park, and the supportive housing development. The existing land uses within the Plan Area will not change and therefore no people or housing would be displaced. The Plan proposes housing,

approximately 4,246 new dwelling units, which would accommodate projected growth identified by SCAG. Additionally, a variety of residential housing types provides opportunity for a range of household sizes and income levels to locate in the Plan Area. Therefore, there would be no impacts.

**Mitigation Measure**

No mitigation measures are required because no significant impacts would occur.

## 3.12.4. Cumulative Impact Analysis

According to State CEQA Guidelines Section 15206, the proposed Specific Plan would be a project of regional significance. SCAG is responsible for addressing and evaluating all cumulative projects to determine each project's level of significance in the region. Implementation of the Specific Plan would be consistent with the regional plans, including the 2024 Connect SoCal RTP/SCS, that address projected population and housing growth patterns in the region. All development within the Plan area would be evaluated on a project-by-project basis for consistencies with the established goals, policies, regulations and guidelines of the City's GP 2030 and Municipal Code. Additionally, the RHNA calls for an increase in housing in the City of Lancaster, which would be implemented through development in the Specific Plan Area. As discussed under Impact PH-1, there would be no substantial unplanned population growth in the area, because the population growth is planned for, and the Project would not cumulatively contribute to cumulative project's impacts. Additionally, there would be no displacement of existing people and housing, since the Project would maintain existing housing and construct additional housing, and the project would not contribute to adverse cumulative impacts to population and housing. Therefore, approval of the Specific Plan would not make a substantial contribution to cumulative impacts associated with population and housing.

## 3.12.5. Level of Significance After Mitigation

All of the population and housing impacts discussed above are less than significant. Because no significant impacts have been identified, no mitigation measures are needed to reduce the severity of the PVSP's impacts. The PVSP's impacts related to population and housing would not be significant.

# 3.13. Public Services, Utilities, and Service Systems

This section describes effects on existing public services, utilities, and service systems that would be caused by the buildout of the Parkway Village Specific Plan (PVSP or Plan). The following discussion addresses existing environmental conditions in the affected area, identifies and analyzes environmental impacts for the PVSP and, as applicable, recommends measures to reduce or avoid anticipated adverse impacts. This section also describes existing laws and regulations relevant to existing public services, utilities, and service systems. In some cases, compliance with these laws and regulations would serve to reduce or avoid certain impacts that would otherwise occur.

**Public Services**

The City of Lancaster's public services and facilities addressed in this section include schools, police and fire protection, libraries, and recreation. As described in Section 2, Project Description, the PVSP would include design concepts that would require these public services. This section will evaluate the PVSP's impacts on the City's existing public services by examining the estimated increase on demands for police and fire services as well as schools.

**Utilities and Service Systems**

Many utilities and services available in the City of Lancaster, such as water supply, sewage treatment, and solid waste management, are provided by other agencies or private companies. Future development guided by the proposed PVSP would require connection to these utility systems. The PVSP's impacts to these systems are evaluated in this section.

## 3.13.1. Environmental Setting

### 3.13.1.1. Public Services

**Police Protection**

The Los Angeles County Sheriff's Department provides law enforcement services to more than 150,000 residents in the City of Lancaster and unincorporated areas of the County of Los Angeles. The Lancaster Sheriff's Station is located at 501 West Lancaster Boulevard, which is approximately 1.7 miles north of the Specific Plan area. Law enforcement needs for the City as a whole are determined annually and are based on several factors, including, but not limited to, population increases, numbers of calls for service, response times, numbers of traffic accidents, arrests, bookings, and patrol miles. The Lancaster Sheriff's Station has over 230 sworn deputies and over 100 civilian personnel and has the largest patrol area at over 600 square miles, covering the entire northeast portion of the County. The communities of Antelope Acres, Hi Vista, Roosevelt, and most of Quartz Hill are included in this patrol area (City of Lancaster, 2024a).

In addition to the Sheriff's Department contract, the City of Lancaster recently created the Lancaster Police Department to enhance and support the efforts of the Sheriff's Department. This partnership allows the Sheriff's Department to focus on major crimes while the Lancaster Police Department implements proactive prevention programs to address community safety issues (City of Lancaster, 2024f).

**Fire Protection**

The City of Lancaster contracts with the Los Angeles County Fire Department (LACFD) for fire and para-medic services. There are currently six fire stations within the City, as well as one in the unincorporated community of Antelope Acres. Services provided include fire suppression, fire prevention, paramedic response, swift water rescue, hazardous materials response, and more. LACFD also provides free sandbags and instructions to residents for flooding and erosion control and operates the Safe House program for

children and adults in threatening, dangerous, or abusive situations (City of Lancaster, 2024b). The nearest fire station to the Plan area is LACFD's Fire Station No. 129, Division Headquarters, located approximately 1 mile south of the Plan area at 42110 6th Street West. The LACFD desires a typical urban service level distance of 1.5 miles. The nationally recognized guideline is a five-minute response time in urban areas, which is usually achieved within a 1.5-mile distance. LACFD has plans to expand fire protection service, including paramedic staffing, as the City's population grows.

### Emergency Health Care

According to the City of Lancaster's General Plan, there is currently one hospital and various other medical facilities that provide medical health care services within the City of Lancaster. The nearest hospital to the Plan area is Antelope Valley Hospital, located approximately 1.4 miles northwest. Kaiser Permanente Antelope Valley Medical Offices are located within the Plan area in the southwest corner on Avenue L. As a whole, medical and elderly health care will require expanded services by 2030 to continue providing the same level of long-term service for an increased population.

### Schools

The City of Lancaster and its General Plan study area are served by four different school districts and one community college district. The four public school districts are Antelope Valley Union High School District (AVUHSD), Eastside Union School District, Lancaster School District (LSD), and Westside Union School District (City of Lancaster, 2024c). The Plan area and its surroundings are served by the Lancaster School District and the Antelope Valley Union High School District. In addition to the Lancaster School District schools identified below, high school students residing in the PVSP would attend either Lancaster High School or Antelope Valley High School.

The Antelope Valley Union High School District serves over 22,000 students in the cities of Lancaster and Palmdale and the surrounding areas, within eight comprehensive high schools, three alternative high schools, and an early college high school partnership with Antelope Valley Community College. They also provide adult education on four campuses (AVUHSD, 2024).

**Table 3.13-1. Schools in the Lancaster School District**

| Name of School | Address | Enrollment |
|---|---|---|
| **Amargosa Creek Middle School**<br>Middle School Grades 6th-8th | 44333 27th Street West<br>Lancaster, CA 93536 | 954 |
| **Desert View School**<br>Elementary Grades TK-6th | 1555 Avenue H-10<br>Lancaster, CA 93534 | 718 |
| **Discovery School**<br>Elementary Grades TK-5th | 44910 17th Street East<br>Lancaster, CA 93535 | 699 |
| **Early Learning**<br>Preschool | 44327 Fig Ave<br>Lancaster, CA 93535 | No data |
| **El Dorado School**<br>Elementary Grades TK-5th | 361 Pondera Street<br>Lancaster, CA 93535 | 742 |
| **Endeavour Middle School**<br>Middle School Grades 6th-8th | 43755 45th Street West<br>Lancaster, CA 93536 | 780 |
| **Fulton & Alsbury Academy of Arts and Engineering**<br>Middle School Grades 6th-8th | 831 Avenue K-2<br>Lancaster, CA 93535 | 419 |
| **iLEAD**<br>Grades K-8th | 254 Avenue K-4<br>Lancaster, CA 93535-4500 | 795 |

| Name of School | Address | Enrollment |
|---|---|---|
| **Jack Northrop Elementary**<br>Elementary Grades TK-5th | 835 Avenue K-4<br>Lancaster, CA 93535 | 658 |
| **Joshua Elementary School**<br>Elementary Grades TK-6th | 43926 2nd Street East<br>Lancaster, CA 93535 | 574 |
| **Lancaster Alternative & Virtual Academies**<br>Grades K-8th | 44034 13th Street West<br>Lancaster, CA 93534 | 263 |
| **Life Source International Charter**<br>Grades K-8th | 44339 Beech Avenue<br>Lancaster, CA 93534-4303 | 210 |
| **Lincoln Elementary School**<br>Elementary Grades TK-5th | 44021 15th Street East<br>Lancaster, CA 93535 | 702 |
| **Linda Verde Elementary School**<br>Elementary Grades TK-8 DLI | 44924 5th Street East<br>Lancaster, CA 93535 | 638 |
| **Mariposa Computer Science Magnet School**<br>Elementary Grades TK-6th | 737 Avenue H-6<br>Lancaster, CA 93534 | 732 |
| **Miller Elementary School**<br>Elementary Grades TK-7th | 43420 22nd Street West<br>Lancaster, CA 93536 | 652 |
| **Monte Vista Elementary School**<br>Elementary Grades TK-5th | 1235 Kettering Street<br>Lancaster, CA 93534 | 792 |
| **Nancy Cory Elementary School**<br>Elementary Grades TK-5th | 3540 Avenue K-4<br>Lancaster, CA 93536 | 715 |
| **New Vista Middle School**<br>Middle School Grades 6th-8th | 753 Avenue K-2<br>Lancaster, CA 93535 | 938 |
| **Piute Middle School**<br>Middle School Grades 6th-8th | 425 Avenue H-11<br>Lancaster, CA 93535 | 767 |
| **Promise Academy**<br>Special Education Grades TK-8th | 1331 Avenue J-8<br>Lancaster, CA 93535 | 46 |
| **RISE**<br>Alternative Grades 6-8 | 44321 Fig Avenue<br>Lancaster, CA 93534 | 10 |
| **Sierra Elementary School**<br>Elementary Grades TK-5th | 747 Avenue J-12<br>Lancaster, CA 93534 | 711 |
| **Sunnydale Elementary School**<br>Elementary Grades K-6th | 1233 Avenue J-8<br>Lancaster, CA 93534 | 504 |
| **The Leadership Academy**<br>Grades K-8th | 44310 Hardwood Avenue<br>Lancaster, CA 93534 | 39 |
| **West Wind Elementary School**<br>Elementary Grades TK-5th | 44044 36th Street West<br>Lancaster, CA 93536 | 777 |
| **Total enrollment in Lancaster School District** | | **14,835** |

Source: Lancaster School District, 2024, and CDE 2024.

## Library Services

The County of Los Angeles Public Library System is one of the largest public library systems in the United States. Los Angeles County Public Library System serves 3.4 million residents across 3,000 square miles through its 86 libraries, 4 Cultural Resource Centers, and mobile fleet of 15 vehicles, including 4 Bookmobiles, 6 MākMō (maker mobiles), 3 Reading Machines (early literacy vehicles), and 2 mobile outreach vehicles (LA County Library, 2024a).

In fiscal year 2022/2023, the library system circulated 13.2 million items to 2.3 million registered borrowers; provided over 4,000 adult and young adult programs for over 70,000 attendees; and approximately 500 programs for over 8,000 children. The library also offers magazines, newspapers, microfilm, government publications, specialized reference materials, audio-visual media, adult, teen and children's programs, downloadable audio and e-books, and internet access, including Wi-Fi (LA County Library 2024b). No libraries are located within or in the immediate vicinity of the Plan area. The Lancaster Library is the nearest library to the Plan area, located approximately 1.6 miles north at 604 Lancaster Boulevard.

#### Parks

As discussed in Section 3.10.1, Land Use and Planning, and Recreation, the nearest park is Sgt. Steve Owen Memorial Park, located on 10th Street West adjacent to the southwest boundary of the project area and within an Open Space land use designation. No other parks or major recreational areas are located in the vicinity of the project area. The PVSP would include recreational land uses within the Plan boundary, such as an Open-Air Plaza in Planning Area A, a Community Park in Planning Area E, several Neighborhood Parks scattered throughout the PVSP and located in Planning Areas B, C, H, J, K, and M and Linear Parks located in Planning Areas D, G, I, L, and N. See Section 3.10, Land Use and Planning, and Recreation for a discussion of parks in the vicinity.

### 3.13.1.2. Utilities and Service Systems

The City of Lancaster's utilities and service systems include, but are not limited to, water, electricity, natural gas, sewage treatment, solid waste management, and telecommunication, which are described in detail below.

#### Water

Most of the City of Lancaster, including the Plan area, is within the boundaries of Los Angeles County Waterworks District 40., Water service is provided by 11 retail water agencies, including Quartz Hill Water District, and one wholesale water distributor, the Antelope Valley-East Kern Water Agency (AVEK). The 11 separate retail water agencies serving the Lancaster area use a combination of imported (from the California Aqueduct) and well water. No agency oversees the drilling of water wells in the area, and all water providers drill and maintain their own wells.

Amargosa Creek has been placed underground in a reinforced concrete box channel through the Specific Plan area and flows from southeast to northeast, terminating in Rosamond Dry Lake. Amargosa Creek continues underground north of the Plan area.

In 2006, the Los Angeles County Department of Public Works, County Sanitation Districts of Los Angeles County, local cities, and several water purveyors established the Regional Water Management Group. This group was created to coordinate efforts in drafting the Antelope Valley Integrated Regional Water Management Plan (IRWMP). The IRWMP serves to identify inter-agency objectives, priorities, projects, and management strategies to address the regional water supply issues. The document was most recently updated in 2019.

Water demand in the City of Lancaster and Antelope Valley is anticipated to increase comparable to the population growth. Due to the increase of residents, businesses, and landscaped areas, total water use in the City of Lancaster and Antelope Valley will increase. Each future development project would have a specific impact on demand, depending on the historic water use at the development site and the proposed land use type.

In 2021, The Los Angeles County Waterworks District 40 adopted an Urban Water Management Plan (UWMP) in accordance with the California Urban Water Management Planning Act of 1983, and subsequent

revisions. The UWMP states that the retail demand for potable and non-potable water in the year 2020 was 45,818 AFY, increasing to 54,400 AFY in 2025, and up to 66,300 AFY in 2045, not including demand for recycled water. Including recycled water demand, these numbers increase to 46,180 AFY in 2020, and 67,602 AFY in 2045 (LA County Public Works, 2021).

Utility systems, including water mains and sewers, are available to service the Specific Plan area, including, but not limited to:

- A 12-inch water main contained in the future alignment of Avenue K-8, and in the future alignment of 5th Street West.
- A 10-inch sanitary sewer collector and a natural gas line are contained in the future alignment of Avenue K-8 terminating from the north roughly at the centerline of Gadsden Avenue.
- Water and sewer are contained in 10th Street West, and in Avenue L between 5th Street West and 10th Street West.

### Electricity

Lancaster Energy (LE) and Southern California Edison (SCE) provide electricity to the City (City of Lancaster, 2024d). LE is the new, locally run, power program created by the City of Lancaster. LE began providing power to the public in 2015 (Lancaster Energy 2024a). Lancaster Energy contracts with private firms to procure energy. LE provides a cost-effective "Clear Choice" plan, offering clean energy at competitive rates from renewable sources, and the "Smart Choice" plan provides electricity from 100 percent renewable sources. SCE works with LE to deliver electricity, provide billing and customer service, and power line maintenance, and repair (Lancaster Energy, 2024b).

Electric lines along Avenue K and Sierra Highway, and contained in 10th Street West, are available to service the PVSP site (T&B Planning, 2024).

### Natural Gas

The Southern California Gas Company (SoCalGas) supplies the City with natural gas services (City of Lancaster, 2024d). Natural gas lines contained in 10th Street West and in Avenue L, between 5th Street West and 10th Street West are available to service the PSVP site (T&B Planning, 2024).

### Sewage Treatment

Collection, treatment, and disposal of wastewater within the City of Lancaster and adjacent unincorporated areas are under the jurisdiction of County Sanitation District No. 14 of Los Angeles County (District No. 14). District No. 14 owns and maintains the trunk sewers and the Lancaster Wastewater Reclamation Plant (LWRP), which convey and treat wastewater generated by residential, commercial and industrial areas of the City of Lancaster, as well as portions of the City of Palmdale and unincorporated County (City of Lancaster, 2009).

The LWRP currently provides primary, secondary, and tertiary treatment for design capacity of 18 million gallons of wastewater per day (MGD) and serves a population of approximately 160,000 people. Approximately 12.6 MGD of recycled water produced at the LWRP is used at over 55 different sites. This recycled water is used for municipal and industrial purposes in the City, landscape irrigation, to maintain water levels at Apollo Lakes Regional Park and Piute Ponds, and for irrigation of fodder crops (LACSD, 2024).

### Solid Waste Management

Waste Management of Antelope Valley is currently the only private hauler serving the City of Lancaster under an existing franchise agreement (City of Lancaster, 2024d). The Lancaster Landfill and Antelope

Valley Landfill are two landfill sites located in the Antelope Valley. Both are designated as Class III landfill facilities, which allows the disposal of non-hazardous waste.

The Lancaster Landfill has a remaining capacity of approximately 14,514,648 cubic yards and is estimated to operate until 2044. The maximum permitted throughput is 5,100 tons per day, which equates to 1,861,500 tons per year (CalRecycle 2024a). The Antelope Valley Landfill has a remaining capacity of approximately 17,911,225 cubic yards and is also estimated to operate until 2044. The maximum permitted throughput is 5,548 tons per day, which equates to 2,025,020 tons per year (CalRecycle 2024b). In total, the two landfills have a capacity of 3,886,520 tons per year.

Nearly 100 percent of the City's solid waste is taken to one of these landfills; however, other regional landfills in Los Angeles County also accept the City's solid waste (City of Lancaster, 2009).

Assembly Bill (AB) 939, also known as the California Integrated Waste Management Act, requires cities and counties to divert 50 percent of their wastes each year. The City of Lancaster has established recycling and resource recovery programs in compliance with the requirements of AB 939. As part of an effort the reduce the state's methane emissions, Senate Bill 1383 (SB 1383), which was signed into law in September 2016, required a 50 percent reduction in organic waste disposal by 2020 and a 75 percent reduction by 2025.

#### Telecommunication: Telephone, Mobile Phone, Cable, and Internet Services

A variety of telecommunications operators serve the Plan area, including, but not limited to, Antelecom, Inc., AT&T, AV Radio Net, DIRECTV, DISH Network, Frontier Communications, Race Communications, HughesNet, Spectrum, and Verizon (City of Lancaster, 2024e).

## 3.13.2. Regulatory Setting

### 3.13.2.1. Public Services

#### State Regulations

##### *Quimby Act*

The Quimby Act (Government Code § 66477) states that the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative map or parcel map, provided certain requirements are met. This Section further states that "the dedication of land, or the payment of fees, or both, shall not exceed the proportionate amount necessary to provide three acres of park area per 1,000 persons residing within a subdivision subject to this section."

##### *Mello-Roos Community Facilities Act*

The Mello-Roos Community Facilities Act of 1982 allows the creation of special districts authorized to levy a special tax and issue tax exempt bonds to finance public facilities and services. New residential developments within the Plan area will be required to annex into the existing community facilities district (CFD), which funds the provision of public services. Project developers may also elect to pursue the creation of a private CFD in order to fund improvements within the Plan area, or a similar mechanism at the discretion of the Director of Community Development and Director of Finance.

##### *California Health and Safety Code (Section 13000 et seq.)*

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-

rise building and childcare facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all State-owned buildings, State-occupied buildings, and State institutions throughout California.

### *California Code of Regulations (CCR) Title 24, Part 2 and Part 9*

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains fire-safety-related building standards referenced in other parts of Title 24. This Code is preassembled with the 2000 Uniform Fire Code of the Western Fire Chiefs Association. This Code was revised in January 2008 with a change in the base model/consensus code from the Uniform Fire Code series to the International Fire Code.

### *CCR Title 24, Part 6: Energy Efficiency Standards for Buildings*

Title 24, Part 6, of the California Code of Regulations contains the CEC's Energy Efficiency Standards for Residential and Nonresidential Buildings. Title 24 was first established in 1978, in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

### *Title 20, California Code of Regulations, Sections 1601 et seq: Appliance Efficiency Regulations*

The 2012 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) took effect February 13, 2013. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.

### *Assembly Bill 2926*

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill 2926 (AB 2926) in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

### *Senate Bill 50*

Senate Bill 50 ("SB 50," also known as Proposition 1A, codified in California Government Code Section 65995 et seq.) was enacted in 1988 to address how schools are financed and how development projects may be assessed for associated school impacts. SB 50 sets forth the "exclusive methods of considering and mitigating impacts on school facilities" resulting from any state or local planning and/or development project, regardless of whether its character is legislative, adjudicative, or both (Govt. Code § 65996[a]). Section 65995 provides that "[t]he payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995… are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property, or any change in governmental organization… on the provision of adequate school facilities." (Govt. Code § 65995[h]). The reference in Section 65995(h) to fees "imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995" is a reference to per-square-foot school fees that can be imposed by school districts on new residential, commercial, and industrial construction.

To accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts and occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

Pursuant to Section 65995.5(b) of the Government Code, the District must conduct and adopt a School Facilities Needs Analysis ("SFNA") as one of the prerequisites to levying alternative school facility fees on new construction of residences within the District in excess of those established in amounts specified in Section 65995 of Government Code ("Alternative School Facility Fees"). The existing statutory school facility fees established by Section 65995 of the Government Code are presently in the amount of $5.17 per square foot of assessable space for residential construction and $0.84 per square foot of chargeable covered and enclosed space for commercial construction (Lancaster School District, 2024b).

### Local Regulations and Plans

#### *City of Lancaster Municipal Code*

Title 15, Buildings and Construction, of the Lancaster Municipal Code provides building requirements for new and existing land uses.

**Fire Protection Regulations.** Chapter 15.32, Fire Code, adopts the 2020 Los Angeles Fire Code and the 2022 California Fire Code, which prescribes regulations governing conditions hazardous to life and property from fire or explosion within the City.

#### *City of Lancaster General Plan*

The City's General Plan contains the Safety Element and the Plan for Active Living, both of which describe public services such as police and fire services, emergency medical facilities, and school facilities. The City developed these two plans to guide existing and future growth of residential, commercial, and industrial development and the associated public services required to support population growth resulting from expanded development. The Safety Element and Plan for Active Living include goals, objectives, and policies that apply to public services in the PVSP area, which are outlined below.

**Goal 4.6.** Residents and businesses that feel safe and secure throughout the community.

> Policy 4.6.1. Ensure that adequate law enforcement is provided to the citizens and businesses of the City of Lancaster.
>
> Policy 4.6.2. Promote public safety through the incorporation of Crime Prevention Through Environmental Design (CPTED) concepts and other methods to design and implement new developments.
>
> Policy 4.6.3. Promote programs and partnerships that encourage citizens to take a proactive role in community safety and the welfare of their neighborhoods.

**Goal 4.7.** A resilient community where structural and wildland fire hazards are effectively managed and mitigated.

> Policy 4.7.2. Ensure adequate fire prevention and suppression infrastructure (fire stations, fire-fighting equipment) and personnel are available to protect the citizens and businesses of the City of Lancaster.
>
> Policy 4.7.2. Ensure that new development incorporates recommended design strategies to minimize the potential for fire.
>
> Policy 4.7.3. Promote community involvement in fire prevention activities.

**Goal 4.8.** A community with a strong sense of readiness to address emergency situations and activities.

Policy 4.8.1 Maintain a level of preparedness to respond to emergency situations that will save lives, protect property, and facilitate recovery with a minimum of disruption.

Policy 4.8.2. Effectively coordinate with neighboring jurisdictions and the Operational Area on planning, training, and exercises to effectively respond to major emergency incidents.

**Goal 4.10.** Medical services and facilities that meet community needs and desires.

Policy 4.10.1. Promote the provision of quality medical facilities and services to meet the needs of area residents and facilitate the expansion and extension of quality medical and emergency medical facilities to meet the needs of Lancaster residents and businesses.

**Goal 9.** To promote access to high quality local educational services for Lancaster residents.

Objective 9.1. Cooperate with local educational entities in their acquisition of sites and the construction of schools in such a manner to ensure the availability of adequate school facilities to serve the needs of Lancaster residents at all levels, including location of a four-year university within the City of Lancaster.

Policy 9.1.1. Work with area school districts to identify funding programs for school site acquisition and facilities construction which recognize chronic shortfalls in traditional funding programs, and to ensure that schools are appropriately located.

Policy 9.1.3. Facilitate the establishment of a four-year university within the City of Lancaster.

Objective 12.2. Promote the availability of local library facilities; book, audiovisual and other material reserves; computer databases; Internet access and programs in accordance with the standards of the American Library Association.

Policy 12.2.1. Promote the construction of libraries or expansion of existing libraries as required to meet the needs of existing and future residents.

### 3.13.2.2. Utilities and Service Systems

#### Federal Regulations

#### *Safe Drinking Water Act*

Passed in 1974 and amended in 1986 and 1996, the Safe Drinking Water Act (SDWA) gives the U.S. Environmental Protection Agency (USEPA) the authority to set drinking water standards. Drinking water standards apply to public water systems, which provide water for human consumption through at least 15 service connections, or regularly serve at least 25 individuals. There are two categories of drinking water standards, the National Primary Drinking Water Regulations (NPDWR) and the National Secondary Drinking Water Regulations (NSDWR). The NPDWR are legally enforceable standards that apply to public water systems. NPDWR standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water.

#### State Regulations

#### *California Water Code Sections 10610 et seq.: Urban Water Management Planning Act*

The Urban Water Management Planning Act of 1983 states that every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet (af) of water annually should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple dry years. Both SB 610 and SB 221 identify the urban water management plan (UWMP) as a planning document that can be used by a water

supplier to meet the standards in both statutes. Thorough and complete UWMPs are foundations for water suppliers to fulfill the specific requirements of these two statutes, and they are important source documents for cities and counties as they update their general plans. Conversely, general plans are source documents as water suppliers update the UWMPs. These planning documents are linked, and their accuracy and usefulness are interdependent.

The Urban Water Management Planning Act, California Water Code Sections 10610 et seq., requires preparation of a plan that:

- Plans for water supply and assesses reliability of each source of water, over a 20-year period, in 5-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implements conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (Senate Bill 7 of Special Extended Session 7 (SBX7-7)), which amends the act and adds new water conservation provisions to the Water Code.

### *California Water Plan Update 2023*

The California Water Plan, updated every five years, is the State's strategic plan for sustainably and equitably managing, developing, and stewarding water resources. 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 water plan is updated every 5 years. The most recent plan, updated in 2023, builds on existing water policies, laws and regulations, and initiatives and investments of the Newsom administration's Water Resilience Portfolio (Portfolio), Water Supply Strategy (Strategy), and recent legislation. The plan defines three themes, Addressing Climate Urgency, Strengthening Watershed Resilience, and Achieving Equity (DWR, 2023).

### *Senate Bills 610 and 221: Water Supply Assessments*

To assist water suppliers, cities, and counties in integrating water and land use planning, the State passed Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001), effective January 1, 2002. SB 610 and SB 221 improve the link between information of water-supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures that promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to local jurisdiction decision makers prior to approval of specified large development projects. This detailed information must be included in the administrative record as the evidentiary basis for an approval action by an agency. The statutes recognize local control and decision making regarding the availability of water for projects and the approval of projects. Under SB 610, water supply assessments (WSA) must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA, as defined in Water Code Section 10912[a]. Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative verification of sufficient water supply. SB 221 ensures collaboration on finding needed water supplies to serve new large subdivisions before construction begins.

### *Assembly Bill 939: Integrated Solid Waste Management Act of 1989*

Assembly Bill 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling,

composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

### *Assembly Bill 341 (2011)*

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses as well as schools and school districts.

### *California Green Building Standards Code*

Section 5.408 of the 2013 California Green Building Standards Code (Title 24, California Code of Regulations, Part 11) required that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. Since it's inception, The California Green Building Standards Code has been updated several times. In 2016, construction waste reduction was increased from 50 percent to 65 percent of the total building site construction waste, which helped meet the California Department of Resources Recycling and Recovery (CalRecycle) statewide solid waste recycling goal of 75 percent for 2020. The latest update went into effect on January 1, 2023. Significant changes for the 2022 CALGreen included amendments of the EV charging requirements for multifamily buildings, hotels, and motels. (HCD 2023).

### *Assembly Bill 1890 (1996)*

The California Public Utilities Commission (CPUC) regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., Southern California Edison) was decoupled. All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. The utilization of alternative energy applications in development projects, while encouraged, is not required as a condition of approval. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources (i.e., electricity and natural gas). Incentives, primarily in the form of state and federal tax credits, as well as reduced energy bills, provide a favorable basis.

### *Assembly Bill 1826 (2014)*

Assembly Bill 1826 (2014) requires certain businesses to set up recycling services for recyclables and organic waste. These laws also require the County to implement a commercial solid waste recycling program and an organic waste recycling program that is designed specifically to divert commercial solid waste and organic waste generated by businesses. Failure to comply may subject the city or county to fines of up to $10,000 per day.

### *California Public Utilities Commission*

CPUC General Order 112E, which is based on the Federal Department of Transportation Guidelines contained in Part 192 of the Federal Code of Regulations, specifies a variety of design, construction, inspection, and notification requirements. The CPUC conducts annual audits of pipeline operations to

ensure compliance with these safety standards. In addition, safety programs are in place in companies such as SoCal Gas that reduce the risk of gas distribution fires by improving welds on the larger diameter (24- to 30-inch) pipelines and replacing old distribution pipes with flexible plastic pipes.

SoCalGas has implemented and follows policies, procedures, and programs that govern the design, construction, testing, installation, operation, maintenance, and determination of maximum allowable operating pressure for gas transmission and distribution facilities. These policies, procedures, and programs are updated in a timely manner, as appropriate, in response to changes in regulation, safety advisories, and other safety information (SoCalGas, 2024).

### *California Energy Commission*

The California Energy Commission (CEC) was created as the State's principal energy planning organization in 1974, in order to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

- Forecasting statewide electricity needs;
- Licensing power plants to meet those needs;
- Promoting energy conservation and efficiency measures;
- Developing renewable energy resources and alternative energy technologies;
- Promoting research, development and demonstration; and
- Planning for and directing state response to energy emergencies.

## Local Regulations and Plans

### *City of Lancaster Municipal Code*

**Solid Waste.** The City's Municipal Code Chapter 13.16, Refuse Collection and Disposal, addresses waste collection and disposal within the City. The purpose of the Chapter is to promote the health, safety and welfare of residents in Lancaster by establishing regulations governing the collection and disposal of refuse.

**Recycling.** The City's Municipal Code Chapter 13.17, Requirements for the Collection and Recycling of Recyclable Materials and Collection and Organics Processing of Organic Material Generated from Commercial Facilities, Multi-Family Dwellings, And Special Events, establishes citywide requirements applicable to the 1989 California Integrated Waste Management Act - Assembly Bill 939 (AB 939), as amended by Assembly Bill 341 (AB 341), signed into law October 2011, Recycling of Commercial Solid Waste, and Assembly Bill 1826 (AB 1826), signed into law September 2014, Recycling of Organic Waste, and any future bills amending the 1981 California Integrated Waste Management Act. The bills state that their purpose is to increase the diversion of recyclable material and organic waste from landfill disposal. Chapter 13.17 ensures citywide compliance with state-mandated policies.

**Wastewater.** The City's Municipal Code includes two Sections related to new developments connecting to the City's sewer system and requires that the appropriate fees are paid. However, developments within the PVSP area are exempt from paying City impact fees.

### *City of Lancaster General Plan*

The City's General Plan contains the Plans for Municipal Services and Facilities and Physical Mobility, which describe infrastructure and service providers, the future needs for such services and facilities, and utility infrastructure. Specific topics include water facilities, wastewater facilities, flood control and drainage facilities, solid waste management, public facilities and buildings, and utility line easements. The City developed the Plan for Municipal Services and Facilities and the Plan for Physical Mobility to guide existing and future growth of residential, commercial, and industrial development. The two plans include goals,

objectives, and policies that apply to utilities and service systems in the PVSP area, which are outlined below.

**Goal 14.** A well-balanced transportation and circulation system which provides for the efficient and safe transport of goods and people within and through the City of Lancaster; and which balances concerns for mobility with concerns for safety and the quality of the City's living environment.

Objective 14.5. Ensure the ability to safely move commodities within and through the City of Lancaster, including availability of truck routes, pipelines, and other utility corridors, in such a manner as to minimize impacts on adjacent land uses and enhance Lancaster residents' quality of life.

Policy 14.5.2. Encourage the continued development of pipeline and utility corridors and rail freight lines, while minimizing the impacts on adjacent land uses and the roadway network.

**Goal 15.** A full range of municipal services and facilities at desired levels for urban and rural areas, as appropriate.

Objective 15.1. Achieve and maintain the following levels of service:

| Facility/Service | Performance Objective |
|---|---|
| Streets | Level of Service "C" wherever possible; Level of Service "D" during peak hours. |
| Sanitary Sewers | Restricted flow only during peak day, peak hour conditions. |
| Sewage Treatment | Remain within the rated capacity of the treatment facility. |
| Water Systems | Adequate fire flow as established by the County Fire Department; sufficient storage for emergency situations. |
| Flood Control | Provision of protection of structures for human occupancy from the FEMA 100-year flood. |
| Fire Protection | Five (5) minute average response time from receipt of alarm at station to time of arrival on scene. |
| Parks and Recreation | Five (5) acres per 1,000 population. |
| Libraries | 0.35 square feet of library space per capita and 2.0 loanable material items per capita. |
| Schools and other Public Buildings and Facilities | Sufficient number and size to provide required services. |

Policy 15.1.1. Promote continued coordination between the City of Lancaster and local service providers.

Policy 15.1.2. Cooperate with local water agencies to provide an adequate water supply system to meet the standards for domestic and emergency needs.

Policy 15.1.5. Ensure sufficient infrastructure is built and maintained to handle and treat wastewater discharge.

Objective 15.2. Minimize the negative impacts of solid waste disposal using a variety of methods including mitigating the disposal of waste from outside the Antelope Valley.

Policy 15.2.2. Minimize the generation of solid wastes as required by State law (AB-939) through an integrated program of public education, source reduction, and recycling

Objective 15.3. Ensure the coordination of development activity with the provision of public services and facilities in order to eliminate gaps in service provision, provide economical public services, and achieve the equitable sharing of the cost of such facilities and services.

Policy 15.3.1. Direct growth to areas with adequate existing facilities and services, areas which have adequate facilities and services committed, or areas where public services and facilities can be economically extended.

Policy 15.3.2. Ensure that the City is proactive in addressing the infrastructure and service needs of the wireless communications industry.

## 3.13.3. Environmental Impacts and Mitigation Measures

The issues presented in Appendix G of the State CEQA Guidelines were used to define thresholds of significance. Impacts associated with public services and utilities may be considered significant if they would result in the following:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  a. Fire Protection;
  b. Police Protection;
  c. Schools;
  d. Parks;
  e. Other Public Facilities.
- 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?
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- 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?
- 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?
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

### Impact Assessment Methodology

Based on these significance thresholds and criteria, the Project's effects have been categorized as either "no impact," a "less-than-significant impact," or a "significant impact." Mitigation measures are recommended for significant impacts. If a significant impact cannot be reduced to a less-than-significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

### Environmental Impact Analysis

**Impact PS-1: Substantial adverse physical effects associated with the provision of 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.**

#### *Fire Protection*

Implementation of the PVSP would allow for the development of residential uses and various other land uses, at various densities throughout the Plan area. The PVSP provides for a maximum of 4,246 residential dwelling units within the 233.5 acres permitted for residential uses within the three residential land use categories. The PVSP also provides for the development of mixed uses, including commercial uses, restaurants, lodging, technical schools, fitness centers, medical uses, schools, and parks, including the new aquatics center. The Plan does not propose the development of any fire stations. The development of residential land uses and various other land uses would result in an increased demand for fire protection services and facilities.

The LACFD's goal is to have a fire station within 1.5 miles of all fully developed urban areas. The nationally recognized guideline is a five-minute response time in urban areas, which is usually achieved within a 1.5-mile distance. The nearest fire station to the Project is approximately 1 mile away; therefore, the Plan area is close enough to an existing fire station to meet the LACFD's goal.

All new development would be required to comply with applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and hydrants. Individual projects would be reviewed on a project-by-project basis by the LACFD to determine the specific fire requirements applicable to the specific development and to ensure compliance with these requirements.

Compliance with the City's Municipal Code, LACFD requirements, and policies in the City of Lancaster General Plan would ensure impacts to fire protection services would be less than significant.

#### *Police Protection*

Implementation of the PVSP would allow for the development of residential uses and various other land uses, at various densities throughout the study area, which would result in an increased demand for police protection services and facilities. An additional 4,246 dwelling units are proposed in the Specific Plan. Section 3.12, Population and Housing states that the 2024 persons per household is approximately 3.06. Given this estimate, an additional 4,246 dwelling units would add approximately 13,000 residents. Additionally, other developments proposed in the PVSP, such as commercial uses, restaurants, lodging, medical offices, and schools, would lead to an increase in the amount of people living, working, and staying in the area.

The LACSD recommends a staffing level of one officer per 1,000 people. Currently, there are 230 sworn deputies and over 100 civilian personnel part of the LACSD's Lancaster Station. As stated in Section 3.12, Population and Housing, the estimated population in 2035 and 2050 for the City of Lancaster is 163,390, and 167,285, respectively. This estimate should encompass the population growth that would occur due to the maximum number of dwelling units proposed in the PVSP. However, even if this estimate does not account for all additional development in the PVSP, the approximately 13,000 additional residents would bring the estimated population to 180,285. Based on LACSD's recommended staffing ratio, there are more than enough police personnel to serve the City.

Additionally, the Lancaster Police Department was formed in 2023, partnering with the Los Angeles County Sheriff's Department to enhance and support the efforts of the LACSD, allowing the LACSD to focus

on major crimes, while the Lancaster Police Department implements prevention programs to address community safety issues. Currently there are only two sworn officers in the department, establishing the foundation of the force, with plans to hire additional officers.

Law enforcement needs for the City of Lancaster are determined annually. The City's contract with the LACSD allows for annual renegotiation, during which staffing considerations for the Lancaster Station is continually reviewed and adjusted accordingly. Therefore, if an increase in law enforcement resources were needed, they can be addressed on a yearly basis and based on the needs at that time. The Lancaster Police Department is also growing, while focusing on prevention programs, which will prevent crime from happening in the City and within the PVSP area.

Additionally, new development projects would be reviewed by the City on a project-by-project basis to determine potential impacts to police protection services and mitigation measures to reduce such impacts would be recommended, as necessary.

Based on the existing number of police personnel in the City of Lancaster and the estimated population in 2035 and 2050, there would not be an increased demand for police protection services or facilities. Therefore, impacts would be less than significant.

### *Schools*

The PVSP area is served by the Lancaster School District (LSD), which operates 26 lower-grade schools and has 14,835 students enrolled, and the Antelope Valley Union High School District, which serves over 22,000 students within several high schools. Implementation of the PVSP would allow for increased residential development, which would increase the number of students attending schools within the LSD.

The PVSP includes an 8.7-acre site designated for school uses, within Planning Area H. Potential school uses could include public, charter, or private schools and are limited to elementary, middle, high school, colleges, and associated uses and activities.

Development within the PVSP would increase the number of students in the LSD, and the AVUHSD, but this would happen gradually, as individual developers build housing units. Additionally, the developers would be subject to paying the existing statutory school facility fees established by Section 65995 of the Government Code.

Consistent with Senate Bill 50, payment of developer fees to the applicable school district is considered full mitigation for project impacts, including impacts related to 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, or other performance objectives for schools. Individual project applicants would be required to pay the statutory fees to the applicable school district that would serve new students associated with a project; thereby, reducing school impacts to a less-than-significant level. Additionally, the General Plan identifies policies to ensure that adequate facilities are available to serve students, such as working with school districts to address funding shortfalls, further reducing impacts to a less-than-significant level.

### *Parks*

The PVSP includes several Planning areas that would include six neighborhood parks, six linear/trail system parks, a community park, and a plaza to accompany many residential Planning areas located within the Residential District and some contained in the other Planning areas. The Plan proposes to designate 27.8 acres for parks. This is in addition to the requirement for private and public open space within individual residential developments. Given the City's established park standard of 5.0 acres of parkland per 1,000 residents, the Plan would provide adequate parkland for approximately 6,000 residents.

Individual development projects would be reviewed on a project-by-project basis to determine their potential impact on park and recreation facilities. With the forecasted growth expected in the city, consistent with SCAG's Connect SoCal RTP/SCS growth for the region, it is anticipated that the existing neighborhood and regional parks in the Plan vicinity would experience physical deterioration of their facilities. However, future development in the Specific Plan area would be required to comply with and be consistent with the City's General Plan and Municipal Code.

Compliance with the City's General Plan and Municipal Code would ensure that ensure park and recreation impacts associated with development of the PVSP would be less than significant.

### *Other Public Facilities*

The PVSP includes several Planning areas, one of which is for medical use. This would allow for the construction and operation of up to a 200-bed hospital, and up to 500,000 square feet of medical-related office type uses. The nearest hospital to the Plan area is Antelope Valley Hospital, located approximately 1.4 miles northwest. Kaiser Permanente Antelope Valley Medical Offices are located within the Plan area in the southwest corner on Avenue L.

The PVSP includes Planning Area H, which is planned for an 8.7-acre school site. However, if Planning Area H is not developed as a school facility, it may be developed as other public serving uses, such as libraries or museums. The nearest library to the Plan area is the Lancaster Library, located approximately 1.6 miles north. The LA County Library has standards in place to ensure that there are enough materials and resources to meet the needs of the County. Their 2024-2028 Strategic Plan outlines strategies to ensure reliable, long term service. The plan includes securing support from elected officials and funders to create a sustainable budget, which would allow for expansion of the services already offered, to meet demand of a growing population. Additionally, the Library Commission's goals include advising the County Librarian with regard to the changing needs of the areas they serve and advocating for funding.

With the forecasted growth expected in the City, consistent with SCAG's Connect SoCal RTP/SCS growth for the region, it is anticipated that the existing medical facilities and libraries could experience increased use and may experience physical deterioration of their facilities. However, the PVSP includes the development of medical facilities and other public services, along with the development of housing, to serve the additional residents.

New residential developments within the PVSP area will be required to annex into the existing CFD, which funds the provision of public services, excluding libraries. Project developers may also elect to pursue the creation of a private CFD in order to fund improvements within the Specific Plan area, or a similar mechanism at the discretion of the Director of Community Development and Director of Finance.

While new development would increase the use of existing public services, the PVSP would include the construction of new facilities for public services. Additionally, future development in the Plan area would be required to comply with and be consistent with the City's General Plan and Municipal Code, which would ensure that impacts to other public facilities would be less than significant.

**Impact PS-2. 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.**

The PVSP would allow for the development of a variety of land uses including residential, commercial/ office, medical, parks, and schools which would increase the need for public utilities. Impacts to individual utilities such as water, wastewater, electricity and natural gas are discussed below.

### *Water*

Development associated with the buildout of the PVSP would increase water demand and the need for new water supply, storage, and transmission facilities. For new development projects to receive water service, the projects will be subject to an agreement with District 40, together with any and all applicable fees, charges, plans, and specifications. New development is required to install adequately sized water mains to provide domestic service and meet fire flow requirements.

Development projects would be required to coordinate with the LACWD to ensure that transmission capacity and adequate storage would be available or planned to support the development, and if necessary, provide the improvements required to serve the project. Prior to construction of individual development projects, projects would be required to prove to the LACWD that the additional flow would not impact the water system and/or provide adequate funds for necessary improvements to the water system. Therefore, impacts are less than significant.

### *Wastewater*

The LWRP currently provides primary, secondary, and tertiary treatment with a design capacity of 18 million gallons of wastewater per day (MGD). Currently, the LWRP processes an average recycled water flow of 13.9 MGD. Therefore, there is excess processing capacity of approximately 4 million gallons of wastewater a day. Wastewater generated by developments within the Plan area would discharge to local sewer lines for conveyance to one of the following truck sewer lines maintained by the District: 1) 10$^{th}$ Street West Trunk in 10$^{th}$ Street north of Avenue K-15; 2) Amargosa Creek Trunk located in Avenue L at 5$^{th}$ Street West; or 3) Trunk E located in Sierra Highway south of Avenue K.

It is possible that the growth in the Plan area, and the planned growth in the City of Lancaster as a whole, would result in a need for new or expanded wastewater treatment facilities. However, developments in the Plan area would be reviewed on a project-by-project basis to ensure that there is sufficient wastewater treatment capacity available to serve the development.

New developments would only be allowed to connect to the City's sewer systems if there is sufficient capacity or planned expansions of its facilities to accommodate new developments proposed. Therefore, new development would not be permitted to exceed the capacity of wastewater conveyance systems or treatment facilities, since adequate capacity must be demonstrated in order to contribute flows to the system.

### *Electric Power*

Lancaster Energy would provide energy to the Plan area, and SCE power lines would deliver it to the site. Lancaster Energy and SCE anticipates providing sufficient energy to meet new and existing demand. Due to continued growth in the City, power transmission lines and electrical infrastructure would be necessary to be extended in accordance with SCE's projected development demands. Development under the proposed Plan would be reviewed on a project by-project basis to determine project-specific SCE service requirements. Financial responsibility for any updates or additional facilities would be in accordance with SCE's rules and tariffs approved by the California Public Utilities Commission. All new developments that require new electricity lines to be installed would be required to pay applicable fees assessed by SCE. SCE would not provide service to new developments if there were not adequate electricity supplies and infra-structure to maintain existing service levels and meet the anticipated electricity demands of the specific development requesting service. In addition, all new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. Therefore, impacts would not be significant in this regard. Further, policies

in the City's General Plan, and design guidelines in the Specific Plan have been identified that would further reduce energy consumption through energy conservation.

### *Natural Gas*

Natural gas service to the Plan area is provided by SoCalGas. Buildout of the PVSP would result in an increase in demand for natural gas supplies and service, due to an increase in population and service square footage. Future loads and energy consumption varies for a variety of reasons, including changes in energy usage, demand levels (reflective of new development and population growth), and weather patterns. As such, a quantitative projection of future natural gas demands associated with implementation of the Plan is not provided. SoCalGas has planned for and is able to meet the growing energy need of the City of Lancaster. Facility expansions are based on projected demands. The availability of natural gas supplies is evaluated on a project-by-project basis, based on the current conditions at that time.

Development under the PVSP would be reviewed on a project-by-project basis to determine project-specific SoCalGas service requirements. Future developments that require new natural gas infrastructure would be required to pay all applicable fees assessed by SoCalGas necessary to accommodate the specific project. Natural gas service provided would be required to comply with all policies and extension rules of SoCalGas when contractual arrangements are made with the development applicant. SoCalGas would not allow new development projects to connect to existing gas main unless the system could maintain adequate service and supply to existing customers and meet the anticipated demands of the project requesting service. Proposed development within the boundaries of the PVSP would be subject to sustainable design practices, which would reduce energy consumption through development of energy-conserving buildings and required solar energy systems.

The reduced energy consumption is reflected in Connect SoCal's 2024 report. The report uses energy consumption to assess Connect SoCal plan performance relative to resource efficiency. In 2019, the average household in the SCAG Region consumed around 61.2 million British Thermal Units (BTU) of energy. With implementation of Connect SoCal 2024, it is projected that, by 2050, the average annual household energy use will decrease to 44.6 million BTU, which is a reduction of about 25 percent (SCAG 2024). Given that there is sufficient supply currently, supply would grow as a response to development, and the demand for energy would be reduced, impacts would be less than significant to natural gas resources.

**Impact PS-3. Availability of sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.**

Development within the boundaries of the PVSP would increase water demand and the need for new water supply, storage, and transmission facilities. A water supply assessment (WSA) was prepared for the PVSP on behalf of Los Angeles County Waterworks District 40, the water supplier for the Plan area.

The WSA identifies the estimated water demand for the PVSP as 4,125 acre feet/year (AFY). District 40's existing water demand is 45,818 AFY, and it is expected to grow to 66,300 AFY by 2045.

The WSA presents District 40's normal water year scenario, which shows that the water demands for the PVSP of 4,125 AFY could be accommodated within the estimated system wide supply. This indicates that the demand for water would not be an issue in a normal water year scenario.

In a single-dry year scenario, based on the driest year on record in the area, and a multiple-dry year scenario, based on five consecutive dry years, District 40 determined that the demand for water can be met by pumping groundwater from its banked supplies, and no supply deficit is anticipated for either scenario. The WSA states that although there are supplies to meet demands, District 40's water supply is very near the limit of what the region is able to accommodate, and that the development related to the PVSP will add stress to an already stressed supply.

The PVSP places an emphasis on water conservation in its design guidelines, which would reduce the stress on the water supply. The LACWD currently assesses a fee per billing unit for each new development in the district to fund construction of projects that would assist in water supply, including expansion of the recycled water system, construction of a groundwater bank, and additional groundwater wells. Other potential options to increase water supply include developing or expanding groundwater storage programs, and acquiring new imported water supplies, or by participating with other State Water Project contractors.

Site-specific development projects would be required to coordinate with the LACWD to ensure that transmission capacity and adequate storage would be available or planned to support the development, and if necessary, provide the improvements required to serve the project. Prior to construction of individual development projects, project developers would be required to prove to the LACWD that the additional flow would not adversely impact the water system and/or provide adequate funds for necessary improvements to the water system. For these reasons, impacts would be less than significant.

**Impact PS-4. Adequacy of capacity to serve the project's projected demand in addition to the wastewater service provider's existing commitments.**

As stated above, the LWRP currently provides primary, secondary, and tertiary treatment with a design capacity of 18 million gallons of wastewater per day (MGD). Currently, the LWRP processes an average recycled water flow of 13.9 MGD. Therefore, there is excess capacity of approximately 4 million gallons of wastewater a day. Developments in the PVSP would be reviewed on a project-by-project basis to ensure that there is sufficient wastewater treatment capacity available to serve the development.

New developments would only be allowed to connect to the City's sewer systems if there is sufficient capacity or planned expansions of its facilities to accommodate new developments proposed. Therefore, new development would not be permitted to exceed the capacity of wastewater conveyance systems or treatment facilities, since adequate capacity must be demonstrated in order to contribute flows to the system, and impacts would be less than significant.

**Impact PS-5. Generation of solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or other impairment to the attainment of solid waste reduction goals.**

Implementation of the PVSP would allow for the development of housing and other land uses such as commercial, office, medical, etc., and would therefore increase the amount of solid waste generated in the City of Lancaster, both during construction of these developments and as a result of an occupancy/ operation. Table 3.13-2 presents the estimates of solid waste generated by each land use category proposed in the PVSP area.

**Table 3.13-2. Estimated Solid Waste Generation**

| Land Use | Units | Generation Factor | Solid Waste Generation |
|---|---|---|---|
| Residential | 4,246 dwelling units | 11.4 lbs/dwelling unit/day | 48,404 lbs/day |
| Mixed Use (town center, office, workshop) | 52.2 ac<br>2,273,832 sq ft | 0.006 lb/sq ft/day | 13,643 lbs/day |
| Medical | 200 beds | 16 lbs/bed/day | 3,200 lbs/day |
| School | 8.7 ac<br>378,972 sq ft | 0.007 lb/sq ft./day | 2,653 lbs/day |
| Parks, Existing Facilities, Other land uses | 159.4 ac<br>6,943,464 sq ft | 0.007 lb/sq ft./day | 48,604 lbs/day |
| Total | | | 116,504 lbs/day<br>21,262 tons/year |

Source: CalRecycle, 2024c.

The full buildout of the Plan area would generate approximately 21,262 tons of solid waste per year, in addition to the solid waste already generated in the City. The Plan area is served by two landfills, each estimated to operate until 2044. The two landfills that serve the Plan area have a combined capacity of 3,886,520 tons per year, which is several orders of magnitude greater than the solid waste expected to be generated by the projects within the PVSP area, at 21,262 tons per year. Therefore, the proposed Plan would not generate solid waste in excess of the capacity of local infrastructure.

Regarding state and local standards, compliance with County and City waste reduction policies and programs would reduce the volume of solid waste entering landfills. Individual development projects within the City would be required to comply with applicable State and local regulations, thus reducing the amount of landfill waste by at least 50 percent. By complying with the City's Municipal Code, Chapter 13.17, individual developments would also be compliant with state mandated policies related to solid waste. Therefore, the Plan would not generate solid waste in excess of standards or in excess of the capacity of local infrastructure and impacts would be less than significant.

**Impact PS-6. Compliance with federal, state, and local management and reduction statutes and regulations related to solid waste.**

All new development projects would be required to comply with federal, state, and local statutes and regulations related to solid waste. The City's General Plan and Municipal Code include policies to reduce solid waste generation and disposal at landfills, which includes compliance with state-mandated policies. Additionally, future development projects resulting from the implementation of the PVSP would be reviewed on a project-by-project basis to ensure that solid waste disposal services and landfill facilities would be available to serve the development. As discussed above, there is sufficient capacity to serve the planned development. Therefore, implementation of the PVSP would result in less than significant impacts in this regard.

## 3.13.4. Cumulative Impact Analysis

### Cumulative Effects of the Proposed Project

Cumulative effects related to public services, utilities, and service systems are analyzed in terms of the service areas of the providers serving the Plan area, which includes the City of Lancaster. The PVSP and development projects in the cumulative scenario, presented in Section 3.1, together, could increase demand for public services and utilities in the City of Lancaster. This has the potential to result in a significant cumulative impact on public services and utilities.

#### *Fire Protection, Law Enforcement, and Health Services*

Construction of present and reasonably foreseeable future projects may overlap with construction of individual projects constructed in the Plan area. The other present and reasonably foreseeable cumulative projects that fall within the geographic scope for fire and law enforcement services are primarily made up of single- and multi-family residential housing, industrial, and commercial projects; similar to the development proposed in the PVSP.

The greatest potential for fires and fire hazards would exist at individual project sites during construction because the on-site workforce would be at its peak, which would create human presence-related hazards, with the variety of equipment used that could create sparks or other potential fire hazards. The combined effects of the increased cumulative demand for fire, law enforcement, and emergency medical services from the cumulative projects within the geographic scope of analysis has the potential to result in a significant cumulative impact.

However, as discussed above, there is sufficient law enforcement personnel, fire services, and medical services in the City of Lancaster to accommodate a larger population, such that such that the residual demand would not exceed established service ratios or require new or physically altered facilities, the construction of which could cause environmental impacts.

Other projects would be required to comply with similar standards and regulations to reduce the potential for fire risks. Therefore, the Project's contribution to cumulative impacts would not be considerable.

### *Schools and Libraries*

Implementation of the development proposed in the Plan area would result in a growth in the population of the area. Development of specific projects would happen gradually, and it is likely that construction workers would either reside in the City of Lancaster or within a reasonable driving distance, and therefore would not need to relocate to the area. The PVSP proposes the development of a school, which would reduce the demand from the increased population on the existing schools. Therefore, the PVSP would not make a considerable contribution to cumulative impacts related to schools or public libraries.

### *Utilities*

There are sufficient water supplies to service the developments proposed as part of the PVSP. There is also sufficient capacity at solid waste facilities in the City of Lancaster to serve the development proposed as part of the PVSP. Individual projects constructed in the Plan area, and cumulative projects, would be reviewed on a project-by-project basis to determine if there are sufficient utilities to serve the development. Therefore, the PVSP would not make a considerable contribution to cumulative operational impacts on utility services.

# 3.14. Transportation

This section evaluates potential transportation impacts resulting from the implementation of the Parkway Village Specific Plan (PVSP). This section is primarily based on the preliminary Traffic/Transportation Impact Analysis (TIA) for the PVSP, prepared by Garland Associates in October 2024. Although not included in this section of the EIR, the TIA includes an intersection Level of Service (LOS) analysis for all project vicinity roadways surrounding the Plan Area. As individual development projects are proposed within the boundaries of the PVSP, detailed, project-specific local transportation analyses will be conducted.

This section of the EIR identifies associated regulatory requirements; describes the existing traffic conditions within vicinity of the Plan area; evaluates potential adverse impacts related to conflicts with an applicable program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities; conflicts or inconsistencies with State CEQA Guidelines Section 15064.3(b); increase in hazards due to a geometric design feature or incompatible uses and inadequate emergency access; and identifies mitigation measures related to implementation of the proposed Project. The transportation analysis in this section presents and uses the vehicle miles traveled (VMT) metric per CEQA requirements.

## 3.14.1. Environmental Setting

### 3.14.1.1. Existing Conditions

#### Regional Access

The Plan Area is located within the City of Lancaster (City) in Los Angeles County, California. The Antelope Valley Freeway (State Route [SR] 14) is an important regional transportation corridor linking the city to the rest of the Antelope Valley and beyond. SR 14, located approximately one-half mile west of the Plan Area, provides the primary regional connection between Lancaster and the greater metropolitan area of Los Angeles, the City of Palmdale, and the Santa Clarita Valley. The City of Los Angeles is located approximately 75 miles to the south along SR-14. Additionally, SR 14 extends north to Kern County before connecting to Highway 58 in Mojave and transitioning to Interstate Highway 395 north of Inyokern. The facility contains 6 travel lanes, 3 in each direction, in the vicinity of the Plan area, with ramp connections to Avenue J, Avenue K, Avenue L, and 20$^{th}$ Street West.

#### Local Access

The Plan Area is approximately 434.7 acres and consists of multiple parcels bordered by Avenue K-8 and Avenue K to the north; 10th Street West to the west; Sierra Highway to the east; and Avenue L to the south. The Plan Area consists of mostly vacant land with some parcels being developed and containing existing uses. The Plan Area is located in a largely urbanized area and is surrounded by existing development and bordered by paved roadways, aside from the northern portion of the western boundary which abuts the eastern boundary of several multi-family residential neighborhoods.

#### Roadway Facilities

The roadway facilities surrounding the Plan Area are comprised of regional roadways, several major and secondary arterials, collector roadways, and local streets as defined below.

##### *Regional Roadways*

Regional roadways serve an important role in the City by providing regional access to Lancaster from surrounding municipalities and beyond. Regional roadways include state freeways such as State Route (SR) 14, otherwise known as the Antelope Valley Freeway, and highways such as the Sierra Highway, as well as various arterials that also serve regional functions by linking the City to regional transportation

networks such as Avenue D (SR 138) that connects the City to Interstate 5 (I-5) near the Ventura County border to the west.

### *Major Arterials*

Major arterials in the City are able to accommodate four to six through-travel lanes and primarily intended to provide traffic movement and secondary land access. Access is provided by at-grade intersections normally spaced at one-quarter-mile intervals, with direct access limited to major traffic generators. Some traffic movements may be restricted or controlled. On-street parking is normally prohibited. Right-of-way (ROW) widths vary from 100 feet at mid-block locations, widening up to 130 feet for intersections and driveways. Major arterials are normally spaced at one-mile intervals. Within the Plan area, Avenue K, Avenue L, Sierra Highway, and 10th Street West are designated as major arterials.

### *Secondary Arterials*

Secondary arterials provide more local access than major arterials, while also providing a reduced level of non-local through-traffic service. Secondary arterials can accommodate two to four travel through lanes, a bike lane in each direction and a left-turn lane within 68 feet of curb-to-curb space, within an 84-foot ROW. These roadways are typically undivided and, in some cases, have limited on-street parking. Turning lanes exist at most major intersections with some control of pedestrian vehicular access for driveways, cross streets, and crosswalks. Within the Plan area, only Avenue K-8 is designated as a secondary arterial roadway.

### *Collector Roadways*

Collector roadways of Lancaster provide access for neighborhood and commercial land uses via the greater arterial network. These roadways are generally two lanes wide with limited access to driveways and cross streets. They are typically undivided roads with no turn lanes at intersections. Collectors in Lancaster comprise of 44 feet curb-to-curb, within a 64-foot ROW. There are no designated collector roadways in the Plan area.

### *Local Streets*

Local streets serve residential land uses only, allowing on-street parking and access to residential driveways for neighborhoods within the city. Local residential streets are allocated a 42-foot roadway within a 60-foot ROW. These streets are not intended to serve through traffic traveling from one street to another. Within the Plan Area, Gadsden Avenue, Avenue K-4, 5th Street West, and Avenue K-6 in the commercial and multi-family residential area adjacent to, and northwest of the site are designated as local streets. Parkway Village Specific Plan Proposed Roadway Network

***Future Sierra Highway*** would be designed as proposed in the Specific Plan; however, in the event that the California High Speed Rail is implemented, the segment of the highway adjacent to the Plan site will need to be expanded to realigned and redirect the additional vehicular traffic through the Specific Plan area. In the case that the Sierra Highway realignment does proceed forward, the intersection of West Avenue K and Sierra Highway will shift approximately 600 feet to the west of its current location and travel in a north/south alignment through the Plan Area. The Future Sierra Highway would provide a 100-foot-wide ROW and would contain a 30-foot-wide landscaped median, turn lanes at major intersections, and two 10-foot-wide drive lanes and a 15-foot-wide landscaped buffer on each side of the street. In addition to the 100-foot-wide ROW, the Future Sierra Highway would also provide 180 feet of landscaped buffer, making the total width of the Future Sierra Highway corridor 280 feet.

***Urban Collectors*** in the Plan area would consist of two variations of roadways with this designation (variations A and B in the PVSP). As shown on Figure 2-5, Street Hierarchy Plan, the only proposed Variation A Urban Collector would be located in the southwestern quadrant starting from 10th Street West at the

Plan's western boundary and heading east along the northern boundaries of planning areas 1-3, turning south to divide planning area 3 and Park E, and finally turning east again along the southern boundaries of Park E and planning area 10 and ending at the intersection with 5th Street West. Features would include rainwater harvesting (bioswales), pedestrian crossings, sidewalk connections within the 100-foot ROW, and opportunities for on-street parallel parking. The only Variation B Urban Collector proposed would be located within the southwestern quadrant as well starting from the northeastern corner of planning area 8 and heading southwest between the southeastern boundary of planning area 8 and the northeastern boundaries of the School planning area (F) and Park E, then ending at a 'T' intersection with the Variation A Urban Collector mentioned above. This variation would not include on-street parking due to its location being in close proximity to the school. Similar to Variation A, the 100-foot-wide ROW of Variation B provides for bioswales and sidewalk connections.

***General Collectors*** would be the primary connections between the residential neighborhoods in the Plan area to the Medical district and School (Planning Area F). These collectors are designed to be provide an 80-foot-wide ROW, include a 10-foot-wide landscaped setback located in a public easement outside the ROW, making the total width 100 feet wide. General Collectors in the Plan area would be an extension of the existing Avenue K-8 and 5th Street West in the Plan area. Avenue K-8 would terminate at the eastern boundary of the Plan area.

***Minor Collectors*** would provide connections between the residential planning areas of the PVSP and as shown in Figure 2-5 are proposed to be extensions of Avenues K-4 and K-6, and connecting to Park J (after intersecting with 5th Street West and the Future Sierra Highway) and 5th Street West, respectfully. An additional Minor Collector would connect 5th Street West to Park M (also intersecting with the Future Sierra Highway). These roadways would comprise of a 60-foot-wide ROW, and additional 10-foot-wide setback outside the ROW in a public easement that would contain the remaining portion of the meandering sidewalk and additional landscaped setback area for a total width of 80 feet. Minor Collectors shall comply with all applicable City of Lancaster requirements. Final driveway connection locations shall be determined in conjunction with the final design of implementing development projects.

***Local Streets*** in the Plan area would provide access between the residential neighborhoods and would be located primarily on the east side of the Plan Area. Figure 2-5 shows a proposed Local Street surrounding Planning Areas 35, 38, 39 and Park M; then a single Local Street connecting to Park K to the north. These local roadways are planned to connect the Neighborhood, Suburban, and the Urban planning areas and would consist of a 60-foot-wide ROW. As with Minor Collectors, the final driveway connection locations shall be determined in conjunction with the final design of implementing development projects.

***Plaza Street*** is a single one-way loop road surrounding Plaza A in the Plan area, accessible from the eastern and western ends of the plaza. This street would include a 64-foot-wide ROW, a 12-foot-wide one-way drive land, angled parking, and a 10-foot-wide landscape buffer area. An additional 10-foot-wide building setback would provide space for pedestrian circulation within the ROW. This roadway would comply with the city's street requirements and the final driveway connections would be determined coinciding with the final designs included with the implementation of development projects in this area.

***Mixed Use Streets*** would provide access to the Mixed-Use planning areas located in the Plan's southwestern quadrant that include the Town Center Planning Areas 1 through 6, as well as the Planning Area 9 and Park C. These streets would also connect to the Plaza Street surrounding Plaza A, with one street connecting Plaza A to 10th Street West, one street connecting to Avenue K-15, and one street going along the northwestern boundary of the Kaiser Permanente Expansion Area. Similar to collector streets, Mixed Use Streets would include bioswales for rainwater harvesting and sidewalk connections. These streets would provide a 52-foot ROW, a 10-foot-wide setback on both sides of the street for pedestrian circulation and building canopies, and would either include parallel parking or would not, depending on final design of implementing development projects for a total of 72 feet of roadway width.

***Private Drive Aisles*** would connect individual planning areas to the previously mentioned roadways and would include vehicular and pedestrian access within each planning area. These aisles would provide vehicular access for automobiles to parking and loading areas that would serve residential and non-residential uses. Final locations, alignments, and widths would be determined in conjunction with the approval of design plans for future developments.

All Streets in the Plan area are intended to be privately maintained and shall comply with all Lancaster requirements. Additional features, such as those of the Future Sierra Highway, bike lane buffers and bollard locations, drive lane widths, headers, planting islands, curbs, landscaped buffers and more of the proposed roadway network within the Plan Area can be found in the PVSP.

### Traffic Study Intersections and Roadways

The streets that provide access to the Plan area include Avenue K, Avenue K-8, Avenue L, 10th Street West, 5th Street West, Sierra Highway, and Gadsden Avenue. Regional access is provided by SR 14, which is a freeway located approximately one-half mile west of the Plan area. The following paragraphs provide a brief description of the characteristics of these streets and highways.

#### *Avenue K*

Avenue K is a six-lane east-west street that abuts the north side of the Plan area. It narrows to five lanes along most of the segment east of Gadsden Avenue (two eastbound lanes and three westbound lanes). Sidewalks are in place on both sides of the street and parking is prohibited on both sides. There is a protected bike lane on the south side of Avenue K between Gadsden Avenue and Sierra Highway. The speed limit on Avenue K is 35 miles per hour (mph) west of SR 14, 40 mph between SR 14 and Gadsden Avenue, and 45 mph east of Gadsden Avenue.

#### *Avenue K-8*

Avenue K-8 is a two-lane east-west street that extends easterly from 10th Street West into the Plan area. It is an existing street from 10th Street West to a terminus east of Gadsden Avenue and a paved bike path currently extends from the east end of the existing Avenue K-8 to Sierra Highway. Sidewalks are in place on the north side of the street and along a developed property on the south side of the street immediately east of 10th Street West. Parking is prohibited on Avenue K-8 and bike lanes are in place on both sides of the street. The speed limit on Avenue K-8 is 40 mph.

#### *Avenue L*

Avenue L is a six-lane east-west street that abuts the south side of the Plan area. It widens to seven lanes between 10th Street West and SR 14 (three eastbound lanes and four westbound lanes) and it is a four-lane street west of SR 14 and east of Sierra Highway. Sidewalks are in place on both sides of the street, parking is prohibited on both sides of the street, and there are no bike lanes. The speed limit on Avenue L is 55 mph east of SR 14 and 50 mph west of SR 14.

#### *10th Street West*

10th Street West is a four- to six-lane north-south street that abuts the southwest area of the Plan area and runs approximately three-eighths of a mile west of the northwest area of the Plan area. It has five lanes north of Avenue K (three northbound lanes and two southbound lanes), six lanes between Avenue K and Avenue K-8, four lanes between Avenue K-8 and Avenue L, and six lanes south of Avenue L. Sidewalks are in place on both sides of the street and parking is prohibited on both sides. There is a protected bike lane on both sides of 10th Street West between Avenue K-8 and Avenue L. The speed limit on 10th Street West is 50 mph south of Avenue K and 45 mph north of Avenue K.

### *5th Street West*

5th Street West is a three-lane north-south street (one northbound lane and two southbound lanes) that extends northerly from Avenue L into the Plan area. It is an existing street from Avenue L to a terminus approximately 500 feet north of Avenue L and serves as the entry/exit road for Kaiser Permanente, which is on the northwest quadrant of 5th Street West and Avenue L. North of the existing paved segment of 5th Street West, it continues as a dirt road through the Plan area to Avenue K. A sidewalk is in place on the west side of the street and parking is prohibited on both sides. There are painted bike lanes on both sides of 5th Street West. There is no posted speed limit on 5th Street West.

### *Sierra Highway*

Sierra Highway is a four-lane north-south street that abuts the east side of the Plan area. Sidewalks are in place on the west side of the street and parking is prohibited on both sides of the street except for a limited area adjacent to a developed parcel north of Avenue L where the street has been widened. There is a two directional bike path on the east side of Sierra Highway that is physically separated from the vehicular travel lanes. The bike path is located between Sierra Highway and the railroad tracks that run along the east side of Sierra Highway. The speed limit on Sierra Highway is 50 mph north of Avenue K and 55 mph south of Avenue K.

### *Gadsden Avenue*

Gadsden Avenue is a two-lane north-south street that extends southerly from Avenue K into an area that is already developed on the northwest side of the Plan area. It runs from Avenue K to Avenue K-8 and continues north of Avenue K into an existing residential neighborhood. Although it does not extend into the Plan Area, Gadsden Avenue will serve as a link between the Plan area and Avenue K via Avenue K-4, Avenue K-6, and Avenue K-8, each of which will extend into the Plan area. Sidewalks are in place on both sides of the street with parking on both sides north of Avenue K-4. Parking is prohibited on both sides of the street between Avenue K-4 and Avenue K-8. There are no bike lanes on Gadsden Avenue, but it does have shared lane markings (sharrows) that inform motorists to share the traveled lane with bicyclists. The speed limit on Gadsden Avenue is 25 mph north of Avenue K and 35 mph south of Avenue K.

### *State Route 14*

State Route 14 is a six-lane freeway located approximately one-half mile west of the Plan area. It has interchanges with northbound and southbound on and off ramps at Avenue K and Avenue L.

## Public Transportation System

### *Rail Services*

Commuter rail service is provided by Metrolink on the Antelope Valley Line. The trains run from the Lancaster Metrolink Station to Santa Clarita, the San Fernando Valley, and Los Angeles cities in the morning and return to Lancaster in the afternoon. The Antelope Valley Line provides 9 weekday departures and arrivals, and 6 weekend departures and arrivals. The Lancaster Metrolink Station is located on the east side of Sierra Highway at Lancaster Boulevard approximately 1.5 miles north of the Plan area.

### *Bus Services*

Public transportation in the project area is provided by the Antelope Valley Transit Authority (AVTA). This agency operates several bus routes on the streets that run adjacent to the Plan area and it has a transit center/park-and-ride facility at Owen Memorial Park at the southwest corner of 10$^{th}$ Street West and Avenue K-8.

AVTA Route 1 runs along 10th Street West and extends from Lancaster to Palmdale. Route 4 runs south along 10th Street West from the transit center, then transitions to Sierra Highway and further to Avenue L east of Sierra Highway. Route 5 runs along Avenue L west of State Route 14 and along Avenue K-8 to the Owen Memorial Park transit center. Route 8 runs along Avenue K and the extends south on Sierra Highway to Palmdale.

Route 9 begins at the transit center and runs north along 10th Street West, east on Avenue K, and north on Sierra Highway. Route 11 begins at the Owen Memorial Park transit center and runs north on 10th Street West and west on Avenue K. Route 50 begins at the transit center and runs south along 10th Street West and east along Avenue L.

Route 94 is a peak period commuter bus that begins at the Owen Memorial Park transit center and runs north along 10th Street West during the morning peak period. During the afternoon peak period, it runs along Avenue K and turns south on 10th Street West to the transit center.

### *Bicycle Network*

The City's Master Plan of Trails and Bikeways indicates a Class I Bike Path exists along Avenue K-8 in the center of the Plan area, of which is proposed to be replaced with a Class II bike path. Pursuant to the Master Plan, the City proposes additional Class II bike lanes along Avenue K on the northern border of the Plan Area, the segment of Sierra Highway that borders the site's eastern boundary, and along Avenue L at the site's southern boundary. In addition, a Class II bike lane is proposed along a segment of the former dry creek channel (formerly Amargosa Creek) that is now located underground and runs north-south through the southwestern portion of the Plan area (City of Lancaster, 2012).

According to the Master Plan of Trails and Bikeways, additional improvements include colored bike lanes along the north, east, and southern boundaries of the Plan area. Furthermore, a bicycle parking area is proposed at the northeastern corner of the Plan area at the intersection of Sierra Highway and Avenue K. However, the proposed bike network in the PVSP supersedes any planned facilities in the Master Plan of Trails and Bikeways.

### *Pedestrian Facilities*

Pedestrian sidewalks are present adjacent to development throughout the Plan area, including curb and gutter, with crosswalks sited at major intersections. Notable areas with sidewalks consist of development along Sierra Highway, fronting the Kaiser Permanente facility, and the commercial area at the southeast corner of Avenue K-8 and 10th Street West. The remaining site, which includes the majority of the area, is vacant and does not include development with attached sidewalks.

In accordance with the City's vision of creating a connected network of on-road and off-road trails and bikeway facilities for users of all ages and abilities, the PVSP would provide a network of sidewalks and bikeways for non-motorized travelers. The Plan proposes a handful of shared multi-use paths with Class I bike routes including the southern boundaries of planning areas 26 (within Park I) and 20 (through Park G); between planning areas 7 and 8 (within Park D); through the eastern portion of Park E (along the southeastern corner of planning area F that extends along the southern boundary of planning area 10 and ends at 5th Street West); and between planning areas 42 and 43 (within Park N) connecting Avenue L with the Neighborhood planning area 39. Class II or IV bike lanes are proposed throughout the Plan area, connecting the inner districts with the land uses surrounding the Plan area, with a lane on either side of the Future Sierra Highway Transportation Corridor. Pedestrian and Class III bike routes with sharrows would surround the Town Center planning areas in the southwestern corner of the site and would encircle the Plaza, in addition to surrounding the Neighborhood planning areas 38 and 39, Suburban planning area 35, and Park M, with a single lane traveling through the Suburban areas to the north and connecting to Park K.

## 3.14.2. Regulatory Setting

### 3.14.2.1. Federal Regulations

#### American Disabilities Act

The American with Disabilities Act (ADA) of 1990 prohibits discrimination toward people with disabilities and guarantees that they have equal opportunities as the rest of society to become employed, purchase goods and services, and participate in government programs and services. The ADA includes requirements pertaining to transportation infrastructure. The Department of Justice's regulations for Titles II and III of the ADA, known as the 2010 ADA Standards for Accessible Designs, set minimum requirements for newly designed and constructed or altered state and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. These standards apply to accessible walking routes, curb ramps, and other facilities (US Department of Labor, 2024).

### 3.14.2.2. State Regulations

#### Senate Bill 743

In September 2013, the Governor's Office of Planning and Research (OPR) signed SB 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. SB 743 identifies VMT as the most appropriate CEQA transportation metric and eliminates of auto delay, or LOS, and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. [OPR, 2024].

In December 2018, the California Natural Resource Agency certified and adopted the CEQA statute (14 California Code of Regulations Section 15064.3), including the Guidelines section implementing SB 743. Specifically, Section 15064.3, Determining the Significance of Transportation Impacts, that describes specific considerations for evaluating a project's transportation impacts using the VMT methodology. The provisions of this section applied statewide as of July 1, 2020.

State CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

- **Land Use Projects.** Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less-than-significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- **Transportation Projects.** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less-than-significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- **Qualitative Analysis.** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's

vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

### Sustainable Communities Strategies: Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the state's climate action goals to reduce greenhouse gas emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board (CARB) sets regional targets for greenhouse gas 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 (MPOs). CARB periodically reviews and updates the targets, as needed.

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 greenhouse gas 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 greenhouse gas targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP. The latest update to the Act, the Draft 2022 Progress Report, was posted by CARB on June 8, 2023, and comprised a collection of analyzed data for over two dozen indicators to tell a more complete story regarding land use and housing trends; travel behavior; and whether transit, carpooling, and active transportation have become more convenient and frequent choices relative to driving. For the first time, CARB included metrics for VMT by region, accessibility to key destinations, housing activity by income level, units with a density bonus or inclusionary deed restrictions, and Greenhouse Gas Reduction Fund spending (CARB, 2022).

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the alternative planning strategy. Developers can get relief from certain CEQA requirements if their new residential and mixed-use projects are consistent with a region's SCS (or alternative planning strategy) that meets the targets (see California Public Resources Code Sections 21155, 21155.1, 21155.2, 21159.28.).

### Complete Streets Act of 2008

Assembly Bill 1358 (AB 1358), the Complete Streets Act of 2008, was developed in response to and in support of other legislation aimed at reducing vehicle emissions through reduced trip length and frequency combined with changes in land use policies. The legislation impacts local general plans by adding the following language to Government Code Section 65302(b)(2)(A) and (B):

> (A) Commencing January 1, 2011, upon any substantial revision of the circulation element, the legislative body shall modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan.
>
> (B) For the purposes of this paragraph, "users of streets, roads, and highways" means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors (OPR, 2010).

The Complete Streets Act is supported by the California Department of Transportation (Caltrans) Deputy Directive DD-64-R1, which memorializes the importance of pedestrian and bicycle facilities to the State's

transportation system and outlines responsibilities for Caltrans employees to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of complete streets throughout the State. Currently SB 960, the Complete Streets Act of 2024, is in progress and being reviewed by the state congress (CalBike, 2024).

### California Department of Transportation

Caltrans publishes a document entitled Guide for the Preparation of Traffic Impact Studies, which provides guidelines and recommended elements of traffic studies for projects that could potentially impact state facilities such as State Route highways and freeway facilities. This is a State-level document that is used by each of the Caltrans District offices. The Guide defines when traffic studies should be conducted to address impacts to state facilities but does not define quantitative impact standards.

Caltrans Transportation Impact Study Guide, May 20, 2020, has replaced the 2002 Guide for the Preparation of Traffic Impact Studies. Per the 2020 Transportation Impact Study Guide, Caltrans' primary review focus is VMT, replacing LOS as the metric used in CEQA transportation analyses (Caltrans 2020). Caltrans recommends use of OPR's recommended thresholds and guidance on methods of VMT assessment found in OPR's Technical Advisory (OPR 2018) for land use projects. In addition to VMT, the 2020 Transportation Impact Study Guide states that it may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the state highway system and connections with the state highway system.

### Southern California Association of Governments (SCAG) Plans

The PVSP is in the planning area of SCAG, the designated MPO for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 15 million persons in an area of more than 38,000 square miles. As the designated MPO, SCAG is mandated by the federal government to research and develop regional plans for transportation, growth management, hazardous waste management, and air quality. As the MPO, SCAG administers the state-mandated Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), designed to address the regional impact of urban congestion.

**Regional Comprehensive Plan.** SCAG's Regional Comprehensive Plan (RCP) contains a general overview of federal, state, and regional plans applicable to the Southern California region and serves as a comprehensive planning guide for future regional growth (SCAG, 2008). The Guiding Principles of the RCP are as follows:

- Improve mobility for all residents. Improve the efficiency of the transportation system by strategically adding new travel choices to enhance system connectivity in concert with land use decisions and environmental objectives.
- Foster livability in all communities. Foster safe, healthy, walkable communities with diverse services, strong civic participation, affordable housing and equal distribution of environmental benefits.
- Enable prosperity for all people. Promote economic vitality and new economies by providing housing, education, and job training opportunities for all people.
- Promote sustainability for future generations. Promote a region where quality of life and economic prosperity for future generations are supported by the sustainable use of natural resources.

SCAG member agencies adopted the RCP in 2008 to set broad goals for the Southern California region and identify strategies for agencies at all levels of government to use in their decision making. It includes input from each of the 13 subregions that make up the Southern California region, which includes Los Angeles, Orange, San Bernardino, Riverside, Imperial, and Ventura counties.

**SCAG's Connect SoCal (Regional Transportation Plan/Sustainable Communities Strategy).** SCAG's Connect SoCal (2024-2050 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]), adopted on April 4, 2024, provides the overall transportation and land use goals that satisfy the vision of the RCP for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties (SCAG, 2024a). The RTP portion of the RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area. The SCS portion of the RTP/SCS presents an overall land use concept for the region with increasing focus on densification of urban areas and development around transit stations, as well as an emphasis on use of transit, active transportation, and the reduction of greenhouse gas emissions from cars and light duty trucks.

The RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecasted Land Development Category pattern of development described in detail in the SCS. The Connect SoCal 2024 RTP/SCS outlines the mobility projects and sustainable planning projects that have been achieved since the 2020 RTP/SCS. Based on the Project List appendix of the 2020 RTP/SCS, the projects in the North Area include, but are not limited to, preventative maintenance, road, interchange, and corridor improvements, bike and pedestrian improvements, street widening, Transit and Congestion Management (TCM) work, and the installation of new Complete Streets (SCAG, 2020).

SCAG released for public review and comment the Proposed Final 2024-2050 RTP/SCS in November of 2023 and approved for federal transportation conformity purposes only on April 4, 2024. The core vision of this plan is to build upon and expand land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern (SCAG, 2024b).

The Connect SoCal 2024 RTP/SCS incorporates the SCAG 2023 Federal Transportation Improvement Program (FTIP), which is a federally mandated four-year program of all surface transportation projects that will receive federal funding or are subject to a federally required action in the SCAG region. However, since the previous Connect SoCal was adopted in 2020, SCAG gained new responsibility for the selection of transportation projects. SCAG's project selection process follows a performance-based evaluation and selection approach and ensures that selected projects further Connect SoCal goals. SCAG ensures that all projects included in the RTP/SCS align with Plan goals and further the region's progress on key performance measures. The following projects are in the vicinity of the Plan area for fiscal years (FY) 2022/23 – 2027/28 (SCAG, 2020; SCAG, 2022):

**Table 3.14-1. Federal Transportation Improvement Program Project Listing FY 2022/23 – 2027/28**

| Lead Agency | Location | Project Description |
|---|---|---|
| City of Lancaster | City-wide | Rebuild Lancaster's SRTS education & encouragement programs; recruit & train parent volunteers at 10 focus schools; conduct school-based and community-wide events |
| City of Lancaster | 5th Street East Corridor | 5th Street east corridor improvements, utilizing toll credits |
| City of Lancaster | Various locations throughout City | Install various SRTS improvements at 5 elementary school sites, increasing safety for non-motorized users. Elements include closing gaps in sidewalks, installation of ADA curb ramps and curb extensions at intersections, new striping and signage, and Class II and III bike lanes |
| City of Lancaster | Various locations throughout City | Rehabilitation of existing pavement, re-construction of existing curb and gutter, sidewalk, ADA curb ramps, traffic re-striping, and installation of enhanced landscaping. |

| Lead Agency | Location | Project Description |
|---|---|---|
| City of Lancaster | Various locations throughout City | Pedestrian gap closure improvements. |
| City of Lancaster | SR-14 from 10th Street West to 25th Street West | IC – Modify/Replace/Reconfigure Lane Addition(s). SR-14 ramps, intersection controls, and pedestrian improvements |
| City of Lancaster | SR-14 Avenue J Int. from 15th Street West to 30th Street West | New IC w/ Non-motorized and/or TCM Scope/Facilities: REGIONALLY SIGNIFICANT |
| City of Lancaster | 10th Street West to 12th Street West and from 20th Street West to 10th Street West | Adding a lane through a bottleneck: REGIONALLY SIGNIFICANT. SR-14 Avenue K IC improvements |
| City of Lancaster | Avenue L between 15 Street West and 10th Street West and SR-14 | Road Diet – Eliminating travel lanes and geometric changes to SR-14 ramps and redistribute lane to provide bike lanes |
| City of Lancaster | SR-14 Avenue M IC to 10th Street West | IC – Modify/Replace/Reconfigure – Lane Addition(s) with Non-motorized and/or TCM |
| City of Lancaster | 15th Street West to 12th Street West | Construct 2 miles of new complete streets; access to existing and proposed medical facilities |
| City of Lancaster | 20th Street West to 13th Street West | Construct 2 miles of new complete streets; access to existing and proposed medical facilities |
| City of Lancaster | Development Services building, City Emergency Operations Center, various locations | Traffic Management/Operations Centers; installation of TCM and CCTV |
| City of Lancaster | Various Locations | Construction of curb, gutter, and sidewalk improvements |
| Los Angeles County | Avenue H to Avenue N-8, Avenue M to Avenue N-8 along 30th Street West | Installation of Class IV buffered bikeways and sidewalks |
| City of Palmdale | From Lancaster to Palmdale | Signal Synchronization |
| Various Agencies | Int. of Avenue K and Union Pacific Railroad (UPRR) | Eliminate hazards at railroad grade crossing |
| Various Agencies | Int. of Avenue M and UPRR | Eliminate hazards at railroad grade crossing |
| Los Angeles County | Urbanized areas, including Lancaster | Enhanced Mobility of Seniors and Individuals with Disabilities Grant Program. Includes formula grants, operating assistance, capital assistance, and program administration |
| Los Angeles County MTA | Various AVL areas, including Lancaster | AVL improvement project: add capacity between Los Angeles Union Station and Lancaster |
| Metrolink | Various AVL areas, including Lancaster | Metrolink AVL capacity improvement projects – add capacity to the AVL between Los Angeles Union Station and Lancaster |

SRTS=Safe Routes to School; Int.=intersection; ADA=Americans with Disabilities Act; TCM=Transit and Congestion Management; IC=Interchange; TCM=Traffic Congestion Management; CCTV=Closed Circuit Television; AVL=Antelope Valley Line

Furthermore, the 2024-2050 RTP/SCS discusses a variety of land use tools to help achieve the state-mandated reductions in GHG emissions through reduced per capita VMT. Some of these tools include center-focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

**SCAG's Intergovernmental Review.** The Intergovernmental Review (IGR) Program provides informational resources to regionally significant plans, projects and programs, per CEQA Guidelines, to ensure consistency of projects with SCAG's adopted regional plan. SCAG helps lead agencies to identify a project's impact on a regional scale and how each project contributes to the region's plan and vision. Information

from the goals and strategies of the Connect SoCal, jurisdictional-level growth forecast, and mitigation measures contained in the Connect SoCal Program Environmental Impact Report, guide lead agencies during project development. Additionally, the IGR Program functions as a clearinghouse for federal grant and financial assistance program applications, federally required state plans, federal development activities, and federal environmental documents (SCAG, 2024b).

### 3.14.2.3. Local Regulations and Plans

#### City of Lancaster Master Plan of Trails and Bikeways

The City of Lancaster Master Plan of Trails and Bikeways (March 2012) is intended to guide the planning and design of pedestrian, bicycle, and equestrian facilities in a comprehensive manner throughout Lancaster. The City's vision is to create a connected network of on-road and off-road trails and bikeway facilities to accommodate users of all ages and abilities including equestrians. When implemented, it is anticipated that the proposed network will provide linkages between residential areas, commercial centers, transportation hubs, employment centers, and recreational activities.

#### City of Lancaster Safer Streets Action Plan

On January 28, 2020, as part of the City's commitment to Vision Zero by 2050, the City Council adopted the Lancaster Safer Streets Action Plan, a.k.a. the Systemic Safety Analysis Report. The City aims to eliminate traffic-related deaths and severe injuries by proactively addressing traffic safety concerns by applying engineering countermeasures systemically across Lancaster's roadway network. The plan allows the City to address "hot spot" collision locations with proven engineering countermeasures like "road diets", 4-way stops, protected left-turn signals, and roundabouts. These countermeasures reduce the total number of collisions at these locations and the severity of collisions that still occur (City of Lancaster, 2020).

#### City of Lancaster Master Plan of Complete Streets

The City of Lancaster has developed its Master Plan of Complete Streets to implement the state's Complete Streets Act (City of Lancaster, 2017). The implementation of Complete Streets is intended to increase access and convenience for all users to adjacent land-uses, such as residential neighborhoods, commercial centers, and public institutions, while still providing functional, multimodal street performance for all modes whether the users are traveling to, from, or through the area. The Master Plan seeks to do the following:

- Encourage the development of a Complete Streets network throughout Lancaster to create a more balance transportation system for all users;
- Provide flexible design concepts and best practices that promote Complete Streets features and concepts; and
- Ensure that new and updated street projects are planned, design, maintained, and operated to enable safe, comfortable, and convenient travel to the greatest extent possible for users of all ages and abilities, including pedestrians, bicyclists, motorists, and transit riders.

#### City of Lancaster Local Road Safety Plan and Program

The City of Lancaster Local Roadway Safety Plan (LRSP) identifies emphasis areas to inform and guide further safety evaluation of the City's transportation network. The emphasis areas include type of crash, certain locations, and notable relationships between current efforts and crash history. The LRSP analyzes crash data on an aggregate basis as well as at specific locations to identify high-crash locations, high-risk

locations, as well as citywide trends and patterns. The analysis of crash history throughout the City's transportation network allows for opportunities to (City of Lancaster, 2022a):

- Identify factors in the transportation network that inhibit safety for all roadway users,
- Improve safety at specific high-crash locations, reduce serious injury and fatal collisions, and
- Develop safety measures using the four E's of safety: Engineering, Enforcement, Education, and Emergency Response to encourage safer driver behavior and better severity outcomes.

The City's vision is to enhance the transportation network and reduce traffic fatalities and serious injury related crashes, and the goals for the City of Lancaster include the following:

- Goal #1: Identify areas with a high risk for crashes.
- Goal #2: Illustrate the value of a comprehensive safety program and the systemic process.
- Goal #3: Plan future safety improvements for near-, mid-, and long-term.
- Goal #4: Define safety projects for Highway Safety Improvement Plan (HSIP) and other program funding consideration.

### Vison Zero Resolution

Through this action, Lancaster has pledged to tackle ambitious transportation improvements to achieve zero traffic deaths and serious injuries by 2050. Dubbed "Vision Zero", this worldwide initiative challenges cities to increase safe, healthy, equitable mobility. Reaching zero deaths requires the implementation of a Safe System approach. The Safe System approach requires a supporting safety culture that places safety first and foremost in road system investment decisions. Road design and management should encourage safe speeds and manipulate appropriate crash angles to reduce injury severity (City of Lancaster, 2022b).

### Transportation Analysis Updates in Lancaster

In response to SB 743, the City of Lancaster adopted new transportation impact thresholds utilizing the VMT metric. The City provides guidance in its transportation analysis updates on conducting transportation studies in the City. Specifically, the City provides an overview of SB 743 and what it means for transportation impact analysis in Lancaster; describes the process for determining the City's baseline VMT and describes the analysis methodology and VMT metrics; and outlines the methodology for calculating VMT for projects and plans in the City, provides the threshold of significance, and discusses mitigation options for projects that are found to have a VMT impact.

### City of Lancaster Local VMT Analysis Screening

Pursuant to California Senate Bill 743, the City adopted the VMT Analysis Screening guidelines to provide guidance in conducting VMT assessments for development in the city. Specifically, the guide provides direction for land use projects that meet the City-established screening threshold criteria. The criteria are based on size, location, proximity to transit, or trip-making potential that may be presumed to have a less-than-significant transportation impact under CEQA. Projects that meet the screening thresholds do not require a full detailed VMT analysis. If the project is not screened out from a full VMT analysis, the SCAG regional travel demand model would be required to determine the project's full VMT impact. It is acknowledged that the screening guidelines are the primary resource for VMT assessment; however, the guidelines are utilized in conjunction with the Lancaster Transportation Analysis (City of Lancaster, n/d).

### City of Lancaster VMT Mitigation Program

The City of Lancaster VMT Mitigation Program establishes mitigation for projects that exceed the City's VMT thresholds in the form of a mitigation impact fee. The program identifies relevant transportation demand management (TDM) strategies and VMT-reducing projects within the City to be funded by the impact fee. These funds would be utilized to fund active transportation infrastructure projects in the City to help the City meet its VMT reduction goals. The overall intent of the program is to streamline the Senate Bill (SB) 743 compliance process for development projects while funding future VMT improvement projects to reduce citywide VMT.

### City of Lancaster General Plan 2030

The General Plan 2030 Plan for Physical Mobility focuses on transportation issues and the movement of goods and people throughout the plan's study area. The City recognizes that transportation affects, and is affected by, land use, urban design, energy consumption, air quality, and infrastructure. Circulation decisions in the city must also consider the needs and requirements of, and to coordinate with, regional, state, and federal agencies, as well as with neighboring communities. In the Plan for Physical Mobility, transportation facilities are discussed, as well as alternative modes of transportation. The Plan for Physical Mobility was updated in 2017 to reflect a complete streets approach. The following policies and specific actions are applicable to the PVSP:

**Goal 14**: A well-balanced transportation and circulation system which provides for the efficient and safe transport of goods and people within and through the City of Lancaster; and which balances concerns for mobility with concerns for safety and the quality of the City's living environment.

> Objective 14.1: Maintain a classification system of streets throughout the city which balances the need for free traffic flow with the development of a well-connected and integrated multimodal transportation system that offers choices among modes including pedestrian ways, public transportation, streets, and bikeways (reference the Master Plan of Complete Streets for details).
>
> > Policy 14.1.1 Manage traffic on streets to improve safety and reduce operation and maintenance costs. Auto speed and convenience may be diminished in some locations to achieve a more walkable, bike-friendly, and livable community. Street design and operation in these areas should emphasize community character, access to adjacent land uses, and the accommodation of multiple travel modes, rather than vehicle speed.
>
> Objective 14.2 Promote a street system which balances the needs of automobiles with the needs of pedestrians, bicyclists, and transit users while protecting environmental and quality of life issues. Over time, Lancaster's streets should evolve to respond to the needs of transportation users and the surrounding neighborhood.
>
> > Policy 14.2.1 Support and improve a street network that is sensitive to environmental issues such as, biological, land, and water resources, as well as air quality, while permitting continued development within the study area.
> >
> > > Specific Action 14.2.1(a) Continue implementation of state environmental requirements mandated by the California Environmental Quality Act (CEQA) to mitigate, to the extent feasible, significant environmental impacts associated with traffic and circulation improvements.
> >
> > Policy 14.2.2 Manage the City's roadway network so that it is aesthetically pleasing through the development and maintenance of streetscapes. Maintain design standards or guidelines for streetlights, landscaping, street furniture, and other streetscape features that

enhance Lancaster neighborhoods, with due consideration given to maintenance needs and operational costs.

Specific Action 14.2.2(b) Through the development review process, require the installation of street trees in new developments.

Policy 14.2.3 Support flexible street design and operation that takes into consideration community character, access to adjacent land uses, and the accommodation of multiple travel modes.

Specific Action 14.2.3(a) When considering the design of subdivisions, circulation patterns and street layouts, traffic flow requirements shall be balanced against their effect on pedestrian, bicycle, and transit access and the livability of both existing and proposed neighborhoods. Where conflicts arise between motorist convenience and the livability and wellbeing of neighborhoods, the latter concerns shall have priority.

Specific Action 14.2.3(c) New subdivision and development street networks should be designed with an emphasis on connectivity and accessibility. Where new street networks are proposed that do not meet such objectives and do not provide connectivity benefits to the public at large (limited number of intersections, limited connections to the surrounding street system, or significant use of cul-de-sacs), consider requiring such streets to be privately owned and maintained.

Objective 14.4 Reduce reliance of the use of automobiles and increase the average vehicle occupancy by promoting alternatives to single-occupancy auto use, including ridesharing, non-motorized transportation (bicycle, pedestrian), and the use of public transit.

Policy 14.4.3 Encourage bicycling as an alternative to automobile travel for the purpose of reducing vehicle miles traveled (VMT), fuel consumption, traffic congestion, and air pollution by providing appropriate facilities for the bicycle riders (see also Policy 10.2.4 and subordinate specific actions of the Plan for Active Living).

Specific Action 14.4.3(c) Consistent with the adopted Master Plan of Trails and Bikeways, , require bikeways to link residential neighborhood areas with parks, scenic areas, and other points of interest. These bikeways also should be designed to encourage intra-city travel to employment areas, civic and commercial areas, and schools.

Policy 14.4.4 Encourage commuters and employers to reduce vehicular trips by implementing Transportation Demand Management strategies.

Specific Action 14.4.4(a) As part of the development and environmental review process, require implementation of transportation demand management programs for new commercial and industrial development based on local government responsibilities in the Los Angeles County Congestion Management Plan as applicable.

### City of Lancaster Municipal Code

The following standards and regulations are provided by the City of Lancaster Municipal Code in order to ensure development in the city is consistent with state and local regulations (City of Lancaster, 2024):

- Lancaster Municipal Code Chapter 15.56, Trip Reduction and Travel Demand Measures, requires review of transit impacts and the implementation of transportation demand management and trip reduction

measures prior to approval of any development project. Specific requirements are provided based on the type and size of the development.

## 3.14.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

Transportation issue areas of the CEQA environmental checklist (Appendix G) are discussed below and include an evaluation of the Project's impacts on 1) plans and policies for transit, roadway, bicycle, and pedestrian facilities; 2) vehicle miles traveled (VMT); 3) increased hazards or incompatible uses; and 4) emergency access.

In 2013, Senate Bill (SB) 743 was adopted, starting a process that fundamentally changed the way transportation impact analysis is conducted under CEQA. SB 743 identifies Vehicle Miles Traveled (VMT) as the most appropriate CEQA transportation metric and eliminates auto delay, or level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. In December 2018, the California Natural Resource Agency integrated VMT into the State CEQA Guidelines (14 California Code of Regulations Section 15064.3) pursuant to the provisions of SB 743. The VMT guidelines became effective Statewide beginning July 1, 2020. As such, the following analysis utilizes VMT as the transportation metric to evaluate the project's potential impacts.

### CEQA Significance Criteria

The following thresholds of significance are based on Appendix G of the State CEQA Guidelines. For purposes of this Draft EIR, implementation of the proposed Plan may have a significant adverse impact on land use and planning and recreation if it would:

- Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access.

#### *VMT significance threshold, hazards due to geometric design, and emergency access*

In response to SB 743, the City of Lancaster developed guidelines for analyzing proposed development projects to determine if a project would result in a significant VMT impact. The guidelines provide thresholds that are to be used for evaluating the significance of a project's VMT impacts. If a proposed project's VMT is 15 percent or greater below the Antelope Valley Planning Area (AVPA) baseline VMT, the project's VMT impact would be considered as less than significant.

The City's guidelines also provide screening criteria that can be used to screen a project from requiring a detailed VMT analysis. A project can be screened out of a VMT analysis if the project site is in a low VMT generating area of Lancaster. Figures 3 and 4 of that report indicate that the Parkway Village Specific Plan site is in an area of Lancaster that is greater than 15 percent below the AVPA average baseline VMT. The proposed Specific Plan development can, therefore, be screened from any further VMT analysis and, as indicated in Section 15.67.060 Exceptions, development within the Plan area would be exempt from the City's established VMT mitigation program.

The proposed Specific Plan would not provide any internal or external roadway, access, or circulation features that would create or increase any design hazards or incompatible uses. The increased levels of

traffic on the study area streets, the increased number of pedestrians and bicyclists in the area, and the increased number of vehicular turning movements that would occur on the access routes and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant; however, because the streets, intersections, sidewalks, bike lanes, and driveways are designed or will be designed to accommodate the anticipated levels of vehicular and pedestrian activity.

All street improvements in the public ROW will be designed and constructed consistent with the City of Lancaster and all improvements within the Plan area would be consistent with the criteria outlined in the PVSP. Over time, the development within the PVSP would add vehicles to the nearby streets and intersections, but the additional vehicles would be compatible with the design and use of the affected roadways.

As the existing and proposed street network, which would include the recommended improvements and mitigation measures, could accommodate the anticipated increases in vehicular, pedestrian, and bicycle activity, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses.

Finally, the proposed access and circulation features within the PVSP, which includes the street network, driveways, on-site roadways, parking lots, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. These facilities would provide access to all areas of the Plan area and each development project within the Plan boundaries would include emergency access features that would be subject to review and approval by the Los Angeles County Fire Department and the City's Community Development Department

As the project can be screened from requiring a detailed VMT analysis, is required to be consist with state and local design and construction standards regarding potential design hazards, and requires emergency ingress and egress be incorporated into the proposed access and circulation features of the Plan, these impacts were found to be less than significant, and these significance criteria are not discussed further in this EIR. Therefore, this analysis focuses solely on the first significant criteria above.

### Environmental Impact Analysis

**Impact TR-1: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.**

The Plan for Physical Mobility component of the City of Lancaster General Plan includes various objectives and policies that support the overall goal of providing a well-balanced transportation and circulation system which provides for the efficient and safe transport of goods and people within and through the City of Lancaster; and which balances concerns for mobility with concerns for safety and the quality of the City's living environment.

The relevant objectives that support the overall goal include: Objective 14.1 - Maintain a classification system of streets throughout the city which balances the need for free traffic flow with the development of a well-connected and integrated multimodal transportation system that offers choices among modes including pedestrian ways, public transportation, streets, and bikeways; Objective 14.2 - Promote a street system which balances the needs of automobiles with the needs of pedestrians, bicyclists, and transit users while protecting environmental and quality of life issues, and Objective 14.4 - Reduce reliance of the use of automobiles and increase the average vehicle occupancy by promoting alternatives to single-occupancy auto use, including ridesharing, non-motorized transportation (bicycle, pedestrian), and the use of public transit. There are numerous policies associated with each of these objectives that provide guidance for implementing and maintaining consistency with each objective.

The Lancaster Master Plan of Complete Streets provides guidelines for implementing a street network that accommodates vehicular traffic as well as travel by alternative modes (pedestrians, bicycles, public transit, etc.). The primary goals of that document are to (1) Encourage the development of a Complete Streets network throughout Lancaster to create a more balanced transportation system for all users, (2) Provide flexible design concepts and best practices that promote Complete Streets features and concepts, and (3) Ensure that new and updated street projects are planned, design, maintained, and operated to enable safe, comfortable, and convenient travel to the greatest extent possible for users of all ages and abilities, including pedestrians, bicyclists, motorists, and transit riders.

The PVSP is consistent with the goals, objectives, and policies presented in the Plan for Physical Mobility component of the City of Lancaster General Plan and the Lancaster Master Plan of Complete Streets. The PVSP provides an internal street network that would accommodate the traveling demands of the residents, employees, customers, and visitors of the proposed land uses. The street system is designed to accommodate vehicular travel as well as the pedestrian and bicycle active transportation modes.

At the discretion of the City Engineer and Traffic Engineer, a local transportation assessment may be required to ensure that the transportation circulation system operates in a smooth and efficient manner. Measures recommended in any local transportation assessment would become conditions of approval for individual development projects.

Regarding transit, the existing network of bus routes and the proximity of the Owen Memorial Park transit center to the Plan area would provide opportunities for the residents, employees, customers, and visitors of the Specific Plan land uses to conveniently use public transit as an alternative travel mode. In addition, the Specific Plan offers the option of providing a transit hub in the southeast quadrant of the site which would further encourage the use of public transportation. Regarding roadway design standards, internal and external street improvements would be consistent with the City of Lancaster and Caltrans design standards.

Based on the traffic impact analysis, the proposed mitigation measures, the discussion of non-motorized transportation and transit, and a review of the Plan for Physical Mobility component of the City of Lancaster General Plan and the Lancaster Master Plan of Complete Streets, the proposed Specific Plan project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The impacts would be less than significant.

## 3.14.4. Cumulative Impact Analysis

The proposed PVSP would be a project of regional significance according to State CEQA Guidelines Section 15206. SCAG is responsible for addressing and evaluating all cumulative projects to determine each project's level of significance in the region. As stated above, implementation of the PVSP would be consistent with the regional plans, including the 2024 Connect SoCal RTP/SCS, that address projected growth patterns in the region. Furthermore, all future projects in the Plan's vicinity would be evaluated for consistencies with the established goals, policies, regulations, and guidelines of the City's GP 2030 and Municipal Code as well regulations governed by Caltrans. Therefore, implementation of the PVSP would not make a considerable contribution to cumulative impacts associated with transportation in the Plan area.

# 3.15. Tribal Cultural Resources

A Cultural Place is defined in the PRC sections 5097.9 and 5097.995 as: (1) Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9), or (2) Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.995).

Tribal cultural resources (TCRs) are a class of resources under State law; they are described in more detail below under in the Regulatory Setting (Section 3.15.2). TCRs include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a tribe. To qualify as a TCR, the resource must either: (1) be listed on, or be eligible for listing on, the California Register of Historical Resources (CRHR) or other local historic register; or (2) constitute a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR (PRC § 21074(a)(2)).

Native American tribes that are traditionally and culturally affiliated with a geographic area can provide expert knowledge of Cultural Places and TCRs to lead agencies.

The following discussion is based on the confidential cultural resources technical report prepared for this project: *Cultural Resources Assessment for the Parkway Village Project* (DeOliveira et al., 2024), unless otherwise referenced, and the results of the City's formal government-to-government tribal consultation effort.

## 3.15.1. Environmental Setting

### Natural Setting

The Plan area is located within the Antelope Valley portion of the western Mojave Desert. The Antelope Valley represents an extremely large, nearly flat physiographic feature consisting of amalgamated alluvial fans formed over thousands of years from the surrounding mountains. The southern border is comprised of the Sierra Pelonas, which give way to the San Gabriel Mountains at Soledad Pass (marking the Antelope Valley's midpoint) and continues to the east, while the Tehachapi Mountains form the northern boundary. Both ranges meet at the western tip of the Antelope Valley and contribute to climate patterns that form the desert climate of the region. The Antelope Valley is considered "high desert," with elevations of around 3,050 ft. above mean sea level (amsl) in the southern foothills, and roughly 2,270 ft. above mean sea level (amsl) along the playas of Rosamond and Rogers Dry Lakes.

Amargosa Creek runs through southwestern portion of the Plan Area. Amargosa Creek is known to be a source of natural resources for the native peoples of this area of the high desert and archaeological sites are known to be along the creek's alignment (Earle, 2005); (Sutton, Et Al, 2011). The creek was undergrounded in the Plan area in 2008/2009.

### Precontact Setting

Please see Section 3.5, Cultural Resources, for details on the precontact setting.

### Ethnographic Setting

The Plan area was occupied by the Tataviam and Serrano people since time immemorial. The following is a brief ethnographic and archaeological summary of the Tataviam and Serrano.

### *Tataviam*

The Kawaiisu to the north called the Tataviam *pitadi* or "southerners"; however, by historic times the Tataviam language had become so distinct that one of J.P Harrington's informants expressed that the language was as foreign to him as English. The Tataviam are described as resembling their Takic neighbors in the types of artifacts used in social interactions as well as the internal organization of cemeteries and villages. However, archaeological data suggests that the Tataviam started to differentiate from the other southern California Takic speakers around 1000 Before Present (BP).

The subsistence activities of the Tataviam were generally similar to neighboring groups and they primarily exploited the *Yucca whippelei* (baked in earthen ovens) in addition to acorns, sage, juniper berries, islay (*Prunus illicifolia*), small mammals, deer, and possibly antelope. The exploitation of the *Yucca whippelei* as the primary food source is likely due to the degree of slope-exposure (degree of exposure to sunlight present on a slope) within the Tataviam region, which was conducive to an abundance of yucca being more available within this area than it was in neighboring groups (King and Blackburn 1978). Tataviam villages varied in size from large centers with up to 200 people to medium settlements of 20-60 people and small settlements of 10 to 15 people dispersed around the large habitation centers.

### *Serrano*

It is nearly impossible to assign boundaries of the Serrano territory due to their sociopolitical organization and lack of reliable data. The Serrano were organized into local lineages occupying favored territories, but rarely claiming any territory far from the lineage's home base. Generally speaking, the Serrano occupied an area in and around the San Bernardino Mountains, extending west to the Cajon Pass, east to Twentynine Palms, north to Victorville and south to Yucaipa Valley. The estimated population of the Serrano before European contact was 1,500 to 2,500. It is difficult to estimate the number of Serrano living in each village; however, likely, the villages held only as many Serrano as could be accommodated by water sources.

The Serrano relied on hunting and gathering of plants for subsistence, with the occasional fishing. Both large and small mammals were hunted such as deer, antelope, rabbits, small rodents, and various birds like quail. Plant staples included seeds like acorns, pinion nuts and chia, bulbs, blooms, tubers, and roots of various plants like berries, yucca, barrel cactus, and mesquite. It is noted that fire was used as a management tool to increase the yields of certain plants.

The Serrano lived in rounded dwellings, domed structures with tule thatching built over an excavated area. These structures were built with fire pits and primarily served as sleeping areas with tule mats. The majority of the daily norm was conducted outdoors under square ramadas, or in the open.

In the Serrano artifact assemblage, it is noted to be similar to that of the neighboring Cahuilla and includes musical instruments such as rattles and flutes; utensils and ornaments such as fire drills, mortars, metates, pipes, beads, awls, and projectile points from wood, shell, bone, and stone. The Serrano were talented pottery and basket makers. Baskets were often made of deergrass, and yucca fibers. Their pots were made of coiled clay smoothed out with a paddle and set in the sun to dry before being fired in a pit. The brownware pottery was sometimes decorated with circular designs and lines in either red or black.

The Serrano were also known for their petroglyphs. Abstract and geometric designs are often seen with representational figures of sheep, lizards and human beings. Some state that their petroglyphs were records of important events, rough maps, and artistic representations of native life.

## Data Collection Methodology

Information presented in this section was gathered through formal SB 18 and AB 52 consultation between City of Lancaster (City) and California Native American Tribes that have traditional and cultural affiliations with the Plan area.

### Project Notification

On August 20, 2024, the City mailed out consultation request letters to seven tribes identified by the Native American Heritage Commission (NAHC): Fernandeño Tataviam Band of Mission Indians, Kern Valley Indian Community, Morongo Band of Mission Indians, Quechan Tribe of the Fort Yuma Reservation, San Fernando Band of Mission Indians, Yuhaaviatam of San Manuel Nation (formerly San Manuel Band of Mission Indians), and Serrano Nation of Mission Indians. Under AB 52, tribes have 30 days, and under the provisions of SB 18, tribes have 90 days from receipt of consultation letters to advise the City if they are interested in further consultation on a project. The City received four (4) requests for consultation which are summarized at a high level below.

### Summary of SB 18 and AB 52 Tribal Consultation

Fernandeño Tataviam Band of Mission Indians requested consultation under both AB 52 and SB 18 on September 10, 2024. The cultural technical report was sent to the tribe for review on September 12, 2024, and a virtual meeting was held on September 19, 2024. In the afternoon of September 19, 2024, the Fernandeño Tataviam Band of Mission Indians requested specific language be incorporated into the mitigation measures for the Plan area. These measures have been included in the cultural resources section.

Morongo Band of Mission Indian requested consultation under both AB 52 and SB 18 on September 20, 2024. In their consultation request letter, initial project documents including a copy of the cultural technical report was requested for their review, which was provided by the City on October 29, 2024. No additional response was received.

San Fernando Band of Mission Indians requested consultation under both AB 52 and SB 18 on August 30, 2024. The tribe has not responded to any requests to initiate consultation to date.

Yuhaaviatam of San Manuel Nation requested consultation under SB 18 on September 3, 2024. In their consultation request letter, initial project documents including a copy of the cultural technical report was requested for their review, which was provided by the City on September 12, 2024. On October 11, 2024, Yuhaaviatam of San Manuel Nation responded saying they did not have any concerns about the Plan area but did request specific language be incorporated into the mitigation measures for unanticipated discoveries. These measures have been included in the cultural resources section.

## 3.15.2. Regulatory Setting

### *Federal Regulations*

No federal regulations apply.

### *State Regulations*

#### Senate Bill 18 (SB 18)

California Senate Bill (SB) 18 states that prior to a local (city or county) government's adoption of any general plan or specific plan, or amendment to general and specific plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places.

A Cultural Place is defined in the PRC sections 5097.9 and 5097.995 as:

1. Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9), or
2. Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.995).

The intent of SB 18 is to establish meaningful consultation between tribal governments and local governments ("government-to-government") at the earliest possible point in the planning process so that Cultural Places can be identified and preserved and to determine necessary levels of confidentiality regarding Cultural Place locations and uses. According to the Government Code (GC) Section 65352.4, "consultation" is defined as:

> The meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

**Assembly Bill 52 (AB 52)**

PRC Sections 5020.1(k), 5024.1(c), 21073, 21074(a)(1-2), 21080.3.1(a), 21084.2, etc.). This code changes sections of the Public Resources Code to add a process of consideration for Native American culture within the CEQA. The goal of AB 52 is to promote the involvement of California Native American tribes in the decision-making process when it comes to identifying and developing mitigation for impacts to resources of importance to their culture. To reach this goal, the bill establishes a formal role for tribes in the CEQA process. Under AB 52, tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of tribal cultural resources within their traditionally and culturally affiliated geographic area (PRC Section 21080.3.1(a)). CEQA defines a California Native American tribe as a "Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission." This definition does not distinguish between federally recognized and non-federally recognized tribal groups and is therefore more inclusive than the federal definition of "Indian tribe" (PRC § 21073).

CEQA lead agencies are required to consult with tribes about potential tribal cultural resources in the project area, the potential significance of project impacts on those resources, the development of project alternatives, and the type of environmental document that should be prepared. AB 52 specifically states that a project 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 (PRC Section 21084.2).

Tribal cultural resources, as defined by CEQA Section 21074(a)(1) and 5024.1(c), includes either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
    b. Included in a local register of historical resources as defined in Public Resources Code section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code section 5024.1(c). In applying the criteria set forth in 5024.1(c) for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Tribal cultural resources are also defined as a cultural landscape where "the landscape is geographically defined in terms of the size and scope of the landscape." However, tribal cultural resources can also include "non-unique archaeological resources" that rather than being important for scientific value as a resource, can also be significant because of the sacred and/or cultural tribal value of the resource.

### *Local Regulations and Plans*

**City of Lancaster General Plan 2030** states as Objective 12.1, "Identify and preserver and/or restore those features of cultural, historical, or architectural significance," and Policy 12.1.1, to "Preserve features and sties of significant historical and cultural value consistent with their intrinsic and scientific values. Five cultural resources Specific Actions are established:

12.1.1(a) As part of the CEQA review process, require site-specific historical, archaeological, and/or paleontological studies when there exists a possibility that significant environmental impacts might result or when there is a lack of sufficient documentation on which to determine potential impacts.

12.1.1(b) Include a condition of approval on all development projects that addresses State and Federal regulations with respect to the disposition of cultural resources.

12.1.1(c) Process requests for inclusion in state and federal historic registers those historic and prehistoric sites and features which meet state or federal criteria.

12.1.1(d) Prior to permitting demolition of any historic structure, require that an evaluation of the condition of the structure, potential adaptive reuse of the structure, and the cost of rehabilitation be undertaken.

12.1.1(e) Work with area school districts and historical/archaeological/paleontological preservation support groups to establish educational programs related to all phases of Lancaster's cultural and historical heritage.

In addition, the General Plan 2030 establishes Policy 19.3.4 for historic resources, "Preserve and protect important areas of historic and cultural interest that serve as visible reminders of the City's social and architectural history. Specific Action 19.3.4(a) states, "Through the development review process, apply Community Design guidelines that incorporate site-sensitive building design techniques into developments that shall integrate harmoniously into the community to preserve areas of historic and cultural interest."

## 3.15.3. Environmental Impacts and Mitigation Measures

### Impact Assessment Methodology

The PVSP could result in a significant impact to Cultural Places or Tribal Cultural Resources if development activities permitted under the PVSP would alter, change, degrade, or destroy:

1. Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9), or
2. Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1 or local register of historical resources as defined in Public Resources Code section 5020.1(k), including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.995).
3. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code section 5024.1(c).

### Environmental Impact Analysis

**Impact TCR-1: Cause a significant impact to a Tribal Cultural Resource, Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9; 21074(a)(1); and 5024.1(c),).**

As discussed above, no Tribal Cultural Resources or Cultural Places were identified during formal government to government consultation. Therefore, there is no reasonable potential for the Project's activities to impact known Tribal Cultural Resources or Cultural Places. The Plan area was identified as being sensitive for unknown buried resources.

As with any project that involves ground-disturbing activity, it is possible that unknown buried resources that qualify as Tribal Cultural Resources or Cultural Places may be encountered. For example, although undergrounded in 2008/2009, Amargosa Creek was used by Native Americans, increasing the possibility for unanticipated archaeological discoveries. These unanticipated discoveries could be significantly impacted without mitigation in place. Therefore, implementation of Mitigation Measure (MM) CUL-1 through MM CUL-5 will ensure a less-than-significant impact to unanticipated resources.

**Impact TCR-2: Cause a significant impact to Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1 or local register of historical resources as defined in Public Resources Code section 5020.1(k), including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.995).**

As discussed above, no Tribal Cultural Resources or Cultural Places that are listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1 or local register of historical resources as defined in Public Resources Code section 5020.1(k) were identified during formal government to government consultation. Therefore, there is no reasonable potential for the Plan's activities to impact known Tribal Cultural Resources or Cultural Places that are listed or may be eligible for listing in the California Register of Historic Resources or local register of historical resources.

As with any action that involves ground-disturbing activity, it is possible that unknown buried resources that qualify as Tribal Cultural Resources or Cultural Places eligible for listing in the state or local register maybe encountered. For example, although undergrounded in 2008/2009, Amargosa Creek was utilized by Native Americans, increasing the possibility for unanticipated archaeological discoveries. These unanticipated discoveries could be significantly impacted without mitigation in place. Therefore, implementation of MM CUL-1 through CUL-5 will ensure a less-than-significant impact to unanticipated resources.

**Impact TCR-3: Cause a significant impact to a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code section 5024.1(c).**

As discussed above, no resources determined by the City to qualify as a Tribal Cultural Resource or Cultural Place was identified during formal government to government consultation. Therefore, there is no reasonable potential for the Project's activities to impact known Tribal Cultural Resources or Cultural Places. The Plan area was identified as being sensitive for unknown buried resources.

As with any project that involves ground-disturbing activity, it is possible that unknown buried resources that qualify as Tribal Cultural Resources or Cultural Places eligible for listing in the state or local register maybe encountered, especially given that Amargosa Creek runs through the southwestern portion of the Plan Area (Refer to Section 3.5 for detailed information). These unanticipated discoveries could be significantly impacted without mitigation in place. Therefore, implementation of MM CUL-1 through MM

CUL-5 (identified in Section3.5 Cultural Resources) will ensure a less-than-significant impact to unanticipated resources.

**Mitigation Measures**

Mitigation measures with respect to cultural resources and those measures requested by the tribes during consultation can be found in Section 3.5, Cultural Resources.

## 3.15.4. Cumulative Impact Analysis

### Geographic Extent

For the purposes of this cumulative impact analysis, Figure 3.1-1 shows 28 projects within 1 mile of the Project site, where there is the potential for impacts related to Cultural Places or Tribal Cultural Resources to combine with those of the Project. The 28 identified projects generally include commercial residential buildings, gas station development, and industrial buildings. This geographic scope of analysis is appropriate because the Cultural Places and Tribal Cultural Resources within this area are expected to be similar to those that occur on the Project site. Their proximity and similarity in environments would result in similar land-use, and thus, site types. Cumulative impacts could occur if other projects, in conjunction with the Project, would have impacts on Cultural Places or Tribal Cultural Resources that, when considered together, would be significant.

### Cumulative Effects of the Proposed Project

Impacts to Cultural Places and Tribal Cultural Resources tend to be site specific and are assessed on a site-by-site basis. The Plan would require implementation of mitigation measures as detailed above and in Section 3.5 of this document, which will lessen the overall impact to unknown buried cultural resources, including those that could be evaluated as Cultural Places or Tribal Cultural Resources. As identified in Table 3.1-1, the cumulative projects that are within the geographic extent for Cultural Places and Tribal Cultural Resources include 28 identified projects which generally include commercial residential buildings, gas station development, and industrial buildings. It is assumed that these projects have, or will have, CEQA clearance which in most cases involves the identification of Tribal Cultural Resources which can include Cultural Places. These projects all likely involve ground disturbing activity to some degree that have the potential to impact buried cultural resources, some of which could be evaluated as Cultural Places or Tribal Cultural Resources, and it is assumed that each project will implement similar inadvertent discovery mitigation measures to reduce impacts to buried unknown resources. Therefore, implementation of the PVSP would not contribute any additional or cumulative impacts to Cultural Places or Tribal Cultural Resources and no additional mitigation is required.

# 3.16. Effects Not Found to be Significant

### Introduction

CEQA Guidelines Section 15128 requires that an Environmental Impact Report (EIR) briefly explain the reasons why certain effects associated with a proposed project have been determined not to be significant, and therefore not discussed in detail in the EIR. The following discussion presents this required rationale.

The Parkway Village Specific Plan (PVSP) would result in no impacts or less-than-significant impacts to the following resources:

- Agriculture and Forestry Resources
- Mineral Resources
- Wildfire

Summary descriptions of each of these resources and an explanation of why the proposed Project would not result in significant impacts are presented below. Significance criteria are derived from CEQA Guidelines Appendix G (CEQA Checklist).

## 3.16.1. Agriculture and Forestry Resources

As designated by the Department of Conservation's (DOC's) California Important Farmland Finder, the Plan area is entirely comprised of Urban and Built-Up Land and Other Land (DOC, 2024). There are no farmlands of local, state, or federal importance in the Plan area, nor surrounding the Plan area. There are no Williamson Act Contract lands within the Plan area or in the City of Lancaster. In addition, there are no forest lands, and the project would not result in the loss of forest land. There would be no agricultural or forestry impacts as a result of the implementation of the PVSP.

## 3.16.2. Mineral Resources

The City of Lancaster is located within Mineral Resource Zone (MRZ) 3, which indicates an area which contains potential but presently unproven resources. It is not considered likely that the Plan area has large, valuable mineral and aggregate deposits (City of Lancaster, 2008). Therefore, there would no impacts to mineral resources as a result of implementation of the PVSP.

## 3.16.3. Wildfire

The Cal Fire maps for Los Angeles County (CALFIRE, 2023) indicate that the Plan area is located in a Local Responsibility Area (LRA). Within the LRA, the Plan area falls within an area mapped as a Non-Very High Fire Hazard Severity Zone (CALFIRE, 2011). The Plan area is within an urban environment that includes areas of scattered to dense development and undeveloped areas of sparse desert vegetation. Once developed, the PVSP would add to the area's urban environment with planned and engineered landscaping, design, and architecture that complies with State and local fire codes and design requirements. The City of Lancaster General Plan Safety Element identifies the PVSP area as having moderate wildfire risk (City of Lancaster, 2022). The few areas of sparse desert vegetation that would remain in the PVSP area would be less prone to wildfires than other heavily vegetated areas of Southern California (City of Lancaster, 2022). The urbanized areas near the PVSP are unlikely to be exposed to wildland fires due to the lack of wildlands in the vicinity.

As discussed in Section 3.14 (Transportation) and 3.8 (Hazards and Hazardous Materials), the buildout of the PVSP would not impair an adopted emergency response plan or emergency evacuation plan. Existing evacuation and emergency response routes would continue to be available for access during Project construction and operation activities associated with the PVSP.

# 4. ALTERNATIVES

This chapter identifies and analyzes the alternatives to the proposed Parkway Village Specific Plan (PVSP). Section 4.1 provides an overview of the California Environmental Quality Act (CEQA) requirements for the analysis of alternatives. Section 4.2 provides an analysis of each alternative selected for analysis, and Section 4.3 describes alternatives that were considered but not selected for analysis. Section 4.4 includes a comparison of impacts amongst each of the alternatives carried forward for analysis. The significance of potential impacts that would result from implementation of any of the analyzed alternatives are identified.

## 4.1. CEQA Requirements for Alternatives

Section 15126.6 of the State CEQA Guidelines requires the identification and evaluation of a reasonable range of alternatives designed to feasibly achieve the basic objectives of a project, while avoiding or substantially lessening any of the significant environmental effects identified for the proposed project. In addition, CEQA requires a comparative evaluation of the merits of the alternatives.

Pursuant to Section 15126.6 (f)(1) of the State CEQA Guidelines, factors that may be taken into account when addressing the feasibility of alternatives include, but are not limited to, 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). Although these factors do not present a strict limit on the scope of reasonable alternatives to be considered, they help establish the context in which "the rule of reason" is measured against when determining an appropriate range of alternatives sufficient to establish and foster meaningful public participation and informed decision-making.

Additionally, the No Project Alternative must be analyzed. The Environmental Impact Report (EIR) must explain the rationale for selecting the alternatives to be discussed, identify those that were not carried forward because they were infeasible, and briefly explain why these were not carried forward. The "environmentally superior" alternative to the Project must be identified and discussed (see Section 4.4, Comparison of Alternatives). If the environmentally superior alternative is the No Project Alternative, the EIR must identify an additional "environmentally superior" choice among the other Project alternatives.

As presented below, a variety of alternatives to the PVSP were considered to determine potential alternatives which might produce fewer significant impacts, or reduce the severity of those significant impacts, than the PVSP, including the No Project Alternative. Possible alternatives were assessed as to whether they would satisfy the following:

- The alternative is technically feasible;
- The alternative would avoid or significantly lessen any of the significant impacts of the PVSP; and
- The alternative would attain most of the basic PVSP objectives, defined in Section 2.2 (Project Objectives).

Alternatives considered included two No Project Alternatives and an All-Residential Alternative. The No Project Alternative and other alternatives carried forward for evaluation are presented in Section 4.2 (Alternatives Retained for Analysis). Alternatives considered, but not carried forward for further analysis, are presented in Section 4.3 (Alternatives Considered but Eliminated). An alternative comparison is provided in Section 4.4 (Comparison of Alternatives).

## 4.2. Alternatives Retained for Analysis

### 4.2.1. Summary of Alternatives

This section includes detailed evaluations of the alternatives considered for each resource area presented in Section 3.

- **Alternative 1 – No Project/No Development**. Under this alternative, no development would occur within the boundaries of the PVSP area. The area would remain in its current condition.
- **Alternative 2 – No Project/Development Under Existing Zoning.** Under this alternative, development would occur on a project-by-project basis in accordance with the existing zoning. The area currently zoned as Specific Plan 07-01 (SP 07-01; Amargosa Creek Specific Plan) would ultimately be developed with a mix of commercial uses and the hospital for Kaiser Permanente. A small strip located between Avenue K and Avenue K-8, which is currently zoned Mixed Use-Neighborhood (MU-N), would be developed predominantly with residential uses. The remainder of the PVSP area is currently zoned Mixed-Use Employment (MU-E). The intent would be to provide non-retail employment uses in close proximity to multi-family residential uses.
- **Alternative 3 – All Residential.** Under this alternative, 386.6 acres of the PVSP area would be rezoned to allow for a variety of residential uses. The remaining 48.1 acres (owned by Kaiser Permanente) would be zoned Hospital (H) to allow for construction and operation of a proposed hospital and related medical uses. The residential zoning would include R-7,000 (single family residential, minimum lot size 7,000 square feet), R-10,000 (single-family residential, minimum lot size 10,000 square feet), MDR (moderate-density residential, 8.1-15 units to the acre), and HDR (high-density residential, 15.1-30 units to the acre). A maximum of 2,500 residential units would be constructed for an overall density of 6.7 units per acre.

### 4.2.2. Alternative 1 – No Project/No Development

#### 4.2.2.1. Aesthetics/Visual

Under the No Project/No Development Alternative no development would occur within the Plan area; therefore, the No Project/No Development Alternative would represent no change to the environmental setting. This alternative would avoid any development, and therefore would avoid any impacts related to aesthetics. The No Project/No Development Alternative would not cause direct, indirect, or cumulative impacts to aesthetics.

#### 4.2.2.2. Air Quality/Greenhouse Gas

Under the No Project/No Development Alternative development would not occur within the Plan area; therefore, would not result in any new construction and/or operational activities, or any associated ground-disturbing activities. However, the lack of development would continue to allow for dust to be blown from exposed ground surfaces. The No Project/No Development Alternative would not create any new sources of air pollutant emissions related to development activities. Accordingly, the No Project/No Development Alternative would represent no change to the environmental setting. Because no new air pollutant emission would occur under this alternative, there would be no direct, indirect, or cumulative impacts related to air quality.

#### 4.2.2.3. Biological Resources

Under the No Project/No Development Alternative no development would occur within the Plan area and therefore would not result in any new construction and/or operational activities, or any new associated ground-disturbing activities. Accordingly, the No Project/No Development Alternative would represent no

change to the environmental setting. This alternative would avoid any development and therefore would avoid any impacts on biological resources present in the Plan area. The No Project/No Development Alternative would not cause direct, indirect, or cumulative impacts to biological resources.

#### 4.2.2.4. Cultural Resources

Under the No Project/No Development Alternative, no development would occur within the Plan area, and there would be no associated ground-disturbing activities. Therefore, no impacts to historic or cultural resources would occur.

#### 4.2.2.5. Energy

Under the No Project/No Development Alternative no new construction or operational activities would occur, and therefore, would not affect energy resources in the Plan area. The No Project/No Development Alternative would not cause direct, indirect, or cumulative impacts to energy resources.

#### 4.2.2.6. Geology, Soils and Paleontology

Under the No Project/No Development Alternative no new construction or operational activities would occur, and therefore, no impacts on geology, soils, and paleontology resources in the Plan area would be created. The No Project/No Development Alternative would not cause direct, indirect, or cumulative impacts to energy resources.

#### 4.2.2.7. Hazards/Hazardous Materials

Under the No Project/No Development Alternative no new construction and ground disturbance nor operational activities would occur, and therefore, no impacts with respect to hazards or hazardous materials would be created. The No Project/No Development Alternative would not cause direct, indirect, or cumulative impacts with respect to hazards and hazardous materials.

#### 4.2.2.8. Hydrology/Water Quality

Under the No Project/No Development Alternative no new construction or operational activities would occur, and therefore, no impacts on hydrology or water quality would be created, and there would be no increase in demand for water resources. The area's water quality would remain in the existing condition, as would flood patterns. There would be no potential for increasing flood potential either on site or off site. The No Project/No Development Alternative would not cause direct, indirect, or cumulative impacts to hydrology or water quality.

#### 4.2.2.9. Land Use Planning, and Recreation

Under the No Project/No Development Alternative no new construction or operational activities would occur, nor would the existing land use or zoning designations be modified. No recreational land uses would be developed within the Plan boundary. This alternative would not conflict with any existing or known future land use plans or zoning. This alternative would not develop any beneficial recreational land uses, such as a linear trail system or shade trees in public gathering spaces. Therefore, this alternative would not have direct, indirect, or cumulative impacts related to land use or recreation, and would not provide beneficial effects from development of recreational elements.

#### 4.2.2.10. Noise and Vibration

Under the No Project/No Development Alternative no new construction or operational activities would occur and no new noise sources or noise-generating activities would be created. Accordingly, the No Project/No Development Alternative would represent no change to the environmental setting. Because

no new sources of noise or vibration would occur with the No Project/No Development Alternative, this alternative would have no direct, indirect, or cumulative impact related to noise and vibration.

#### 4.2.2.11. Population and Housing

Under the No Project/No Development Alternative no new construction or operational activities would occur. No new housing would be constructed in the Plan area. The No Project/No Development Alternative would not affect population growth or demand for additional housing in the Plan area. Therefore, the No Project/No Development Alternative would not have direct, indirect, or cumulative impacts to population and housing. However, since there would be no housing developed under the No Project/No Development Alternative, there would be no benefits related to the provision of new housing in the community.

#### 4.2.2.12. Public Services and Utilities

Under the No Project/No Development Alternative no new construction or operational activities would occur. The No Project/No Development Alternative would not require provision of additional government facilities and services, including fire protection, police protection, schools, parks, medical facilities, and libraries. Additionally, the Alternative would not require new storm water drainage facilities or expansion of existing facilities to provide water, wastewater, electricity or natural gas services. The No Project/No Development Alternative would not result in direct, indirect, or cumulative impacts to public services and utilities.

#### 4.2.2.13. Transportation

Under the No Project/No Development Alternative would not result in impacts related to traffic and transportation. No temporary (construction) or permanent trips, VMT, or temporary travel lane disruptions would be created. There would be no physical features that could cause impacts to air navigation. The No Project/No Development Alternative would not result in direct, indirect, or cumulative impacts to transportation, and there would be no benefits related to the development of pedestrian and bike-friendly infrastructure which connect areas of the community and promote alternative modes of transportation.

#### 4.2.2.14. Tribal Cultural Resources

Under the No Project/No Development Alternative, the Plan would not be implemented, and there would be no development. Therefore, no impacts to tribal cultural resources would be created.

### 4.2.3. Alternative 2 – No Project/Development Under Existing Zoning

#### 4.2.3.1. Aesthetics/Visual

Under the No Project/Development Under Existing Zoning Alternative development would occur subject to the existing zoning applicable to parcels in the Plan area. No new specific plan would be implemented; however, a portion of the Plan area would still be subject to the requirements of the Amargosa Creek Specific Plan (SP 07-01). Development under Alternative 2 would be guided by existing General Plan policies and zoning, which would likely result in similar impacts to aesthetics when compared to development under the PVSP. While the PVSP includes design guidelines to ensure a cohesive look throughout the area, development under this alternative would be required to comply with the City's design guidelines and objective design standards for residential uses. Therefore, Alternative 2 would result in greater impacts to aesthetics compared to the PVSP, although the impacts would still be less than significant.

#### 4.2.3.2. Air Quality/Greenhouse Gas

Under the No Project/Development Under Existing Zoning Alternative, development would be allowed under the existing zoning for the Plan area. No new specific plan would be implemented; however, a

portion of the site would still be subject to the requirements of the SP 07-01. Development would be guided by existing General Plan policies and zoning. Construction activities, or any new associated ground-disturbing activities would be similar to those allowed under the implementation of the PVSP and would cause similar sources of air pollutant emissions. Some projects developed under existing zoning would be subject to CEQA review. Development under the No Project/Development Under Existing Zoning Alternative would be subject to the same federal, State, and local regulations, and as such, projects would develop their own mitigation measures to avoid significant impacts from temporary construction emissions and operational emissions from vehicle trips and energy generation similar to the PVSP. Since there would be similar sources of air pollutant emissions, and similar mitigation measures implemented, impacts would be similar to the PVSP.

#### 4.2.3.3. Biological Resources

Under the No Project/Development Under Existing Zoning Alternative, development would be allowed under the existing zoning for the Plan area. Development under this alternative would be guided by existing General Plan policies and zoning. Construction activities would be similar to activities allowed under the PVSP, and would cause similar impacts to biological resources, such as impacts to special status plant and wildlife species. All projects developed in the region would need to comply with applicable federal, state, and local requirements. Impacts to biological resources would be mitigated to a less-than-significant level under the PVSP. Similarly, projects developed under this alternative would develop their own mitigation measures to avoid significant impacts. Therefore, impacts would be similar to the PVSP with mitigation.

#### 4.2.3.4. Cultural Resources

Under the No Project/Development Under Existing Zoning Alternative, the PVSP would not be implemented, and development would occur under existing zoning. Construction and ground-disturbing activities would be similar to those that would occur under the PVSP, causing potential impacts to unknown buried cultural resources. Impacts would be mitigated to a less-than-significant level for the PVSP, and similarly, projects developed under this alternative would be required to develop their own mitigation measures to avoid significant impacts. Therefore, impacts for implementation of Alternative 2 would be similar to the PVSP.

#### 4.2.3.5. Energy

Under the No Project/Development Under Existing Zoning Alternative development would occur under existing zoning. Because the PVSP would not be implemented, the sustainable design practices promulgated from Chapter 5 of the PVSP, such as the use of energy-conserving buildings on all residential and commercial development, may not be implemented to the same degree as would occur under the PVSP. All development would be subject to applicable local, regional, and state standards, laws, policies, ordinances, and regulations of the City of Lancaster 2030 General Plan and Municipal Code, related to energy efficiency. Additionally, all development is required to comply with the California Green Building Standards Code (see Section 3.6, Energy), which includes measures to ensure energy efficiency. Therefore, impacts of implementing Alternative 2 may be slightly greater for energy resources when compared to the PVSP.

#### 4.2.3.6. Geology, Soils and Paleontology

Under the No Project/Development Under Existing Zoning Alternative development would be guided by existing General Plan policies and zoning. This development would be subject to the same local and state building codes, regulations, and standards for construction of structures and facilities as the PVSP. Development under the No Project/Development Under Existing Zoning Alternative would be subject to the same seismic and geologic hazards as development allowed under the PVSP. Impacts under this

alternative would be similar to impacts under the PVSP due to a similar amount of ground disturbance and development, causing potential impacts to unknown buried paleontological resources. Impacts would be mitigated to a less-than-significant level for the PVSP, and similarly, projects developed under this alternative would be required to develop their own mitigation measures to avoid significant impacts. Therefore, impacts would be similar to the PVSP.

#### 4.2.3.7. Hazards/Hazardous Materials

Under the No Project/Development Under Existing Zoning Alternative development would be guided by existing General Plan policies and zoning. All development would be subject to existing regulations related to hazardous materials, airport hazards, implementation of emergency response plans, and fire safety standards. There would be similar development and therefore similar types of construction and amounts of ground disturbance, causing potential impacts related to the release of hazardous materials or unknown contamination. This alternative would result in construction of more commercial uses than the PVSP, which could result in increased hazardous material use and storage depending on the type of projects developed. Projects developed under this alternative would be required to develop similar mitigation measures to avoid significant impacts. Therefore, this alternative would have similar impacts as the PVSP related to spills or leaks of hazardous materials and encountering hazardous materials during project construction, but a slightly increased potential for spills or leaks of hazardous materials during project operation.

#### 4.2.3.8. Hydrology/Water Quality

Under the No Project/Development Under Existing Zoning Alternative development would be guided by existing General Plan policies and zoning. All development would be subject to existing water quality standards, waste discharge requirements, flooding and drainage engineering requirements, and would be similar to development allowed under the PVSP, with a slightly different land use mix. As with the PVSP, groundwater use is limited by the Antelope Valley Groundwater Basin Adjudication. Land uses under this alternative may differ from those envisioned under the PVSP. Different land uses may consume more or less water, depending on the type of individual development. Impacts under this alternative would be similar to the PVSP, including impacts to stormwater quality, flooding, and drainage. Projects under this alternative would also be required to develop similar mitigation measures as the PVSP. Therefore, this alternative would have similar impacts as the PVSP.

#### 4.2.3.9. Land Use and Planning, and Recreation

Under the No Project/Development Under Existing Zoning Alternative development would be consistent with the current General Plan, zoning, and specific plans applicable to the Plan area. These developments would not be focused on achieving the various planning objectives set forth in the PVSP. This alternative would have similar impacts as the PVSP, but without the additional design guidance and objectives provided by the PVSP.

#### 4.2.3.10. Noise and Vibration

Under the No Project/Development Under Existing Zoning Alternative, development would be allowed under the existing zoning for the Plan area. No new specific plan would be implemented; however, a portion of the site would still be subject to the requirements of SP 07-01. Development would be guided by existing General Plan policies and zoning. Construction activities, or any new associated ground-disturbing activities would be similar to implementation of the PVSP and would cause similar levels of noise and vibrations. Some projects developed under existing zoning would be subject to CEQA review. Projects would develop their own mitigation measures to avoid significant impacts, similar to the PVSP, such as limiting construction activities to daytime hours, requiring modern equipment, staging equipment,

and operational measures such as installing HVAC equipment in shielded areas, requiring acoustical analyses prior to the issuance of construction permits and avigation easements for residential land uses. However, this alternative allows for a greater amount of commercial uses than the PVSP, which could result in higher levels of ambient noise above the existing levels; the impact would be slightly greater. Therefore, impacts would be similar or slightly greater than under the PVSP, due to similar sources of noise and vibration emissions and similar mitigation measures being implemented.

#### 4.2.3.11. Population and Housing

Under the No Project/Development Under Existing Zoning Alternative, development would be consistent with the current General Plan, zoning, and specific plans applicable to the Plan area. Existing zoning would allow for development of less housing than the PVSP. This alternative would have similar impacts as the PVSP, but with the provision of less housing.

#### 4.2.3.12. Public Services and Utilities

Under the No Project/Development Under Existing Zoning Alternative, development would be consistent with the current General Plan, zoning, and specific plans applicable to the Plan area. Each project would be evaluated individually to determine how utilities and public services would be provided. Development under this alternative would result in similar impacts to those of the PVSP.

#### 4.2.3.13. Transportation

Under the No Project/Development Under Existing Zoning Alternative, development would be guided by existing General Plan policies and zoning. The area would be developed with a variety of mixed use residential and employment land uses, so that employees could live in close proximity to where they work. Impacts would be similar when compared to the PVSP, with less benefits related to pedestrian and bike-friendly infrastructure which connect areas of the community and promote alternative modes of transportation.

#### 4.2.3.14. Tribal Cultural Resources

Under the No Project/Development Under Existing Zoning Alternative, the PVSP would not be implemented, and development would occur under existing General Plan policies and zoning. Construction and ground-disturbing activities would be similar to the PVSP, and therefore, impacts would be similar to PVSP.

### 4.2.4. Alternative 3 – All Residential

#### 4.2.4.1. Aesthetics/Visual

The All-Residential Alternative would allow development of only residential uses on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H (Hospital). Because no specific plan would be implemented, development would be guided by existing General Plan policies and zoning. Impacts to aesthetics would likely be greater when compared to development under the PVSP as no cohesive look would be created. However, all new residential uses would be required to comply with the City's Design Guidelines and recently adopted Objective Design Standards. The PVSP includes design guidelines to ensure impacts to Aesthetics are less than significant. Alternative 3 would result in greater impacts to aesthetics compared to the PVSP, although the impacts would still be less than significant.

#### 4.2.4.2. Air Quality/Greenhouse Gas

The All-Residential Alternative would allow development for only residential uses on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned

H. Because no specific plan would be implemented, development would be guided by existing General Plan policies and zoning regulations. Impacts under this alternative would be similar to the PVSP, due to similar construction activities. Construction activities, or any new associated ground-disturbing activities would be similar to activities allowed under the PVSP and would cause similar sources of air pollutant emissions. All projects developed in the region would need to comply with applicable federal, state, and local requirements, and each project would implement mitigation measures to reduce their impacts. Therefore, impacts would be similar to the PVSP with mitigation.

#### 4.2.4.3. Biological Resources

The All-Residential Alternative would allow development for only residential uses on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. Because no specific plan would be implemented, development would be guided by existing General Plan policies and zoning regulations. Impacts under this alternative would be similar to those under the PVSP, due to similar construction activities. All projects developed in the region would need to comply with applicable federal, state, and local requirements, and each project would implement mitigation measures to reduce their impacts to a less-than-significant level. Therefore, impacts would be similar to the PVSP, with mitigation.

#### 4.2.4.4. Cultural Resources

Under the All-Residential Alternative, the PVSP would not be implemented. Only residential uses would be constructed on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. Construction and ground-disturbing activities would be similar to the PVSP, causing potential impacts to unknown buried cultural resources. Impacts would be mitigated to a less-than-significant level for the PVSP, and similarly, projects developed under this alternative would be required to develop their own mitigation measures to avoid significant impacts. Therefore, impacts for implementation of Alternative 3 would be similar to the PVSP.

#### 4.2.4.5. Energy

Under the All-Residential Alternative, the PVSP would not be implemented. Only residential uses would be constructed on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be subject to applicable local, regional, and state standards, laws, policies, ordinances, and regulations of the City of Lancaster 2030 General Plan, Municipal Code, and the California Green Building Standards Code related to energy efficiency. Therefore, impacts for implementation of Alternative 3 may be slightly greater for energy resources when compared to the proposed Project.

#### 4.2.4.6. Geology, Soils and Paleontology

The All-Residential Alternative would result in development guided by existing General Plan policies and zoning; however, only residential uses would be constructed on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. Development under this alternative would be subject to the same regulations and standards for construction as the PVSP. There would be a similar amount of ground disturbance and development causing potential impacts to unknown buried paleontological resources. Impacts would be mitigated to a less-than-significant level for the PVSP, and similarly, projects developed under this alternative would be required to develop their own mitigation measures to avoid significant impacts. Therefore, impacts would be similar to the PVSP.

#### 4.2.4.7. Hazards/Hazardous Materials

The All-Residential Alternative would result in development guided by existing General Plan policies and zoning; however, only residential uses would be constructed on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be subject to existing regulations related to hazardous materials, airport hazards, implementation of emergency response plans, and fire safety standards. There would be a similar amount of ground disturbance and development, causing potential impacts related to release of hazardous materials or unknown contamination during construction. Projects developed under this alternative would be required to develop similar mitigation measure to avoid significant impacts. Residential land uses would likely use less hazardous materials compared to commercial land uses, with the residential properties each likely storing and using small amounts of various hazardous materials. Therefore, this alternative would have similar impacts to the PVSP, although perhaps slightly reduced.

#### 4.2.4.8. Hydrology/Water Quality

The All-Residential Alternative would result in development of residential uses guided by existing General Plan policies and zoning; however, only residential uses would be constructed on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be subject to existing water quality standards, waste discharge requirements, flood and drainage engineering requirements, and would be similar to development under the PVSP, with a different mix of land uses. Different land uses may consume more or less water, depending on the individual project. Impacts under this alternative would be similar to the PVSP, including impacts to stormwater quality and drainage. Projects under this alternative would be required to develop similar mitigation measures as the PVSP to avoid impacts. Therefore, this alternative would have similar impacts to the PVSP.

#### 4.2.4.9. Land Use and Planning, and Recreation

The All-Residential Alternative would allow residential development on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be guided by existing General Plan policies and zoning. Parcels within the Plan area would be rezoned to allow for a variety of housing options including R-7,000 (single family residential minimum lot size 7,000 square feet), R-10,000 (single family residential minimum lot size 10,000 square feet), MDR (moderate density residential), and HDR (high density residential). Although these developments would contribute to the regional housing needs the alternative would not provide as many residential units at the PVSP and would not be focused on achieving the various planning objectives set forth in the PVSP. This alternative would have similar impacts as the PVSP, but without the additional design guidance provided by the PVSP. Noise and Vibration

The All-Residential Alternative would allow development of residential uses on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be guided by existing General Plan policies and zoning. Construction activities, and any new associated ground-disturbing activities would be similar to implementation of the PVSP and would cause similar levels of noise and vibrations. Some projects developed under existing zoning would be subject to CEQA review. Projects would develop their own mitigation measures to avoid significant impacts, similar to the PVSP. However, due to the lack of commercial land uses in this alternative (with the exception of the medical uses), the permanent increase in noise levels over the existing ambient levels would be slightly less than the PVSP but would still be within the City's noise standards with the imposition of mitigation. Therefore, impacts would be similar to the PVSP, due to similar sources of noise and vibration emissions and similar mitigation measures being implemented.

#### 4.2.4.10. Population and Housing

The All-Residential Alternative would allow development of residential uses on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be guided by existing General Plan policies and zoning. The area would be developed with a variety of housing density options, adding approximately 2,500 units in the City. Although these developments would contribute to the regional housing needs, this alternative proposes less housing units when compared to the buildout of the PVSP (4,246 units). This alternative would have similar impacts as the PVSP but would have fewer beneficial impacts.

#### 4.2.4.11. Public Services and Utilities

The All-Residential Alternative would allow development of residential uses on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be guided by existing General Plan policies and zoning. The area would be developed with a variety of housing density options, adding approximately 2,500 units, which is less than under the buildout of the PVSP. Each project would be evaluated individually to determine how utilities and public services would be provided to each development. Because there are less units proposed, there would be less demand for public services and utilities, and therefore, development under this alternative would result in slightly reduced impacts when compared to the PVSP.

#### 4.2.4.12. Transportation

The All-Residential Alternative would allow development of residential uses on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. All development would be guided by existing General Plan policies and zoning. The area would be developed with a variety of housing density options, adding approximately 2,500 units, which is less than the PVSP. With less housing units, there would be less cars on the roadway accessing the area, and potential impacts would be less when compared to the PVSP. Additionally, there would be fewer beneficial impacts related to pedestrian and bike-friendly infrastructure which connect areas of the community and promote alternative modes of transportation.

#### 4.2.4.13. Tribal Cultural Resources

Under the All-Residential Alternative, the PVSP would not be implemented., Residential uses would be developed on 386.6 acres of the project site while the remaining 48.1 acres would be used for Kaiser Permanente's operations and zoned H. Construction and ground-disturbing activities would be similar to the PVSP, and therefore, impacts would be similar to the PVSP.

## 4.3. Alternatives Considered but Eliminated from Further Consideration

### 4.3.1. Alternative Location

An alternative location for the development of the specific plan was considered and ultimately dismissed. There are no other large, vacant land areas within the central urban core of the City that could be considered for this type of development. There are many scattered undeveloped, smaller parcels throughout the urban core which could be developed; however, these parcels are not of suitable size or in proximity to one another to create a cohesive, master planned community. Additionally, a large area of land bound by 8$^{th}$ Street West, Sierra Highway, Avenue L, and Avenue M is undeveloped. While these parcels are currently undeveloped;, many of them have been entitled with large distribution facilities, general industrial uses, and solar fields making them unavailable and unsuitable for residential development.

### 4.3.2. All Commercial

The City considered allowing for the development of the entire Plan area with commercial uses similar to what is currently allowed under the Amargosa Creek Specific Plan. This alternative would have allowed for the development of up to 9,467,766 square feet of commercial space (based on 50% lot coverage permitted by the Lancaster Municipal Code). This amount of commercial is unsustainable in one concentrated location. This assumption is based on the limited amount of commercial development that has occurred within the Amargosa Creek Specific Plan area over the previous 17 years. Additionally, the alternative would not assist the City in meeting its Regional Housing Needs Assessment (RHNA) numbers/ housing needs.

### 4.3.3. Industrial Development

The City considered allowing for the development of the entire Plan area with industrial uses to provide additional employment opportunities for City and area residents and to help meet the current demand for large industrial parcels. This alternative was ultimately dismissed due to the close proximity of existing sensitive receptors (e.g., church, park, residences, etc.) to the Plan area.

## 4.4. Comparison of Alternatives

This subsection summarizes and compares the environmental advantages and disadvantages of the PVSP and the alternatives evaluated in this EIR. This comparison is based on the assessment of environmental impacts of the PVSP as identified in Section 3 (Environmental Analysis) and each alternative as identified in Section 4.2 (Alternatives Retained for Analysis).

CEQA requires the following for alternatives analysis and comparison:

> The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. State Guidelines Section 15126.6(d)

If the environmentally superior alternative is the No Project Alternative, CEQA requires identification of an environmentally superior alternative among the other alternatives [State CEQA Guidelines Section 15126.6I(2)].

### 4.4.1. Comparison Methodology

The following methodology was used to compare alternatives in this EIR:

- **Step 1: Identification of Alternatives.** A screening process (described in Section 4.1, CEQA Requirements) was used to identify alternatives to the PVSP. Two No Project Alternatives were also identified. This range of alternatives is sufficient to foster informed decision-making and public participation. No other feasible alternatives meeting most of the Project objectives were identified that would lessen or alleviate significant impacts.
- **Step 2: Determination of Environmental Impacts.** The environmental impacts of the PVSP and alternatives were identified in Section 3 and Section 4.2, respectively, including the potential impacts of construction and operation from uses developed under the PVSP and the alternatives.

- **Step 3: Comparison of Proposed Project and Alternatives.** The environmental impacts of implementing the PVSP were compared to those of implementing each alternative to determine the environmentally superior alternative. The environmentally superior alternative was then compared to the No Project Alternative.

Determining an environmentally superior alternative requires balancing many environmental factors. In order to identify the environmentally superior alternative, the level of the most severe adverse impacts in each issue area were identified and compared in Table 4-1. Although this EIR identifies an environmentally superior alternative, it is possible that the decision-makers could balance the importance of each impact area differently and reach different conclusions. In other words, the lead agency is not required to select the environmentally superior alternative. CEQA's "substantive mandate" only requires the selection of one alternative over others if that alternative is feasible, based on a list of statutory factors, and if it will avoid one or more significant effects on the environment compared to other alternatives.

## 4.4.2. Comparison of the Proposed Project and Alternatives

Table 4-1 compares the potential impacts of the PVSP to the alternatives. The comparison focuses on the most intense impact per environmental resource area, compared to the impacts for the alternatives. The "proposed Project" in the table is the PVSP.

**Table 4-1. Comparison of Alternatives to the Parkway Village Specific Plan**

| | Impact Severity Compared to Proposed Project | | | |
|---|---|---|---|---|
| **Environmental Resource** | **Proposed Project** | **Alternative 1 No Project, No Development** | **Alternative 2 No Project/Development Under Existing Zoning** | **Alternative 3 All Residential** |
| **Aesthetics/ Visual** | Less than significant | Less than proposed Project | Greater than proposed Project | Greater than proposed Project |
| **Air Quality/ Greenhouse Gas** | Less than significant with mitigation | Less than the proposed Project | Similar to the proposed Project | Similar to the proposed Project |
| **Biological Resources** | Less than significant with mitigation | Similar to the proposed Project | Similar to the proposed Project | Similar to the proposed Project |
| **Cultural Resources** | Less than significant with mitigation | Less than the proposed Project | Similar to the proposed Project | Similar to the proposed Project |
| **Energy** | Less than significant | Less than the proposed Project | Slightly greater than proposed Project | Slightly greater than proposed Project |
| **Geology, Soils and Paleontology** | Less than significant with mitigation | Less than the proposed Project | Similar to the proposed Project | Similar to the proposed Project |
| **Hazards/Hazardous Materials** | Less than significant with mitigation | Less than the proposed Project | Slightly greater than proposed Project | Slightly less than proposed Project |
| **Hydrology/ Water Quality** | Less than significant with mitigation | Less than the proposed Project | Similar to the proposed Project | Similar to the proposed Project |
| **Land Use, Planning, and Recreation** | Less than significant | Less than the proposed Project, with less benefits | Similar to the proposed Project, with less benefits | Similar to the proposed Project, with less benefits |
| **Noise and Vibration** | Less than significant with mitigation | Less than the proposed Project | Slightly greater than proposed Project | Slightly less than proposed Project |
| **Population and Housing** | Less than significant | Less than the proposed Project, with less benefits | Similar to the proposed Project, with less benefits | Similar to the proposed Project, with less benefits |
| **Public Services and Utilities** | Less than significant | Less than the proposed Project | Similar to the proposed Project | Slightly less than proposed Project |

| Environmental Resource | Impact Severity Compared to Proposed Project | | | |
|---|---|---|---|---|
| | Proposed Project | Alternative 1 No Project, No Development | Alternative 2 No Project/Development Under Existing Zoning | Alternative 3 All Residential |
| **Transportation** | Less than significant with mitigation | Less than the proposed Project, with less benefits | Similar to the proposed Project, with less benefits | Less than the proposed Project, with less benefits |
| **Tribal Cultural Resources** | Less than significant with mitigation | Less than proposed Project | Similar to proposed Project | Similar to proposed Project |

### 4.4.3. Comparison of the Proposed Plan and No Project Alternatives

There are two No Project Alternative scenarios considered, Alternative 1 (No Project/No Development) and Alternative 2 (No Project/Development Under Existing Zoning). Alternative 1 would avoid all impacts from the construction and operation of the development allowed under the PVSP, since there would be no development, but would not realize the beneficial impacts of the Project related to the aesthetically pleasing and unified landscape theme proposed, a mix of land uses designed to connect the entirety of the Plan area, recreation and leisure opportunities that promote a healthy living environment, and other design concepts that positively respond to the residents of Lancaster's physical, social, and emotional wellbeing. Additionally, dust from undeveloped disturbed portions of the site would continue to be generated. Progress toward meeting City housing objectives would not be made.

Similarly, Alternative 2 would allow development under existing zoning, but would not implement a new Specific Plan to do so. It is unknown whether the parcels would be developed, or if they would be re-zoned to allow for different uses in the future. Alternative 2 could meet some Project objectives, but it is unknown what would be developed under the existing zoning, and development would not create a coherent community, as proposed in the PVSP. The number of housing units developed under Alternative 2 would be significantly fewer than under the PVSP.

### 4.4.4. Environmentally Superior Alternative

Section 15126.6 of the State CEQA Guidelines requires an EIR identify an "environmentally superior" alternative. If the "no project" alternative is the environmentally superior alternative, then the EIR must identify which of the other alternatives is environmentally superior.

Table 4-1 summarizes the comparison of alternatives and the PVSP (proposed Project) to help determine the environmentally superior alternative. As presented in the comparative analysis above, the environmentally superior alternative evaluated in this EIR would be the No Project, No Development Alternative (Alternative 1). No substantially adverse and long-term impacts would occur to the environment under the No Project Alternative. The No Project Alternative would also avoid the impacts of the PVSP, as analyzed in Section 3. However, it would not meet any Project objectives.

The No Project/Development Under Existing Zoning Alternative (Alternative 2) would achieve most of the Project objectives and would be feasible to implement; however, it would cause greater Noise and Aesthetic impacts than the PVSP and would not be the environmentally superior alternative. In accordance with section 15126.6 of the State CEQA Guidelines, the No Project/No Development Alternative (Alternative 1) would be the environmentally superior alternative since it would result in fewer, if any, impacts to the environment. However, as indicated above, CEQA requires the identification of another alternative that is environmentally superior. In which case, the all-residential alternative (Alternative 3) would be the environmentally superior alternative resulting in fewer impacts to Noise and Transportation resources than the PVSP and the No Project/Development Under Existing Zoning Alternative (Alternative 2); however, it would cause greater and slightly greater impacts to Aesthetics and Energy resources, respectively.

While Alternative 3 is marginally environmentally superior, it would provide for only residential land uses and Kaiser Permanente's operations and not a broad range of residential, commercial, recreational, office, and medical uses envisions under the PVSP. It would not include the variety of housing types provided in the PVSP, some of which are not typically found in Lancaster and there would be minimal business or employment opportunities that would promote a strong and diversified economy.

Because parcels within the Plan area would be developed by individual landowners and not be guided by an overarching theme or set of areawide objectives Alternative 3 likely would not:

- Be as effective in meeting housing goals as the PVSP
- Include a wide variety of amenities, including parks and recreational opportunities or
- Promote or facilitate modes of transport that are alternatives to fossil-fuel-consuming vehicles, or
- Connect residential areas to various nearby mixed-use areas or
- Include distinctive community character place-making elements found in the PVSP.

These conditions reduce Alternative 3's ability to meet the PVSP objectives.

# 5. OTHER CEQA CONSIDERATIONS

This chapter addresses the CEQA-required topics of growth-inducing impacts, significant irreversible environmental changes, and significant unavoidable impacts identified in the analysis of the Parkway Village Specific Plan (PVSP or Plan).

## 5.1. Growth-Inducing Effects

CEQA Guidelines Section 15126.2(d) requires analysis of the ways in which a proposed project could foster economic or population growth, either directly or indirectly, in the surrounding environment. Growth inducement can occur when a project:

- Removes obstacles to population growth (e.g., establishing essential public services or providing new access to an area)
- Fosters economic expansion or growth that would require construction of new facilities with significant environmental effects
- Establishes precedent-setting actions (e.g., changes to land use policies)
- Develops or encroaches on an isolated or adjacent area of open space

Growth should not be assumed to be either beneficial or detrimental. The following analysis examines the PVSP's potential growth-inducing effects against these criteria.

**Removal of obstacles to growth.** The PVSP provides a regulatory framework to guide development of a 434.7 acre tract of primarily vacant land within the City of Lancaster. While implementation of the Plan would result in new infrastructure and services to support planned development, these improvements would serve only the Plan area and would not extend services to other currently unserved areas. The Plan area is surrounded by existing development and infrastructure, and its development has been anticipated in local and regional plans. Therefore, implementation of the PVSP would not remove obstacles to growth beyond the Plan area.

**Economic growth effects**. The PVSP allows for development of substantial commercial, medical, and business uses that would create new employment opportunities in Lancaster. At full buildout, the Plan area could accommodate up to:

- 150,000 square feet of commercial uses in the Town Center
- 415,000 square feet of office, medical office, and business uses
- 185,000 square feet of commercial/workshop uses
- A 200-bed hospital and up to 500,000 square feet of medical-related uses

This economic growth and job creation has been accounted for in the City's General Plan and SCAG's regional growth forecasts. While construction activities may temporarily induce some worker migration to the area, the Plan's employment growth is expected to primarily serve and employ the existing regional workforce, particularly given the City's current unemployment rate of approximately 8.9 percent. Any new facilities needed to serve this planned growth would be constructed within the Plan area itself or in already developed areas of the City. Therefore, while the PVSP will foster economic growth, this growth has been planned for and would not trigger significant unplanned growth-inducing effects.

**Precedent-setting actions.** The PVSP requires a General Plan Amendment and Zone Change to implement the Plan. However, these changes apply only to the Plan area and do not alter fundamental City policies regarding growth and development. In the past. Other Specific plans have been prepared and approved

in the City to guide planned growth. The Plan's development standards and guidelines are specific to the Plan area and would not establish broader precedents for development elsewhere in Lancaster. Therefore, approval of the PVSP would not be growth-inducing through precedent-setting actions.

**Development of open space.** While the Plan area is largely undeveloped, it is located within an area designated as "Urbanizing" in the City's General Plan and is surrounded by existing development. The Plan area's development has been anticipated in both the General Plan and SCAG's regional plans. The PVSP would not induce growth through encroachment into isolated open space or by developing areas lacking access to urban services and infrastructure.

## 5.2. Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(c) requires discussion of significant irreversible environmental changes that would result from project implementation. The PVSP would guide development that commits future generations to similar urban uses and would result in both primary and secondary impacts. The following irreversible changes would occur as the Plan Area develops over time:

- **Commitment of Land and Resources.** Development under the PVSP would permanently convert approximately 434.7 acres of largely vacant land to urban uses. While some existing development is anticipated to remain, most of the Plan Area would be irreversibly transformed into a mixed-use community with residential, commercial, medical, and recreational uses. This commitment of land resources has been anticipated in local and regional planning documents.
- **Energy and Material Resources.** Implementation of the PVSP will result in the long-term commitment of various resources, including:
  - Construction materials such as lumber, steel, concrete, asphalt, and other building materials
  - Energy resources for construction and long-term operation (electricity, natural gas, and petroleum products)
  - Water resources for construction, landscaping, and operations

The use of these resources would represent a long-term commitment of essentially non-renewable resources. However, development under the PVSP would be required to comply with California's stringent building and energy efficiency standards, which would minimize resource consumption. The Plan also emphasizes sustainable design practices, drought-tolerant landscaping, and other conservation measures. Additionally, as buildings reach the end of their useful life, some materials may be recycled or reused in future construction.

- **Potential Environmental Accidents.** Limited use of potentially hazardous materials typical of commercial and residential uses may occur within the Plan area. These could include cleaning products, maintenance chemicals, and landscape materials. However, the use, storage, and disposal of any hazardous materials will be subject to existing regulations and standards. Compliance with these requirements will minimize the potential for significant environmental damage from accidents or spills.

While implementation of the PVSP will result in the irreversible commitment of resources, such commitments are consistent with planned urban development in Lancaster and would occur in compliance with applicable regulations and standards designed to minimize environmental impacts.

## 5.3. Significant Unavoidable Effects of the Proposed Project

As detailed in Chapter 3 of this EIR, implementation of the PVSP would result in two significant and unavoidable environmental impacts that cannot be reduced to a less-than-significant level even with implementation of feasible mitigation measures:

- Air Quality: Operation of development allowed under the PVSP would result in cumulatively considerable net increases of criteria pollutants for which the region is non-attainment under federal and state ambient air quality standards. Operation of development would also generate CO, VOC, and $PM_{10}$ (Fugitive Dust) emissions and expose sensitive receptors to substantial pollutant concentrations.

These two impacts are primarily related to mobile source emissions from vehicle trips generated by future development within the Plan area. While various mitigation measures will reduce operational emissions, they cannot be reduced below significance thresholds given the scale of planned development and the current limitations of vehicle emission control technologies.

## 5.4. Significant Cumulative Effects

As detailed in Chapter 3, Environmental Analysis, implementation of the PVSP would make a cumulatively considerable contribution to significant cumulative impacts related to operational air quality emissions. The PVSP's contribution to all other cumulative impacts would be less than considerable with implementation of identified mitigation measures.

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# 7. CONSULTATION AND PREPARERS

## City of Lancaster

| Name | Title |
|---|---|
| Patti Garibay | Director – Community Development |
| Hai Nguyen | Assistant Director – Community Development |
| Jocelyn Swain | Senior Planner |
| Kendall Brekke | Senior Planner |
| Nick Godin | Assistant Director – City Engineering |
| Matt Simons | Senior Engineer |
| Stephen Carrillo | Senior Engineer |

## Aspen Environmental Group Team

| Name | Title |
|---|---|
| Fritts Golden | Project Manager |
| Jon Davidson | Senior Consultant |
| Amanda Wild | Deputy Project Manager |
| Nader Kahlil | Environmental Planner |
| Rachael Dal Porto | Environmental Engineer |
| Justin Wood | Senior Biologist |

| Name | Title |
|---|---|
| Shaun Kehrmeyer | Biologist |
| Lauren DeOliveira | Senior Archaeologist |
| Michael Hoke | Cultural Resources Specialist |
| Collin Crawford | Environmental Planner |
| Aurie Patterson | Environmental Scientist/Geologist |
| Grace Weeks | Associate Environmental Scientist |

| Subconsultants | |
|---|---|
| Kurt Legleiter | Principal – Ambient Air Quality & Noise Consulting |
| Christopher Allen | Engineering Geologist – Earth Systems |
| Linda Pineda | Staff Geologist – Earth Systems |
| Richard Garland | Principal – Garland Associates |

## Specific Plan Preparers and Technical Consultants

| Firm | Staff |
|---|---|
| **T&B Planning** | Tracy Zinn, AICP – Principal |
| | Gary Cheng – Project Planner |
| **KTGY** | Geoff Graney – Associate Principal |
| | Melanie Wiranta – Project Manager, Planning |
| | Abby Choi – Planner |
| **Floor Associates** | Erin Forstner – Landscape Designer |
| | Shawn Bryon – Associate Landscape Architect |
| **Michael Baker Int'l** | Frances Yau, AICP – Project Manager |
| | John Nagle – Water Engineer |