Draft Environmental Impact Report

# Electric Vehicle Charging Station and Logistics Facility Project

## Lenwood Road, San Bernardino County

**JUNE 2026**

*State Clearinghouse No. 2024050651*

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F Paleontological Resources Inventory Memorandum
G Phase I Environmental Site Assessment
H Preliminary Drainage Study

I Noise Technical Memorandum
J Transportation Impact Study
K Water Supply Assessment
L Local Transportation Assessment
M Conceptual Landscape Plan

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# Acronyms and Abbreviations

| Acronym/Abbreviation | Definition |
|---|---|
| AAQS | ambient air quality standard |
| AB | Assembly Bill |
| ADMRT | Air Dispersion Modeling and Risk Tool |
| AERMOD | American Meteorological Society/Environmental Protection Agency Regulatory Model |
| BenMAP | Benefits Mapping and Analysis Program |
| BFPD | Barstow Fire Protection District |
| BIG | Barstow International Gateway |
| BMP | best management practice |
| BUG | backlight, up light, and glare |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| CALGreen | California Green Building Standards |
| CARB | California Air Resources Board |
| CEC | California Energy Code |
| CEQA | California Environmental Quality Act |
| City | City of Barstow |
| CMP | Congestion Management Plan |
| County | San Bernardino County |
| County Fire | San Bernardino County Fire Protection District |
| CPUC | California Public Utilities Commission |
| CRHR | California Register of Historical Resources |
| CRMP | Cultural Resource Management Plan |
| CTP | Countywide Transportation Plan |
| CWA | Clean Water At |
| CWP | Countywide Plan |
| DPM | diesel particulate matter |
| DWR | California Department of Water Resources |
| EIR | Environmental Impact Report |
| EISA | Energy Independence and Security Act of 2007 |
| EO | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| EV | electric vehicle |
| FEMA | Federal Emergency Management Agency |
| GHG | greenhouse gas |
| GHGRP | Greenhouse Gas Emissions Reduction Plan |
| GSWC | Golden State Water Company |
| GSWCB | Golden State Water Company – Barstow area |
| GWP | global warming potential |
| HARP2 | Hotspots Analysis and Reporting Program Version 2 |

| Acronym/Abbreviation | Definition |
|---|---|
| HHDT | heavy-heavy duty truck |
| HIA | health impact assessment |
| HRA | health risk assessment |
| HVAC | heating, ventilation, and air conditioning |
| I | Interstate |
| IESNA | Illuminating Engineering Society of North America |
| kWh | kilowatt hour |
| LACM | Natural History Museum of Los Angeles County |
| LAFCO | Local Agency Formation Commission of San Bernardino County |
| LCFS | Low Carbon Fuel Standard |
| LCI | Land Use and Climate Innovation |
| LOS | level of service |
| LZ | lighting zone |
| MDAB | Mojave Desert Air Basin |
| MDAQMT | Mojave Desert Air Quality Management District |
| MHDT | medium heavy duty truck |
| MMT | million metric tons |
| MPO | Metropolitan Planning Organizations |
| MT | metric ton |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NHTSA | National Highway Traffic Safety Administration |
| NMTP | Non-Motorized Transportation Plan |
| NOP | Notice of Preparation |
| NPDES | National Pollutant Discharge Elimination System |
| NRHP | National Register of Historic Places |
| PCE | passenger car equivalent |
| PM2.5 | particulate matter with an aerodynamic diameter equal to or less than 2.5 microns |
| PM10 | particulate matter with an aerodynamic diameter equal to or less than 10 microns |
| PRIMP | Paleontological Resources Impact Mitigation Program |
| PRC | Public Resources Code |
| "project" or "proposed project" | Electric Vehicle Charging Station and Logistics Facility project |
| project applicant | EVC Partners LLC |
| PV | photovoltaic |
| RFS | renewable fuel standard |
| RL | Rural Living |
| ROG | reactive organic gas |
| ROW | right-of-way |
| RPS | Renewables Portfolio Standard |
| RTP | Regional Transportation Plan |
| SAFE | Safer Affordable Fuel-Efficient |
| SB | Senate Bill |

| Acronym/Abbreviation | Definition |
|---|---|
| SBCTA | San Bernardino County Transportation Authority |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCE | Southern California Edison |
| SCS | Sustainable Communities Strategy |
| sf | square feet |
| SGMA | Sustainable Groundwater Management Act |
| SLCP | short-lived climate pollutant |
| SLF | Sacred Lands File |
| SOI | Secretary of the Interior |
| SVP | Society of Vertebrate Paleontology |
| SWRCB | State Water Resource Control Board |
| SWMP | stormwater management program |
| SWPPP | Stormwater Pollution Prevention Plan |
| TAC | toxic air contaminant |
| TCR | tribal cultural resources |
| TMDL | total maximum daily load |
| TPA | Transit Priority Area |
| UWMP | Urban Water Management Plan |
| VMT | vehicle miles traveled |
| VOC | volatile organic compound |
| VVTA | Victor Valley Transit Authority |
| WEAP | Worker Environmental Awareness Program |
| Wh | watt hour |
| WSA | water supply assessment |
| ZEV | zero-emission vehicle |
| ZNE | zero net energy |

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# Executive Summary

## ES.1 Introduction

This environmental impact report (EIR) evaluates the potential environmental impacts associated with implementation of the proposed Electric Vehicle Charging Station and Logistics Facility Project ("proposed project or project"). This EIR has been prepared by San Bernardino County ("County") as lead agency pursuant to the California Environmental Quality Act (CEQA), codified as California Public Resources (PRC) Code Section 21000 et seq., and the CEQA Guidelines in the California Code of Regulations (CCR), Title 14, Section 15000 et seq. Pursuant to CEQA Guidelines Section 15121, this EIR provides the public and responsible agencies information about the potential adverse impacts on the environment associated with implementation of the project.

CEQA requires that local government agencies, before taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An EIR is an informational document designed to provide to local and state governmental agency decision makers and the public an analysis of potential environmental consequences of a project to support informed decision making.

This chapter provides a brief synopsis of the project, results of the environmental analysis contained within Chapter 3, Environmental Analysis, of this EIR, alternatives to the project that were considered, and major areas of controversy and issues to be resolved by decision-makers. Effects that were found not to be significant, and therefore are not further analyzed in this EIR, are also described. This chapter does not contain the extensive background and analysis found throughout the individual sections within Chapter 3 of this EIR. Therefore, the reader should review the entire document to fully understand the project and its environmental effects.

## ES.2 Project Location

The 99.85 acre-project site (Assessor Parcel Numbers 0497-142-03; 0497-142-04; 0497-142-14; and 0497-142-15) is located on Lenwood Road between California State Route (SR) 58 and Interstate 15 (I-15) in the unincorporated County's Desert Region within the City of Barstow (City) Sphere of Influence. The project site is located approximately 4 miles west of downtown Barstow, 2.4 miles northwest of I-15, 1.15 miles southwest of SR-58, and approximately 6 miles west of I-40. Adjacent uses include the High Desert Estates residential subdivision to the south, large-lot rural residences to the north, and undeveloped land to the east and west.

## ES.3 Project Description

The project includes the construction and operation of a 20.72-acre electric vehicle (EV) charging station that would include approximately 53 EV chargers to serve different charging needs in addition to other service-related amenities including a 15,000 square-foot (SF) commercial building; truck services including a truck wash, truck maintenance facility and truck scale; parking areas; landscaping and other required utilities and infrastructure. The remaining 79.10 acres in the northern portion of the site would be developed and operated as a state of the art logistics facility consisting of three 447,144-SF concrete tilt-up buildings for a total of 1,341,432 SF, in addition to associated on-site improvements, including vehicle parking with 108 EV charging spaces, on-site stormwater detention basins, and landscaped areas. The project would also include off-site improvements, including widening and paving of Lenwood Road which provides access the project site and connections to water, sewer, and other

utilities. The proposed project also includes approval of an extra-territorial sewer service agreement with the City of Barstow and annexation of the project site and additional parcels, comprising approximately 226 acres inclusive of the project site, to the Barstow Fire Protection District.

See Chapter 2, Project Description, for a more detailed overview of the project.

## ES.4 Project Objectives

The underlying purpose of the proposed project is to provide electrical vehicle charging infrastructure to meet local and regional needs and develop a logistics facility proximate to major transportation corridors.

The objectives for the project are as follows:

1. To site an electric vehicle (EV) charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on SR 58, I-15, and I-40.
2. To contribute to the creation of a robust EV charging network in the region and strengthen the state and regional supply chain.
3. To develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors.
4. To expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses.
5. To attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment.

## ES.5 Required Approvals

The following discretionary approvals would be required by the County for the project:

- Countywide Plan/Policy Plan Amendment from Rural Living (RL) to Limited Industrial (LI)
- Zone change from Rural Living (RL) to Community Industrial (IC)
- Conditional Use Permit to construct the various project components, including but not limited to the commercial building, logistics buildings, truck amenities, EV charging stations and infrastructure, landscaping, and parking areas in the IC zone
- Tentative Parcel Map (with roadway dedications and ROW vacation)

In addition, the following discretionary approvals by others would be required for the project:

- Extra-territorial sewer service agreement with the City, to be approved by the City, with LAFCO authorizing the City to provide such service. If such agreement is not approved and authorized, then the project shall obtain discretionary approvals as required for an on-site wastewater treatment system.
- Annexation of the project site and additional parcels to the BFPD, per Figure 2-6, to be initiated or approved by the BFPD and approved by LAFCO. If the annexation does not occur, the project will continue to be served by County Fire.

# ES.6 Summary of Project Impacts

Table ES-1 provides a complete list of the project's environmental impacts, including the level of significance before and after mitigation, based on the analysis and conclusions presented in Chapter 3, Environmental Analysis. This EIR identified significant and unavoidable impacts related to aesthetics.

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| **Aesthetics** | | | |
| 3.1-1. The proposed project would not have a substantial adverse effect on a scenic vista. | Less than significant | N/A | Less than significant |
| 3.1-2. The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. | Less than significant | N/A | Less than significant |
| 3.1-3. The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. | Less than significant | N/A | Less than significant |
| 3.1-4. The proposed project would not contribute to a significant cumulative impact related to scenic vistas. | No impact | N/A | No impact |
| 3.1-5. The proposed project would contribute to a significant cumulative impact related to visual character and quality of public views. | Potentially significant | N/A | Significant and unavoidable |
| 3.1-6. The proposed project would contribute to a significant cumulative impact related to light and glare. | Potentially significant | N/A | Significant and unavoidable |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| **Air Quality** | | | |
| 3.2-1. The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. | Potentially significant | **MM-AQ-1 Construction Equipment Emission Reductions.** Prior to the commencement of construction activities for the project, the project Applicant shall require its construction contractor(s) to use California Air Resources Board (CARB)-certified Tier 4 Final engines for all diesel-powered equipment that are 100 horsepower or greater throughout all phases of project construction.<br><br>In the event of changed circumstances (e.g., changes in the availability of specific types of construction equipment), the project Applicant may submit a request to San Bernardino County Land Use Services Department (County) to apply an equivalent method of achieving project-generated construction emissions that fall below the numeric criteria air pollutant thresholds established by the Mojave Desert Air Quality Management District (MDAQMD). Documentation using industry-standard emission estimation methodologies shall be furnished to the County demonstrating that estimated project-generated construction emissions would not exceed the applicable MDAQMD criteria air pollutant thresholds with the alternate construction method(s). If the documentation demonstrates that project-generated construction emissions remain below the applicable MDAQMD criteria air pollutant thresholds, then the County may approve the alternate construction method(s), at the County's discretion. In addition, before a request for equivalent method of achieving project-generated construction emissions below thresholds may be granted, the project Applicant's construction contractor shall demonstrate that at least two construction fleet owners/operators in the County were contacted and those owners/operators confirmed Tier 4 final equipment could not be | Less than significant with mitigation |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | located within the County during the desired construction schedule.<br><br>**MM-AQ-2 Construction volatile organic compounds (VOC) Emission Reductions.** During construction, the construction contractor shall use super-compliant low volatile organic compound (VOC) paint (less than 10 grams per liter VOC) for all interior and exterior paint applications for nonresidential land uses. | |
| 3.2-2. The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard. | Potentially significant | **MM-AQ-1** and **MM-AQ-2** | Less than significant with mitigation |
| 3.2-3. The proposed project would not expose sensitive receptors to substantial pollutant concentrations. | Potentially significant | **MM-AQ-1** and **MM-AQ-2** | Less than significant with mitigation |
| 3.2-4. The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. | Less than significant | N/A | Less than significant |
| 3.2-5. The proposed project would not result in cumulatively considerable exposure by sensitive | Less than significant | N/A | Less than significant |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| receptors to pollution concentrations or other emissions (such as those leading to odors). | | | |
| **Biological Resources** | | | |
| 3.3-1. The proposed project 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 in local or regional plans, policies, or regulations, or by the CDFW or USFWS. | Potentially significant | **MM-BIO-1 Construction-Related Impacts to Special-Status Plants and Special-Status Wildlife.** Prior to issuance of a construction permit, construction plans and conditions of approval shall include the following to address indirect impacts to special-status species:<br><br>Biological Monitoring. A qualified project biologist shall monitor ground-disturbing and vegetation clearing activities for the duration of construction to ensure that practicable measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources outside the project footprint. Once ground-disturbing and vegetation clearing activities are complete, the project biologist shall conduct weekly checks in order to inspect construction fencing and ensure that all applicable requirements from the mitigation measures are being upheld. The qualified project biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures.<br><br>Worker Environmental Awareness Training. Prior to grading, a pre-construction meeting shall be required that includes a training session for project personnel by a qualified biologist. The training shall include (1) a description of the species of concern and its habitats; (2) the general provisions of the applicable regulations pertaining to biological resources, including the federal and California Endangered Species Act and the Clean Water Act; (3) the need to adhere to the provisions of the Endangered Species Act, | Less than significant with mitigation |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
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| | | the Clean Water Act, and other applicable regulations; (4) the penalties associated with violating the provisions of the Endangered Species Act, Clean Water Act, and other applicable regulations; (5) the general measures that are being implemented to conserve the species of concern as they relate to the project; and (6) the access routes to and project site boundaries within which the project activities must be accomplished. Additionally, the training shall include the measures and mitigation requirements for the applicable resources. Copies of the mitigation measures and any required permits from the resource agencies shall be made available to construction personnel.<br><br>**Delineation of Property Boundaries.** Prior to construction activities that would cause impacts, the contractor shall, in consultation with the biological monitor, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts shall take place. All impacts outside the fenced, staked, or flagged areas shall be avoided and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area. In addition, any avoided environmental resources (if applicable) shall be clearly delineated. Prior to implementing construction activities, the biological monitor shall verify that the flagging clearly delineates the construction limits and any sensitive environmental resources to be avoided.<br><br>**Standard Dust Control Measures.** Standard dust control measures shall be implemented in accordance with the Mojave Desert Air Quality Management District's Rules 401 and 403.2 to reduce impacts on nearby plants and wildlife. Measures include controlling speed to 25 mph or less on unpaved roads (including signage), replacing ground cover in disturbed areas as quickly as possible, frequently watering active work sites, installing shaker | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
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| | | plates, and suspending excavation and grading operations during periods of high winds.<br><br>**Stormwater Pollution Prevention Plan.** Prior to issuance of a grading permit for construction, the applicant shall submit a stormwater pollution prevention plan (SWPPP) to San Bernardino County that specifies best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sedimentation or any other pollutants from moving off site and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Best management practice categories employed on site would include erosion control, sediment control, and non-stormwater (good housekeeping). Best management practices recommended for the construction phase shall include, but not be limited to, the following:<br><br>▪ Limiting grading to the minimum area necessary for construction and operation of the project<br>▪ Limiting vegetation disturbance/removal to the maximum extent practicable<br>▪ Implementing fiber rolls and sandbags around drainage areas and the site perimeter<br>▪ Stockpiling and disposing of demolition debris, concrete, and soil properly<br>▪ Installing a stabilized construction entrance/exit and stabilization of disturbed areas<br>▪ Implementing proper protections for fueling and maintenance of equipment and vehicles<br>▪ Managing waste, aggressively controlling litter, and implementing sediment controls<br>▪ Stabilizing soil in disturbed areas by revegetation | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
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| | | The following water quality measures will be included in the SWPPP to the extent applicable:<br>▪ Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.<br>▪ Projects that cannot be conducted without placing equipment or personnel in sensitive habitats shall be timed to avoid the breeding season of riparian species.<br>▪ When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments off site. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.<br>▪ Water pollution and erosion control plans shall be developed and implemented in accordance with the Regional Water Quality Control Board.<br>**Minimize Spills of Hazardous Materials.** All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be immediately cleaned up and the contaminated soil shall be properly handled or disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area. | |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
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| | | **Wildlife Hazards.** The following measures shall be implemented to ensure that wildlife do not become trapped, entangled, injured, or poisoned by construction activities:<br>▪ Structures in which wildlife may become trapped (e.g., open pipes, pits, trenches, etc.) shall be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp shall be provided to allow any wildlife that falls in to safely escape.<br>▪ Debris piles, construction materials, equipment, and other items that may be used as wildlife refuge shall be inspected for wildlife at the start of each work day and prior to disturbance. If wildlife is discovered, it shall either be moved out of harm's way by a qualified biologist or allowed to move off of the project site on its own.<br>▪ Nets and mesh shall be made of loose weave material that is not fused at the intersections of the weave, as nets with welded weaves present an entanglement risk.<br>▪ Toxic materials and garbage shall be removed from the work site and safely stored or disposed of at the end of each work day.<br>**Invasive Weeds.** In order to reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council California Invasive Plant Inventory (http://www.cal-ipc.org/ip/inventory/index.php).<br>**Noise.** Proposed noise-generating land uses affecting suitable habitat for special-status species shall incorporate setbacks, berms, or walls to minimize the effects of noise on resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife shall not be subject to noise that would exceed residential noise standards. | |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | **Night Work.** All construction activities shall be conducted during the daytime and lights shall not be kept on overnight in the construction area, as practicable. Should construction activities occur at night, the project applicant would be required to obtain authorization for nighttime work from the County. If night-lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that shall prevent light spillage or glare into the adjacent open space (undeveloped land).<br><br>**MM-BIO-2 Long-Term Impacts to Special-Status Plants and Special-Status Wildlife.** Prior to issuance of a construction permit, construction plans and conditions of approval shall include the following to address indirect impacts to special-status species and nesting birds and raptors:<br><br>**Runoff.** The project shall implement measures required through the National Pollutant Discharge Elimination System requirements to ensure that the quantity and quality of runoff discharged is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into open space (undeveloped land) or suitable habitat for special-status species. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.<br><br>**Toxicants.** Land uses that use chemicals or generate bioproducts such as manure, fertilizer, or vineyard waste that are potentially | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | toxic or may adversely affect plant species, wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharges. Measures such as those employed to address drainage issues shall be implemented.<br><br>**Noise.** Proposed noise-generating land uses affecting suitable habitat for special-status species shall incorporate setbacks, berms, or walls to minimize the effects of noise on resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife should not be subject to noise that would exceed residential noise standards.<br><br>**Barriers.** The project shall incorporate barriers, where appropriate, to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in open space and/or suitable habitat for special-status wildlife. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.<br><br>**Invasive Species.** Invasive, non-native plant species listed on the most recent California Invasive Plant Council inventory (https://www.cal-ipc.org/plants/inventory/) with a rating of moderate or high shall not be included in landscaping.<br><br>**MM-BIO-3 Pre-Construction Surveys for Burrowing Owl and Avoidance.** One pre-construction burrowing owl take avoidance survey shall be completed by a qualified biologist no less than 14 days before initiation of site preparation or grading activities. A second take avoidance survey shall be completed within 24 hours prior to the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the project site shall be resurveyed. Surveys for burrowing owl shall be | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | conducted in accordance with protocols established in the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The surveys shall be conducted of the project site and adjoining habitat areas within 500-feet of the construction area. If burrowing owl are not detected during pre-construction surveys, and if no burrows or perch sites have active sign (molted feathers, cast pellets, prey remains, eggshell fragments, decoration, or excrement), then construction related activities may begin, no further action shall be required, and no further mitigation under this measure is necessary.<br><br>If burrowing owls are detected occupying the site, a Burrowing Owl Management Plan shall be prepared in consultation with CDFW. Unless otherwise approved by CDFW, disturbance to suitably sized burrows (>11 cm in diameter and >150 cm in depth) shall be avoided during the breeding season (February 1 through August 31) unless found to be unoccupied. Buffers shall be established around occupied burrows by a qualified biologist in accordance with guidance provided in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and based on the level of disturbance and time of year. Buffers may be adjusted by a qualified biologist based on the level of disturbance, site-specific conditions (e.g., visual screens), and after consultation with CDFW. Fencing or flagging shall be installed to create a non-disturbance buffer area where no work activities may be conducted. The buffer shall remain in place in accordance with the Burrowing Owl Management Plan and until it is determined that the burrows are no longer occupied or the young from the occupied burrows are foraging independently and capable of independent survival.<br><br>If impacts to burrowing owl cannot be feasibly avoided or minimized through non-disturbance buffers during construction, | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
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| | | the applicant shall consult with CDFW on whether take authorization under the California Endangered Species Act (CESA) Incidental Take Permit (ITP) process may be warranted. If take authorization is necessary, the ITP shall include suitable avoidance and minimization measures to reduce potential impacts (e.g., maintenance of buffers during the breeding season and passive relocation), and adequate compensatory mitigation through conservation or mitigation banking. Unavoidable impacts to occupied suitable habitat shall be compensated at a minimum of 1:1 ratio (through on- or off-site preservation with permanent protection and long-term funding, or through purchase of equivalent credits through a mitigation bank, if available) in addition to implementing all other measures and conditions of the ITP.<br><br>MM-BIO-4 Pre-Construction Nesting Bird Surveys and Avoidance. Construction activities shall avoid the migratory bird nesting season (typically February 1 through August 31) to reduce any potential significant impact to birds that may be nesting in the survey area to the maximum extent feasible. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the project site and within 500 feet of the project site shall be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate buffer established around the nest, which shall be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | species). The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall be conducted when construction occurs in close proximity to an active nest buffer. No project activities shall encroach into established buffers without the consent of a monitoring biologist. The nest area and buffer shall be avoided and remain in place until it is determined by a qualified biologist that the nestlings have fledged and the nest is vacated and no longer active.<br><br>**MM-BIO-5 Mohave Ground Squirrel Avoidance and Minimization.** To address potentially significant impacts to Mohave ground squirrel, the project applicant shall conduct pre-construction surveys to evaluate presence of the species. If pre-construction surveys or genetic testing (if such testing is available) are negative for the Mohave ground squirrel or Mohave ground squirrel hybrids, no further mitigation shall be required.<br><br>If the pre-construction surveys confirm presence on the site, or alternatively, if the applicant forgoes pre-construction surveys and presumes presence, the applicant shall consult with the California Department of Fish and Wildlife (CDFW) and obtain an Incidental Take Permit (ITP) under Section 2081 of California Fish and Game Code. The ITP shall provide, at a minimum, suitable take avoidance and minimization measures to reduce potential impacts, and adequate compensatory mitigation through conservation or mitigation banking. Unavoidable impacts to occupied suitable habitat shall be compensated at a minimum of 1:1 ratio (through on- or off-site preservation with permanent protection and long-term funding, or through purchase of equivalent credits through a mitigation bank if available) in addition to implementing all other measures and conditions of the ITP. For example, take minimization measures to be implemented shall include, at a minimum, a combination of the | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | following: (1) preconstruction surveys of the project site and 50-foot buffer, (2) preparation of a Mohave Ground Squirrel Relocation Plan with specific methods and procedures for burrow excavation and ground squirrel relocation, and (3) reporting to the County and CDFW.<br><br>**MM-BIO-6 Pre-Construction Survey for Desert Kit Fox and Avoidance.** A pre-construction survey for desert kit fox shall be conducted by a qualified biologist within 10 days prior to initiation of site preparation or grading activities to determine the presence/absence of desert kit fox.<br><br>If desert kit fox is detected, a Desert Kit Fox Relocation and Mitigation Plan shall be implemented. The Desert Kit Fox Relocation and Mitigation Plan shall include, at a minimum, the following avoidance, minimization, and mitigation measures.<br><br>If an active non-natal desert kit fox den is detected, a 200-foot no disturbance buffer shall be established around the active den, unless otherwise authorized by the California Department of Fish and Wildlife (CDFW). Where required buffering will not be feasible, passive relocation, as outlined in the Desert Kit Fox Relocation and Mitigation Plan, shall be allowed in consultation with San Bernardino County, CDFW, and U.S. Fish and Wildlife Service (USFWS). If an active natal desert kit fox den is detected, an initial 200 foot no disturbance buffer shall be established around the natal den, and this buffer shall be maintained until the den can be verified to not host pups. Construction activities shall not be permitted in this area until the den has been vacated. Once the den is vacated and if threatened by construction, it can be collapsed if deemed necessary by a qualified biologist.<br><br>A report to evaluate the success of the relocation efforts and any subsequent re-occupation, if applicable, shall be provided | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | (including a comprehensive summary, tables, maps, and other necessary materials) at the end of the construction period to CDFW, the USFWS and the County. Data shall be readily available to the CDFW upon request. If an injured, sick, or dead desert kit fox is detected on any area associated with the project, the designated CDFW personnel at both the Ontario office and the Wildlife Investigation Lab shall be notified as described within the Desert Kit Fox Relocation and Mitigation Plan.<br><br>**MM-BIO-7 Pre-Construction Mohave Fringe-toed Lizard Clearance Surveys.** Pre-construction clearance surveys for Mohave fringe-toed lizard shall be conducted by a qualified biologist within 48 hours of the initiation of ground disturbance or vegetation clearing within and adjacent to construction areas. If found, Mohave fringe-toed lizards shall be relocated to suitable habitat nearby where they are safe from construction activities. Surveys and relocation of these species may only be conducted by a qualified biologist.<br><br>Suitable burrows or rock piles shall be checked for occupancy. Occupied burrows shall be flagged and avoided (employing a 50-foot buffer) during construction. If the burrow cannot be avoided, it shall be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed.<br><br>During construction, if a Mohave fringe-toed lizard is found on the project site, construction activities adjacent to the individual's location shall be halted and the animal shall be allowed to move away from the construction site. If the individual is not moving, a qualified biologist shall relocate it to nearby suitable habitat outside the construction area. It shall be placed in the shade of a shrub. | |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| 3.3-2. The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. | Less than significant | N/A | Less than significant |
| 3.3-3. The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. | Potentially significant | **MM-BIO-8 Pre-Construction Desert Native Plant Survey.** Prior to the issuance of grading permits, the BSA shall undergo a preconstruction survey to obtain an accurate count of the total number of protected desert native plants within the BSA. Protected desert native plants include those listed in the CDNPA as well as those listed within Chapter 88.01.060 (*Desert Native Plant Protection)* of the County's Development Code, and is as follows:<br>▪ The following desert native plants with stems 2 inches or greater in diameter or 6 feet or greater in height:<br>- *Psorothamnus spinosus* (smoketree).<br>- All species of the genus *Prosopis* (mesquites).<br>▪ All species of the family *Agavaceae* (century plants, nolias, yuccas).<br>▪ Creosote Rings, 10 feet or greater in diameter.<br>▪ All Joshua trees.<br>▪ Any part of any of the following species, whether living or dead:<br>- *Olneya tesota* (desert ironwood).<br>- All species of the genus *Prosopis* (mesquites).<br>▪ All species of the genus *Cercidium* (palo verdes). | Less than significant with mitigation |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | Should any of the above listed plants be observed within the BSA during the preconstruction survey, the project applicant shall submit an application and applicable fee paid to San Bernardino County for removal of said protected native desert plants. The application shall include certification from a qualified native desert plant expert to show that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the San Bernardino County Development Code. | |
| 3.3-4. The proposed project would not result in cumulatively considerable impacts related to biological resources. | Potentially significant | **MM BIO-1** through **MM-BIO-8** | Less than significant with mitigation |
| **Cultural and Paleontological Resources** | | | |
| 3.4-1. The proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. | Potentially significant | **MM-CUL-1 Cultural Resource Management Plan (CRMP).** To mitigate impacts to known archaeological resources, as well as those resources that may be encountered inadvertently during ground-disturbing construction-related activities, a CRMP shall be developed. The CRMP shall be reviewed and approved by San Bernardino County, acting as lead agency, prior to issuance of grading permits. It shall be subject to review and input from Consulting Tribes (i.e., the Yuhaaviatam of San Manuel Nation and the Morongo Band of Mission Indians). The CRMP shall, at a minimum, include and expand upon the following components:<br>▪ Should design refinements result in possible impacts to other prehistoric sites, located outside of the current project parcel limits, management strategies shall be developed on a case-by-case basis (e.g., establishment of construction buffers) and will be subject to review and approval by the lead agency. | Less than significant with mitigation |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | ▪ The CRMP shall outline specific methods for ground disturbance during construction. Areas within dune complexes shall be subject to "controlled grading," where soil will be excavated or otherwise removed in shallow intervals from the surface and/or other appropriate methods such that subsurface conditions can be observed and sampled throughout initial disturbance by construction.<br>▪ The CRMP shall require that a Worker Environmental Awareness Program (WEAP) addressing cultural resources and Tribal Cultural Resources be developed by a Secretary of the Interior (SOI)-qualified archaeologist. The WEAP shall be implemented through on-site training of construction staff by a qualified archaeologist. Tribal representatives from Consulting Tribes shall be invited to attend and/or participate in the WEAP training should they elect to and will be given ten days' notice prior to the training. The WEAP shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.<br>▪ To the extent construction activities uncover previously unknown or additional potentially significant components of known cultural resources, all such activities shall stop in the vicinity of the resource until the significance of the resource(s) is determined. An appropriate buffer for avoidance during construction is typically 60 feet, which may be adjusted at the recommendation of a qualified archaeologist meeting SOI qualifications, so that the exclusion buffer allows key areas of construction to proceed while ensuring that no ongoing project activities will affect the find. The CRMP shall provide for archaeological evaluation to occur, as approved by San Bernardino County, | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | and in consultation with Consulting Tribes. While the archaeologist is engaged with the find, work outside of the buffer may only continue with the presence of an additional archaeologist to monitor the work. Resources shall be evaluated by a qualified archaeologist through an archaeological testing phase that consists of systematic excavations of a sample of areas within the Project area to determine the integrity of the archaeological deposits, the horizontal and vertical extent of the deposits, and the quantity and diversity of artifacts contained within the deposits. The Project proponent may use the information from the testing phase as described in the resulting report to refine or revise the Project impact area for purposes of avoidance. The goal is to avoid, if feasible, or minimize impacts to significant deposits based on the results of the test excavations. The qualified archaeologist shall assess if the archaeological site qualifies as a significant or unique archaeological resource under the criteria of the California Environmental Quality Act (CEQA) Guidelines Section 15064.5, or a Tribal Cultural Resource under the criteria of Public Resources Code Section 21074, in consultation with San Bernardino County, and Consulting Tribes. For purposes of this mitigation measure, feasibility of avoidance shall be determined by San Bernardino County based on the recommendation of the Project proponent, in consultation with Consulting Tribes. If avoidance is not feasible, preservation in place, if feasible, is the preferred manner of mitigating impacts to archaeological resources pursuant to CEQA Guidelines Section 15126.4(b)(3)(A). However, Section 15126.4(b)(3)(C) also recognizes that data recovery through excavation may be the only feasible mitigation for significant or unique cultural resources at times; therefore, this contingency should be provided for as well in the CRMP. | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | ▪ Regarding Tribal Cultural Resources, where avoidance or preservation in place are not feasible, the preferred treatment is for Tribal Cultural Resources to be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then another reburial location should be identified on-site, if feasible, by the Project proponent in consultation with Consulting Tribes and approved San Bernardino County. Reburial should not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, and all cataloguing and basic recordation of cultural resources have been completed.<br>▪ Should it occur that avoidance, preservation in place, or on-site reburial are not feasible options for treatment of Tribal Cultural Resources, the landowner shall relinquish all ownership and rights to material suitable for curation and confer with Consulting Tribes to identify an American Association of Museums (AAM)-accredited facility within San Bernardino County that can accept the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the Project proponent and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project proponent to pay for those fees.<br>▪ The CRMP shall define the requirements for inadvertent discoveries, communication and notification to San | |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | Bernardino County and consulting parties, daily monitoring log preparation, and the final construction monitoring report. The final monitoring report shall be submitted to the San Bernardino County, Consulting Tribes, and the South Central Coastal Information Center.<br><br>**MM-CUL-2 Ground-Disturbance Monitoring.** A qualified archaeologist shall monitor initial grading, subsurface disturbances, or other ground-disturbing activities on the Project site. If unanticipated cultural resources are encountered during construction, the process outlined by the Cultural Resource Management Plan (CRMP) shall be followed. General responsibilities of the archaeological monitor shall include monitoring construction, preparation of daily monitoring logs, reporting and assessing inadvertent discoveries, communication with on-site Native American monitors and contractors, guiding installation and tracking maintenance of environmentally sensitive area marking, and generally ensuring implementation of the CRMP and approved mitigation. The final Cultural Resources Monitoring Report shall act as a record of compliance with guiding documents and mitigation. | |
| 3.4-2. The proposed project could disturb human remains, including those interred outside of dedicated cemeteries? | Potentially significant | **MM-CUL-3 Treatment of Human Remains.** If human remains are found during evaluations, data recovery, construction monitoring, or any Project-related ground-disturbing activity, all work within 100 feet of the find shall cease and the San Bernardino County Coroner shall be notified within 24 hours. The remains shall be treated with appropriate dignity pursuant to the requirements of California Public Resources Code Section 5097.98 and the California Environmental Quality Act Guidelines Section 15064.5(e). Project-specific requirements (e.g. stop work buffers, County Coroner contact information) shall be included in the Cultural Resource Management Plan. | Less than significant with mitigation |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| 3.4-3. The project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | Potentially significant | **MM-CUL-4 Paleontological Resources Impact Mitigation Program.** Prior to commencement of any grading activity on site, the project applicant shall retain a qualified paleontologist, subject to the review and approval of the County. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the project consistent with the Society of Vertebrate Paleontology (2010) guidelines. The PRIMP shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, adequate on-site monitoring, procedures for adequate paleontological monitoring, discoveries treatment, paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The PRIMP shall also include protocols for spot-checking significant ground-disturbing activities below a depth of 5 feet below the ground surface or 5 feet below the depth of artificial fill in areas mapped as Holocene alluvium and full-time paleontological monitoring below the depth of artificial fill in areas underlain by Tertiary sandstone and shale deposits and Tertiary limestone deposits (Barstow Formation). In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery shall be roped off with a 50-foot radius buffer. While the paleontological monitor recovers the find, work may continue in areas outside of the buffer as long as another paleontological monitor is available and present for the work. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Costs for laboratory work and curation fees for any significant fossils recovered during the monitoring program are the responsibility of the project applicant. | Less than significant with mitigation |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | Recovered resources should be curated at a repository within San Bernardino or Riverside County. | |
| 3.4-4. The proposed project would not result in a cumulative impact to cultural, or paleontological resources. | Potentially significant | **MM-CUL-1** through **MM-CUL-4** | Less than significant with mitigation |
| **Energy** | | | |
| 3.5-1. The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. | Less than significant | N/A | Less than significant |
| 3.5-2. The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. | Less than significant | N/A | Less than significant |
| 3.5-3. The proposed project would not contribute to a significant cumulative impact related to energy. | Less than significant | N/A | Less than significant |
| **Greenhouse Gas Emissions** | | | |
| 3.6-1. The proposed project would not generate greenhouse gas emissions, either directly or indirectly, | Less than significant | N/A | Less than significant |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| that may have a significant impact on the environment. | | | |
| 3.6-2. The proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. | Less than significant | N/A | Less than significant |
| **Hydrology, Water Quality, and Drainage** | | | |
| 3.7-1. The proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. | Potentially significant | **MM-HYD-1 Water Quality Best Management Practices.** Stormwater quality filtration shall be accomplished through 1) the proposed stormwater detention basins and/or 2) through installation of manufactured biotreatment units.<br>▪ Percolation tests shall be completed in the vicinity of proposed stormwater detention basins to determine the permeability of on-site soils and suitability for stormwater infiltration. In the event the soils are sufficiently permeable, the stormwater detention basins shall be constructed without a bottom liner and also function as infiltration basins. The detention/infiltration basin systems shall be sized and designed to prevent flooding from a 100-year storm while also providing stormwater infiltration for water quality purposes. | Less than significant with mitigation |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| | | ▪ In the event the soils are not sufficiently permeable for the stormwater detention basins to also be used as infiltration basins, proprietary biotreatment units (i.e., Modular Wetland Systems) shall be installed downstream of the proposed detention basins. Biotreatment units shall also be installed downstream of the proposed underground detention chambers/basins. The biotreatment units shall be designed to capture and treat stormwater pollutants, consistent with commercial/industrial developments and associated parking lots, and including oil, grease, metals, trash, and debris. Treatment design shall be finalized upon completion of final project design.<br>▪ Source control Best Management Practices, such as secondary containment, regular inspections, and equipment maintenance, shall also be implemented throughout the project site whenever possible. | |
| 3.7-2. The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. | Less than significant | N/A | Less than significant |
| 3.7-3. The proposed project would not substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of | (i, ii, iv) Less than significant<br>(iii) Potentially significant | **MM-HYD-1** | (i, ii, iv) Less than significant<br>(iii) Less than significant with mitigation |

**Table ES-1. Summary of Project Impacts**

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| impervious surface, in a manner which would:<br>(i) result in substantial erosion or siltation on or off site;<br>(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;<br>(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or<br>(iv) impede or redirect flood flows. | | | |
| 3.7-4. The proposed project would not risk release of pollutants in flood hazards, tsunami, or seiche zones. | Less than significant | N/A | Less than significant |
| 3.7-5. The proposed project would not conflict with or obstruct implementation of a water quality control plan or | Potentially significant | **MM-HYD-1** | Less than significant with mitigation |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| sustainable groundwater management plan. | | | |
| 3.7-6. The proposed project would not result in cumulatively considerable impacts related to hydrology and water quality. | Potentially significant | MM-HYD-1 | Less than significant with mitigation |
| **Land Use and Planning** | | | |
| 3.8-1. The proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. | Less than significant | N/A | Less than significant |
| 3.8-2. The proposed project would not contribute to a significant cumulative impact related to land use. | No impact | N/A | No impact |
| **Noise** | | | |
| 3.9-1. The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | Less than significant | N/A | Less than significant |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| 3.9-2. The project would not result in generation of excessive groundborne vibration or groundborne noise levels. | Less than significant | N/A | Less than significant |
| **Transportation** | | | |
| 3.10-1. The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. | Less than significant | N/A | Less than significant |
| 3.10-2. The proposed project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). | Less than significant | N/A | Less than significant |
| 3.10-3. The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). | Less than significant | N/A | Less than significant |
| 3.10-4. The proposed project would not result in inadequate emergency access. | Less than significant | N/A | Less than significant |
| 3.10-5. The proposed project would not result in a | Less than significant | N/A | Less than significant |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| cumulatively considerable impact to transportation. | | | |
| **Utilities and Service Systems** | | | |
| 3.11-1. The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. | Less than significant | N/A | Less than significant |
| 3.11-2. The project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. | Less than significant | N/A | Less than significant |
| 3.11-3. The project would 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 | Less than significant | N/A | Less than significant |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| provider's existing commitments. | | | |
| 3.11-4. The proposed project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. | Less than significant | N/A | Less than significant |
| 3.11-5. The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. | Less than significant | N/A | Less than significant |
| 3.11-6. The project would not result in cumulatively considerable impacts related to utilities and service systems. | Less than significant | N/A | Less than significant |
| **Tribal Cultural Resources** | | | |
| 3.12-1. The proposed project may cause an adverse change in the significance of a previously unidentified tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or | Potentially significant | **MM-CUL-1** through **MM-CUL-3**, see Cultural and Paleontological Resources.<br>**MM-TCR-1 Tribal Monitoring.** At the discretion of the Consulting Tribes, Tribal monitors shall be present for initial grading, subsurface disturbances, or other ground-disturbing activities on the Project site. At the discretion of the Consulting Tribes, a sufficient number of Tribal Monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Any and | Less than significant with mitigation |

## Table ES-1. Summary of Project Impacts

| Environmental Topic | Impact? | Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|---|
| determined to be a tribal cultural resource, as supported by evidence | | all findings will be subject to the protocol detailed within the Cultural Resources Management Plan (CRMP). Consulting Tribes include the Yuhaaviatam of San Manuel Nation and the Morongo Band of Mission Indians. | |
| 3.12-2. The proposed project, in conjunction with, past, present, and reasonably foreseeable probable future projects in the County and the Central and Western Mojave Desert region would not have a cumulative impact on tribal cultural resources and human remains of Native American origin. | Potentially significant | **MM-CUL-1** through **MM-CUL-3,** and **MM-TCR-1**. | Less than significant with mitigation |

# ES.7 Alternatives to the Project

Section 15126.6(a) of the CEQA Guidelines states that an EIR shall describe "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project," as well as provide an evaluation of "the comparative merits of the alternatives." Under CEQA Guidelines Section 15126.6(a), an EIR does not need to consider alternatives that are not feasible, nor does it need to address every conceivable alternative to the project. The range of alternatives "is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice" (14 CCR 15126.6[f]).

## No Project/No Build Alternative (Alternative 1)

Under Alternative 1, implementation of the project would not occur. The project site would remain unchanged, and development activities related to construction and operation of the proposed EV charging station and logistic buildings, landscaping, associated surface parking and loading areas, and all other proposed on- and off-site improvements would not occur.

Consistent with existing conditions, the project site would continue to be undeveloped. Under Alternative 1, the site would remain vacant, undeveloped land, although the site would presumably continue to be subject to illegal dumping, trespassing, and unpermitted off-road vehicle use, similar to the existing conditions.

## No Project/Existing Zoning Alternative (Alternative 2)

Alternative 2 assumes that the project would not be implemented; instead, the project site would likely be developed according to the existing zoning designation. This alternative is another approach to the "No Project" analysis, in that it considers what is reasonably expected to occur, based on current plans and available infrastructure. The project is requesting, among other entitlements, a Countywide Plan/Policy Plan Amendment from Rural Living (RL) to Limited Industrial (LI) and a Zoning Amendment from RL to Community Industrial (IC). As the site is currently zoned RL, it is reasonable to assume that absent the proposed project, the project site could instead be developed with residential uses consistent with the RL land use zoning district. The RL land use zoning district provides sites for rural residential uses, incidental agricultural uses, and similar and compatible uses. The maximum residential density in the RL zone is 1 unit per 2.5 acres. As such, under this alternative, the project site would be developed with 39 rural residential units instead of the proposed EV charging station, commercial building, truck amenities, and state-of-the-art logistics facility.

## Revised Site Plan Alternative (Alternative 3)

Under Alternative 3, the site plan would be revised and the EV charging station, truck amenities, and commercial building in the southern portion of the site would be moved to the northern portion of the site. The EV charging station, truck amenities, and commercial building would maintain the same configuration as designed, but would be located in the northern portion of the project site. The logistics facility consisting of three buildings would be shifted down to be in the southern portion of the site. The loading docks at the south end of the southern-most logistics facility building, adjacent to the existing residences to the south, would be removed to provide a buffer with the residential development to the south, which may result in limitations on the type of uses that may be accommodated in the southernmost building and/or the economic viability of that building. The elimination of loading docks on the southern side of the southern-most logistics facility building may deter certain future users from occupying that logistics facility building or render the use of the third building less economically viable.

### Environmentally Superior Alternative

As noted above, CEQA Guidelines Section 15126.6(a) requires that an EIR describe a range of reasonable alternatives to the project, which would attain most of the basic project objectives, but would avoid or substantially lessen any of the project's significant effects. In addition, Section 15126.6 [e][2] states that if the environmentally superior alternative is the No Project Alternative, the EIR must also identify an environmentally superior alternative among the other alternatives.

Each of the three Project alternatives considered herein would lessen at least one environmental impact relative to the project. As required under CEQA, if the No Project Alternative is the environmentally superior alternative—which in the case of this analysis is both Alternative 1 and 2—the EIR must also identify another environmentally superior alternative among the remaining alternatives.

Alternative 3 would develop a revised site plan with the same components of the project and would meet most of the project objectives. Alternative 3 would not reduce potentially significant impacts, but would further reduce the less-than-significant noise impact on residential receptors. Alternative 3 is therefore identified as the environmentally superior alternative. Alternative 3 would achieve the project objectives, although not to the full extent of the proposed project. Objective 3 is to develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors. The elimination of loading docks on the southern side of the southern-most logistics facility building may deter certain future users from occupying that logistics facility building or render the use of the third building less economically viable. Thus, Alternative 3 would only partially meet Objectives 3 and 4.

## ES.8 Areas of Controversy/Issues to Be Resolved

### Scoping Comments

A notice of preparation (NOP) the project was circulated for a 30-day comment period from May 15, 2024, to June 15, 2024, to determine the scope and extent of environmental issues to be addressed in this EIR. A public scoping meeting was held on May 30, 2024. In response to the NOP, written comments were received from two public agencies, two organizations, one California Native American tribe, and two members of the public. No written comments were received at the scoping meeting. The NOP and public comments received in response to the NOP are included in Appendix A.

The County, as lead agency, has identified areas of concern based on the response to the NOP. The comments received indicate that the areas of controversy associated with the project include: (1) impacts to protected plants and wildlife, including but not limited to desert tortoise, burrowing owl, Swainson's hawk, Mohave ground squirrel, Mohave fringe-toed lizard, Crotch's bumble bee, and desert kit fox; (2) air quality and noise during both construction and operation; (3) changes in traffic patterns and effects on local roads and neighborhoods; (4) impacts to cultural and tribal cultural resources; and (5) safety of bicyclists and pedestrians.

All substantive environmental issues raised in the comment letters received in response to the NOP have been addressed or otherwise considered during preparation of this EIR.

### Issues to be Resolved by Lead Agency

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved. With respect to the project, the key issues to be resolved include decisions by the County, as lead agency, as to the following:

- Whether to approve the change in land use classification and other discretionary entitlements
- Whether this EIR adequately describes the environmental impacts of the project and identifies feasible mitigation measures and alternatives to reduce or avoid potentially significant impacts.

## ES.9 References

CAL FIRE (California Department of Forestry and Fire Protection). 2024. Fire Hazard Severity Zone Viewer. Accessed November 1, 2024. https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/.

DOC (California Department of Conservation). 2024a. California Important Farmland Finder. Accessed November 1, 2024. https://maps.conservation.ca.gov/DLRP/CIFF/.

DOC. 2024b.CGS Information Warehouse: Regulatory Maps. Accessed November 1, 2024. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html.

San Bernardino City Unified School District. 2025. Developer Fees. Accessed May 2025. https://www.sbcusd.com/departments/business-services-division/facilitiesoperations/facilities-planning-development/developer-fees

San Bernardino County. 2017. County of San Bernardino Safety Background Report. Accessed November 1, 2024. https://countywideplan.com/wp-content/uploads/sites/68/2021/01/G1_SafetyBackgroundReport.pdf.

San Bernardino County. 2019. San Bernardino Countywide Plan Draft PEIR. *Section 5.11 Mineral Resources.* Accessed November 1, 2024. https://countywideplan.com/wp-content/uploads/sites/68/2021/01/Ch_05-11-MIN.pdf.

San Bernardino County. 2022. County Policy Plan. Accessed November 1, 2024. https://countywideplan.sbcounty.gov/wp-content/uploads/sites/125/2021/01/CWP_PolicyPlan_HardCopy_MainText_Tables_2022_Sept_Adopted.pdf.

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# 1.0 Introduction

## 1.1 Purpose and Intended Use of this Environmental Impact Report

This Draft Environmental Impact Report (EIR) has been prepared by San Bernardino County (County), as lead agency to inform the general public, the local community, responsible agencies, trustee agencies, and other interested public agencies, and the County's decision-making bodies (Planning Commission and Board of Supervisors) regarding the potential significant environmental effects resulting from implementation of the proposed Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project") as well as feasible measures to mitigate those significant effects and alternatives to the proposed project. This Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA), per California Public Resources Code (PRC), Section 21000 et seq., and the CEQA Guidelines, which are found in Title 14 of the California Code of Regulations, commencing with Section 15000 and the County's procedures for implementing CEQA. Under CEQA, the lead agency for a project is the public agency with primary responsibility for carrying out or approving the project, and for implementing the requirements of CEQA.

Pursuant to CEQA Guidelines Section 15121, an EIR is an informational document that is required to (1) identify the potentially significant environmental effects of a project on the environment, (2) indicate the manner in which those significant effects can be avoided or significantly lessened via the implementation of potentially feasible mitigation measures, (3) identify a reasonable range of potentially feasible alternatives to a project that would eliminate or substantially lessen any significant environmental effects, and (4) identify any significant and unavoidable adverse impacts that cannot be mitigated or otherwise reduced. When considering whether to approve a proposed project, the lead agency's decision-making body must consider the information in the EIR along with other information that may be presented to that body. While the information in the EIR does not control the ultimate decision about a project, the decision-making body must consider the information in the EIR and respond to each significant effect identified in the EIR by making required findings of fact (PRC Section 21081).

Pursuant to PRC Section 21002, public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures that would substantially lessen the significant environmental effects of such projects. Furthermore, pursuant to CEQA Guidelines Section 15021, CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. In deciding whether changes in a project, such as mitigation measures or alternatives, are feasible, an agency may consider specific economic, environmental, legal, social, and technological factors. As defined in Section 15364 of the CEQA Guidelines, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

CEQA Guidelines Section 15093 provides that, if a lead agency decides to approve a project that will cause one or more significant effects on the environment, the agency must prepare a "statement of overriding considerations" to reflect the ultimate balancing of competing public objectives.

## 1.2 Project Overview

This Draft EIR addresses the potential physical environmental effects of the proposed project. The project involves construction and operation of an electric vehicle charging station for light passenger vehicles and medium and heavy-duty trucks along with a commercial building and amenities for trucks, and a logistics facility on an undeveloped 99.85-acre site. The project would involve associated on-site improvements, including truck and vehicle parking, on-site stormwater drainage facilities, connections to utilities, and installation of landscaped areas. The project would also include off-site roadway improvements, including widening of roadways used to access the project site. A full description of all project components is provided in Chapter 2, Project Description.

### Project Location

The project site is located on Lenwood Road between California Highway 58 and Interstate 15 in the unincorporated County within the City of Barstow Sphere of Influence. The project site is located approximately 4 miles west of downtown Barstow, 2.4 miles northwest of Interstate 15, 1.15 miles southwest of California Highway 58, and approximately 6 miles west of Interstate 40.

## 1.3 Scope of the Environmental Impact Report

This EIR evaluates the proposed project to the extent feasible, which includes establishing the existing environmental resources within the project site, analyzing potential impacts on those resources due to implementation of the proposed project, and identifying mitigation measures to reduce significant impacts. Where project specific information is available this EIR quantifies and/or evaluates project impacts at a level of detail commensurate with information available at the time the analysis was conducted.

Based on a review of the project and comments received during the Notice of Preparation (NOP) public review period from May 15 to June 14, 2024 (see Appendix A for a copy of the NOP and comments received), the County determined that an EIR should be prepared that addresses the following environmental issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Paleontological Resources
- Energy
- Greenhouse Gas Emissions
- Hydrology, Water Quality, and Drainage
- Land Use and Planning
- Noise and Vibration
- Utilities and Service Systems
- Transportation
- Tribal Cultural Resources

The environmental review focuses on the potentially significant environmental effects of the project. As defined in CEQA Guidelines Section 15382, a “significant effect on the environment” is “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. The specific environmental issue areas or topics are described in each of the sections presented in Chapter 3, Environmental Analysis.

In evaluating the significance of the environmental effect of a project, the CEQA Guidelines require the lead agency to consider direct physical changes in the environment and reasonably foreseeable indirect physical changes in the

environment that may be caused by the project (CEQA Guidelines Section 15064[d]). A direct physical change in the environment is a physical change in the environment that is caused by and immediately related to the project. An indirect physical change in the environment is a physical change in the environment that is not immediately related to the project, but which is caused indirectly by the project. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact that may be caused by the project.

CEQA Guidelines Section 15064(e) further indicates that economic and social changes resulting from a project shall not be treated as significant effects on the environment, although they may be used to determine that a physical change shall be regarded as a significant effect on the environment. In addition, where a reasonably foreseeable physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project.

The topics of agriculture and forestry resources, geology and soils, hazards and hazardous materials, mineral resources, population and housing, public services, recreation, and wildfire are discussed in Chapter 4, Effects Found Not to be Significant, of the EIR. These impacts in these areas would be less than significant or no impacts would occur. Therefore, these topics are not further evaluated in Chapter 3, Environmental Analysis.

The Project Alternatives chapter of the EIR (Chapter 6, Project Alternatives) was prepared in accordance with Section 15126.6 of the CEQA Guidelines. CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur (CEQA Guidelines Section 15021(a)). Project modification or alternatives are not required, however, where significant environmental impacts will not occur.

## 1.4 CEQA Process

### Notice of Preparation

In accordance with CEQA Guidelines Section 15082, a NOP was circulated for public and agency review from May 15, 2024 through June 14, 2024, and a public scoping meeting was held on May 30, 2024 (see Appendix A). The purpose of the NOP was to provide notification that an EIR for the proposed project was to be prepared and to solicit guidance on the scope and content of the document.

A summary of scoping comments received is provided in Table 1 as well as in the Introduction of each technical section in Chapter 3. The comment letters and the NOP are included in Appendix A of this EIR.

**Table 1-1. Summary of NOP Scoping Comments**

| Commenter | Date | Summary of Environmental Issues Raised | EIR Section Where Comment is Addressed |
|---|---|---|---|
| **Agencies** | | | |
| California Department of Fish and Wildlife | 6/4/24 | ▪ Agency requests that the EIR analyze habitat on site and address potential impacts to Burrowing Owl, Mohave Ground Squirrel, Swainson's Hawk, Mojave Fringe-Toed Lizard, Agassiz's Desert Tortoise, Crotch's Bumble Bee, Desert Kit Fox, American Badger, Ring-Tailed Cat, and Western Joshua Tree. Comments included recommended mitigation measures. | 3.3, Biological Resources |
| Native American Heritage Commission | 5/15/24 | ▪ Agency recommends consulting with California Native American Tribes pursuant to Assembly Bill (AB) 52 | 3.12 Tribal Cultural Resources |
| **Tribal Governments** | | | |
| Colorado River Indian Tribes (CRIT) | 5/30/2024 | ▪ Identifies concerns with removal of cultural resources from the project site | 3.12, Tribal Cultural Resources |
| **Organizations** | | | |
| CARE CA | 6/14/24 | ▪ Identifies concerns about the project's industrial uses and potential air quality effects. | 3.2, Air Quality<br>3.6, Greenhouse Gases Emissions<br>3.8, Land Use and Planning |
| Desert Tortoise Council | 6/14/24 | ▪ Discusses potential for the project to affect the Mojave Desert Tortoise. | 3.3, Biological Resources |
| **Public** | | | |
| Alex Tank | 5/18/24 | ▪ Identifies concerns and recommendations about the project's impacts to air quality, noise, stormwater, transportation, economics, and safety. | 3.2, Air Quality<br>3.9, Noise<br>3.7, Hydrology and Water Quality |
| Trista Brown | 6/10/24 | ▪ None. Letter acknowledges response from County regarding project information. | N/A |

## Draft EIR and Public Review

This Draft EIR is being circulated for public review and comment for a period of 45 days pursuant to CEQA Guidelines Section 15105. The 45-day public review period for the Draft EIR will be from XXX, XX, XX, 2026 through XXX, XX, XX , 2026. The public can review the Draft EIR at the following address during normal business hours (Monday through Friday, 8 a.m. to noon and 1 p.m. to 5 p.m.) or on the County's website at:_____.

San Bernardino County Government Center
385 North Arrowhead Avenue, First Floor
San Bernardino, California 92415

Additionally, a copy of the Draft EIR is available for public review at the following location:

> San Bernardino County Library – Barstow Branch
> 304 East Buena Vista Street
> Barstow, California 92311

The County encourages all comments on the Draft EIR to be submitted in writing. All comments or questions regarding the Draft EIR should be addressed to:

> San Bernardino County, Land Use Services Department Attn.: Jon Braginton, Planner
> 385 North Arrowhead Avenue, First Floor San Bernardino, California 92415
> Email: Jon.Braginton@lus.sbcounty.gov
> Phone: 909.387.4110

Please include your name, phone number, and address in your response and, if commenting on behalf of an agency, your agency's contact person.

## Final EIR

Upon completion of the Draft EIR public review period, a Final EIR will be prepared that will include written responses to comments received during the public review period that raise significant environmental issues. A Mitigation Monitoring and Reporting Program will also be prepared in accordance with PRC Section 21081.6. The Final EIR will address any revisions to the Draft EIR made in response to agency or public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed project. Before the County can approve the project, it must first certify that the EIR has been completed in compliance with CEQA, that the Board of Supervisors has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the County. The Board of Supervisors also would be required to adopt the Mitigation Monitoring and Reporting Program and Findings of Fact, along with a Statement of Overriding Considerations because there are significant and unavoidable impacts where no feasible mitigation is available to reduce the severity of the impact (see PRC Section 21081).

## EIR Adequacy

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines, which states the following:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

# 1.5 Environmental Issues Determined Not to be Significant

Pursuant to CEQA, the discussion of potential environmental impacts is focused on those impacts that could be significant or potentially significant. CEQA allows the lead agency to limit the detail of discussion of the environmental impacts that are not considered potentially significant (PRC Section 21100; 14 CCR 15126.2[a] and 15128). CEQA requires that the discussion of any significant environmental effect be limited to substantial, or potentially substantial, adverse changes in physical conditions that exist within the affected area, as defined in PRC Section 21060.5. In accordance with CEQA Guidelines Section 15143, environmental impacts dismissed in an analysis as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the lead agency subsequently receives information inconsistent with the finding.

Based on public comments received in response to the NOP (see Table 1 above), the location and type of project, the County has determined that certain environmental resource topics merit a detailed analysis while others were found to have no impact or a less-than-significant impact and are not discussed in detail in the EIR. See Chapter 4, Effects Found Not to be Significant for a discussion of those effects found to not to be significant; and therefore, not further addressed in this EIR.

# 1.6 Lead, Responsible, and Trustee Agencies

## Lead Agency

In accordance with CEQA Guidelines Sections 15050 and 15367, the County has been designated the "'lead agency," which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." The lead agency is also responsible for determining the scope of the environmental analysis, preparing the EIR, and responding to comments received on the Draft EIR. Prior to making a decision to approve a project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the lead agency.

## Responsible Agencies

Responsible agencies are state and local public agencies, other than the lead agency, that have some authority to carry out or approve a project or that are required to approve a portion of the project or approve a permit for which a lead agency is preparing or has prepared an EIR or Initial Study/Negative Declaration (CEQA Guidelines Section 15813). The necessary approvals and entitlements for implementation of the project are discussed in Chapter 2, Project Description. The following agencies would potentially act as responsible agencies for the purposes of this project:

- California Department of Fish and Wildlife
- Lahontan Regional Water Quality Control Board
- Mojave Desert Air Quality Management District
- Local Agency Formation Commission of San Bernardino County
- City of Barstow
- Barstow Fire Protection District

### Trustee Agencies

Trustee agencies are designated public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether or not the agencies have authority to approve or implement the project (CEQA Guidelines Section 15386). The following agency was identified as a trustee agency with potential jurisdiction over the proposed project:

- California Department of Fish and Wildlife

## 1.7 Organization of the Environmental Impact Report

This Draft EIR contains all of the information required to be included in an EIR, as specified by the CEQA Statutes and Guidelines (PRC Section 21000 et seq.; 14 CCR 15000 et seq.). The following provides a quick reference in locating the CEQA-required sections within this EIR:

- **Chapter ES: Executive Summary.** The Executive Summary provides a summary of the project and project alternatives. Provides an overview of areas of known controversy, issues to be resolved, and technical issues dismissed from further evaluation. This chapter also summarizes the elements of the proposed project and the environmental impacts that could result from implementation of the project and provides a table that lists impacts, describes proposed mitigation measures, and indicates the level of significance of impacts before and after mitigation.
- **Chapter 1: Introduction.** The Introduction provides an overview of the project and the CEQA process, and describes the purpose, scope, and organization of this Draft EIR.
- **Chapter 2: Project Description.** The Project Description provides a detailed description of the project, including the location and project characteristics, existing site conditions, project objectives, and required project approvals.
- **Chapter 3: Environmental Analysis.** Describes the baseline environmental setting and provides an assessment of potential project impacts for each technical issue area. The environmental impacts of the project are evaluated by environmental resource topics in separate sections. Each technical section includes an introduction, description of the existing conditions (environmental setting), regulatory setting, significance criteria, impacts (project-specific and cumulative impacts), and mitigation measures.
- **Chapter 4: Effects Found Not To Be Significant.** This chapter lists the environmental issues based on the CEQA Guidelines Appendix G Checklist that were determined to be less than significant or no impact during the EIR scoping process, with a brief explanation of the finding.
- **Chapter 5: Other CEQA Considerations.** The Other CEQA Considerations chapter provides information required by CEQA regarding impacts that would result from the proposed project, including a summary of significant environmental impacts, including unavoidable, irreversible environmental changes, and growth-inducing impacts.
- **Chapter 6: Alternatives.** The Alternatives chapter describes and compares alternatives to the proposed project.
- **Chapter 7: List of Preparers.** The List of Preparers chapter provides a list of the organizations, persons consulted, and various individuals who contributed to the preparation of this EIR. This section also includes a list of the lead agency personnel used to prepare this EIR.

- **Appendices.** The technical appendices include various documents and data prepared to support the analyses and conclusions in this EIR.

As noted above, the Final EIR will be prepared after the public review period for this EIR has been completed. The Final EIR will include comments and recommendations received on the Draft EIR during the public review period; a list of persons, organizations, and public agencies commenting on the Draft EIR; written responses to significant environmental issues identified in the comments received; and any other relevant information added by the County.

# 2.0 Project Description

This chapter describes the location, background, objectives, characteristics, design features, and discretionary actions for the proposed Electric Vehicle Charging Station and Logistics Facility project ("project" or "proposed project") in San Bernardino County ("County"). EVC Partners LLC (project applicant) requests approval of various discretionary entitlements in support of the proposed project, including a Countywide Plan/Policy Plan Amendment, Zoning Amendment, a Conditional Use Permit, and Tentative Parcel Map, as well as approval of an extra-territorial sewer service agreement with the City of Barstow ("City") and annexation of the project site and additional parcels to the Barstow Fire Protection District (BFPD). The following project description serves as the basis for the environmental analysis contained in this Draft Environmental Impact Report.

## 2.1 Project Location

The 99.85-acre project site (Assessor Parcel Numbers: 0497-142-03; 0497-142-04; 0497-142-14; and 0497-142-15) is located on Lenwood Road between California State Route 58 and Interstate (I) 15 in the unincorporated County's Desert Region within the City's Sphere of Influence, as shown on Figure 2-1, Project Location. The project site is located approximately 4 miles west of downtown Barstow, 2.4 miles northwest of I-15, 1.15 miles southwest of State Route 58, and approximately 6 miles west of I-40. Adjacent uses include the High Desert Estates subdivision to the south, large-lot rural residences to the north, and undeveloped land to the east and west. The area to be annexed to the BFPD is approximately 226 acres, inclusive of the project site, as discussed in Section 2.3.2.7, below.

## 2.2 Existing Project Site

The project site is located at the southern edge of the Mojave Desert on alluvial plains derived from the Mojave River. Elevation gradually trends upward in a southerly direction from approximately 2,197 feet above mean sea level in the northern portion of the site to 2,272 feet above mean sea level in the southern portion. The site is undeveloped and includes areas of highly compacted soils and areas of sandy, loose soils with sand dune formations. Evidence of dirt pathways/roadways and trash throughout the site indicates the informal or unauthorized use of the project site for overland vehicle travel for recreational purposes. Vegetation includes creosote bush (*Larrea* spp.), tumbleweed (*Salsola tragus* spp.) and various species of invasive grasses.

### 2.2.1 Surrounding Land Uses and Setting

The area surrounding the project site to the west and east is characterized as undeveloped land, with a few rural residences located to the north. Across Lenwood Road to the west, land within the City is designated and zoned Industrial (I) and includes the proposed Barstow International Gateway (BIG) Specific Plan project being undertaken by BNSF Railway, located directly across Lenwood Road from the project. The BIG Specific Plan proposes an integrated rail facility and onsite transload warehouse center at the City's western extent. The project site abuts the High Desert Estates residential subdivision on the south. The closest school, Lenwood Elementary School, is located approximately 0.5 miles southeast of the project site. The closest public airport, Barstow-Daggett Airport, is located approximately 18 miles east of the project site.

### 2.2.2 Land Use and Zoning

The project site is designated Rural Living (RL) in the San Bernardino Countywide Plan/Policy Plan (September 2022) and also zoned RL. The project is requesting a Countywide Plan/Policy Plan Amendment from RL to Limited Industrial (LI) and a Zoning Amendment from RL to Community Industrial (IC). Figure 2-2, Existing and Proposed Land Use , and Figure 2-3, Existing and Proposed Zoning, show the existing and proposed land use designation and zoning, respectively.

## 2.3 Proposed Project Description

### 2.3.1 Project Objectives

California Environmental Quality Act Guidelines Section 15124(b) requires that the Project Description include a statement of the objectives of the project. Section 15124(b) further states that "the statement of objectives should include the underlying purpose of the project and may discuss the project benefits." The underlying purpose of the proposed project is to provide electrical vehicle charging infrastructure to meet local and regional needs and develop a logistics facility proximate to major transportation corridors.

Specific project objectives are:

- To site an electric vehicle (EV) charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on State Route 58, I-15, and I-40.
- To contribute to the creation of a robust EV charging network in the region and strengthen the state and regional supply chain.
- To develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors.
- To expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses.
- To attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment.

### 2.3.2 Project Components

The proposed project would provide an EV charging station in the southern 20.72-acre portion of the site to serve light duty/passenger vehicles and medium and heavy-duty trucks along with on-site amenities, and a state-of-the-art logistics facility in the northern 79.10-acre portion of the site, as shown on Figure 2-4, Site Plan.[1] The full-size site plan drawing is available on the County website at https://lus.sbcounty.gov/planning-home/environmental-2/desert-region/. Conceptual elevations of the project are shown on Figures 2-5A through 2-5E. The following provides a detailed description of the various project components.

[1] Due to rounding, the combined acreages of the 20.72-acre southern portion and 79.10-acre northern portion differ slightly from the project site total of 99.85 acres.

### 2.3.2.1 Electric Vehicle Charging Station

The proposed project would establish an EV charging station area within a 20.72-acre portion of the total 99.85-acre project site that would support a range of EV chargers to serve different charging needs (e.g., light duty vehicles, medium and heavy-duty trucks) in addition to other service-related amenities. A total of approximately 53 EV DC fast chargers would be provided, with approximately 45 EV DC fast chargers for medium and heavy-duty trucks (e.g., 350 kilowatt, or kW, and 125 kW) located in the truck parking area and 8 DC fast chargers for light duty vehicles (e.g., 250 kW) located proximate to the commercial building (2 of the 8 would be Americans with Disabilities Act [ADA] accessible). Additional chargers could be added in the future based on market demand and power availability.[2] The project would be designed to include electrical infrastructure that would accommodate additional EV light duty vehicle and truck charging stations as demand increases. Such design considerations include reserving space for future equipment (e.g., transformers, switchgear, power electronics) as well as make-ready construction (e.g., buried conduit, equipment pads) to expedite construction and minimize disruption from installation of additional chargers.

Southern California Edison would supply electrical power to the site via an interconnection with the existing 33-kilovolt circuit located on the west side of Lenwood Road. Electrical power to the site would be supplemented by solar canopies over parking areas within the EV charging station area and on-site battery storage. It is estimated that there would be approximately 65,000 square feet (sf) of solar panels on the canopies. Specific location will be determined at final design. As to on-site battery storage, there would be approximately four battery energy storage systems, each approximately 3 feet long, 5 feet deep and 8 feet high, with an approximate storage capacity of 16 megawatt hours. The batteries would store power generated by solar canopies as well as grid power and would be located within the area designated “electrical equipment” on the site plan (see Figure 2-4). The area designated as “electrical equipment” would contain the batteries, electrical transformers, and electrical switchgear and be enclosed with a 6-foot-tall fence.

### 2.3.2.2 Commercial Building

A commercial building of up to 15,000 sf in size would be located on the western side of the 20.72-acre EV charging station portion of the site, as shown in Figure 2-4. The commercial building would contain ancillary uses including food service (with a drive-through provided) and other convenience options for patrons using the charging station (i.e., convenience store), as well as for local residents and employees of the adjacent logistics facility. A total of 65 parking spaces would be provided on the west and south sides of the building, including the 8 DC fast charging spaces for light duty vehicles referenced in 2.3.2.1, Electric Vehicle Charging Station, and 3 additional ADA spaces (these parking spaces are in addition to the pull-through spaces located to the south of the commercial building, which can accommodate potential future EV chargers.)

The single-story commercial building would be approximately 25 feet in height and would be constructed with a steel or wood frame, clad with stucco and metal siding, as well as stone or tile veneer for accents. The building would be designed to have a significant amount of low reflective exterior glazing and a low sloping roof with parapets to visually shield mechanical equipment. Figure 2-5A shows a conceptual building elevation that depicts what the commercial building could look like once completed.

[2] California Government Code 65850.7(b)(1) provides as follows: A city, county, or city and county shall administratively approve an application to install electric vehicle charging stations through the issuance of a building permit or similar nondiscretionary permit.

### 2.3.2.3 Truck Amenities

The project would include a two-lane truck wash, truck maintenance facility with up to four bays, and a two-lane truck scale. The truck wash, truck maintenance facility, and truck scale would be located at the eastern portion of the 20.72-acre EV charging station area, as shown on Figure 2-4. The truck wash would be approximately 28 feet in height and approximately 6,000 sf and the truck maintenance facility would be approximately 25 feet in height and approximately 4,000 sf. The buildings would consist of steel framing and an architectural metal system and/or stucco façade. A total of 27 parking spaces would be provided for the truck wash and truck maintenance buildings, of which 2 would be ADA spaces, and 2 would be equipped with Level 2 EV chargers. Figures 2-5B and 2-5C show conceptual building elevations of the truck maintenance and truck wash buildings, respectively. Maintenance services would include full maintenance and repair services for trucks. All of these facilities would provide necessary on-site services for trucks.

### 2.3.2.4 Logistics Facility

A 1,341,432 sf logistics facility is proposed in the northern 79.10-acre portion of the site, shown on Figure 2-4. This facility would consist of three 447,144 sf concrete tilt-up buildings. No refrigeration would be included for cold storage. The buildings would be designed to include a varied parapet and would be 45 feet and 4 inches in height at the highest point, including the varied parapet. Therefore, the maximum height would not exceed 50 feet plus parapet as allowed by Section 82.06.060 of the County Development Code. The buildings would be constructed of painted concrete tilt-up panels and low-reflective glass. Decorative building elements include panel reveals, parapets, mullions, and steel canopies at office entries. The interior of each building would be designed to provide a main logistics floor and office space(s). Figures 2-5D and 2-5E provide conceptual building elevations that depict what the buildings could look like once completed. The buildings are rectangular with north and south facing elongated walls parallel to the internal area of the site and the property's north property line.

Access to the logistics facility would be provided via six driveways along Lenwood Road. Driveways would allow access for both passenger cars and trucks; truck courts with 98 loading docks for each building and trailer parking spaces would be provided. Automobile parking spaces would be distributed around the buildings, as shown on Figure 2-4. A total of approximately 1,071 parking spaces for employees and visitors (including 126 spaces with Level 2 EV chargers and 108 EV capable parking spaces [allowing future installation of chargers] as required by Title 24, Part 11 [California Green Building Standards – CALGreen], and 30 ADA spaces) would be provided, along with 337 spaces to accommodate trailers.

### 2.3.2.5 Landscaping, Lighting, Fencing and Signage

The project's conceptual landscaping plan, included as Appendix M of this EIR, includes a mix of drought-tolerant ornamental trees, shrubs and groundcovers suited to the local environment. New trees would be planted along the project site boundary adjacent to Lenwood Road, along driveways, at the logistic building entrances, and around parking areas. The 40-foot setback along the southern boundary would also be planted with trees and other landscaping plants. Prior to issuance of a building permit, the project applicant would be required to submit final landscaping, planting and irrigation plans to the County for review and approval. The plans are required to comply with the "Landscaping Standards" contained in Chapter 83.10 of the County's Development Code, which establishes requirements for landscape design, automatic irrigation system design, and water-use efficiency.

The project would include building lighting, overhead light poles, and low-level security lighting around the commercial building and logistics facility. The overhead pole mounted lights would be up to 25 feet in height, would be located in the parking areas, be designed to minimize light levels, and directed onto high use areas such as pedestrian walkways. Streetlights would be installed along the project site's frontage along Lenwood Road. The project would be subject to Section 83.07.060 of the County's Development Code (Dark Sky Ordinance), which establishes standards for outdoor lighting in the County's Mountain and Desert Regions. In accordance with the standards presented therein, proposed outdoor lighting would be designed to shield and preclude light pollution or light trespass in excess of the maximum allowed foot-candles.

Per the County's Development Code, Chapter 83.06, a 6-foot-tall masonry wall is required along the north, east, and south sides of the project site (if the adjacent residential land uses on those sides are zoned at the time of project development with a zoning designation [e.g., residential] that would require such a wall be constructed, per the County's Development Code). There is an existing 6-foot masonry wall along the southern boundary of the project site. This project would construct a section of new 8-foot masonry wall, directly adjacent to the westerly approximately 200 feet of the existing 6-foot wall, for sound attenuation purposes (see Figure 3.9-2 for the proposed location of the 8-foot wall section).

The project would include mounted signage on the commercial building, truck wash, and truck maintenance facility and on the logistic buildings, as well as monument signage along Lenwood Road for the EV charging station and for the logistics buildings, consistent with the County's Development Code.

### 2.3.2.6 Access and Circulation

Access to the EV charging station area would be via a 30-foot-wide full-access driveway and a new 60-foot-wide roadway (proposed A Street) off Lenwood Road, as shown on Figure 2-4. Access to the logistics facility area would be provided via six full access driveways off Lenwood Road consisting of three 30-foot-wide full access driveways and three 50-foot-wide full access driveways.

There is an existing 40-foot-wide interior roadway right-of-way (ROW) located centrally within the project site that would be required to be removed or "vacated". The project would provide a new 60-foot-wide roadway dedication for the Proposed "A" Street providing future access to the property to the east of the site. Additional ROW along the project site's street frontage on Lenwood Road would be required in accordance with the County's Department of Public Works Transportation Design standards for roadway standard street width requirements.

New 6-foot sidewalks would be provided along the project site boundary on Lenwood Road and interior sidewalks for pedestrian access are included within the site, as shown on Figure 2-4. Bicycle racks would be provided at the commercial building (two racks for five bikes at each rack), the truck wash (one rack for five bikes), the truck maintenance facility (one rack for five bikes), and the logistics buildings (one rack for five bikes at each building), which would meet CALGreen Code requirements for the commercial building and exceed such requirements for the other buildings. Locations of the bike racks will be determined at final design consistent with building codes.

### 2.3.2.7 Utilities and Public Services

#### Water and Sewer Infrastructure Improvements

Water service would be provided to the project site by the Golden State Water Company. The project would construct new connections to the existing 12-inch-diameter water main located within Lenwood Road for fire service, domestic

water, and for landscape irrigation. All proposed water facilities would be designed and constructed in accordance with County and Golden State Water Company standards.

The City would provide sewer service to the project site pursuant to an extra-territorial service agreement to be approved by the City, with the Local Agency Formation Commission of San Bernardino (LAFCO) authorizing the City to provide such service. The project would construct new connections to the existing 8-inch diameter sewer main located within Lenwood Road. The project may also construct a lift station on the project site and a force main in Lenwood Road from the project to a future sewer main proposed in Jasper Road to accommodate flows from the Logistics Facility.[3] The proposed wastewater connection is required to be designed and constructed in accordance with City standards.

In the event that extra-territorial sewer service is not provided by the City as proposed, the project would instead be served by on-site wastewater treatment facilities.

These on-site sewer facilities would be designed, reviewed and approved by the necessary regulatory agencies, which may include the San Bernardino County Building & Safety Department and Environmental Health Services Department, the Lahontan Regional Water Quality Control Board., and the Victor Valley Wastewater Reclamation Authority. Each of the proposed four parcels containing structures with discharges would be serviced by treatment systems to manage the anticipated flows at an average 4500 gallons per day (gpd) each. In general, treatment systems would consist of above ground and subsurface components and located appropriately in accordance with design and regulatory agency requirements.

## Stormwater Drainage Infrastructure Improvements

The project stormwater drainage system is depicted in the Preliminary Drainage Study (Appendix H). The project's on-site stormwater drainage system would consist of catch basins, underground storm drainpipes, underground detention chambers/basins, and a detention basin. The system is designed to collect and detain on-site stormwater runoff through peak flow attenuation before discharging flows off site. Attenuated stormwater runoff will be discharged off site via proposed parkway drains that connect to the proposed gutter system in Lenwood Road and a discharge structure located at the northwesterly corner of the site that will discharge flows to the street gutter. Flows will continue northerly along the easterly side of Lenwood Road as is currently conveyed. Attenuated flows discharged from the detention basin in the northeasterly portion of the site will be discharged to a point along the end of an unimproved street located at/adjacent to the northeast corner of the project site.

The proposed project will provide on-site detention basins designed to restrict the post development peak design flows to no greater than the existing condition peak flows as outlined above. The detention basins will consist of a combination of conventional open above ground detention basins and underground chamber detention basins located in each drainage area.

The proposed project is not subject to the County's MS4 (municipal separate storm sewer system) Phase II Permit and is not required to prepare a water quality management plan. However, the project site is still subject to the National Pollutant Discharge Elimination System (NPDES) requirements and recommendations provided in the San Bernardino County Stormwater Program, and is required to prepare a Stormwater Pollution Prevention Plan (SWPPP) to seek coverage under the Construction Stormwater General Permit prior to the start of construction.

[3] If required, the construction of a lift station and force main would be implemented as required by the City of Barstow.

### Dry Utilities

The project would require the extension of underground utilities (e.g., electrical, telecommunications, fiber optic, etc.) along the project site's frontage with Lenwood Road. The undergrounding of utilities would be performed in coordination with Southern California Edison and other service providers. The project would only use natural gas, provided by Southwest Gas Corporation, for food/restaurant purposes in the commercial building.

As referenced above, electrical service to serve the project would be provided via a connection to the existing Southern California Edison 33-kilovolt circuit line that runs along the west side of Lenwood Road.

### Fire Service

The project is proposed to be served by the BFPD. Accordingly, the project site would be annexed to the BFPD, which annexation must be approved by the BFPD and LAFCO. In order to meet LAFCO's policy objectives, additional parcels (13 total) beyond those comprising the project site would be annexed to the BFPD as part of the required discretionary approvals. A total of 226 acres, including the 99.85-acre project site would be annexed to the BFPD. as shown on Figure 2-6, Fire District Annexation. In the event that the annexation to the BFPD is not approved or does not proceed forward, then the project would continue to be served by the San Bernardino County Fire Protection District (County Fire).

## 2.3.2.8 Operations

The EV charging station and commercial building, as well as the truck wash, truck scales, and truck maintenance facility would operate 24 hours per day, 7 days per week.

Tenants for the logistics facility have not yet been identified; however, business operations would be expected to be conducted primarily within the warehouse buildings, with the exception of ingress and egress of trucks and passenger vehicles accessing the site; passenger and truck parking; loading and unloading of trailers within designated truck courts/loading areas; and the internal and external movement of materials around the project site via forklifts, pallet jacks, yard hostlers, and similar equipment. It is anticipated that the facilities would operate 24 hours a day, 7 days a week.

Because future project tenants are not known, the number of jobs the project would generate cannot be precisely determined. Employment estimates for the proposed logistics buildings and commercial uses were calculated using information provided by potential commercial operators, and data from the Southern California Association of Governments and the U.S. Energy Information Administration.[4] The number of employees assumed is 35 for the commercial building and for the ancillary truck amenities (truck wash, maintenance facility, etc.) and 604 for the logistics facility.

[4] Employment estimates for the logistics facility were calculated using an employment density factor for warehouses of 1 employee per 2,222 square feet per the U.S. Energy Information Administration's 2018 Commercial Building Energy Consumption Survey (US EIA 2022), resulting in 604 employees. For the commercial building, truck maintenance facility, and truck wash, information from potential operators and the Southern California Association of Governments (SCAG 2001) was incorporated, resulting in an estimated employee count of 35. The commercial building (exclusive of the food service) is assumed to have 6 employees (based on 12,000 sf), who would also serve the truck wash. The truck maintenance facility is assumed to have 1 mechanic for each of the 4 bays and 1 supervisor. The 3,000 sf fast food use in the commercial building is assumed to have 24 employees based on 1 employee per 124 sf, per Southern California Association of Governments estimates (SCAG 2001).

### 2.3.2.9 Off-Site Improvements

In addition to the utilities connections described in Section 2.3.2.7, the project would include off-site improvements to Lenwood Road, and off-site grading to accommodate the proposed "A" Street which crosses the project site. These improvements are shown in Figures 2-7A and 2-7B.

Under existing conditions, Lenwood Road is currently a two-lane north-south oriented roadway that is classified as a 104-foot wide Major Highway in the County's Circulation Master Plan. The project would improve the east side of Lenwood Road to its ultimate 52-foot half-width along the project site's frontage including the construction of sidewalk, curb and gutter. This half section would contain a 10-foot shoulder, two 12-foot northbound travel lanes, and half of a 12-foot center striped median lane. The 10-foot shoulder would provide the dedicated right-of-way for a Class II bike lane. In addition, the project would add 6 feet of paving to the west half of Lenwood Road to accommodate the balance of the center striped median lane and would repave the existing southbound travel lane, to the extent such paving and re-paving have not already been completed by others. The proposed cross section of Lenwood Road is shown in Figure 2-8. Further, the project would transition Lenwood Road back to existing width and provide striping north of the project boundary to Agate Road. The improvements to Lenwood Road outside of the project property boundary extend approximately 3,900 lineal feet (approximately 2.23 acres) within the existing ROW and are shown in Figure 2-7A. The ROW dedication for and construction of the ultimate width of the west side of Lenwood Road would be determined by a future agreement between the City and the County.

In addition, the project will grade approximately 0.06 acres (2,715 sf) on the property directly to the east of the project site, at the east end of proposed "A" Street, to accommodate future potential extension of "A" Street into the easterly property. The off-site grading for "A" Street is shown in Figure 2-7B.

### 2.3.2.10 Project Construction, Phasing, and Schedule

Construction of the project is anticipated to commence in Spring 2027 (if the project is approved) with an approximately 12-to-18-month construction schedule. Construction would generally occur over four phases: (1) site preparation (e.g., vegetation clearing, grubbing, discing) and grading; (2) utility installation (trenching); (3) building construction, paving, and architectural coating; and (4) fine grading, and installation of landscaping and fencing/walls. If the construction of the logistics buildings is phased due to market demand, project development could occur over a 5-to-7-year time frame. For the purposes of this Environmental Impact Report, construction is assumed to be completed over a 12-to-18-month schedule.

Proposed grading activities would result in physical disturbance to a total of approximately 102 acres (99.85 acres of on-site grading and approximately 2.3 acres of off-site disturbance for road and infrastructure improvements). No other on- or off-site physical impacts are anticipated as part of the project, except for the utility connections referenced above.

Proposed manufactured slopes on site would feature a maximum incline of 2:1 (unless approved by the project's Geotechnical engineer and County Geologist). Underground utilities would be installed to an approximate depth of 10 feet below grade. No import or export of soil would be required, and soil would be balanced on site.

The proposed logistic buildings would be constructed with a tilt-up construction method. With tilt-up construction, slabs of concrete, which comprise load-bearing sections of a building envelope or elevation, are cast horizontally on a concrete slab-on-ground. The slabs are then lifted (tilted) with a crane after the concrete has reached sufficient strength. The crane sets the panels, most often in a vertical orientation, on prepared foundations, thus forming the

desired wall line from a series of consecutive panels standing next to each other. Roof structures and other internal features would subsequently be installed.

Construction equipment would generally operate on the project site approximately 8 hours per day, 6 days per week. Permitted hours of construction are between 7:00 a.m. to 7:00 p.m. on Mondays through Saturdays (except Federal holidays) pursuant to Section 83.01.080(g)(3) of the County's Development Code. Even though daily construction activities are permitted to occur over a 12-hour period, not all construction equipment would be in continual operation, and some pieces of equipment are used only periodically throughout a typical day of construction. Thus, 8 hours of daily use per piece of equipment (approximately two-thirds of the daily period over which construction activities are allowed) is a reasonable assumption. Should construction activities occur at night (such as concrete pouring activities that require air temperatures to be lower than occur during the day), the project applicant would be required to obtain authorization for nighttime work from the County.

## 2.4 Required Approvals

The following discretionary approvals would be required by the County for the project:

- Countywide Plan/Policy Plan Amendment from Rural Living (RL) to Limited Industrial (LI)
- Zone change from Rural Living (RL) to Community Industrial (IC)
- Conditional Use Permit to construct the various project components, including but not limited to the commercial building, logistics buildings, truck amenities, EV charging stations and infrastructure, landscaping, and parking areas in the IC zone
- Tentative Parcel Map (with roadway dedications and ROW vacation), see Figure 2-9

In addition, the following discretionary approvals by others would be required for the project:

- Extra-territorial sewer service agreement with the City, to be approved by the City, with LAFCO authorizing the City to provide such service. If such agreement is not approved and authorized, then the project shall obtain discretionary approvals as required for an on-site wastewater treatment system.
- Annexation of the project site and additional parcels to the BFPD, per Figure 2-6, to be initiated or approved by the BFPD and approved by LAFCO. If the annexation does not occur, the project will continue to be served by County Fire.

### 2.4.1 Responsible and Trustee Agencies

The Environmental Impact Report prepared for the proposed project would be used by responsible agencies and trustee agencies that may have some approval authority over the proposed project (i.e., to issue a permit). The project applicant would obtain all permits, as required by law. The following agencies have been identified as having potential discretionary authority over approval of certain project elements, as described above, or may have jurisdiction over natural resources affected by the proposed project:

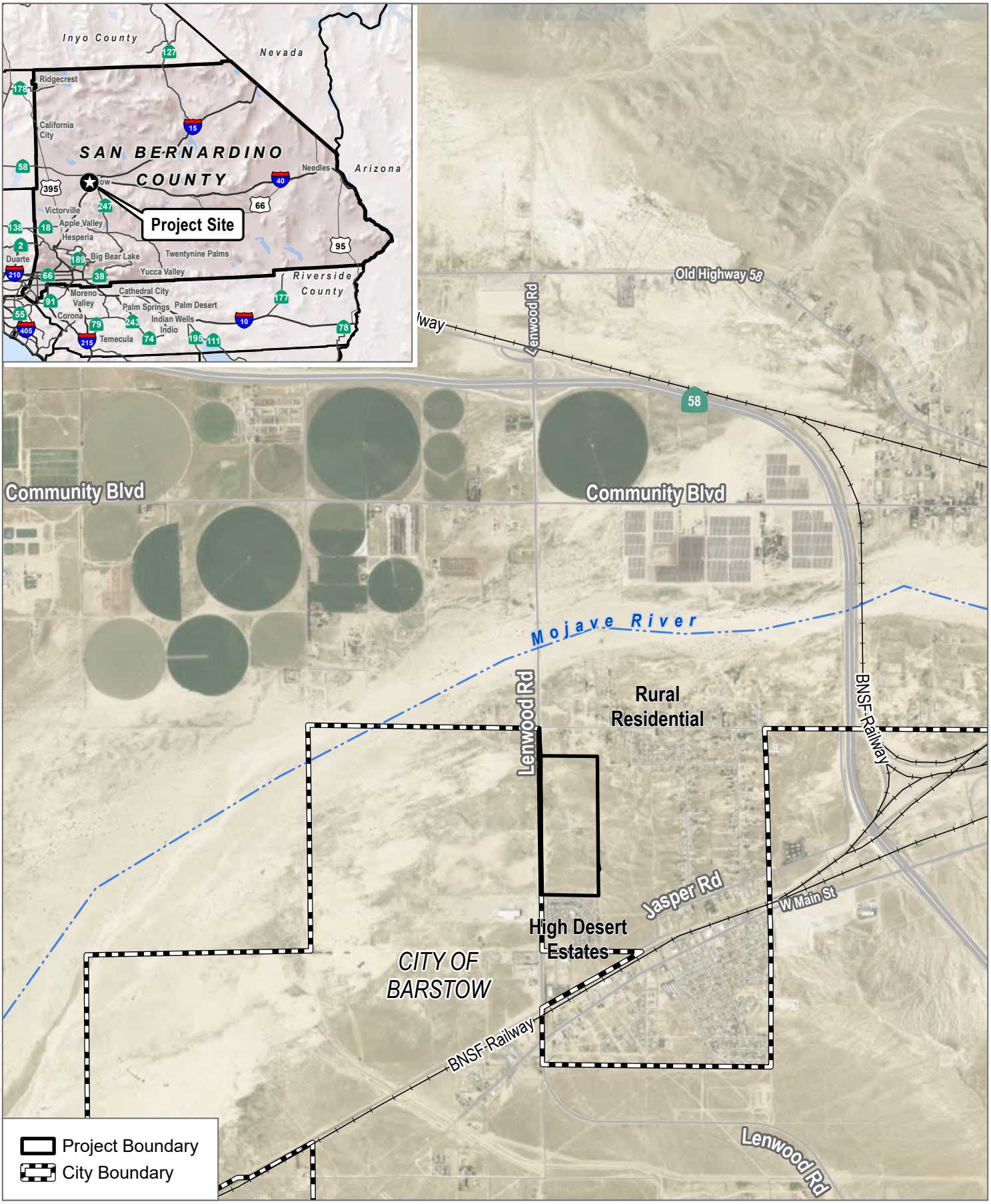
- California Department of Fish and Wildlife
- Lahontan Regional Water Quality Control Board
- Mojave Desert Air Quality Management District
- Local Agency Formation Commission of San Bernardino County

- City of Barstow
- Barstow Fire Protection District

## 2.5 References

SCAG (Southern California Association of Governments). 2001. *Employment Density Study Summary Report.* October 31, 2001.

U.S. EIA (U.S. Energy Information Administration). 2022. *2018 Commercial Building Energy Consumption Survey*. Released September 2021; revised September 2022.




SOURCE: Esri Aerial Imagery, OpenStreetMap, USDOT

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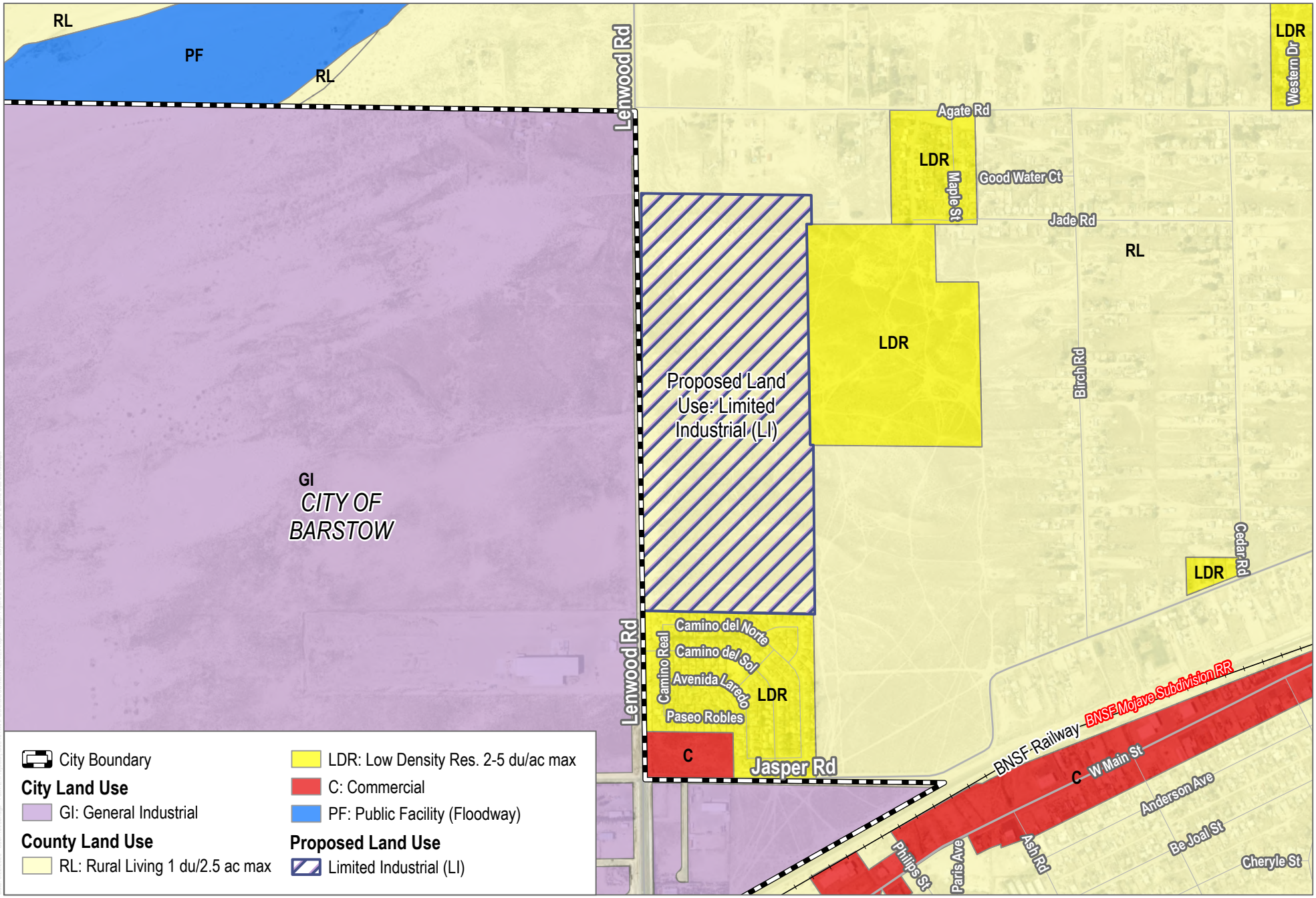
0 1,500 3,000 Feet

**Figure 2-1**

Project Location

EV Charging Station and Logistics Facility

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SOURCE: Esri Aerial Imagery, San Bernardino County, 2024

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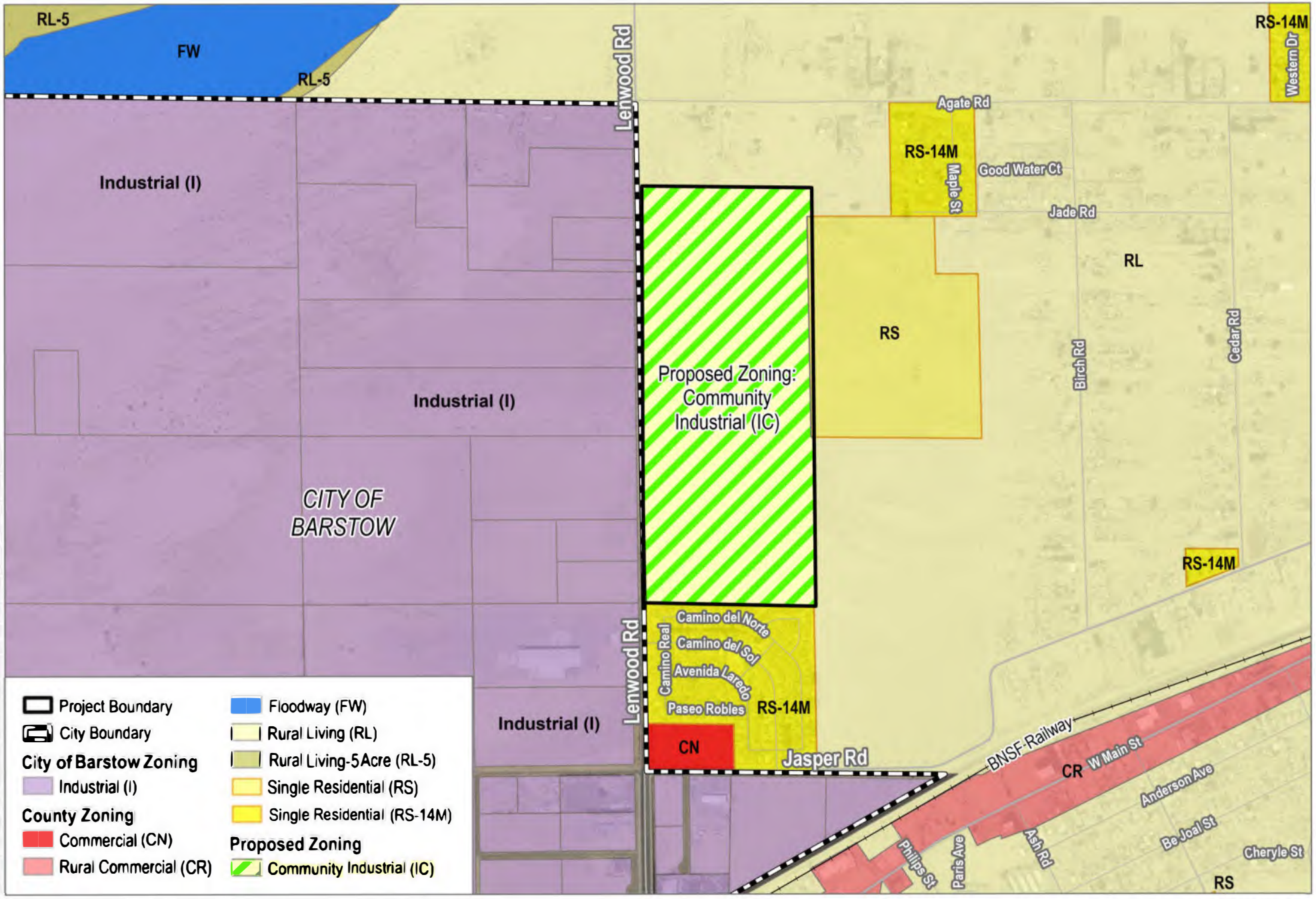
0 500 1,000 Feet

**FIGURE 2-2**

Existing and Proposed Land Use

EV Charging Station and Logistics Facility

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SOURCE: Bing Imagery 2024, San Bernardino County, 2024

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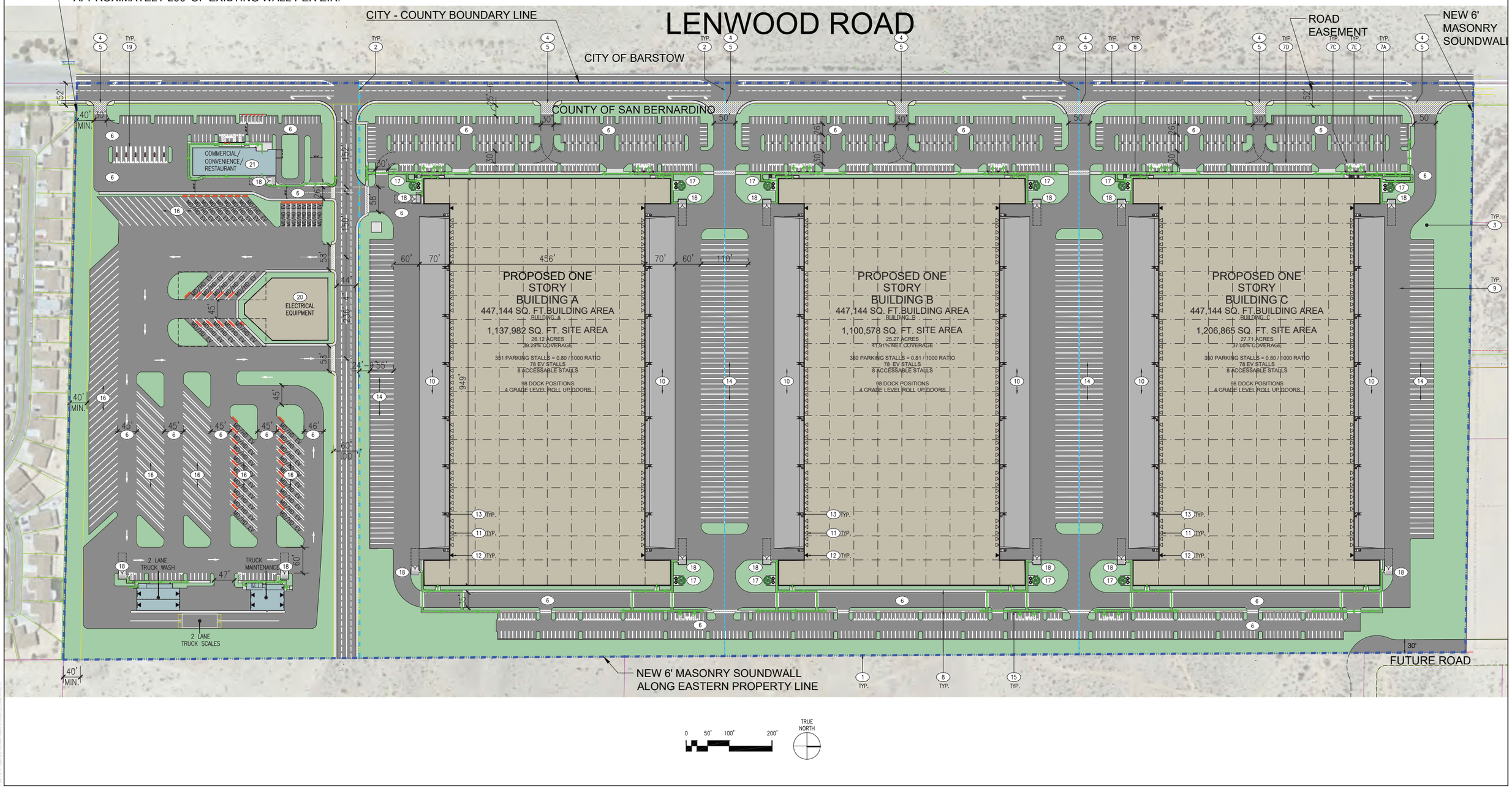
0 500 1,000 Feet

**FIGURE 2-3**

Existing and Proposed Zoning

EV Charging Station and Logistics Facility

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SOURCE: RMW Architecture 2026

**FIGURE 2-4A**

Site Plan

EV Charging Station and Logistics Facility

DUDEK

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## OVERALL SITE INFORMATION

| | |
|---|---|
| APN : | 049-714-203, 049-714-204, 049-714-214, 049-714-215 |
| ZONING: | CURRENT : RL - RURAL LIVING<br>PROPOSED : IC - COMMUNITY INDUSTRIAL |
| TOTAL GROSS SITE AREA: | 4,347,827 G.S.F. = 99.81 ACRES |
| NET SITE AREA: | 4,216,377 N.S.F. = 96.79 ACRES |
| BUILDING AREA: | 1,341,432 S.F. OF INDUSTRIAL, AND UP TO 15,000 S.F COMMERCIAL USES |
| SITE COVERAGE: | 32.17% |
| CONSTRUCTION TYPE: | II-B, III-B OR V-B |
| BUILDING HEIGHT: | 50'-0" TO UNDER SIDE OF ROOF DECK. MAXIMUM OVERALL ALLOWABLE 75'-0" |
| NUMBER OF STORIES: | 1 |

LOT COVERAGE / FLOOR AREA RATIO ANALYSIS:

| LAND USE ZONING | PROPOSED LOT COVERAGE | LOT SIZE | MAXIMUM LOT COVERAGE ALLOWED | TOTAL LOT COVERAGE |
|---|---|---|---|---|
| PROPOSED IC - COMMUNITY INDUSTRIAL | 3,570,486 SQ. FT. | 4,216,377 N.S.F. | 85% | 3,570,486 / 4,216,377 = 0.8468 |

| LAND USE ZONING | FLOOR AREA RATIO MAXIMUM COVERAGE | TOTAL BUILDING AREA | TOTAL LOT AREA | TOTAL FAR |
|---|---|---|---|---|
| PROPOSED IC - COMMUNITY INDUSTRIAL | .45 : 1 | 1,366,432 SQ. FT. | 4,216,377 N.S.F. | 1,366,432 / 4,216,377 = .32 |

LANDSCAPING STANDARDS ANALYSIS:

| LAND USE ZONING | MINIMUM LANDSCAPE AREA | |
|---|---|---|
| | AS A % OF LOT AREA | AREA IN SQ. FT. |
| PREDOMINANTLY INDUSTRIAL / WAREHOUSE | 15 % | 1,000 SQ. FT. |

TOTAL LANDSCAPED AREA = ± 627,041 SQ. FT. = 15%

## ELECTRIC VEHICLE CHARGING AND COMMERCIAL

| | |
|---|---|
| TOTAL GROSS SITE AREA: | 902,634 G.S.F. = 20.72 ACRES |
| NET SITE AREA: | 876,170 N.S.F. = 20.11 ACRES |
| BUILDING AREA: | UP TO 15,000 SQ.FT. COMMERCIAL USES<br>APPROXIMATELY 6,000 SQ.FT. TRUCK WASH<br>APPROXIMATELY 4,000 SQ.FT. TRUCK MAINTENANCE |
| SITE COVERAGE: | 2.85% |
| CONSTRUCTION TYPE: | II-B OR V-B |
| BUILDING HEIGHT: | ± 25'-0" |
| NUMBER OF STORIES: | 1 |
| PARKING: | 91 STALLS TOTAL |
| MEDIUM DUTY PARKING: | 12 STALLS TOTAL |
| TRUCK PARKING: | 115 STALLS TOTAL |

PARKING STANDARDS: (SAN BERNARDINO COUNTY ZONING CODE TABLE 83-15)

- GENERAL RETAIL — 1/250 S.F. (15,000 S.F. @ 1/250 S.F. )) = 60 TOTAL STALLS
- REPAIR AND SERVICE STATIONS — 3 STALLS FOR EACH SERVICE BAY
  - 6 BAYS (2 @ TRUCK WASH AND 4 @ MAINTENANCE) = 18 STALLS
  - •• REQUIRED: 78 STALLS
  - •• PROVIDED: 91 STALLS
- STANDARD STALLS: 91 — 9' X 19' (17' WITH A 2'-0" OVERHANG)
- COMPACT STALLS: 0 — 8' X 16' (14' WITH A 2'-0" OVERHANG) 0% OF TOTAL STALLS

ACCESSIBLE & DESIGNATED PARKING STALLS (REQUIRED AND PROVIDED) :

PER 2025 CBC TABLE 11B-208.2: 76 TO 100 STALLS, 4 STALLS REQUIRED TO BE ACCESSIBLE
STALLS: EVERY 6 OR FRACTION OF SIX, AT LEAST ONE SHALL BE VAN PARKING.
5 ADA STALLS (INCLUDING 1 VAN ACCESSIBLE STALLS) PROVIDED.

PER 2025 CALIFORNIA GREEN BUILDING CODE TABLE 5.106.5.3.1:
GENERAL RETAIL = 51-75 STALLS, 13 REQUIRED EV CAPABLE SPACES. OF THESE 8 (RETAIL) ARE REQUIRED TO BE PROVIDED WITH EVSE.
WASH AND SERVICE STATIONS = 10-25 STALLS, 4 REQUIRED EV CAPABLE SPACES. OF THESE 2 (OTHER) ARE REQUIRED TO BE PROVIDED WITH EVSE.

PER 2025 CBC TABLE 11B-228.3.2.1: 5 TO 25 EVCS STALLS: 1 VAN ACCESSIBLE EVCS, 1 STANDARD ACCESSIBLE EVCS AND 0 AMBULATORY EVCS ARE REQUIRED.
OF THE 17 EVCS REQUIRED, 1 VAN EVCS, 1 STANDARD ADA EVCS, AND 0 AMBULATORY EVCS ARE PROVIDED AS SHOWN.

*10 STALLS TO BE PROVIDED WITH EVSE. 8 OF WHICH WILL BE DC FAST CHARGERS, NO ADDITIONAL EV READY STALLS NEEDED - PER CGBC 5.106.5.2.4*
*IN ADDITION, SITE TO CONTAIN 45 EVSE (DC FAST CHARGERS) FOR TRUCK CHARGING.*

## THREE BUILDING LOGISTICS FACILITY

| | |
|---|---|
| TOTAL GROSS SITE AREA: | 3,445,405 G.S.F. = 79.10 ACRES |
| NET SITE AREA: | 3,339,865 N.S.F. = 76.67 ACRES |
| BUILDING AREA: | 1,341,432 S.F TOTAL OF BUILDINGS A, B, AND C |
| SITE COVERAGE: | 40.16% |
| CONSTRUCTION TYPE: | III-B OR V-B |
| BUILDING HEIGHT: | MAXIMUM OVERALL ALLOWABLE 50'-0" |
| CLEAR HEIGHT: | 36'-0" |
| NUMBER OF STORIES: | 1 |
| PARKING: | 1071 STALLS TOTAL |
| TRAILER PARKING: | 337 STALLS TOTAL |

PARKING STANDARDS: (SAN BERNARDINO COUNTY ZONING CODE TABLE 83-15)

- WAREHOUSING — 1/1,000 S.F. FOR THE FIRST 40,000 S.F. 1/4,000 S.F. FOR ALL WAREHOUSE EXCEEDING 40,000 S.F.
  - (40,000 S.F. @ 1/1,000 S.F. = 40 STALLS * 3 BUILDINGS = 120 STALLS + (1,154,826 S.F @ 1/4,000 S.F. = 284 STALLS)) = 404 TOTAL STALLS
- POTENTIAL OFFICE SPACE @ 12.42% OF BUILDING AREA (MAX) — 1/250 S.F. (166,606 S.F. @ 1/250) * 3 BUILDINGS = 667 TOTAL STALLS
  - •• REQUIRED: 1071 STALLS
  - •• PROVIDED: 1071 STALLS
- STANDARD STALLS: 1071 — 9' X 19' (17' WITH A 2'-0" OVERHANG)
- COMPACT STALLS: 0 — 8' X 16' (14' WITH A 2'-0" OVERHANG) 0% OF TOTAL STALLS

ACCESSIBLE & DESIGNATED PARKING STALLS (REQUIRED AND PROVIDED) :

PER 2025 CBC TABLE 11B-208.2:
BUILDING A: 2 VAN ACCESSIBLE AND 8 STANDARD ACCESSIBLE STALLS REQUIRED
BUILDING B: 2 VAN ACCESSIBLE AND 8 STANDARD ACCESSIBLE STALLS REQUIRED
BUILDING C: 2 VAN ACCESSIBLE AND 8 STANDARD ACCESSIBLE STALLS REQUIRED

PER 2025 CALIFORNIA GREEN BUILDING CODE TABLE 5.106.5.3.1: OVER 201 STALLS, 20% OF ACTUAL PARKING SPACES TO BE EV CAPABLE SPACES. (1071 X 0.2 = 215 STALLS) OF THESE, 50% ARE TO BE PROVIDED WITH EVSE (OTHER). (215 X 0.5 = 108 STALLS)

PER 2025 CBC TABLE 11B-228.3.2.1:
BUILDING A: 1 EV VAN ACCESSIBLE, 2 EV STANDARD ACCESSIBLE, AND 2 EV AMBULATORY REQUIRED
BUILDING B: 1 EV VAN ACCESSIBLE, 2 EV STANDARD ACCESSIBLE, AND 2 EV AMBULATORY REQUIRED
BUILDING C: 1 EV VAN ACCESSIBLE, 2 EV STANDARD ACCESSIBLE, AND 2 EV AMBULATORY REQUIRED

*234 EV CAPABLE STALLS PROVIDED WITH 126 OF THOSE TO HAVE EVSE INSTALLED.*

## KEYNOTES:

1. EXISTING PROPERTY LINES
2. PROPOSED NEW PARCEL LINES
3. TYPICAL LANDSCAPE AREAS
4. ENHANCED PAVING AT DRIVE ENTRIES.
5. PROPOSED LOCATION OF NEW SITE ACCESS DRIVE CURB CUT
6. TYPICAL DRIVE ISLE
7. TYPICAL PARKING:
   - A. STANDARD STALLS: 9' X 19' OR 9' X 17' WITH 2' PARKING OVERHANG.
   - B. COMPACT STALLS: 8' X 16' OR 8' X 14' WITH 2' PARKING OVERHANG (35% MAX). *FINAL DESIGN MAY INCORPORATE COMPACT STALLS
   - C. ACCESSIBLE PARKING STALLS: 9' X 18' MIN. WITH 2' PARKING OVERHANG WITH 5' OR 8' WIDE LOADING ZONE
   - D. ELECTRIC VEHICLE CHARGING SPACES (STALLS LABELED "ELECTRIC VEHICLE CHARGING"). TO FOLLOW REQUIREMENTS PER CBGC 5.106.5.3.1.
   - E. ACCESSIBLE ELECTRIC VEHICLE CHARGING STALLS, VAN, STANDARD, AND AMBULITORY.
8. NEW CONCRETE PEDESTRIAN WALKS. ASSUME ALL SIDEWALKS TO BE ACCESSIBLE PATH OF TRAVEL. SLOPE NOT TO EXCEED 1:20 (5%) IN DIRECTION OF TRAVEL. CROSS SLOPE NOT TO EXCEED 1:50 (2%) WHERE PARKING OVERHANG OCCURS, INCREASE WIDTH OF SIDEWALK TO 6'-0" MIN.
9. SEMI TRACTOR TRAILER TEMPLATE SHOWN FOR REFERENCE ONLY
10. 60" DEPRESSED CONCRETE TRUCK DOCK WITH CURB AND GUARDRAIL AT EACH SIDE
11. LOADING DOCK ROLL UP DOOR, TYPICAL
12. GRADE LEVEL ROLL UP DOOR, TYPICAL
13. PREFABRICATED PAINTED STEEL DOCK STAIR AND BOLLARDS
14. TRAILER PARKING STALLS WITH CONCRETE DOLLY PADS
15. DASHED LINE INDICATES 2'-0" PARKING OVERHANG
16. SEMI TRUCK AND TRAILER PARKING STALLS
17. EMPLOYEE AMENITY AREAS
18. TRASH ENCLOSURE WITH 40' APPROACH. DESIGN TO COMPLY WITH COUNTY STANDARDS. CAPACITY TO MEET MINIMUMS IN COUNTY DEVELOPMENT CODE 84.24.040 SHOWN BELOW.
19. LIGHT/MEDIUM DUTY PULL THROUGH EV READY STALLS
20. INCLUDES ELECTRICAL VEHICLE SUPPLY EQUIPMENT (EVSE), POTENTIAL SOLAR STORAGE BATTERIES, AND ELECTRICAL SUBSTATION (IF NEEDED)
21. UP TO 15,000 SQ. FT. COMMERCIAL BUILDING WITH DRIVE THRU WINDOW

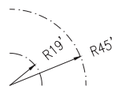
REFUSE AND RECYCLABLE MATERIAL STORAGE AREAS: (SAN BERNARDINO COUNTY ZONING CODE 84.24.040)

| | |
|---|---|
| • ELECTRIC VEHICLE CHARGING AND COMMERCIAL | |
| •• COMMERCIAL | 10,000-25,000 SQ FT BSF = 96 SQ FT OF TOTAL STORAGE AREA<br>*ONE 11'-4" X 20'-0" ENCLOSURE PROVIDED = 226.6 SQ FT* |
| •• TRUCK WASH | 5,000-10,000 SQ FT BSF = 48 SQ FT OF TOTAL STORAGE AREA<br>*ONE 11'-4" X 20'-0" ENCLOSURE PROVIDED = 226.6 SQ FT* |
| •• TRUCK MAINTENANCE | 5,000-10,000 SQ FT BSF = 48 SQ FT OF TOTAL STORAGE AREA<br>*ONE 11'-4" X 20'-0" ENCLOSURE PROVIDED = 226.6 SQ FT* |
| • LOGISTICS FACILITY | |
| •• FOR EACH BUILDING | 100,001+ SQ FT BSF = 384 SQ FT FOR THE FIRST 100,000 SQ FT + 96 SQ FT OF TOTAL STORAGE FOR EACH ADDITIONAL 25,000 SQ FT OF BSF = 347,144 / 25,000 = 14 * 96 = 1,344 + 384 = 1,728 SQ FT OF TOTAL STORAGE AREA<br>*FOUR 11'-4" X 20'-0" ENCLOSURES PROVIDED = 906.4 SQ FT. THE REMAINING 821.6 SQ FT OF TOTAL STORAGE TO BE PROVIDED BY DOCK MOUNTED ROLL-OFF BINS AND/OR COMPACTORS AT TIME OF FUTURE TENANT IMPROVEMENTS.* |

## SITE LEGEND:

- BUILDING AREA
- SITE CONCRETE
- COMMERCIAL AREA
- ADA PATH OF TRAVEL
- ASPHALT AREA
- LANDSCAPE AREA
- EXISTING PROPERTY LINE
- NEW PARCEL LINE
- ▽ 9' X 10' OVERHEAD DOCK LEVEL DOOR
- ▼ 12' X 14' OVERHEAD GRADE LEVEL DOOR

FIRE DEPARTMENT TURN RADIUS:



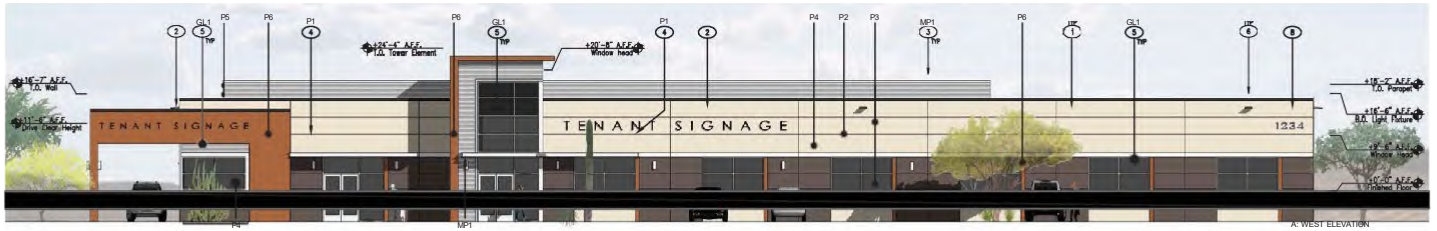

SOURCE: RMW Architecture 2026

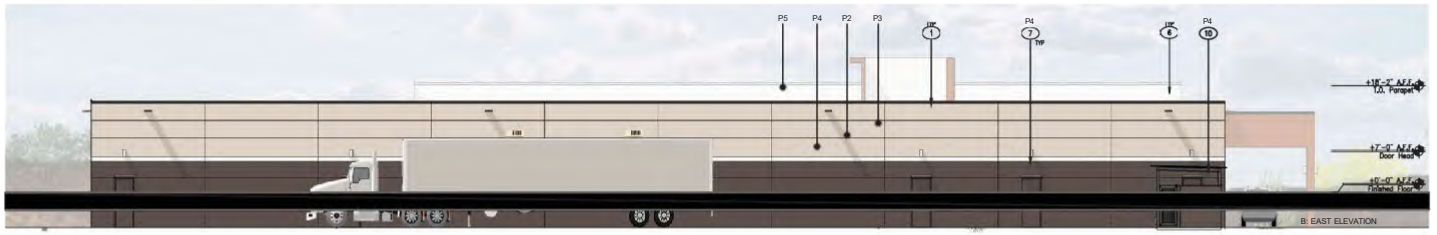
**FIGURE 2-4B**
Site Plan
EV Charging Station and Logistics Facility

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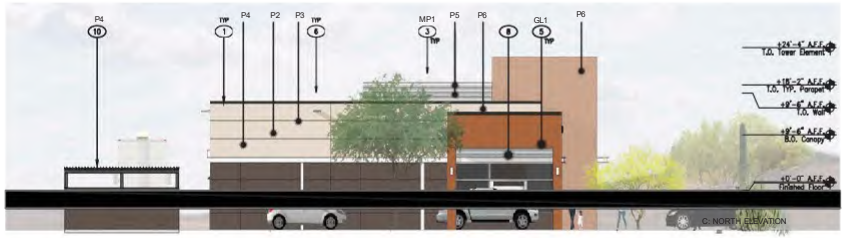




KEYNOTES:

1. TYPICAL SITE CAST, CONCRETE TILT-UP PANELS WITH 3/4" REVEALS AND A MULTI COLOR TEXTURED COATING SYSTEM OR LOAD BEARING WOOD STUD FRAMING WITH AN EXTERIOR CEMENT PLASTER SYSTEM.
2. TENANT SIGNAGE (FOR REFERANCE ONLY) UNDER SEPARATE PERMIT.
3. MECHANICAL SCREEN AS NEEDED.
4. PAINTED CANOPY WITH C CHANNEL ACCENT ELEMENT, PAINT AS SPECIFIED. TYPICAL AT STOREFRONT OPENINGS.
5. TYPICAL WINDOW SYSTEM: DUAL PANE GLAZING IN 2" x 4" (NOMINAL) THERMALLY BROKEN, CLEAR ANODIZED ALUMINUM FRAMES. OUTER GLAZING PANE TO BE TINTED WITH LOW-E COATING ON INTERIOR SURFACE, INNER PANE CLEAR FLOAT. STOREFRONT DOORS WHERE SHOWN.
6. EXTERIOR WALL PACK LIGHTING. SEE PHOTOMETRIC DRAWINGS.
7. 3' X 7' STEEL MAN DOOR WITH EMERGENCY LIGHT FIXTURE CENTERED OVER DOOR SEE PHOTOMETRIC PLAN FOR FIXTURE TYPE.
8. ADDRESS SIGNAGE UNDER SEPARATE PERMIT AND SHALL MEET BUILDING, FIRE AND SHERIFF DEPT REQUIREMENTS.
9. DRIVE THRU WINDOW.
10. CMU TRASH ENCLOSURE WITH CORUGATED METAL DOORS AND ROOF.

FINISH LEGEND:

- P1: PAINT 1 — SHERWIN WILLIAMS SW 7757 HIGH REFLECTIVE WHITE
- P2: PAINT 2 — SHERWIN WILLIAMS SW 7063 NEBULOUS WHITE
- P3: PAINT 3 — SHERWIN WILLIAMS SW 7531 CANVAS TAN
- P4: PAINT 4 — SHERWIN WILLIAMS SW 7026 GRIFFEN
- P5: PAINT 5 — SHERWIN WILLIAMS SW 6990 CAVIAR
- P6: PAINT 6 — SHERWIN WILLIAMS SW 2803 ROOKWOOD TERRA COTTA
- MP1: METAL WALL PANEL — HORIZONTAL ORIENTATION STYLE/PROFILE: AEP SPAN HR.36R COLOR: ZINCALUME PLUS
- GL1: VITRO ARCHITECTURAL GLASS "SOLARGRAY" GRAY TINTED GLASS IN THERMALLY BROKEN CLEAR ANODIZED ALUMINUM FRAMES







EXTERIOR ELEVATIONS

SCALE: 1" = 20'-0"

1

OURCE: RMW 202

**FIGURE 2-5A**

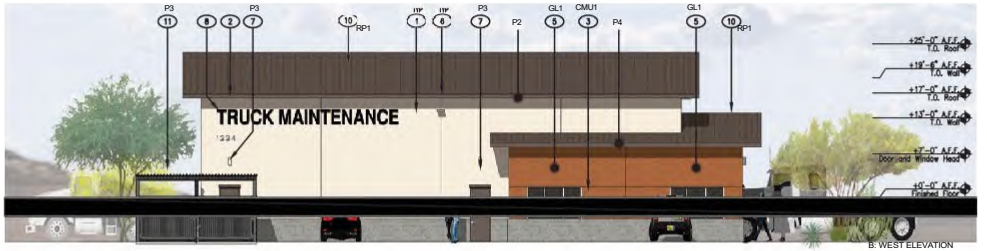
Conceptual Elevations - Commercial / Drive-Through Building

EV Charging Station and Logistics Facility

DUDEK n Not to Scale

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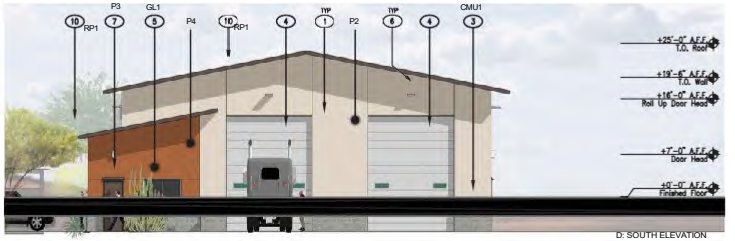









KEYNOTES:

1. LOAD BEARING WOOD STUD FRAMING WITH AN EXTERIOR CEMENT PLASTER SYSTEM. PAINT AS SPECIFIED
2. TENANT SIGNAGE (FOR REFERANCE ONLY) UNDER SEPARATE PERMIT.
3. 36" CMU BASE. SEE FINISH LEGEND.
4. 14' X 16' ROLL UP DOORS.
5. TYPICAL WINDOW SYSTEM: DUAL PANE GLAZING IN 2" x 4" (NOMINAL) THERMALLY BROKEN, CLEAR ANODIZED ALUMINUM FRAMES. OUTER GLAZING PANE TO BE TINTED WITH LOW-E COATING ON INTERIOR SURFACE. INNER PANE CLEAR FLOAT.
6. EXTERIOR WALL PACK LIGHTING.
7. 3' X 7' STEEL MAN DOOR WITH EMERGENCY LIGHT FIXTURE CENTERED OVER DOOR.
8. ADDRESS SIGNAGE UNDER SEPARATE PERMIT AND SHALL MEET BUILDING, FIRE AND SHERIFF DEPT REQUIREMENTS.
9. 8' X 9' ROLL UP PARTS DOOR.
10. STANDING SEAM ROOF. 2:12 PITCH.
11. CMU TRASH ENCLOSURE WITH CORUGATED METAL DOORS AND ROOF.

0 4' 8' 16'

EXTERIOR ELEVATIONS

SCALE: 1/8" = 1'-0"

1

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OURCE: RMW 202

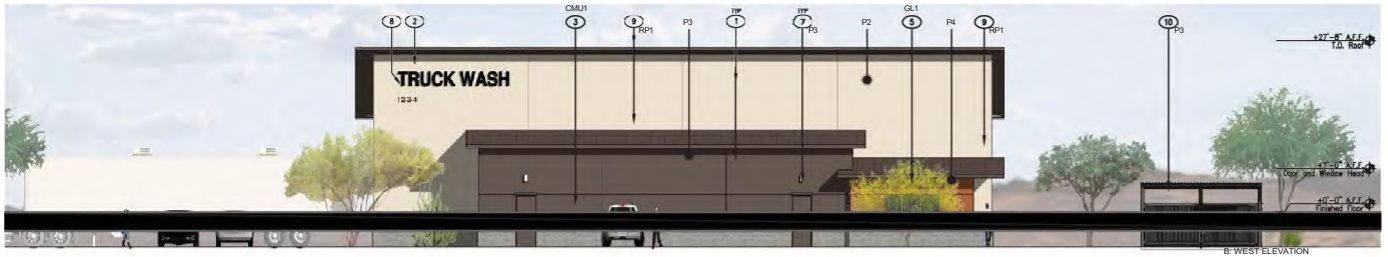
**FIGURE 2-5B**

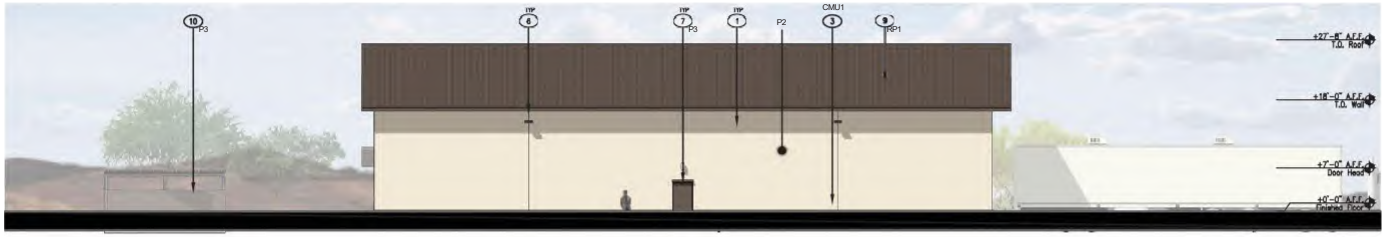
Conceptual Elevations - Truck Maintenance

EV Charging Station and Logistics Facility

DUDEK @ Not to Scale

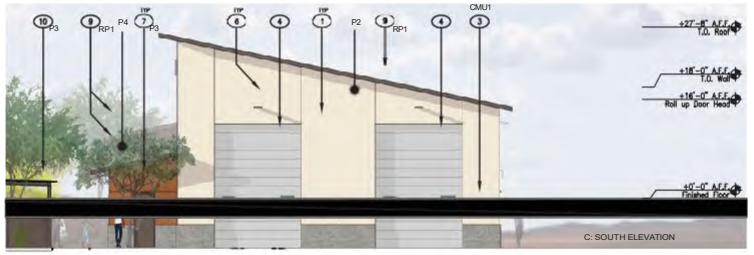
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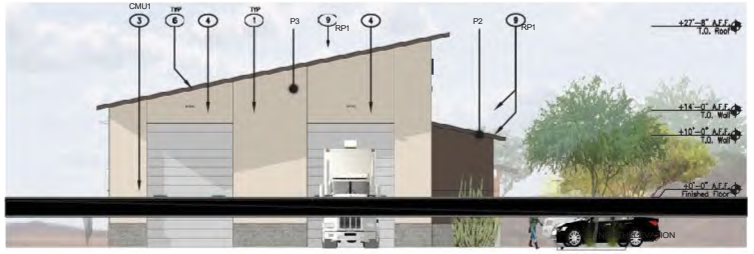








KEYNOTES:

1. LOAD BEARING WOOD STUD FRAMING WITH AN EXTERIOR CEMENT PLASTER SYSTEM. PAINT AS SPECIFIED
2. TENANT SIGNAGE (FOR REFERANCE ONLY) UNDER SEPARATE PERMIT.
3. 36" CMU BASE. SEE FINISH LEGEND.
4. 14' X 16' ROLL UP DOORS.
5. TYPICAL WINDOW SYSTEM: DUAL PANE GLAZING IN 2" x 4" (NOMINAL) THERMALLY BROKEN, CLEAR ANODIZED ALUMINUM FRAMES. OUTER GLAZING PANE TO BE TINTED WITH LOW-E COATING ON INTERIOR SURFACE. INNER PANE CLEAR FLOAT.
6. EXTERIOR WALL PACK LIGHTING.
7. 3' X 7' STEEL MAN DOOR WITH EMERGENCY LIGHT FIXTURE CENTERED OVER DOOR.
8. ADDRESS SIGNAGE UNDER SEPARATE PERMIT AND SHALL MEET BUILDING, FIRE AND SHERIFF DEPT REQUIREMENTS.
9. STANDING SEAM ROOF. 2:12 PITCH.
10. CMU TRASH ENCLOSURE WITH CORUGATED METAL DOORS AND ROOF.

EXTERIOR ELEVATIONS
SCALE: 1/8" = 1'-0"

1

OURCE: RMW 202

DUDEK @ Not to Scale

**FIGURE 2-5C**

Conceptual Elevations - Truck Wash

EV Charging Station and Logistics Facility

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A: NORTH ELEVATION



B: SOUTH ELEVATION

KEYNOTES:

1. TYPICAL SITE CAST, CONCRETE TILT-UP PANELS WITH 3/4" REVEALS AND A MULTI COLOR TEXTURED COATING SYSTEM.
2. TENANT SIGNAGE (FOR REFERANCE ONLY) UNDER SEPARATE PERMIT.
3. CONTINUOUS GUTTER AND SURFACE MOUNTED DOWNSPOUTS. PAINT AS SPECIFIED.
4. PAINTED CANOPIES. PAINT AS SPECIFIED. TYPICAL AT MAIN ENTRANCE STOREFRONT OPENINGS.
5. TYPICAL WINDOW SYSTEM: DUAL PANE GLAZING IN 2" x 4" (NOMINAL) THERMALLY BROKEN, CLEAR ANODIZED ALUMINUM FRAMES. OUTER GLAZING PANE TO BE TINTED WITH LOW-E COATING ON INTERIOR SURFACE. INNER PANE CLEAR FLOAT. STOREFRONT DOORS WHERE SHOWN.
6. 12' X 14' GRADE LEVEL ROLL UP DOOR, PAINT AS SPECIFIED.
7. 9' X 10' DOCK LEVEL ROLL UP DOOR, PAINT AS SPECIFIED.
8. EXTERIOR WALL PACK LIGHTING. TO COMPLY WITH SAN BERNARDINO COUNTY LIGHTING CODE.
9. 3' X 7' STEEL MAN DOOR WITH EMERGENCY LIGHT FIXTURE CENTERED OVER DOOR. SEE PHOTOMETRIC PLAN FOR FIXTURE TYPE. PAINT AS SPECIFIED.
10. ADDRESS SIGNAGE UNDER SEPARATE PERMIT AND SHALL MEET BUILDING, FIRE AND SHERIFF DEPT REQUIREMENTS.
11. DASHED LINE INDICATES INTERNAL CLEAR HEIGHT. SEE ELEVATIONS FOR HEIGHT.
12. METAL WALL PANEL OR FORMLINER. FINISH MP1.
13. FOAM ACCENT BAND. PAINT AS SPECIFIED.
14. PREFABRICATED STEEL STAIR AND FIXED BOLLARDS PAINTED "SAFETY YELLOW" TYPICAL. ENLARGE LANDING AS REQUIRED AT STAIRS WITH EXTERIOR AREA OF ASSISTED RESCUE.
15. POTENTIAL LOCATION OF MECHANICAL LOUVERED WALL VENTS. PAINT AS SPECIFIED.
16. 3' X 1' TILT-UP CONCRETE WING WALL.

FINISH LEGEND:

- P1: PAINT 1 — SHERWIN WILLIAMS SW 7757 HIGH REFLECTIVE WHITE
- P2: PAINT 2 — SHERWIN WILLIAMS SW 7065 ARGOS
- P3: PAINT 3 — SHERWIN WILLIAMS SW 7067 CITYSCAPE
- P4: PAINT 4 — SHERWIN WILLIAMS SW 6072 VERSATILE GREY
- P5: PAINT 5 — SHERWIN WILLIAMS SW 7026 GRIFFEN
- P6: PAINT 6 — SHERWIN WILLIAMS SW 9183 DARK CLOVE
- P7: PAINT 7 — SHERWIN WILLIAMS SW 6990 CAVIAR
- GL1: VITRO ARCHITECTURAL GLASS "SOLARGRAY" GRAY TINTED GLASS IN THERMALLY BROKEN CLEAR ANODIZED ALUMINUM FRAMES
- MP1: METAL WALL PANEL HORIZONTAL ORIENTATION STYLE/PROFILE: AEP SPAN HR 36R COLOR: ZINCALUME PLUS OR SIMILAR FORMLINER & PAINT



C: EAST ELEVATION



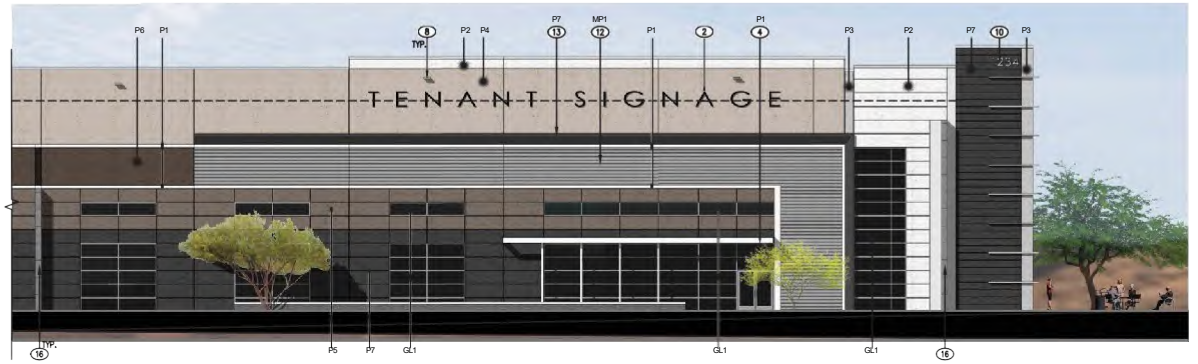
D: WEST ELEVATION

0 15' 30' 60'

EXTERIOR ELEVATIONS

SCALE: 1" = 30'-0"

1




BUILDING ADDRESS NUMBER NOTE:
APPROVED NUMBERS OR ADDRESSES SHALL BE PLACED ON ALL NEW BUILDINGS IN SUCH A POSITION TO BE EASILY READ FROM THE STREET OR ROAD FRONTING THE PROPERTY. THE MINIMUM SIZE OF THE NUMBERS SHALL NOT BE LESS THAT TEN (10) INCHES AND SHALL BE MOUNTED IMMEDIATELY ADJACENT TO A LIGHT SOURCE (I.E., BACK-DROP LIGHTING BEHIND ADDRESS NUMBERING), AND SHALL CONTRAST WITH THEIR BACKGROUND.

0 4' 8' 16'

ENLARGED ELEVATION

SCALE: 1/8" = 1' - 0"

2

Path: Z:\Projects\650401MAP\DOCS\DEIR\EIR

OURCE: RMW 202

**FIGURE 2-5D**

Conceptual Elevations - Logistics Building

EV Charging Station and Logistics Facility

DUDEK n Not to Scale

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BUILDING A RENDERING - SW CORNER
SCALE: N.T.S.
1

SOURCE: RMW 2025

**FIGURE 2-5**E

Conceptual Elevations - Logistics Building Corner Rendering

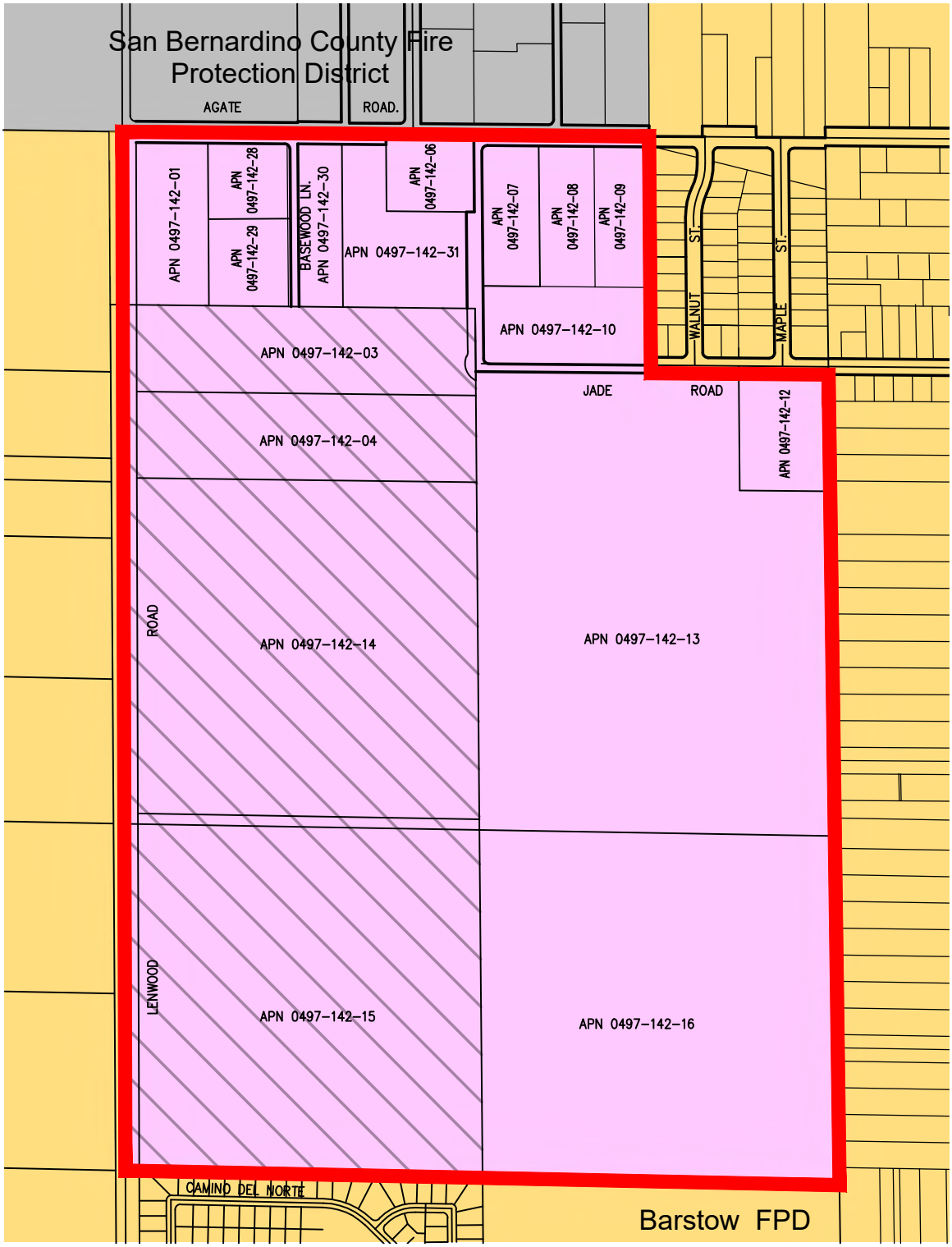
EV Charging Station and Logistics Facility

DUDEK

Not to Scale

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LEGEND

- Proposed Annexation Area
- Parcels in Proposed Annexation Area ~226.16 Ac.
- Barstow FPD
- EV Charging Station and Logistics Facility ~99.85 Ac.
- San Bernardino County Fire Protection District

NORTH

600' 0' 600'

SOURCE: River West 2026

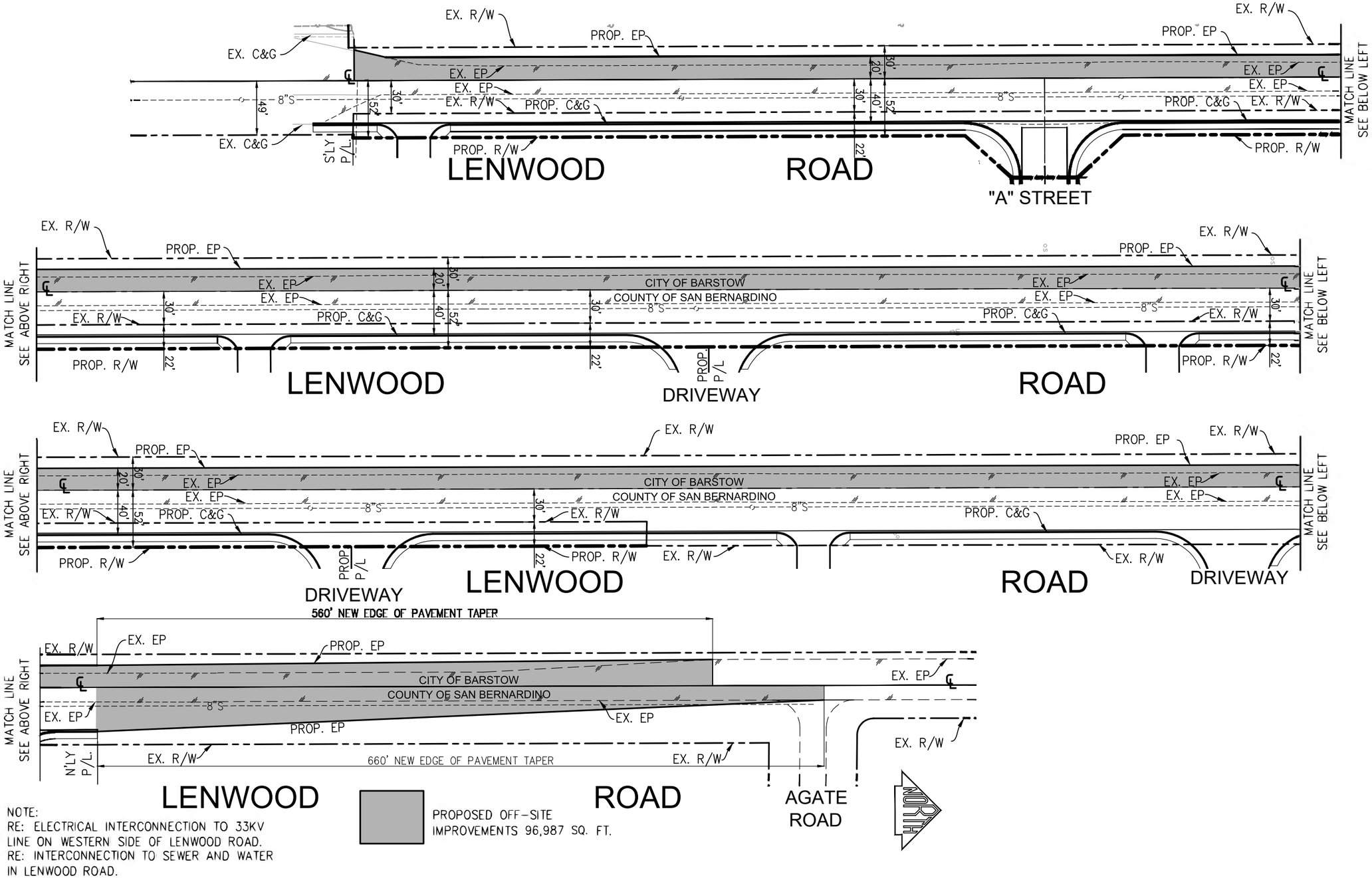
**FIGURE 2-6**

Fire District Annexation

EV Charging Station and Logistics Facility

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SOURCE: RMW 2025

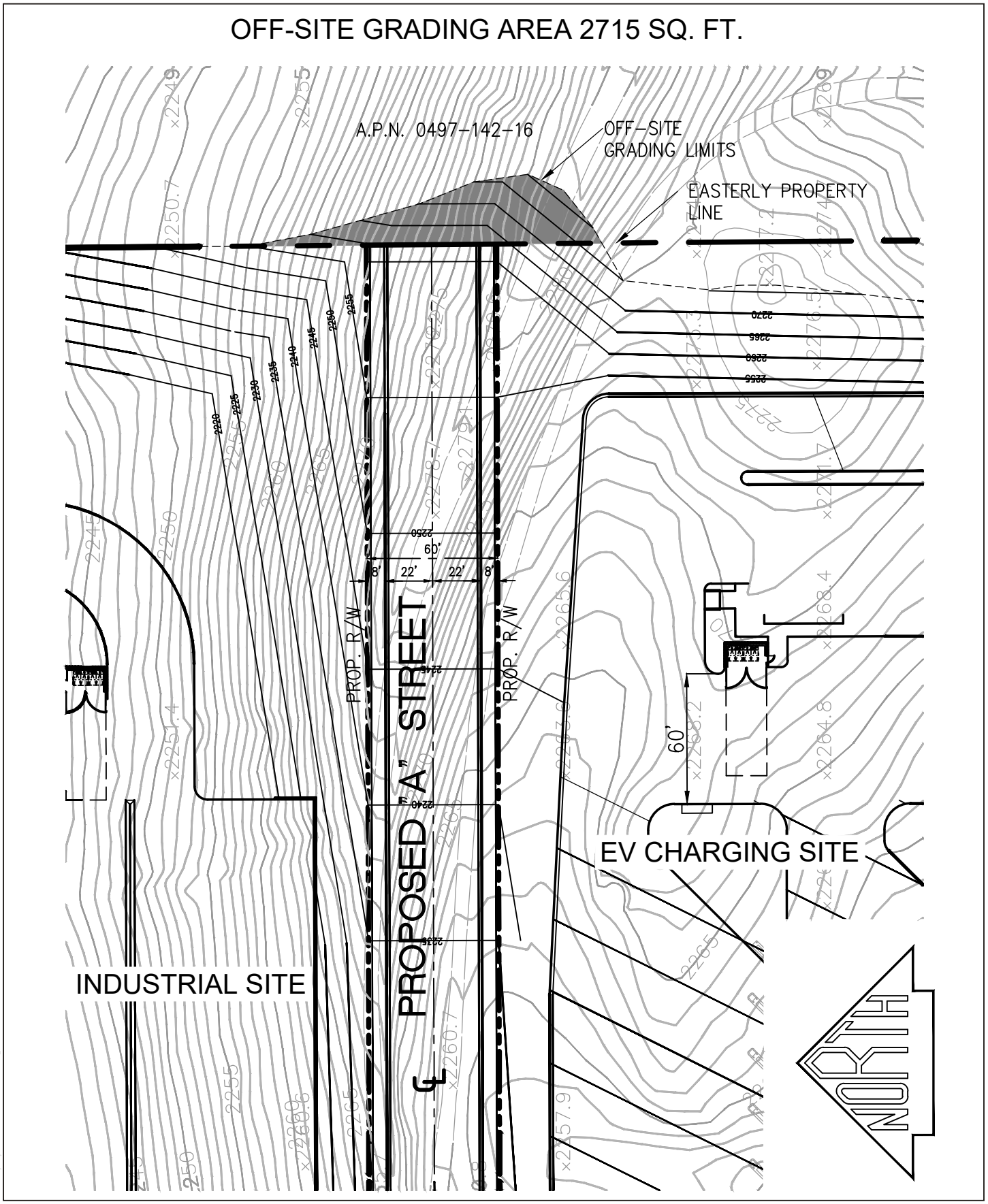
**FIGURE 2-7A**

Offsite Improvements

EV Charging Station and Logistics Facility

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SOURCE: RMW 2025

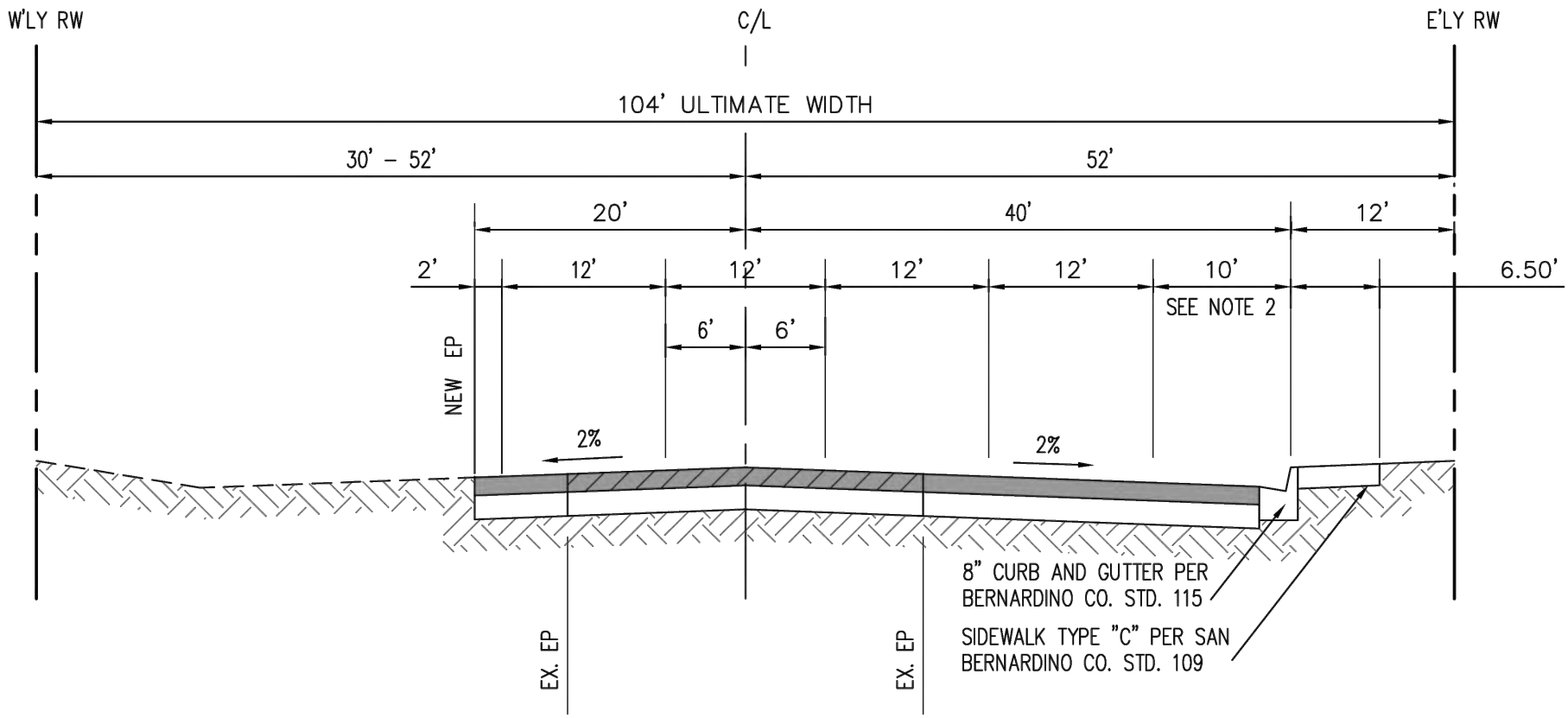
**FIGURE 2-7B**

Offsite Improvements

EV Charging Station and Logistics Facility

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# PROPOSED LENWOOD ROAD SECTION

## WITH CONTINUOUS LEFT TURN LANE

(MAJOR HIGHWAY SAN BERNARDINO CO. STD. 101)

NO SCALE

NOTE:

1. STRUCTURAL SECTION OF ROADWAY SHALL BE DETERMINED FROM SOILS TEST AND SO INDICATED ON CONSTRUCTION PLANS
2. TEN FEET (10') SHOULDER AREAS MAY BE DESIGNATED AS BIKE LANES AND EMERGENCY PARKING.

SOURCE: Transtech, 2025.

**FIGURE** 2-8

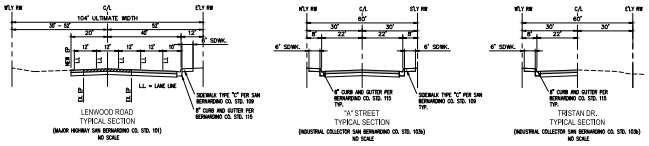
Proposed Lenwood Road Cross-Section

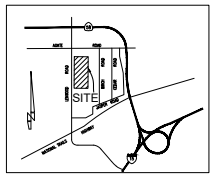
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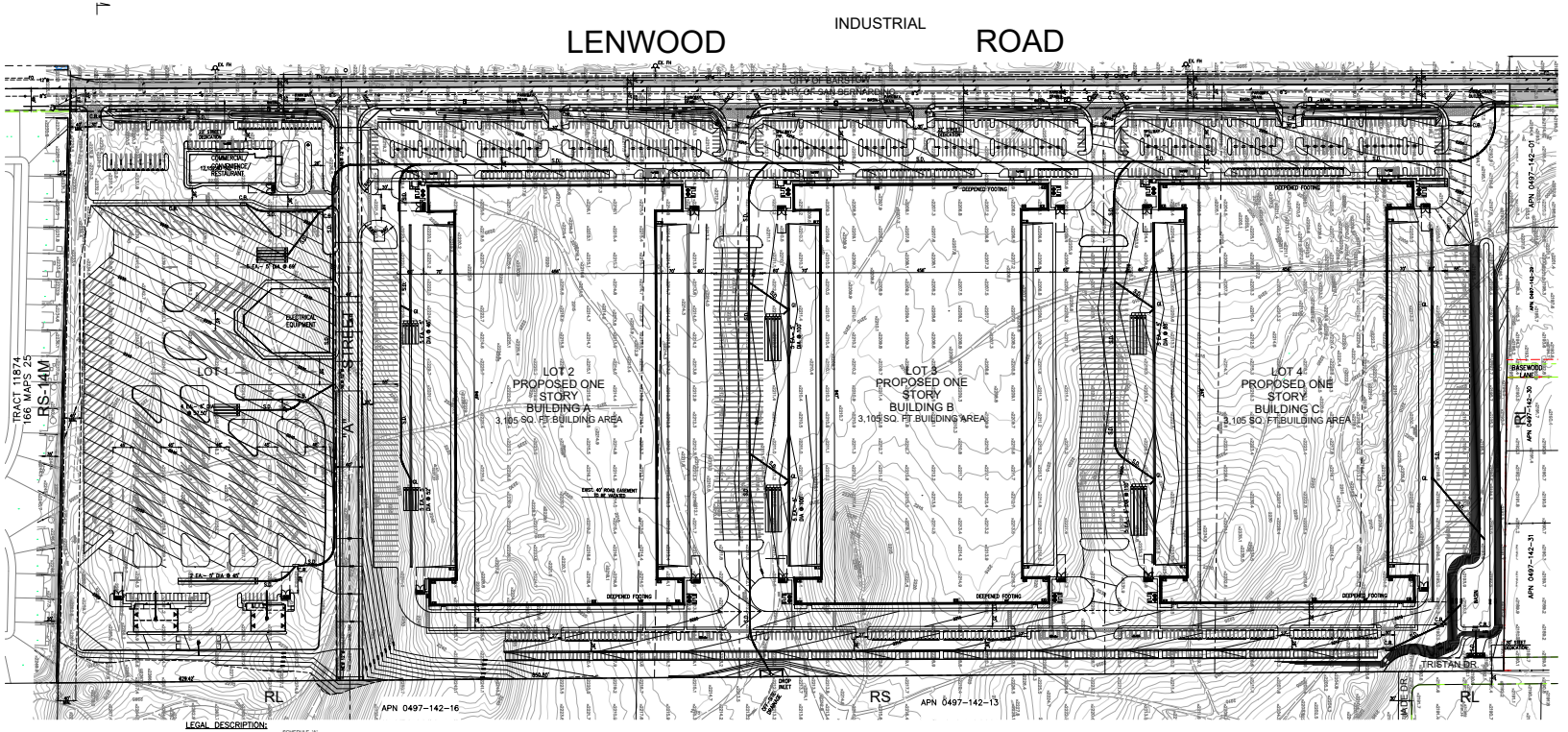
# TENTATIVE PARCEL MAP NO. 20998

IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA
BEING A SUBDIVISION OF A PORTION OF THE SOUTHWEST ONE-QUARTER AND THE NORTHWEST ONE-QUARTER OF SECTION 8, TOWNSHIP 9 NORTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF.

TRANSTECH ENGINEERS, INC FEBRUARY 2025




**LEGAL DESCRIPTION:** SCHEDULE 'A'

THE LAND REFERRED TO IN THIS REPORT IS SITUATED IN AN UNINCORPORATED AREA KNOWN AS BARSTOW, THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL A:
THE SOUTHWEST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER OF SECTION 8, TOWNSHIP 9 NORTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE WEST 30 FEET FOR ROAD PURPOSES AS CONDEMNED TO THE COUNTY OF SAN BERNARDINO BY FINAL ORDER OF CONDEMNATION RECORDED NOVEMBER 24, 1948 AS INSTRUMENT NO. 69-30350, OFFICIAL RECORDS.

ALSO EXCEPT ALL URANIUM, THORIUM OR OTHER FISSIONABLE MATERIALS WITH THE RIGHT TO ENTER UPON SAID LAND TO PROSPECT FOR, MINE AND REMOVE THE SAME PURSUANT TO THE PROVISIONS OF THE ACT OF AUGUST 1, 1946 (60 STAT. 755) AS EXCEPTED AND RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA TO CHARLES RONALD ROUSE, RECORDED MARCH 28, 1955 IN BOOK 3603, PAGE 476, OFFICIAL RECORDS.

PARCEL B:
THE NORTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF SECTION 8, TOWNSHIP 9 NORTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE WEST 30 FEET FOR ROAD PURPOSES AS CONDEMNED TO THE COUNTY OF SAN BERNARDINO BY FINAL ORDER OF CONDEMNATION RECORDED NOVEMBER 24, 1948 AS INSTRUMENT NO. 69-30350, OFFICIAL RECORDS.

ALSO EXCEPT ALL URANIUM, THORIUM OR OTHER FISSIONABLE MATERIALS WITH THE RIGHT TO ENTER UPON SAID LAND TO PROSPECT FOR, MINE AND REMOVE THE SAME PURSUANT TO THE PROVISIONS OF THE ACT OF AUGUST 1, 1946 (60 STAT. 755) AS EXCEPTED AND RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA TO CHARLES RONALD ROUSE, RECORDED MARCH 28, 1955 IN BOOK 3603, PAGE 476, OFFICIAL RECORDS.

PARCEL C:
PARCELS 3 AND 4 OF PARCEL MAP NO. 8113, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 83, PAGES 51 AND 52 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

GRAPHIC SCALE: 1" = 80'

**NOTES:**

1. PROPOSED PROJECT IS DESIGNED FOR DEVELOPER BUILD OUT.
2. NO JOSHUA TREES LOCATED ON SITE.
3. PROJECT GROSS ACREAGE PER ALTA SURVEY PREPARED BY GEO LAND, JULY 2022 99.85 ACRES.

**BUILDING SETBACKS/ COMMUNITY INDUSTRIAL ZONE**

| | |
|---|---|
| FRONT | 25 FT. |
| REAR | 10 FT. |
| SIDE-INTERIOR | 10 FT. |
| SIDE - STREET | 25 FT. |

**PROPOSED LOT/PARCELS:**

| | | |
|---|---|---|
| LOT NO. 1 | 790,566.99 S.F. / 18.15 ACRES | |
| LOT NO. 2 | 1,092,602.62 S.F. / 25.08 ACRES | |
| LOT NO. 3 | 1,057,646.57 S.F. / 24.28 ACRES | |
| LOT NO. 4 | 1,152,469.96 S.F. / 26.46 ACRESps | |
| LENWOOD ROAD | 173,100.83 S.F. / 3.97 ACRES | |
| "A" STREET | 74,925.82 S.F. / 1.72 ACRES | |
| TRISTAN DRIVE | 8,299.42 S.F. / 0.19 ACRES | |

**ENGINEER/REPRESENTATIVE:**

TRANSTECH
413 MACKAY DRIVE
SAN BERNARDINO, CA. 92408
PH. (909) 384-7464

**EXISTING ASSESSOR'S PARCEL NUMBERS:**

| | |
|---|---|
| 0497-142-03-0-000 | 9.72 ACRES |
| 0497-142-04-0-000 | 9.54 ACRES |
| 0497-142-14-0-000 | 39.87 ACRES |
| 0497-142-15-0-000 | 40.13 ACRES |

**ZONING:**

RL: RURAL LIVING – EXISTING
IC2: COMMUNITY INDUSTRIAL – PROPOSED

**OWNER/APPLICANT:**

EVC PARTNERS, LLC
2410 FAIR OAKS BLVD, SUITE 110
SACRAMENTO, CA. 95825
PH. 916-320-3860

PRELIMINARY
NOT FOR CONSTRUCTION
MAR. 03, 2026

Path: Z:\Projects\11505401\MAP\DOC\DOCUMENTER

SOURCE: Transtech, 2026

**FIGURE 2-9**
Tentative Parcel Map
EV Charging Station and Logistics Facility

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# 3.0 Environmental Analysis

## 3.01 Scope of the Environmental Impact Report Analysis

This chapter of the Draft environmental impact report (EIR) evaluates the potential physical environmental effects of implementing the Electric Vehicle Charging Station and Logistics Facility Project (proposed project or project). Each section within this chapter, listed below, discusses the environmental and regulatory setting; impacts and mitigation measures; and cumulative impacts (Sections 3.1 through 3.12).

- **Section 3.1.** Aesthetics
- **Section 3.2.** Air Quality
- **Section 3.3.** Biological Resources
- **Section 3.4.** Cultural and Paleontological Resources
- **Section 3.5.** Energy
- **Section 3.6.** Greenhouse Gas Emissions
- **Section 3.7.** Hydrology, Water Quality, and Drainage
- **Section 3.8.** Land Use and Planning
- **Section 3.9.** Noise
- **Section 3.10.** Transportation
- **Section 3.11.** Utilities and Service Systems
- **Section 3.12.** Tribal Cultural Resources

Implementation of the proposed project must be consistent with the San Bernardino County (County) Countywide Plan/Policy Plan goals and policies, and all applicable regulations such as the California Building Code standards and the County Development Code. Therefore, such policies and standards are not identified as mitigation, and compliance with relevant goals, policies, and federal, state or County requirements are instead described within the impact analysis.

### Technical Studies

A number of technical studies were prepared for the proposed project and are included in the technical appendices. Studies prepared include the following: Air Quality and Greenhouse Gas Emissions Technical Report (Appendix B); Biological Resources Technical Report (Appendix C); Cultural Resources Inventory and Evaluation Report (Appendix D); Geotechnical Investigations (including Preliminary Geotechnical Report, Response Letter to San Bernardino County Comments, Geotechnical Hazards Report and Fault Rupture Hazards Report) (Appendix E); Paleontological Resources Inventory Memorandum (Appendix F); Phase I Environmental Site Assessment (Appendix G); Preliminary Drainage Study (Appendix H); Noise Technical Memorandum (Appendix I); Transportation Impact Study (Appendix J); Water Supply Assessment (Appendix K); and the Local Transportation Assessment (Appendix L).

### Environmental Setting

According to subdivision (a) of Section 15125 of the California Environmental Quality Act (CEQA) Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. The environmental setting will normally reflect the conditions at the time the Notice of Preparation was published, which is May 15, 2024, for this project. However, the CEQA Guidelines recognize that the data for establishing an environmental baseline cannot be rigid, and that necessary technical studies relied upon in the EIR may be prepared over a range of time.

## Significance Determinations

In accordance with CEQA, specifically Public Resources Code Section 21068, a "significant effect on the environment" means a substantial or potentially substantial adverse change in the environment. Impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required CEQA review. "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project." (*Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473.)

The significance thresholds used for each environmental resource topic are presented in each technical or topical section of this chapter immediately before the discussion of impacts. Where the project would have no impact, it is discussed following the Thresholds of Significance under the header "Issues Not Further Discussed".

For each impact described, one of the following significance determinations is made:

- **No Impact.** This determination applies if there is a no potential for the project to result in an environmental impact.
- **Less than Significant Impact.** This determination applies if there is a potential for some limited impact on a resource, but the impact is not significant in accordance with the significance standard.
- **Potentially Significant.** This determination applies to those impacts where an environmental effect is identified that could cause a substantial adverse change in the environment; prior to consideration of feasible alternatives or mitigation measures that may reduce or avoid that impact.
- **Less than Significant With Mitigation.** This determination applies to impacts that are potentially significant, but feasible mitigation measures are identified to reduce these effects to the environment to a less-than-significant level.
- **Significant and Unavoidable Impact.** This determination applies to impacts that are potentially significant, and no feasible mitigation measures have been identified that would reduce the impact to a less-than-significant level.

## Section Organization

The EIR assesses how the project would impact each of the above-listed resource areas. Each section begins with a description of the project's **environmental setting** (see above) and **regulatory setting** as it pertains to a particular issue.

The regulatory setting provides a summary of applicable federal, state, and local regulations, plans, policies, and laws that are relevant to each technical issue. The regulatory setting in each section is followed by a discussion of **project-level impacts**. The project-specific impacts discussion is followed by an analysis of the **cumulative impacts** of the project. The impact portion of each section includes an impact statement based on Appendix G of the CEQA Guidelines or from other entities that have oversight authority (e.g., Mojave Desert Air Quality Management District), prefaced by a number for ease of identification followed by an analysis of that impact and a determination of whether the impact would be potentially significant (that is, exceed the applicable threshold) or less than significant (that is, below the applicable threshold). If a potentially significant impact is identified, one or more mitigation measures are recommended, if available, to reduce the severity of the impact. All **mitigation measures** are identified at the end of each impact analysis. The degree to which the identified mitigation measure(s) would reduce the

impact and the final significance determination is also described. The project-level impact section is followed by an analysis of the cumulative impacts (see below).

In determining the level of significance of environmental impacts associated with the proposed project, the analysis in this Draft EIR assumes that the proposed project would comply with relevant federal and state laws and regulations, County General Plan policies, ordinances, other adopted County documents, and policies, actions, design guidelines and development standards, unless otherwise noted. Therefore, such mandatory policies, ordinances, and standards are not identified as mitigation measures, but rather are discussed as part of the "Regulatory Setting" governing the proposed project and compliance with these requirements often mitigate potential impacts.

An example of an impact statement is shown below.

Impact 3.3-1 The proposed project could have a substantial adverse effect on a candidate, sensitive, or special-status species.

A discussion of potential impacts of the proposed project is presented in paragraph form. The impacts associated with construction and operation of the project are evaluated and compared to the threshold of significance for the particular impact. The analysis discusses the applicable local (including Countywide Plan/Policy Plan goals, policies, implementing actions, etc.), state, and federal laws and regulations/standards that would reduce impacts, and assumes that the project would comply with them. In many instances, the actions that are necessary to reduce a project impact are already required by compliance with existing laws or requirements. Further, it is assumed that the project applicant would obtain all necessary permits and comply with all required conditions of those permits. If no mitigation measures are required, the discussion will conclude with a determination of the impact's significance in **bold type** (e.g., **no impact/less than significant impact**). If mitigation measures are required, the impact analysis concludes with a determination of the impact's significance prior to mitigation in regular type (e.g., potentially significant impact).

## Mitigation Measures

Following each impact analysis is a discussion of the applicable mitigation measures identified to reduce the significance of an impact, if required. In Chapter 3, this section includes a statement indicating whether the mitigation measure will reduce the impact to a less than significant level or if even with mitigation the impact is significant and unavoidable. A discussion of how the mitigation would reduce the impact is included before the mitigation measure. The discussion concludes with a determination of the impact's significance after mitigation in **bold type** (e.g., **less than significant with mitigation/significant and unavoidable**).

Mitigation measures, if applicable, are numbered and presented in the following format.

MM-BIO-1 Statement of what, if any, mitigation measures are required.

Note that CEQA Guidelines, Section 15370, defines mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- Compensating for the impact by replacing or providing substitute resources or environments.

In some instances, contribution of a project's fair-share to an established program provided there is a "reasonable plan for mitigation" and fair-share contributions are clearly designated to mitigate the impact are considered adequate mitigation for both project and cumulative impacts under CEQA.[1]

## Cumulative Analysis

According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). CEQA requires that cumulative impacts be discussed when the "project's incremental effect is cumulatively considerable" (CEQA Guidelines, Section 15130 (a)).

An analysis of cumulative impacts follows the evaluation of project impacts under existing conditions in each section in Chapter 3. As defined in CEQA Guidelines, Section 15355, cumulative impacts refer to two or more past, present and/or reasonably foreseeable future actions which, when considered together, result in a significant impact. The cumulative impacts analyze the extent to which the project would contribute to an existing cumulative impact, and whether that contribution would be considerable (i.e., would cause a cumulative condition to be significant and/or substantially increase the severity of a cumulative impact that would be significant whether or not the project was developed) or if there is no existing cumulative impact would the project, in combination with past, present and/or reasonably foreseeable future actions result in a cumulative impact and is that contribution considerable.

The analysis of cumulative impacts may consider either (1) a list of past, present, and probable future projects producing cumulative impacts or (2) a summary of growth projections contained either in an adopted plan that evaluates conditions contributing to cumulative impacts or in a certified environmental document for such a plan (CEQA Guidelines, Section 15130(b)).

The cumulative analysis in this EIR primarily relies upon the list method. Projects that are relevant to the cumulative analysis include projects that could:

- Contribute incremental environmental effects on the same resources as, and would have similar impacts to, those discussed in this EIR applicable to the proposed project.
- Be located within the defined geographic scope for the cumulative effect. The defined geographic scope is dependent on the environmental resource affected.
- Contribute impacts that coincide with proposed project impacts during either construction (short-term) or operation (long-term).

The project meeting these criteria that could contribute to potential cumulative effects is the Barstow International Gateway Project. The Barstow International Gateway Project proposes an integrated rail facility and onsite transload warehouse center at the City's western extent. The City of Barstow has published a Draft EIR for the proposed project, entitled the City of Barstow General Plan and Barstow International Gateway Project (State Clearinghouse

[1] See *Save Our Peninsula Com. v. Monterey County Bd. of Supervisors,* (2001) 87 Cal.App.4th 99, 141; and CEQA Guidelines, §15130, subd. (a)(3) ([recognizing that a project's contribution to a cumulative impact may be less than cumulatively considerable where "the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact"]). See also *Anderson First Coalition v. City of Anderson,* (2005) 130 Cal.App.4th 1173).

No. 2024020501). The Draft EIR examines the Barstow International Gateway Project and a broader update of the Barstow General Plan.

Note that certain impact analyses, described in Chapter 3, are inherently cumulative in nature, such as greenhouse gas emissions, or criteria air pollutants for which the area is in non-conformity. Certain impacts will also incorporate the growth projection method in addition to the project list, such as transportation and transportation noise. These are discussed in the individual sections in Chapter 3.

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# 3.1 Aesthetics

This section describes the existing visual conditions of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project") site and vicinity, identifies associated regulatory requirements, evaluates potential impacts associated with aesthetics, light, and glare, and identifies mitigation measures, if required, for project implementation.

No comments regarding aesthetics were received during the Notice of Preparation scoping period for this environmental impact report (EIR). All scoping comment letters received are provided in Appendix A.

Primary sources referenced in this section include the following:

- Countywide Plan/Policy Plan (San Bernardino County 2020)
- County Development Code (Title 8 of the County Code)
- Caltrans State Scenic Highway System Map (Caltrans 2025)

## 3.1.1 Environmental Setting

### Regional Setting

San Bernardino County (County) is divided into four regional areas (Valley, Mountain, North Desert, and East Desert) based on the characteristic landforms, climates, vegetation, and development patterns in each region (San Bernardino County 2020). The project site is within the North Desert Region of the County, which is bounded to the south primarily by the San Bernardino and San Gabriel Mountain Ranges. The North Desert Region is primarily characterized by shorter remote mountain ranges surrounded by desert plains. These mountain ranges often have associated alluvial fans, which are accumulations of sediments that fan outwards. Other significant landforms include playas, basin, plateaus, and dunes. The Mojave River is perhaps the most prominent feature in the region and supports extensive riparian, wetland, and wind-blown sands habitat. The majority of the Desert Region ranges from 2,000 to 5,000 feet above mean sea level (amsl).

### Project Location

The 99.85-acre project site (Assessor Parcel Numbers 0497-142-03; 0497-142-04; 0497-142-14; and 0497-142-15) is located on Lenwood Road between State Route (SR) 58 and Interstate 15 in the unincorporated County's North Desert Region within the City of Barstow (City) Sphere of Influence.

### Visual Character

The project site is located in an alluvial valley, related to the Mojave River corridor. The site is undeveloped and contains gently sloping desert landscape consisting of sandy soils, sand dune formations, exposed beds of volcanic rock desert shrubs, and various species of invasive grasses. Evidence of dirt pathways/roadways and trash throughout the site indicates the informal or unauthorized use of the project site for overland vehicle travel for recreational purposes. The project site is gently sloping, with elevation gradually increasing in a southerly direction from approximately 2,197 feet above mean sea level (amsl) in the northern portion of the site to 2,272 feet amsl in the southern portion.

The area surrounding the project site to the west and east is characterized as undeveloped land, with a few rural residences located to the north and a residential subdivision, High Desert Estates, to the south. Across Lenwood Road to the west, land within the incorporated City is zoned for industrial use and includes the planned Barstow International Gateway (BIG) project being undertaken by the BNSF Railway.[1] However, this area is currently undeveloped and interspersed with desert vegetation, similar to the project site and similar in vegetation for the area east of the project site. South of the project site is the High Desert Estates residential subdivision containing one-story single-family tract homes. A mile to the north of the project area is the Mojave River, which, at this location in its drainage basin, only has surface flow during Winter and Spring rain storm and thunderstorm events.

### Views of the Project Site

Public views of the project site are primarily from Lenwood Road, which runs along the western boundary of the site. Most viewers of the project site would be motorists, who typically travel and pass by the project area quickly, resulting in low viewer sensitivity and exposure. There are no sidewalks and little to no pedestrian traffic along Lenwood Road. There are no views of the existing project site from publicly accessible roads within the High Desert Estates residential subdivision, such as Camino Del Norte Road, due to existing single-family homes and a masonry wall separating the subdivision from the project site. Existing views of the site from Lenwood Road show undeveloped desert landscape consisting of sandy soils, sand dune, shrubs, and grasses (Figures 3.1-1 through 3.1-4). Although the current undeveloped nature of the project site contributes to the rural character of the region, the project site does not provide any unique or high quality views.

## Scenic Resources, Views, and Vistas

Scenic resources are described in Appendix G of the California Environmental Quality Act (CEQA) Guidelines in the Environmental Checklist as specific features of a viewing area (or viewshed) such as trees or rock outcroppings. These are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic vistas are generally defined as an expansive view of highly valued landscape features (e.g., mountain range, lake, or coastline) observable from a publicly accessible vantage point. There are no officially designated scenic vistas in the County; however, the County's General Plan acknowledges that the region contains vast stretches of undeveloped desert landscapes that, due to a general lack of development, trees, and other visual obstructions, provide panoramic scenic views. Scenic vistas in the region are generally associated with views of the Mojave Desert landscape, including distant mountain ranges and open desert expanses. These views are most prominent from public roadways and areas with unobstructed sightlines.

## Scenic Highways

According to the California Department of Transportation (Caltrans), the County contains two officially designated state scenic highways: segments of SR-247 beginning south of Barstow to north of Lucerne Valley, and the segment of SR-38 from east of South Fork Campground to State Lane in the San Bernardino Mountains (Caltrans 2025). There are also several eligible state scenic highway segments surrounding the City of Barstow (City) and throughout the San Bernardino National Forest. These scenic routes traverse hundreds of miles in the region, generally through undeveloped desert landscapes with panoramic views of ridgelines, mountains, rock formations, and desert plant life including Joshua trees.

[1] The BIG Specific Plan proposes an integrated rail facility and onsite transload warehouse center at the City's western extent.

The officially designated scenic highway segment of SR-247 beginning south of Barstow is located approximately 6 miles southeast of the project site. The segment of SR-38 from east of South Fork Campground to State Lane in the San Bernardino Mountains is located approximately 49 miles southeast of the project site. SR-58 to the north (1.6 miles) and east (1 mile) of the project site is a County-designated scenic route and an eligible state scenic highway. The project site is not visible from any of the officially designated or eligible state scenic highways.

### Light and Glare Conditions

Most sources of light and glare are generated in the communities and incorporated areas of the region, including Barstow, Victorville, Apple Valley, Hesperia, Twentynine Palms, and Needles. However, most of the desert land is undeveloped and dark. There are no existing sources of light or glare on the project site. The primary sources of light in the immediate vicinity of the project site are the residential dwellings to the south, east, and north, and three streetlights along Lenwood Road from the intersection of Camino Del Sol northward to 120 feet southwest of the project's southwestern corner boundary.

## 3.1.2 Regulatory Setting

### Federal

No federal plans, policies, regulations, or laws related to aesthetics, light, and glare are applicable to the project.

### State

#### California Scenic Highway Program

California's Scenic Highway Program was created by the state legislature in 1963. This program's purpose is to "preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways" (Caltrans 2008). A highway may be designated as scenic on the basis of the amount of natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent that development intrudes upon the traveler's enjoyment of the view. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. The California Scenic Highway System includes a list of highways that are officially designated as scenic highways or eligible for designation as scenic highways. The project site is not visible from any of the closest officially designated or eligible state scenic highways.

#### California Code of Regulations, Title 24 – 2022 California Building Standards Code

Title 24, California Building Standards Code, consists of regulations to control building standards throughout the state. The following components of Title 24 include standards related to lighting, listed below.

##### *Title 24, Part 1 – California Building Code / Title 24, Part 3 – California Electrical Code*

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress.

### *Title 24, Part 6 – California Energy Code*

The California Energy Code (CEC) (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems, with the aim of reducing energy consumption through efficient and effective use of lighting equipment. Section 130.2 sets forth requirements for Outdoor Lighting Controls and Luminaire Cutoff requirements. All outdoor luminaires rated above 150 watts shall comply with the backlight, up light, and glare (BUG) ratings in accordance with IES TM-15-11, Addendum A, and shall be provided with a minimum of 40% dimming capability activated to full on by motion sensor or other automatic control. This requirement does not apply to streetlights for the public right-of-way, signs, or building facade lighting.

Section 140.7 establishes outdoor lighting power density allowances in terms of watts per area for lighting sources other than signage. The lighting allowances are provided by the Lighting Zone (LZ), as defined in Section 10-114 of the CEC. Under Section 10-114, rural areas within California as defined by the U.S. Census are designated as LZ 1. The project site is within an area designated as LZ 1. Additional allowances are provided for Building Entrances or Exits, Outdoor Sales Frontage, Hardscape Ornamental Lighting, Building Facade Lighting, Canopies, Outdoor Dining, and Special Security Lighting for Retail Parking and Pedestrian Hardscape.

Section 130.3 stipulates sign lighting controls with any outdoor sign that is on during both day and nighttime hours must include a minimum 65% dimming at night. Section 140.8 of the CEC sets forth lighting power density restrictions for signs.

### *Title 24, Part 11 – California Green Building Standards Code*

The California Green Building Standards (CALGreen) Code (Title 24, Part 24) stipulates maximum allowable light levels, efficiency requirements for lighting, miscellaneous control requirements, and light trespass requirements for electric lighting and daylighting. Paragraph 5.1106.8 Light Pollution Reduction, specifies that all non-residential outdoor lighting must comply with the following:

- The minimum requirements in the CEC for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code; and
- BUG ratings as defined in the Illuminating Engineering Society of North America's Technical Memorandum on Luminaire Classification Systems for Outdoor Luminaires (IESNA TM-15-07); and
- Allowable BUG ratings not exceeding those shown in Table A5.106.8 in Section 5.106.8 of the CALGreen Code; or
- Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

## California Vehicle Code, Chapter 2, Article 3

Chapter 2, Article 3 of the California Vehicle Code stipulates limits to the location of light sources that may cause glare and impair the vision of drivers.

Article 3. Offenses Relating to Traffic Devices [21450–21468] (Article 3 enacted by Stats. 1959, Ch. 3.), Section 21466.5. No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway.

## Local

### San Bernardino County Countywide Plan/Policy Plan

The Countywide Plan/Policy Plan contains long-term goals and policies to guide decisions, investments, and improvements toward achieving the Countywide Vision in unincorporated areas of the County. The following goals and policies are relevant to the project:

Goal LU-2. Land Use Mix and Compatibility. An arrangement of land uses that balances the lifestyle of existing residents, the needs of future generations, opportunities for commercial and industrial development, and the value of the natural environment.

Policy LU-2.1. Compatibility with existing uses. We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.

Policy LU-2.3. Compatibility with natural environment. We require that new development is located, scaled, buffered, and designed for compatibility with the surrounding natural environment and biodiversity.

Goal LU-4. Community Design. Preservation and enhancement of unique community identities and their relationship with the natural environment.

Policy LU-4.1. Context-sensitive design in the Mountain/Desert regions. We require new development to employ site and building design techniques and use building materials that reflect the natural mountain or desert environment and preserve scenic resources.

Policy LU-4.3. Native or drought-tolerant landscaping. We require new development, when outside of high and very high fire hazard severity zones, to install and maintain drought-tolerant landscaping and encourage the use of native species.

Policy LU-4.7. Dark skies. We minimize light pollution and glare to preserve views of the night sky, particularly in the Mountain and Desert regions where dark skies are fundamentally connected to community identities and local economies. We also promote the preservation of dark skies to assist the military in testing, training, and operations.

Goal NR-4. Scenic Resources. Scenic resources that highlight the natural environment and reinforce the identity of local communities and the county.

Policy NR-4.1. Preservation of scenic resources. We consider the location and scale of development to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs.

## San Bernardino County Code

**County Code Title 8: Development Code.** The Development Code includes various regulations (e.g., general development and use standards; fences, hedges, and walls; light trespass; landscaping, signage) intended to minimize aesthetic and light and glare impacts associated with new development projects.

**County Code Chapter 81.01: Purpose and Effect of Development Code.** The purpose of the Development Code is to implement the San Bernardino General Plan by classifying and regulating the uses of land and structures within unincorporated San Bernardino County; preserving and protecting the County's important agricultural, cultural, natural, open space, and scenic resources; and by protecting and promoting the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the County.

**County Code Chapter 83.02: General Development and Use Standards.** The purpose of this chapter is to ensure that all development produces an environment of stable and desirable character that is harmonious with existing and future development, and protects the use and enjoyment of neighboring properties, consistent with the Countywide Plan/Policy Plan.

**County Code Chapter 83.07: Light Trespass.** This chapter sets forth standards that prohibit light pollution and light trespass. It includes definitions and outdoor lighting regulations by region, focusing on prevention of light trespass onto neighboring properties and protection of dark night skies in the Mountain and Desert Regions. The following County Code §§ 83.07.060 (a) through (g) are required for the Desert Region and applicable to the project:

a. **Shielding Required.** All outdoor light fixtures shall be fully shielded, installed and maintained in such a manner that the shielding does not permit light trespass in excess of amounts set forth in subdivision (f).
b. **Light Pollution Standards.** Light pollution and trespass shall be minimized through the use of directional lighting, fixture location, height and the use of shielding and/or motion sensors and timers in such a manner that the light source does not permit light trespass in excess of amounts set forth in subdivision (f).
c. **Automated Controls.** Automated control systems, such as motion sensors and timers, shall be used to meet curfew requirements set forth in subdivision (d). Photocells or photo controls shall be used to extinguish all outdoor lighting automatically when sufficient daylight is available. Automated controls should be fully programmable and supported by battery or similar backup.
d. **Dark Sky Curfew.** All outdoor lighting shall be extinguished by 11:00 PM, close of business, or when people are no longer present in exterior areas, whichever is later, except for the following:
    1. Lighting used for entry and exit points of a structure, parking areas, driveways and driveway ingress/egress points; or
    2. Lighting activated by a motion sensor that extinguishes no later than five minutes after activation.
e. **Lighting Color.** The correlated color temperature of all outdoor lighting shall be 3,000 Kelvin or less except for seasonal lighting.
f. **Allowable Light Trespass.** Outdoor lighting shall not cause light trespass exceeding one-tenths foot-candles measured with a light meter oriented vertically or horizontally either at the property line of the adjacent property or measured from some other point on the property where light trespass may be reasonably determined to occur due to differences in property or improvement elevations.
g. **Blinking, Flashing, or High Intensity Lighting.** Permanently installed lighting that blinks, flashes or is of high intensity or brightness that causes a light trespass is prohibited.

## 3.1.3 Environmental Impacts and Mitigation Measures

### Methodology

The first step of the visual analysis is to identify the visual features of the environment and their importance, including visual resources and scenic vistas unique to a project area. The existing aesthetic setting involves identifying existing visual character and quality. Changes to aesthetic resources resulting from implementation of the project are identified and qualitatively evaluated based on the proposed modifications to the existing setting and viewer sensitivity. Anticipated changes to lighting and glare potential are also qualitatively evaluated.

Aesthetics and visual resources are natural and cultural landscape features that people see and that contribute to the public's enjoyment of the environment. Visual character is an impartial description of the visible attributes of a scene or object such as form (dominance and scale), line, color, and texture. Visual-character-defining resources and features include elements of the natural, cultural, and built environments, such as landforms, water, vegetation, animals, land uses, buildings, infrastructure, artifacts and art, and historic structures or districts, etc. Visual quality is an assessment of what viewers like and dislike about visual resources that compose the visual character of a particular scene. Different viewers may evaluate specific visual resources differently based on their interests. Scenic vistas are generally defined as an expansive view of highly valued landscape features (e.g., mountain range, lake, or coastline) observable from a publicly accessible vantage point.

The analysis of potential impacts related to aesthetics is limited to public views, which are defined as exterior locations accessible by the public. Accordingly, this analysis considers views of the project site from nearby publicly accessible areas, such as public roads. If the lead agency does not include a policy that protects private views, a project's impacts to private views are not required to be evaluated under CEQA (see *Mira Mar Mobile Community v. City of Oceanside* [2004] 119 Cal.App.4th 477). The most recent update to the CEQA Guidelines also clarifies that public views "are those that are experienced from a publicly accessible vantage point" (CEQA Guidelines Appendix G). Therefore, private views by the adjacent residential neighborhood are not required to be evaluated.

### Visual Simulations

Visual simulations of the proposed project are shown in Figures 3.1-5 through 3.1-8. As discussed above, the analysis of potential impacts is limited to public views that can be experienced from a publicly accessible vantage point (i.e., Lenwood Road and Camino Del Norte Road).

**View From Northbound Lenwood Road, from South Property Line.** The view shown from northbound Lenwood Road near the southwest corner of the project site includes the new entrance to the electric vehicle (EV) charging station to the right (Figure 3.1-5). Newly planted trees along Lenwood Road would partially screen the view of the single-story commercial building associated with the EV charging station. Behind the landscaping, the parking area parallel to Lenwood Road and the commercial building are partially visible. The building has a rectangular form, low-reflective exterior glazing, and a low-sloping roof with parapets intended to screen mechanical equipment. The proposed 8-foot sound wall is also visible, immediately north of the existing 6-foot masonry wall separating Lenwood Road from High Desert Estates.

**View From Southbound Lenwood Road, from North Property Line.** The view shown from southbound Lenwood Road near the northwest corner of the project site includes the logistics facility buildings to the left (Figure 3.1-6). There is a landscaping area, including shrubs, grasses, and trees, next to Lenwood Road. The landscaped area is graded to transition from the sidewalk to the building site, which is higher than the roadway. Building C of the logistics

facility appears behind the landscaping as a long, horizontal structure with gray concrete panels, low-reflective glass, and parapet detailing. The proposed 6-foot-tall masonry wall is also visible along the northern project site boundary.

**View Looking North From Camino Del Norte Road.** The view of the project from Camino Del Norte Road, within the High Desert Estates residential development, is limited to new mature trees on the project site (Figure 3.1-7). Existing single-story homes along Camino Del Norte Road would block any views of proposed buildings, structures, or other project components.

**Bird's-Eye View Looking Northeast From Southwest Corner of the Site.** The bird's-eye view from the southwest corner of the site is an elevated view that would not be considered a public viewpoint, and is therefore not considered in the impact analysis. However, it is included in the EIR for informational purposes and provides a useful overview of the proposed project (Figure 3.1-8). This view provides an aerial perspective of the project set against the desert landscape. The most prominent features are the three concrete logistics buildings aligned in a row within the north and central portions of the site. The southern portion of the site includes the paved parking lot with the EV charging station, commercial building, truck wash, and truck maintenance buildings. New trees and landscaped areas are visible surrounding the project site and throughout the parking areas.

### Urbanized and Non-Urbanized Area Definitions

Public Resources Code Section 21071 defines an "urbanized area" as "an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." The project site is located in an unincorporated area of the County and would not meet the definition of an urbanized area under Section 21071.

CEQA Guidelines Section 15387 also defines "urbanized area" as "a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile." Section 15387 further indicates that a lead agency shall determine whether a particular area meets the criteria in this section either by examining the area or by referring to a map prepared by the U.S. Census Bureau, which designates the area as urbanized. The area is not mapped as an urbanized area by the U.S Census Bureau, and given that the project site is in a rural unincorporated area of the County with no densely populated areas nearby, the project site does not meet the definition of an urbanized area under Section 15387. As such, this analysis includes an assessment of change in visual character or quality that would occur with the project for projects located in non-urbanized areas.

## Thresholds of Significance

The significance criteria used to evaluate project impacts related to aesthetics are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to aesthetics, light, and glare would occur if implementation of the project would do any of the following:

(a) Have a substantial adverse effect on a scenic vista;

(b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

(c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point); or

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

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to aesthetics.

## Issues Not Further Discussed

(b) No officially designated or eligible state scenic highways or County-designated scenic routes are visible from the project site, nor is the project site visible from any highways, thus, there would be no impact to scenic resources visible from a state scenic highway. Therefore, this issue is not further analyzed in this section.

## Impact Analysis

### Impact 3.1-1 The proposed project would not have a substantial adverse effect on a scenic vista.

A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. As discussed in Section 3.1.1, scenic views in the region are generally associated with views of the Mojave Desert landscape and distant mountain ranges. These views are most prominent from public roadways and areas with unobstructed sightlines. However, there are no officially designated scenic vistas near the project site.

The proposed project would introduce new built elements including an EV charging station with solar canopies, a single-story commercial building approximately 25 feet in height, a truck wash approximately 28 feet in height, a truck maintenance facility approximately 25 feet in height, and a logistics facility consisting of three concrete tilt-up buildings approximately 45 feet in height. Per the County's Development Code, Chapter 83.06, a 6-foot-tall masonry wall is required along the north, east, and south sides of the project site if the adjacent residential land uses on those sides are zoned residential at the time of project development. An 8-foot-tall masonry wall is proposed along the westerly 200 feet of the southern boundary of the project site for noise attenuation. The project's proposed building layout and masonry walls would be visible from adjacent roadways within areas that are not designated as scenic corridors and do not contain officially recognized scenic vistas. The project would not obstruct views of distant mountain ranges, such as Mount General 4 miles to the north or Stoddard Mountain 13 miles to the south, from public vantage points such as Lenwood Road (see Figures 3.1-5 and 3.1-6). The landscapes immediately adjacent to the site are largely disturbed or include rural development. Views of distant mountains and desert landscapes would remain available from public vantage points beyond the site. The project also incorporates landscaping and architectural treatments intended to reduce visual massing and to blend with the existing context. The project would not introduce any buildings that would broadly obstruct existing panoramic views of distant mountains or desert landscapes. Therefore, impacts would be **less than significant**.

## Mitigation Measures

No mitigation measures are required.

Impact 3.1-2 The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The project site is currently undeveloped and consists of open desert land with sparse vegetation. The surrounding area is primarily characterized by natural desert landscapes with scattered residential uses to the north and east, and higher density single family development to the south. This setting provides a predominantly open and natural visual environment with minimal built features, contributing to the rural character of the region. The proposed project would alter this visual character by introducing large-scale development on the site. The existing visual setting is shown in Figures 3.1-1 through 3.1-4. Visual simulations of the proposed project are shown in Figures 3.1-5 through 3.1-8.

During the construction period, on-site activities would include site preparation, grading, installation of utilities, tilt-up building construction, site paving, and architectural coating and landscaping. Construction would require the use of typical large construction equipment, such as trucks, cranes, and bulldozers, that would be visible from surrounding roadways. Construction activities would introduce temporary visual disturbances to the surroundings, including earth preparation and grading, aggregations of stored construction materials and equipment, and creation of concrete tilt-up panels for the logistics buildings. However, these impacts would be temporary, and disturbed areas would be remediated upon completion of construction in accordance with the project plans.

Upon project completion, the visual character of the project site would change from an undeveloped desert landscape to a development including an EV charging station with solar canopies, a commercial building, a truck wash and a truck maintenance facility, and a logistics facility consisting of three concrete tilt-up buildings. Although the current undeveloped nature of the project site contributes to the rural character of the region, the project site area does not provide any unique or high quality views or a viewshed that would be substantially degraded by development of the project. Most viewers of the project site would be motorists traveling along Lenwood Road, who typically travel at relatively high speeds and pass by an area quickly, resulting in low viewer sensitivity and exposure. There are no existing sidewalks and little to no pedestrian traffic on the surrounding roads (except for those within High Desert Estates). The project site is not located in an area where viewer concern and expectations of visual quality would be high, such as a park where scenery is a primary focus. Additionally, the project includes landscaping, architectural treatments, and design features intended to reduce visual contrast and soften building massing. The Project has been designed such that the buildings' colors and tones would be neutral and would not create a sharp contrast with the natural desert landscape. The project's landscaping plan would include a mix of drought-tolerant ornamental trees, shrubs and groundcovers suited to the local environment, such as Eldarica Pine, Allepo Pine, and Canyon Live Oak, planted along the project site boundary adjacent to Lenwood Road, along driveways, at the logistic building entrances, and within the parking areas. Given that the project site does not contain any high-quality public views and viewer sensitivity is low, the project impact would be **less than significant.**

## Mitigation Measures

No mitigation measures are required.

Impact 3.1-3 The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The project site is currently undeveloped and does not support any existing sources of light or glare. Construction and operation of the project would introduce new sources of light and glare to the project site. Construction activities associated with the Project would occur during daytime hours consistent with standard industry practices. Permitted

hours of construction are between 7:00 a.m. to 7:00 p.m. on Mondays through Saturdays (except Federal holidays) pursuant to Section 83.01.080(g) of the County's Development Code. In the event that work is required outside the standard construction hours, the project applicant would be required to obtain authorization for nighttime work from the County. Any nighttime lighting would be focused directly on work activity areas and would be temporary. Given the minimal extent during which nighttime construction activities could occur, which would also be coordinated with the County, nighttime construction lighting impacts would be less than significant.

Once construction is complete, the project would include building lighting, overhead light poles, and low-level security lighting around the commercial building and logistics facility. The overhead pole mounted lights would be up to 25 feet in height, would be located in the parking areas, be designed to shield and minimize light levels for any given application, and directed onto high use areas or objects to be lit such as walkways. Streetlights would be installed along the project site's frontage along Lenwood Road. The project would be subject to the CEC lighting allowances for the LZ 1 area, and Section 83.07.060 of the County's Development Code (Dark Sky Ordinance), which establishes standards for outdoor lighting in the County's Mountain and Desert Regions. In accordance with the County's Dark Sky Ordinance, proposed outdoor lighting would be designed to preclude light pollution or light trespass in excess of one-tenths foot-candles measured at the property line of an adjacent property or from some other point on the property where light trespass may be reasonably determined to occur due to differences in elevation.

The project would introduce some reflective materials to the site including approximately 65,000 square feet of solar panels over parking spaces. However, these panels would be oriented to maximize solar exposure and would direct most glare upward toward the sky rather than toward adjacent roadways or residences. Additionally, the project has been designed with building materials such as low-reflective exterior glazing on the single-story commercial building and low-reflective glass on the concrete tilt-up buildings.

In conclusion, although the project would introduce new sources of light and glare to the project site, there would be no resulting significant adverse effect on day or nighttime views in the area. Impacts would be **less than significant.**

### Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

The geographic context for the evaluation of cumulative impacts to visual resources is confined to the area that comprises the public viewshed in which the project site is visible. The cumulative context for aesthetics is limited to other developments in the surrounding area that would be in the public viewshed with the proposed project. The only probable future project that would contribute to potential cumulative effects is the BIG project being undertaken by the BNSF Railway, located to the west of the proposed project site. The City of Barstow has published a Draft EIR for the proposed project, entitled the City of Barstow General Plan and Barstow International Gateway Project (State Clearinghouse No. 2024020501) (City of Barstow 2025).

Impact 3.1-4 The proposed project would not contribute to a significant cumulative impact related to scenic vistas.

As previously discussed, the project site and surrounding area contains no prominent or unique natural features that contribute to an officially designated scenic vista. There are no scenic vista areas designated by a federal, State, or local agency. Scenic views in the region are generally associated with views of the Mojave Desert landscape and distant mountain ranges. New development may obstruct views of distant mountains and desert landscapes from immediately adjacent roads, but views would remain available from public vantage points beyond the site. Given that the project site and surrounding area (including the BIG project) are not within the viewshed of an officially designated scenic vista, there would be **no cumulative impact**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.1-5 The proposed project would contribute to a significant cumulative impact related to visual character and quality of public views.

As discussed in Impact 3.1-2, the project would permanently alter the visual character of the project site, but the project-level impact would not rise to a level of significance under CEQA. However, the change in visual character and quality of public views in combination with the BIG project would be considered a significant cumulative impact. The BIG Specific Plan proposes to create a 4,300-acre modern rail facility including 9 million square feet of warehousing and a solar farm. This would result in a substantial and permanent change to the existing visual character and quality of public views of the site and its surroundings, as supported by the Draft EIR prepared for the BIG project (State Clearinghouse No. 2024020501). The combined effect of the proposed project and the BIG project would result in a substantial transformation of the visual environment from predominantly undeveloped desert to a highly developed industrial and logistics hub. The proposed project's large-scale concrete buildings and other components would contribute to the overall loss of the existing rural visual character when viewed in conjunction with the BIG project. As such, the project would result in a significant contribution to the cumulative impact associated with visual character and quality of public views.

### Mitigation Measures

The proposed project includes landscaping and architectural design features to create a development with visual quality. There are no feasible mitigation measures that would reduce the cumulative change in the visual character of the project viewshed from largely undeveloped high desert to industrial development. Therefore, this impact is **significant and unavoidable**.

Impact 3.1-6 The proposed project would contribute to a significant cumulative impact related to light and glare.

As discussed in Impact 3.1-3, the project would introduce new sources of light and glare to the project site, but the project-level impact would not rise to a level of significance under CEQA. However, the change in lighting conditions in combination with the BIG project would be considered a significant cumulative impact. As discussed in the Draft EIR prepared for the BIG project (State Clearinghouse No. 2024020501), development of the BIG project would introduce extensive outdoor lighting for security and operations as well as illuminated structures across a very large footprint. The combined effect of the proposed project and the BIG Project would significantly increase the amount of artificial light in an area that is currently characterized by dark skies and minimal nighttime illumination. Both projects would operate 24 hours a day, and the cumulative increase in lighting would result in noticeable sky glow and significantly alter the nighttime character of the region. While the proposed project's contribution would be

relatively small compared to the BIG Project, it would still be considerable because it adds additional lighting sources adjacent to the BIG Project site in an area that is minimally illuminated. As such, the project would result in a significant contribution to the cumulative impact associated with light and glare.

### Mitigation Measures

The proposed project would comply with the County lighting ordinance, Chapter 83.07, which requires the design and operation of lighting to minimize light trespass and preserve dark skies. However, even with proper lighting controls, the charging station and warehouse operations could, in conjunction with operations of the BIG project, result in a cumulatively considerable increase in nighttime lighting. There are no additional feasible mitigation measures that would reduce the project's contribution to less than cumulatively considerable levels. Therefore, this impact is **significant and unavoidable**.

## 3.1.4 References

Caltrans (California Department of Transportation). 2025. California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

City of Barstow. 2025. *City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report.* SCH No. 2024020501. https://ceqanet.lci.ca.gov/2024020501/2

San Bernardino County. 2020. Countywide Plan/Policy Plan. https://countywideplan.sbcounty.gov/policy-plan/.

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IMAGE 1: NORTHBOUND LENWOOD ROAD TOWARDS SOUTH PROPERTY LINE.

SOURCE: RMW, 2025

DUDEK

**FIGURE 3.1-1**

Existing View

EV Charging Station and Logistics Facility

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IMAGE 2: SOUTHBOUND LENWOOD ROAD TOWARDS NORTH PROPERTY LINE

SOURCE: RMW, 2025

**FIGURE 3.1-2**

Existing View

EV Charging Station and Logistics Facility

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IMAGE 3: VIEW OF SITE FROM CAMINO DEL NORTE ROAD

SOURCE: RMW, 2025

DUDEK

**FIGURE 3.1-3**

Existing View

EV Charging Station and Logistics Facility

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IMAGE 4: BIRDS EYE VIEW OF SITE LOOKING NORTHEAST

SOURCE: RMW, 2025

DUDEK

**FIGURE 3.1-4**

Existing View

EV Charging Station and Logistics Facility

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IMAGE 1: NORTHBOUND LENWOOD ROAD TOWARDS SOUTH PROPERTY LINE

SOURCE: RMW, 2026

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**FIGURE 3.1-5**

Visual Smulation

EV Charging Station and Logistics Facility

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IMAGE 2: SOUTHBOUND LENWOOD ROAD TOWARDS NORTH PROPERTY LINE

SOURCE: RMW, 2025

DUDEK

**FIGURE 3.1-6**

Visual Smulation

EV Charging Station and Logistics Facility

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IMAGE 3: VIEW OF SITE FROM CAMINO DEL NORTE ROAD

SOURCE: RMW, 2025

DUDEK

**FIGURE 3.1-7**

Visual Smulation

EV Charging Station and Logistics Facility

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IMAGE 4: BIRDS EYE VIEW OF SITE LOOKING NORTHEAST

SOURCE: RMW, 2025

DUDEK

**FIGURE 3.1-8**

Visual Smulation

EV Charging Station and Logistics Facility

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# 3.2 Air Quality

This section describes the existing conditions related to air quality, identifies required regulatory requirements, evaluates potential project specific and cumulative impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to project implementation of the Lenwood Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

Comments regarding air quality received during the Notice of Preparation scoping period included a request that the project minimize air quality and public health impacts to the extent possible and the project include air quality monitoring and implementation of green technologies to minimize emissions from both construction and operational activities. All scoping comment letters are provided in Appendix A to this Environmental Impact Report (EIR).

This analysis is based, in part, on the Air Quality and Greenhouse Gas Emissions Technical Report prepared by Dudek (Appendix B) and Transportation Impact Study prepared by Dudek for the project (Appendix J).

## 3.2.1 Environmental Setting

### Meteorological and Topographical Conditions

The project site is located within the Mojave Desert Air Basin (MDAB)[1], which includes the desert portions of Los Angeles, Kern, San Bernardino, and Riverside counties. Most of this area is commonly referred to as the high desert because elevations range from approximately 2,000 to 5,000 feet above mean sea level. The MDAB is generally above the regional inversion layer and experiences relatively good dispersion conditions.

The MDAB is separated from Southern California coastal regions and Central California valley regions by mountains extending up to 10,000 feet above mean sea level. As a result, the Mojave Desert is removed from the cooling effects of the Pacific Ocean and is characterized by extreme temperatures. The MDAB consists of an assemblage of mountain ranges interspersed with valleys that often contain dry lakes. Lower-elevation mountains scattered throughout the basin are generally 1,000 feet to 4,000 feet high. Mountain passes form channels for air masses flowing from the west and southwest, and the prevailing winds from the west and southwest are caused by the proximity of the MDAB to coastal and central regions and to the blocking effect of the Sierra Nevada to the north.

This MDAB region is characterized by hot, dry summers and cool winters, with little precipitation. During the summer, the MDAB is generally influenced by a Pacific subtropical high-pressure cell that resides off the coast of California. This high-pressure cell prevents cloud formation and can cause daytime solar heating. The MDAB is rarely influenced by the cold air masses that move south from Canada and Alaska, as these frontal systems diffuse by the time they reach the MDAB. Most moisture arrives in frequent warm, moist, unstable air masses from the south. The MDAB averages between 3 and 7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The Victorville California Irrigation Management Information System station recorded an average annual precipitation of 2.9 inches of precipitation between November 2020 and October 2021 (CIMIS 2021). The

[1] The description of the MDAB climate and topography is based on the Mojave Desert Air Quality Management District (MDAQMD) 2016 CEQA and Federal Conformity Guidelines (MDAQMD 2016). The description of the Western Mojave Desert ozone ($O_3$) nonattainment area is based the MDAQMD Federal 8-Hour Ozone Attainment Plan for the Western Mojave Desert Non-Attainment Area (MDAQMD 2008).

MDAB is classified as a dry–hot desert climate, with portions classified as dry–very hot desert, to indicate at least 3 months have maximum average temperatures over 100.4°F (MDAQMD 2008).

The project is also located within the MDAQMD portion of the Western Mojave Desert ozone ($O_3$) nonattainment area (MDAQMD 2008), which includes the following San Bernardino County communities: Phelan, Hesperia, Adelanto, Victorville, Apple Valley, Barstow, Joshua Tree, Yucca Valley, and Twentynine Palms (the southwestern portion of the MDAQMD).

## Pollutants and Effects

### Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established minimum ambient air quality standards (AAQS), or criteria, for outdoor pollutant concentrations in order to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive people from illness or discomfort. Pollutants of concern include ozone ($O_3$), nitrogen dioxide ($NO_2$), carbon monoxide (CO), sulfur dioxide ($SO_2$), particulate matter with an aerodynamic diameter less than or equal to 10 microns ($PM_{10}$), particulate matter with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), and lead (Pb). These pollutants, as well as toxic air contaminants (TACs), are discussed below.[2] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. A summary of criteria pollutants is provided below. Please refer to Appendix B for more detailed information on criteria and non-criteria air pollutants.

**Ozone.** $O_3$ is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and $O_3$ precursors. These precursors are mainly oxides of nitrogen ($NO_x$) and volatile organic compounds (VOCs) (also referred to as reactive organic gases or "ROG"). The maximum effects of precursor emissions on $O_3$ concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in $O_3$ formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. $O_3$ exists in the upper atmosphere $O_3$ layer (stratospheric $O_3$) and at Earth's surface in the lower atmosphere (tropospheric $O_3$).[3] The $O_3$ that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to ground level, where people live, exercise, and breathe. Ground-level $O_3$ is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" $O_3$. Stratospheric, or "good," $O_3$ occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric $O_3$ layer, plant and animal life would be seriously harmed.

$O_3$ in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to $O_3$ can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2020). The occurrence and severity of health effects from $O_3$ exposure vary widely among individuals, even when the dose and the duration of exposure

[2] The descriptions of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's "Criteria Air Pollutants" (EPA 2021), as well as CARB's "Glossary" (CARB 2021a)

[3] The troposphere is the layer of Earth's atmosphere nearest to the surface of Earth, extending outward approximately 5 miles at the poles and approximately 10 miles at the equator.

are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of $O_3$ exposure. Children, adolescents, and adults who exercise or work outdoors, where $O_3$ concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2021b).

**Nitrogen Dioxide.** $NO_2$ is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of $NO_2$ in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. $NO_x$, which includes $NO_2$ and NO, plays a major role, together with VOC, in the atmospheric reactions that produce $O_3$. $NO_x$ is formed from fuel combustion under high temperature or pressure. The two major emissions sources are transportation and stationary fuel combustion sources (such as electric utility and industrial boilers).

A large body of health science literature indicates that exposure to $NO_2$ can induce adverse health effects. The strongest health evidence, and the health basis for AAQS for $NO_2$, results from controlled human exposure studies that show that $NO_2$ exposure can intensify responses to allergens in allergic asthmatics. Infants and children are particularly at risk because they have disproportionately higher exposure to $NO_2$ than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2021c).

**Carbon Monoxide.** CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2021d).

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

$SO_2$ is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2021e).

People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their $SO_2$-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). $SO_2$ is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

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

$PM_{2.5}$ and $PM_{10}$ pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and $PM_{10}$ can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and $PM_{10}$. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. Short-term exposures to $PM_{10}$ have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2021f). Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.

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

**Visibility-Reducing Particles.** Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Sources of visibility-reducing particles are the same as for $PM_{2.5}$ described above. Adverse effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism.

**Volatile Organic Compounds.** Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of $O_3$ are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the main sources of hydrocarbons.

Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

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

### Non-Criteria Air Pollutants

**Toxic Air Contaminants.** A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancerous health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. Examples of TACs include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills.

Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

**Diesel Particulate Matter.** Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70th the diameter of a human hair) and thus is a subset of $PM_{2.5}$ (CARB 2016b). DPM is typically composed of carbon particles (“soot,” also called black carbon, or BC) and numerous organic compounds, including over 40 known cancer-causing organic substances. The CARB classified “particulate emissions from diesel-fueled engines” (i.e., DPM; 17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others.

Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same noncancerous health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Those most vulnerable to noncancerous health effects are children whose lungs are still developing and the elderly who often have chronic health problems.

**Odorous Compounds.** Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person’s reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

**Valley Fever.** Coccidioidomycosis, more commonly known as "valley fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline sandy soils. Valley fever can affect construction workers that disturb soils in areas where the spores are present. San Bernardino County is not considered a highly endemic region for valley fever. Per the California Department of Public Health, the range over 7 years (2013–2019) for coccidioidomycosis cases in the county is 1.4 – 10.4 cases per 100,000 people per year. Statewide incidences in 2019 were 22.5 per 100,000 people (CDPH 2019).

## Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The MDAQMD identifies sensitive receptors as residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses (MDAQMD 2020). The closest off-site sensitive receptors to the project site are residential units in the High Desert Estates subdivision located adjacent to the southern boundary of the project site boundary. The closest school, Lenwood Elementary School, is located approximately 0.5 miles southeast of the project site.

## Local Ambient Air Quality Conditions

### Mojave Desert Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on the California Ambient Air Quality Standards (CAAQS) rather than the NAAQS. Table 3.2-1 depicts the current attainment status of the project site with respect to the NAAQS and CAAQS, as well as the attainment classifications for the criteria pollutants are outlined in Table 3.2-1.

**Table 3.2-1. Mojave Desert Air Basin Attainment Status**

| Pollutant | Designation/Classification | |
|---|---|---|
| | National Designation | California Designation |
| Ozone ($O_3$) | Unclassified/Attainment | Nonattainment (Severe) |
| Nitrogen dioxide ($NO_2$) | Unclassifiable/Attainment | Attainment |

## Table 3.2-1. Mojave Desert Air Basin Attainment Status

| Pollutant | Designation/Classification | |
|---|---|---|
| | National Designation | California Designation |
| Carbon monoxide (CO) | Unclassifiable/Attainment | Unclassified |
| Sulfur dioxide ($SO_2$) | Unclassifiable/Attainment | Attainment |
| Respirable particulate matter ($PM_{10}$) | Unclassified | Nonattainment |
| Fine particulate matter ($PM_{2.5}$) | Unclassified/Attainment | Attainment |
| Lead (Pb)[1] | Unclassifiable/Attainment | Attainment |
| Sulfates ($SO_4$) | No national standard | Attainment |
| Hydrogen sulfide ($H_2S$) | No national standard | Unclassified |
| Vinyl chloride[1] | No national standard | No designation |
| Visibility-reducing particles | No national standard | Unclassified |

**Source:** CARB 2022.
**Notes:** Attainment = meets the standards; Attainment (maintenance) = achieve the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or unclassifiable = insufficient data to classify; Unclassifiable/ attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data.
[1] CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined.

### Mojave Desert Air Basin Attainment Designation

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. The MDAQMD and CARB monitor local ambient air quality at monitoring stations that measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

The Barstow monitoring station, located at 200 E. Buena Vista, Barstow, California, is the nearest air quality monitoring station to the project site, located approximately 5.4 miles east. The data collected at this station is considered representative of the air quality experienced in the project vicinity given similar climate and meteorological and topographical conditions. Air quality data for $O_3$ $NO_2$, CO, and $PM_{10}$, from the Barstow monitoring station is provided in Table 3.2-2. Because $PM_{2.5}$ is not monitored at the Barstow monitoring station, measurements were taken from the Victorville monitoring station located at 14306 Park Avenue, Victorville, CA (approximately 29 miles south of the project site). $SO_2$ is not currently monitored in the County and data is not available. The most recent background ambient air quality data from 2020 to 2022, including the number of days exceeding the AAQS are shown in Table 3.2-2.

## Table 3.2-2. Local Ambient Air Quality Data

| Monitoring Station | Unit | Averaging Time | Agency/Method | Ambient Air Quality Standard | Measured Concentration by Year | | | Exceedances by Year (days) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 |
| **Ozone ($O_3$)** | | | | | | | | | | |
| Barstow | ppm | Maximum 1-hour concentration | California | 0.09 | 0.10 | 0.09 | 0.09 | 3 | 2 | 1 |
| | ppm | Maximum 8-hour concentration | California | 0.070 | 0.090 | 0.085 | 0.085 | 26 | 21 | 14 |
| | | | National | 0.070 | 0.081 | 0.077 | 0.078 | 25 | 20 | 19 |
| **Nitrogen Dioxide ($NO_2$)** | | | | | | | | | | |
| Barstow | ppm | Maximum 1-hour concentration | California | 0.18 | 0.060 | 0.060 | 0.060 | 0 | 0 | 0 |
| | | | National | 0.100 | 0.055 | 0.054 | 0.054 | 0 | 0 | 0 |
| | ppm | Annual concentration | California | 0.030 | 0.014 | 0.015 | 0.014 | 0 | 0 | 0 |
| | | | National | 0.053 | 0.014 | 0.014 | 0.014 | 0 | 0 | 0 |
| **Carbon Monoxide (CO)** | | | | | | | | | | |
| Barstow | ppm | Maximum 1-hour concentration | California | 20 | 5.5 | 1 | — | 0 | 0 | — |
| | | | National | 35 | 5.5 | 1 | — | 0 | 0 | — |
| | ppm | Maximum 8-hour concentration | California | 9.0 | 1 | 0.7 | — | 0 | 0 | — |
| | | | National | 9 | 1 | 0.7 | — | 0 | 0 | — |
| **Coarse Particulate Matter ($PM_{10}$)[a]** | | | | | | | | | | |
| Barstow | µg/m³ | Maximum 24-hour concentration | California | 50 | — | — | — | 1 | 1 | 6 |
| | | | National | 150 | 213.5 | 372.7 | 225.1 | 1 | 1 | 6 |
| | µg/m³ | Annual concentration | California | 20 | — | — | — | — | — | — |
| **Fine Particulate Matter ($PM_{2.5}$)[a]** | | | | | | | | | | |
| Victorville-14306 Park Avenue | µg/m³ | Maximum 24-hour concentration | National | 35 | 20 | 22 | 23 | 4 | 1 | 0 |
| | µg/m³ | Annual concentration | California | 12 | 10 | 10 | 10 | — | — | — |
| | | | National | 12.0 | 8.2 | 9.0 | 9.6 | — | — | — |

**Source:** Appendix B.
**Notes:** — = not available; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value; ppm = parts per million
Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (https://www.epa.gov/outdoor-air-quality-data) represents the highest concentrations experienced over a given year.

Exceedances of national and California standards are only shown for $O_3$ and particulate matter. Daily exceedances for particulate matter are estimated days because $PM_{10}$ and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour $O_3$, annual $PM_{10}$, or 24-hour $SO_2$, nor is there a California 24-hour standard for $PM_{2.5}$.
$SO_2$ is not currently monitored in the County and data is not available; therefore, it is not included in the table.
* = there was insufficient data available to determine the value.
[a] Measurements of $PM_{10}$ and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

## 3.2.2 Regulatory Setting

Please refer to Appendix B for a detailed overview of all federal and state regulations adopted relevant to air quality. The following summarizes regulations applicable to the proposed project.

### Federal

#### Criteria Air Pollutants

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric $O_3$ protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: $O_3$, CO, $NO_2$, $SO_2$, $PM_{10}$, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the public. The NAAQS (other than for $O_3$, $NO_2$, $SO_2$, $PM_{10}$, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for $O_3$, $NO_2$, $SO_2$, $PM_{10}$, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

### State

#### Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products. In May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). While the U.S. Senate Parliamentarian and the Government Accountability Office concluded that the bills were illegal (GAO 2025), these actions impact CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus authority with the current result eliminating California's enforcement of these fuel standard regulations. California filed a lawsuit challenging the revocations (see *State of California et al. v. U.S.A et al.* (2025) N.D. Cal Case No. 25-CV-04966, challenging disapproval of California's CAA waivers that allowed California to set its own vehicular fuel economy standards), which is currently pending.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. As stated previously, an AAQS defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below the relevant CAAQS before a basin can attain the corresponding CAAQS. Air quality is considered "in attainment" if pollutant levels are

continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for $O_3$, CO, $SO_2$ (1-hour and 24-hour), $NO_2$, $PM_{10}$, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded.

The MDAQMD have based their thresholds of significance for California Environmental Quality Act (CEQA) purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Because an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, this means that the thresholds established by air districts are also protective of human health. The NAAQS and CAAQS are presented in Table 3.2-3.

## Table 3.2-3. Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards[a] | National Standards[b] | |
|---|---|---|---|---|
| | | Concentration[c] | Primary[c,d] | Secondary[c,e] |
| $O_3$ | 1 hour | 0.09 ppm (180 µg/m³) | — | Same as Primary Standard[f] |
| | 8 hours | 0.070 ppm (137 µg/m³) | 0.070 ppm (137 µg/m³)[f] | |
| $NO_2$[g] | 1 hour | 0.18 ppm (339 µg/m³) | 0.100 ppm (188 µg/m³) | Same as Primary Standard |
| | Annual Arithmetic Mean | 0.030 ppm (57 µg/m³) | 0.053 ppm (100 µg/m³) | |
| CO | 1 hour | 20 ppm (23 mg/m³) | 35 ppm (40 mg/m³) | None |
| | 8 hours | 9.0 ppm (10 mg/m³) | 9 ppm (10 mg/m³) | |
| $SO_2$[h] | 1 hour | 0.25 ppm (655 µg/m³) | 0.075 ppm (196 µg/m³) | — |
| | 3 hours | — | — | 0.5 ppm (1,300 µg/m³) |
| | 24 hours | 0.04 ppm (105 µg/m³) | 0.14 ppm (for certain areas)[g] | — |
| | Annual | — | 0.030 ppm (for certain areas)[g] | — |
| $PM_{10}$[i] | 24 hours | 50 µg/m³ | 150 µg/m³ | Same as Primary Standard |
| | Annual Arithmetic Mean | 20 µg/m³ | — | |
| $PM_{2.5}$[i] | 24 hours | — | 35 µg/m³ | Same as Primary Standard |
| | Annual Arithmetic Mean | 12 µg/m³ | 9.0 µg/m³ | 15.0 µg/m³ |
| Lead[j,k] | 30-day Average | 1.5 µg/m³ | — | — |
| | Calendar Quarter | — | 1.5 µg/m³ (for certain areas)[k] | Same as Primary Standard |
| | Rolling 3-Month Average | — | 0.15 µg/m³ | |
| Hydrogen sulfide | 1 hour | 0.03 ppm (42 µg/m³) | — | — |
| Vinyl chloride[j] | 24 hours | 0.01 ppm (26 µg/m³) | — | — |
| Sulfates | 24- hours | 25 µg/m³ | — | — |

## Table 3.2-3. Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards[a] | National Standards[b] | |
|---|---|---|---|---|
| | | Concentration[c] | Primary[c,d] | Secondary[c,e] |
| Visibility reducing particles | 8 hour (10:00 a.m. to 6:00 p.m. PST) | Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70% | — | — |

**Source:** CARB 2024.

**Notes:** µg/m³ = micrograms per cubic meter; mg/m³= milligrams per cubic meter; ppm = parts per million by volume; $O_3$ = ozone; $NO_2$ = nitrogen dioxide; CO = carbon monoxide; $SO_2$ = sulfur dioxide; $PM_{10}$ = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

a California standards for $O_3$, CO, $SO_2$ (1-hour and 24-hour), $NO_2$, suspended particulate matter ($PM_{10}$, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than $O_3$, $NO_2$, $SO_2$, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The $O_3$ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For $PM_{10}$, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f On October 1, 2015, the national 8-hour $O_3$ primary and secondary standards were lowered from 0.075 to 0.070 ppm.

g To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

h On June 2, 2010, a new 1-hour $SO_2$ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 $SO_2$ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

i On February 7, 2024, the national annual PM2.5 primary standard was lowered from 12.0 µg/m3 to 9.0 µg/m3. The existing national 24- hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m3 , as was the annual secondary standard of 15.0 µg/m3 . The existing 24-hour $PM_{10}$ standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

j CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

k The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

### Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a

subset of these pollutants pursuant to the California Health and Safety Code. In accordance with Assembly Bill (AB) 2728, the state list includes the (federal) hazardous air pollutants. In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). With the participation of local air districts, industry, and interested public, CARB prepared a risk management guidance document and a risk reduction plan to inform the regulatory process and achieve further diesel PM emission reductions. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

## Local

### Mojave Desert Air Quality Management District

The MDAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the San Bernardino County portion of the MDAB, where the project is located. The MDAQMD operates monitoring stations in the MDAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The MDAQMD's air quality management plans include control measures and strategies to be implemented to attain state and federal AAQS in the MDAB. The MDAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. The MDAQMD's most recent air quality plans are the $PM_{10}$ attainment demonstration and maintenance plan (MDAQMD 1995) and the $O_3$ attainment plan (MDAQMD 2008).

Emissions that would result from mobile, area, and stationary sources during construction and operation of the project are subject to the rules and regulations of the MDAQMD. The MDAQMD rules applicable to the project may include, but are not limited to, the following:

- **Rule 219 – Equipment Not Requiring a Permit:** The rule identifies equipment exempt from permit requirements of District Rules 201 and 203.
  - District permit required for Internal combustion engines with manufacturer's maximum continuous rating greater than or equal to 50 brake horsepower.
- **Rule 401 – Visible Emissions:** This rule establishes the limit for visible emissions from stationary sources.

- **Rule 402 – Nuisance:** This rule prohibits the discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any 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 Control for the Mojave Desert Planning Area:** This rule ensures that the NAAQS for $PM_{10}$ will not be exceeded due to anthropogenic sources of fugitive dust within the Mojave Desert Planning Area and implements the control measures contained in the Mojave Desert Planning Area Federal $PM_{10}$ Attainment Plan. Rule 403 includes requirements for a Dust Control Plan, signage and fencing requirements, as well as surface watering and stabilization with chemicals, gravel and asphaltic pavement to eliminate visible fugitive dust from vehicular travel and wind erosion.
- **Rule 431 – Sulfur Content of Liquid Fuels:** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of $SO_x$ and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the MDAQMD. The rule also affects diesel fuel supplied for mobile sources.
- **Rule 442 – Usage of Solvents:** The purpose of this rule is to reduce VOC emissions from VOC-containing materials or equipment that is not subject to limits of any rule found in District Regulation XI – Source Specific Standards.
- **Rule 1113 – Architectural Coatings.** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

### Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

With respect to air quality planning and other regional issues, SCAG has developed Connect SoCal, the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, planning strategies, and the people whose collaboration can improve the quality of life for Southern Californians. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG recently adopted the 2024-2050 RTP/SCS, also referred to as "Connect SoCal 2024". The Connect SoCal 2024-2050 builds upon prior planning cycles to update the vision of the region's future (SCAG 2024).

## San Bernardino Countywide Plan/Policy Plan

The Countywide Plan/Policy Plan contains the long-term goals and policies that guide County decisions, investments, and improvements toward achieving the Countywide Vision. The Policy Plan represents a unique approach to county planning. It serves as the County's General Plan for the unincorporated areas, which is mandated by state law, but it also includes policy direction for adult and child supportive services, healthcare, public safety, and other regional services the County administers in both incorporated and unincorporated areas. The Natural Resource Element includes goals and policies relevant to air quality and to the project (San Bernardino County 2020):

Goal NR-1. Air Quality that promotes health and wellness of residents in San Bernardino County through improvements in locally-generated emissions.

Policy NR-1.2. Indoor Air Quality. We promote the improvement of indoor air quality through the California Building and Energy Codes and through the provision of public health programs and services.

Policy NR-1.3. Coordination on Air pollution. We collaborate with air quality management districts and other local agencies to monitor and reduce major pollutants affecting the county at the emission source.

Policy NR-1.5 Sensitive Land Uses. We consider recommendations from the California Air Resources Board on the siting of new sensitive land uses and exposure to specific source categories.

Policy NR-1.6 Fugitive Dust Emissions. We coordinate with air quality management districts on requirements for dust control plans, revegetation, and soil compaction to prevent fugitive dust emissions.

Policy NR-1.8 Construction and Operations. We invest in County facilities and fleet vehicles to improve energy efficiency and reduce emissions. We encourage County contractors and other builders and developers to use low-emission construction vehicles and equipment to improve air quality and reduce emissions.

Policy NR-1.9 Building Design and Upgrades. We use the CALGreen Code to meet energy efficiency standards for new buildings and encourage the upgrading of existing buildings to incorporate design elements, building materials, and fixtures that improve environmental sustainability and reduce emissions.

## San Bernardino County Code of Ordinances

Section 83.01.040 of the San Bernardino County Code of Ordinances pertains to air quality performance standards. The relevant provisions of the section are listed below.

(c) **Diesel Exhaust Emissions Control Measures.** The following emissions control measures shall apply to all discretionary land use projects approved by the County on or after January 15, 2009:

(1) **On-Road Diesel Vehicles.** On-road diesel vehicles are regulated by the State of California Air Resources Board.

(2) **Off-Road Diesel Vehicle/Equipment Operations.** All business establishments and contractors that use off-road diesel vehicle/equipment as part of their normal business operations shall adhere to the following measures during their operations in order to reduce diesel particulate matter emissions from diesel-fueled engines:

(A) Off-road vehicles/equipment shall not be left idling on site for periods in excess of five minutes. The idling limit does not apply to:

(I) Idling when queuing;

(II) Idling to verify that the vehicle is in safe operating condition;

(III) Idling for testing, servicing, repairing or diagnostic purposes;

(IV) Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane);

(V) Idling required to bring the machine system to operating temperature; and (VI) Idling necessary to ensure safe operation of the vehicle.

(B) Use reformulated ultra-low-sulfur diesel fuel in equipment and use equipment certified by the U.S. Environmental Protection Agency (EPA) or that pre-dates EPA regulations.

(C) Maintain engines in good working order to reduce emissions.

(D) Signs shall be posted requiring vehicle drivers to turn off engines when parked.

(E) Any requirements or standards subsequently adopted by the South Coast Air Quality Management District, the Mojave Desert Air Quality Management District or the California Air Resources Board.

## 3.2.3 Environmental Impacts and Mitigation Measures

### Methodology

#### Construction

Construction of the project would result in emissions primarily associated with the use of off-road construction equipment, on-road haul and vendor (material delivery) truck trips, and worker vehicle trips. Emissions from construction were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.29[4] using a combination of CalEEMod default assumptions and project-specific information provided by the Applicant where available. The methods and assumptions used to estimate the criteria air pollutant emissions from project

[4] CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform to calculate construction and operational emissions from land use development projects. The model was developed for the California Air Pollution Control Officers Association in collaboration with multiple air districts across the state. Numerous lead agencies in the state, including MDAQMD and South Coast Air Quality Management District (SCAQMD), use CalEEMod to estimate criteria air pollutant emissions in accordance with CEQA Guidelines Section 15064.4(a)(1).

construction are described below in detail for each component. For additional details see Appendix B (Appendix A, CalEEMod Output Files).

For purposes of estimating project emissions and based on information provided by the Applicant, it is assumed that construction would commence in April 2027 and would last approximately 18 months, ending in September 2028. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- **Site Preparation:** 2 weeks
- **Grading:** 1 month
- **Fine Grading:** 1 month
- **Underground Utilities:** 1 month
- **Building Construction:** 12 months
- **Paving:** 1 month
- **Architectural Coatings:** 1 month

### *Off-Road Equipment*

General offroad construction equipment assumptions (i.e., type and number of pieces) were provided by the Applicant and are summarized in Table 3.2-4. Default values for equipment horsepower and load factor provided in CalEEMod were used for all construction equipment. For the analysis, it was generally assumed that heavy-duty construction equipment would be operating at the site for up to approximately 8 hours per day, 6 days per week, during construction.

## Table 3.2-4. Construction Off-Road Equipment Assumptions

| Construction Phase | Equipment Type | Quantity |
|---|---|---|
| Site Preparation | Rubber Tired/Tracked Dozers | 15 |
| | Tractors/Loaders/Backhoes | 20 |
| Grading | Graders | 5 |
| | Excavators | 10 |
| | Tractors/Loaders/Backhoes | 10 |
| | Scrappers | 10 |
| | Rubber Tired/Tracked Dozers | 5 |
| Fine Grading | Graders | 5 |
| | Excavators | 10 |
| | Tractors/Loaders/Backhoes | 10 |
| | Scrappers | 10 |
| | Rubber Tired/Tracked Dozers | 5 |
| Underground Utilities | Excavators | 20 |
| | Trenchers | 5 |
| | Off-Highway Trucks | 20 |
| | Plate Compactors | 15 |
| | Rubber Tired/Tracked Dozers | 5 |
| | Skid Steer Loaders | 20 |

**Table 3.2-4. Construction Off-Road Equipment Assumptions**

| Construction Phase | Equipment Type | Quantity |
|---|---|---|
| Building Construction | Forklifts | 15 |
| | Generator Sets | 5 |
| | Cranes | 5 |
| | Welders | 5 |
| | Tractors/Loaders/Backhoes | 15 |
| Paving | Pavers | 10 |
| | Paving Equipment | 10 |
| | Rollers | 10 |
| Architectural Coatings | Air Compressors | 5 |

**Source**: Appendix B.

### *On-Road Vehicles*

On-road vehicles would be required for worker travel, vendor trips, and haul trips to and from the project site during construction. General assumptions for on-road vehicle travel are consistent with the Traffic Generation Analysis prepared for the project and described below. CalEEMod default emission factors representing the vehicle mix and emissions were used to estimate emissions associated with vehicular sources.[5] Fugitive dust emissions for paved and un-paved travel were estimated using default emission factors in CalEEMod. In accordance with MDAQMD Rule 403, the project would employ the following fugitive dust control measures:

- Watering two times daily
- Limiting unpaved road travel speed to 25 miles per hour

## Operational Emissions

Operation of the project would result in criteria air pollutant emissions for area, mobile, energy, and off-road sources and were estimated using CalEEMod. Operational year 2028 was assumed following completion of construction.

### *Area Sources*

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described below.

Consumer products are chemically formulated products, including detergents; cleaning compounds; polishes; floor finishes; lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2024). Consumer product emissions are estimated in CalEEMod based on the floor area of nonresidential buildings and on the default factor of pounds of ROG per building square foot per day.

[5] The use of CalEEMod default values results in a conservative estimate of on-road construction trips. The values used in air quality analysis are therefore higher than those used in the noise analysis, which are based on discussions with a local construction company with substantial experience with similar projects in the region.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from the application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emissions factor is based on the VOC content of the surface coatings, and MDAQMD Rule 1113, Architectural Coatings, governs the VOC content for interior and exterior coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories. CalEEMod default values were assumed, including the surface area to be painted, the VOC content of architectural coatings, and the reapplication rate of 10% of area per year.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

### *Mobile Sources*

The project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of passenger vehicles (workers and visitors) and truck traffic associated with the commercial operations. For the analysis, commercial operations are modeled as fast food with drive-thru, retail with truck washing, electric vehicle (EV) charging, and warehouse operations. However, combustion emissions are not estimated from vehicle trips associated with the EV charging facilities as EVs do not generate combustion emissions. Emissions of particulate matter would be generated from EV trips due to tire and brake wear and these emissions are estimated and included in the analysis.

Emissions from mobile sources during operation of the project were estimated in CalEEMod. The maximum daily trip rates, taken from the Transportation Impact Study (Appendix J), were 1,402 trips per day for fast food with drive-thru; 653 trips per day for retail; 1,097 trips per day for EV charging; 2,428 primary warehouse trips per day total, of which 1,760 trips would be passenger vehicles and 668 trips would be trucks, both of which were assumed 7 days per week. For the warehouse operation the passenger vehicle trip lengths were based on the project's vehicle miles traveled (VMT) analysis trip length of 12.8 miles for commercial-work trips (i.e., trips made by someone who is employed by the warehouse land use).

To identify an appropriate trip length assumption for warehouse heavy-duty truck trips, two different methods of estimation were evaluated: (1) project-specific EMFAC-based estimate, and (2) SCAQMD recommendations. For method 1, to determine an average operational truck trip distance, EMFAC data and the distance to the Port of Long Beach was examined. The Port of Long Beach was evaluated because it is the nearest major maritime cargo hub to the project site and potential origin/destination for haulage outside the MDAB. EMFAC data was queried for San Bernardino County for operational year 2028 for light-heavy duty (LHDT1 and LHDT2)[6], medium heavy duty trucks (MHDT), and heavy-heavy duty trucks (HHDT) for total VMT and number of vehicle trips. Based on the EMFAC data it is estimated that MHDTs averaged 4.23 miles per trip and HHDTs averaged 9.71 miles per trip in the county in 2028. LHDT1 and LHDT2s have a shorter EMFAC trip distance compared to MHDT; therefore, as a conservative assumption, LHDT1 and LHDT2 were assumed to have the same trip distance as MHDTs. The estimated trip

[6] LHDT1 and LHDT2 categories based on weight classes. Specifically, LHDT1 = 8,501 to 10,000 pounds and LHDT2 = 10,001 to 14,000 pounds.

distance from the Port of Long Beach to the project site was estimated to be 134 miles. Based on the project's Transportation Impact Study (Appendix J), HHDT make up 62% of the project's total truck trips and LHDT1, LHDT2, and MHDTs make up 37.4% of truck trips. Conservatively, assuming all HHDTs originate from the Port of Long Beach, then 50% of HHDT truck trips, arrival trips, are assumed to be of a distance of 134 miles. The other 50% making up the HHDT departure from the project are assumed to have trip distance equal to the average EMFAC San Bernardino County trip distance of 9.71 miles. To determine an average total truck distance for use in CalEEMod, HHDT trips are averaged with the other 37.4% of the trucks (and LHDT1, LHDT2, and MHDTs) to determine an overall weighted average truck trip distance, which equates to about 50 miles. See Table 3.2-5 for calculation details.

### Table 3.2-5. Operational Truck Trip Distance -EMFAC Data

| Vehicle | Percent of Trucks Trips (%)[1] | EMFAC Data | | | Trip Distance |
|---|---|---|---|---|---|
| | | EMFAC Truck Classification | County-wide VMT per Year | County-wide Vehicle Trips per Year | VMT per Trip |
| 2-3 Axle Trucks (Arriving and Departing) | 37.4 | LHDT1, LHDT2, and MHDT | 165,558[2] | 39,169[2] | 4.23 |
| 4+ Axle Trucks (Arriving from Port) | 31.3 (50% of total HHDT Trips[4]) | HHDT | N/A | N/A | 134[3] |
| 4+ Axle Trucks (Departing) | 31.3 (50% of total HHDT Trips[4]) | HHDT | 2,867,818 | 295,282 | 9.71 |
| | | | | *Weighted Average (All Truck Trips)* | *45.7* |

**Source:** Appendix B.
**Notes:**
1 Based on the project's Transportation Impact Study (Appendix J).
2 LHDT1, LHDT2, and MHDT conservatively based on EMFAC VMT and trip data for MHDT.
3 Based on the distance from the project site (Barstow) to the Port of Long Beach.
4 Percent of truck trips represent arrival and departure trips; therefore, 50% of trips (arrival) conservatively assumed to originate at the Port of Long Beach. 50% of trips assumed to depart the project site and estimated truck trip distance is based on EMFAC county-wide average HHDT truck VMT per trip.

For method 2, without MDAQMD specific recommendations, the EMFAC truck trip lengths were compared to the SCAQMD recommendation of 40 miles and when the EMFAC estimation was less than the SCAQMD recommendation then the SCAQMD recommendation of 40 miles was used in place of the EMFAC value and assumed to be 100% of primary trips.[7] Table 3.2-6 presents the weighted average truck trip distance based on the combination of SCAQMD recommendation and the specific distance from the Port for Long Beach to the project site. Because method 2 provides a more conservative trip length based on the project location and a reasonably anticipated origin and destination of operational truck trips and goods movement, it is conservatively applied in this analysis to estimate mobile source emissions.

7 The average trip length for heavy-duty trucks were based on implementation of the Facility-Based Mobile Source Measures adopted in the SCAQMD's 2016 AQMP. SCAQMD's "Preliminary Warehouse Emission Calculations" assumed a heavy-heavy-duty truck trip length of 39.9 miles (SCAQMD 2021), and the default commercial-nonwork trip length for trucks in CalEEMod is 6.6 miles. Therefore, the conservatively assumed trip length of 40 miles is used for this analysis.

## Table 3.2-6. Operational Truck Trip Distance - SCAQMD Assumptions

| Vehicle | Percent of Trucks Trips (%)[1] | EMFAC Data | Trip Distance |
|---|---|---|---|
| | | EMFAC Truck Classification | VMT per Trip |
| 2-3 Axle Trucks (Arriving and Departing) | 37.4 | LHDT1, LHDT2, and MHDT | 40 |
| 4+ Axle Trucks (Arriving from Port) | 31.3 (50% of total HHDT Trips[4]) | HHDT | 134[3] |
| 4+ Axle Trucks (Departing) | 31.3 (50% of total HHDT Trips[4]) | HHDT | 40 |
| | | *Weighted Average (All Truck Trips)* | *61* |

**Source:** Appendix B.
**Notes:**
1 Based on the project's Transportation Impact Study (Appendix J).
2 LHDT1, LHDT2, and MHDT conservatively based on SCAQMD Recommendation.
3 Based on the distance from the project site (Barstow) to the Port of Long Beach.

Vehicle emissions occur during startup, operation (running), and idling, as well as from evaporative losses when the engines are resting. The emissions factors for trucks and passenger vehicles were determined using CalEEMod.

Project truck idling for trucks accessing the logistics facility would be limited to 5 minutes in accordance with CARB's adopted Airborne Toxic Control Measures; however, for modeling purposes, it was conservatively assumed that trucks would idle for a total of 15 minutes: idling which occurs while the trucks are waiting to pull up to the loading dock, at the loading dock, and prior to entering and exiting the site.

### *Energy Source Emissions*

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gas (GHG) emissions in CalEEMod because criteria pollutant emissions would occur at the site of power plants, which are not on the project site. However, natural gas combustion would occur at the project site itself, in association with equipment that uses natural gas (e.g., restaurant uses). The emissions associated with natural gas use were calculated using CalEEMod default parameters, which assume compliance with Title 24 Building Energy Efficiency Standards.

### *Off-Road Equipment*

The most common type of cargo handling equipment are forklifts, pallet jacks, and yard trucks, which are designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors, hustlers, yard hostlers, and yard tractors. For this project, based on the maximum square footage of building space, on-site modeled operational equipment includes a total of 161 electric forklifts and 5 electric yard tractors operating 24 hours a day for 365 days of the year. See Appendix B for detailed calculations.

## Health Risk Assessments

### *Construction Health Risk Assessment*

A HRA was performed to evaluate potential health risk associated with construction of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix B.

For risk assessment purposes, $PM_{10}$ in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on-road vehicle exhaust (e.g., heavy-duty diesel trucks).

The air dispersion modeling methodology was based on MDAQMD's generally accepted modeling practices (MDAQMD 2020). Air dispersion modeling was performed using the EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 23132 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 12.0.0. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the MDAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 3.2-7.

**Table 3.2-7. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters**

| Parameter | Details |
|---|---|
| Meteorological Data | AERMOD-specific meteorological data for the Barstow-Daggett Airport air monitoring station (KDAG) was used for the dispersion modeling based on the location of the Project. A meteorological data set from 2015 through 2020 was obtained from the CARB in a preprocessed format suitable for use in AERMOD. |
| Urban versus Rural Option | The rural dispersion option was selected due to the undeveloped nature of the Project site. |
| Terrain Characteristics | Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the U.S. Geological Survey's National Elevation Dataset format. |
| Source Release Characterizations | Air dispersion modeling of DPM emissions was conducted assuming the off-road equipment and trucks would operate in accordance with the modeling scenario estimated in CalEEMod (Appendix B-1), based on the best information available at the time of analysis:<br>▪ Off-road construction equipment was modeled as a line of adjacent volume sources across the project site with a release height of 5 meters, a plume height of 10 meters, and plume width of 9 meters. |
| Receptors | Discrete receptors were placed at the nearest receptor locations in all directions to the Project site. |

**Source:** Appendix B.
**Notes**: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; MDAQMD = Mojave Desert Air Quality Management District; DPM = diesel particular matter; CalEEMod = California Emissions Estimator Model. See Appendix B-2.

The health risk calculations were performed using the Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion Modeling and Risk Tool (ADMRT, Version 22118). AERMOD was run with all sources emitting unit

emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the 1 gram per second emission rate. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices. There is no reference exposure level for acute health impacts from DPM, and, thus, acute risk was not evaluated.

*Operational Heath Risk Assessment*

For the operational health risk, the operation year 2028 was assumed consistent with completion of project construction. Emissions from operation of the project include truck trips, and truck idling emissions. Truck idling for trucks accessing the logistics facility would be limited to 5 minutes in accordance with CARB's adopted Airborne Toxic Control Measures; however, truck idling was conservatively assumed to continue for 15 minutes. Therefore, the analysis conservatively overestimates DPM emissions from idling. All deliveries would occur Monday through Sunday.

Dudek evaluated the project's potential cancer and noncancer health impacts using exposure periods appropriate to evaluate long-term emission increases (third trimester of pregnancy to 30 years). Emissions dispersion of DPM was modeled using AERMOD, then cancer risk and noncancer health impacts were subsequently modeled using the CARB HARP2. The health risk results were then compared to MDAQMD thresholds to assess project significance. Principal parameters of this modeling are presented in Table 3.2-8.

## Table 3.2-8. Operational Health Risk Assessment American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model Operational Principal Parameters

| Parameter | Details |
|---|---|
| Meteorological Data | AERMOD-specific meteorological data for the Barstow-Daggett Airport air monitoring station (KDAG) was used for the dispersion modeling based on the recommendation of the MDAQMD. A meteorological data set from 2015 through 2020 was obtained from CARB in a preprocessed format suitable for use in AERMOD. |
| Urban versus Rural Option | The rural dispersion option was selected due to the undeveloped nature of the Project site. |
| Terrain Characteristics | Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the U.S. Geological Survey's National Elevation Dataset format. |
| Source Release Characterizations | The following operational source modeling parameters were based on the best information available at the time of analysis:<br>▪ Diesel truck travel was modeled as a line of adjacent volume sources with a release height of 3.4 meters, a plume height of 6.8 meters, and plume width of 13.4 meters allow the following truck routes, based on the Transportation Impact Study:<br>1. 5% of truck traffic north to SR-58 from Agate Road via Lenwood Road<br>2. 45% of truck traffic west via Main Street and to I-15 from Agate Road via SR-58<br>3. 50% of truck traffic east to I-15 via Lenwood Road south of the project site.<br>▪ Truck idling was modeled as a line of adjacent volume sources along each side of the warehouse building with loading docks, with a release height of 4 meters, a plume height of 8 meters, and plume width of 8 meters. |
| Receptors | Discrete receptors were placed at the nearest receptor locations in all directions to the Project site. |

**Source:** Appendix B.

**Note:** AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; MDAQMD = Mojave Desert Air Quality Management District; SCAQMD = South Coast Air Quality Management District; EPA = U.S. Environmental Protection Agency.

## Thresholds of Significance

The significance criteria used to evaluate project impacts to air quality are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to air quality would occur if implementation of the project would do any of the following:

(a) Conflict with or obstruct implementation of the applicable air quality plan.
(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable state ambient air quality standard.
(c) Expose sensitive receptors to substantial pollutant concentrations.
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The impact analysis also considers whether the project would result in cumulatively considerable air quality impacts.

The CEQA Guidelines indicate that, where available, significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether a project would have a significant impact on air quality. As outlined in the MDAQMD's *CEQA and Federal Conformity Guidelines* (MDAQMD 2016), a project would result in a significant environmental impact if it:

1. Would generate total emissions (direct and indirect) in excess of the established significance thresholds (presented in Table 3.2-9).
2. Would generate a violation of any ambient air quality standard when added to the local background.
3. Does not conform with the applicable attainment or maintenance plan.
4. Would expose sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million (10 × 10−6) and/or a hazard index (noncarcinogenic) greater than or equal to 1.

Residences, schools, daycare centers, playgrounds, and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned sensitive receptor land use must be evaluated using Threshold 4:

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

The MDAQMD *CEQA Air and Federal Conformity Guidelines* (MDAQMD 2016) sets forth quantitative emission significance thresholds for criteria air pollutants below which a project would not have a significant impact on ambient air quality. Project-related air quality emissions estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 3.2-9 are exceeded. The emission-based thresholds for $O_3$ precursors are intended to serve as a surrogate for an "ozone significance

threshold" (i.e., the potential for adverse $O_3$ impacts to occur) because $O_3$ itself is not emitted directly. MDAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions.

### Table 3.2-9. Mojave Desert Air Quality Management District Daily Air Quality Significance Thresholds

| Pollutant | Daily Threshold (pounds per day) |
|---|---|
| VOC | 137 |
| $NO_x$ | 137 |
| CO | 548 |
| $SO_x$ | 137 |
| $PM_{10}$ | 82 |
| $PM_{2.5}$ | 65 |
| Hydrogen sulfide[a] | 54 |
| Lead[a] | 3 |

**Source:** MDAQMD 2016.
**Notes:** VOC = volatile organic compound; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
[a] The project includes typical equipment and on-road vehicles, which result in negligible (if any) emissions of hydrogen sulfide and lead. Therefore, these pollutants are not discussed in this analysis.

Regarding localized CO, although the MDAQMD does not have screening levels for intersection traffic that could result in potential CO hotspots, several other air districts have established these levels including the SCAQMD and Bay Area Air District, which are described below to provide context of the magnitude of hourly volumes that could result in significant localized CO impacts:

- The SCAQMD conducted CO modeling for its 2003 Air Quality Management Plan (SCAQMD 2003) for the four worst-case intersections in the South Coast Air Basin. At the time the 2003 Air Quality Management Plan was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least more than 100,000 vehicles per day.
- The Bay Area Air District[8] determined that projects would result in a less-than-significant impact to localized CO concentrations if (1) project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour, or (2) project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) (BAAQMD 2017).

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

[8] The Bay Area Air Quality Management District changed its name to the Bay Area Air District January 2025.

## Impact Analysis

Impact 3.2-1 The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

### MDAQMD Air Quality Plans

The control measures and related emission reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the MDAB are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. A project is non-conforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable MDAQMD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Zoning changes, specific plans, general plan amendments and similar land use plan changes that do not increase dwelling unit density, do not increase vehicle trips, and do not increase VMT are also deemed to comply with the applicable air quality plan (MDAQMD 2020).

The project would comply with all applicable MDAQMD Rules and Regulations, including, but not limited to Rules 401 (Visibile Emissions), 402 (Nuisance), and 403 (Fugitive Dust Control for the Mojave Desert Planning Area). The zoning of the site is Rural Living, where the Rural Living zone allows, through a Conditional Use Pemit or minor use permit, some industrial, retail, transportation, communicaiton and infrastructure land uses. While the project would require a rezone, General Plan Amendment, and a Conditional Use Permit, it would not increase dwelling unit density, and as discussed in Section 3.10, Transportation, the project is expected to shorten vehicle trips that were already occuring and the overall VMT analysis including all project facilites concluded no net increase in VMT per service population. Therefore, the project would comply with the applicable air quality plan as further described below.

The project includes amenities that cater to both local residents and motorists traveling along Lenwood Road, I-15, and SR-58. It includes EV charging facilities that would primarily serve vehicles already using the adjacent freeways. This component, although not strictly local-serving in nature, does not generate additional trips that were not already occurring. In addition, by offering dining, shopping, and EV charging opportunities, the project is expected to shorten vehicle trips for both local residents and passing motorists. This aligns with the County's objective to promote development that contributes to reducing VMT. Thus, the project's EV charging and retail components qualify for an exemption from a VMT assessment under the County Guidelines. The project's Transportation Impact Study (Appendix J) conservatively includes all project facilites and concludes the following:

- The project was evaluated against screening criteria as outlined in the County Guidelines. The project's EV charging and retail component were found to meet the Local Serving Project screening criteria. However, the logistics facility component was not found to meet screening criteria and a VMT analysis was performed.
- Project-generated VMT estimates were calculated using the San Bermardino Transporation Analysis Model and compared to the County's adopted impact threshold of 4% below existing Countywide VMT per employee. Project-generated VMT per employee was found to be below the County's impact threshold.
- The project's cumulative effect on VMT was found to be unchanged or below the County's adopted impact threshold of no net increase in VMT per service population with project conditions.

In addition, SCAG's adopted 2024-2050 RTP/SCS, "Connect SoCal 2024" identifies the following relevant policies and strategies that are intended to be supportive of implementing the 2024–2050 RTP/SCS and reducing GHG emissions: Sustainable Development, Clean Transportation, and Preservation, and Climate Resilience, which would collaterally reduce criteria pollutant emissions.

- **Sustainable Development.** The 2024-2050 RTP/SCS identifies sustainable development, including water and energy-efficient building practices and green infrastructure, as a strategy to reduce GHG emissions. As described herein, targeted sustainable design strategies of the project include all cargo handling equipment to be electric powered and the project would support the transition from fossil fuel through its EV charging facilities. The project would support increased usage of renewable electricity through approximately 2,338,800 kWh of on-site renewable energy produced per year.
- **Clean Transportation.** The 2024–2050 RTP/SCS identifies EV charging infrastructure, adoption of zero-emission vehicles, and clean transit as ways to reduce GHG emissions from mobile sources. As described herein, the project would directly promote and support low emission technologies for transportation through the development of an EV charging station to serve light duty/passenger vehicles and medium and heavy-duty trucks.

The project would directly support SCAG's policies and strategies and promote and support low emission technologies for transportation through the development of an EV charging station to serve light duty/passenger vehicles and medium and heavy-duty trucks, secondarily supporting MDAQMD plans including the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the MDAB through the reduction of vehicular combustion emissions.

In summary, the project's cumulative effect on VMT was found to be unchanged or below the County's adopted impact threshold of no net increase in VMT per service population with project conditions and the project would be supportive of the 2024–2050 RTP/SCS and reducing GHGs and collaterally $PM_{2.5}$ and ozone precursor pollutants. However, the project would exceed the MDAQMD's threshold for VOC and $NO_x$ during construction, as discussed below under Impact 3.2-2 and thus, would conflict with the MDAQMD plans including the Ozone Attainment Plan for the MDAB. Impacts related to the project's potential to conflict with or obstruct implementation of the applicable air quality plan are considered potentially significant.

## Mitigation Measures

Implementation of Mitigation Measure (MM) AQ-1 (Construction Equipment Emission Reductions) and MM-AQ-2 (Construction volatile organic compounds (VOC) Emission Reductions) would reduce emissions of $NO_x$ and VOC during construction. Compliance with these measures would reduce emissions of $NO_x$ and VOC to a level that is **less than significant with mitigation** as shown in Table 3.2-12, eliminating project conflicts with MDAQMD plans. Details of the emissions calculations are provided in Appendix B.

MM-AQ-1 Construction Equipment Emission Reductions. Prior to the commencement of construction activities for the project, the project Applicant shall require its construction contractor(s) to use California Air Resources Board (CARB)-certified Tier 4 Final engines for all diesel-powered equipment that are 100 horsepower or greater throughout all phases of project construction.

In the event of changed circumstances (e.g., changes in the availability of specific types of construction equipment), the project Applicant may submit a request to San Bernardino County Land Use Services Department (County) to apply an equivalent method of achieving project-

generated construction emissions that fall below the numeric criteria air pollutant thresholds established by the Mojave Desert Air Quality Management District (MDAQMD). Documentation using industry-standard emission estimation methodologies shall be furnished to the County demonstrating that estimated project-generated construction emissions would not exceed the applicable MDAQMD criteria air pollutant thresholds with the alternate construction method(s). If the documentation demonstrates that project-generated construction emissions remain below the applicable MDAQMD criteria air pollutant thresholds, then the County may approve the alternate construction method(s), at the County's discretion. In addition, before a request for equivalent method of achieving project-generated construction emissions below thresholds may be granted, the project Applicant's construction contractor shall demonstrate that at least two construction fleet owners/operators in the County were contacted and those owners/operators confirmed Tier 4 final equipment could not be located within the County during the desired construction schedule.

MM-AQ-2 Construction volatile organic compounds (VOC) Emission Reductions. During construction, the construction contractor shall use super-compliant low volatile organic compound (VOC) paint (less than 10 grams per liter VOC) for all interior and exterior paint applications for nonresidential land uses.

Impact 3.2-2 The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Construction and operation of the project would result in emissions of criteria air pollutants, which may result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the MDAB is designated as nonattainment under the NAAQS or CAAQS. As shown in Table 3.2-1, the area of the MDAB in which the project is located is a nonattainment area for $O_3$ and $PM_{10}$ under the NAAQS and/or CAAQS. All other pollutants under the NAAQS or CAAQS are either in attainment or are not classified.

Past, present, and future development projects may contribute to adverse air quality impacts in the MDAB on a cumulative basis. By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the MDAQMD develops and implements plans for future attainment of AAQS. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would result in a cumulatively considerable net increase of any criteria pollutant. If a project's emissions would exceed the applied significance thresholds, it would result in a cumulatively considerable net increase in criteria pollutants. Conversely, projects that do not exceed project-specific thresholds are generally not considered to be cumulatively significant.

### Short-Term Construction Impacts

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., vendor trucks and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

Project construction would generate air pollutant emissions from entrained dust, off-road equipment, and vehicle emissions. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in $PM_{10}$ and $PM_{2.5}$ emissions. The project would be required to comply with MDAQMD Rule 403 to control dust emissions generated during grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites two times per day depending on weather conditions. The project would also require an off-road speed limit of 25 miles per hour. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, $NO_x$, CO, $PM_{10}$, and $PM_{2.5}$.

As shown in Table 3.2-10, maximum daily construction emissions would not exceed the MDAQMD significance thresholds for CO, $SO_x$, $PM_{10}$, or $PM_{2.5}$. However, even with compliance with Rule 403 the project would exceed the MDAQMD thresholds for $NO_x$ and VOC during construction. Therefore, impacts related to construction would be potentially significant.

### Table 3.2-10. Estimated Construction Criteria Air Pollutant Emissions – Unmitigated

| Year | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Daily (pounds per day)** | | | | | | |
| 2027 | 32.9 | 147 | 464 | 0.69 | 80.4 | 25.4 |
| 2028 | 500 | 124 | 399 | 0.57 | 79.5 | 21 |
| Maximum | 500 | 147 | 464 | 0.69 | 80.4 | 25.4 |
| *MDAQMD Threshold* | *137* | *137* | *548* | *137* | *82* | *65* |
| **MDAQMD Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |

**Source:** Appendix B.
**Notes:** VOC = volatile organic compounds; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; MDAQMD = Mojave Desert Air Quality Management District.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect compliance with MDAQMD Rule 403 (Fugitive Dust), including watering of the project site and unpaved roads two times per day.

## Long-Term Operational Emissions

Operation of the project would generate criteria pollutant emissions from mobile sources, including vehicle trips from passenger vehicles and heavy-duty trucks; and area sources, including the use of consumer products. Table 3.2-11 presents the annual area, energy, off-road, stationary and mobile emissions associated with the project's first full year of operation (2028). Details of the emission calculations are provided in Appendix B.

### Table 3.2-11. Estimated Operational Criteria Air Pollutant Emissions – Unmitigated

| Emission Source | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Daily (pounds per day)** | | | | | | |
| **Summer** | | | | | | |
| Mobile | 16.8 | 111 | 190 | 1.47 | 78 | 21.9 |
| Mobile (EV Diverted Trip Tire and Brake Wear) | N/A | N/A | N/A | N/A | 0.56 | 0.18 |
| Area | 67.1 | 0.82 | 97.5 | 0.01 | 0.17 | 0.13 |
| Energy | 0.01 | 0.09 | 0.08 | <0.005 | 0.01 | 0.01 |

**Table 3.2-11. Estimated Operational Criteria Air Pollutant Emissions – Unmitigated**

| Emission Source | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Daily (pounds per day)** | | | | | | |
| **Total** | **83.91** | **111.91** | **287.58** | **1.48** | **78.7** | **22.04** |
| **Winter** | | | | | | |
| Mobile | 15.2 | 117 | 146 | 1.43 | 78 | 21.9 |
| Mobile (EV Diverted Trip Tire and Brake Wear) | N/A | N/A | N/A | N/A | 0.56 | 0.18 |
| Area | 51.1 | - | - | - | - | - |
| Energy | 0.01 | 0.09 | 0.08 | <0.005 | 0.01 | 0.01 |
| **Total** | **66.31** | **117.09** | **146.08** | **1.43** | **78.6** | **21.91** |
| *MDAQMD Threshold* | *137* | *137* | *548* | *137* | *82* | *65* |
| **MDAQMD Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Source:** Appendix B.
**Notes**: VOC = volatile organic compounds; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter
Totals may not sum due to rounding.

As shown in Table 3.2-11, the daily and annual operational emissions for the project would not exceed MDAQMD for any criteria air pollutant. As discussed in Section 3.2.1, the MDAB has been designated as a state nonattainment area for $O_3$ and $PM_{10}$. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the MDAB including motor vehicles, off-road equipment, and commercial and industrial facilities. The project would not exceed MDAQMD emission-based significance thresholds for any criteria air pollutant during operation and impacts would be less than significant.

### Mitigation Measures

Compliance with mitigation measures MM-AQ-1 and MM-AQ-2 would reduce short-term construction $NO_x$ and VOC emissions to below MDAQMD thresholds, as shown in Table 3.2-12. Details of the emission calculations are provided in Appendix B. Emissions of criteria air pollutants would therefore be **less than significant with mitigation.**

**Table 3.2-12. Estimated Construction Criteria Air Pollutant Emissions – Mitigated**

| Year | VOC | NOx | CO | SOx | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| **Daily (pounds per day)** | | | | | | |
| 2027 | 29 | 124 | 502 | 0.69 | 79.5 | 21.0 |
| 2028 | *105* | *109* | *407* | *0.57* | *79.0* | *20.5* |
| Maximum | 105 | 124 | 502 | 0.69 | 79.5 | 21.0 |
| *MDAQMD Threshold* | *137* | *137* | *548* | *137* | *82* | *65* |
| **MDAQMD Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Source:** Appendix B.
**Notes:** VOC = volatile organic compounds; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter
Emissions include application of MM-AQ-1 and MM-AQ-2.

Impact 3.2-3 The proposed project would not expose sensitive receptors to substantial pollutant concentrations.

## Health Effects of Toxic Air Contaminants

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as TACs or hazardous air pollutants. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and has adopted appropriate control measures for sources of these TACs. For example, the following measures are required by state law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (13 CCR 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

As previously discussed, the closest off-site sensitive receptors include residential uses adjacent to the project site's boundary to the south. DPM emissions, which are considered TACs, would be emitted from off-road equipment operations and heavy-duty trucks during project construction activities. Such activities could result in TAC exposure to existing sensitive land uses during construction. Off-road construction equipment and commercial trucks are subject to CARB Airborne Toxic Control Measures to reduce DPM emissions. According to the Office of Environmental Health Hazard Assessment, HRAs, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should also be limited to the period/duration of activities associated with the project. Total project construction is anticipated to occur over a temporary period over the course of 18 months, from April 2027 through September 2028. Health effects from carcinogenic air toxics are usually described in terms of cancer risk.

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have noncarcinogenic effects.

## Construction and Operation Health Risk

### *Construction Health Risk*

Although construction activities of the proposed project are short-term and variable, a construction HRA was performed for the proposed project to evaluate the risk from diesel exhaust emissions on existing proximate off-site sensitive receptors. The HRA methodology was described above under the Methods of Analysis and a detailed assessment is provided in Appendix B. Table 3.2-13 summarizes the results of the HRA for the project's construction activities.

**Table 3.2-13. Construction Health Risk Assessment Results – Unmitigated**

| Impact Parameter | Units | Project Impact | CEQA Threshold | Level of Significance |
|---|---|---|---|---|
| Maximum Individual Cancer Risk – Residential | Per Million | 7.23 | 10 | Less than Significant |
| Chronic Hazard Index – Residential | Index Value | 0.006 | 1.0 | Less than Significant |

**Source**: Appendix B.
**Note**: CEQA = California Environmental Quality Act.

As shown in Table 3.2-13, project construction activities would result in a Maximum Individual Cancer Risk of 7.23 in 1 million at the nearest residence, which is less than the significance threshold of 10 in 1 million. Project construction would result in a Chronic Hazard Index of 0.006, which is below the 1.0 significance threshold. Therefore, project construction TAC health risk impacts would be less than significant.

### *Operation Health Risk*

The health effects of exposure to long-term operation of the project was also evaluated. As shown in Table 3.2-14, potential impacts associated with exposure of sensitive receptors to TACs would be less than significant.

**Table 3.2-14. Operational Health Risk Assessment Results - Unmitigated**

| Impact Parameter | Units | Project Impact | CEQA Threshold | Level of Significance |
|---|---|---|---|---|
| Maximum Individual Cancer Risk – Residential | Per Million | 3.87 | 10 | Less than Significant |
| Chronic Hazard Index – Residential | Index Value | 0.001 | 1.0 | Less than Significant |

**Source**: Appendix B.
**Note**: CEQA = California Environmental Quality Act

## Health Effects of Criteria Air Pollutants

Construction of the project would result in emissions that would not exceed the MDAQMD thresholds for criteria air pollutants, including VOC and $NO_x$, after implementation of mitigation measures MM-AQ-1 and MM-AQ-2 (see Impact 3.2-2). Operation of the project would not result in emissions that would exceed the MDAQMD thresholds for any criteria air pollutants. The following provides a brief discussion of the health effects of criteria air pollutants. Please see Appendix B for a more in-depth discussion.

VOCs and $NO_x$ are precursors to $O_3$, for which the MDAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and $NO_x$ to regional ambient $O_3$ concentrations is the result of complex photochemistry. The increases in $O_3$ concentrations in the MDAB due to $O_3$ precursor emissions tend to be found downwind of the source location because of the time required for photochemical reactions to occur. Further, the potential for exacerbating excessive $O_3$ concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the $O_3$ NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, attempting to quantify the holistic effect of a single project's emissions of $O_3$ precursors would be speculative. That being said, because the project would not exceed the MDAQMD VOC and $NO_x$ thresholds during project construction

with mitigation and would not exceed the MDAQMD VOC and $NO_x$ thresholds during project operations without mitigation, the project would not contribute to health effects associated with $O_3$.

Project-related $NO_x$ emissions would not exceed the MDAQMD construction mass daily thresholds with mitigation and would not exceed the MDAQMD mass daily thresholds without mitigation during operation. Because the MDAB is a designated attainment area for $NO_2$ (and $NO_2$ is a constituent of $NO_x$) and the existing $NO_2$ concentrations in the area are well below the NAAQS and CAAQS standards,[9] it is not anticipated that the project would cause an exceedance of the NAAQS and CAAQS for $NO_2$ or result in potential health effects associated with $NO_2$ and $NO_x$.

CO tends to be a localized impact associated with congested intersections and is discussed in detail under a separate heading below.

Construction and operation of the project would not exceed the MDAQMD threshold for $PM_{10}$. As such, the project would not contribute to exceedances of the NAAQS and CAAQS for particulate matter and would not obstruct the MDAB from coming into attainment for these pollutants, and the project would not result in associated health effects.

The California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (December 24, 2018) addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences and requires correlating an individual project's criteria air pollutant emissions to specific health impacts. Because national and state AAQS are focused on achieving a particular emissions concentration region-wide, the tools and plans for attaining the AAQS are regional in nature. For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the AAQS, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of $O_3$ or PM that would be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

It has been determined by several air districts that attempting to identify a change in background pollutant concentrations that can be attributed to a single project is a theoretical exercise and it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the models are equipped to model the impact of all emission sources in an air basin on attainment and would likely not yield valid information or a measurable increase in $O_3$ concentrations sufficient to accurately quantify $O_3$-related health impacts for an individual project.

Nonetheless, following the Supreme Court's Friant Ranch decision, some EIRs have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model[10] and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition [CE]).[11] The publicly available

9 See Table 3.2-2, which shows that ambient concentrations of $NO_2$ at the Victorville monitoring station have not exceeded the NAAQS or CAAQS between 2019 and 2021.

10 The first step in the publicly available HIAs includes running a regional photochemical grid model, such as the Community Multiscale Air Quality (CMAQ) model or the Comprehensive Air Quality Model with extensions (CAMx) to estimate the increase in concentrations of $O_3$ and $PM_{2.5}$ as a result of project-generated emissions of criteria and precursor pollutants. Air districts use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2017).

11 After estimating the increase in concentrations of $O_3$ and $PM_{2.5}$, the second step in the five examples includes use of BenMAP or BenMAP-CE to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting

health impact assessments (HIAs) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from a project's estimated increase in concentrations of $O_3$ and $PM_{2.5}$.[12] To date, the five publicly available HIAs reviewed have concluded that the evaluated projects' health effects associated with the estimated project-generated increase in concentrations of $O_3$ and $PM_{2.5}$ represent a small increase in incidences and a very small percentage of the number of background incidences, indicating that these health impacts are negligible and potentially within the models' margin of error. It is also important to note that, while the results of the five available HIAs conclude that project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity is also conservatively inputted into the HIA and thus, overestimate health incidences, particularly for $PM_{2.5}$.

In summary, while project operation would not exceed the MDAQMD significance thresholds for any criteria pollutant, construction of the project without mitigation would temporarily exceed $NO_x$ and VOC resulting in a potentially significant impact, as VOCs and $NO_x$ are precursors to $O_3$, for which the MDAB is designated as nonattainment with respect to the NAAQS and CAAQS and where the NAAQS and CAAQS are designed to protect public health.

### Health Impacts of Carbon Monoxide

Mobile-source impacts, including those related to CO, occur essentially on two scales of motion. Regionally, project-related vehicle travel would add to regional trip generation and increase the VMT within the local airshed and the MDAB. Locally, construction and operational traffic would be added to the roadway system in the vicinity of the project site. Although the MDAB is currently an attainment area for CO, there is a potential for the formation of microscale CO "hotspots" to occur immediately around points of congested traffic. Hotspots can form if such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and/or is operating on roadways crowded with non-project traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the MDAB is steadily decreasing.

During construction, the project would generate trips associated with construction worker vehicles and vendor and haul trucks. Title 40 of the California Code of Regulations, Section 93.123(c)(5), Procedures for Determining Localized CO, $PM_{10}$, and $PM_{2.5}$ Concentrations (hot-spot analysis), states that "CO, $PM_{10}$, and $PM_{2.5}$ hot-spot analyses are not required to consider construction-related activities, which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site" (40 CFR 93.123). While project construction would involve on-road vehicle trips from trucks and workers during construction, construction activities would be temporary and last up to approximately 18 months; therefore, a project-level construction hotspot analysis is not required.

As discussed above, high CO concentrations would be associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic

from changes in air pollution concentrations. The health impact function in BenMAP-CE incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. All of the five example HIAs focused on $O_3$ and $PM_{2.5}$.

12 The following CEQA documents included a quantitative HIA to address Friant Ranch: (1) California State University Dominguez Hills 2018 Campus Master Plan EIR (CSUDH 2019), (2) March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA 2019), (3) Mineta San Jose Airport Amendment to the Airport Master Plan EIR (City of San Jose 2019), (4) City of Inglewood Basketball and Entertainment Center Project EIR (City of Inglewood 2019), and (5) San Diego State University Mission Valley Campus Master Plan EIR (SDSU 2019).

impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact (i.e., LOS E or worse) at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. According to the project's Local Transportation Assessment, operation of nearby intersections would not operate at an unacceptable LOS after the project is constructed and in operation (Appendix L). As such, potential project-generated impacts associated with CO hotspots would be less than significant.

### Valley Fever

As discussed in Section 3.2.1, Valley Fever is not highly endemic to San Bernardino County as the latest report from the California Department of Public Health listed Riverside County as having 1.4 -- 10.4 cases per 100,000 people (California Department of Public Health 2019). The proposed project would employ dust mitigation by watering two times per day and limiting speed on unpaved roads to 25 miles per hour in compliance with MDAQMD regulations. The project would comply with MDAQMD Rule 403, which limits the amount of fugitive dust generated during construction and also minimizes the release of the *Coccidioides immitis fungus* from construction activities. Therefore, with respect to Valley Fever exposure for sensitive receptors, primarily construction workers and nearby residences, the project impact would be less than significant.

### Mitigation Measures

Compliance with mitigation measures MM-AQ-1 and MM-AQ-2 would reduce the impact regarding health effects from criteria air pollutants to less than significant. Project operation would not exceed the MDAQMD significance thresholds for any criteria air pollutant. Thus, the project would not result in significant health effects associated with any criteria air pollutants. The project is not anticipated to result in health effects associated with criteria air pollutants and the potential health effects associated with these criteria air pollutants is considered **less than significant with mitigation**.

No additional mitigation is required. Refer to MM-AQ-1 and MM-AQ-2 described under Impact 3.2.-1.

Impact 3.2-4 The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints. Land uses and industrial operations associated with odor complaints typically include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993).

Odors potentially would be generated from vehicles and equipment exhaust emissions during construction activities. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. The project would not create any new sources of odor from these types of operations. Therefore, impacts associated with odors during project construction and operation would be **less than significant**.

## Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

As discussed in Impact 3.2-1, the project would directly support SCAG's policies and strategies and promote and support low emission technologies for transportation through the development of an EV charging station to serve light duty/passenger vehicles and medium and heavy-duty trucks, secondarily supporting MDAQMD plans including the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the MDAB through the reduction of vehicular combustion emissions. In addition, the project's cumulative effect on VMT was found to be unchanged or below the County's adopted impact threshold of no net increase in VMT per service population with project conditions and the project would be supportive of the 2024–2050 RTP/SCS and reducing GHGs and collaterally $PM_{2.5}$ and ozone precursor pollutants. However, the project would exceed the MDAQMD's thresholds for $NO_x$ and VOC during construction, as discussed under Impact 3.2-2 and thus, would potentially conflict with the MDAQMD plans including the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the MDAB. As discussed below, exceedance of an MDAQMD threshold for criteria air polluants is consdered an inherently cumulative impact, and thus a separate cumulative impact determination is not required.

The analysis of increases in criteria air pollutants for which the region is in non-attainment is also an inherently cumulative issue, as stated in the CEQA Guidelines Appendix G impact question. The nonattainment status of regional pollutants is a result of past and present development, and the MDAQMD develops and implements plans for future attainment of AAQS. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Individual projects that do not generate operational or construction emissions that exceed the MDAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the MDAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact.

The area of the MDAB in which the project is located is a nonattainment area for $O_3$ and $PM_{10}$ under the NAAQS and/or CAAQS. The poor air quality in the MDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOC and $NO_x$ for $O_3$) potentially contribute to poor air quality. Project construction would contribute to $NO_x$ and VOC, resulting in a potentially significant cumulative impact, as stated in Impact 3.2-2. However, implementation of MM-AQ-1 and AQ-2 would reduce the project's contribution to a less than significant with mitigation.

Impact 3.2-5 The proposed project would not result in cumulatively considerable exposure by sensitive receptors to pollution concentrations or other emissions (such as those leading to odors).

As discussed above regarding sensitive receptors, emissions of TACs during construction and operation would not exceed applicable thresholds for sensitive receptors. Additionally, CARB has established that diesel PM concentrations are substantially reduced at approximately 1,000 feet from their source (CARB 2005). Given the distance of potential other construction projects combined with the site-specific impacts of meteorologic conditions, i.e. effects of wind direction and wind speed on DPM dispersion, DPM emissions from construction of overlapping construction projects would be unlikely to have the same maximum impact receptors. Construction of the project would result in emissions that would not exceed the MDAQMD thresholds for criteria air pollutants, including VOC

and $NO_x$, after implementation of mitigation measures MM-AQ-1 and MM-AQ-2 (see Impact 3.2-2). As such, with mitigation, the project would not exceed the ambient air quality standards for criteria air pollutants during construction. Operation of the project would not result in emissions that would exceed the MDAQMD thresholds for any criteria air pollutants. The project would also not cause or create a CO hotspot. Therefore, the project would not contribute to a cumulatively considerable impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

Odor impacts are generally limited to the immediate area surrounding the source. As stated in Impact 3.2-4, the project would result in a less than significant impact during construction and operation. Therefore, the project would not contribute to a cumulatively considerable impact regarding other emissions, such as those leading to odors, which would adversely affect a substantial number of people.

The cumulative impact would therefore be **less than significant.**

### Mitigation Measures

No mitigation measures are required.

## 3.2.4 References

BAAQMD. 2017. CEQA Air Quality Guidelines. May 2017. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf.

CAPCOA. 2024. CalEEMod User Guide Version 2022.1.1.22 April. Available: https://www.caleemod.com/user-guide. Accessed February 2024.

CARB (California Air Resources Board). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October 2000. Accessed August 2016. http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf.

CARB. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005. Accessed August 2016. http://www.arb.ca.gov/ch/landuse.htm.

CARB. 2016a. "Glossary of Air Pollution Terms." CARB website. Accessed March 2023. http://www.arb.ca.gov/html/gloss.htm.

CARB. 2016b. "Overview: Diesel Exhaust and Health." April 12, 2016. Accessed December 2016. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

CARB. 2021b. "Ozone & Health." Accessed November 17, 2021. https://ww2.arb.ca.gov/resources/ozone-and-health.

CARB. 2021c. "Nitrogen Dioxide & Health." Accessed November 17, 2021. https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health.

CARB. 2021d. "Carbon Monoxide & Health." Accessed November 17, 2021. https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health.

CARB. 2021e. “Sulfur Dioxide & Health.” Accessed November 17, 2021. https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health.

CARB. 2021f. “Inhalable Particulate Matter and Health (PM2.5 and PM10).” Accessed November 17, 2021. https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm.

CARB. 2022. Maps of State and Federal Area Designations. November. Available: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed March 2023.

CARB. 2023. iADAM Air Quality Data Statistics: Top 4 Measurements and Days Above the Standard. Available: https://www.arb.ca.gov/adam. Accessed March 2023.

CARB. 2024. “Ambient Air Quality Standards.” July 16, 2024. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.

CDPH (California Department of Public Health). 2019. Epidemiologic Summary of Coccidioidomycosis in California, 2019. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciEpiSummary2019.pdf.

CIMIS (California Irrigation Management Information System). 2021. CIMIS Monthly Report Victorville Station. Accessed November 17, 2021. https://cimis.water.ca.gov/UserControls/Reports/MonthlyReportViewer.aspx

EPA. 2017. “Climate Change.” Last updated January 19, 2017. Accessed January 2017. https://www.epa.gov/climatechange.

EPA. 2020. Integrated Science Assessment for Ozone and Related Photochemical Oxidants. April 2020. Accessed November 17, 2021. https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NCEA&dirEntryId=348522#:~:text=The%20Integrated%20Science%20Assessment%20for%20Ozone%20and%20Related,Related%20Photochemical%20Oxidants%20under%20the%20Clean%20Air%20Act.

EPA. 2021. “Criteria Air Pollutants.” August 16, 2021. Accessed November 17, 2021. https://www.epa.gov/criteria-air-pollutants. EPA. 2023a. Outdoor Air Quality Data: Monitor Values Report. Accessed March 2023. https://www.epa.gov/outdoor-air-quality-data/monitor-values-report.

MDAQMD (Mojave Desert Air Quality Management District). 1995. Final Mojave Desert Planning Area Federal PM10 Attainment Plan. July 31, 1995. Accessed November 17, 2021. Available https://www.mdaqmd.ca.gov/home/showpublisheddocument/176/636305689057870000.

MDAQMD. 2008. Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-Attainment Area). Adopted June 9, 2008. Accessed November 2021.

MDAQMD. 2016. “MDAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines.” MDAQMD, Planning, Rule Making and Grants Section, Air Monitoring Section. August 2016. Accessed November 17, 2021. https://www.mdaqmd.ca.gov/home/showdocument?id=192.

MDAQMD. 2020. California Environmental Quality Act and Federal Conformity Guidelines. February. Available: https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000. Accessed March 2023.

NRC (National Research Council). 2005. Interim Report of the Committee on Changes in New Source Review Programs for Stationary Sources of Air Pollutants. Washington, DC: The National Academies Press. https://doi.org/10.17226/11208.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.* California Environmental Protection Agency, OEHHA. February 2015.

San Bernardino County. 2020. County Policy Plan. Natural Resources. Last Updated October 27, 2020. https://countywideplan.sbcounty.gov/policy-plan/natural-resources/.

SCAG. 2024. Connect SoCal. Adopted April 4, 2024. https://scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1714175547

SCAQMD (South Coast Air Quality Management District). 1993. CEQA Air Quality Handbook.

SCAQMD. 2003. White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. August 2003. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2.

SCAQMD. 2015. Brief of Amicus Curiae in Support of Neither Party, Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-airquality-mgt-dist-041315.pdf.

SJVAPCD. 2015. Brief of Amicus Curiae in Support of Defendant And Respondent, County Of Fresno, And Real Party In Interest And Respondent, Friant Ranch, L.P., Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-airpollution-control-dist-041315.pdf.

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# 3.3 Biological Resources

This section describes the existing conditions related to biological resources, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to project implementation of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

Comments received in response to the Notice of Preparation (NOP) included a letter from the California Department of Fish and Wildlife (CDFW) and a letter from the Desert Tortoise Council. The CDFW letter included recommendations for analysis of wildlife and species to be included in the EIR. CDFW also identified special-status species that the project site has the potential to support, that includes burrowing owl, Mohave ground squirrel, Mohave fringe-toed lizard, Swainson's hawk, Crotch's bumble bee and Agassiz's desert tortoise. The project site is comprised of sparse vegetation and generally lacking floral resources, particularly those preferred by Crotch's bumblebee, as confirmed by the plant surveys. Further, the closest recent as well as historical records for Crotch's bumble bee are at least 19 miles from the project site. Given both the lack of floral resources and the lack of records within the vicinity of the project site, Crotch's bumble bee is not expected to occur on site and is therefore not further evaluated. The letter from the Desert Tortoise Council raised concerns about the Mojave Desert tortoise and requested tortoise protocol surveys be performed throughout the site to determine the full extent of impacts to tortoises. The comment also raised concerns for other special-status species. Concerns raised in the NOP comment letters are addressed in this section. Appendix A includes the NOP and comment letters received.

The biological resources analysis is based on data and review of information contained in the Biological Resources Technical Report for the Electric Vehicle Charging Station and Logistics Facility (Appendix C), and the San Bernardino Countywide Plan/Policy Plan (San Bernardino County 2022) and associated environmental impact report (EIR) (San Bernardino County 2019).

## 3.3.1 Environmental Setting

The following discussion summarizes the existing biological resources present within the project site and off-site areas. A description of the existing vegetation communities, special-status species, jurisdictional waters, including wetlands, and wildlife corridors are discussed below. This section of the EIR analyzes the entire project site (99.85 acres) and off-site improvement areas (2.3 acres) for direct and indirect impacts. This area constitutes the project's approximately 102.15-acre biological survey area (BSA).

### Climate

The project site is west of the City of Barstow within unincorporated San Bernardino County. The average annual temperature in Barstow ranges from 47.3°F to 88.1°F (ACIS 2026). The average annual precipitation for Barstow is 4.19 inches (ACIS 2026). Periods of extended drought are common throughout the region.

### Topography and Soils

The project site is composed of undeveloped vacant lands bisected by dirt roads. The topography within the BSA consists of a gradually sloping plain. The undeveloped project site is located at the southern edge of the Mojave Desert, approximately four miles west of downtown Barstow within unincorporated San Bernardino County (County) In the Desert Region in the City of Barstow's Sphere of Influence. Elevation ranges from approximately 2,197 feet

above mean sea level (amsl) in the northern portion of the project site to 2,272 feet amsl in the southern portion of the site. Adjacent land uses include large-lot rural residential areas and Agate Road to the north, residential areas and Birch Road to the east, residential areas (High Desert Estates) and Jasper Road to the south, and Lenwood Road and undeveloped areas to the west.

According to the U.S. Department of Agriculture Natural Resource Conservation Service's Web Soil Survey (USDA 2023), the project site consists of seven soil map units: Cajon sand (2% to 9% slopes); Joshua loam (2% to 5% slopes); Rosamond loam, saline-alkali; Victorville sandy loam (0% to 2% slopes); Villa loamy sand (0% to 2% slopes); dune lands; and rock outcrop-lithic torriorthents complex (15% to 50% slopes). These soil types are presented in Figure 3.3-1, Soils. The soil types are discussed further in Appendix C (the Biological Resources Technical Report).

## Vegetation Communities and Land Covers

There are two vegetation communities and two land cover types within the project site, as identified in Table 3.3-1 and Figure 3.3-2, Biological Resources. The project site is comprised of *Atriplex polycarpa* sparse playa, *Larrea tridentata–Atriplex polycarpa*, and small portions of disturbed habitat and urban/developed land. Representative site photographs are included in Appendix C.

Vegetation communities within the project site were mapped using the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018) and the California Natural Communities List (CDFW 2025), also referred to as the Natural Communities List, based on A Manual of California Vegetation, Online Edition (CNPS 2026b).

### Table 3.3-1. Vegetation Communities and Land Cover Types within the BSA

| Floristic Alliance | Association[1] | State Ranking[2] | Project Site (acres) | Off-Site (acres) | Total BSA (acres) |
|---|---|---|---|---|---|
| Allscale Scrub | *Atriplex polycarpa sparse playa* | G4/S4 | 49.38 | 0.001 | 49.38 |
| Creosote Bush Scrub | *Larrea tridentata–Atriplex polycarpa* | G5/S5 | 49.65 | 0.064 | 49.71 |
| Disturbed Habitat | N/A | GNR/SNR | 0.820 | 1.12 | 1.94 |
| Urban/Developed | N/A | GNR/SNR | 0.007 | 1.11 | 1.12 |
| | | **Total[3]** | **99.85** | **2.30** | **102.15** |

**Source:** Appendix C.
**Notes:** N/A = not applicable.
1 The spatial distribution of the vegetation communities and land covers are presented in Figure 3.3-2, Biological Resources.
2 The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). The numbers have the following meaning (NatureServe 2023):
1 = critically imperiled: At very high risk of extinction or collapse due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
2 = imperiled: At high risk of extinction or collapse due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
3 = vulnerable to extirpation or extinction: At moderate risk of extinction or collapse due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
4 = apparently secure: At fairly low risk of extinction or collapse due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
5 = demonstrably widespread, abundant, and secure: At very low risk or extinction or collapse due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
GNR = unranked, global rank not yet assessed
SNR = unranked, subnational rank not yet assessed

[3] Total acreages may not sum exactly due to rounding.

### Allscale Scrub

The allscale scrub (*Atriplex polycarpa)* shrubland alliance includes allscale scrub as the dominant species in the shrub canopy. Shrubs are less than 3 meters (9 feet 8 inches) tall, with an open to continuous canopy; emergent trees may be present but at low cover (CNPS 2026b). The allscale scrub alliance is ranked by the CDFW as a G4S4 alliance. This ranking indicates that globally and within California the alliance is apparently secure (CDFW 2026b; NatureServe 2023); therefore, the community is not considered sensitive under CEQA. The only association within the alliance mapped on site was *Atriplex polycarpa* sparse playa. Associated species observed within this alliance in the field include allscale scrub, pale desert thorn (*Lycium pallidum*), with some four-wing salt bush (*Atriplex canescens)* and shadscale (*Atriplex confertifolia*) present at lower cover. Allscale scrub covers approximately 50% of the project site and is comprised of a large patch that extends from the central to the northern portion of the site.

### Creosote Bush Scrub

Creosote bush (*Larrea tridentata*) shrubland alliance, includes creosote bush as the dominant or co-dominant species in the shrub canopy. Creosote bush scrub has an open shrub canopy of less than 3 meters (9 feet 8 inches) tall, with an open to intermittent herbaceous layer of annuals and perennial grasses (CNPS 2026b). The creosote bush alliance is ranked by the CDFW as a G5S5 alliance. This ranking indicates that globally and within California the alliance is widespread, abundant, and secure (CDFW 2026b; NatureServe 2023); therefore, the community is not considered sensitive under CEQA. The only association within the alliance mapped on site was *Larrea tridentata–Atriplex polycarpa.* Associated species observed within this alliance in the field include creosote, longleaf joint-fir (*Ephedra trifurca*), and allscale scrub. The creosote bush alliance covers approximately 50% of the project site and is comprised of two large patches in the northern and southern portions of the site (Figure 3.3-2).

### Disturbed Habitat

Although not recognized by the Natural Communities List (CDFW 2025), disturbed habitat refers to areas that have had anthropogenic disturbance and, as a result, cannot be identified as a native or naturalized vegetation association. However, these areas do have a recognizable soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species. Disturbed habitat is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2025).

Disturbed habitat within the BSA consists of maintained areas immediately adjacent to Lenwood Road that appear to have been recently graded or appear to be somewhat regularly maintained (Figure 3.3-2).

### Urban/Developed

While not recognized by the Natural Communities List (CDFW 2025), urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping. Urban/developed land is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2025).

The urban/developed land cover within the BSA consists of Lenwood Road, which is a paved roadway that runs along the western boundary of the BSA.

## Special-Status Plants

Special-status plants include those listed, or candidates for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and CDFW, species identified as rare by the California Native Plant Society (CNPS) (particularly California Rare Plant Rank (CRPR 1A), presumed extinct in California; CRPR 1B, rare, threatened, or endangered throughout its range; and CRPR 2, rare or endangered in California, more common elsewhere).

Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status plant species to occur within the project site. Based on the results of the literature review and database searches, 12 special-status plant species were reported in the California Natural Diversity Database (CNDDB) and CNPS databases as occurring in the nine U.S. Geological Survey 7.5-minute quadrangles containing and surrounding the project site. Each special-status plant species was assigned a rating of "not expected," "low," "moderate," or "high" potential to occur based on relative location to known occurrences, vegetation community, soil, and elevation; the results of this analysis are provided in Appendix C.

All 12 special-status plant species were determined to have a low potential to occur or are not expected to occur within the BSA based on the soils, vegetation communities (habitat) present, elevation range, and previous known location. While none of the special-status plant species were determined to have a moderate or high potential to occur, out of an abundance of caution, Dudek botanists conducted a special-status plant survey (i.e., rare plant survey) concurrently with the desert native plant survey, which is discussed below, within the project site. This survey was conducted during the blooming period for the 12 special-status species identified by the database search. No listed or non-listed CRPR 1 or CRPR 2 plants were observed during the 2023 survey efforts; however, one CRPR 4.2 species, Mojave spineflower (*Chorizanthe spinosa*) was observed during the survey effort.

The off-site area located along Lenwood Road is comprised entirely of either urban developed lands or disturbed habitat and does not provide suitable habitat for any of the 12 special-status plant species identified in the literature review and database searches; therefore, a focused survey for special-status plants was not warranted for this area. The off-site area located along the eastern boundary of the project site is continuation of the creosote bush scrub mapped immediately adjacent to this area within the project site. Given the similarity in habitat, proximity to already surveyed areas where survey results for special-status plants were negative, and the small size of this off-site area (i.e., less than 0.1 acre), it was determined that a special-status plant survey was not warranted for this off-site area.

In addition, there is no USFWS-designated critical habitat for listed plant species overlapping or immediately adjacent to the BSA and the BSA occurs outside the CDFW distribution for western Joshua tree (USFWS 2023b; CDFW 2020). Appendix F of Appendix C includes all special-status plants known to occur within the vicinity of the project and their potential to occur.

## Desert Native Plants

Dudek botanists conducted a desert native plant survey to comply with the CDNPA and in support of the project. This survey was conducted concurrently with a special-status plant (i.e., rare plant) survey, resulted in the detection of silver cholla (*Cylindropuntia echinocarpa*) within the project site. No other desert native plants were detected during the survey efforts.

## Special-Status Wildlife

Special-status wildlife include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW and those designated as fully protected or Species of Special Concern by CDFW. Similar to special-status plants, Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status wildlife species to occur within the project site. Each special-status wildlife species was assigned a rating of "not expected," "low," "moderate," or "high" potential to occur based on relative location to known occurrences and vegetation community/habitat association; the detailed results of this analysis are provided in Appendix C. Listed species with any potential to occur and non-listed special-status species with a moderate or higher potential to occur are discussed below and shown in Table 3.3-2. Those special-status wildlife species that are not expected or have low potential to occur in the project site are also included in Appendix C; however, these species are not discussed further because no significant direct or indirect impacts are expected.

Focused surveys for the Mojave desert tortoise determined that there were no live desert tortoises or desert tortoise sign (i.e., burrows, scat, or carcasses) within the project site. In addition, there is no USFWS-designated critical habitat for listed wildlife species overlapping or immediately adjacent to the project site (USFWS 2023b). The closest designated critical habitat for Mojave desert tortoise is located approximately 2.2 miles from the project site. The project site also does not contain nursery sites, such as bat colony roosting sites or colonial bird nesting areas (Appendix C).

Loggerhead shrike was incidentally observed on site during the 2023 biological reconnaissance survey and an active desert kit fox (*Vulpes macrotis arsipus*) den and at least one desert kit fox individual was observed on site during the 2023 survey efforts (which included camera trapping for Mohave ground squirrel). Four additional special-status wildlife species were determined to have at least a moderate or high potential to occur within the project site: burrowing owl (*Athene cunicularia*), LeConte's thrasher (*Toxostoma lecontei*), Mohave ground squirrel (*Spermophilus [Xerospermophilus] mohavensis*), and Mohave fringe-toed lizard (*Uma scoparia*).

Focused surveys conducted for Mohave ground squirrel resulted in the capture of round-tailed ground squirrels (*Xerospermophilus tereticaudus*), including some individuals that had physical characteristics of Mohave ground squirrel (i.e., flatter tail and brown dorsal pelage), indicating the potential for the presence of hybridized individuals, but no Mohave ground squirrels were identified. These species are listed in Table 3.3-2 and discussed in more detail below and in Appendix C.

### Table 3.3-2. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Biological Survey Area

| Scientific Name | Common Name | Status (Federal/ State) | Habitat | Potential to Occur[1] |
|---|---|---|---|---|
| **Birds** | | | | |
| *Athene cunicularia* (burrow sites and some wintering sites) | burrowing owl | BCC/SCE | Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows | **High potential to occur**. The BSA contains open scrub habitat, with some small mammal and desert kit fox burrows. No burrowing owls or sign of burrowing owl were observed on site. The nearest mapped CNDDB record is approximately 1 mile southeast of the BSA (CDFW 2026d). |

## Table 3.3-2. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Biological Survey Area

| Scientific Name | Common Name | Status (Federal/ State) | Habitat | Potential to Occur[1] |
|---|---|---|---|---|
| *Lanius ludovicianus* (nesting) | loggerhead shrike | None/SSC | Nests and forages in open habitats with scattered shrubs, trees, or other perches | **Present**. A loggerhead shrike was observed on site by Dudek biologists on January 23, 2023, during the biological reconnaissance survey. |
| *Toxostoma lecontei* | LeConte's thrasher | BCC/SSC | Nests and forages in desert wash, desert scrub, alkali desert scrub, desert succulent, and Joshua tree habitats; nests in spiny shrubs or cactus | **Moderate potential to occur**. The BSA contains desert scrub, with spiny shrub species such as *Lycium* and *Atriplex* that may provide suitable nesting habitat. The nearest mapped CNDDB record is approximately 4 miles east of the BSA in Barstow proper (CDFW 2026d). While this is a historical record, there are a few current sightings of the species less than 5 miles from the BSA (eBird 2023). |
| **Mammals** | | | | |
| *Spermophilus (*Xerospermophilus*) mohavensis* | Mohave ground squirrel | None/ST | Desert scrub habitats, including those dominated by creosote bush and burrobush, desert sink scrub, and desert saltbush scrub | **Potentially Present**. Focused trapping surveys were conducted in the northern and southern portions of the site. Round-tailed ground squirrels (*Xerospermophilus tereticaudus*) exhibiting some Mohave ground squirrel physical characteristics were detected. CDFW stated they consider round-tailed ground squirrel–Mohave ground squirrel hybrids to be protected under CESA and require authorization for take (Wood, pers. comm., 2024). The BSA contains desert scrub with creosote bush, as well as saltbush scrub. Additionally, Mohave ground squirrel is known to prefer sandy to gravelly soils, which are present within the BSA (Johnson et al. 2019; USDA 2023). Some small mammal burrows were observed within the BSA, though many appeared to be inactive. The nearest mapped CNDDB record is approximately 1.25 miles north of the BSA. Additionally, there are several other records of the species within 5 miles of the BSA (CDFW 2026d). |
| *Vulpes macrotis arsipus* | desert kit fox | None/None[2] | Sparse vegetated scrub habitats such as | **Present**. An active desert kit fox burrow complex and tracks were |

## Table 3.3-2. Special-Status Wildlife Species Observed or with Moderate or High Potential to Occur within the Biological Survey Area

| Scientific Name | Common Name | Status (Federal/ State) | Habitat | Potential to Occur[1] |
|---|---|---|---|---|
| | | | creosote scrub communities that support abundant rodent populations (Center for Biological Diversity 2013) | incidentally observed on site by a Dudek biologist during desert tortoise surveys, and at least one individual desert kit fox was detected at a Mohave ground squirrel camera station. |
| **Reptiles** | | | | |
| *Gopherus agassizii* | Mojave desert tortoise | FT/ST | Arid and semi-arid habitats in Mojave and Sonoran Deserts, including sandy or gravelly locations along riverbanks, washes, sandy dunes, canyon bottoms, desert oases, rocky hillsides, creosote flats, and hillsides | **Absent**. While the study area contains creosote flats, some sandy dunes, and sandy hillsides that could provide suitable habitat to this species, no desert tortoise individuals, burrows, or their sign were observed during focused surveys in January 2023 and in January 2026. The southwestern end of the study area overlaps with a CNDDB delineated area containing what was historically the largest of four primary populations in California (CDFW 2026d). |
| *Uma scoparia* | Mohave fringe-toed lizard | None/SSC | Loose wind-blown sand dunes, flats with sandy hummocks, washes, and banks of rivers | **High potential to occur**. The BSA contains areas of loose wind-blown dunes and flats with sandy hummocks. Additionally, the BSA contains shrubs and annual plants that may support arthropods, a part of the Mohave fringe-toed lizard diet. The nearest mapped CNDDB record is approximately 1 mile southwest of the BSA (CDFW 2026d). |

**Notes:**
BSA = biological survey area; CNDDB = California Natural Diversity Database.

[1] **Determination Definitions:**

- **Absent:** Protocol-level focused surveys conducted for the species were negative and the species was not detected on site during any biological survey.
- **Present:** The species has been documented on the site by a reliable source or there are historic occurrences within the site boundary.
- **Potentially present:** Possible round-tailed ground squirrel–Mohave ground squirrel hybrids were trapped within the project site.
- **High potential to occur:** The species has not been documented on the site but has been observed within dispersal range of the site (or is within range and is highly mobile or cryptic – e.g., migratory avian species or legless lizard) and high-quality habitat is present.
- **Moderate potential to occur:** The species has not been documented on or within dispersal range of the site, but the site is within its known geographic range and moderate- to high-quality habitat is present. General rarity may be considered.

[2] Section 4000 of the California Fish and Game Code defines "kit fox" as a fur-bearing mammal.

**Status Designations**
**Federal**
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

FT: Federally listed as threatened
**State**
SCE: State candidate for listing as threatened or endangered
SSC: California Species of Special Concern
ST: State listed as threatened

## Mojave Desert Tortoise

Mojave desert tortoise is a federally and state-listed threatened species. The range of the Mojave desert tortoise includes portions of the Mojave Desert and the Colorado Desert in Southern California (parts of Inyo, Kern, Los Angeles, San Bernardino, and Riverside Counties), southern Nevada (Clark, Esmeralda, Nye, and Lincoln Counties), northwestern Arizona (Mohave County), and southwestern Utah (Washington County).

Typical habitat for Mojave desert tortoise in the Mojave Desert is creosote bush scrub where annual precipitation ranges from 2 to 8 inches, with a relatively high diversity of perennial plants and high productivity of ephemeral plants. Throughout most of the Mojave Desert, Mojave desert tortoises occur most commonly on gently sloping terrain with sandy gravel soils and where there is sparse cover of low-growing shrubs, which allows for the establishment of herbaceous plants. Soils must be friable enough for digging burrows, but firm enough that burrows do not collapse (USFWS 2011). Although populations of Mojave desert tortoise are not generally known to inhabit elevations much above 4,000 feet amsl, they occur from below sea level to an elevation of 7,300 feet amsl. Occupied habitat varies from flats and slopes dominated by creosote bush scrub at low elevations, to rocky slopes in blackbrush and juniper woodland ecotones at higher elevations (USFWS 2011).

To evaluate the impacts to Mojave desert tortoise, protocol surveys were conducted in accordance with the Pre-project Field Survey Protocol for Potential Desert Tortoise Habitats section included in Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise (*Gopherus agassizii*) (USFWS 2010). Biologists surveyed the BSA by walking approximately 10-meter-wide (32.8 feet) transects for 100% coverage. A buffer survey was not conducted because there was no legal access to these areas.

The BSA contains suitable sandy soils and Mojave desert scrub habitat; however, there are several regional barriers to potential population sources around the BSA, such as high traffic roads; residential areas; and railroad tracks. The BSA overlaps a CNDDB delineated area containing what was historically the largest of four primary populations of Mojave desert tortoise in California; however, the nearest CNDDB occurrence is from 2007 and is mapped approximately 6.1 miles west of the BSA (CDFW 2026a).

No Mojave desert tortoise individuals, burrows, or diagnostic sign (i.e., tracks, scat, water catch basins, courtship rings, or carcasses) were observed during the 2023 and 2026 focused protocol surveys; therefore, this species is considered absent from the BSA and will not be analyzed further.

## Burrowing Owl

Burrowing owl is a USFWS Bird of Conservation Concern and a CDFW candidate for listing as threatened or endangered. With a relatively wide-ranging distribution throughout the west, this species is considered to be a habitat generalist (Lantz et al. 2004). In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats and grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner et al. 1990). Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils (Haug et al. 1993).

The presence of burrows is the most essential component of burrowing owl habitat because they are required for nesting, roosting, cover, and storing prey (Coulombe 1971; Green and Anthony 1989; Haug et al. 1993; Martin 1973). In California, western burrowing owls most commonly live in burrows created by California ground squirrels (*Otospermophilus beecheyi*). Burrowing owls may occur in human-altered landscapes such as agricultural areas, ruderal grassy fields, vacant lots, and pastures if the vegetation structure is suitable (i.e., open and sparse), useable burrows are available, and foraging habitat occurs in proximity (Gervais et al. 2008). Debris piles, riprap, culverts, and pipes can be used for nesting and roosting.

No burrowing owls or sign of burrowing owl were observed on site. However, this species has a high potential to occur within the project site. Suitable habitat and small mammal burrows are present in the project site, and the nearest mapped CNDDB record is approximately one mile southeast of the project site (CDFW 2026d).

### Loggerhead Shrike

Loggerhead shrike is a CDFW Species of Special Concern. It is widespread throughout the United States, Mexico, and portions of Canada (Humple 2008). The species is a yearlong resident in most of the United States, including from California east to Virginia and south to Florida, and in Mexico. In California, although shrikes are widespread at the lower elevations in the state, the largest breeding populations are in portions of the Central Valley, the Coast Ranges, and the southeastern deserts (Humple 2008).

Preferred habitats for loggerhead shrike are open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or human-made structures (such as the top of chain-link fences or barbed wire) that provide a location to impale prey upon for storage or manipulation (Humple 2008). Loggerhead shrikes occur most frequently in riparian areas along woodland edges, grasslands with sufficient perch and butcher sites, scrublands, and open canopied woodlands, although they can be quite common in agricultural and grazing areas and can sometimes be found in mowed roadsides, cemeteries, and golf courses. Loggerhead shrikes occur rarely in heavily urbanized areas. For nesting, the height of shrubs and presence of canopy cover are most important (Yosef 1996).

A loggerhead shrike was incidentally observed within the western portion of the project site by Dudek biologists on January 23, 2023, during the biological reconnaissance survey (Figure 3.3-2).

### LeConte's Thrasher

LeConte's thrasher is a USFWS Bird of Conservation Concern and a CDFW Species of Special Concern. LeConte's thrasher is found from below sea level up to 1,600 meters amsl in Southern California deserts in southern Mono County to the Mexican border (Dobkin and Granholm 2005; Sheppard 1996).

Preferred habitat for LeConte's thrasher is open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; LeConte's thrasher also occurs in western Joshua tree habitat with scattered shrubs (Dobkin and Granholm 2005). This species prefers gently rolling to well-drained slopes occupied by saltbush and joint fir (*Ephedra sp.*) with bare ground or sparse grass (Fitton 2008). These conditions are generally found on bajadas or alluvial fans where the slopes are bisected by dry washes (Fitton 2008). Much of the LeConte's thrasher diet consists of insects found within leaf litter under desert shrubs; therefore, habitat must contain sufficient ground cover (Sheppard 1996).

The project site supports suitable foraging habitat (desert scrub) and nesting habitat (spiny shrubs and cactus). The nearest mapped CNDDB record is approximately four miles east of the project site in Barstow (CDFW 2026d). While this is a historical record, there are a few current sightings of the species less than five miles from the project site (eBird 2023). Based on the discussion above, LeConte's thrasher has a moderate potential to occur within the project site.

### Mohave Ground Squirrel

Mohave ground squirrel is a State of California threatened species. This species' distribution range is restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo counties (Zeiner et al. 1990). Mohave ground squirrels generally inhabit areas where the soil is friable and sandy or gravelly. Mohave ground squirrels occur in desert scrub habitats dominated by creosote bush and desert saltbush scrub at elevations of 1,800 to 5,000 feet amsl (CDFW 2023).

The project site contains desert scrub with creosote bush, as well as saltbush scrub. Additionally, Mohave ground squirrel is known to prefer sandy to gravelly soils, which are present within the project site (Johnson et al. 2019; USDA 2023). The project site occurs along the edge of the south-central part of the historical range of Mohave ground squirrel but is located outside any core areas, key population centers, or corridors (Figure 3.3-3, Wildlife Movement) (CDFW 2019a; Leitner 2015). The Mohave ground squirrel U.S. Geological Survey habitat suitability model ranks the majority of the project site as being moderately suitable Mohave ground squirrel habitat (CDFW 2019a). The project site is outside of the Mohave ground squirrel habitat modeled as part of by the Desert Renewable Energy Conservation Plan (DRECP) (BLM 2016).

Historic protocol surveys were conducted within the project site's vicinity between 2008 and 2012 by Leitner (2015); however, these surveys yielded no Mohave ground squirrel captures south of the Mojave River (Leitner 2015). The closest CNDDB occurrence, from 1990, is approximately 1.25 miles north of the project site and occurs within an area currently functioning as an agricultural operation (CDFW 2026d). This occurrence record does not specify the number of individuals or whether they were trapped or merely a visual observation. Focused trapping surveys were conducted in the northern and southern portions of the project site. Camera trapping surveys were deployed in the center portions of the site and no Mohave ground squirrels were recorded (Appendix C).

Genetic testing of specimen samples by Leitner and Bell and Matocq (CDFW 2019a) confirmed that (1) pure Mohave ground squirrel and pure round-tailed ground squirrel are living near one another, (2) hybridization does occur, (3) some hybrids are fertile, and (4) backcrossing occurs in both species. The study concluded that although "hybridization has occurred within contact zones, recent examination of mitochondrial, morphological, allozyme, and chromosome data show no evidence of broad introgression of alleles between the two species (CDFW 2019a [Bell et al., 2009; Bell and Matocq, 2011]), indicating hybridization is a rare occurrence and further supporting the retention of full species designation for MGS" (CDFW 2019a).

During focused protocol surveys conducted in 2023, round-tailed ground squirrels exhibiting some Mohave ground squirrel physical characteristics (specifically a flatter tail and brown dorsal pelage) were captured within the project site. These captured individuals indicate the potential for the presence of hybridized round-tailed ground squirrel–Mohave ground squirrel individuals within the project site. Ear tissue samples from each potential hybrid individual captured were collected for potential future DNA testing; however, genetic testing was not conducted on these samples to confirm if these individuals are hybrids (as such testing was not available at the time of trapping). Based on the historical records of Mohave ground squirrel occurrences and the presence of potential round-tailed ground

squirrel–Mohave ground squirrel hybrids, it is possible that a population of Mohave ground squirrel was present within or near the project site in the near past.

### Desert Kit Fox

While desert kit fox is not listed by USFWS or CDFW under any special-status designation, the species is considered a "fur-bearing mammal," and is protected from take under the California Fish and Game Commission's Mammal Hunting Regulations (Subdivision 2, Chapter 5), which effectively protects it from hunting pressure. No hunting or trapping is proposed or would be allowed with project implementation and the project would not be allowed take of this species. Desert kit fox lives in the open desert, on creosote bush flats, and among sand dunes (NPS 2015).

An active desert kit fox burrow complex and tracks were incidentally observed within the project site by a Dudek biologist during the January 2023 desert tortoise surveys effort. In addition, at least one desert kit fox individual was incidentally observed via a Mohave ground squirrel camera trap in 2023 (Figure 3.3-2).

### Mohave Fringe-Toed Lizard

Mohave fringe-toed lizard is a CDFW Species of Special Concern. This species' range is in the Mojave Desert from Death Valley to western Arizona (California Herps 2023). Mohave fringe-toed lizards inhabit sparsely vegetated sand dunes, flats with hummocks, washes, and banks of rivers from 300 feet to 3,000 feet amsl. Adults eat small arthropods. The project site contains areas of loose sand dune soils with shrubs and annual plants that may support arthropods, a part of the Mohave fringe-toed lizard diet. The nearest mapped CNDDB record is approximately 1 mile southwest of the project site (CDFW 2026d). Therefore, Mohave fringe-toed lizard has a high potential to occur within the project site.

### Protected Birds and Raptors

Birds of prey (raptors) and other avian species protected under the Migratory Bird Treaty Act (MBTA), California Fish and Game Code, and the California Migratory Bird Protection Act have the potential to occur in the BSA. Vegetation within the BSA provides opportunities for these species to nest on and adjacent to the BSA. See Section 3.3.2 for a discussion of the regulations related to birds and their nests.

### Wildlife Corridors and Habitat Linkages

The project site is currently undeveloped land located within established wildlife corridors and/or habitat linkage areas (i.e., the San Bernardino Mountains–Calico Mountains Essential Connectivity Area, the Desert Tortoise Conservation Area/Least Cost Corridor, and South Coast Wildlands Desert Linkage Network), that allow for viable populations of terrestrial species and/or species' dispersal movements through the vicinity. Surveys for desert tortoise were negative, indicating the site is not used by this species. Surveys within the project site determined that round-tailed ground squirrel and potentially Mohave ground squirrel hybrids occupy the site, as do desert kit fox, a variety of small mammals, reptiles, and birds. The project site occurs outside any Mohave ground squirrel core areas, key populations centers, or corridors (CDFW 2019a; Leitner 2015).

Because the project site overlaps with established wildlife corridors and/or habitat linkage areas and is mapped as an Area of Conservation Emphasis, Rank 4, by CDFW (Figure 3.3-4), there are opportunities for wildlife to move across the site when migrating through the region. However, the project site is immediately adjacent to Lenwood Road along the western boundary, a residential area abuts the southern boundary with the BNSF rail lines located

farther to the south, and rural residential areas are north and east of the site. Therefore, wildlife movement through the project site's vicinity is, to some extent, restricted. The only relatively unrestricted areas are along the Mojave River to the north and undeveloped land to the west. If wildlife enter the project site, movement directly north, east, and south is restricted by residential development, railroads, and roads.

### Jurisdictional Resources

There are no potential waters or wetland waters of the U.S. or state within the BSA (Appendix C). Additionally, the National Hydrography Dataset and National Wetlands Inventory do not identify any potential aquatic resources, including riparian habitat present within the project site.

## 3.3.2 Regulatory Setting

Please refer to Appendix C for a detailed overview of all federal and state regulations adopted relevant to the protection of biological resources. The following summarizes regulations applicable to the proposed project.

### Federal

#### Federal Endangered Species Act

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

FESA allows for the issuance of Incidental Take Permits (ITPs) for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of Habitat Conservation Plans on private property without any other federal agency involvement.

#### Migratory Bird Treaty Act

The MBTA prohibits the intentional and unintentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Currently, the Migratory Birds Office considers nests that support eggs, nestlings, or juveniles to be active. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

## Clean Water Act

The Clean Water Act (CWA) is the major federal legislation governing water quality, providing guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 of the CWA requires an applicant for a federal license or permit that may result in a discharge of pollutants into waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) administer the 401 certification program in California. Section 402 of the CWA establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the United States Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found in 33 Code of Federal Regulations (CFR) Parts 320 to 332. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency (EPA) in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic ecosystem only if there is no practicable alternative that would have less adverse impacts.

### *Wetlands and Other Waters of the United States*

The definition of waters of the United States establishes the geographic scope for authority under Section 404 of the CWA; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. The definition of what constitutes "waters of the United States" (provided in 33 CFR Section 328.3[a]) has changed multiple times over the past few decades. On December 30, 2022, the agencies announced the final Revised Definition of "Waters of the United States" rule (Rule) (88 CFR 3004–3144). The Rule was published in the Federal Register on January 18, 2023, and became effective on March 20, 2023, restoring federal jurisdiction over waters that were protected prior to 2015 under the CWA for traditional navigable waters, the territorial seas, and interstate waters, as well as upstream water resources that significantly affect those waters. The Rule represents a re-expansion of federal jurisdiction over certain water bodies and wetlands previously exempt pursuant to the 2020 Navigable Waters Protection Rule. The Rule also considers various subsequent court decisions including two notable Supreme Court decisions.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in *Sackett v. EPA*, in which it rejected the U.S. EPA's claim that "waters of the United States," as defined in the CWA, includes wetlands with an ecologically significant nexus to traditional navigable waters. Although the Sackett opinion did not specifically reference streams, the EPA's new rule extends the "continuous surface connection" standard to streams, thereby removing non-permanent, ephemeral streams that do not meet these standards from federal jurisdiction.

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as "areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." No wetlands or riparian plants were identified within the project site.

## State

### California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050–2068) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA, state-listed plants have the same degree of protection as wildlife and take is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from the CDFW under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of mitigation implementation, and monitoring of mitigation measures.

On October 21, 2019, the California Fish and Game Commission received a petition from the Center for Biological Diversity to list western Joshua tree (*Yucca brevifolia*) (Center for Biological Diversity 2019).[1] On November 1, 2019, the California Fish and Game Commission referred the petition to CDFW for evaluation. CDFW evaluated the scientific information presented in the petition and recommended that the California Fish and Game Commission accept the petition for further consideration of western Joshua tree under CESA. On September 22, 2020, the California Fish and Game Commission approved the petition to accept the candidacy proposal for western Joshua tree, effective October 9, 2020 (CDFW 2020). When a plant or wildlife species is granted candidacy under CESA, the species is given the same protection as a threatened or endangered species while the California Fish and Game Commission evaluates whether formal listing as threatened or endangered is warranted. Take or removal of western Joshua trees would require a 2081 ITP from CDFW. No USFWS-designated critical habitat for listed plant species overlapping or immediately adjacent to the project site were identified in the on-site surveys and the project site occurs outside the CDFW distribution for western Joshua tree.

### California Fish and Game Code

#### *Fully Protected Species*

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

[1] On October 21, 2019, the California Fish and Game Commission received a petition to list the following as threatened under the California Endangered Species Act: (1) western Joshua tree (*Yucca brevifolia*) throughout its California range or, in the event the Commission determines that listing of *Yucca brevifolia* throughout its California range is not warranted, then (2) the western Joshua tree population within the northern part of western Joshua tree's California range or (3) the western Joshua tree population within the southern part of western Joshua tree's California range.

### *California Department of Fish and Wildlife Species of Special Concern*

CDFW maintains a list of vertebrate animal species considered of "special concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. A species of special concern is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- Is extirpated (no longer present) from the state or, in the case of birds, is in its primary seasonal or breeding role
- Is listed as threatened or endangered federally, but not by the state
- Meets the state definition of threatened or endangered, but has not formally been listed
- Is experiencing, or formerly experienced, serious noncyclical population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for threatened or endangered status by the state
- Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that, if realized, could lead to declines that would qualify it for threatened or endangered status by the state.

### *California Fish and Game Code*

#### *Section 4150*

California Fish and Game Code Section 4150 states a mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a non-game mammal. A non-game mammal may not be taken or possessed under this code. All bat species occurring naturally in California are considered non-game mammals and are therefore prohibited from take as stated in California Fish and Game Code Section 4150.

#### *Sections 1600-1616*

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of definable bed and banks, and existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream or the limit of the adjacent riparian vegetation, which may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high-water mark to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete, certified California Environmental Quality Act (CEQA) document.

### *California Native Plant Protection Act*

The Native Plant Protection Act of 1977 (Sections 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this

State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare," and protect endangered and rare plants from take. CESA expanded the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, the categories of "threatened" and "endangered" species were added to CESA. All "rare" animals in CESA were converted to "threatened," but this did not change for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and project proponents.

#### *Nesting Birds*

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. Assembly Bill Number 454 (AB 454; California Migratory Bird Protection Act) amended Section 3513 to prohibit take or possession of any migratory non-game bird as designated in the MBTA prior to 2017, except as provided by rules and regulations adopted by the United States Secretary of the Interior under the MBTA before January 1, 2017, or subsequent rules or regulations adopted pursuant to the MBTA, unless those rules or regulations are inconsistent with the CFGC. ABA 454 became operative became inoperative on January 20, 2025, but was reenacted on October 6, 2025.

### California Environmental Quality Act

CEQA requires identification of a project's potentially significant impacts on biological resources, and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

The State of California CEQA Guidelines (CEQA Guidelines) Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as California Rare Plant Rank (CRPR) 1 and 2 by the CNPS, and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G, Environmental Checklist Form, of the CEQA Guidelines requires an evaluation of impacts to "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 the U.S. Fish and Wildlife Service."

### Porter–Cologne Water Quality Control Act

Pursuant to provisions of the Porter–Cologne Water Quality Control Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code Section 13260[a]). The SWRCB defines a water of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). All waters of the United States are waters of the state including wetlands. There are no potential aquatic or wetland resources on site, including state or federally protected wetlands.

### California Native Desert Plants Act

The purpose of the California Desert Native Plants Act (CDNPA) is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands. The CDNPA only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego counties. Within these counties, the CDNPA prohibits the harvest, transport, sale, or possession of specific native desert plants unless a person has a valid permit or wood receipt and the required tags and seals. The appropriate permits, tags, and seals must be obtained from the sheriff or commissioner of the county where collecting will occur, and the county will charge a fee.

## Local

### San Bernardino County Countywide Plan/Policy Plan

The San Bernardino County Countywide Plan/Policy Plan contains the goals and policies that guide future development within the County (San Bernardino County 2022). The Countywide Plan/Policy Plan contains the long-term goals and policies that guide County decisions, investments, and improvements toward achieving the Countywide Vision and serves as the County's General Plan for the unincorporated areas. The Countywide Plan/Policy Plan's Natural Resources Element describes the purpose and principles, as well as outlines the goals and policies for resources, including air quality; water quality; open space, parks, and recreation; scenic resources; biological resources; mineral resources; and agriculture and soils. Relevant policies from the Countywide Plan/Policy Plan are summarized below.

#### *Natural Resources Element*

Goal NR-5. Biological Resources. An interconnected landscape of open spaces and habitat areas that promotes biodiversity and healthy ecosystems, both for their intrinsic value and for the value placed on them by residents and visitors.

Policy NR-5.1. Coordinated habitat planning. We participate in landscape - scale habitat conservation planning and coordinate with existing or proposed habitat conservation and natural resource management plans for private and public lands to increase certainty for both the conservation of species, habitats, wildlife corridors, and other important biological resources and functions; and for land development and infrastructure permitting.

Policy NR-5.2. Capacity for resource protection and management. We coordinate with public and nongovernmental agencies to seek funding and other resources to protect, restore, and maintain open space, habitat, and wildlife corridors for threatened, endangered, and other sensitive species.

Policy NR-5.3. Multiple resource benefits. We prioritize conservation actions that demonstrate multiple resource preservation benefits, such as biology, climate change adaptation and resiliency, hydrology, cultural, scenic, and community character.

Policy NR-5.5. Mitigation and future responsibilities. We require that new development satisfy habitat conservation responsibilities without shifting conservation responsibilities onto military property.

Policy NR-5.6. Mitigation banking. We support the proactive assemblage of lands to protect biological resources and facilitate development through private or public mitigation banking. We require public and private conservation lands or mitigation banks to ensure that easement and fee title agreements provide funding methods sufficient to manage the land in perpetuity.

Policy NR-5.7. Development review, entitlement, and mitigation. We comply with state and federal regulations regarding protected species of animals and vegetation through the development review, entitlement, and environmental clearance processes.

Policy NR-5.8. Invasive species. We require the use of non-invasive plant species with new development and encourage the management of existing invasive plant species that degrade ecological function.

### San Bernardino County Development Code

The County Development Code (San Bernardino County 2014) implements the goals and policies of the Countywide Plan/Policy Plan. Chapter 88.01.060, Desert Native Plant Protection, of the Development Code is a subset of the Plant Protection and Management Code (Chapter 88.01 of the Development Code) and focuses on the conservation of specified desert plant species. Chapter 88.01.060, *Desert Native Plant Protection*, specifically states "Removal of all plants protected or regulated by the Desert Native Plants Act (Food and Agricultural Code Section 80001 et seq.) shall comply with the provisions of the Act before the issuance of development permit or approval of a land use application. All members of the family Cactaceae (Cactus Family) require a Tree or Plant Removal Permit for harvesting under the Desert Native Plants Act." This ordinance contains provisions for the protection of certain desert native plants as follows:

- The following desert native plants with stems 2 inches or greater in diameter or 6 feet or greater in height:
  - *Psorothamnus spinosus* (smoketree).
  - All species of the genus *Prosopis* (mesquites).
- All species of the family Agavaceae (century plants, nolinas, yuccas).
- Creosote Rings, 10 feet or greater in diameter.
- All Joshua trees.
- Any part of any of the following species, whether living or dead:
  - *Olneya tesota* (desert ironwood).
  - All species of the genus *Prosopis* (mesquites).
  - All species of the genus *Cercidium* (palo verdes).

Based on the desert native plant surveys conducted for the project none of these plant species were identified (Appendix C).

## 3.3.3 Environmental Impacts and Mitigation Measures

### Methodology

This section addresses the potential direct and indirect impacts on biological resources that would result from implementation of the proposed project and provides an analysis of significance for each impact. Required off-site infrastructure improvements including widening Lenwood Road and installation of electrical poles would primarily be located within existing rights-of-way and total approximately 2.3 acres. The analysis of project impacts on biological resources draws from the baseline information summarized in the Biological Resources Technical Report for the Electric Vehicle Charging Station and Logistics Facility (Appendix C). For those impacts considered to be potentially significant under CEQA, measures are proposed to avoid, minimize, and/or mitigate the impacts. Land cover impacts are presented in Table 3.3-3 below.

Dudek biologists first conducted a literature search and database review to evaluate the natural resources found or potentially occurring within the BSA. The database review included the most recent versions of the CNDDB, special-status species lists (CDFW 2025, 2026b, 2026c), and the CNPS Inventory of Rare and Endangered Plants of California (CNPS 2026a). These databases were reviewed to identify sensitive biological resources present or potentially present for the U.S. Geological Survey 7.5-minute quadrangle on which the BSA is located (Barstow) and the eight surrounding quadrangles (Hinkley, Nebo, Mud Hills, Lane Mountain, Water Valley, Hodge, Barstow SE, and Daggett). The USFWS occurrence data and critical habitat databases were queried using geographic information system (GIS) software based on a 5-mile buffer around the BSA. The BSA was investigated for the potential for historical drainages and aquatic features based on a review of U.S. Geological Survey topographic maps (1:24,000-scale), aerial photographs, the USFWS National Wetland Inventory database (USFWS 2023a), and the Natural Resource Conservation Service's Web Soil Survey (USDA 2023).

Following the literature search, Dudek Biologists conducted an initial reconnaissance-level field survey of the project site to document biological resources, which included vegetation community and land cover mapping, on January 23, 2023. Additional field surveys within the project site included protocol presence/absence surveys for Mojave Desert tortoise, rare plant and desert native plants, and Mohave ground squirrel protocol level surveys. In January 2026, additional off-site areas were added to the project, and a reconnaissance-level field survey and protocol presence/absence survey for Mojave desert tortoise was conducted within the off-site area. Refer to Appendix C for the dates, focus, scope, and conditions for each survey.

The analysis of direct and indirect impacts covers construction, operation, and maintenance of the proposed project. Direct impacts include those that would occur immediately as a result of the proposed project on a particular biological resource. Indirect impacts refer to off-site and on-site "edge effects" that are short-term (i.e., not permanent) and result from project construction or long-term (i.e., permanent) due to the design of the project and the effects it may have to adjacent resources. Examples of "edge effects" include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and runoff. The total acreage of direct impacts is summarized in Table 3.3-3 and depicted on Figure 3.3-5, Project Impacts.

**Table 3.3-3. Impacts to Vegetation Communities and Land Cover Types within the BSA**

| Floristic Alliance | Association[1] | Ranking[2] | Total Existing BSA (Acres) | On-Site Permanent Impacts (Acres) | Off-Site Permanent Impacts (Acres) | Total Impacts (Acres)[3] |
|---|---|---|---|---|---|---|
| **Scrub** | | | | | | |
| Allscale Scrub | *Atriplex polycarpa* | G4/S5 | 49.38 | 49.38 | 0.001 | 49.38 |
| Creosote Bush –Allscale Scrub | *Larrea tridentata*– *Atriplex polycarpa* | G5/S5 | 49.71 | 49.65 | 0.064 | 49.71 |
| **Non-Vegetated Land Covers** | | | | | | |
| Disturbed Habitat | N/A | GNR/SNR | 1.94 | 0.82 | 1.12 | 1.94 |
| Urban/ Developed | N/A | GNR/SNR | 1.12 | 1.1 | 1.11 | 1.12 |
| | | **Total[3]** | **102.15** | **99.85** | **2.30** | **102.15** |

**Source:** Appendix C.
**Notes:**
BSA = biological survey area; N/A = not applicable.
1 The spatial distribution of permanent impacts to vegetation communities and land covers are presented in Figure 3.3-5.
2 The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). The numbers have the following meaning (NatureServe 2023):
4 = apparently secure
5 = demonstrably widespread, abundant, and secure
GNR = unranked, global rank not yet assessed
SNR = unranked, subnational rank not yet assessed
3 Total acreages may not sum exactly due to rounding.

## Thresholds of Significance

The significance criteria used to evaluate project impacts related to biological resources are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to biological resources would occur if implementation of the project would do any of the following:

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

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

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

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

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

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

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to biological resources.

## Thresholds Not Further Discussed

(b) The project site, including the off-site areas, does not contain any vegetation communities identified by CDFW as sensitive based on the vegetation mapping conducted for the project (see Table 3.3-3). The undeveloped areas adjacent to the project site are similar to those on site—allscale scrub and creosote bush–all scale scrub. Additionally, there are no riparian plants or resources present on or immediately adjacent to the site (Appendix C). Therefore, the project would not have any direct or indirect impacts on riparian habitat or sensitive natural communities and there would be no impact**.** This issue is not further discussed.

(c) The project site, including the off-site areas does not contain any potential waters or wetland waters of the U.S. or state on site. Additionally, the National Hydrography Dataset and National Wetlands Inventory do not identify any potential resources immediately surrounding the project site (Appendix C). Therefore, the project would not adversely impact any state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Appendix C). The project would have no direct or indirect impact on state or federally protected wetlands and this issue is not further discussed.

(f) There are no adopted habitat conservation plans or natural communities conservation plans that include the project site or are near the project site. Therefore, the proposed project would not conflict with any adopted habitat conservation plans or natural community conservation plans and there would be no impact. This issue is not further discussed.

## Impact Analysis

Impact 3.3-1 The proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

### Special-Status Plants

As described in Section 3.3.3, Methodology, a focused rare plant survey was conducted within the project site, and one non-listed special-status plant species, Mojave spineflower, was observed within the BSA. Mojave spineflower was not included as a target species for the 2023 focused surveys because it is a CRPR 4.2 species. Species with a CRPR of 4 are not considered rare but only limited in distribution or infrequent throughout a boarder range in California (e.g. “Watch List” species) (CNPS 2026a). Thus, given that CEQA requires findings of significance for projects that “threaten to … reduce the number or restrict the range of a rare or endangered plant,” Mojave spineflower will not be analyzed further.

No other special-status plant species were observed or determined to have a high or moderate potential to occur within the BSA. Based on these results, there would be no direct impacts to special-status plant species from construction or operation of the project. However, construction and long-term operation of the project could result

in indirect impacts to special-status plants located outside but near the project site, as discussed below. The project site does not occur within or adjacent to federally designated critical habitat for any listed plant species; as such, there would be no direct or indirect impacts to federally designated critical habitat for plants.

#### *Indirect Impacts*

***Construction-Related:*** Potential short-term or temporary indirect impacts to special-status plant species resulting from construction activities include inadvertent spillover impacts, including unintentional clearing, trampling, or grading outside of the project footprint; generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the release of chemical pollutants. These potential construction-related activities could result in indirect impacts to special-status plant species that would be considered potentially significant.

***Long-Term - Operation:*** Potential long-term indirect impacts that could result from future project operation near special-status plant species or their suitable habitat off the project site include chemical releases such as oils and grease from vehicles that could degrade habitat; increased human presence that could lead to unauthorized access to potential habitat for special-status plants; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. These potential indirect impacts to special-status plant species would be considered potentially significant.

### Special-Status Wildlife

A total of three special-status wildlife species were determined to have a moderate or high potential to occur within the BSA based on known species distribution, species-specific habitat preferences, and habitat conditions within the project site: burrowing owl, LeConte's thrasher, and Mohave fringe-toed lizard. Additionally, two special-status wildlife species were observed directly or via active, diagnostic sign and camera trapping within the BSA. Specifically, an active desert kit fox burrow and at least one individual desert kit fox was observed, and a loggerhead shrike was directly observed within the BSA. Finally, potential round-tailed ground squirrel–Mohave ground squirrel hybrids were captured within the project site during protocol Mohave ground squirrel surveys; therefore, Mohave ground squirrel is considered to be potentially present within the project site and has a high potential to occur.[2]

Focused surveys conducted for Mojave desert tortoise were negative; therefore, this species is not expected to occur and will not be analyzed further. The project site does not occur within or adjacent to federally designated critical habitat for listed wildlife species; thus, there would be no direct or indirect impacts to federally designated critical habitat for wildlife.

#### *Direct Impacts*

Direct impacts can potentially occur to special-status wildlife species from the permanent loss of habitat and due to injury or mortality of individuals during construction activities. The project could result in significant direct impacts to four special-status wildlife species that have a moderate to high potential to occur within the project site (burrowing

[2] CDFW considers round-tailed squirrel – Mohave ground squirrel hybrids to be a protected species under CESA.

owl, LeConte's thrasher, Mohave ground squirrel, and Mohave fringe-toed lizard) and two special-status wildlife species that were observed within the project site (loggerhead shrike and desert kit fox[3]), as discussed below.

*Burrowing Owl*

Focused surveys for burrowing owl were not conducted; however, small mammal and desert kit fox burrows are present on site and could be suitable for burrowing owl nesting or wintering. Therefore, suitable nesting and foraging habitat exists on-site and the species could occupy the project site prior to construction. Should the species be present, direct impacts may occur due to injury or mortality of nesting or wintering burrowing owls and the loss of occupied habitat during construction-related vegetation removal and ground-disturbance activities. Direct impacts to burrowing owl during project construction would be considered potentially significant.

*Loggerhead Shrike*

Loggerhead shrike (*Lanius ludovicianus*) was observed during the initial reconnaissance-level field survey within the project site. The project site contains open habitats with scattered shrubs and trees suitable for nesting and foraging. However, due to the amount of suitable nesting and foraging habitat in the surrounding region, the removal of 99.1 acres of suitable nesting and foraging habitat during construction activities would be less than significant.

Direct impacts to individual loggerhead shrike adults during construction would generally be unlikely due to the species' high mobility and access to adjacent habitat. However, direct impacts may occur to nesting loggerhead shrike during vegetation removal. Direct impacts due to injury or mortality of nesting loggerhead shrike would be potentially significant.

*LeConte's Thrasher*

LeConte's thrasher has a moderate potential to occur within the project site. The project site contains desert scrub, with spiny shrubs such as *Lycium* and *Atriplex* that may provide suitable nesting and foraging habitat for LeConte's thrasher. However, due to the amount of suitable nesting and foraging habitat occurring within the surrounding region, the removal of 99.1 acres of suitable nesting and foraging habitat during construction activities would be less than significant.

Direct impacts to individual LeConte's thrasher adults during construction would generally be unlikely due to this species' high mobility and access to adjacent habitat. However, direct impacts may occur to nesting LeConte's thrasher during vegetation removal. Direct impacts due to injury or mortality of nesting LeConte's thrasher would be potentially significant.

*Mohave Ground Squirrel*

Focused surveys for Mohave ground squirrel resulted in the capture of round-tailed ground squirrels exhibiting some physical characteristics of Mohave ground squirrels (i.e., a flatter tail and brown dorsal pelage) within the BSA. These individuals may be a round-tailed ground squirrel–Mohave ground squirrel hybrid; however, as noted above, genetic testing was not conducted to confirm if these individuals were hybrids. The CDFW has stated they consider any Mohave ground squirrel hybrid to be protected under CESA and impacts to any of these confirmed hybrid individuals would require authorization for take (Wood, pers. comm., 2024). Therefore, project implementation

[3] Although this species does not have any federal or state designation, Section 4000 of the California Fish and Game Code defines "kit fox" as a fur-bearing mammal and it is therefore considered "special-status" for purposes of this analysis.

could result in potentially significant direct impacts to Mohave ground squirrel hybrid individuals and suitable habitat for these individuals if confirmed present during construction. Project construction could result in injury or mortality of individuals and would result in the loss of occupied suitable habitat during vegetation removal and ground-disturbance activities. Direct impacts to individuals and occupied suitable habitat would be potentially significant.

#### *Desert Kit Fox*

An active desert kit fox burrow complex and tracks were incidentally observed on-site by a Dudek biologist during the Mojave desert tortoise survey efforts. In addition, at least one desert kit fox individual was incidentally observed during camera trapping efforts for Mohave ground squirrel in 2023. Project construction could have direct impacts to desert kit fox due to injury or mortality of individuals and the permanent loss of 99.1 acres of suitable habitat during vegetation removal and ground-disturbance activities. Due to the surrounding undeveloped lands available, which contain similar suitable habitat to that present on site, the loss 99.1 acres of occupied suitable habitat for desert kit fox would be less than significant. Direct impacts due to mortality or injury to individuals would be potentially significant.

#### *Mohave Fringe-Toed Lizard*

Mohave fringe-toed lizard has a high potential to occur within the project site. The project site contains areas of loose sand dune soils with shrubs and annual plants that may support arthropods, a part of the Mohave fringe-toed lizard diet. Development of the project site would result in the loss of 99.1 acres of potential habitat for Mohave fringe-toed lizard. However, due to the surrounding undeveloped lands available, which contain similar suitable habitat to that present on site, the loss 99.1 acres of occupied suitable habitat for Mohave fringe-toed lizard would be less than significant. This species generally has low mobility and therefore is susceptible to injury and mortality during construction activities. Direct impacts due to mortality or injury to individuals would be potentially significant.

#### *Nesting Migratory Birds and Raptors*

Similar to most other sites containing trees, shrubs, and other vegetation, the project site contains opportunities for birds of prey (raptors) and other avian species to nest on site. Native nesting bird species with potential to occur within the project site are protected by California Fish and Game Code Sections 3503 and 3503.5 and by the federal MBTA (16 USC 703–711). In particular, California Fish and Game Code Section 3503 provides that it is unlawful to take, possess, or needlessly destroy the active nests or eggs of any bird in California; Section 3503.5 protects all raptors and their eggs and active nests; and the MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of native migratory bird species throughout the United States. Therefore, direct impacts due to take of nesting migratory birds or raptors would be considered potentially significant.

### *Indirect Impacts*

Indirect impacts to special-status wildlife species are those reasonably foreseeable effects caused by the project and which occur later in time and/or outside of the project footprint. Short-term indirect impacts are those that occur during construction and which may affect species present near the site but not within the construction zone. Long-term indirect impacts are those that occur during operation, which may affect species present on or near the site, but which occur after construction is complete. Indirect impacts potentially resulting from the proposed project include fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species, causing them to leave an area of otherwise suitable habitat, or result in

disruption of bird nesting and abandonment of nests; increased human presence, which can disrupt daily activities of wildlife and cause them to leave an area and can also result in trampling of vegetation and soil compaction that degrades habitat; night-time lighting, which can disrupt the activity patterns of nocturnal species, including many mammals and some birds, amphibians, and reptiles; release of chemical pollutants, such as from oil leaks from construction vehicles and machinery; and the introduction of invasive plant species that can degrade wildlife habitat.

The project site could result in significant, indirect impacts to nesting migratory birds and raptors and to six special-status wildlife species: burrowing owl, loggerhead shrike, LeConte's thrasher, Mohave ground squirrel, desert kit fox, and Mohave fringe-toed lizard. These potential indirect impacts are further discussed below.

*Burrowing Owl, Loggerhead Shrike, LeConte's Thrasher, and Nesting Migratory Birds and Raptors*

***Construction-Related:*** Potential short-term, or temporary, indirect impacts to burrowing owl, loggerhead shrike, LeConte's thrasher, and other nesting birds and raptors resulting from construction activities include the release of chemical pollutants; adverse effects from dust, noise, vibration, and increased human presence; and night-time lighting. These potential construction-related indirect impacts to burrowing owl, loggerhead shrike, LeConte's thrasher and other nesting birds and raptors would be potentially significant.

***Long-Term Operation:*** Potential long-term indirect impacts to suitable habitat for burrowing owl, loggerhead shrike, LeConte's thrasher, and other nesting birds and raptors that could result from future project operation include chemical releases such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. Night-lighting associated with the proposed development could also disrupt some bird species' activity patterns and the use of adjacent habitats. These potential long-term indirect impacts to suitable habitat for burrowing owl, loggerhead shrike, LeConte's thrasher, and other nesting birds and raptors would be potentially significant.

*Mohave Ground Squirrel, Desert Kit Fox, Mohave Fringe-Toed Lizard*

***Construction-Related:*** Potential short-term or temporary indirect impacts to Mohave ground squirrel, Mohave ground squirrel hybrids, desert kit fox, and Mohave fringe-toed lizard resulting from construction activities include the release of chemical pollutants; generation of fugitive dust; adverse effects from noise, vibration, and increased human presence; and night-time lighting. These potential construction-related indirect impacts to Mohave ground squirrel, Mohave ground squirrel hybrids, desert kit fox, and Mohave fringe-toed lizard would be potentially significant.

***Long-Term Operation:*** Potential long-term, indirect impacts that could result from development to suitable habitat for Mohave ground squirrel, Mohave ground squirrel hybrids, desert kit fox, and Mohave fringe-toed lizard include chemical releases such as oils and grease from vehicles that could degrade habitat; increased invasive plant species that may degrade habitat; and trampling of vegetation and soil compaction by humans, which could affect soil moisture, water penetration, surface flows, and erosion. Increased human presence that could lead to unauthorized access to potential habitat for desert kit fox and night-lighting associated with the proposed development could also impact desert kit fox use of adjacent habitats. These potential long-term indirect impacts to suitable habitat for Mohave ground squirrel, Mohave ground squirrel hybrids, desert kit fox and Mohave fringe-toed lizard would be potentially significant.

## Mitigation Measures

Implementation of Mitigation Measures (MM) BIO-1 through BIO-8 would reduce potential direct and indirect construction-related impacts to special-status plants and wildlife. MM-BIO-1 (Construction-Related Impacts to Special-Status Plants and Special-Status Wildlife) would reduce potential construction-related indirect impacts to special-status plants and wildlife to a less-than-significant level through biological monitoring, requirement of a Worker Environmental Awareness Training, delineation of project boundaries, implementation of standard dust control measures, development of a stormwater pollution prevention plan (SWPPP), requiring all vehicles and equipment be serviced in designated staging areas, restrictions related to landscape plants, implementation of noise reduction measures, and ensuring that construction shall not be conducted at night. Implementation of MM-BIO-2 (Long-Term Indirect Impacts to Special-Status Plants and Special-Status Wildlife) would reduce potential impacts to a less-than-significant level by requiring measures to ensure project runoff is not altered from existing conditions and toxicants are not discharged, restoration of temporary impacts, and preparation of landscaping plans that will emphasize native species and not include invasive species. Implementation of MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl Avoidance) would reduce potential impacts to burrowing owl to a less-than-significant level by requiring a pre-construction survey for burrowing owl in areas supporting potentially suitable habitat prior to the start of construction activities and preparing a Burrowing Owl Management Plan if burrowing owls are detected occupying the site. Implementation of MM-BIO-4 (Pre-Construction Nesting Bird Survey) would minimize potential direct impacts to nesting birds, including loggerhead shrike and Leconte's thrasher, to a less-than-significant level through pre-construction surveys and avoidance measures. Implementation of MM-BIO-5 (Mohave Ground Squirrel Avoidance and Minimization) would reduce potential impacts to Mohave ground squirrel and Mohave ground squirrel hybrids by requiring pre-construction surveys to evaluate presence of the species. If pre-construction surveys or genetic testing (if such testing is available) are negative for the Mohave ground squirrel or Mohave ground squirrel hybrids, no further mitigation shall be required. Should presence be determined, MM-BIO-5 provides minimization and avoidance measures. Implementation of MM-BIO-6 (Pre-Construction Survey for Desert Kit Fox and Avoidance) would reduce potential impacts to desert kit fox to less than significant through pre-construction surveys and avoidance measures. Implementation of MM-BIO-7 would reduce potential impacts to Mohave fringe-toed lizard through pre-construction surveys and avoidance measures. With implementation of MM-BIO-1 through BIO-7, the effects of construction-related and long-term operational impacts to special-status plant species, burrowing owl, nesting birds including Loggerhead Shrike and Leconte's thrasher, Mohave ground squirrel, desert kit fox, and Mohave fringe-toed lizard would be reduced to **less than significant with mitigation**.

MM-BIO-1: Construction-Related Impacts to Special-Status Plants and Special-Status Wildlife. Prior to issuance of a construction permit, construction plans and conditions of approval shall include the following to address indirect impacts to special-status species:

- **Biological Monitoring.** A qualified project biologist shall monitor ground-disturbing and vegetation clearing activities for the duration of construction to ensure that practicable measures are being employed to avoid incidental disturbance of habitat, species of concern, and other sensitive biological resources outside the project footprint. Once ground-disturbing and vegetation clearing activities are complete, the project biologist shall conduct weekly checks in order to inspect construction fencing and ensure that all applicable requirements from the mitigation measures are being upheld. The qualified project biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures.

- **Worker Environmental Awareness Training.** Prior to grading, a pre-construction meeting shall be required that includes a training session for project personnel by a qualified biologist. The training shall include (1) a description of the species of concern and its habitats; (2) the general provisions of the applicable regulations pertaining to biological resources, including the federal and California Endangered Species Act and the Clean Water Act; (3) the need to adhere to the provisions of the Endangered Species Act, the Clean Water Act, and other applicable regulations; (4) the penalties associated with violating the provisions of the Endangered Species Act, Clean Water Act, and other applicable regulations; (5) the general measures that are being implemented to conserve the species of concern as they relate to the project; and (6) the access routes to and project site boundaries within which the project activities must be accomplished. Additionally, the training shall include the measures and mitigation requirements for the applicable resources. Copies of the mitigation measures and any required permits from the resource agencies shall be made available to construction personnel.
- **Delineation of Property Boundaries.** Prior to construction activities that would cause impacts, the contractor shall, in consultation with the biological monitor, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts shall take place. All impacts outside the fenced, staked, or flagged areas shall be avoided and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area. In addition, any avoided environmental resources (if applicable) shall be clearly delineated. Prior to implementing construction activities, the biological monitor shall verify that the flagging clearly delineates the construction limits and any sensitive environmental resources to be avoided.
- **Standard Dust Control Measures.** Standard dust control measures shall be implemented in accordance with the Mojave Desert Air Quality Management District's Rules 401 and 403.2 to reduce impacts on nearby plants and wildlife. Measures include controlling speed to 25 mph or less on unpaved roads (including signage), replacing ground cover in disturbed areas as quickly as possible, frequently watering active work sites, installing shaker plates, and suspending excavation and grading operations during periods of high winds.
- **Stormwater Pollution Prevention Plan.** Prior to issuance of a grading permit for construction, the applicant shall submit a stormwater pollution prevention plan (SWPPP) to San Bernardino County that specifies best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sedimentation or any other pollutants from moving off site and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Best management practice categories employed on site would include erosion control, sediment control, and non-stormwater (good housekeeping). Best management practices recommended for the construction phase shall include, but not be limited to, the following:
  - Limiting grading to the minimum area necessary for construction and operation of the project
  - Limiting vegetation disturbance/removal to the maximum extent practicable
  - Implementing fiber rolls and sandbags around drainage areas and the site perimeter
  - Stockpiling and disposing of demolition debris, concrete, and soil properly
  - Installing a stabilized construction entrance/exit and stabilization of disturbed areas
  - Implementing proper protections for fueling and maintenance of equipment and vehicles

- Managing waste, aggressively controlling litter, and implementing sediment controls
- Stabilizing soil in disturbed areas by revegetation

The following water quality measures will be included in the SWPPP to the extent applicable:

- Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- Projects that cannot be conducted without placing equipment or personnel in sensitive habitats shall be timed to avoid the breeding season of riparian species.
- When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments off site. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
- Water pollution and erosion control plans shall be developed and implemented in accordance with the Regional Water Quality Control Board.

- **Minimize Spills of Hazardous Materials.** All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be immediately cleaned up and the contaminated soil shall be properly handled or disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area.
- **Wildlife Hazards.** The following measures shall be implemented to ensure that wildlife do not become trapped, entangled, injured, or poisoned by construction activities:
  - Structures in which wildlife may become trapped (e.g., open pipes, pits, trenches, etc.) shall be tightly covered at the end of each work day. If covering the structure is not possible, an escape ramp shall be provided to allow any wildlife that falls in to safely escape.
  - Debris piles, construction materials, equipment, and other items that may be used as wildlife refuge shall be inspected for wildlife at the start of each work day and prior to disturbance. If wildlife is discovered, it shall either be moved out of harm's way by a qualified biologist or allowed to move off of the project site on its own.
  - Nets and mesh shall be made of loose weave material that is not fused at the intersections of the weave, as nets with welded weaves present an entanglement risk.
  - Toxic materials and garbage shall be removed from the work site and safely stored or disposed of at the end of each work day.
- **Invasive Weeds.** In order to reduce the spread of invasive plant species, landscape plants shall not be on the most recent version of the California Invasive Plant Council California Invasive Plant Inventory (http://www.cal-ipc.org/ip/inventory/index.php).
- **Noise.** Proposed noise-generating land uses affecting suitable habitat for special-status species shall incorporate setbacks, berms, or walls to minimize the effects of noise on resources pursuant to applicable rules, regulations, and guidelines related to land use noise

standards. For planning purposes, wildlife shall not be subject to noise that would exceed residential noise standards.

- **Night Work.** All construction activities shall be conducted during the daytime and lights shall not be kept on overnight in the construction area, as practicable. Should construction activities occur at night, the project applicant would be required to obtain authorization for nighttime work from the County. If night-lighting is required during construction activities, all exterior lighting along undeveloped land shall be fully shielded and directed downward in a manner that shall prevent light spillage or glare into the adjacent open space (undeveloped land).

Implementation of recommended MM-BIO-2 (Long-Term Indirect Impacts to Special-Status Plants and Special-Status Wildlife) would reduce potential construction-related and long-term project operation indirect impacts to a less-than-significant level by requiring measures to ensure project runoff is not altered from existing conditions and toxicants are not discharged; preparation of landscaping plans that emphasize native species and do not include species from the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory (Cal-IPC 2006); and incorporation of barriers to prevent unauthorized public access to areas with potential habitat for special-status plants and wildlife. Compliance with the County Light Trespass Ordinance (Chapter 83.07) would reduce light trespass on adjacent undeveloped areas. With implementation of MM-BIO-2, the effect of long-term project operation indirect impacts to special-status plant species, burrowing owl, loggerhead shrike, LeConte's thrasher, other nesting birds and raptors, Mohave ground squirrel, desert kit fox, and Mohave fringe-toed lizard would be reduced to **less than significant with mitigation**.

MM-BIO-2 Long-Term Impacts to Special-Status Plants and Special-Status Wildlife. Prior to issuance of a construction permit, construction plans and conditions of approval shall include the following to address indirect impacts to special-status species and nesting birds and raptors:

- **Runoff.** The project shall implement measures required through the National Pollutant Discharge Elimination System requirements to ensure that the quantity and quality of runoff discharged is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into open space (undeveloped land) or suitable habitat for special-status species. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.
- **Toxicants.** Land uses that use chemicals or generate bioproducts such as manure, fertilizer, or vineyard waste that are potentially toxic or may adversely affect plant species, wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharges. Measures such as those employed to address drainage issues shall be implemented.
- **Noise.** Proposed noise-generating land uses affecting suitable habitat for special-status species shall incorporate setbacks, berms, or walls to minimize the effects of noise on resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife should not be subject to noise that would exceed residential noise standards.

- **Barriers.** The project shall incorporate barriers, where appropriate, to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in open space and/or suitable habitat for special-status wildlife. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.
- **Invasive Species.** Invasive, non-native plant species listed on the most recent California Invasive Plant Council inventory (https://www.cal-ipc.org/plants/inventory/) with a rating of moderate or high shall not be included in landscaping.

Implementation of MM-BIO-3 (Pre-Construction Surveys for Burrowing Owl Avoidance) requires pre-construction surveys for burrowing owl in areas supporting potentially suitable habitat no less than 14 days prior to the start of construction activities. If burrowing owls are detected occupying the site, a Burrowing Owl Management Plan would be prepared to identify avoidance measures and relocation methods to be implemented only if avoidance is not feasible. With the implementation of pre-construction surveys and avoidance and/or relocation measures, direct and indirect impacts to burrowing owl would be reduced to **less than significant with mitigation**.

MM-BIO-3 Pre-Construction Surveys for Burrowing Owl and Avoidance. One pre-construction burrowing owl take avoidance survey shall be completed by a qualified biologist no less than 14 days before initiation of site preparation or grading activities. A second take avoidance survey shall be completed within 24 hours prior to the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the project site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation. The surveys shall be conducted of the project site and adjoining habitat areas within 500-feet of the construction area. If burrowing owl are not detected during pre-construction surveys, and if no burrows or perch sites have active sign (molted feathers, cast pellets, prey remains, eggshell fragments, decoration, or excrement), then construction related activities may begin, no further action shall be required, and no further mitigation under this measure is necessary.

If burrowing owls are detected occupying the site, a Burrowing Owl Management Plan shall be prepared in consultation with CDFW. Unless otherwise approved by CDFW, disturbance to suitably sized burrows (>11 cm in diameter and >150 cm in depth) shall be avoided during the breeding season (February 1 through August 31) unless found to be unoccupied. Buffers shall be established around occupied burrows by a qualified biologist in accordance with guidance provided in CDFW's 2012 Staff Report on Burrowing Owl Mitigation and based on the level of disturbance and time of year. Buffers may be adjusted by a qualified biologist based on the level of disturbance, site-specific conditions (e.g., visual screens), and after consultation with CDFW. Fencing or flagging shall be installed to create a non-disturbance buffer area where no work activities may be conducted. The buffer shall remain in place in accordance with the Burrowing Owl Management Plan and until it is determined that the burrows are no longer occupied or the young from the occupied burrows are foraging independently and capable of independent survival.

If impacts to burrowing owl cannot be feasibly avoided or minimized through non-disturbance buffers during construction, the applicant shall consult with CDFW on whether take authorization under the California Endangered Species Act (CESA) Incidental Take Permit (ITP) process may be warranted. If take authorization is necessary, the ITP shall include suitable avoidance and

minimization measures to reduce potential impacts (e.g., maintenance of buffers during the breeding season and passive relocation), and adequate compensatory mitigation through conservation or mitigation banking. Unavoidable impacts to occupied suitable habitat shall be compensated at a minimum of 1:1 ratio (through on- or off-site preservation with permanent protection and long-term funding, or through purchase of equivalent credits through a mitigation bank, if available) in addition to implementing all other measures and conditions of the ITP.

Implementation of recommended MM-BIO-4 (Pre-Construction Nesting Bird Surveys and Avoidance) would minimize potential direct and indirect impacts to Loggerhead shrike, LeConte's thrasher and all nesting migratory birds and raptors to a less-than-significant level through avoidance of construction activities during the nesting season (February 1 through August 31) and performance of a nesting bird survey if construction activities occur during the nesting season. Therefore, direct and indirect impacts to nesting birds would be reduced to **less than significant with mitigation.**

MM-BIO-4 Pre-Construction Nesting Bird Surveys and Avoidance. Construction activities shall avoid the migratory bird nesting season (typically February 1 through August 31) to reduce any potential significant impact to birds that may be nesting in the survey area to the maximum extent feasible. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the project site and within 500 feet of the project site shall be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans, along with an appropriate buffer established around the nest, which shall be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall be conducted when construction occurs in close proximity to an active nest buffer. No project activities shall encroach into established buffers without the consent of a monitoring biologist. The nest area and buffer shall be avoided and remain in place until it is determined by a qualified biologist that the nestlings have fledged and the nest is vacated and no longer active.

Implementation of MM-BIO-5 (Mohave Ground Squirrel Avoidance and Minimization) requires pre-construction surveys to evaluate presence of the species. If pre-construction surveys or genetic testing (if such testing is available) are negative for the Mohave ground squirrel or Mohave ground squirrel hybrids, no further mitigation shall be required. Should presence be determined, MM-BIO-5 provides minimization and avoidance measures to Mohave ground squirrel and Mohave ground squirrel hybrids and requires consultation with CDFW to determine the need for an ITP. Section 2081 subdivision (b) of the Fish and Game Code allows CDFW to authorize take of species listed as endangered, threatened, or candidate pursuant to the California Endangered Species Act (CESA) through an ITP. If needed, the ITP shall include an analysis of whether project impacts would jeopardize the continued existence of the species and shall provide suitable avoidance and minimization measures to reduce potential impacts, including indirect impacts from noise, vibration, and increased human presence during construction and operation. If required, the ITP shall also provide compensatory mitigation for direct impacts to occupied Mohave ground squirrel or Mohave ground squirrel hybrid habitat at a minimum of 1:1 ratio through on- or off-site preservation with permanent protection and long-term funding or through purchase of equivalent credits through a

mitigation bank if available. Therefore, if Mohave ground squirrel are determined to be present on site, direct and indirect impacts to Mohave ground squirrel would be reduced to **less than significant with mitigation.**

MM-BIO-5 Mohave Ground Squirrel Avoidance and Minimization. To address potentially significant impacts to Mohave ground squirrel, the project applicant shall conduct pre-construction surveys to evaluate presence of the species. If pre-construction surveys or genetic testing (if such testing is available) are negative for the Mohave ground squirrel or Mohave ground squirrel hybrids, no further mitigation shall be required.

If the pre-construction surveys confirm presence on the site, or alternatively, if the applicant forgoes pre-construction surveys and presumes presence, the applicant shall consult with the California Department of Fish and Wildlife (CDFW) and obtain an Incidental Take Permit (ITP) under Section 2081 of California Fish and Game Code. The ITP shall provide, at a minimum, suitable take avoidance and minimization measures to reduce potential impacts, and adequate compensatory mitigation through conservation or mitigation banking. Unavoidable impacts to occupied suitable habitat shall be compensated at a minimum of 1:1 ratio (through on- or off-site preservation with permanent protection and long-term funding, or through purchase of equivalent credits through a mitigation bank if available) in addition to implementing all other measures and conditions of the ITP. For example, take minimization measures to be implemented shall include, at a minimum, a combination of the following: (1) preconstruction surveys of the project site and 50-foot buffer, (2) preparation of a Mohave Ground Squirrel Relocation Plan with specific methods and procedures for burrow excavation and ground squirrel relocation, and (3) reporting to the County and CDFW.

To avoid potential direct and indirect impacts to desert kit fox, a pre-construction survey for desert kit fox would be conducted within 10 days prior to the start of construction to determine the presence/absence of desert kit fox, pursuant to MM-BIO-6 (Pre-Construction Survey for Desert Kit Fox and Avoidance). If an active desert kit fox den is detected, a Desert Kit Fox Management and Relocation Plan would be prepared in consultation with CDFW to identify avoidance measures and relocation methods to be implemented only if avoidance is not feasible. With the implementation of pre-construction surveys and avoidance and/or relocation measures, direct and indirect impacts to desert kit fox would be reduced to **less than significant with mitigation.**

MM-BIO-6 Pre-Construction Survey for Desert Kit Fox and Avoidance. A pre-construction survey for desert kit fox shall be conducted by a qualified biologist within 10 days prior to initiation of site preparation or grading activities to determine the presence/absence of desert kit fox.

If desert kit fox is detected, a Desert Kit Fox Relocation and Mitigation Plan shall be implemented. The Desert Kit Fox Relocation and Mitigation Plan shall include, at a minimum, the following avoidance, minimization, and mitigation measures. If an active non-natal desert kit fox den is detected, a 200-foot no disturbance buffer shall be established around the active den, unless otherwise authorized by the California Department of Fish and Wildlife (CDFW). Where required buffering will not be feasible, passive relocation, as outlined in the Desert Kit Fox Relocation and Mitigation Plan, shall be allowed in consultation with San Bernardino County, CDFW, and U.S. Fish and Wildlife Service (USFWS). If an active natal desert kit fox den is detected, an initial 200 foot no disturbance buffer shall be established around the natal den, and this buffer shall be maintained until the den can be verified to not host pups. Construction activities shall not be permitted in this area until the den has been vacated. Once the den is vacated and if threatened by construction, it can be collapsed if deemed necessary by a qualified biologist.

A report to evaluate the success of the relocation efforts and any subsequent re-occupation, if applicable, shall be provided (including a comprehensive summary, tables, maps, and other necessary materials) at the end of the construction period to CDFW, the USFWS and the County. Data shall be readily available to the CDFW upon request. If an injured, sick, or dead desert kit fox is detected on any area associated with the project, the designated CDFW personnel at both the Ontario office and the Wildlife Investigation Lab shall be notified as described within the Desert Kit Fox Relocation and Mitigation Plan.

Implementation of recommended MM-BIO-7 (Pre-Construction Mohave Fringe-toed Lizard Clearance Surveys) would reduce potential direct and indirect impacts to Mohave fringe-toed lizard to a less-than-significant level by requiring a pre-construction survey using appropriate methods, avoidance of these species where possible, and relocation of individuals to nearby suitable habitat outside of the construction footprint. Therefore, direct and indirect impacts to Mohave fringe-toed lizard would be reduced to **less than significant with mitigation**.

MM-BIO-7 Pre-Construction Mohave Fringe-toed Lizard Clearance Surveys. Pre-construction clearance surveys for Mohave fringe-toed lizard shall be conducted by a qualified biologist within 48 hours of the initiation of ground disturbance or vegetation clearing within and adjacent to construction areas. If found, Mohave fringe-toed lizards shall be relocated to suitable habitat nearby where they are safe from construction activities. Surveys and relocation of these species may only be conducted by a qualified biologist.

- Suitable burrows or rock piles shall be checked for occupancy. Occupied burrows shall be flagged and avoided (employing a 50-foot buffer) during construction. If the burrow cannot be avoided, it shall be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed.
- During construction, if a Mohave fringe-toed lizard is found on the project site, construction activities adjacent to the individual's location shall be halted and the animal shall be allowed to move away from the construction site. If the individual is not moving, a qualified biologist shall relocate it to nearby suitable habitat outside the construction area. It shall be placed in the shade of a shrub.

Impact 3.3-2 The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires). Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping-stones for dispersal.

The project site is currently undeveloped land located within established wildlife corridors and/or habitat linkage areas (i.e., the San Bernardino Mountains–Calico Mountains Essential Connectivity Area, the Desert Tortoise Conservation Area/Least Cost Corridor, and South Coast Wildlands Desert Linkage Network) that allow for

movement of terrestrial wildlife species through the vicinity. However, the project site is immediately adjacent to Lenwood Road along the western boundary, a residential neighborhood abuts the southern boundary with the BNSF rail lines are located farther to the south, and rural residential areas are north and south of the site. Therefore, wildlife movement through the project vicinity is, to some extent, restricted. The only relatively unrestricted areas nearby are along the Mojave River to the north and undeveloped land to the west. Surveys for desert tortoise were negative, indicating the site is not used by this species. Surveys determined that there are possible round-tailed/Mohave ground squirrel hybrids occupying the site, as well as desert kit fox, a variety of small mammals, reptiles, and birds. If wildlife were to enter the project site, movement directly north, west, and south is restricted by development, railroads, and roads. Additionally, the site is mapped as being "less permeable" by CDFW (2026a) which means the habitat has lower ecological conditions and is less permeable to ecological flows. Areas mapped as such typically do not support sustainable wildlife movements between high-value ecological areas and protected areas or ecological flows.

As shown on Figure 3.3-3, areas outside the project site that include established wildlife corridors and/or habitat linkages and currently support wildlife movement in the region would not be impacted by the project and would continue to allow for wildlife movement. The off-site area is adjacent to Lenwood Road so would not impact any wildlife corridors. Furthermore, the project site does not contain any buildings, structures, streams or waterways that could include fish species or wildlife nursery sites, such as bat colony roosting sites or colonial bird nesting areas (Appendix C). Therefore, impacts to established migratory wildlife corridors and wildlife movement would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.3-3 The proposed project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The San Bernardino Countywide Plan/Policy Plan and County Development Code regulate and protect California Desert Native Plants, including silver cholla. The following analysis evaluates the project's potential conflicts with these local policies and ordinances.

### San Bernardino Countywide/Policy Plan

The project would comply with Countywide Plan/Policy Plan Policy NR-5.8 and would not include invasive plant species within the project's landscaping plans. Therefore, construction of the project would not conflict with the Countywide Plan/Policy Plan Policy NR-5.8.

### San Bernardino County Development Code

As previously discussed in Section 3.3.2, the project must comply with Chapter 88.01.060, Desert Native Plant Protection of the County's Development Code, which focuses on the conservation of specified desert plant species. Survey efforts within the BSA resulted in the detection of at least one silver cholla, which is protected under the CDNPA as well as this Development Code. All silver cholla present within the BSA would be directly removed by project activities (Figure 3.3-5, Project Impacts), which would be considered a potentially significant impact, absent mitigation, due to a conflict with the California Desert Native Plants Act and with the County's Development Code.

Section 88.01.080 of the Development Code focuses on promoting the health of riparian corridors in relation to their impact on waterways within the region, their use as habitat by various plant and wildlife species, and their stabilization of stream banks, and Chapter 88.02 of the Development Code provides a regulatory framework to promote the health of soil communities within the County, limits soil erosion potential, and preserves air quality.

There are no riparian corridors present within the BSA; therefore, the project is in compliance with Section 88.01.080 of the Development Code. However, construction of the project may result in soil erosion and runoff which may conflict with Chapter 88.02 of the Development Code, and therefore be significant absent mitigation.

## Mitigation Measures

Implementation of MM-BIO-8 (Pre-Construction Survey and Removal Permit for Desert Native Plants) would require a preconstruction survey for protected native desert plants within the BSA to ensure all individuals are accurately counted. The project applicant would submit an application and applicable fee paid to the San Bernardino County for removal of all protected native desert plants, as listed within the CDNPA and Chapter 88.01.060 of the County's Development Code, that are detected within the BSA. The application would include certification from a qualified native desert plant expert that the proposed removal of protected native desert plants is appropriate, supportive of a healthy environment, and in compliance with the County's Development Code. Implementation of MM-BIO-1 (Construction-Related Impacts to Special-Status Plants, Special-Status Wildlife, Sensitive Vegetation Communities, and Aquatic Resources) and MM-BIO-2 (Long-Term Impacts to Special-Status Plants, Special-Status Wildlife, and Sensitive Vegetation Communities) would help implement standard dust control measures, minimize runoff, and require soil stabilization and would limit soil erosion and help preserve air quality.

Implementation of MM-BIO-1, MM-BIO-2, and MM-BIO-8 would reduce potentially significant impacts due to conflicts with the California Desert Native Plants Act and the County's Development Code to **less than significant with mitigation.**

MM-BIO-8 Pre-Construction Desert Native Plant Survey. Prior to the issuance of grading permits, the BSA shall undergo a preconstruction survey to obtain an accurate count of the total number of protected desert native plants within the BSA. Protected desert native plants include those listed in the CDNPA as well as those listed within Chapter 88.01.060 (*Desert Native Plant Protection*) of the County's Development Code, and is as follows:

- The following desert native plants with stems 2 inches or greater in diameter or 6 feet or greater in height:
  - *Psorothamnus spinosus* (smoketree).
  - All species of the genus *Prosopis* (mesquites).
- All species of the family *Agavaceae* (century plants, nolias, yuccas).
- Creosote Rings, 10 feet or greater in diameter.
- All Joshua trees.
- Any part of any of the following species, whether living or dead:
  - *Olneya tesota* (desert ironwood).
  - All species of the genus *Prosopis* (mesquites).
- All species of the genus *Cercidium* (palo verdes).

Should any of the above listed plants be observed within the BSA during the preconstruction survey, the project applicant shall submit an application and applicable fee paid to San Bernardino County for removal of said protected native desert plants. The application shall include certification from a qualified native desert plant expert to show that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the San Bernardino County Development Code.

### Cumulative Impacts

Impact 3.3-4 The proposed project would not result in cumulatively considerable impacts related to biological resources.

The BIG project, located west of the proposed project, would impact several special status species, including the five special-status species potentially affected by the proposed project. Cumulative impacts would occur with regards to burrowing owl, loggerhead shrike, LeConte's thrasher, Mohave ground squirrel or Mohave ground squirrel hybrids, desert kit fox, and Mohave fringe-toed lizard. In addition, both projects have the potential to affect nesting migratory birds and desert native plants.

### Mitigation Measures

Mitigation measures proposed in this EIR, MM BIO-1 through BIO-8, would reduce cumulative impacts to less than considerable. Similar mitigation measures are proposed in the BIG Draft EIR to reduce that project's effects on these species. Therefore, the project's contribution to a cumulative impact to biological resources would be **less than significant with mitigation**.

## 3.3.4 References

BLM (Bureau of Land Management). 2016. Desert Renewable Energy Conservation Plan. Prepared by the U.S. Bureau of Land Management.

Cal-IPC (California Invasive Plant Council). 2006. *California Invasive Plant Inventory*. California Invasive Plant Council. February 2006. Accessed October 23, 2024. https://www.cal-ipc.org/docs/ip/inventory/pdf/Inventory2006.pdf.

California Herps. 2023. A Guide to the Amphibians and Reptiles of California. Accessed August 2023. https://californiaherps.com/.

CDFW. 2018. *Protocols for Surveying and Evaluating Impacts to Special-Status Native Populations and Natural Communities*. March 20, 2018. Accessed October 23, 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

CDFW. 2019a. *A Conservation Strategy for the Mohave Ground Squirrel Xerospermophilus mohavensis*. Accessed October 23, 2024. http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=171301&inline.

CDFW. 2020. *California Fish and Game Commission Notice Of Findings, Western Joshua Tree* (Yucca brevifolia). September 24, 2020. Accessed October 23, 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=183565&inline.

CDFW. 2023. "California Wildlife Habitat Relationships (CWHR)" [information system]. Version 9.0. Accessed October 23, 2024. https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range.

CDFW. 2025. "California Natural Communities List." Sacramento, California: CDFW, Vegetation Classification and Mapping Program. February 27, 2025. Accessed February 6, 2026. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

CDFW. 2026a. "Biogeographic Information and Observation Systems (BIOS)." Accessed February 2026. https://apps.wildlife.ca.gov/bios6/.

CDFW. 2026b. "Special Vascular Plants, Bryophytes, and Lichens List." California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. January 2026. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.

CDFW. 2026c. "Special Animals List." California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed 2026. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline=1.

CDFW. 2026d. "RareFind 5, Version 5.2.14" [online database]. California Natural Diversity Database. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed 2026. https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

Center for Biological Diversity. 2019. *A Petition to List Western Joshua Tree (*Yucca brevifolia*) as Threatened under the California Endangered Species Act (CESA)*. Submitted to the California Fish and Game Commission. October 15, 2019. Accessed October 23, 2024. https://www.biologicaldiversity.org/species/plants/pdfs/CESA-petition-Western-Joshua-Tree-10-15-19.pdf.

CNPS (California Native Plant Society). 2026a. *Inventory of Rare and Endangered Plants of California* (online ed., v9-5). Sacramento, California: California Native Plant Society, Rare Plant Program. Accessed February 2026. http://www.rareplants.cnps.org/.

CNPS. 2026b. *A Manual of California Vegetation* (online edition). Sacramento, California: California Native Plant Society. Accessed February 2026. http://www.cnps.org/cnps/vegetation/.

Coulombe, H.N. 1971. "Behavior and Population Ecology of the Burrowing Owl, *Speotyto cunicularia*, in the Imperial Valley of California." *Condor* 73(2): 162–176.

Dobkin, D., and S. Granholm. 2005. "Le Conte's Thrasher." Life History Accounts and Range Maps—California Wildlife Habitat Relationships System. California Department of Fish and Wildlife, California Interagency Wildlife Task Group. August 2005. Accessed October 23, 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2077&inline=1.

eBird. 2023. The Cornell Lab of Ornithology. Accessed February 2023. https://ebird.org/home.

Fitton, S. 2008. "Le Conte's Thrasher (*Toxostoma lecontei*)." In *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California,* edited by W.D. Shuford and T. Gardali, 351–358. Studies of Western Birds 1. Camarillo, California: Western Field Ornithologists and Sacramento, California:

California Department of Fish and Game. February 4, 2008. http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html.

Gervais, J.A., D.K. Rosenberg, and L.A. Comrack. 2008. "Burrowing Owl (*Athene cunicularia*)." In *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, edited by W.D. Shuford and T. Gardali, 218–226. Studies of Western Birds 1. Camarillo, California: Western Field Ornithologists, and Sacramento, California: California Department of Fish and Game. February 4, 2008. http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html.

Green, G.A., and R.G. Anthony. 1989. "Nesting Success and Habitat Relationships of Burrowing Owls in the Columbia Basin, Oregon." *Condor* 91: 347–354.

Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. "The Burrowing Owl (*Speotyto cunicularia*)." In *The Birds of North America*, edited by A. Poole and F. Gill. Philadelphia, Pennsylvania: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.

Humple, D. 2008. "Loggerhead Shrike (*Lanius ludovicianus*)." *In California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, edited by W.D. Shuford and T. Gardali, 271–277. Studies of Western Birds 1. Camarillo, California: Western Field Ornithologists and Sacramento, California: California Department of Fish and Game. February 4, 2008. http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html.

Johnson, V., H. Shellhammer, J. Harris, and S. Granholm. "Mohave Ground Squirrel." California Wildlife Habitat Relationships System. California Department of Fish and Wildlife, California Interagency Wildlife Task Group. August 2019. Accessed October 25, 2024. https://wildlife.ca.gov/Conservation/Mammals/Mohave-Ground-Squirrel.

Lantz, S. J., H. Smith, and D.A. Keinath. 2004. *Species Assessment for Western Burrowing Owl* (Athene cunicularia hypugaea) *in Wyoming*. Prepared for the U.S. Department of Interior and Bureau of Land Management, Wyoming State Office. Cheyenne, Wyoming. September 2004.

Leitner, P. 2015. "Current Status of the Mohave Ground Squirrel (*Xerospermophilus mohavensis*): A Five-Year Update (2008–2012)." *Western Wildlife* 2:9–22. July 14, 2015. Accessed October 25, 2024. https://wwjournal.org/wp-content/uploads/sites/9/2021/05/Leitner_WW_2015.pdf.

Martin, D.J. 1973. "Selected Aspects of Burrowing Owl Ecology and Behavior." *Condor* 75: 446–456.

NatureServe. 2023. "Definitions of NatureServe Conservation Status Ranks." September 2023. Accessed October 25, 2024. https://help.natureserve.org/biotics/content/record_management/Element_Files/Element_Tracking/ETRACK_Definitions_of_Heritage_Conservation_Status_Ranks.htm#:~:text=The%20ranking%20system%20facilitates%20a,individual%20Natural%20Heritage%20Program%20scient.

NPS (National Park Service). 2015. "Desert Kit Fox." February 28, 2015. Accessed October 25, 2024. https://www.nps.gov/jotr/learn/nature/kitfox.htm.

San Bernardino County. 2014. *County of San Bernardino Development Code*. As amended January 2014. Accessed October 25, 2024. http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DC011614.pdf.

San Bernardino County. 2019. *San Bernardino Countywide Plan Draft PEIR*. Chapter 5.4, Biological Resources. Accessed March 9, 2026. https://countywideplan.sbcounty.gov/wp-content/uploads/sites/125/2021/01/Ch_05-04-BIO.pdf

San Bernardino County. 2022. *Countywide Plan/Policy Plan.* September 2022. Accessed October 25, 2024. https://countywideplan.sbcounty.gov/resources/document-download/

Sheppard, J.M. 1996. "LeConte's Thrasher (*Toxostoma lecontei*)." *The Birds of North America Online*. Edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. https://birdsoftheworld.org/bow/species/lecthr/1.0/introduction.

USDA (U.S. Department of Agriculture). 2023. "Web Soil Survey." USDA, Natural Resources Conservation Service, Soil Survey Staff. Accessed February 2023. http://websoilsurvey.nrcs.usda.gov/.

USFWS (U.S. Fish and Wildlife Service). 2010. *Preparing for any Action That May Occur within the Range of the Mojave Desert Tortoise* (Gopherus agassizii). Accessed October 25, 2024. https://www.deserttortoise.org/documents/2010DTPre-projectSurveyProtocol.pdf.

USFWS. 2023a. *National Wetlands Inventory*. U.S. Department of the Interior, USFWS. Accessed February 2023. http://www.fws.gov/wetlands/.

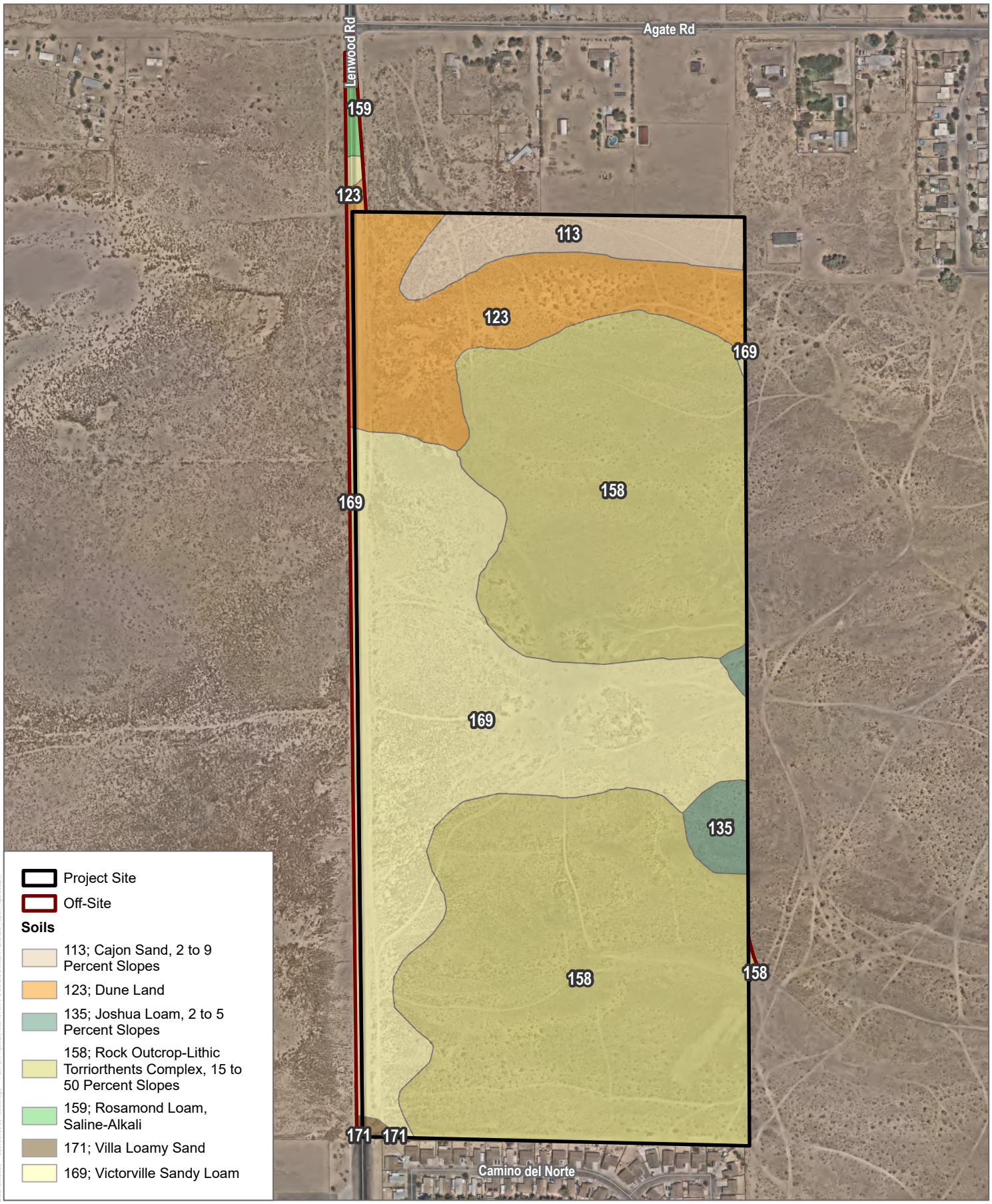
USFWS. 2023b. *Environmental Conservation Online System, Information for Planning and Conservation Report* (online edition, v2.3.2). http://ecos.fws.gov/ipac/.

Wood, B. 2024. Potential Mohave Ground Squirrel Hybrid. Email communication between from B. Wood (CDFW) to C. Amoaku (Dudek). April 26, 2024.

Yosef, R. 1996. "Loggerhead Shrike." *The Birds of North America Online*, edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. https://birdsoftheworld.org/bow/species/logshr/1.0/introduction. January 1, 1996. Accessed October 23, 2024.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1990. *California's Wildlife, Volume 2, Birds*. California Statewide Habitat Relationships System. Sacramento, California: California Department of Fish and Game. November 1990.

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SOURCE: NearMap Accessed 2026, OpenStreetMaps 2019, USDA SSURGO

DUDEK

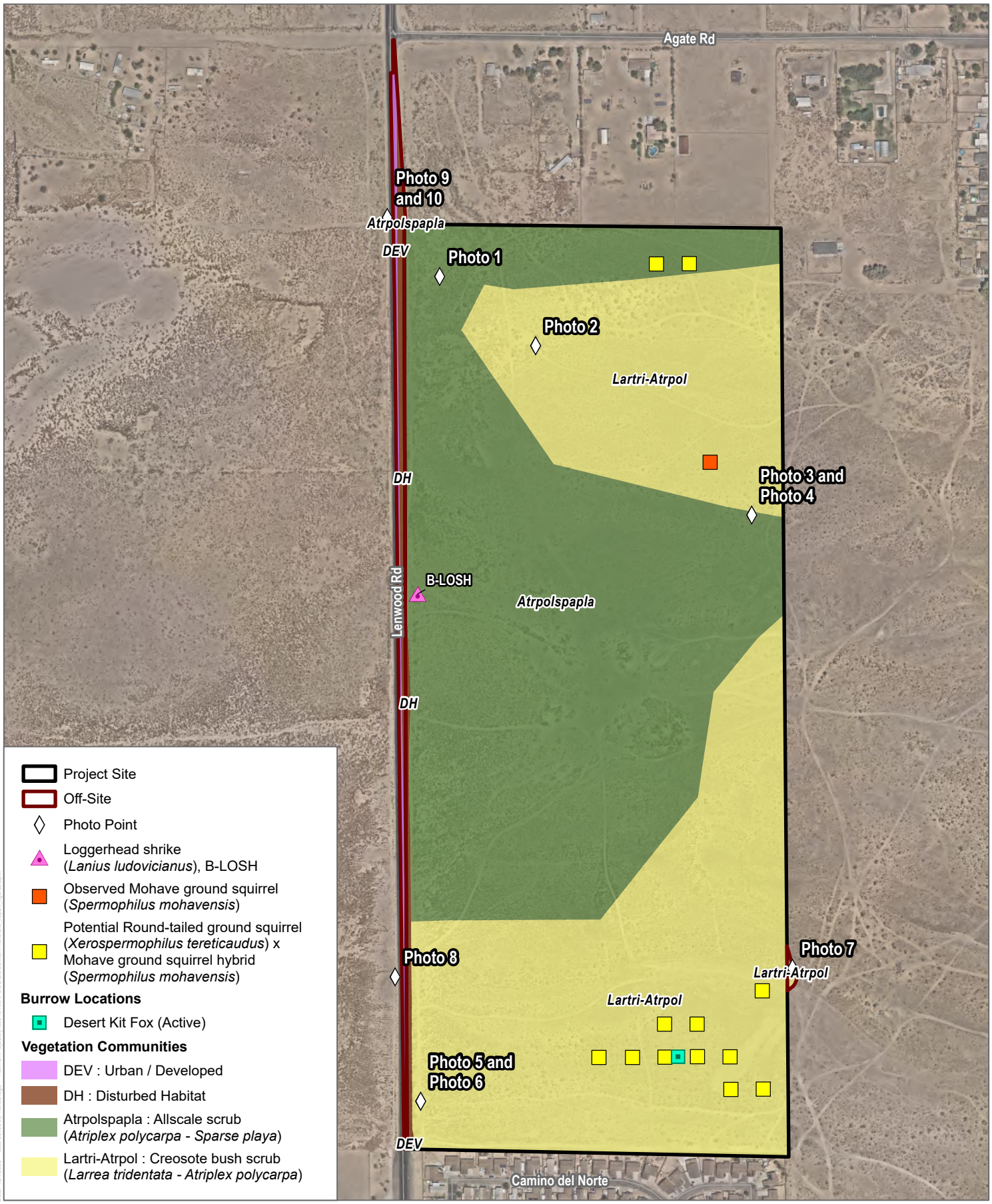
0 225 450 Feet

**FIGURE 3.3-1**

Soils

EV Charging Station and Logistics Facility

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SOURCE: NearMap Accessed 2026, OpenStreetMaps 2019, Dipodomys 2023

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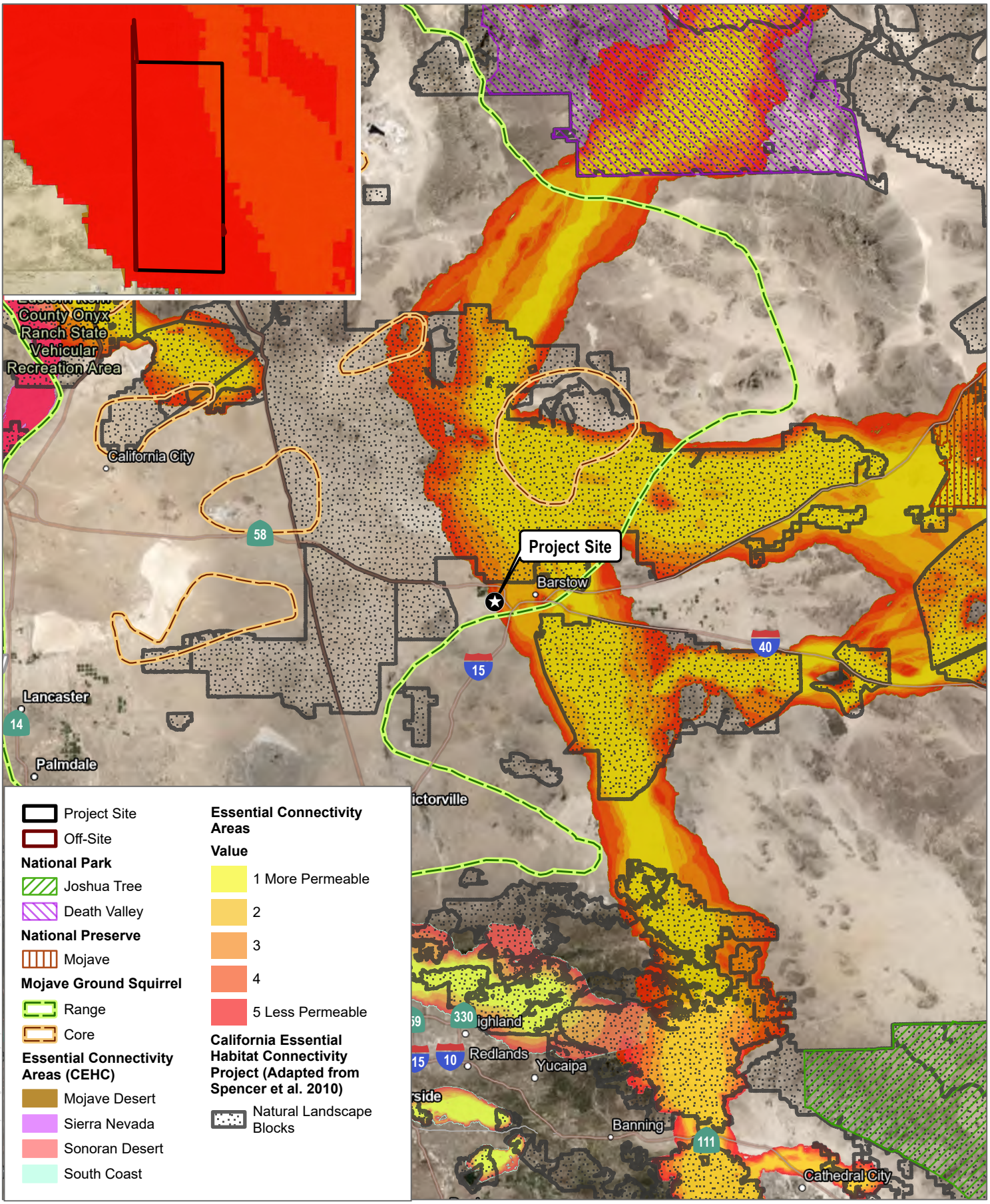
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**FIGURE 3.3-2**

Biological Resources

EV Charging Station and Logistics Facility

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SOURCE: Firefly Basemap Imagery, OpenStreetMaps 2019

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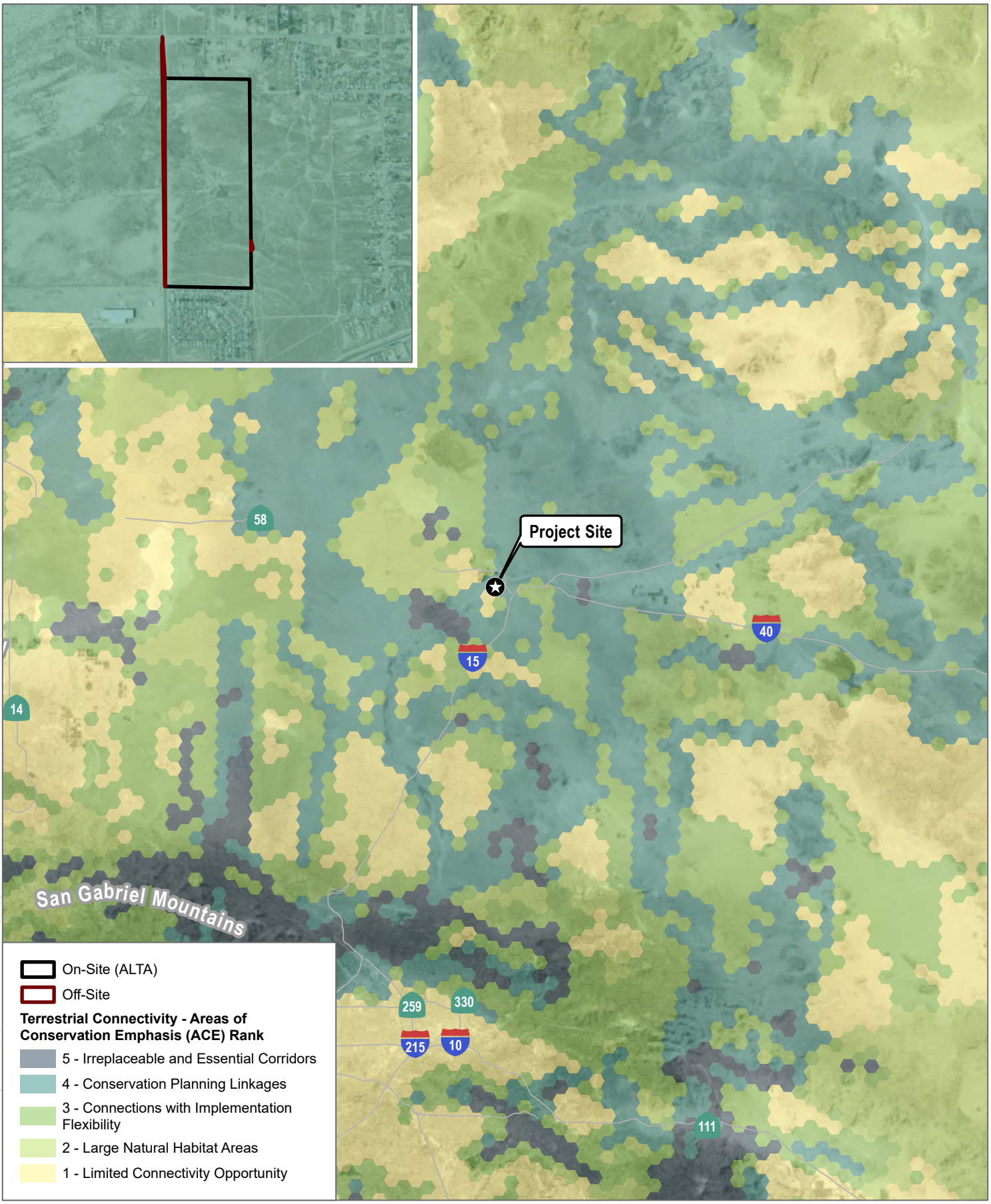
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**FIGURE 3.3-3**

Wildlife Movement

EV Charging Station and Logistics Facility

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SOURCE: Firefly Basemap Imagery, OpenStreetMaps 2019, CDFW 2019

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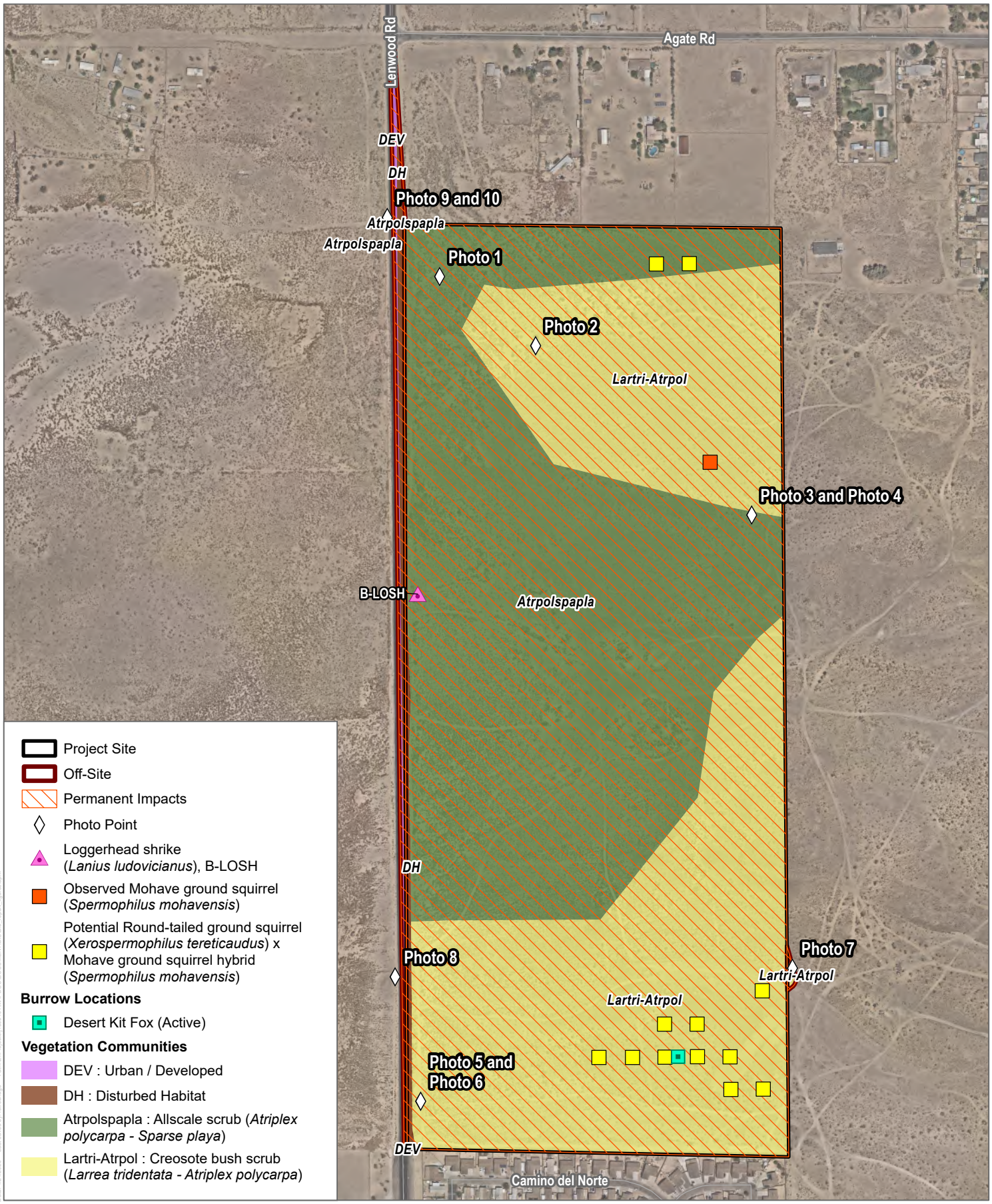
0 5 10 Miles

**FIGURE 3.3-4**

Terrestrial Connectivity - Areas of Conservation Emphasis (ACE)

EV Charging Station and Logistics Facility

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SOURCE: NearMap Accessed 2026, OpenStreetMaps 2019, Dipodomys 2023

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0 225 450 Feet

**FIGURE 3.3-5**

Project Impacts

EV Charging Station and Logistics Facility

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# 3.4 Cultural and Paleontological Resources

This section describes the existing conditions related to cultural and paleontological resources, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to project implementation of the Lenwood Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

Comments regarding cultural resources were received during the Notice of Preparation scoping period from the Native American Heritage Commission (NAHC). This is a standard letter sent by the NAHC that lists requirements for lead agencies to follow. All Notice of Preparation comment letters received are provided in Appendix A.

The analysis is based, in part, on the Cultural Resources Inventory and Evaluation Report (non-confidential report Appendix D) and the Paleontological Resources Inventory Memorandum (Appendix F) prepared for the project by Dudek, as well as the Preliminary Geotechnical Engineering Investigation prepared by Moore Twining Associates Inc., included as Appendix E to this EIR.

## 3.4.1 Environmental Setting

The project site is located on Lenwood Road between California State Route 58 and Interstate 15, within unincorporated San Bernardino County in the community of Lenwood. The approximately 100-acre project site is undeveloped and has not previously been developed. The project proposes to develop an electric vehicle charging station along with associated amenities to serve light duty/passenger vehicles and medium and heavy-duty trucks, and a state-of-the-art concrete tilt-up logistics facility.

The off-site improvements include widening Lenwood Road within its existing right-of-way and installing overhead electrical poles within the Lenwood right-of-way to connect to a substation located 1.52 miles south.

### Natural Setting

The northern boundary of the project area is approximately 0.4 miles south and the western boundary is approximately 1.4 miles east of the current channel of the Mojave River, and due west of downtown Barstow. The Mojave River flows through a channel between the Mitchell Range to the north, and the Daggett Ridge to the south. The project area is in an area where relatively subtle outcrops of eroding volcanic, metavolcanic, and sedimentary strata interweave with riverine alluvium, and both fine and coarse grain sediments transported eastward from the perennially exposed Mojave Riverbed. These eroded bedrock exposures have attracted people for millennia, providing them with easy access to raw materials (rhyolitic and cryptocrystalline) for the production of stone tools.

### Prehistoric Context

While it is likely that long-term trends in prehistoric subsistence/settlement adaptations, and the timing of major changes in them, were largely similar across the Mojave Desert region, several attempts to summarize them during the last 30 years of archaeological research have often produced differing results. In particular, the character of late Pleistocene/early Holocene adaptations is still unclear and strongly debated, due in part to the persistence of long-standing notions of "Paleoindian" lifeways but also due to the continued scarcity of archaeological data from ancient sites in good (e.g., stratigraphically intact), dateable contexts.

The following summary of early prehistoric culture history, therefore, contains some assertions that are largely inferred and many that are highly debatable. Other important, more detailed syntheses can be found elsewhere (Basgall 1993, 2000; Giambastiani and Basgall 2000; Grayson 1993; Sutton et al. 2007; Sutton 2017; Warren 1984; Warren and Crabtree 1986) that provide additional opinions on broader datasets for the region.

The following discussion begins with summaries of local cultural chronological traditions as they are popularly understood, embedded within Paleoclimatic trends, and separated into the following periods: Fluted Point Period, Lake Mojave Period, Pinto Period, Gypsum Period, Saratoga Springs Period, Post-Saratoga Springs/Late Period, and Contact/Ethnographic Period. This setting divides the pre-contact cultural sequence into five periods. These periods are analytical constructs and do not necessarily reflect Native American views.

### Terminal Pleistocene – Fluted Point Period (ca. 12,000–10,000 BP[1])

Disregarding claims for extremely ancient human presence in the Mojave Desert, there is substantial evidence that human occupation of the arid west began at the end of the Pleistocene era. Archaeological assemblages of such antiquity have been recognized mainly due to the presence of fluted-base projectile points similar to the well-known Clovis forms of the Great Plains and are fairly well-dated to 12,000-10,000 BP. Many of the earliest discoveries were made in the Mojave Desert at places like Lake Mojave, China Lake, Tiefort Basin, and Little Lake. Many of those recovered were surface finds, but sites at China Lake held fluted points in apparent association with the burned remains of extinct fauna; these locations remain among the more convincing for the Pleistocene antiquity of fluted point occupations (Basgall et al. 2002; Warren et al. 2004). Fluted points in the West often occur as isolated finds but they also tend to be found with flaked stone assemblages that are dominated by bifaces and formally shaped, unifacial flake tools. The comparable prevalence of bifaces in central plains Paleoindian (Clovis) assemblages could signify a need for a generalist, portable technology among extremely mobile groups. The premise of high residential mobility among Paleoindian groups has drawn support from studies of lithic assemblages transported long-distances and from obsidian source profiles for Great Basin Concave-base points and crescents in the Mojave Desert.

Recent discoveries of fluted points have increased the spatial distribution of these artifacts but have not contributed much to solidifying their place in time. Finds from the Mojave Desert have slowly multiplied (Basgall and Hall 1991), revealing differences in the spatial distributions of fluted and stemmed points (e.g., at Fort Irwin) that may point to a cultural division between them throughout the Mojave Desert (Basgall and Hall 1994).

More recent work at Edwards Air Force Base (AFB) has identified a few sites with Great Basin Concave-base points around the shore of Rosamond Lake, also known as Pleistocene Lake Thompson (Basgall and Overly 2004), where various surface assemblages contain Great Basin Concave-base points, Great Basin Stemmed points, crescents, and even buried cultural deposits of late Pleistocene-early Holocene age.

### Early Holocene – Lake Mojave Period (ca. 10,000–7,000 BP)

In the western Great Basin, various stemmed projectile point forms have been fairly well dated to the early Holocene, roughly between 10,000 and 7500 BP. Generally subsumed under the broader appellation “Great Basin Stemmed,” these artifacts are elongate, lanceolate forms often with subtle, sloping shoulders, although many different regional styles exist. In the western Mojave Desert, typical stemmed points are Lake Mojave

[1] Before Present.

(unshouldered) and Silver Lake (slightly shouldered) forms, both of which are parts of lithic assemblages similar to those of the Fluted Point Period.

Because of their tendency to occur along the shorelines of extinct lakes, stemmed point assemblages were once considered to represent a unique, lacustrine-based subsistence adaptation. The term "Western Pluvial Lakes Tradition," originally coined by Bedwell (1973), was applied to stemmed point sites found in ancient lakeshore contexts across the Great Basin. Lithic assemblages of the Western Pluvial Lakes Tradition were found to be fairly comparable to Clovis materials, and in many cases points of both kinds occur together in the same sites (Basgall and Hall 1991; Davis and Panlaqui 1978). Flaked stone "crescents" (Amsden 1937) were found primarily in such lakeshore assemblages, leading many archaeologists to draw associations between crescents and lacustrine environments. Support for the Western Pluvial Lakes Tradition has faded in recent years, however, as additional stemmed point sites have been discovered in locations away from extinct bodies of water and the landform bias in early survey programs becomes increasingly clear. Bias in the differential preservation of ancient land surfaces along fossil washes and in the center of dry lake basins has also been recognized (Basgall and Hall 1991; Waters 1988, 1991).

### Middle Holocene – Pinto Period (ca. 7,000–4,000 BP)

Archaeological assemblages dating to this period are typified by Pinto points, projectiles bearing weak shoulders and indented or split-stem bases. Associated flaked stone assemblages include leaf-shaped bifaces, formal unifaces, flake tools, and consistent quantities of core-cobble implements (Basgall 1993, 2000; Campbell and Campbell 1935; Hunt 1960; Rogers 1939). Lithic selection evidently favored fine-grained igneous stones such as basalt and rhyolite for points and bifaces. Milling stones are a major part of Pinto Period assemblages, reflecting the importance of seed processing. The timing of the Pinto Period coincides with Antevs' (1953) "Altithermal," an extended interval when climate was supposedly very hot and dry. Archaeologists once believed a scarcity of Pinto sites in the Mojave Desert signaled a near-total abandonment of the region due to the oppressive climate, but more recent studies suggest that the middle Holocene in the Antelope Valley was punctuated by wetter episodes (Grayson 1993; Mehringer 1987) and that the effects of the Altithermal were variable in different parts of the desert.

### Early Late Holocene – Gypsum Period (ca. 4,000 – 1500 BP)

Diagnostic artifacts at Gypsum Period sites include Gypsum contracting-stem projectile points, Elko Eared and Corner-notched points, and Humboldt Basal-notched points. Lithic assemblages are typified by bifaces, scrapers, and a variety of other flake-based tools, but also contain mortars and pestles as evidence of expanded plant processing (including mesquite, pine nuts, yucca, and agave). Large villages or village complexes appear during Gypsum times that may reflect a transition from seasonal transhumance to year-round sedentary occupation within the Antelope Valley (Sutton 1988a, 1996, 2017). The presence of marine shell artifacts at Gypsum period sites (near Edwards Air Force Base for example) indicates economic ties between the Antelope Valley and the California coast (Warren 1984). Gardner (2006) analyzed data from a slew of sites in the western Mojave to assess the socioeconomic impact of the Medieval Climatic Anomaly and in so doing, suggested a revision in the terminus of the Gypsum period to about 2000 BP. Gardner (2006) based this revision on the early appearance of the bow and arrow within the Rose Spring Complex in conjunction with an increase in effective moisture at 2000 BP.

### Middle Late Holocene – Saratoga Springs Period (ca. 1500 – 800 BP)

By at least 1500 BP (or 2000 BP using Gardner's 2006 chronological scheme), the aboriginal people of the Mojave Desert had replaced the atlatl (or spear-thrower) with the bow and arrow (Yohe 1992). This change brought about

a shift toward the use of smaller projectile points, including various corner-notched and side-notched Saratoga Springs types and the corner-notched Rose Spring and Eastgate types. Ancestral Puebloan (also called "Anasazi") ceramics also appear in the southern Mojave around 1200 to 1100 BP, coinciding with the westward spread of the Virgin Anasazi into southern Nevada. Influence from the cultures of the Colorado River eventually grew stronger than those from the east, allowing for an influx of buffware ceramics and other goods that persisted until the historic present. The intensification of plant use initiated during the Gypsum period continued in the Saratoga Springs period, as diet breadth was expanded to include a wide range of plant foods that required high cost/high return procurement and processing strategies. This is indicated by a general increase in milling equipment from Gypsum times through the Saratoga Springs period (see Gardner 2006).

### Recent Late Holocene – Post-Saratoga Springs Period / Late Period (ca. 800 – 300 BP)

Social and economic adaptations during this final prehistoric interval were largely an extension of patterns that developed during the Saratoga Springs period. Trade along the Mojave River continued to provide the people of Central and Eastern Mojave Desert with a variety of exotic goods and materials, although it appears that relationships with groups in coastal California eventually grew stronger than those with groups inhabiting the arid interior. Projectile points also shifted in form, with unnotched Cottonwood Triangular and Desert Side-notched points being even smaller than their predecessors. Mortars and pestles also appear in significant quantities, probably an indication of increased emphasis on high-cost/high-yield processing.

## Ethnohistoric Context

Ethnic territorial claims by the different groups who occupied the Mojave Desert could be fluid in response to environmental pressure and sometimes resulted in conflict that would end in the movement of a group of people out of an area, which would then be occupied by a competing group. Ethnographic sources, compiled for the most part by anthropologists, suggest varying and sometimes overlapping territorial boundaries (see Kroeber 1925, Bean and Smith 1978, Earle 1990, Sutton and Earle 2017). Evidence suggests boundaries would shift over time and groups would sometimes share territory or resources and would invite neighbors to share resources when abundant.

Regardless of the overlapping and often conflicting accounts of which Serrano group, clan, or local inhabitants occupied the area along the Mojave River near Barstow, the project area is unequivocally within Serrano ancestral territory, and several named Serrano settlements have been documented historically. Harrington writes that he was informed of an ethnohistoric Serrano village called *Tutupeat*, reported to have been located to the west or northwest of the present town of Barstow, on a flat plain bordered by hills (Sutton and Earle 2017). Harrington's interviewee (Santos Manuel) further noted that while the *Tutupeatam* people from this village were part of the larger *Kai'uyam* clan who occupied the northwestern quadrant of Serrano territory during the nineteenth century, the *Yohaviatum* (also spelled *Yuhaaviatam*) clan – most typically associated with the southwestern quadrant of Serrano territory in the mountains around Cajon Pass – also used this area. The exact location of another named settlement, *Sisugenat*, is similarly uncertain, but generally relevant (Sutton and Earle 2017). This village location has been assigned to at least two different archaeological manifestations: P-36-000118 ("Lenwood Sand Dunes/Manning Ranch") and P-36-001549. The former (P-36-000118) has been reported to contain evidence of domestic activity, including manos, metates, mortars, scrapers, projectile points, and an abundance of debitage, and according to coordinates provided in an early report (Smith 1963) is located approximately 2.15 miles from the project area, and beyond the records search for the current project. More recent assessments put the location of *Sisugenat* much further upriver (to the southwest), perhaps near the contemporary communities of Hellendale or Bryman (Sutton and Earle 2017). However, the latter (P-36-001549) is a little less than 1 mile due west of the Project area, in a zone of very active, mobile sand dunes immediately adjacent the Mojave River channel. This zone contains many archaeological

manifestations, some with evidence of domestic activity and inhumation (see below), Currently, it is unknown whether this represents the location of an ethnohistoric Serrano settlement, though repatriation efforts have linked this location to the settlement of *Sisugenat* (NPS 2021).

### Serrano

Although contact between the Serrano and Euroamericans may have occurred as early as 1771 (when Mission San Gabriel was established) or 1772 (the date of Pedro Fages' trip into Serrano territory), most historical sources mark the first encounter in 1776 when Francisco Garcés visited a community of about 40 people near present-day Victorville. Kroeber (1925) estimates the Serrano population before contact to be about 1,500 people, while Bean and Smith (1978) suggest a total of about 2,500. Spanish influence on the Serrano was limited until about 1819, when an *asistencia* was built near Redlands, to which the Serrano were marched involuntarily to build the Mill Creek Zanja (SMBMI 2024). By 1834 most of the western Serrano had been moved to southern California missions like San Gabriel (Bean and Smith 1978; Cook 1943). Strong (1929:5) noted that the 1910 federal census identified only 119 Serrano.

On the basis of both ethnographic and archaeological information, Sutton (2017) argues that both the Serrano who preferred the uplands and highlands of the San Bernardino Mountains (i.e., the "mountain" Serrano) and the Serrano who occupied the Mojave River (i.e., the Vanyume or "desert Serrano") shared a large desert region as a "common pool resource" area north of the mountains and east of the river called *te'mtak*; this region was described by Santos Manuel (see Harrington, cited by Bean et al. 1981, and NEA and CRS 2004). In general, the Serrano were organized around autonomous localized lineages that maintained favored, generalized usage areas. These lineages were organized into exogamous clans. Each clan had a hereditary leader, called the *kiika'*, who conducted ceremonies and religious activities (Bean and Smith 1978). Comprehensive discussions of clan- or moiety-based territories derived from ethnographic studies include Sutton and Earle (2017), Earle (2005), and Earle (1990).

Prior to contact, the desert-dwelling Serrano maintained a hunting and gathering economy. Staple plant foods included acorns, pinyon nuts, yucca (flowers, stalks, and roots), mesquite, screwbeans, and cactus fruit, these often supplemented with various roots, bulbs, shoots, and seeds like chia (*Salvia columbariae*) and ricegrass (*Oryzopsis* spp.). Principal game included deer, mountain sheep, rabbits and larger rodents, and many birds (Bean and Smith 1978). Various basketry tools were used to gather, winnow, and cook plant foods (Bean and Vane 2002), many of which were stored in large, elevated basketry granaries at village locations. Pottery was also used for food storage, particularly to hold mesquite and pinyon flour (Benedict 1924). Hunting was accomplished with throwing sticks, various types of traps, nets and snares, and sinew-backed bows and arrows (Bean and Smith 1978; Drucker 1937). Principal trading partners were the Mohave people to the east and the Gabrielino to the south and west, but they also traded often with their closer neighbors, the Cahuilla and, in more recent times, the Chemehuevi.

Families traditionally lived in single-family dwellings that were circular, domed or conical structures with central firepits. The walls were constructed of willow frames with exterior tule thatching secured with yucca withes (Bean and Smith 1978; Drucker 1937). Each house generally had a small "ramada" attached to it, an unwalled shade structure consisting of a willow-framed roof covered with thatching and supported by poles (Benedict 1924; Drucker 1937; Kroeber 1925). The homes of several families were generally clustered in small groups, each of which usually had shared facilities such as granaries, a sweathouse, and a larger ceremonial house where the lineage leader resided (Bean and Smith 1978; Strong 1929). Serrano houses of more recent times (e.g., 1920s) were rectangular, with sloped tule-thatched roofs supported by forked posts, a central cross-beam, and horizontal wall beams set about 4 feet from the ground (Benedict 1924; Drucker 1937).

The Serrano had similar technology to their neighbors, particularly the Cahuilla. Basic items of material culture included baskets, pottery, rabbit skin blankets, awls, arrow straighteners, bows and arrows, mortars and pestles, stone pipes, musical instruments, bags and pouches, mats, and cordage (Bean and Smith 1978). Baskets were fabricated from yucca fiber, willow, and other reeds and grasses found in the area, while pots were made by coiling, smoothed with a paddle and anvil, and left undecorated (Benedict 1924; Stickel et al. 1980). Arrows were made of hardwood and tipped with stone points (Drucker 1937), and food-grinding tools featured basketry hoppers with portable stone mortars (attached with adhesive), deep wooden mortars, and bedrock mortars (Benedict 1924; Drucker 1937). Fibers of yucca, agave, and other plants were used to make clothing and other textiles, mats, and cordage. Musical instruments consisted of rattles made from turtle/tortoise shell or deer hooves, bone whistles, and flutes.

First-hand accounts of the Serrano settlement-subsistence system come from the observations of William McHaney, a Euroamerican prospector who spent time hunting and gathering in the 1880s with the Serrano in the desert north of Twentynine Palms (cited in Walker 1931). McHaney calls attention to the seasonal movements of Serrano for different kinds of plants and animals, but also water and for raw materials to make tools.

The Serrano language is classified as part of the Serran branch of the Uto-Aztecan language family, making it broadly similar to the language of their neighbors: Kitanemuk and Tataviam, Serrano has also been grouped with a somewhat larger set of languages spoken by other neighboring groups in southern California, including Tongva, Luiseño, Juaneño, Cahuilla, and Cupeño (see Golla 2011 and Hill 2011 for somewhat different interpretations). Language affinities over such a larger area have led many scholars to suggest that Serrano was part of a larger "Shoshonean" or "Takic" expansion into southern California, ca 3,500 to 1,500 years ago (Kroeber 1925, Sutton 2009).

## Historic Period Context

Spanish missionization of Alta California was initiated in San Diego (1769). A total of 21 missions were constructed by the Dominican and Franciscan orders between 1769 and 1823. Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to native populations. Following the establishment of the Mexican republic, the government seized many of the lands belonging to Native Americans, providing them as parts of larger Land Grants to affluent Mexican citizens and rancheros. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to Native Americans, and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented due to several factors that conspired to prevent Native Americans from regaining their patrimony.

California was officially ceded to the United States in 1848, which led to the continued appropriation of Native American Lands by ranchers, prospectors, and an increasing number of settlers. The United States Government did little to dissuade these trespasses. From 1850, with the passage of California's Indian Act, until legislative reforms in the late 1880s, state laws promoted conditions that amounted to indentured servitude for much of the Native American population throughout California. The mining-related resources within the Project area are limited to early local roads associated with mining activities, which played an important role in the history of the Mojave Desert. Information in this section addresses the subject in order to provide a full picture of the Project vicinity's development history.

The California Gold Rush that began in 1848 sparked a period of unprecedented mining activity in the West. As the number of productive strikes in Northern California and across the state line in the eastern Sierra Nevada began to

decline in the 1850s and 1860s, surveyors and prospectors began exploring the Mojave Desert for resources. Materials mined from the Mojave Desert included gold, barium, barite, borates, copper, feldspar, lead, magnesite, silver, manganese, strontium, and tungsten.

Throughout the late nineteenth and early twentieth century, mining in California and Nevada remained an industry subject to extreme periods of boom and bust. The longevity of a mining town depended directly on the operation of a mine, which simultaneously required a market for the material mined there and favorable environmental conditions, such as adequate rainfall. The cost and overall difficulty associated with transportation remained a hindrance to any sustained success until wider railroad expansion occurred after the turn of the twentieth century. The silver and gold mining booms, led to the development of new short-line railroads, with the T&T connecting to the Salt Lake Route in eastern California.

The Tonopah and Tidewater Railroad, known colloquially as the T&T, was built by Francis Marion "Borax" Smith in 1906–1907 to tap his borax mines near Death Valley and the silver and gold mines of central Nevada. The line never reached the coast or Tonopah, stopping just short of Beatty, Nevada, but served as the "neighborhood railroad" for much of the desert. The T&T crossed the UP Railroad at Crucero (Myrick 1992).

For almost 35 years, from 1907 to 1940, the T&T served as an important transportation link between the isolated mining communities of the Mojave Desert and southern California and Nevada. The history of the T&T is a story of success in overcoming formidable obstacles in the desert regions of California and Nevada. These obstacles included steep mountains, dry lakes and washes subject to flooding, and long expanses of uninhabited land devoid of trees and reliable sources of water. The great geologic forces that formed high-grade mineral deposits also created adverse conditions that impeded the economic development of those resources (Myrick 1992).

### Resources Identified within the Project Site

The approximately 100-acre project site is undeveloped and does not contain any built environment resources (i.e., buildings or structures) that could be eligible as historic resources. Dudek archaeologists conducted an in-person records search of the project site and surrounding 1-mile radius at the South Central Coastal Information Center located at California State University, Fullerton on March 6, 2023. The search included a review of previously recorded cultural resources and previously conducted studies within the project site and including a 1-mile radius of the project site. The records search also included a review of the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search results are confidential and contain sensitive information related to the location of cultural sites. The information is on file with the County and available for review only by eligible individuals.

### Previous Technical Studies

South Central Coastal Information Center records indicate that 35 previous cultural resources studies have been conducted within a 1-mile radius of the proposed project site. Of the 35 studies, four intersect the project site: SB-01161, SB-01344, SB-03278, and SB-05279. Of the four studies that intersect the project site, two are cultural resource inventory reports, and two are evaluation reports, as shown in Table 3.4-1.

**Table 3.4-1. Previous Resource Studies that Intersect Project Area**

| SCCIC Report ID | Year | Author | Report Title |
|---|---|---|---|
| SB-01161 | 1981 | Lerch, Michael K. | Cultural Resources Assessment of Tentative Tract No. 11874, Lenwood Area, San Bernardino County |
| SB-01344 | 1983 | Lerch, Michael K. | Cultural Resources Assessment of The Lenwood Village Large Scale Housing Project, Lenwood Area, San Bernardino County, California |
| SB-03728 | 2000 | Love, Bruce | Identification And Evaluation of Historic Properties: Lenwood Sewer Line Installation in The Community of Lenwood, San Bernardino County, Ca. 25pp |
| SB-05279 | 2006 | Dibble, Stephen D. | An Evaluation of The Cultural Resources Potential Of Three Parcels For Proposed Annexation By The City Of Barstow, San Bernardino County, California |

**Source**: Appendix D.
**Note:** SCCIC = South Central Coastal Information Center

## Previously Recorded Cultural Resources

The South Central Coastal Information Center records search identified 49 previously recorded cultural resources within a 1-mile radius of the project site. Of these, two intersect the project area. The two identified resources include two prehistoric lithic quarries/lithic scatters (P-36-003677 and P-36-005076). Neither of these resources have been evaluated for listing on the CRHR or NRHP. Of the remaining 47 previously recorded resources, 13 are characterized as prehistoric lithic quarries/lithic scatters, eight are prehistoric isolates, seven are historic refuse scatters, five are multicomponent sites, five are historic linear features (roads, railroads, trails etc.), four are ranches/farms, three are structures/foundations, one is a prehistoric habitation deposit, and one is a bedrock milling feature. The two resources that intersect the project site are discussed in further detail below.

### *P-36-003677 (CA-SBR-003677)*

P-36-003677 was first recorded in 1979 by G. Smith of the San Bernardino County Museum. The site record was later updated in 1981 by Michael Lerch in support of the proposed development of Tracts 11874 and 12016 (within the project site). P-37-003677 is described as a prehistoric quarry of jasper and chalcedony, which extends over an area of 500 × 100 meters. Artifacts recorded in 1981 include lithic debitage, cores, and hammerstones. The site record from 1981 also notes that there is a similar site nearby, presumably referencing P-36-005076. A portion of the site, as recorded in 1981, was likely impacted by the construction of the mobile home park north of Jasper Road and south of the project site (Appendix D).

### *P-36-005076 (CA-SBR-005076)*

P-36-005076 was recorded in 1982 by Michael Lerch of the San Bernardino County Museum in support of the proposed development of Tract 12170 (directly east of the current project site). This prehistoric resource is described as a light lithic scatter, comprising primarily jasper debitage, but with some chalcedony and chert flakes as well. The site boundary recorded in 1982 spans 200 × 100 meters and consists predominantly of unmodified raw material. Overall, this site is described as being sparser when compared to P-36-003677 (Appendix D).

## Resources Identified within the Project Site

A pedestrian survey of the project site was conducted on April 14 and July 6, 2023. The previously recorded cultural resources (P-36-003677 and P-36-005076) were both re-located within the project area. Additionally, seven newly identified cultural resources were recorded within the project site during the survey. These newly identified cultural resources include a prehistoric lithic scatter (LE-S-001), three prehistoric lithic isolates (LE-I-002, LE-I-004, and LE-I-005), and three historic-period isolates (LE-I-001, LE-I-003, and LE-I-006). Isolates are categorically ineligible for listing on the CRHR and not considered to be to be significant under the California Environmental Quality Act (CEQA). Both previously recorded cultural resources and LE-S-001 required formal evaluation for eligibility for listing on the CRHR and for significance under CEQA and local regulations. Resources P-36,003677, P-36-005076, and LE-S-001 were formally evaluated and are recommended to not be eligible for listing on the CRHR and are not significant under CEQA and local regulations.

**Table 3.4-2. Newly Identified Resources within Project Site**

| Dudek Number | Age | Designation | Description |
|---|---|---|---|
| LE-S-001 | Prehistoric | Site | Lithic Scatter |
| LE-I-001 | Historic | Isolate | Bi-Metal Cans (4) |
| LE-I-002 | Prehistoric | Isolate | Lithic Shatter (2) |
| LE-I-003 | Historic | Isolate | Associated Ceramic Fragments (30+) |
| LE-I-004 | Prehistoric | Isolate | Lithic Flakes and Shatter (3) |
| LE-I-005 | Prehistoric | Isolate | Lithic Shatter (2) |
| LE-I-006 | Historic | Isolate | Church-Key Opened Cans (5) |

**Source**: Appendix D.

In March 2025, in response to a request from the Yuhaaviatam of San Manuel Nation (Tribe) for further site testing, six shovel test pit sites were conducted in the northeast portion of the project site. The test pits were excavated to a depth of between 6 inches to 3 feet and no cultural resources were unearthed eligible for listing.

## Buried Site Sensitivity

In general, artifact complexity, variability, and frequency are relatively low within the archaeological resources documented on and around the project site. While buried resource potential is possible in the areas discussed above, information gathered from surface evidence has provided an understanding of the range and frequency of artifacts associated with these resources. The likelihood for substantially different archaeological assemblages and/or deposits, or significant features, to be present in subsurface contexts is unlikely.

## Geotechnical Conditions

Geotechnical explorations were conducted for the project site to document subsurface geological conditions. Geotechnical borings up to 35.5 feet below ground surface reveal poorly graded sands and silty sands underlain by interbedded layers of lean clay, sandy silt, silty sand, poorly graded sands, and clayey sands, as well as a strongly cemented layer of coarse-grained soil at the depths where the borings were terminated (Villegas and Andersen 2022). Soils in the area are mapped as Dune Land and Victorville Sandy Loam in the north; Joshua Loam and Victorville Sandy Loam are present in the central portion of the site; and Rock Outcrop areas are mapped in the southern and northern areas (Appendix D).

In addition, two exploratory fault trenches were extended across the trend of the mapped 'shallow linear swale' feature as projected within the southeastern portion of the site. The 42-inch wide trenches were approximately 300 feet and 100 feet long, and 10 feet to 5 feet deep.]

## Historical Topographic Maps and Aerial Photographs Review

A review of historic topographic maps and aerial photographs indicates that the project site has remained undeveloped throughout the latter half of the twentieth century. The presence of dirt pathways/roadways throughout also indicate the informal use of the project site for overland vehicle travel and recreational purposes by surrounding communities since at least the 1980s. Additionally, there is evidence in the historic aerials to indicate that the project site was used for rockhounding and fossil collecting since at least the 1980s as well. This is supported by the presence of high-quality lithic material present within the area that would have involved exploratory excavation and collection of rocks and minerals. After 1995, there are no visible changes to the project site, as depicted in the historic aerials (Appendix D).

## Native American Coordination

The project is subject to compliance with Assembly Bill (AB) 52, which requires consideration of impacts to tribal cultural resources as part of the CEQA process from California Native American Tribal representatives that have requested notification who are traditionally or culturally affiliated with the geographic area of the project site. The results of tribal consultation and tribal cultural resources are provided in Section 3.12, Tribal Cultural Resources.

Senate Bill (SB) 18 Tribal Consultation (Government Code Section 65352.3) requires local governments to consult with California Native American Tribes identified by the California NAHC regarding proposed local land use planning decisions prior to the adoption or amendment of a general plan or specific plan. The project is requesting a Countywide Plan/Policy Plan Amendment; therefore, it is required to comply with SB 18.

On March 13, 2024, the County requested a Tribal Consultation List from the NAHC and a Sacred Lands File search in compliance with SB 18, as noted above. The County did not receive a response from the NAHC so reached out again on May 22, 2025. The County received a response from the NAHC with a Consultation List that included tribes with traditional lands or cultural places located within the county. The County sent formal consultation request letters via certified mail to the tribes listed below. The tribes had 90 days to respond to request consultation. The response window closed on June 13, 2024.

- Yuhaaviatam San Manual Nation (formerly the San Manuel Band of Mission Indians)
- Kern Valley Indian Community (KVIC)
- Twenty-Nine Palms Band of Mission Indians
- Morongo Band of Mission Indians
- Fort Yuma Quechan Tribe
- Serrano Nation of Mission Indians
- San Fernando Band of Mission Indians

## Paleontological Resources

Paleontological resources are the remains or traces of plants and animals that are preserved in the earth's crust, and per the Society of Vertebrate Paleontology (SVP) guidelines (SVP 2010), are older than written history or older

than approximately 5,000 years, which approximates the middle Holocene (4,200 to 8,200 years ago; Cohen et al. 2023). They are limited, non-renewable resources of scientific and educational value and are afforded protection under state laws and regulations.

A Paleontological Resources Inventory for the project was prepared by Dudek on September 20, 2024, included as Appendix F. The inventory consisted of a Natural History Museum of Los Angeles County (LACM) paleontological records search, review of the preliminary geotechnical (Appendix E), a paleontological survey of the project site, and review of geological mapping and geological and paleontological literature.

The project site is located within the Mojave Desert Geomorphic Province. This geomorphic province is characterized as a broad interior region of isolated mountain ranges separated by expanses of desert playas. The Mojave Desert Geomorphic Province is a wedge-shaped, sharp angled chunk of arid land bounded by the Garlock Fault to the north (southern boundary Sierra Nevada) and the San Andreas Fault to the west, where it bends east from its northwest trend. More specifically, the project site is located within the western Mojave Desert region also known as the Mojave Block. The Mojave Block is a tectonic block bounded on the southwest by the San Andreas Fault and on the northwest by the Garlock fault zone, along which the bordering mountains were elevated.

The LACM records search results did not produce any fossil localities from within the project site; however, more than 200 fossil localities are located in the region within the same sedimentary deposits as the project site. Refer to Table 3.4-3, LACM Fossil Localities Near the Project Site for a detailed description of fossil locations within the region.

### Table 3.4-3 LACM Fossil Localities Near the Project Site

| Locality Number | Location | Formation | Taxa | Depth |
|---|---|---|---|---|
| LACM IP 4736 | Harper Dry Lake | Unknown formation (Pleistocene) | Peaclam (*Pisidium compressum*) | Unknown |
| LACM VP 1224, 3352, 3353, 3498, 3512, CIT 209 | Victorville, California | Shoemaker Gravel Formation | Mammoth (*Mammuthus*), Horse (*Equus*), Camel family (*Camelidae*), deer (*Cervidae*); antelope (*Antilocapridae*) | Unknown |
| LACM IP 6125 | East end of Rabbit Lake; San Bernardino County | Unknown formation (Pleistocene) | Invertebrates (unspecified) | Unknown |
| LACM VP 1123 | Schuiling Cave, San Bernardino County | Unknown formation (Pleistocene) | Horse (*Equus*), antelope (*Breameryx*), fox (*Urocyon*), camel (*Camelops*), lama (*Tanupolama*), badger (*Taxidae*), wolf (*Canis*), human (*Homo sapiens*), sheep (*Ovis*), hare (*Lepus*), rabbit (*Sylvilagus*), kangaroo rat (*Dipodomys*), pocket mouse (*Perognathus*), pack rat (*Neotoma*); gopher tortoise (*Gopherus*), chuckwalla (*Sauromalus*), rattlesnake (*Crotalus*); vulture (*Gymnogyps*), horned owl (*Bubo*), Scops | Surface and shallow subsurface |

## Table 3.4-3 LACM Fossil Localities Near the Project Site

| Locality Number | Location | Formation | Taxa | Depth |
|---|---|---|---|---|
| | | | owl (*Otus*), duck (*Anas, Oxyura, Aythya*), coot (*Fulca*), merganser (*Mergus*), woodpecker (*Colaptes*), hawk (*Buteo*), cat (*Felis, Lynx*), crow (*Corvus*), dove (*Zenaida),* eagle *(Aquila*). | |
| Over 30 sites | Manix Lake, Manix, California | Manix Lake Beds | Abundant vertebrate fossils, including camel family (*Camelops, Hemiauchenia*), goat (*Capra*), bear (*Ursus*), horse family (*Equus, Neohipparion*), mammoth (*Mammuthus*), ground sloth (*Nothrotheriops*), fish (*Gila*), flamingo (*Phoenicopterus*), grebe (*Aechmophorus*), pelican (*Pelecanus*), goose (*Branta*), stork (*Ciconia*), crane (*Grus*), cormorant (*Phalacrocorax*), eagle (*Aquila*), diving duck (*Aythya).* | Surface and shallow subsurface |
| 29 Vertebrate Localities and 8 invertebrate localities | Mud Hills, north of Barstow | Barstow Formation | (*Brachycrus*), horse (*Merychippus*), sheep (*Pecora*), canine (*Borophagus, Tomarctus,* Canidae), bird (Aves), antelope family (*Merycodus*), carnivore (Carnivora), bear dog (*Amphycyoninae*), turtle family (*Testudinata*), camel (*Camelidae*), cat (Felidae, *Peudoaelurus*), rabbit (*Leporidae*), artiodactyl (*Artiodactyla*, *Palaeomerycinae, Dromomerycinae*), peccary (*Dyseohyus, Cynorca*), elephant clade (Proboscidea), weasel family (Mustelidae), and other unidentified mammals; Invertebrates (primarily gastropods and bivalves) | Surface and shallow subsurface |
| LACM VP 3181 | North of Hinkley | Barstow Formation | Rodent (Rodentia), antelope (*Merycodontinae*, *Merycodus*), weasel (*Leptarctus*), horse (*Merychippus*), rhinoceros family (*Rhinocerotoidea*), artiodactyl (*Artiodactyla*, *Dromomerycinae*), carnivore (*Carnivora*), perissodactyl (*Perissodactyla*), camel (*Camelidae*), canine (*Candidae*), cat (*Felidae*), rabbit (*Leporidae*); bird (*Aves*); invertebrates (*Mollusca*). | Surface |

**Source**: Appendix F.

The project site is mapped as Holocene (present to 11,700 years ago) alluvium (Qa), Tertiary sandstone and shale deposits (Ts) deposits, and Tertiary sedimentary limestone (Tsl) (see Figure 2, Geologic Map, included in Appendix F). The Holocene alluvium within the project site has low paleontological resource sensitivity on the surface, increasing to high at potentially shallow depths. The Tertiary sedimentary and Tertiary sedimentary limestone deposits (Barstow Formation) have a high paleontological resource sensitivity. Based on the underlying formations, the project site has a high potential to be underlain by paleontological resources (Appendix F).

### Unique Geologic Features

The basic definition of geologic features includes the detail of the Earth's surface or topography, for example mountains, valleys, canyons, bodies of water, volcanoes, and caves. Geologic features result from the cycling of water, rock, and sediment through geologic processes including plate tectonics, weathering, erosion, deposition, and weather. A geologic feature may be considered unique if it has qualities that make it unusual or distinct, including scenic or scientific value. For the purposes of this analysis, a "unique geologic feature" means a geologic feature that meets one of the following criteria:

- Is the best example of its kind locally or regionally;
- Embodies the distinctive characteristics of a geologic principle that is exclusive locally or regionally;
- Provides a key piece of geologic information important in geology or geologic history;
- Is a "type locality" of a geologic feature (i.e., the place where a geologic feature was first recognized and described);
- Is a geologic formation that is exclusive locally or regionally;
- Contains a mineral that is not known to occur elsewhere in the region; or
- Is used repeatedly as a teaching tool.

No unique geologic features, such as unique erosional features or rock outcrops, have been identified on the project site by land surveyors, cultural resource teams, and other field staff that have conducted surveys of the project site.

## 3.4.2 Regulatory Setting

Please refer to Appendix D for a detailed overview of all federal and state regulations adopted relevant to the protection of cultural and paleontological resources. The following summarizes regulations applicable to the proposed project.

### Federal

#### National Historic Preservation Act

The National Historic Preservation Act established the NRHP and the President's Advisory Council on Historic Preservation, and provided that states may establish State Historic Preservation Officers to carry out some of the functions of the National Historic Preservation Act. Most significantly for federal agencies responsible for managing cultural resources, Section 106 of the National Historic Preservation Act directs the following:

> [t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP.

Section 106 also affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking (16 USC 470f).

Title 36 of the Code of Federal Regulations, Part 800 (36 CFR 800) implements Section 106 of the National Historic Preservation Act. It defines the steps necessary to identify historic properties (those cultural resources listed in or eligible for listing in the NRHP), including consultation with federally recognized Native American tribes to identify resources with important cultural values; to determine whether they may be adversely affected by a proposed undertaking; and the process for eliminating, reducing, or mitigating the adverse effects.

The content of Title 36 of the Code of Federal Regulations, Section 60.4, defines criteria for determining eligibility for listing in the NRHP. The significance of cultural resources identified during an inventory must be formally evaluated for historic significance in consultation with the Advisory Council on Historic Preservation and the California State Historic Preservation Officer to determine if the resources are eligible for inclusion in the NRHP. Cultural resources may be considered eligible for listing if they possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Regarding criteria A through D of Section 106, the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, cultural resources, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (36 CFR 60.4):

- Are associated with events that have made a significant contribution to the broad patterns of our history; or
- Are associated with the lives of persons significant in our past; or
- Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Have yielded or may be likely to yield, information important in prehistory or history.

## State

### The California Register of Historic Resources (PRC Section 5020 et seq.)

In California, the term “historical resource” includes but is not limited to “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (PRC section 5020.1(j)). In 1992, the California legislature established CRHR “to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC section 5024.1(a)). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets specific NRHP criteria including:

- Associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- Associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.
  (PRC section 5024.1(c).)

Resources less than 45 years old are not considered for listing in the CRHR but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR, section 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys. The State Historic Preservation Officer maintains the CRHR.

### California PRC Section 5097.5

PRC Section 5097.5 states that:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on [lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof], except with the express permission of the public agency having the jurisdiction over the lands. Violation of this section is a misdemeanor.

### California Environmental Quality Act – Cultural Context

The following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological resources and historical resources:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with an archaeological site.

Under CEQA, a project may have a significant impact on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5[b]). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for the purposes of CEQA (PRC Section 21084.1; 14 CCR

15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant impact under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register [CRHR] as determined by a lead agency for purposes of CEQA (14 CCR 15064.5[b][2]).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a]–[c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2[g]):

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; 14 CCR 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a tribal cultural resource (PRC Sections 21074[c] and 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

### *CEQA Guidelines Section 15064.5(b)(2)*

Pursuant to these sections, the CEQA first evaluates evaluating whether a project site contains any "historical resources," then assesses whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

When a project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements. Specifically, "[i]f it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:"

1. "Planning construction to avoid archaeological sites."
2. "Deeding archaeological sites into permanent conservation easements."
3. "Capping or covering archaeological sites with a layer of soil before building on the sites."

### *California PRC Section 21083.2(b)(1)-(4)*

If these "preservation in place" options are not feasible, mitigation may be accomplished through data recovery (PRC Section 21083.2[d]; CEQA Guidelines Section 15126.4[b][3][C]). PRC Section 21083.2(d) states that "[e]xcavation as mitigation shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archaeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report."

### *Section 7050.5 of the California Health and Safety Code*

Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. In the unlikely event that human graves are encountered, work should halt in the vicinity and the County Coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation and grave. If the human remains are determined to be of Native American origin, the Coroner must contact the NAHC within 24 hours of identification. The code states:

> "In the event of discovery or recognition 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 remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made

> to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in section 5097.98 of the Public Resources Code."

## Paleontological Resources

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under state laws and regulations. PRC, Chapter 1.7, sections 5097.5 and 30244 regulate removal of paleontological resources from state lands, define unauthorized removal of fossil resources as a misdemeanor, and require mitigation of disturbed sites. Professional standards of practice, such as those adopted by the SVP Conformable Impact Mitigation Guidelines Committee (2010), offer additional guidance for the control and remediation of adverse effects on significant paleontological resources. The standards include conducting a field survey prior to earth disturbing activities (if applicable; monitoring by a qualified paleontologist of excavation of any previously undisturbed rock features; salvage of any fossil remains; screen washing to recover small specimens (if applicable); cleaning of fossils for curation; identify, catalog and provide for storage of fossils; preparation of a final report.

Section 5097.5 of the PRC (see above) establishes individuals are prohibited from excavating removing, destroying, injuring or defacing any vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other paleontological, located on public lands.

PRC Section 30244 requires:

> "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

## California Environmental Quality Act – Paleontological Context

Regarding paleontological resources, the CEQA Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources, which are limited, nonrenewable resources of scientific, cultural, and educational value, are recognized as part of the environment under these state guidelines. This analysis satisfies project requirements in accordance with CEQA (13 PRC, 21000 et seq.) and PRC Section 5097.5 (Stats 1965, c 1136, p. 2792). This analysis also complies with guidelines and significance criteria specified by SVP (2010).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the "Environmental Checklist Form," which addresses the potential for adverse impacts to "unique paleontological resource[s] or site[s] or … unique geological feature[s]." This provision covers fossils of signal importance – remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group – as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth. Further, the CEQA Guidelines provide that generally, a resource shall be considered "historically significant" if it has yielded or may be likely to yield information important in prehistory (Section 15064.5 [a][3][D]). Paleontological resources would fall within this category.

CEQA does not define "a unique paleontological resource or site." However, the SVP has provided guidance specifically designed to support state and federal environmental review. The SVP broadly defines significant paleontological resources as follows (SVP 2010):

> "Fossils and fossiliferous deposits consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years)."

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, diagnostically important, or common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of paleochronology, paleoecology, paleophylogeography, or depositional histories. New or unique specimens can provide new insights into evolutionary history; however, additional specimens of even well represented lineages can be equally important for studying evolutionary pattern and process, evolutionary rates, and paleophylogeography. Even unidentifiable material can provide useful data for dating geologic units if radiometric dating is possible. As such, common fossils (especially vertebrates) may be scientifically important and therefore considered significant.

## Local

### San Bernardino County Countywide Plan/Policy Plan

San Bernardino County's Countywide Plan/Policy Plan, adopted in 2018, contains a Cultural Resources Element that establishes the County's purpose, principles, goals, and policies for the management of archaeological sites, sacred landscapes, historic buildings, and paleontological resources located in the unincorporated portions of the County. Applicable goals and policies from the County's Cultural Resources Element is provided below (San Bernardino County 2020).

#### *Cultural Resources Element*

Goal CR-2. Historic and Paleontological Resources. Historic resources (buildings, structures, or archaeological resources) and paleontological resources that are protected and preserved for their cultural importance to local communities as well as their research and educational potential.

Policy CR-2.1. National and State Historic Resources. We encourage the preservation of archaeological sites and structures of state or national significance in accordance with the Secretary of Interior's standards.

Policy CR-2.2. Local Historic Resources. We encourage property owners to maintain the historic integrity of resources on their property by (listed in order of preference): preservation, adaptive reuse, or memorialization.

Policy CR-2.3. Paleontological and Archaeological Resources. We strive to protect paleontological and archaeological resources from loss or destruction by requiring that new development include appropriate mitigation to preserve the quality and integrity of these resources. We require new development to avoid paleontological and archeological resources whenever possible. If avoidance

is not possible, we require the salvage and preservation of paleontological and archeological resources.

Policy CR-2.4. Partnerships. We encourage partnerships to champion and financially support the preservation and restoration of historic sites, structures, and districts.

Policy CR-2.5. Public Awareness and Education. We increase public awareness and conduct education efforts about the unique historic, natural, tribal, and cultural resources in San Bernardino County through the County Museum and in collaboration with other entities.

## 3.4.3 Environmental Impacts and Mitigation Measures

### Methodology

The section describes the methods used in conducting the analysis of project-specific impacts and contribution to significant cumulative impacts, if any are identified.

#### Records Search

As described above, a records search was conducted for the project site including a 1-mile radius in March 2023. The search included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list.

#### Surveys

Pedestrian surveys of the project site were conducted in April and July 2023. The intensive-level cultural resources pedestrian survey was conducted by a qualified archaeologist using standard archaeological procedures and techniques. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory. The land area was surveyed in pedestrian transects with no more than 15-meter spacing. The survey entailed inspecting the entirety of the project site and documenting the site with notes and photographs. See Appendix D for further details on survey methods.

The Yuhaaviatam San Manual Nation requested subsurface testing be completed in a portion of the site to gain a better understanding of subsurface conditions. Subsurface testing for buried cultural resources was conducted on March 4, 2025, in areas where wind-blown sands may have covered cultural resources that might otherwise be visible on the surface. A tribal representative was present during the testing and no cultural resources were unearthed.

In July 2025, two exploratory fault trenches were extended across the trend of the mapped 'shallow linear swale' feature as projected within the southeastern portion of the site. The 42-inch wide trenches were approximately 300 feet and 100 feet long, and 10 feet to 5 feet deep. A geologist, archeologist and tribal representative were present during the excavation work and no cultural resources were unearthed.

### Archaeological Resources and Human Remains

Archaeological sites are usually adversely affected only by physical destruction or damage that can be caused by grading and excavation, trenching, weather-induced erosion, etc. Impacts to archaeological resources and human remains most often occur as the result of excavation or grading within the vertical or horizontal boundaries of a significant archaeological site. Archaeological resources may also suffer impacts as the result of project activity that increases erosion, or increases the accessibility of a surface resource, and thus increases the potential for vandalism or illicit collection. Because archaeological resources often are buried or cannot be fully defined or assessed on the basis of surface manifestations, substantial ground-disturbing work may have the potential to uncover previously unidentified resources, including archaeological deposits and human remains. As precise fill depths may not be known in all cases, it must be assumed that any ground-disturbing activities in any portion of where development would occur could potentially affect subsurface unique archaeological resources or historical resources of an archaeological nature.

### Paleontological Resources

The analysis also considers whether a unique paleontological resource, site, or unique geologic feature would be directly or indirectly destroyed as a result of the project.

## Thresholds of Significance

The significance criteria used to evaluate project impacts related to cultural and paleontological resources are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to cultural or paleontological resources would occur if implementation of the project would do any of the following:

(a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 (note: this applies only to those resources already designated as a CEQA historical resource).

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

(c) Disturb any human remains, including those interred outside of dedicated cemeteries.

(d) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to cultural or paleontological resources.

## Issues Not Further Discussed

(a) The project site is undeveloped and does not contain any built environment resources 45 years of age or older (e.g., buildings or structures) that meet the definition of historical resources under Section 15064.5(a)(1)–(4) of the CEQA Guidelines. Therefore, there would be no impact to historic period built-environment resources under 15064.5 and this issue (threshold) is not discussed further. Potential historic period archeological resources are evaluated under Impact 3.4-1.

## Impact Analysis

Impact 3.4-1 The proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

Archaeological resources include prehistoric and historic period artifacts, objects, or sites. Development of the project site would include ground-disturbing activities to construct new buildings, parking areas, and trenching for new utilities, including off-site improvements along Lenwood Road. Construction activities could result in damaging or destroying unknown archaeological resources. Archaeological resources are often difficult to identify from surface evidence alone and there may be buried cultural deposits in areas with appropriate soils. Archaeological inventory efforts indicate that three prehistoric sites fall within the project site. Two of these were previously recorded (P-36-003677 and P-36-005076) and one was newly identified through recent surveys (LE-S-001). In addition, six newly recorded isolates were identified (three prehistoric and three historic period) as part of the 2023 surveys. A substantial level of near-modern and modern disturbance has occurred to these resources, including refuse dumping, off highway vehicle activity, and illicit excavation and collection of cultural and natural materials. All of these resources were evaluated and found not eligible for the NRHP or CRHR under any criterion.

The Yuhaaviatam of San Manuel Nation requested additional archeological subsurface testing be completed in a portion of the site determined to be potentially sensitive for buried resources. Sub-surface testing for buried cultural resources was conducted on March 4, 2025, in areas where wind-blown sands may have covered cultural resources that might otherwise be visible on the surface. A tribal representative was present during the testing, and no cultural resources were unearthed. The County also required the Applicant to assess the site for the presence of any active fault lines. During the week of July 21, 2025, two 42-inch wide trenches were excavated, approximately 300 feet and 100 feet long, and 10 feet to 5 feet deep. A geologist, archeologist and tribal representative were present during the excavation work, and no cultural resources were unearthed.

On March 13, 2024, pursuant to SB 18 the County sent a letter to the NAHC requesting a list of tribes with traditional lands or cultural places that would include the project site. The County did not receive a response and followed up with the NAHC in May 2025. The NAHC provided a Consultation List, and the County sent letters notifying tribes of the project and the proposed General Plan Amendment. No tribes responded to the County's request for consultation pursuant to SB 18. Under SB 18 the only requirement is to provide tribes an opportunity to participate in projects requiring general or specific plan adoption or amendments to provide input in land use decisions at an early planning stage to ensure tribal perspectives are considered when making land use decisions, for the purpose of protecting, or mitigating impacts to tribal cultural places. Compliance with the notification and consultation (if requested) required under SB 18 is complete.

The Countywide Plan/Policy Plan includes Policy CR-2.3 that requires new development to include appropriate mitigation to preserve the quality and integrity of resources and to avoid resources whenever possible. If avoidance is not possible, salvage and preservation is required.

The project would not impact any known NRHP or CRHR eligible archeological resources; however, due to the presence of archeological resources both on the project site and the vicinity there is the potential for the project to unearth unknown resources resulting in a substantial adverse change in the significance of the resource. Based on the prior subsurface testing and trenching conducted on the site the likelihood of finding subsurface resources has been lowered because none were unearthed. However, given the size of the site there is always the potential for unearthing resources during site grading and excavation. The project would comply with Policy CR-2.3 to address

potential impacts if any resources are identified to preserve the quality and integrity of the resource. The loss of and/or substantial damage to undiscovered archaeological resources is considered a potentially significant impact.

## Mitigation Measures

Mitigation measure (MM) CUL-1 has been developed to ensure that potential impacts to both known and unknown archeological resources are appropriately managed. MM-CUL-1 would require preparation of a Cultural Resource Management Plan (CRMP) prior to construction that establishes the protocol to follow during construction, including worker training for the identification of and notification protocols for any unanticipated cultural resource discoveries and the stoppage of work within 50 feet of finds until their significance can be evaluated by a qualified archaeologist. MM-CUL-2 requires on-site monitoring during construction and identifies the responsibility of the on-site monitors in the event any resource is unearthed. With these mitigation measures implemented, the potential significant impacts to archaeological resources would be reduced to **less than significant with mitigation.**

MM-CUL-1 Cultural Resource Management Plan (CRMP). To mitigate impacts to known archaeological resources, as well as those resources that may be encountered inadvertently during ground-disturbing construction-related activities, a CRMP shall be developed. The CRMP shall be reviewed and approved by San Bernardino County, acting as lead agency, prior to issuance of grading permits. It shall be subject to review and input from Consulting Tribes (i.e., the Yuhaaviatam of San Manuel Nation and the Morongo Band of Mission Indians). The CRMP shall, at a minimum, include and expand upon the following components:

- Should design refinements result in possible impacts to other prehistoric sites, located outside of the current project parcel limits, management strategies shall be developed on a case-by-case basis (e.g., establishment of construction buffers) and will be subject to review and approval by the lead agency.
- The CRMP shall outline specific methods for ground disturbance during construction. Areas within dune complexes shall be subject to "controlled grading," where soil will be excavated or otherwise removed in shallow intervals from the surface and/or other appropriate methods such that subsurface conditions can be observed and sampled throughout initial disturbance by construction.
- The CRMP shall require that a Worker Environmental Awareness Program (WEAP) addressing cultural resources and Tribal Cultural Resources be developed by a Secretary of the Interior (SOI)-qualified archaeologist. The WEAP shall be implemented through on-site training of construction staff by a qualified archaeologist. Tribal representatives from Consulting Tribes shall be invited to attend and/or participate in the WEAP training should they elect to and will be given 10 days' notice prior to the training. The WEAP shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.
- To the extent construction activities uncover previously unknown or additional potentially significant components of known cultural resources, all such activities shall stop in the vicinity of the resource until the significance of the resource(s) is determined. An appropriate buffer for avoidance during construction is typically 60 feet, which may be adjusted at the recommendation of a qualified archaeologist meeting SOI qualifications, so that the exclusion buffer allows key areas of construction to proceed while ensuring that no ongoing project activities will affect the find. The CRMP shall provide for archaeological evaluation to

occur, as approved by San Bernardino County, and in consultation with Consulting Tribes. While the archaeologist is engaged with the find, work outside of the buffer may only continue with the presence of an additional archaeologist to monitor the work. Resources shall be evaluated by a qualified archaeologist through an archaeological testing phase that consists of systematic excavations of a sample of areas within the Project area to determine the integrity of the archaeological deposits, the horizontal and vertical extent of the deposits, and the quantity and diversity of artifacts contained within the deposits. The Project proponent may use the information from the testing phase as described in the resulting report to refine or revise the Project impact area for purposes of avoidance. The goal is to avoid, if feasible, or minimize impacts to significant deposits based on the results of the test excavations. The qualified archaeologist shall assess if the archaeological site qualifies as a significant or unique archaeological resource under the criteria of the California Environmental Quality Act (CEQA) Guidelines Section 15064.5, or a Tribal Cultural Resource under the criteria of Public Resources Code Section 21074, in consultation with San Bernardino County, and Consulting Tribes. For purposes of this mitigation measure, feasibility of avoidance shall be determined by San Bernardino County based on the recommendation of the Project proponent, in consultation with Consulting Tribes. If avoidance is not feasible, preservation in place, if feasible, is the preferred manner of mitigating impacts to archaeological resources pursuant to CEQA Guidelines Section 15126.4(b)(3)(A). However, Section 15126.4(b)(3)(C) also recognizes that data recovery through excavation may be the only feasible mitigation for significant or unique cultural resources at times; therefore, this contingency should be provided for as well in the CRMP.

- Regarding Tribal Cultural Resources, where avoidance or preservation in place are not feasible, the preferred treatment is for Tribal Cultural Resources to be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then another reburial location should be identified on site, if feasible, by the Project proponent in consultation with Consulting Tribes and approved San Bernardino County. Reburial should not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, and all cataloguing and basic recordation of cultural resources have been completed.
- Should it occur that avoidance, preservation in place, or on-site reburial are not feasible options for treatment of Tribal Cultural Resources, the landowner shall relinquish all ownership and rights to material suitable for curation and confer with Consulting Tribes to identify an American Association of Museums (AAM)-accredited facility within San Bernardino County that can accept the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the Project proponent and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project proponent to pay for those fees.
- The CRMP shall define the requirements for inadvertent discoveries, communication and notification to San Bernardino County and consulting parties, daily monitoring log preparation, and the final construction monitoring report. The final monitoring report shall be submitted to

the San Bernardino County, Consulting Tribes, and the South Central Coastal Information Center.

MM-CUL-2 Ground-Disturbance Monitoring: A qualified archaeologist shall monitor initial grading, subsurface disturbances, or other ground-disturbing activities on the Project site. If unanticipated cultural resources are encountered during construction, the process outlined by the Cultural Resource Management Plan (CRMP) shall be followed. General responsibilities of the archaeological monitor shall include monitoring construction, preparation of daily monitoring logs, reporting and assessing inadvertent discoveries, communication with on-site Native American monitors and contractors, guiding installation and tracking maintenance of environmentally sensitive area marking, and generally ensuring implementation of the CRMP and approved mitigation. The final Cultural Resources Monitoring Report shall act as a record of compliance with guiding documents and mitigation.

Impact 3.4-2 The proposed project could disturb human remains, including those interred outside of dedicated cemeteries.

Development of the proposed project could result in the destruction, damage, or discovery of human remains on the project site during site disturbing construction activities, particularly site clearing, grading, trenching and excavation. Human remains were not discovered during the site survey and a search of the NAHC Sacred Land Files failed to identify any known on-site resources (see also Section 3.13, Tribal Cultural Resources). Nonetheless, there is the potential for project construction to encounter human remains.

Section 7050.5(b) of the California Health and Safety code specifies protocol to follow in the event human remains are discovered. In addition, CEQA Guidelines Section 15064.5(e), specifies steps that should be taken whenever human remains are uncovered, including stopping excavation activities in areas suspected of containing remains, and contacting the county coroner to determine if the cause of death needs to be investigated. If the county coroner determines that the remains are those of Native Americans, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC is responsible for identifying the most likely descendent of the deceased Native American, who may then make recommendations to the landowner or individual responsible for excavation regarding the means of treating or disposing of the remains. The Guidelines also make a provision for appropriate burial of the remains if the NAHC cannot identify a most likely descendent, if the identified individual fails to make recommendations, or if the recommendations are not acceptable to the landowner.

The proposed project would comply with Section 7050.5 of the California Health and Safety Code as well as CEQA Guidelines Section 15064.5; however, because ground-disturbing construction activities have the potential to uncover and potentially impact previously unrecorded human remains, this impact would be considered potentially significant.

## Mitigation Measures

Mitigation measure MM-CUL-3 establishes the appropriate course of action and methods for respectful treatment in the event human remains unearthed are Native American. Compliance with this measure would ensure the proper procedures are followed in the event the project site is considered a Native American Cultural Place and impacts would be reduced to **less than significant with mitigation.**

MM-CUL-3 Treatment of Human Remains: If human remains are found during evaluations, data recovery, construction monitoring, or any Project-related ground-disturbing activity, all work within 100 feet of the find shall cease and the San Bernardino County Coroner shall be notified within 24 hours. The remains shall be treated with appropriate dignity pursuant to the requirements of California Public Resources Code Section 5097.98 and the California Environmental Quality Act Guidelines Section 15064.5(e). Project-specific requirements (e.g., stop work buffers, County Coroner contact information) shall be included in the Cultural Resource Management Plan.

Impact 3.4-3 The proposed project could directly or indirectly destroy a unique paleontological resource or site or a unique geologic feature.

As discussed in Section 3.4.1, Environmental Setting, no paleontological resources were identified within the project site based on the LACM records search, paleontological survey and desktop geological and paleontological review. In addition, excavation was done to determine if active fault lines exist on the site. Two 42-inch wide trenches were excavated, approximately 300 feet and 100 feet long, and 10 feet to 5 feet deep. A geologist was on site during the excavation work, and no fossils or other paleontological resources were identified. The paleontological records search detailed 40 Pleistocene fossil localities and 38 middle Miocene fossil localities nearby from the same geological units present within the project site, as well as over 200 other fossils have been identified in the region (Appendix F). Pleistocene deposits and the Barstow Formation from this portion of the Mojave Desert have a record of producing significant paleontological resources. Based on this, the project site has a high potential to produce paleontological resources during proposed construction activities. In the event intact paleontological resources are unearthed during ground-disturbing activities associated with construction, such as grading and trenching for utilities, there is the potential to destroy a unique paleontological resource or site. This is a potentially significant impact.

## Mitigation Measures

Implementation of mitigation measure MM-CUL-4 requires the preparation of a Paleontological Resources Impact Mitigation Program (PRIMP) for the project, consistent with the SVP (2010) guidelines. Compliance with this mitigation measure would ensure that in the event paleontological resources are discovered, a protocol is in place to minimize damage to the resource. As such, impacts to paleontological resources would be reduced to **less than significant with mitigation**.

MM-CUL-4 Paleontological Resources Impact Mitigation Program. Prior to commencement of any grading activity on site, the project applicant shall retain a qualified paleontologist, subject to the review and approval of the County. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the project consistent with the Society of Vertebrate Paleontology (2010) guidelines. The PRIMP shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, adequate on-site monitoring, procedures for adequate paleontological monitoring, discoveries treatment, paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The PRIMP shall also include protocols for spot-checking significant ground-disturbing activities below a depth of 5 feet below the ground surface or 5 feet below the depth of artificial fill in areas mapped as Holocene alluvium and full-time paleontological monitoring below the depth of artificial fill in areas underlain by Tertiary sandstone and shale deposits and Tertiary limestone deposits (Barstow Formation). In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activity to allow recovery of

paleontological resources. The area of discovery shall be roped off with a 50-foot radius buffer. While the paleontological monitor recovers the find, work may continue in areas outside of the buffer as long as another paleontological monitor is available and present for the work. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Costs for laboratory work and curation fees for any significant fossils recovered during the monitoring program are the responsibility of the project applicant. Recovered resources should be curated at a repository within San Bernardino or Riverside County.

## Cumulative Impacts

The cumulative context for archeological resources and human remains analysis includes San Bernardino County and the Central and Western Mojave Desert region as a whole. These resource types represent locations of specific use of the environment and landscape. For cultural resources, this use is primarily associated with the record of past activity. The cumulative impact to these non-renewable resources are generally considered in terms of their cultural and/or informational value based on their resource type, context and relationships to the surrounding landscape and/or tribal histories. Human remains of Native American origin, while also variable in type, use, and location, are individually identified and assigned value by California Native American tribes. Cumulative impacts on archeological resources and human remains consider whether impacts of the proposed project together with other projects in the larger region, when taken as a whole, substantially diminish the number of such resources within the same or similar context or type.

The geographic scope for the analysis of cumulative paleontological impacts consists of development slated to occur within the County on soils identified as the middle Miocene Barstow Formation. Cumulative impacts on paleontological resources consider whether the impacts of the proposed project together with other related projects substantially diminish the number of paleontological resources within the same or similar context or property type.

### Impact 3.4-4

The proposed project would not result in a cumulative impact to cultural or paleontological resources.

The proposed project, in combination with past, present, and reasonably foreseeable future development, would not result in a potentially significant cumulative impact related to cultural resources. The Barstow International Gateway project area includes 19 archaeological sites identified as historic resources or unique archaeological resources. The Barstow International Gateway EIR identifies mitigation measures to reduce the impacts, but concludes the impact would be significant and unavoidable. The proposed project does not impact any identified cultural resources. MM-CUL-1 through MM-CUL-3 would address the potential for impacts of accidental discovery of previously unidentified resources. As the proposed project would not affect any known historic or unique archaeological resources, and would implement mitigation to address potential impacts from accidental discovery of resources, the project's contribution to the potentially significant cumulative impact would be less than cumulatively considerable.

The proposed project, in combination with past, present, and reasonably foreseeable future development, would not result in a potentially significant cumulative impact related to paleontological resources. No paleontological resources have been identified within the Barstow International Gateway project area, or within the proposed project area. Compliance with mitigation measure MM-CUL-4 would ensure that in the event paleontological resources are discovered, a protocol is in place to minimize damage to the resource.

### Mitigation Measures

No additional mitigation measures are required. Refer to MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4 above. With implementation of these mitigation measures, the cumulative impact regarding cultural or paleontological resources would be **less than significant with mitigation**.

## 3.4.4 References

Amsden, C. A. 1937. The Lake Mohave Artifacts. In The Archaeology of Pleistocene Lake Mohave, by E. W. Campbell, pp. 51-95. Southwest Museum Papers No. 11, Los Angeles.

Antevs, E. 1953. The Postpluvial or Neothermal. University of California Archeology Survey Reports 22:9-13. Berkeley.

Basgall, M. E. 1993. Early Holocene Prehistory of the North-central Mojave Desert. Ph.D. dissertation, Department of Anthropology, University of California, Davis.

Basgall, M. E. 2000. The Structure of Archeological Landscapes in the North-Central Mojave Desert. In Archeological Passages, edited by J. S. Schneider, R. M. Yohe II, and J. K. Gardner, pp. 123-138. Western Center for Archeology and Paleontology Publications in Archeology No.1.

Basgall, M. E., and M. Hall. 1991. Relationships Between Fluted and Stemmed Points in the Mojave Desert. Current Research in the Pleistocene 8:61-64.

Basgall, M. E., and M. Hall. 1994. Archaeological Investigations at Goldstone (CA-SBR-2348): A Middle Holocene Occupation Complex in the North-Central Mojave Desert, California. Report on file at the U.S. Department of Defense, National Training Center, Fort Irwin.

Basgall, M. E., and S. A. Overly. 2004. Prehistoric Archaeology of the Rosamond Lake Basin, Phase II Cultural Resource Evaluations at 41 Sites in Management Region 2, Edwards Air Force Base, California. Report on file, Environmental Management Office, Conservation Branch, Edwards Air Force Base, California.

Basgall, M. E., S. A. Overly, and W. Pierce. 2002. Another Look at the Paleoindian Archeology of Pleistocene Lake China, California. Paper presented at the 2002 Kelso Conference on the Archeology of the California and Mojave Deserts.

Bean, L. J., and C. R. Smith. 1978. Serrano. In California, edited by R. F. Heizer, pp. 570-574. Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Bean, L. J., and S. Vane. 2002. The Native American Ethnography and Ethnohistory of Joshua Tree National Park: An Overview. Cultural Systems Research, Inc. Prepared for U.S. Forest Service.

Bean, L. J., S. B. Vane, M. Lerch, and J. Young. 1981. Native American Places in the San Bernardino Forest: a Glossary of Serrano and Other Native American Placenames and Other Terms, from the Ethnographic Notes of John Peabody Harrington, prepared for the San Bernardino National Forest.

Bedwell, S. F. 1973. Fort Rock Basin: Prehistory and Environment. University of Oregon Press, Eugene.

Benedict, R. F. 1924. A Brief Sketch of Serrano Culture. American Anthropologist 26:366-392.

Campbell, E. W. C., and W. H. Campbell. 1935. The Pinto Basin Site: An Ancient Aboriginal Camping Ground in the California Desert. Southwest Museum Papers No. 9. Los Angeles.

Cohen, K.M., S.C. Finney, P.L. Gibbard, and J.-X. Fan. 2023. "The ICS International Chronostratigraphic Chart." Episodes 36: 199––204. 2013; updated. Available at: https://stratigraphy.org/ICSchart/ChronostratChart2022-02.pdf.

Cook, S. F. 1943. The conflict between the California Indian and white civilization. University of California Press.

Davis, E. L., and C. Panlaqui. 1978. Stone Tools, the Action Units. In The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes County, edited by E. L. Davis, pp. 30-73. Natural History Museum of Los Angeles County Science Series No. 29.

Drucker, P. 1937. Culture Element Distributions: V, Southern California. University of California Anthropological Records 1(1). University of California Press, Berkeley.

Earle, D. D. 1990. New evidence on the political geography of the Antelope Valley and Western Mojave Desert at Spanish Contact. Archaeology and ethnohistory of Antelope Valley and vicinity. B. Love and W. H. De Witt. Lancaster, CA, Antelope Valley Archaeological Society Occasional Papers No. 2: 87-104.

Earle, D. D. 2005. "The Mojave River and the Central Mojave Desert: Native Settlement, Travel, and Exchange in the Eighteenth and Nineteenth Centuries." Journal of California and Great Basin Anthropology 25(1):1-38.

Gardner, J. K. 2006. "The potential impact of the Medieval Climatic Anomaly on human populations in the western Mojave Desert." Unpublished PhD Dissertation in Anthropology, University of Nevada, Las Vegas.

Giambastiani, M. A., and M. E. Basgall. 2000. Phase II Cultural Resource Evaluation for Sites CA-KER-4773/H and CA-KER-2016 in the Bissell Basin, Edwards Air Force Base, California. Prepared for Department of the Army Corps of Engineers, Sacramento, by the Archaeological Research Center, California State University, Sacramento.

Golla, V. 2011. California Indian languages. Berkeley, University of California Press.

Grayson, D.K. 1993. The Desert's Past: A Natural Prehistory of the Great Basin. Smithsonian Institution Press, Washington, D.C.

Hill, J. H. 2011. "Subgrouping in Uto-Aztecan." Language Dynamics and Change 1: 241-278.

Hunt, A. P. 1960. Archaeology of the Death Valley Salt Pan. University of Utah Anthropological Papers No. 47. Salt Lake City.

Kroeber, A.L. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Washington.

Mehringer, P. J., Jr. 1987. Prehistoric Environments. In Great Basin, edited by W. L. d'Azevedo, pp. 31-50. Handbook of North American Indians, Vol. 11, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Myrick, D.F. 1992. Railroads of Nevada, Volume I. University of Nevada Press.

NEA and CRS. 2004. Ethnographic Overview of the San Bernardino Forest, Part A: The North, prepared for U.S. Department of Agriculture, Southern California Province, Angeles National Forest, Arcadia, CA, by Northwest Economic Associates, Vancouver, WA and Cultural Systems Research, Inc., Menlo Park, CA.

NPS (National Park Service). 2021. Notice of inventory completion: San Bernardino County Museum, Redlands, CA. Federal Register, 86(79): 22262-22265

Rogers, M. J. 1939. Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. San Diego Museum of Man Papers 3.

San Bernardino County. 2020. Countywide Plan/Policy Plan. https://countywideplan.sbcounty.gov/policy-plan/.

SMBMI (San Manuel Band of Mission Indians). 2024. About SMBMI: About Our Tribe. https://sanmanuel-nsn.gov/culture/about-smbmi. Accessed October 8, 2024.

Smith, G. A. 1963. Archaeological survey of the Mojave River and adjacent regions, San Bernardino County Museum Association, Redlands, CA.

Stickle, E. G., L. J. Weinman-Roberts, R. Berger, and P. Hopa. 1980. An Overview of the Cultural Resources of the Western Mojave Desert. Bureau of Land Management Cultural Resource Publications in Anthropology and History.

Strong, W. D. 1929. Aboriginal Society in Southern California. University of California Publications in American Archaeology and Ethnology 26: 1-358.

Sutton, M. Q. 1988a. An Introduction to the Archaeology of the Western Mojave Desert, California. Coyote Press Archives of California Prehistory 14.

SVP (Society of Vertebrate Paleontology). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. https://vertpaleo.org/wpcontent/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.

Sutton, M. Q. 1996. The Current Status of Archaeological Research in the Mojave Desert. Journal of California and Great Basin Anthropology 18(2):221–257.

Sutton, M. Q. 2009. "People and Language: defining the Takic expansion into Southern California." Pacific Coast Archaeological Society Quarterly 41: 31-93.

Sutton, M. Q. 2017. "Chasing ghosts? Rethinking the prehistory of the Late Holocene Mojave Desert." Pacific Coast Archaeological Society Quarterly 53 (1): 1-78.

Sutton, M. Q., and D. D. Earle. 2017. "The Desert Serrano of the Mojave River." Pacific Coast Archaeological Society Quarterly 53 (2&3): 1-61.

Sutton, M. Q., M. E. Basgall, J. K. Gardner, and M. W. Allen. 2007. Advances in understanding Mojave Desert prehistory. California Prehistory: colonization, culture, and complexity. T. L. Jones and K. A. Klar. Lanham, MD, Alta Mira Press: 229-246.

Walker, E. F. 1931. Introduction. In An archeological survey of the Twenty Nine Palms Region, edited by Elizabeth W. C. Campbell. Southwest Museum Papers No. 7, Southwest Museum, Los Angeles.

Warren, C. N. 1984. The Desert Region. In: California Archaeology, by M. J. Moratto, pp. 339–430. Academic Press, Orlando.

Warren, C. N. 2004. Data Recovery at Pleistocene Lake Mojave Sites CA-SBR-140, CA-SBR-6566, CA-SBR-264. In Kern River 2003 Expansion Project, California. Vol. 2, Cultural Resource Data Recovery Report, pp. 39–78. Report on file with the Harry Reid Center for Environmental Studies, Las Vegas.

Warren, C. N., and R. H. Crabtree. 1986. Prehistory of the Southwestern Area. In: Handbook of the North American Indians, Vol. 11: Great Basin, edited by W. L. d'Azevedo, pp. 183–193. Smithsonian Institution, Washington, D.C.

Waters, M. R. 1988. Geomorphology of Drinkwater Basin. In The Late Holocene Archeology of Drinkwater Basin, Fort Irwin, San Bernardino County, California, edited by M. E. Basgall, M. C. Hall, and W. R. Hildebrandt, pp. 24-33. Report submitted to U.S. Army Corps of Engineers, Los Angeles.

Waters, M. R. 1991. The Geomorphology of Nelson Basin and Adjacent Areas. In The Archeology of Nelson Basin and Adjacent Areas, Fort Irwin, San Bernardino County, California, by M. E. Basgall, pp. 15-20. Report submitted to U.S. Army Corps of Engineers, Los Angeles.

Yohe, R. M. II. 1992. A Reevaluation of Western Great Basin Cultural Chronology and Evidence for the Timing of the Introduction of the Bow and Arrow to Eastern California Based on New Excavations at the rose Spring Site (CA-INY-372). PhD dissertation, University of California, Riverside.

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# 3.5 Energy

This section analyzes the potential impacts from the implementation of the Lenwood Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project"). The analysis includes the existing energy conditions to present the environmental baseline for the project and an analysis of potentially wasteful, inefficient, or unnecessary consumption of energy resources, during project construction and operation and compliance with state or local plans for renewable energy or energy efficiency.

No comments were received during the Notice of Preparation scoping period regarding energy impacts, although comments were received requesting implementation of green technologies to minimize emissions from both construction and operational activities. All scoping comment letters are provided in Appendix A to this Environmental Impact Report.

The analysis is based, in part, on review of information from the California Energy Commission, California Public Utilities Commission (CPUC), California Air Resources Board (CARB), U.S. Environmental Protection Agency (EPA), and information provided in the following technical appendices:

- **Appendix B,** Air Quality and Greenhouse Gas Emissions Technical Report, prepared by Dudek
- **Appendix J,** Transportation Impact Study, prepared by Dudek.

## 3.5.1 Existing Conditions

### Environmental Setting

#### Electricity

The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into electrical energy. The delivery of electricity involves a number of system components, including power generation facilities, transmission and distribution lines, substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Production of electricity and its conveyance through the power grid occur in response to market demand.

Energy capacity, or electrical power, is generally measured in watts while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 watts, the energy required to keep the bulb on for 1 hour would be 100 Wh. If 10 100-watt bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts, which is 1 million watts, while energy usage is measured in megawatt-hours (1 million watt-hours) or gigawatt-hours (1 billion watt-hours).

According to the U.S. Energy Information Administration, California used approximately 239,480 gigawatt hours of electricity in 2023 (EIA 2024). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. In 2023, California was the fourth-largest electricity producer in the nation, but the state was also the nation's third-largest consumer of electricity (EIA 2024).

Electricity is provided to the San Bernardino County area by the Southern California Edison (SCE). Within the County, annual non-residential electricity use in 2024 was approximately 10.4 billion kilowatt-hours (kWh) per year, while residential electricity use is approximately 5.8 billion kWh per year (CEC 2025a).

To maintain consistency with State laws and regulations, SCE connects different sources of renewable energy and engages new technologies to enable customers to shift energy as pricing changes. Senate Bill (SB) 1078 requires 60% of electric sales to be a renewable energy mix by 2030. According to the 2023 SCE Power Content Label, eligible renewable energy accounts for 36.9% of SCE's overall energy resources (SCE 2023). Table 3.5-1 lists SCE's energy sources and the most recent available data of the power mix of those energy sources. Note that the renewable percentage shown in Table 3.5-1 does not reflect Renewables Portfolio Standard (RPS) compliance, which is determined using a different methodology.

**Table 3.5-1. SCE Power Mix 2023**

| Energy Resources | 2023 SDG&E Power Mix (Percentage) |
|---|---|
| Eligible Renewable[1] | 36.9% |
| *Biomass & Biowaste* | *2.1%* |
| *Geothermal* | *4.8%* |
| *Eligible Hydroelectric* | *1.8%* |
| *Solar* | *17.0%* |
| *Wind* | *11.2%* |
| Coal | 1.8% |
| Large Hydroelectric | 11.7% |
| Natural Gas | 36.6% |
| Nuclear | 9.3% |
| Other | 0.01% |
| Unspecified Power[2] | 3.7% |
| **Total** | **100%** |

**Source:** SCE 2023.
**Notes**:
1 The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.
2 Unspecified power is electricity that has been purchased through open market transaction and is not traceable to a specific generation source.

## Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network, and therefore, resource availability is typically not an issue. Natural gas provides almost one-third of the state's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet.

According to the Energy Information Administration, California used approximately 2,087 billion cubic feet of natural gas in 2023 (EIA 2025a). The majority (by number) of California's natural gas customers are residential and small commercial customers (core customers). These customers account for approximately 35% of the natural gas delivered by California utilities (CPUC 2019). Large consumers, such as electric generators and industrial customers (noncore customers), account for approximately 65% of the natural gas delivered by California utilities (CPUC 2021).

CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2021).

Southwest Gas Corp. provides Lenwood and the Barstow area with natural gas. Countywide natural gas consumption data is provided by the California Energy Commission. Based on this data, the County consumed approximately 547.2 Millions of Therms of natural gas in 2024 across all sectors (CEC 2025b).

### Petroleum

There are more than 36 million registered vehicles in California, and those vehicles consume an estimated 16 billion gallons of fuel each year (CEC 2020; DMV 2021). Petroleum currently accounts for approximately 92% of California's transportation energy consumption (CEC 2020). However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled (VMT). Section 3.6, Greenhouse Gas, discusses in more detail both federal and state regulations that would help increase fuel efficiency of motor vehicles and reduce GHG emissions. Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

According to the Energy Information Administration, California used approximately 628 million barrels of petroleum in 2022, with the majority (534 million barrels) used for the transportation sector (EIA 2025b). This total annual consumption equates to daily use of approximately 1.7 million barrels of petroleum. In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 3.5.2.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend will likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state. According to CARB's Emission Factor Web Database, San Bernardino County on-road transportation sources were estimated to consume 738 million gallons of gasoline and 262 million gallons of diesel fuel, or a total of 1.0 billion gallons of total petroleum in 2024 (CARB 2025).

## 3.5.2 Regulatory Setting

### Federal

#### Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which 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 is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

#### Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased corporate average fuel economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable fuel standard (RFS) (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation (the RFS) requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2017). The EPA is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of GHG emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of our nation's renewable fuels sector. The updated program ("RFS2") includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

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

On June 13, 2025, EPA proposed new RFS volume requirements for 2026 and 2027, which aim to boost domestic biofuel production, reduce reliance on foreign feedstocks, support rural agricultural economies, and remove electricity from qualifying as a renewable fuel under the RFS program.

### Motor Vehicle Fuel Economy Standards

The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. On September 24, 2009, CARB adopted amendments to the Pavley regulations (see discussion on AB 1493, below) that reduced GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment to a nationwide program to reduce new passenger vehicle GHG emissions from 2012 through 2016. CARB's September 2009 amendments allowed for California's enforcement of the Pavley rule while providing vehicle manufacturers with new compliance flexibility. The amendments also prepared California to harmonize its rules with the federal rules for passenger vehicles. It was expected that the Pavley regulations would reduce GHG emissions from California passenger vehicles by about 22% in 2012 and about 30% in 2016, all while improving fuel efficiency and reducing motorists' costs.

In 2020, EPA and the National Highway Traffic Safety Administration approved the Trump administration's Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One and Two (SAFE-1 and SAFE-2), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California, and sought to reduce fuel economy standards. However, in March 2022, EPA reinstated California's authority under the Clean Air Act (CAA) to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

However, in 2025 the President of the United States signed an Executive Order (EO), *Unleashing American Energy*, which directed EPA to eliminate the social cost of carbon calculation from any federal permitting or regulatory decision and submit recommendations on the legality and continued applicability of the 2009 endangerment finding, among other directives (The White House 2025). On July 29, 2025, the EPA released its proposal to rescind the 2009 endangerment finding and repeal all GHG emission standards for light-duty, medium-duty, and heavy-duty vehicles and engines pursuant to CAA Section 202(a) (EPA 2025). The proposed rule would remove GHG-related provisions from Title 40 of the Code of Federal Regulations (40 CFR), Part 600 (90 FR 36288–36365).

In May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). However, the U.S. Senate Parliamentarian and the Government Accountability Office concluded that that the bills were illegal (GAO 2025). Consequently, California filed a lawsuit challenging the revocations (see State of California et al. v. U.S.A et al. (2025) N.D. Cal Case No. 25-CV-04966, challenging disapproval of California's CAA waivers that allowed California to set its own vehicular fuel economy standards).

On February 12, 2026, the U.S. EPA Administrator rescinded the 2009 GHG Endangerment Finding and eliminated all subsequent federal GHG emission standards for motor vehicles and engines. The final rule rescinds EPA GHG

emission standards and related regulatory provisions for light-. medium-, and heavy-duty vehicles and engines promulgated pursuant to the 2009 Endangerment Finding, including the following rulemakings (EPA 2026):

Light-Duty Vehicle Greenhouse Gas Standards:

- Model Year (MY) 2012–2016 Light-Duty Vehicle GHG Standards
  - Joint EPA–National Highway Transportation Safety Administration standards establishing federal GHG emission limits for passenger cars and light trucks.
- MY 2017 and Later Light-Duty Vehicle GHG Standards
  - EPA standards tightening GHG emission requirements beyond MY 2016.
- MY 2023–2026 Light-Duty Vehicle GHG Standards
  - Revisions to national GHG standards for passenger cars and light trucks beyond MY2022.
- MY 2027 and Later Light-Duty Multi-Pollutant Standards (GHG Provisions)
  - Tightening GHG emission requirements beyond MY 2027.

Medium- and Heavy-Duty Vehicle and Engine GHG Standards:

- Phase 1 Medium- and Heavy-Duty Vehicle GHG Standards
  - Initial federal GHG standards for heavy-duty engines and vehicles.
- Phase 2 Medium- and Heavy-Duty Vehicle and Engine GHG Standards (Through MY 2027)
  - Expanded GHG standards covering tractors, vocational vehicles, heavy-duty pickups and vans, and trailers.
- Phase 3 Medium- and Heavy-Duty Vehicle GHG Standards (MY 2027 and Beyond)
  - GHG standards applicable to later model years, including early phases extending into the 2030s.

### Construction Equipment Fuel Efficiency

EPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 horsepower and established the Tier 2 and Tier 3 standards. The Tier 2 and Tier 3 standards were phased in by 2008 for all equipment. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements are contained in 40 CFR Parts 1039, 1065, and 1068 (originally adopted in 69 FR 38958–39273 [June 29, 2004], and most recently updated in 2014 [79 FR 46356–46375]). Emissions requirements for new off-road Tier 4 vehicles were completely phased in by the end of 2015.

CARB is also charged with developing air pollution control regulations based on the best available control measures and implementing every feasible control measure under the state and federal CAA (Health and Safety Code Sections 39602.5, 39667, 43013[a], 43013[h], 43018, 40600, 40601, 40612[a][2], and 40612[c][1][A]). Pursuant to these directives, stringent emission standards were adopted in 2004 for off-road construction equipment (i.e., “Tier 4” standards) (40 CFR Parts 1039, 1065, and 1068; California Code of Regulations, Title 13 [13 CCR], Section 2025; AR 2854). CARB also adopted emission standards for on-road heavy duty diesel vehicles (i.e., haul trucks) (13 CCR 1956.8). These haul truck regulations mandated fleet turnover to ensure that by January 1, 2023, nearly all on-road diesel trucks would have 2010 model year engines or equivalent (i.e., Tier 4). In addition, interim

steps were incorporated into the regulations (e.g., vehicles older than 1999 would be replaced with newer engines by 2020).

## State

### California Environmental Quality Act

In accordance with the California Environmental Quality Act (CEQA) Guidelines and Appendix F, Energy Conservation, of the CEQA Guidelines, in order to ensure that energy implications are considered in project decisions, environmental impact reports must include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the CEQA Guidelines provides a list of energy-related topics that should be analyzed in an environmental impact report. In addition, while not described as significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following topics that the lead agency may consider in the energy analysis in an environmental impact report, where topics are applicable or relevant to the project:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources; and,
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

### Warren-Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974, which created the California Energy Commission. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the California Energy Commission to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial California Energy Commission.
- The California Energy Commission was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

### State of California Energy Action Plan

The California Energy Commission and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure the provision of adequate, reliable, and reasonably priced electrical power and natural gas supplies; it also identified cost-effective and environmentally sound energy policies, strategies, and actions for California's consumers and taxpayers. In 2005, the California Energy Commission and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the California Energy Commission and CPUC determined that it was not necessary or productive to prepare a new energy action plan (CPUC 2008). This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the California Energy Commission and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

### AB 32, SB 32, and AB 1279

In 2006, the State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In 2022, the Legislature enacted AB 1279, which established the policy of the State to achieve carbon neutrality as soon as possible, but no later than 2045 and maintain net negative GHG emissions thereafter, and to ensure that GHG emissions are reduced to at least 85% below 1990 levels by 2045. In accordance with AB 32 and SB 32, the CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources.

### California Building Standards

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (and revised if necessary) (California Public Resources Code, Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402[d]), and cost effectiveness (California Public Resources Code, Sections 25402[b][2] and [b][3]). These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment. The 2022 standards went into effect on January 1, 2023. The 2025 standards, adopted in September 2024, will go into effect on January 1, 2026. Development occurring after 2026 will therefore be subject to the 2025 standards.

In addition to the California Energy Commission's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR 11) is commonly referred to as CALGreen and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, schools, and

hospitals. The CALGreen 2022 standards went into effect on January 1, 2023. The 2025 Title 24 building energy efficiency standards were adopted in September 2024 and will become effective January 1, 2026. The 2025 building energy code focuses on key areas:

- Encouraging inherently efficient electric heat pump technology for space and water heating in newly constructed single-family, multifamily, and select nonresidential building types. Replacing end-of-life rooftop heating, ventilation, and air-conditioning units of a certain size with high efficiency systems including heat pumps, for existing retail, existing schools, and existing offices and libraries.
- Establishing electric-ready requirements for commercial kitchens and some multifamily buildings, so owners can more easily switch to cleaner electric cooking and water heating, when ready. Updating solar and storage standards for assembly buildings, including religious worship, sport, and recreation buildings to make clean energy available for on-site use while minimizing exports to the electrical grid.
- Strengthening ventilation standards to improve indoor air quality in multifamily buildings.

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### SB 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law SB 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation (minimum level of demand on an electrical grid over a span of time) by the state's utilities to those power plants that meet an emissions performance standard jointly established by the California Energy Commission and the CPUC.

The California Energy Commission has designed regulations that:

- Establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds carbon dioxide ($CO_2$) per megawatt-hour. This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of GHGs;
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the California Energy Commission website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long-term while meeting the state's standards for environmental impact; and
- Establish a public process for determining the compliance of proposed investments with the emissions performance standard (Perata, Chapter 598, Statutes of 2006).

### AB 1493

Adopted in 2002 by the state legislature, AB 1493 ("Pavley" regulations) required that the CARB develop and adopt, no later than January 1, 2005, regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles.

The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005 and was denied by the U.S. EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the CAA requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions."

The EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. On September 24, 2009, CARB adopted amendments to the Pavley regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment to a nationwide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September 2009 amendments allowed for California's enforcement of the Pavley rule while providing vehicle manufacturers with new compliance flexibility. The amendments also prepared California to harmonize its rules with the federal rules for passenger vehicles. It was expected that the Pavley regulations would reduce GHG emissions from California passenger vehicles by about 22% in 2012 and about 30% in 2016, all while improving fuel efficiency and reducing motorists' costs.

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In May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). However, the U.S. Senate Parliamentarian and the Government Accountability Office concluded that that the bills were illegal (GAO 2025). These actions impact CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus authority with the current result eliminating California's enforcement of these fuel standard regulations. California filed a lawsuit challenging the revocations (see *State of California et al. v. U.S.A et al.* (2025) N.D. Cal Case No. 25-CV-04966, challenging disapproval of California's CAA waivers that allowed California to set its own vehicular fuel economy standards), which is currently pending.

Furthermore, it is legally infeasible for individual cities and counties to regulate fuel economy standards, as stated in 42 USC Section 7543(a): "No state or any political subdivision therefore shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part."

## EO S-1-07

Issued on January 18, 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard (LCFS) for GHG emissions measured in $CO_2$-equivalent ($CO_2e$) grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the LCFS would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The LCFS was anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020. In 2018, this goal was revised to reduce the carbon intensity of fuels by 20% compared to 2011 by 2030. In 2020, the LCFS met 7.42% of the 7.5% target reduction for the year (CARB 2021a).

## SB 375

In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see EO S-1-07), and other CARB-approved measures to reduce GHG emissions. Under SB 375, regional metropolitan planning organizations are responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan. The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for “transit priority projects,” as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects would not conflict with the SCS or alternative planning strategy. The Southern California Association of Governments 2020–2045 Regional Transportation Plan/SCS is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375.

## Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-use) Regulation

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM, and $NO_x$ emissions from existing diesel vehicles operating in California. Amendments to this regulation were approved by CARB on April 25, 2014.

The regulation applies to nearly all diesel fueled, dual-fueled, or alternative diesel-fueled trucks and buses with a gross vehicle weight rating greater than 14,000 pounds that are privately or federally owned and for privately and publicly owned school buses. The purpose of this regulation is to reduce emissions of diesel PM, $NO_x$, and other criteria pollutants from in-use diesel-fueled vehicles.

Heavier trucks and buses with a gross vehicle weight rating greater than 26,000 pounds must comply with a schedule by engine model year or owners can report to show compliance with more flexible options. Starting January 1, 2012, heavier trucks were required to meet the engine model year schedule. Fleets that comply with the schedule must install the best available PM filter on 1996 model year and newer engines and replace the vehicle 8 years later. Trucks with 1995 model year and older engines were required to be replaced starting in 2015. Replacements with a 2010 model year or newer engines meet the final requirements, but owners can also replace with used trucks that have a future compliance date on the schedule. For example, a replacement with a 2007 model year engine complies until 2023. By 2023, all trucks and buses must have 2010 model year engines with few exceptions. No reporting is required if complying with this schedule (CARB 2014).

### Advanced Clean Car Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEV that contributes to both types of emission reductions (CARB 2021b). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program was certified on August 25, 2022, to establish the next set of Low-Emission Vehicle and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021b). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

However, as discussed above, CARB's ability to enforce ACC II was eliminated by the May 2025 U.S. Senate approved bills under the Congressional Review Act that purported to rescind California's CAA waiver, which previously allowed California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89).

### Advanced Clean Trucks Program

The purpose of the Advanced Clean Trucks Regulation (June 2020) is to accelerate the market for ZEVs in the medium- and heavy-duty truck sector and to reduce emissions of $NO_x$, fine particulate matter, and other criteria pollutants, as well as TACs and GHGs, generated from on-road mobile sources (CARB 2021c). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help California meet established near- and long-term air quality and climate mitigation targets. The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

1. **Zero-emission truck sales:** Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual

California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.

2. Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

However, in May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). The U.S. Senate Parliamentarian and the Government Accountability Office concluded that that the bills were illegal (GAO 2025). These actions impact CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus authority, with the current result eliminating California's enforcement of these fuel standard regulations. By signing the resolutions, the administration nullified the CARB waivers and prohibited EPA from issuing similar waivers in the future.

Consequently, California filed a lawsuit challenging the revocations (see *State of California et al. v. U.S.A et al.* (2025) N.D. Cal Case No. 25-CV-04966, challenging disapproval of California's CAA waivers that allowed California to set its own vehicular fuel economy standards). Despite the pending litigation, state regulations including CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus are no longer in effect.

### EO B-16-12

Governor Brown issued EO B-16-12 on March 23, 2012. The EO requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It ordered CARB, the California Energy Commission, CPUC, and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following by 2015:

- The state's major metropolitan areas will be able to accommodate ZEVs, each with infrastructure plans and streamlined permitting
- The state's manufacturing sector will be expanding ZEV and component manufacturing
- The private sector's investment in ZEV infrastructure will be growing
- The state's academic and research institutions will be contributing to ZEV research, innovation and education.

CARB, the California Energy Commission, and CPUC, were also directed to establish benchmarks to help achieve the following goals by 2020:

- The state's ZEV infrastructure will be able to support up to one million vehicles
- The costs of ZEV will be competitive with conventional combustion vehicles
- ZEVs will be accessible to mainstream consumers
- There will be widespread use of ZEVs for public transportation and freight transport
- Transportation sector GHG emissions will be falling as a result of the switch to ZEVs
- Electric vehicle (EV) charging will be integrated into the electricity grid
- The private sector's role in the supply chain for ZEV component development and manufacturing will be expanding.

Benchmarks were also to be established to help achieve the following goals by 2025:

- Over 1.5 million ZEVs will be on California roads and their market share will be expanding
- Californians will have easy access to ZEV infrastructure
- The ZEV industry will be a strong and sustainable part of California's economy
- California's clean, efficient vehicles will annually displace at least 1.5 billion gallons of petroleum fuels.

On a statewide basis, the EO establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

### Renewable Energy Sources

SB 1078 established the California RPS Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the California Energy Commission to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% had to come from renewables.

SB 350 (2015) expanded the RPS because it requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that it not be achieved through resource shuffling.

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045 (California Government Code Section 7921.505; California Health and Safety Code Section 38561; California Public Utilities Code Sections 454.53, 583, 454.59, 739.13).

### AB 1007

AB 1007 (2005) required the California Energy Commission to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The California Energy Commission prepared the plan in partnership with the CARB and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

## Regional and Local

### San Bernardino County Greenhouse Gas Emissions Reduction Plan

The County adopted its current Greenhouse Gas Emissions Reduction Plan (GHGRP) in 2011 and adopted a plan update in June 2021. As discussed in GHGRP, the 2021 GHGRP update may be used as GHG mitigation in the Countywide Plan/Policy Plan, which is an update of the County's General Plan to demonstrate that the County's GHG reduction targets are aligned with state goals for reducing GHG emissions to a level less than cumulatively considerable. The GHGRP provided baseline GHG emissions inventory for the year 2008, and targets to reduce the County's GHG emissions to 15% below baseline emissions by 2020. This was roughly equivalent to the 2008 Scoping Plan adopted by the State of California in 2008 that recommended a target of 15% below 'current' (2005-2008) levels by the year 2020. The County updated the GHG inventory for year 2016, which demonstrated that the County achieved the 2020 reduction target in that year. Since the adoption of the County's GHG Emissions Reduction Plan, the state has enacted new climate change regulations, most notably SB 32, which stipulates statewide targets to reduce GHG emissions to 40% below 1990 levels by 2030. AB 1279 and the CARB approved the 2022 Scoping Plan for Achieving Carbon Neutrality in December 2022, which outlines the state's plan to reduce anthropogenic emissions to 85% below 1990 levels by 2045 and achieve carbon neutrality by 2045 or earlier. The Plan also assesses the progress the state is making toward reducing GHG emissions by at least 40% below 1990 levels by 2030, as is required by SB 32. In the 2021 GHGRP update, the County has determined that reducing GHG emissions within the unincorporated county area 40% below the 2020 levels of emissions by 2030 matches the state's goal outlined in SB 32 and complements the statewide efforts outlined in the Scoping Plan putting the County on a path towards meeting the state's long-term goal to achieve zero net carbon emissions by 2045.

### San Bernardino Countywide Plan and Policy Plan

The Countywide Plan/Policy Plan contains the long-term goals and policies that guide County decisions, investments, and improvements toward achieving the Countywide Vision. The Policy Plan represents a unique approach to county planning. It serves as the County's General Plan for the unincorporated areas, which is mandated by state law, but it also includes policy direction for adult and child supportive services, healthcare, public safety, and other regional services the County administers in both incorporated and unincorporated areas. The Countywide Plan/Policy Plan policies from the Natural Resources Element and the Renewable Energy & Conservation Element relevant to the project are as follows:

#### *Natural Resources Element*

Goal NR-1. Air Quality. Air quality that promotes health and wellness of residents in San Bernardino County through improvements in locally-generated emissions.

Policy NR-1.9 Building design and upgrades. We use the CALGreen Code to meet energy efficiency standards for new buildings and encourage the upgrading of existing buildings to incorporate design elements, building materials, and fixtures that improve environmental sustainability and reduce emissions

*Renewable Energy & Conservation Element*

Goal RE-1. Energy Conservation and Efficiency. The County will pursue energy efficiency tools and conservation practices that optimize the benefits of renewable energy.

Policy RE-1.2 Optimize energy efficiency in the built environment:

RE 1.2.6: Encourage new development to comply with the optional energy efficiency measures of the CALGreen Code.

Goal RE-2. Renewable Energy Systems. The County will be home to diverse and innovative renewable energy systems that provide reliable and affordable energy to our unique Valley, Mountain, and Desert regions.

Policy RE-2.5. Support renewable energy systems that accelerate zero net energy (ZNE) through innovative design, construction, and operations of residences, businesses, and institutions that are grid-neutral and independent of centralized energy infrastructure.

RE 2.5.1: Allow and encourage construction of new buildings designed to ZNE standards consistent with state programs.

RE 2.5.3: Allow and encourage construction of new buildings or developments in remote locations with stand-alone energy systems not connected to the grid.

Policy RE-2.6. Encourage energy efficiency through appropriate renewable energy systems.

RE 2.6.2: Allow developers of nonresidential properties to reduce required on-site parking spaces below minimum standards when space equivalent to the parking space reduction is devoted to renewable energy generation and storage facilities designed to serve on-site energy needs.

RE 2.6.3: Encourage solar energy generation on rooftops and on covered parking as the first priority for on-site energy generation.

## 3.5.3 Environmental Impacts

### Methodology

This section contains an evaluation of potential environmental impacts associated with the project related to energy consumption. The section describes the methods used in conducting the analysis and evaluates the project-specific impacts and contribution to significant cumulative impacts, if any are identified.

## Construction

Construction of the project would result in the consumption of energy from a variety of sources during construction activities, primarily petroleum-based fuels associated with the use of off-road construction equipment and construction workers, delivery trucks, and haul trucks traveling to and from the sites. Sources of energy consumption during construction would include mobile and stationary construction equipment exhaust, employee and haul truck vehicle exhaust, land clearing and material movement, paving, and application of architectural coatings. All details for construction criteria air pollutants discussed in Section 3.2, Air Quality, are also applicable for the estimation of construction energy consumption. Refer to Subsection 3.2.3, Methodology, for a discussion of construction emissions calculation methodology and assumptions.

## Operation

All details for operational criteria air pollutants discussed in Section 3.2, Air Quality, under subsection 3.2.3, Methodology, are also applicable for the estimation of energy consumption. For additional details refer to Appendix B. As discussed in Chapter 2.0, Project Description, a key purpose of the proposed project is to provide electrical vehicle charging infrastructure to meet local and regional needs and develop a logistics facility proximate to major transportation corridors.

Specific project objectives are:

- To site an EV charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on SR 58, I-15, and I-40.
- To contribute to the creation of a robust EV charging network in the region and strengthen the state and regional supply chain.
- To develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors.
- To expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses.
- To attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment.

The proposed project operation would result in energy consumption from the operation of a 20.72-acre EV charging station, commercial building, truck amenities (i.e., truck wash and maintenance facilities), and a 1,341,432-sf logistics center as well as associated landscaping and lighting.

## Electricity

As represented in CalEEMod, energy sources include emissions associated with building electricity for the project and would also include electricity for warehouse forklift operation, and EV charging. CalEEMod default values for energy consumption were applied for the Project analysis building emissions. The energy use from nonresidential land uses is calculated in CalEEMod based on the Commercial Appliance Saturation Study (CAPCOA 2022). Detailed emissions calculations for forklift and EV charging are calculated via spreadsheet calculations provided in Appendix B.

EV charging is a separate operation from the warehouse operations and is not dependent on the warehouse tenant's trucking schedule or need. As such the project's EV charging facilities would not generate new EVs but serve to support existing EVs within the area fleet mix at the time of project operation. For this reason, energy associated with electric energy throughput of the EV charging facilities of the project would not be attributable to the project. Only EV truck electric energy associated with the diverted trip from the highway (I-15 via Lenwood Road) to the site and electric energy losses associated with the charging facilities would be potentially attributable to the project. With dependency on final equipment design and energy efficiency ratings. For this analysis, it is assumed that 10%[1] of the electric energy is lost at the project site. Energy losses occur from charging facilities due to alternating current distribution, energy rectification, and direct current losses and from heating, ventilation, and air conditioning on both the charging equipment and the vehicles. It is anticipated that approximately 6.5% of project's electric energy processed through EV charging would be generated on site with solar photovoltaic (PV) generation, approximately 2,338,800 kWh of renewable energy per year. For informational purposes, and based on the initial proposed installation of charging stations, the project is anticipated to charge EVs with a cumulative annual total of 35,740,800 kWh of electric energy with 33,401,977 kWh sourced from the electric power grid and the remaining 6.5% from on-site solar PV generation.

In addition, there would also be a Battery Energy Storage System included in the project. The operation of the Battery Energy Storage System would result in approximately 16 MWh of energy per day energy throughput. However, this electricity is only stored in the Battery Energy Storage System and related GHG emissions from the energy would be accounted for in the GHG emissions estimates from building operations (CalEEMod), forklifts, and EV charging operations.

### Natural Gas

Project natural gas consumption would occur only for restaurant(s) in the commercial building and is based on the estimated total annual building load summaries from CalEEMod. The energy use (natural gas usage per square foot per year) is calculated in CalEEMod based on the California Commercial End-Use Survey database.

### Petroleum

Petroleum would be consumed by vehicles accessing the development allowed under the proposed project, which is a function of total VMT and estimated vehicle fuel economies for the vehicles. Fuel consumption was estimated by converting the total $CO_2$ emissions from mobile sources to gallons using the conversion factors for $CO_2$ to gallons of gasoline or diesel. Specifically, conversion factors of 8.78 kg $CO_2$ per gallon for gasoline and 10.21 kg $CO_2$ per gallon for diesel were applied to reflect the carbon intensity of each fuel type (The Climate Registry 2025).

## Thresholds of Significance

The significance criteria used to evaluate the project impacts to energy are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to energy would occur if the project would:

(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

[1] https://insideevs.com/features/711659/ev-charger-efficiency-losses/ Based on level 3 DC fast charging.

(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The impact analysis also considers whether the project would result in a cumulatively considerable impact related to energy.

## Impact Analysis

Impact 3.5-1 The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

### Construction Energy Use

#### *Electricity*

Temporary electric power for construction equipment would be provided by SCE. The amount of electricity used during construction would be minimal because typical demand would be generated only by electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity.

#### *Natural Gas*

Construction activities are not anticipated to require the consumption of natural gas to power equipment or heavy machinery. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection "Petroleum." Any minor amounts of natural gas that may be consumed during construction would be temporary and negligible and would not result in a significant drain on natural gas resources. Therefore, construction of the proposed project would result in a less than significant impact related to wasteful, inefficient, or unnecessary consumption of natural gas.

#### *Petroleum*

Petroleum fuels would be the primary energy resource consumed during construction activities by heavy-duty equipment, on-road delivery trucks, haul trucks, and generators, which are usually diesel powered, as well as on-road vehicles used by the construction crews, which are usually gasoline powered. The same fuels typically are used for vehicles that transport equipment and workers to and from a construction site. Project construction is anticipated to start in 2027 and is anticipated to conclude in 2028. As a result, construction-related fuel consumption would be finite, short-term, and consistent with construction activities for projects of a similar character.

The estimated diesel fuel usage from construction equipment and trucks and estimated gasoline fuel usage from worker vehicles are shown in Table 3.5-2

**Table 3.5-2. Project Construction Petroleum Demand**

| Phase | Off-Road Equipment (Diesel) | Trucks (Diesel) | Worker Vehicles (Gasoline) |
|---|---|---|---|
| | Gallons | | |
| Construction | 315,719 | 881,996 | 1,120,028 |

## Table 3.5-2. Project Construction Petroleum Demand

| Phase | Off-Road Equipment (Diesel) | Trucks (Diesel) | Worker Vehicles (Gasoline) |
|---|---|---|---|
| | Gallons | | |
| | | Total Petroleum Consumed | 2,317,743 |

**Note:** See Appendix B for details.

As shown in Table 3.5-2, the project is estimated to consume approximately 2,317,743 gallons of petroleum during the construction phase over an approximately 1.5-year period.[2] Notably, the project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation, which applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing verified diesel emission control strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the best achievable control technology requirements. Because the project would not be unusual compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state, project construction would not result in wasteful, inefficient, or unnecessary consumption of petroleum.

### Operation

#### *Electricity*

Electric energy sources include emissions associated with building electricity for the project and would also include electricity for warehouse forklift operation, and EV charging. CalEEMod default values for energy consumption were applied for the project analysis building emissions.

As discussed above, EV charging is a separate operation from the warehouse operations and is not dependent on the warehouse tenant's trucking schedule or need. As such the project's EV charging facilities would not generate new EV trips but serve to support existing EVs within the area fleet mix at the time of project operation. For this reason, energy associated with electric energy throughput of the EV charging facilities of the project would not be attributable to the project. Only EV truck electric energy associated with the diverted trip from the highway (I-15 via Lenwood Road) to the site and electric energy losses associated with the charging facilities would be potentially attributable to the project

The energy use from nonresidential land uses is calculated in CalEEMod based on the Commercial Appliance Saturation Study (CAPCOA 2022). Detailed energy calculations for electric forklift and EVs are provided in Appendix B. Additionally, CalEEMod and water intensity factors by hydrologic region were used to estimate the electricity consumption associated with the supply, conveyance, treatment, and distribution of water (see Appendix B for calculations).

[2] For context, in 2019, California consumed about 662 million barrels of oil (EIA 2022). There are 42 U.S. gallons in a barrel, so California consumes approximately 76.2 million gallons of petroleum per day, adding up to an annual consumption of 7.8 billion gallons of petroleum.

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. Modeling associated with the representative development allowed under proposed project operational energy emissions were assumed to meet the 2019 Title 24 Standards, the default assumptions in CalEEMod version 2022.1.1. Of note, application of the 2019 Title 24 standards to the potential land uses would be conservative because future land uses will be required to comply with the then-current (i.e., higher efficiency) standards. According to these estimations, the project would consume approximately 23 million kWh per year during operation. This electrical consumption only represents approximately 0.029% of SCE's overall electricity consumption of approximately 79 billion kWh per year in 2024 (CEC 2025a). In addition, approximately 6.5% of the electric energy processed through EV charging would be generated on site with solar PV generation, approximately 2,338,800 kWh of renewable energy per year. Based on these considerations, the project's electrical energy consumption would not be considered inefficient, wasteful, or unnecessary, and impacts would be less than significant.

### *Natural Gas*

Operation of the project would require natural gas for various purposes, including, but not limited to, space heating, water heating, cooking, and other building-related energy needs. CalEEMod was used to estimate the natural gas demand associated with the project (see Appendix B for calculations). The project is estimated to consume approximately 342,813 kBTU per year during operation (for restaurant operations). This natural gas consumption only represents approximately 0.0023% of Southwest Gas Corp's overall natural gas supply of approximately 149 million therms per year in 2024 (CEC 2025b). Therefore, it is anticipated that Southwest Gas Corp's existing and planned natural gas supplies would be sufficient to support the project's demand for natural gas and per CEQA Guidelines Appendix F, would not have a significant effect on local and regional natural gas supplies or require additional capacity and impacts would be less than significant.

### *Petroleum*

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site. Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of the VMT as a result of project operation. As estimated by CalEEMod, the annual net new VMT attributable to the project is expected to be 29,559,302 VMT. Similar to the construction worker and vendor trips, fuel consumption from worker and truck trips is estimated by converting the total $CO_2$ emissions from operation of the project, as estimated using CalEEMod, to gallons using the conversion factors for $CO_2$ to gallons of gasoline or diesel.

Calculations for annual mobile source fuel consumption are provided in Table 3.5-3.

**Table 3.5-3. Annual Mobile Source Petroleum Demand**

| Fuel | Vehicle MT $CO_2$ | kg/$CO_2$/Gallon | Gallons |
|---|---|---|---|
| Gasoline | 4,792.00 | 8.78 | 545,785.88 |
| Diesel | 18,734.00 | 10.21 | 1,834,867.78 |
| | | Total | 2,380.653.65 |

**Sources:** Trips and vehicle $CO_2$ (Appendix A-1); kg/$CO_2$/Gallon (The Climate Registry 2021).
**Notes:** MT = metric ton; $CO_2$ = carbon dioxide; kg = kilogram
Gasoline fuel consumption includes landscape maintenance equipment.

For context, in year 2023, California consumes approximately 23 billion gallons of petroleum per year (EIA 2025b).

Over time, the fuel efficiency of the vehicles is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips during operation would decrease over time. Regardless of the recent federal actions, discussed herein, to revoke the California CAA waiver, there are numerous regulations in place that require and encourage increased fuel efficiency as discussed in Section 3.5.2, Regulatory Setting. As such, the project is expected to use decreasing amounts of petroleum over time, due to advances in fuel economy. Furthermore, the use of transit and alternative fuel vehicles (e.g., electricity, natural gas, biofuels, hydrogen cells) is anticipated to increase over time, as local and regional plans and policies facilitating increased use and development of transit and alternative fuel vehicle transportation modes are implemented.

The overall intent of the project is to support the transition from petroleum fueled heavy vehicles to EVs. EV charging can facilitate the use of renewable energy for the movement of goods. The transportation sector is the largest source of air emissions and GHG emissions in California (CARB 2026). Thus, the project would support energy efficiency in the long term. As supported by the preceding discussions, transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.5-2 The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

### Construction

As discussed above, in May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). These actions impact CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus authority. By signing the resolutions, the administration nullified the CARB waivers and prohibited EPA from issuing similar waivers in the future. Additionally, on February 12, 2026, U.S. EPA Administrator rescinded the 2009 GHG Endangerment Finding and eliminated all subsequent federal GHG emission standards for motor vehicles and engines. The final rule rescinds EPA GHG emission standards and related regulatory provisions for light-, medium-, and heavy-duty vehicles and engines promulgated pursuant to the 2009 Endangerment Finding. While these recent actions are likely to be challenged in court, regardless of the outcome, the project would utilize construction contractors who must demonstrate compliance with applicable regulations at the time of construction of the project and associated construction equipment would be required to comply with federal, state, and regional requirements applicable at the time of construction.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of 5 minutes per occurrence. Off-road emissions standards would increase equipment efficiencies as they are phased-in over time and less-efficient equipment is phased out of construction fleets. These limitations would result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, based on the information above, construction of the project would comply with state or local plans for renewable energy or energy efficiency.

Construction equipment use associated with the project would not conflict with the energy standards applicable to construction equipment, including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Therefore, per CEQA Guidelines Appendix F, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency regarding during project construction, and impacts would be less than significant.

## Operation

### *California Building Energy Efficiency Standards*

Development of the proposed project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Part 6 of Title 24 establishes energy efficiency standards for residential and non-residential buildings constructed in California in order to reduce energy demand and consumption. Part 11 of Title 24 sets forth voluntary and mandatory energy measures that are applicable to the proposed project under the California Green Building Standards Code. Additionally, approximately 6.5% of the electric energy processed through EV charging would be generated on site with solar PV generation, generating approximately 2,338,800 kWh of renewable energy per year.

### *San Bernardino Countywide Plan/Policy Plan*

The Countywide Plan/Policy Plan policies from the Natural Resources Element and the Renewable Energy & Conservation Element relevant to the project are as follows. Table 3.5-4 below provides an analysis of the project's consistency with the relevant policies.

**Table 3.5-4. Project Consistency with the Countywide Plan/Policy Plan Energy Policies**

| Policy | Description | Consistency |
|---|---|---|
| NR-1.9 | CALGreen Code to meet energy efficiency standards for new buildings | Consistent: The project would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Part 6 of Title 24. |
| RE-1.2.6 | Encourage new development to comply with the optional energy efficiency measures of the CALGreen Code | Consistent: The project would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Additionally, approximately 6.5% of the electric energy processed through EV charging would be generated on site with solar photovoltaic (PV) generation (i.e., approximately 2,338,800 kWh of renewable energy per year). |
| RE-2.5.1 | Allow and encourage construction of new buildings designed to ZNE standards consistent with state programs | No Conflict: The project would not prevent the County from allowing and encouraging construction of new buildings designed to ZNE standards consistent with state programs |
| RE-2.5.3 | Allow and encourage construction of new buildings or developments in remote locations with stand-alone energy systems not connected to the grid | No Conflict: The project would not prevent the County from allowing and encouraging construction of new buildings or developments in remote locations with stand-alone energy systems not connected to the grid. Additionally, the project includes on-site solar photovoltaic (PV) generation and on-site battery energy storage. |

**Table 3.5-4. Project Consistency with the Countywide Plan/Policy Plan Energy Policies**

| Policy | Description | Consistency |
|---|---|---|
| RE 2.6.2 | Allow developers of nonresidential properties to reduce required on-site parking spaces below minimum standards when space equivalent to the parking space reduction is devoted to renewable energy generation and storage facilities designed to serve on-site energy needs | No Conflict: The project includes on-site solar photovoltaic (PV) generation connected to on-site battery energy storage. |
| RE 2.6.2 | Encourage solar energy generation on rooftops and on covered parking as the first priority for on-site energy generation | Consistent: Approximately 6.5% of the electric energy processed through EV charging would be generated on site with solar photovoltaic (PV) generation (i.e., approximately 2,338,800 kWh of renewable energy per year). |

#### *County Greenhouse Gas Emissions Reduction Plan*

As discussed in Section 3.6, Greenhouse Gas Emissions, the proposed project would comply with all regulations adopted in furtherance of the 2022 Scoping Plan to the extent applicable and required by law, and would be consistent with the Southern California Association of Governments 2024–2050 Regional Transportation Plan/SCS. In addition, as presented in Section 3.6, Greenhouse Gas Emissions, the project would achieve 1,203 points in the GHGRP Screening Table, eclipsing the 100 points required to show compliance with the reduction measures in the County's GHG Plan Consistent with Section 15183.5 of the CEQA Guidelines. As such, the project would be consistent with the energy use and efficiency strategies of the County GHG Plan as illustrated in Section 3.6, Greenhouse Gas Emissions.

On this basis, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

Impact 3.5-3 The proposed project would not contribute to a significant cumulative impact related to energy.

Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself).

Cumulative development in the County and surrounding region, including planned growth under the Barstow International Gateway Project, and regional frameworks such as the Southern California Association of Governments's Connect SoCal 2024—will incrementally increase overall energy demand associated with building construction, operations, and transportation in the region. However, these cumulative projects are being implemented under a regulatory framework that increasingly prioritizes energy efficiency and GHG reduction, including but not limited to the California Energy Code (Title 24, Part 6), CALGreen (Title 24, Part 11), SB 100 (Renewable Portfolio Standard), County GHGRP, and evolving vehicle and fuel efficiency standards.

Based on these considerations, the proposed project, in combination with other reasonably foreseeable projects, would not result in the wasteful, inefficient, or unnecessary use of energy resources. The cumulative impact would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

## 3.5.4 References

CARB. 2014. "Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation." August 29, 2014. Accessed April 19, 2017. https://ww2.arb.ca.gov/sites/default/files/classic/msprog/onrdiesel/documents/tbfinalreg.pdf?_ga=2.221250717.486492391.1706560791-1771948847.1690841000.

CARB. 2021a. "Low Carbon Fuel Standard Data Dashboard." August 30, 2021. https://www.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm.

CARB. 2021b. "Advanced Clean Cars Program." Accessed December 2021. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about.

CARB. 2021c. "Advanced Clean Trucks Fact Sheet." August 20, 2021. https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf.

CARB. 2025. EMFAC (Emission Factor). "Welcome to EMFAC." Accessed March 2025. https://arb.ca.gov/emfac/.

CARB. 2026. Current California GHG Emission Inventory Data. https://ww2.arb.ca.gov/ghg-inventory-data. Accessed January 25, 2026.

CEC. 2020. "Weekly Fuel Watch." Accessed October 2021. https://ww2.energy.ca.gov/almanac/petroleum_data/fuels_watch/index_cms.html.

CEC. 2022a. "Electricity Consumption by County." Accessed June 2025. http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

CEC. 2022b. "Gas Consumption by County." Accessed June 2025. http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

CEC. 2025a. Electricity Consumption Dashboard. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0. Accessed December 17, 2025.

CEC. 2025b. Natural Gas Consumption Dashboard. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1. Accessed December 17, 2025.

CPUC. 2008. Energy Action Plan. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2008-energy-action-plan-update.pdf.

CPUC. 2019. *2019 California Renewables Portfolio Standard Annual Report*. November 2019. Accessed October 2020. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2019-rps-annual-report.pdf.

CPUC. 2021. "Natural Gas and California." Accessed March 2021. http://www.cpuc.ca.gov/natural_gas/.

The Climate Registry. 2021. 2021 Default Emission Factors. May 2021.

The Climate Registry. 2025. Default Emission Factors. https://theclimateregistry.org/wp-content/uploads/2025/03/2025-Default-Emission-Factors-03-2025.pdf.

DMV (California Department of Motor Vehicles). 2021. *Statistics for Publication, January through December 2021.* Accessed April 2022. https://www.dmv.ca.gov/portal/file/department-of-motor-vehicles-statistics-pdf/.

EIA. 2024. "State Electricity Profiles – Table 1. 2023 Summary Statistics (California)". https://www.eia.gov/electricity/state/california/index.php.

EIA. 2025a. "Natural Gas Consumption by End Use.". Accessed March 2025. https://www.eia.gov/dnav/ng/ng_cons_sum_a_EPG0_VC0_mmcf_a.htm.

EIA. 2025b. "Total Petroleum Consumption Estimates, 2022." Accessed March 2025. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

EPA (U.S. Environmental Protection Agency). 2011. Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. September 15, 2011. Accessed April 7, 2025. https://www.govinfo.gov/content/pkg/FR-2011-09-15/pdf/2011-20740.pdf.

EPA. 2016. "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2." *Federal Register* Vol. 81, No. 206. October 25, 2016. Accessed April 7, 2025. EPA 2https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf.

EPA. 2017. "Overview for Renewable Fuel Standard." Last updated June 7, 2017. Accessed February 2019. https://www.epa.gov/renewable-fuel-standard-program/overview-renewable-fuel-standard.

EPA. 2025. Proposed Rule: Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards. https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-reconsideration-2009-endangerment-finding.

EPA. 2026. "Fact Sheet: Regulations Affected, Final Rule: Rescission of the Greenhouse Gas Endangerment Finding and Motor Vehicle Greenhouse Gas Emission Standards Under the Clean Air Act. EPA 420-F-26-001. February 2026. https://www.epa.gov/system/files/documents/2026-02/420f26001.pdf.

SCE (Southern California Edison). 2023. Power Content Label. https://www.energy.ca.gov/filebrowser/download/7362. Accessed December 17, 2025.

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# 3.6 Greenhouse Gas Emissions

This section describes the existing conditions related to greenhouse gas (GHG) emissions, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to implementation of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

Comments regarding GHG emissions received during the Notice of Preparation scoping period included a request to quantify the project's GHG emissions. All scoping comment letters are provided in Appendix A to this Environmental Impact Report.

This analysis is based, in part, on the Air Quality and Greenhouse Gas Emissions Technical Report prepared by Dudek (Appendix B) and Transportation Impact Study prepared by Dudek for the project (Appendix J).

## 3.6.1 Environmental Setting

### Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2022).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-twentieth century and are the most significant driver of observed climate change (IPCC 2013; EPA 2017). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system.

## Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code, Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ($SF_6$), and nitrogen trifluoride ($NF_3$) (see also California Environmental Quality Acct [CEQA] Guidelines, Section 15364.5). Some GHGs, such as $CO_2$, $CH_4$, and $N_2O$, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, $CO_2$ and $CH_4$ are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than $CO_2$, include fluorinated gases, such as HFCs, PFCs, and $SF_6$, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[1]. Please refer to Appendix B for more detailed information on the types of GHGs.

**Carbon Dioxide.** $CO_2$ is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of $CO_2$ include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate $CO_2$ include combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

**Methane.** $CH_4$ is produced through both natural and human activities. $CH_4$ is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

**Nitrous Oxide.** $N_2O$ is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create $N_2O$. Sources of $N_2O$ include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using $N_2O$ as a propellant (e.g., rockets, racecars, and aerosol sprays).

**Fluorinated Gases.** Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the ozone depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Because PFCs

[1] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (1995), IPCC Fourth Assessment Report (2007), CARB's "Glossary of Air Pollution Terms" (2016), and EPA's "Glossary of Climate Change Terms" (2016).

have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.

- **Sulfur Hexafluoride:** $SF_6$ is a colorless gas soluble in alcohol and ether and slightly soluble in water. $SF_6$ is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** $NF_3$ is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

**Chlorofluorocarbons.** CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric $O_3$.

**Hydrochlorofluorocarbons**. HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

**Black Carbon.** Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential (GWP). DPM emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health.

**Water Vapor.** The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

**Ozone.** Tropospheric $O_3$, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric $O_3$, which is created by the interaction between solar ultraviolet radiation and molecular oxygen ($O_2$), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric $O_3$, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

**Aerosols.** Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

## Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA

2022). The Intergovernmental Panel on Climate Change developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas.

The current version of CalEEMod (Version 2022.1.1.29) assumes that the GWP for $CH_4$ is 25 (so emissions of 1 MT of CH4 are equivalent to emissions of 25 MT of $CO_2$), and the GWP for $N_2O$ is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

## Greenhouse Gas Inventories

### Global Inventory

Anthropogenic GHG emissions worldwide in 2020 (the most recent year for which data is available) totaled approximately 49,800 million metric tons (MMT) of $CO_2e$, excluding land use change and forestry (PBL 2020). The top six GHG emitters include China, the United States, the Russian Federation, India, Japan, and the European Union, which accounted for approximately 60% of the total global emissions, or approximately 30,270 MMT $CO_2e$ (PBL 2020). Table 3.6-1 presents the top GHG-emissions-producing countries.

**Table 3.6-1. Six Top GHG Producer Countries**

| Emitting Countries | 2020 GHG Emissions (MMT $CO_2e$)[a,b] |
|---|---|
| China | 14,300 |
| United States | 5,640 |
| European Union | 3,440 |
| India | 3,520 |
| Russian Federation | 2,210 |
| Japan | 1,160 |
| **Total** | **30,270** |

**Source:** Appendix B.
**Notes:** MMT $CO_2e$ = million metric tons of carbon dioxide equivalent.
[a] Column may not add due to rounding.
[b] GHG emissions do not include land use change and forestry-related GHG emissions.

### National Inventory

Per the U.S. Environmental Protection Agency's (EPA's) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2021, total United States GHG emissions were approximately 6,340.2 million MT $CO_2e$ (MMT $CO_2e$) in 2021 (EPA 2023). Total U.S. emissions have decreased by 2.3% from 1990 to 2021, down from a high of 15.8% above 1990 levels in 2007. Emissions increased from 2020 to 2021 by 5.2% (314.3 MMT $CO_2e$). Net emissions (i.e., including sinks) were 5,586.0 MMT $CO_2e$ in 2021. Overall, net emissions increased 6.4% from 2020 to 2021 and decreased 16.6% from 2005 levels. Between 2020 and 2021, the increase in total GHG emissions was driven largely by an increase in $CO_2$ emissions from fossil fuel combustion due to economic activity rebounding after the height of the COVID-19 pandemic. The $CO_2$ emissions from fossil fuel combustion increased by 6.8% from 2020 to 2021, including a 11.4% increase in transportation sector emissions and a 7.0% increase in electric power sector emissions. The increase in electric power sector emissions was due in part to an increase in electricity demand of 2.4% since 2020. Overall, there has been a decrease in electric power sector emissions from 1990 through 2021, which reflects the combined impacts of long-term trends in many factors, including population, economic growth, energy markets, technological changes including energy efficiency, and the carbon intensity of energy fuel choices (EPA 2023).

## State Inventory

According to California's 2000–2021 GHG emissions inventory (2023 edition), California emitted approximately 381.3 MMT $CO_2e$ in 2021, including emissions resulting from out-of-state electrical generation (CARB 2023b). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 3.6-2 presents California GHG emission source categories and their relative contributions to the emissions inventory in 2021.

### Table 3.6-2. Greenhouse Gas Emissions Sources in California

| Source Category | Annual GHG Emissions (MMT $CO_2e$) | Percent of Total |
|---|---|---|
| Transportation | 145.6 | 38.2% |
| Industrial uses | 73.9 | 19.4% |
| Electricity generation[a] | 62.4 | 16.4% |
| Residential and commercial uses | 38.8 | 10.2% |
| Agriculture and forestry | 30.9 | 8.1% |
| High-GWP substances | 21.3 | 5.6% |
| Recycling and waste | 8.4 | 2.2% |
| **Totals** | **381.3** | **100%** |

**Source:** CARB 2023b.
**Notes:** GHG = greenhouse gas; GWP = global warming potential; MMT $CO_2e$ = million metric tons of carbon dioxide equivalent. Emissions reflect 2020 California GHG inventory. Totals may not sum due to rounding.
[a] Includes emissions associated with imported electricity, which account for 19.82 MMT $CO_2e$.

Per-capita GHG emissions in California have dropped from a 2001 peak of 13.8 MT per person to 9.7 MT per person in 2021, a 30% decrease. In 2016, statewide GHG emissions dropped below the 2020 GHG limit of 431 MMT $CO_2e$ established by Assembly Bill (AB) 32 and have remained below that level since that time (CARB 2023b).

## Local Inventory

The County developed a GHG emission inventory as part of its Greenhouse Gas Reduction Plan (GHGRP) (San Bernardino County 2021). The communitywide GHG inventory includes all major sources of emissions within the community the County serves. Community-wide GHG inventories include a broader range of emissions associated with both the activities within the community the County serves and the government operations. Table 3.6-3 shows the 2016 community-wide emissions as provided in the GHGRP.

### Table 3.6-3. San Bernardino County GHG Emissions by Source

| Source | Annual GHG Emissions (MT $CO_2e$) | Percent of Total |
|---|---|---|
| On-road transportation | 1,519,146 | 53 |
| Off-road Equipment | 35,618 | 1.2 |
| Building Energy | 948,183 | 33 |
| Agriculture | 143,146 | 5 |
| Solid Waste Management | 197,260 | 7 |
| Waste Water Treatment | 9,651 | 0.3 |

**Table 3.6-3. San Bernardino County GHG Emissions by Source**

| Source | Annual GHG Emissions ($MT CO_2e$) | Percent of Total |
|---|---|---|
| Water Transport, Distribution, and Treatment | 20,456 | 0.7 |
| **Total** | **2,873,469** | **100** |

**Source:** San Bernardino County 2021.
**Notes**: MT $CO_2e$ = metric tons of carbon dioxide equivalent per year.

## Potential Effects of Climate Change

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since pre-industrial times, observed mean surface temperature for the decade 2006–2015 was approximately 0.87°C (33.6°F) higher than the average over the 1850–1900 period (IPCC 2018). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0°C (1.8°F) of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C (1.4°F to 2.2°F) (IPCC 2018). Global warming is likely to reach 1.5°C (2.7°F) between 2030 and 2052 if it continues to increase at the current rate (IPCC 2018).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California and is having significant, measurable impacts in the state. Changes in the state's climate have been observed, including an increase in annual average air temperature with record warmth from 2012 to 2016, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days[2], and an increase in variability of statewide precipitation (OEHHA 2018).

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the state depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the state's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2018).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in

[2] "Degree days" measure the difference between the average daily temperature and the reference temperature of 65 degrees Fahrenheit (°F). "Cooling" degree days refers to temperatures higher than 65 °F, while "heating" degree days refers to temperatures lower than 65 °F (OEHHA 2018).

community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health, as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing.

The California Natural Resources Agency has released four California Climate Change Assessments (2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments need for information to support action in their communities, the Fourth Assessment (CNRA 2018) includes reports for nine regions of the state, including the Inland Deserts Region, where the Project is located. Key projected climate risks facing the Inland Deserts Region include the following (CNRA 2018):

- Extremely high maximum temperatures are expected to occur in the Inland Deserts.
- The fate of the Salton Sea is a critical determinant of future environmental quality.
- Renewable energy development will have big impacts on the economy and infrastructure.
- Continuing current land use/development patterns (i.e., housing development in the region to compensate for lack of development on the coast) will require increased energy for cooling to compensate for a rise in extremely high temperatures.
- Higher temperatures will exacerbate water stress in an already very water-limited region.
- Changing water availability is a key determinant of the future for ecological and agricultural systems.
- Population in the Inland Deserts is highly vulnerable to the effects of climate change.
- Tourism is a major economic driver that is likely to be threatened by a changing climate.

## 3.6.2 Regulatory Setting

Please refer to Appendix B for more detailed information on federal and state regulations that are in place to regulate GHG emissions.

### Federal

#### Massachusetts v. EPA

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under section 202(a) of the federal Clean Air Act (CAA):

- The administrator found that elevated concentrations of GHGs—$CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."

- The administrator further found that the combined emissions of GHGs—$CO_2$, $CH_4$, $N_2O$, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act (42 U.S.C. Section 7401).

## Federal Vehicle Standards

In 2007, in response to the *Massachusetts v. EPA* U.S. Supreme Court ruling, the Bush Administration issued Executive Order (EO) 13432 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 Fed. Reg. 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of $CO_2$ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 Fed. Reg. 62624–63200). On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for $CO_2$ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines (76 Fed. Reg. 57106–57513).

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all sizes of buses and work trucks. The final standards are expected to lower $CO_2$ emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

On April 2, 2018, the EPA, under administrator Scott Pruitt, reconsidered the final determination for light-duty vehicles and withdrew its previous 2017 determination, stating that the current standards may be too stringent and therefore should be revised as appropriate (EPA 2018).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the

post-2020 standards then in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2% to 3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of 1°C by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives.

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program (SAFE-1) (84 Fed. Reg. 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued, which set $CO_2$ emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026, with less stringent standards than previously required. In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and were thereafter entirely rescinded.

EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. On September 24, 2009, the California Air Resources Board (CARB) adopted amendments to the Pavley regulations that reduced GHG emissions in new passenger vehicles from 2009 through 2016. The Pavley regulations were originally adopted in 2002 by the state legislature, AB 1493 ("Pavley" regulations) and required that the CARB develop and adopt, no later than January 1, 2005, regulations to achieve the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles. These amendments are part of California's commitment to a nationwide program to reduce new passenger vehicle GHG emissions from 2012 through 2016. CARB's September 2009 amendments allowed for California's enforcement of the Pavley rule while providing vehicle manufacturers with new compliance flexibility. The amendments also prepared California to harmonize its rules with the federal rules for passenger vehicles. It was expected that the Pavley regulations would reduce GHG emissions from California passenger vehicles by about 22% in 2012 and about 30% in 2016, all while improving fuel efficiency and reducing motorists' costs.

However, in 2025 the President of the United States signed an EO, *Unleashing American Energy*, which directed EPA to eliminate the social cost of carbon calculation from any federal permitting or regulatory decision and submit recommendations on the legality and continued applicability of the 2009 endangerment finding, among other directives (The White House 2025). On July 29, 2025, the EPA released its proposal to rescind the 2009 endangerment finding and repeal all GHG emission standards for light-duty, medium-duty, and heavy-duty vehicles and engines pursuant to CAA Section 202(a) (EPA 2025). The proposed rule would remove GHG-related provisions from Title 40 of the Code of Federal Regulations (40 CFR), Part 600 (90 FR 36288–36365).

In May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). While the U.S. Senate Parliamentarian and the Government Accountability Office concluded that that the bills were illegal (GAO 2025), these actions impact CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus authority with the current result eliminating California's enforcement of these fuel standard regulations. Consequently, California filed a lawsuit challenging the revocations (see State of California et al. v. U.S.A et al. (2025) N.D. Cal Case No. 25-CV-04966, challenging disapproval of California's CAA waivers that allowed California to set its own vehicular fuel economy standards), which is currently pending.

On February 12, 2026, the U.S. EPA Administrator rescinded the 2009 GHG Endangerment Finding and eliminated all subsequent federal GHG emission standards for motor vehicles and engines. The final rule rescinds EPA GHG

emission standards and related regulatory provisions for light-, medium-, and heavy-duty vehicles and engines promulgated pursuant to the 2009 Endangerment Finding, including the following rulemakings (EPA 2026):

Light-Duty Vehicle Greenhouse Gas Standards:

- Model Year (MY) 2012–2016 Light-Duty Vehicle GHG Standards
  - Joint EPA–National Highway Transportation Safety Administration (NHTSA) standards establishing federal GHG emission limits for passenger cars and light trucks.
- MY 2017 and Later Light-Duty Vehicle GHG Standards
  - EPA standards tightening GHG emission requirements beyond MY 2016.
- MY 2023–2026 Light-Duty Vehicle GHG Standards
  - Revisions to national GHG standards for passenger cars and light trucks beyond MY2022.
- MY 2027 and Later Light-Duty Multi-Pollutant Standards (GHG Provisions)
  - Tightening GHG emission requirements beyond MY 2027.

Medium- and Heavy-Duty Vehicle and Engine GHG Standards:

- Phase 1 Medium- and Heavy-Duty Vehicle GHG Standards
  - Initial federal GHG standards for heavy-duty engines and vehicles.
- Phase 2 Medium- and Heavy-Duty Vehicle and Engine GHG Standards (Through MY 2027)
  - Expanded GHG standards covering tractors, vocational vehicles, heavy-duty pickups and vans, and trailers.
- Phase 3 Medium- and Heavy-Duty Vehicle GHG Standards (MY 2027 and Beyond)
  - GHG standards applicable to later model years, including early phases extending into the 2030s.

### Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the U.S. by 40% as compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles (EVs), and includes measures that make homes more energy efficient.

## State

The statewide GHG emissions regulatory framework is summarized in this subsection by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, water, solid waste, and other state actions. The following text describes EOs, ABs, Senate Bills (SBs), and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues. Please see Appendix B for more information.

## State Climate Change Targets

### *Executive Order S-3-05*

EO S-3-05 (June 2005) established California's GHG emissions-reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

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

EO S-3-05 also directed the California EPA to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry.

### *Executive Order B-30-15*

EO B-30-15 (April 2015) identified an interim GHG-reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050, as set forth in S-3-05. To facilitate achieving this goal, EO B-30-15 called for CARB to update the Scoping Plan to express the 2030 target in terms of MMT $CO_2e$. The EO also called for state agencies to continue to develop and implement GHG emission-reduction programs in support of the reduction targets.

### *Executive Order B-55-18*

EO B-55-18 (September 2018) establishes a statewide policy for the state to achieve carbon neutrality as soon as possible (no later than 2045) and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

### *Assembly Bill 32*

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006 (California Health and Safety Code Sections 38500-38599 et seq.). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020, and initiate the transformations required to achieve the state's long-range climate objectives.

### *Senate Bill 32 and Assembly Bill 197*

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions-reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as

nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions-reduction measures when updating the scoping plan.

### *California Air Resources Board's Climate Change Scoping Plan*

One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan: The *Climate Change Proposed Scoping Plan: A Framework for Change* (Scoping Plan). The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission-reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives.

CARB approved the *2022 Scoping Plan for Achieving Carbon Neutrality* in December 2022, which outlines the state's plan to reduce anthropogenic emissions to 85% below 1990 levels by 2045, and achieve carbon neutrality by 2045 or earlier. The Plan also assesses the progress the state is making toward reducing GHG emissions by at least 40% below 1990 levels by 2030, as is required by SB 32 and laid out in the Second Update. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing use of chemicals and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen[3]. The *2022 Scoping Plan for Achieving Carbon Neutrality* also introduces stringent per capita vehicle miles traveled reductions of 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045 (CARB 2022a).

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, AB 1279 (see below), and the EOs; it also establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it would meet the general policies in reducing GHG emissions in order to facilitate the achievement of the state's goals and would not impede attainment of those goals.

### *California Air Resources Board's Regulations for the Mandatory Reporting of Greenhouse Gas Emissions*

CARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Cal. Code Regs. tit. 17, Section 95100–95157) incorporated by reference certain requirements that EPA promulgated in its Final Rule on Mandatory Reporting of Greenhouse Gases (40 Code of Federal Regulations Section 98). Specifically, section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that EPA promulgated in the *Federal Register* on October 30, 2009; July 12, 2010; September 22, 2010; October 28, 2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation

[3] Green hydrogen refers to hydrogen that is generated by renewable energy or from low-carbon power, and has significantly lower associated carbon emissions than grey hydrogen, which is produced using natural gas and makes up the majority of hydrogen production. For the purposes of the *Draft 2022 Scoping Plan*, the term "green hydrogen" is not limited to only electrolytic hydrogen produced from renewables.

that emit over 10,000 metric tons (MT) $CO_2e$ per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MT $CO_2e$ per year threshold are required to have their GHG emissions report verified by a CARB-accredited third party.

#### *Executive Order B-18-12*

EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the Governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing state buildings for reducing grid-based energy purchases and water use.

#### *Senate Bill 605 and Senate Bill 1383*

SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants (SLCPs) in the state (California Health and Safety Code Section 39730); and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018 (California Public Resources Code [PRC] Section 42652-43654). SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for $CH_4$ and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon) and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its *Short-Lived Climate Pollutant Reduction Strategy* (SLCP Reduction Strategy) in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases (CARB 2017).

#### *Assembly Bill 1279*

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter.

Although AB 1279 establishes an overall policy to achieve net zero GHG emissions as soon as possible, but no later than 2045, recognizing the need to implement carbon dioxide removal and carbon capture, utilization and storage technologies, the Legislature established a specific target of 85% below 1990 levels by 2045 for anthropogenic GHG emissions. Therefore, the net zero target does not directly apply to development projects, but the 2045 target of 85% below 1990 levels represents the reductions required to accomplish the state's overall net zero policy.

### Building Energy

#### *California Code of Regulations, Title 24, Part 6*

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission, and revised if necessary (PRC Section 25402(b)(1)). The regulations receive input from members of industry, as well as the public, in order to "reduce the wasteful, uneconomic, inefficient, or unnecessary

consumption of energy" (PRC Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (PRC Section 25402(d)) and cost effectiveness (PRC Section 25402(b)(2-3)). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current 2022 standards improve upon the 2019 standards for new construction of, and additions and alterations to, residential and non-residential buildings. The California Energy Commission updates the Title 24 Energy Code every 3 years. The California Energy Commission adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the California Building Standards Code (CALGreen) in December 2021. The 2022 Energy Code went into effect on January 1, 2023. When compared to the 2019 Title 24 Standards, the 2022 amendments include measures that further reduce energy use in single family, multifamily, and non-residential buildings, through the following strategies (CEC 2021):

- New prescriptive and performance standards for electric heat pumps for space conditioning and water heating, as appropriate for the various climate zones in California,
- Require PV and battery storage systems for newly constructed multifamily and selected non-residential buildings,
- Updated efficiency measures for lighting, building envelope, heating, ventilation, and air conditioning (HVAC), and
- Improvements to reduce the energy loads of certain equipment subject to the requirements of the Energy Code that perform a commercial process that is not related to the occupant needs in the building (such as refrigeration equipment in refrigerated warehouses, or air conditioning for computer equipment in data processing centers).

#### *California Code of Regulations, Title 24, Part 11*

In addition to the California Energy Commission's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as California's Green Building Standards (CALGreen) and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The 2025 CALGreen standards are the current applicable standards. For nonresidential projects, some of the key mandatory CALGreen standards involve requirements related to bicycle parking, designated parking for clean air vehicles, EV charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (Cal. Code Regs. tit. 24, Part 11).

### Renewable Energy and Energy Procurement

#### *Senate Bill 1078*

SB 1078 (2002) (PRC Section 399.11 et seq.) established the Renewables Portfolio Standard program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an

aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EO S-14-08, and EO S-21-09).

#### *Senate Bill 350*

SB 350 (2015) further expanded the Renewables Portfolio Standard program by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the California Energy Commission, to establish efficiency targets for electrical and gas corporations consistent with this goal.

#### *Senate Bill 100*

SB 100 (2018) increased the standards set forth in SB 350, requiring that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be accomplished through resource shuffling.

#### *Senate Bill 1020*

SB 1020 (2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers come from eligible renewable energy resources and zero-carbon resources:

- 90% by December 31, 2035
- 95% by December 31, 2040
- 100% by December 31, 2045

### Mobile Sources

The following describes the state level mobile source regulations, however, as described under the Federal Regulations section above In May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). Additionally, On February 12, 2026, U.S. EPA Administrator rescinded the 2009 GHG Endangerment Finding and eliminating all subsequent federal GHG emission standards for motor vehicles and engines. The final rule rescinds EPA GHG emission standards and related regulatory provisions for light-medium-, and heavy-duty vehicles and engines promulgated pursuant to the 2009 Endangerment Finding. See Federal Regulations above for more information.

#### *State Vehicle Standards (Assembly Bill 1493 and Executive Order B-16-12)*

AB 1493 (July 2002) was enacted in response to the transportation sector accounting for more than half of California's $CO_2$ emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-

duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

### *Heavy-Duty Diesel*

CARB adopted the final Heavy-Duty Truck and Bus Regulation on December 31, 2014, to reduce diesel particulate matter, a major source of black carbon, and oxides of nitrogen emissions from heavy-duty diesel vehicles (Cal. Code Regs. tit. 13, Section 2025) (CARB 2014). The rule requires diesel particulate matter filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (Cal. Code Regs. tit. 13, Section 2485).

### *Executive Order S-1-07*

EO S-1-07 (2007) implementing regulation adopted in April 2009, sets a declining Low Carbon Fuel Standard for GHG emissions measured in $CO_2e$ grams per unit of fuel energy sold in California (CARB 2023a). The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (Cal. Code Regs. tit. 17, Section 95480 et seq.). The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel—including extraction/feedstock production, processing, transportation, and final consumption—per unit of energy delivered.

### *Senate Bill 375*

SB 375 (California Government Code Section 65080 amendment, 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG-reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every 8 years. SB 375 requires the state's 18 regional metropolitan planning organizations to prepare a sustainable communities strategy (SCS) as part of their regional transport plan (RTP) that will achieve the GHG-reduction targets set by CARB. If a metropolitan planning organization is unable to devise an SCS to achieve the GHG-reduction target, the metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG-reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

A SCS does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city or county's land use policies and regulations, including those in a general plan, be consistent with it (California Government Code Section 65080[b][2][K]). Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process. The SCS applicable to the County is the Southern California Association of Governments (SCAG) RTP/SCS. The SCAG 2020–2045 RTP/SCS is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375.

### *Advanced Clean Cars Program and Zero-Emissions Vehicle Program*

The Advanced Clean Cars (ACC) I program (2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEVs that contributes to both types of emission reductions (CARB 2022b). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program was certified on August 25, 2022, to establish the next set of low-emission vehicle and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2022b). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

An ACC II rulemaking package also considers technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts. However, as discussed above, CARB's ability to enforce ACC II was eliminated by the May 2025 U.S. Senate approved bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89).

### *Executive Order N-79-20*

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) Passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the State towards the target of 100% of in-state sales by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the state towards the target of 100% of the fleet transitioning to zero-emission vehicles by 2045 everywhere feasible and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other state agencies, the EPA and local air districts, to achieve 100% zero-emission from off-road vehicles and equipment operations in the State by 2035. EO N-79-20 called for the development of a Zero-Emissions Vehicle Market Development Strategy, which was released February 2021, to be updated every 3 years, that ensures coordination and implementation of the EO and outlines actions to support new and used ZEV markets. In addition, the EO specifies identification of near-term actions, and investment strategies, to improve clean transportation, sustainable freight, and transit options; and calls for development of strategies, recommendations, and actions by July 15, 2021, to manage and expedite the responsible closure and remediation of former oil extraction sites as the State transitions to a carbon-neutral economy.

### *Advanced Clean Trucks Regulation*

The Advanced Clean Trucks Regulation was also approved by CARB in 2020. The purpose of the regulation is to accelerate the market for ZEVs in the medium- and heavy-duty truck sector and to reduce air pollutant emissions

generated from on-road mobile sources (CARB 2022b). The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

- **Zero-emission truck sales:** Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.
- **Company and fleet reporting:** Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

However, in May 2025, the U.S. Senate approved several bills under the Congressional Review Act that purported to rescind California's CAA waiver, which allows California to regulate fuel economy (H.J.Res. 87, H.J.Res. 88, and H.J.Res. 89). The U.S. Senate Parliamentarian and the Government Accountability Office concluded that the bills were illegal (GAO 2025). Nonetheless, these actions impact CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus authority, with the current result eliminating California's enforcement of these fuel standard regulations. By signing the resolutions, the administration nullified the CARB waivers and prohibited EPA from issuing similar waivers in the future.

Consequently, California filed a lawsuit challenging the revocations (see State of California et al. v. U.S.A et al. (2025) N.D. Cal Case No. 25-CV-04966, challenging disapproval of California's CAA waivers that allowed California to set its own vehicular fuel economy standards), which is currently pending. Despite the pending litigation, state regulations including CARB's Advanced Clean Trucks, Advanced Clean Cars II, and Heavy-Duty Omnibus are no longer in effect.

## Water

### *Senate Bill X7-7*

SB X7-7, or the Water Conservation Act of 2009, required that all water suppliers increase their water use efficiency with an overall goal of reducing per capita urban water use by 20% by December 31, 2020. Each urban water supplier was required to develop water use targets to meet this goal.

## Solid Waste

### *Assembly Bill 939, Assembly Bill 341, Assembly Bill 1826, and Senate Bill 1383*

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multi-family residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

SB 1383 (2016) requires a 50% reduction in organic waste disposal from 2014 levels by 2020, and a 75% reduction by 2025—essentially requiring the diversion of up to 27 million tons of organic waste—to reduce GHG emissions. SB 1383 also requires that not less than 20% of edible food that is currently disposed be recovered for human consumption by 2025.

## Other State Actions

### *Senate Bill 97*

SB 97 (2007) directed the Governor's Office of Planning and Research[4] and the California Natural Resources Agency to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2007). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resources Agency adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (Cal. Code Regs. tit. 14, Section 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (Cal. Code Regs. tit. 14, Section 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures (Cal. Code Regs. tit. 14, Section 15126.4[c]). The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The California Natural Resources Agency also acknowledged that a lead agency could consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009). The County's GHG reduction plan is discussed in Section 3.3.3.3.

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a), as subsequently amended in 2018, states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines now note that an agency "shall have discretion to determine, in the context of a particular project, whether to: (1) [q]uantify greenhouse gas emissions resulting from a project; and/or (2) [r]ely on a qualitative analysis or performance-based standards" (Cal. Code Regs. tit. 14, Section 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (Cal. Code Regs. tit. 14, Section 15064.4[b]).

[4] Recently renamed the Governor's Office of Land Use and Climate Innovation.

## Local

### Mojave Desert Air Quality Management District

The project site is under the jurisdiction of the Mojave Desert Air Quality Management District. The Mojave Desert Air Quality Management District has adopted GHG emissions thresholds in its CEQA Guidelines but has not adopted a comprehensive strategy for reducing GHG emissions. The Mojave Desert Air Quality Management District threshold is 100,000 tons of $CO_2e$ per year, or approximately 90,718 MT $CO_2e$ per year (MDAQMD 2020).

### San Bernardino County Greenhouse Gas Emissions Reduction Plan

The County adopted its current GHGRP in 2011 and prepared a plan update in June 2021. As discussed in GHGRP, the 2021 GHGRP update may be used as GHG mitigation in the Countywide Plan, which is an update of the County's General Plan to demonstrate that the County's GHG reduction targets are aligned with state goals for reducing GHG emissions to a level less than cumulatively considerable. The GHGRP provided baseline GHG emissions inventory for the year 2008, and targets to reduce the County's GHG emissions to 15% below baseline emissions by 2020. This was roughly equivalent to the 2008 Scoping Plan adopted by the State of California that recommended a target of 15% below 'current' (2005 to 2008) levels by the year 2020. The County updated the GHG inventory for year 2016, which demonstrated that the County achieved the 2020 reduction target in that year. Since the adoption of the County's GHG Emissions Reduction Plan, the state has enacted new climate change regulations, most notably SB 32, which stipulates statewide targets to reduce GHG emissions to 40% below 1990 levels by 2030. CARB approved the *2022 Scoping Plan for Achieving Carbon Neutrality* in December 2022, which, consistent with AB 1279, outlines the state's plan to reduce anthropogenic emissions to 85% below 1990 levels by 2045 and achieve carbon neutrality by 2045 or earlier. The Plan also assesses the progress the state is making toward reducing GHG emissions by at least 40% below 1990 levels by 2030, as is required by SB 32 and laid out in the Second Update. In the 2021 GHGRP update, the County has determined that reducing GHG emissions within the unincorporated county area 40% below the 2020 levels of emissions by 2030 matches the state's goal outlined in SB 32 and complements the statewide efforts outlined in the Scoping Plan putting the County on a path towards meeting the state's long-term goal to achieve zero net carbon emissions by 2045.

The County's GHGRP is a qualified GHG reduction plan under CEQA Guidelines Section 15183.5, and thus it can be used in a cumulative impacts analysis to determine significance.

### San Bernardino Countywide Plan/Policy Plan

The Countywide Plan contains the long-term goals and policies that guide County decisions, investments, and improvements toward achieving the Countywide Vision. The Policy Plan represents a unique approach to county planning. It serves as the County's General Plan for the unincorporated areas, which is mandated by state law, but it also includes policy direction for adult and child supportive services, healthcare, public safety, and other regional services the County administers in both incorporated and unincorporated areas. The Policy Plan policies from the Natural Resources Element and the Renewable Energy and Conservation Element related to GHG emissions are as follows:

*Natural Resources Element*

Goal NR-1 Air Quality. Air quality that promotes health and wellness of residents in San Bernardino County through improvements in locally-generated emissions.

Policy NR-1.1. Promote compact and transit-oriented development countywide and regulate the types and locations of development in unincorporated areas to minimize vehicle miles traveled and greenhouse gas emissions

Policy NR-1.9. Use the CALGreen Code to meet energy efficiency standards for new buildings and encourage the upgrading of existing buildings to incorporate design elements, building materials, and fixtures that improve environmental sustainability and reduce emissions

*Renewable Energy and Conservation Element*

Goal RE-1 Energy Conservation and Efficiency. The County will pursue energy efficiency tools and conservation practices that optimize the benefits of renewable energy.

Policy RE-1.1. Continue implementing the energy conservation and efficiency measures identified in the San Bernardino County Greenhouse Gas Emissions Reduction Plan

Policy RE-1.2. Optimize energy efficiency in the built environment

RE 1.2.6: Encourage new development to comply with the optional energy efficiency measures of the CALGreen Code.

Policy RE-2.1. Support solar energy generation, solar water heating, wind energy and bioenergy systems that are consistent with the orientation, siting and environmental compatibility policies of the General Plan

RE 2.1.1: Utilize renewable energy development standards in the Development Code to minimize impacts on surrounding properties

Policy RE-2.2. Promote use of energy storage technologies that are appropriate for the character of the proposed location.

RE 2.2.1: Encourage on-site energy storage with RE[5] generation facilities, consistent with County Development Code requirements.

RE 2.2.2: Encourage and allow energy storage facilities as an accessory component of RE generation facilities.

Policy RE-3.1. Prioritize, facilitate, and encourage on-site accessory RE generation to serve the unincorporated county, with a primary focus on rooftop and parking lot solar energy generation

[5] RE = Renewable Energy

Policy RE-3.4. Require renewable energy facilities developed in spheres of influence of incorporated cities to be compatible and consistent with standards of the sphere cities

Policy RE-3.6. Encourage renewable energy facilities to meet community goals, including supporting community health, wellness, and recreational needs.

RE 3.6.2: Encourage the use of renewable energy facilities as shade structures in parks and community centers, and over parking lots and parking structures.

## 3.6.3 Environmental Impacts and Mitigation Measures

### Methodology

This section contains an evaluation of potential environmental impacts associated with the project related to GHG emissions. The section describes the methods used in conducting the analysis and evaluates the project-specific impacts and contribution to significant cumulative impacts, if any are identified.

#### Construction

Construction of the proposed project would result in emissions of GHG emissions primarily associated with the use of off-road construction equipment, on-road haul and vendor (material delivery) truck trips, and worker vehicle trips. Emissions from construction of the project were estimated using CalEEMod using a combination of CalEEMod default assumptions and project-specific information provided by the Applicant where available. All details for construction criteria air pollutants discussed in Section 3.2, Air Quality, are also applicable for the estimation of construction-related GHG emissions. Refer to Subsection 3.2.3, Methodology, for a discussion of construction emissions calculation methodology and assumptions.

##### *Water Use*

In addition to the sources discussed in Section 3.2, Air Quality, the supply, conveyance, treatment, and distribution of water for project construction would require use of electricity, which would result in associated indirect GHG emissions. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, because criteria pollutant emissions occur at the site of the power plant, which is typically off site.

##### *Refrigerants*

Refrigerants from air conditioning systems in vehicles will also result in GHG emissions from worker, haul, and vendor mobile trips during construction. Refrigerant emissions were estimated in CalEEMod based on default assumptions for on-road mobile refrigerant leakage from air conditioning usage. Refrigerant assumptions used in CalEEMod are based on information provided by CARB, which uses a “top-down” approach from total emission inventory estimates and activity data to estimate average (i.e., statewide) leakage rates for light-duty and heavy-duty vehicles (CAPCOA 2024).

Per the EPA’s Significant New Alternatives Policy, certain refrigerants with high GWPs (e.g., HFC-134a) must be replaced with lower GWP alternatives. Starting in 2021, HFC-134a is forbidden in new light-duty vehicles and will be forbidden in all vehicles after 2026. Given this phase out of high GWP refrigerants, the emissions associated

with refrigerant leakage from on-road vehicles is expected to decrease over time as new vehicles are introduced and older vehicles are retired from the fleet (CAPCOA 2024).

## Operation

As with the air quality analysis, CalEEMod was used to estimate potential project-generated operational GHG emissions from area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment. As previously stated, all details for operational criteria air pollutants discussed in Section 3.2, Air Quality under subsection 3.2.3, Methodology, are also applicable for the estimation of operational GHG emissions. For additional details refer to Appendix B.

### *Energy Use*

As represented in CalEEMod, energy sources include emissions associated with building electricity for the project and would also include electricity for warehouse forklift operation, and EV charging. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod and spreadsheet calculations (forklifts, EV charging) because criteria pollutant emissions occur at the site of the power plant, which is typically off site. CalEEMod default values for energy consumption were applied for the Project analysis building emissions. The energy use from nonresidential land uses is calculated in CalEEMod based on the Commercial Appliance Saturation Study (CAPCOA 2024). Detailed emissions calculations for forklift and EV charging are calculated via spreadsheet calculations provided in Appendix B.

EV charging is a separate operation from the warehouse operations and is not dependent on the warehouse tenant's trucking schedule or need. As such, the project's EV charging facilities would not generate new EV trips but serve to support existing EVs within the area fleet mix at the time of project operation, similar to a conventional gas fueling station. For this reason, not all of the GHG emissions associated with electric energy throughput of the EV charging facilities of the project would be attributable to the project. Only EV truck electric energy associated with the diverted trip from the highway (I-15 via Lenwood Road) to the site and electric energy losses associated with the charging facilities would be potentially attributable to the project, with dependency on final equipment design and energy efficiency ratings. For this analysis, it is assumed that 10%[6] of the electric energy is lost at the project site. Energy losses occur from charging facilities due to alternating current distribution, energy rectification, and direct current losses and from heating ventilation and air conditioning (HVAC) on both the charging equipment and the vehicles. It is anticipated that approximately 6.5% of the electric energy processed through EV charging would be generated on site with solar photovoltaic (PV) generation, approximately 2,338,800 kWh of renewable energy per year, which would displace GHG emissions from the same generation sources from the utility. For informational purposes, the project is anticipated to charge EVs with a cumulative annual total of 35,740,800 kWh of electric energy with 33,401,977 kWh sourced from the electric power grid and the remaining 6.5% from on-site solar PV generation. Based on a utility $CO_2$ intensity factor of 531.983 lb/MWh, this amount of electric energy would result in approximately 8,060 MT/year of $CO_2$, of which 10% would be attributable to the project through energy losses, equal to approximately 806 MT/year of $CO_2$.

In addition, there would also be a Battery Energy Storage System included in the project. The operation of the Battery Energy Storage System would result in approximately 16 MWh of energy per day energy throughput. However, this electricity is only stored in the Battery Energy Storage System and related GHG emissions from the

[6] https://insideevs.com/features/711659/ev-charger-efficiency-losses/ Based on level 3 DC fast charging.

energy would be accounted for in the GHG emissions estimates from building operations (CalEEMod), forklifts, and EV charging operations.

### *Solid Waste*

The project would generate solid waste and, therefore, result in $CO_2e$ emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

### *Refrigerants*

Refrigerants are substances used in equipment for air conditioning and refrigeration. Most of the refrigerants used today are HFCs or blends thereof, which can have high GWP values. All equipment that uses refrigerants has a charge size (i.e., quantity of refrigerant the equipment contains), and an operational refrigerant leak rate, and each refrigerant has a GWP that is specific to that refrigerant. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. The proposed project does not include refrigeration for cold storage.

### *$SF_6$ Leakage*

During operations and maintenance, fugitive GHG emissions could also occur due to sulfur hexafluoride ($SF_6$) gas leakage from substation components and related electrical transmission and distribution equipment built for the dedicated use of the project. $SF_6$ has a GWP of 23,900 using $CO_2$ at a reference value of 1 (IPCC 2007). Project related transformers, breakers, switchers, meters, and other related equipment would contain $SF_6$ gas. It is conservatively estimated that the Project would maintain a total of 61 pounds of $SF_6$ gas at the substation supporting the project operation. Although leakage is unlikely, for the purposes of the Project's emissions inventory, it was assumed that the breakers would have a maximum annual leak rate of 0.5% in accordance with the Institute of Electrical and Electronics Engineers (IEEE) PC37.122 - Standard for High Voltage Gas-Insulated Substations Rated Above 52 kV (IEEE 2018). Emissions from $SF_6$ gas are included as part of area source emissions and detailed emissions calculations are provided in Appendix B.

## Thresholds of Significance

The significance criteria used to evaluate project impacts related to GHG emissions are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to GHG emissions would occur if implementation of the project would do any of the following:

(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

(b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

## Impact Analysis

Impact 3.6-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

### Construction Emissions

Construction of the project would result in GHG emissions, which are primarily associated with the use of off-road construction equipment, haul trucks, on-road vendor trucks, and worker vehicles. Table 3.6-4 presents construction emissions for the project from on- and off-site emission sources.

**Table 3.6-4. Estimated Annual Construction Greenhouse Gas Emissions – Unmitigated**

| Year | $CO_2$ | $CH_4$ | $N_2O$ | R | $CO_{2e}$ |
|---|---|---|---|---|---|
| | Metric Tons Per Year | | | | |
| 2027 | 12,117 | 0.17 | 0.87 | 12.80 | 12,394 |
| 2028 | 9.453 | 0.12 | 0.68 | 9.27 | 9,668 |
| | | | | **Total** | **22,062** |
| | | | | *Amortized (30-year Project life)* | *735.40* |

**Source:** Appendix B.
**Notes:** $CO_2$ = carbon dioxide; $CH_4$ = methane; $N_2O$ = nitrous oxide; R = refrigerant; $CO_{2e}$ = carbon dioxide equivalent.
The values shown are the annual emissions reflect California Emissions Estimator Model "mitigated" output.
Totals may not add due to rounding.

As shown in Table 3.6-4, the estimated total GHG emissions during construction of would be approximately 22,062 MT $CO_{2e}$ over the construction period. Estimated project-generated construction emissions amortized over 30 years, the "life-span" of the project, would be approximately 735 MT $CO_{2e}$ per year. Amortization of construction emissions over the life of the project is performed in order to add the construction emissions to the operational emissions to present a total annual GHG emissions estimation, see Table 3.6-5.

### Operational Emissions

Operation of the project would generate GHG emissions from area sources (landscape maintenance equipment operation), energy use (natural gas combustion and utility generation of electricity consumed by the project), mobile sources (vehicular traffic), off-road equipment (electric equipment), solid waste disposal, generation of electricity associated with water supply, treatment, and distribution and wastewater treatment, and EV charging energy losses. The estimated operational GHG emissions, including the amortized construction GHG emissions are shown in Table 3.6-5. Detailed operational model outputs are presented in Appendix B.

**Table 3.6-5. Estimated Annual Operational Greenhouse Gas Emissions**

| Emission Source | $CO_2$ | $CH_4$ | $N_2O$ | R | $CO_{2e}$ |
|---|---|---|---|---|---|
| | Metric Tons Per Year | | | | |
| Mobile[1] | 23,056 | 0.21 | 2.71 | 25.3 | 23,896 |
| Area[2] | 32.7 | <0.005 | <0.005 | – | 36.2 |
| Energy[3] | 4,594 | 0.44 | 0.05 | – | 4,621 |
| Water | 639 | 16.8 | 0.4 | – | 1,179 |
| Waste | 218 | 21.8 | 0 | – | 764 |
| Refrigerant | 0 | 0 | 0 | 794 | 794 |
| Off-Road (Electric Forklifts) | 1,898.5 | 0.12 | 0.01 | – | 1,905.7 |
| | | | | **Total Annual Operational Emissions** | **33,196** |

**Table 3.6-5. Estimated Annual Operational Greenhouse Gas Emissions**

| Emission Source | $CO_2$ | $CH_4$ | $N_2O$ | R | $CO_{2e}$ |
|---|---|---|---|---|---|
| | Metric Tons Per Year | | | | |
| *Amortized 30-Year Construction Emissions* | | | | | *735.4* |
| **Total Annual Project Emissions** | | | | | **33,932** |

**Source:** Appendix B.
**Notes:** $CO_2$ = carbon dioxide; $CH_4$ = methane; $N_2O$ = nitrous oxide; R = refrigerant; $CO_2e$ = carbon dioxide equivalent; < 0.005 = reported emissions less than 0.005.
Totals may not add due to rounding.
1 Includes GHG emissions from EV trucks diverted trip from the highway (I-15 via Lenwood Road).
2 Includes $CO_2e$ emissions from $SF_6$ leakage from substation components and related electrical transmission and distribution equipment.
3 Includes energy loss from EV charging and ventilation and air conditioning for Battery Energy Storage System.

As shown in Table 3.6-5, annual operation of the proposed project would result in the emission of approximately 33,196 MT $CO_2e$ per year. Combined with amortized construction emissions, the total annual GHG emissions resulting from project implementation would be 33.932 MT$CO_2e$ per year. This is below the Mojave Desert Air Quality Management District threshold of 100,000 tons of $CO_2e$ per year, or approximately 90,718 MT $CO_2e$ per year (MDAQMD 2020). Based on the MDAQMD threshold the project operation would be **less than significant**. Nevertheless project significance is determined via consistency with the CARB Scoping Plan and County Greenhouse Gas Emissions Reduction Plan, as discussed in Impact 3.6-2 below which concludes GHG emissions associated with project operation would be **less than significant.**

### Mitigation Measures

No mitigation measures are required.

Impact 3.6-2: The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

### State Reduction Targets and CARB's Scoping Plan

As discussed in subsection 3.6.2, Regulatory Framework, the California State Legislature passed AB 32 to provide initial direction to limit California's GHG emissions to 1990 levels by 2020 and initiate the state's long-range climate objectives. Since the passage of AB 32, the state has adopted GHG emissions reduction targets for future years beyond the initial 2020 horizon year. CARB is required to develop a Scoping Plan, which provides the framework for actions to achieve the state's GHG emission targets. While the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used as the sole basis for project-level evaluations, it is the state's official framework for the measures and regulations that will be implemented to reduce California's GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with the statutes if it would meet the Scoping Plan policies and would not impede attainment of the goals therein.

The state's relevant GHG emissions reduction targets include those established by SB 32 and AB 1279, which require GHG emissions be reduced to 40% below 1990 levels by 2030, and 85% below 1990 levels by 2045, respectively. In addition, AB 1279 requires the state achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter. CARB's 2017 Scoping Plan update was the first to address the state's strategy for achieving the 2030 GHG reduction target set forth in SB 32 (CARB 2017), and the most recent CARB 2022 Scoping Plan update outlines the state's plan to reduce emissions and achieve carbon

neutrality by 2045 in alignment with AB 1279 and assesses progress the state is making toward the 2030 SB 32 target (CARB 2022aGiven that SB 32 and AB 1279 provide the relevant GHG emission targets for the state, this analysis considers whether the proposed project would conflict with the 2017 and 2022 Scoping Plan updates that outline the state's strategy to achieve those targets.

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), increase stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increase stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022a). Many of the measures and programs included in the 2022 Scoping Plan would aid in the reduction of project-related GHG emissions with no action required at the project-level, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (Low Carbon Fuel Standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy). Table 3.6-6 highlights the measures from the 2022 Scoping Plan that are relevant to the project.

## Table 3.6-6. Project Potential to Conflict with 2022 Scoping Plan

| Sector | Action | Potential to Conflict |
|---|---|---|
| Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs) | 100% of LDV sales are ZEV by 2035 | *No conflict*. As this action pertains to LDV sales within California, the project would not obstruct or interfere with its implementation. Furthermore, the project would support the transition from fossil fuel LDV to ZEV through its EV charging facilities. |
| Truck ZEVs | 100% of medium-duty vehicle (MDV)/ heavy-duty vehicle (HDV) sales are ZEV by 2040 | *No conflict*. As this action pertains to MDV and HDV sales within California, the project would not obstruct or interfere with its implementation. Furthermore, the project would support the transition from fossil fuel LDV to ZEV through its EV charging facilities. |
| Electricity Generation | Sector GHG target of 38 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2030 and 30 $MMTCO_2e$ in 2035<br>Retail sales load coverage[1]<br>20 gigawatts (GW) of offshore wind by 2045<br>Meet increased demand for electrification without new fossil gas-fired resources | *No conflict*. As this Action pertains to the statewide procurement of renewably generated electricity, the project would not obstruct or interfere with its implementation. However, the project would support increased usage of renewable electricity through approximately 2,338,800 kWh of on-site renewable energy produced per year. |

## Table 3.6-6. Project Potential to Conflict with 2022 Scoping Plan

| Sector | Action | Potential to Conflict |
|---|---|---|
| New Residential and Commercial Buildings | All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030 | *No conflict*. The project would not obstruct or interfere with agency efforts to meet the all-electric appliance and heat pump goals. The project would exclude natural gas usage with the exception of restaurant(s) in the commercial building. |
| Construction Equipment | 25% of energy demand electrified by 2030 and 75% electrified by 2045 | *No conflict*. As this Action pertains to the electrification of off-road equipment across California, the project would not obstruct or interfere with its implementation. However, the project would support the Action through the requirement that all cargo handling to be electric powered. |
| Low Carbon Fuels for Transportation | Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen | *No conflict*. The project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for transportation. Furthermore, the project would support the transition from fossil fuel LDV to ZEV through its EV charging facilities. |
| Low Carbon Fuels for Buildings and Industry | In 2030s biomethane blended in pipeline<br>Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040<br>In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters | *No conflict*. The project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for use in buildings and industry. The project would support increased usage of renewable electricity through approximately 2,338,800 kWh of on-site renewable energy produced per year. |
| High GWP Potential Emissions | Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions | *No conflict*. The project would not obstruct or interfere with agency efforts to introduce low GWP refrigerants. |

**Source:** CARB 2022a.
**Note:**
[1] As noted in Table 2-1 of the 2022 Scoping Plan, SB 100 speaks only to retail sales and state agency procurement of electricity (i.e., wholesale or non-retail sales and losses from storage and transmission and distribution lines are not subject to the law).

Based on the analysis in Table 3.6-6, the project would be consistent with and support the applicable strategies and measures in the 2017 Scoping Plan and 2022 Scoping Plan, respectively.

The 2045 carbon neutrality goal required CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions. However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the state's natural and working lands will not be sufficient to address residual GHG emissions, and achieving carbon neutrality will require research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture). Given that the specific path to neutrality will require development of

technologies and programs that are not currently known or available, the Project's role in supporting the statewide goal would be speculative and cannot be wholly identified at this time.

Overall, the project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent applicable and required by law. As demonstrated above, the Project would not conflict with CARB's 2017 or 2022 Scoping Plan updates and with the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals

### Potential to Conflict with the County Greenhouse Gas Emissions Reduction Plan

The County's Greenhouse Gas Emissions Reduction Plan is a qualified GHG reduction plan according to CEQA Guidelines Section 15183.5 and thus can be used in a cumulative impacts analysis to determine significance. As such, the Project applies the GHGRP Screening Table as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that garner a 100 or greater points would not require quantification of project specific GHG emissions. The point system was devised to ensure Project compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those existing development, will allow the County to support reductions in GHG emissions beyond 2020. Consistent with the CEQA Guidelines, such projects are consistent with the Plan and therefore will be determined to have a less-than-significant individual and cumulative impact for GHG emissions. Table 3.6-7 provides the Project's application of the Screening Tables.

**Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table**

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Reduction Measure Energy: Exceed Energy Efficiency Standards in New Commercial Units** | | | |
| **Building Envelope** | | | |
| Insulation | 2019 Baseline (walls R-16: roof/attic: R-32) | 0 points | 9 points |
| | Modestly Enhanced Insulation (walls R-15, roof/attic R-38) | 9 points | |
| | Enhanced Insulation (rigid wall insulation R-13, roof/attic: R-38) | 11 points | |
| | Greatly Enhanced Insulation (spray foam wall insulated walls R-18 or higher, roof/attic R-38 or higher) | 12 points | |
| Windows | 2019 Title 24 Windows (0.57 U-factor, 0.4 SHGC) | 0 points | 4 points |
| | Modestly Enhanced Window Insulation (0.4 U-factor, 0.32 SHGC) | 4 points | |
| | Enhanced Window Insulation (0.32 U-factor, 0.25 SHGC) | 5 points | |
| | Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less SHGC) | 7 points | |
| Cool Roof | Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance) | 8 points | 8 points |

## Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance) | 10 points | |
| Air Infiltration | Air barrier applied to exterior walls, calking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent) | 7 points | 0 points |
| | Blower Door HERS Verified Envelope Leakage or equivalent | 6 points | |
| Thermal Storage of Building | Modest Thermal Mass (10% of floor or 10% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials) | 2 points | 0 points |
| | Enhanced Thermal Mass (20% of floor or 20% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials) | 4 points | |
| | Enhanced Thermal Mass (80% of floor or 80% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials) | 14 points | |
| **Indoor Space Efficiencies** | | | |
| Heating/Cooling Distribution System | Minimum Duct Insulation (R-6 required) | 0 points | 6 points |
| | Enhanced Duct Insulation (R-8) | 6 points | |
| | Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent | 8 points | |
| Space Heating/Cooling Equipment | 2019 Minimum HVAC Efficiency (EER 13/75% AFUE or 7.7 HSPF) | 0 points | 4 points |
| | Improved Efficiency HVAC (EER 14/78% AFUE or 8 HSPF) | 4 points | |
| | High Efficiency HVAC (EER 15/80% AFUE or 8.5 HSPF) | 5 points | |
| | Very High Efficiency HVAC (EER 16/82% AFUE or 9 HSPF) | 7 points | |
| Commercial Heat Recovery Systems | Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial | TBD | 0 Points |

**Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table**

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy saving | | |
| Water Heaters | 2019 Minimum Efficiency (0.57 Energy Factor) | 0 points | 8 points |
| | Improved Efficiency Water Heater (0.675 Energy Factor) | 8 points | |
| | High Efficiency Water Heater (0.72 Energy Factor) | 10 points | |
| | Very High Efficiency Water Heater (0.92 Energy Factor) | 11 points | |
| | Solar Pre-heat System (0.2 Net Solar Fraction) | 2 points | |
| | Enhanced Solar Pre-heat System (0.35 Net Solar Fraction) | 5 points | |
| Daylighting | All peripheral rooms within building have at least one window or skylight 0 | 0 points | 0 points |
| | All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) | 1 point | |
| | All rooms daylighted | 1 point | |
| Artificial Lighting | Efficient Lights (25% of in-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt) | 5 points | 5 points |
| | High Efficiency Lights (50% of in-unit fixtures are high efficacy) | 7 points | |
| | Very High Efficiency Lights (100% of in-unit fixtures are high efficacy) | 8 points | |
| Appliances | Energy Star Commercial Refrigerator (new) | 2 points | 0 points |
| | Energy Star Commercial Dish Washer (new) | 2 points | |
| | Energy Star Washing Machine (new) | 2 points | |
| **Miscellaneous Commercial Building Efficiencies** | | | |
| Building Placement | North/South alignment of building or other building placement such that the orientation of the buildings | 4 points | 0 points |

## Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | optimizes conditions for natural heating, cooling, and lighting. | | |
| Shading | At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21. | 6 points | 0 points |
| Other | This allows innovation by the applicant to provide design features that increase the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards | TBD | 0 points |
| Existing Commercial Buildings Retrofits | Not Applicable to the Project | NA | NA |
| **Reduction Measure Energy-3: All Electric Buildings** | | | |
| All-Electric Buildings | All electric buildings reduce GHG emissions, as the grid electricity they use is generated using less carbon over time. Grid electricity in California will be 60% renewable energy by 2030 and 100% renewable energy by 2040 | 0 points | 0 points |
| **Reduction Measure Energy-7: Clean Energy** | | | |
| Photovoltaic | 30% of the power needs of the project | 8 points | 0 points |
| | 40% of the power needs of the project | 12 points | |
| | 50% of the power needs of the project | 16 points | |
| | 60% of the power needs of the project | 19 points | |
| | 70% of the power needs of the project | 23 points | |
| | 80% of the power needs of the project | 26 points | |
| | 90% of the power needs of the project | 30 points | |
| | 100% of the power needs of the project | 34 points | |
| Wind Turbines | 30% of the power needs of the project | 8 points | 0 points |
| | 40% of the power needs of the project | 12 points | |

## Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | 50% of the power needs of the project | 16 points | |
| | 60% of the power needs of the project | 19 points | |
| | 70% of the power needs of the project | 23 points | |
| | 80% of the power needs of the project | 26 points | |
| | 90% of the power needs of the project | 30 points | |
| | 100% of the power needs of the project | 34 points | |
| Off-Site Renewable Energy Project | The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing residential or existing commercial/industrial. These off-site renewable energy retrofit project proposals will be determined on a case-by-case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal | TBD | 0 points |
| Other Renewable Energy Generation | The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed would be decided based upon engineering data documenting the ability to generate electricity | TBD | 0 points |
| **Irrigation and Landscaping** | | | |
| Water Efficient Landscaping | Eliminate conventional turf from landscaping | 0 points | 5 points |
| | Only moderate water using plants | 2 points | |
| | Only low water using plants | 3 points | |
| | Only California Native landscape that requires no or only supplemental irrigation | 5 points | |
| Water Efficient Irrigation Systems | Low precipitation spray heads <.75”/hr or drip irrigation | 1 point | 3 points |

**Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table**

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | Weather based irrigation control systems combined with drip irrigation (demonstrate 20% reduced water use) | 3 points | |
| Recycled Water | Recycled water connection (purple pipe) to irrigation system on site | 6 points | 0 points |
| Storm Water Reuse Systems | Innovative on-site storm water collection, filtration, and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings | TBD | 0 points |
| **Commercial Potable Water** | | | |
| Showers | Water Efficient Showerheads (2.0 gpm) | 2 points | 2 points |
| Toilets | Water Efficient Toilets (1.5gpm) | 3 points | 3 points |
| | Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points) | 3 points | 0 points |
| Faucets | Water Efficient faucets (1.28gpm) | 2 points | 2 points |
| Commercial Dishwashers | Water Efficient dishwashers (20% water savings) | 2 points | NA |
| Commercial Laundry Washers | Water Efficient laundry (15% water savings) | 2 points | NA |
| | High Efficiency laundry equipment that captures and reuses rinse water (30% water savings) | 4 points | NA |
| Commercial Water Operations Program | Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings | TBD | 0 points |

## Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Increase Commercial/Industrial Reclaimed Water Use** | | | |
| Recycled Water | Graywater (purple pipe) irrigation system on site | 5 points | 0 points |
| **Reduction Measure On-Road: Alternative Transportation Options** | | | |
| **Mixed-Use Development** | | | |
| Mixed-Use | Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed-use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled | TBD | 0 points |
| Local Retail Near Residential (Commercial only Projects) | Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled | TBD | 0 points |
| **Preferential Parking** | | | |
| Parking | Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles | 1 point | 0 points |
| | Provide larger parking spaces that can accommodate vans used for ride-sharing programs and reserve them for vanpools and include adequate passenger waiting/loading areas | 1 point | 1 point |
| **Signal Synchronization and Intelligent Traffic Systems** | | | |
| Signal Improvements | synchronize signals along arterials used by project | 1 point/signal | 0 points |
| | Connect signals along arterials to existing ITS | 3 points/signal | 0 points |
| **Increase Public Transit** | | | |
| Public Transit | The point value of a project's ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of | TBD | 0 points |

## Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | private vehicles and increased use of public transportation. Increased transit accessibility (1–15 points) | | |
| **Reduction Measure: Install Electric Vehicle Chargers** | | | |
| Worker and Customer Based Electric Vehicle Chargers | Installation of Electric Vehicle (EV) Chargers for passenger EVs: Level 2 240 volt AC Fast Chargers | 5 points/charger | 640 points (128 chargers) |
| | Level 3 480 volt DC Rapid Chargers | 8 points/charger | 64 points (8 Level 3 chargers) |
| Electric Commercial Truck Chargers | Level 1 AC Chargers for EV Medium Duty Trucks | 3 points/charger | 0 points |
| | Level 1 AC Chargers for EV Class 8 (Heavy Duty) Trucks | 5 points/charger | 0 points |
| | Level 2 AC Chargers for EV Medium Duty Truck | 8 points/charger | 0 points |
| | Level 2 AC Chargers for EV Class 8 (Heavy Duty) Trucks | 12 points/charger | 0 points |
| | Level 3 DC Fast Chargers for EV Class 8 (Heavy Duty) Trucks | 16 points/charger | 720 points (45 Charging stations for heavy-duty trucks) |
| **Reduction Measure: Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the County** | | | |
| Sidewalks | Provide sidewalks on both sides of the street (required) | 0 points | 3 points |
| | Provide pedestrian linkage between commercial and residential land uses within 1 mile | 3 points | |
| Bicycle Paths | Provide bicycle paths within project boundaries. | 1 point | 0 points |
| | Provide bicycle path linkages between residential and other land uses. | 2 points | |
| | Provide bicycle path linkages between commercial and transit. | 5 points | |
| **Reduction Measure: Reduce Waste to Landfills** | | | |
| Recycling | Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up | 2 points | 2 points |

**Table 3.6-7. Project Potential to Conflict with the GHGRP Emissions Screening Table**

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | Provide commercial/industrial recycling programs that fulfills an on-site goal of 80% diversion of solid waste | 5 points | |
| | Recycle construction waste | 4 points | 4 points |
| **Other GHG Reduction Feature Implementation** | | | |
| Other GHG Emissions Reduction Features | This allows innovation by the applicant to provide commercial design features that the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods, and protocols. | TBD | 0 points |
| | | **Total Points** | **1,503** |

**Source:** San Bernardino County 2021.

As shown in Table 3.6-7, the project applies the GHGRP Screening Table calculating GHG reduction measures with a resulting 1,503 points. Projects that garner a 100 or greater points would not require quantification of project-specific GHG emissions. The point system was devised to ensure project compliance with reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with existing development, will allow the County to support reductions in GHG emissions beyond 2020. Consistent with Section 15183.5 of the CEQA Guidelines, the proposed project does not conflict with the goals of the County's GHGRP, a qualified GHG reduction plan; therefore, the project is determined to have a less-than-significant impact for GHG emissions.

### SCAG's 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy

SCAG adopted the 2024-2050 RTP/SCS, "Connect SoCal 2024" on April 4, 2024 (SCAG 2024). The following relevant policies and strategies are intended to be supportive of implementing the 2024–2050 RTP/SCS and reducing GHGs: Sustainable Development, Clean Transportation, and Preservation, and Climate Resilience.

- Sustainable Development. The 2024-2050 RTP/SCS identifies sustainable development, including water and energy-efficient building practices and green infrastructure, as a strategy to reduce GHG emissions. As described herein, targeted sustainable design strategies of the project include all cargo handling equipment to be electric powered and the transition from fossil fuel LDV to ZEV through its EV charging facilities. The project would support increased usage of renewable electricity through approximately 2,338,800 kWh of on-site renewable energy produced per year.
- Clean Transportation. The 2024–2050 RTP/SCS identifies EV charging infrastructure, adoption of zero-emission vehicles, and clean transit as ways to reduce GHG emissions from mobile sources. As described

herein, the project would directly promote and support low emission technologies for transportation through the development of an EV charging station to serve light duty/passenger vehicles and medium and heavy-duty trucks.

- Climate Resilience. The 2024–2050 RTP/SCS promotes regional coordination and solutions for effective emergency response for climate-related hazards. Additionally, in the category of climate resilience, SCAG has established the following policies: prioritize the most vulnerable populations and communities subject to climate hazards; support local and regional climate and hazard planning; support nature-based solutions to increase regional resilience; promote sustainable water use planning; and support an integrated planning approach to help jurisdictions meet housing needs in a drier environment. While the project does not directly pertain to these regional coordination efforts for climate resilience, the project would not interfere with this strategy.

As demonstrated above, the project would be consistent with the SCAG 2024–2050 RTP/SCS.

### Summary

Overall, the proposed project would comply with all regulations adopted in furtherance of the 2022 Scoping Plan to the extent applicable and required by law, and would be consistent with the SCAG 2024-2050 RTP/SCS. In addition, the project would achieve 1,503 points with the GHGRP Screening Table eclipsing the 100 points required to show compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those existing development, will allow the County to support reductions in GHG emissions beyond 2020. Consistent with Section 15183.5 of the CEQA Guidelines, the proposed project does not conflict with the goals of the County's GHGRP, a qualified GHG reduction plan; therefore, the project is determined to have a **less-than-significant impact** for GHG emissions**.**

### Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

GHG emissions impacts are inherently cumulative in nature, and a separate cumulative impact statement is not necessary. The project GHG emissions of 33.932 $MTCO_2e$ per year would be well below the Mojave Desert Air Quality Management District's applicable numeric threshold of 100,000 tons of $CO_2e$ per year, or approximately 90,718 MT $CO_2e$ per year (MDAQMD 2020). The project would also achieve 1,503 points with the GHGRP Screening Table eclipsing the 100 points required to show compliance with the reduction measures in the GHG Plan such that the GHG emissions from the new development, when considered together with those existing developments, will allow the County to support reductions in GHG emissions beyond 2020. Consistent with Section 15183.5 of the CEQA Guidelines, the proposed project does not conflict with the goals of the County's GHGRP, a qualified GHG reduction plan; therefore, the project is determined to have a **less-than-significant** individual and cumulative impact for GHG emissions.

# 3.6.4 References

CAPCOA. 2024. *CalEEMod User Guide Version 2022.1.1.22* April. Available: https://www.caleemod.com/user-guide. Accessed February 2024.

CARB. 2014. "Truck and Bus Regulation, On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation." August 29, 2014. Accessed April 19, 2017. http://www.arb.ca.gov/msprog/onrdiesel/documents/FSRegSum.pdf.

CARB. 2016. "Glossary of Air Pollution Terms." CARB website. Accessed March 2023. http://www.arb.ca.gov/html/gloss.htm.

CARB. 2017. The 2017 Climate Change Scoping Plan Update. January 20. Accessed January 2017. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

CARB. 2022a. "Glossary." Accessed November 17, 2021. https://ww2.arb.ca.gov/about/glossary.CARB. 2022. Final 2022 Scoping Plan Update. November. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed March 2023.

CARB. 2022b. Advanced Clean Trucks regulation https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks

CARB. 2023a. Low Carbon Fuel Standard Data Dashboard. Last Updated April 28. Available: https://ww2.arb.ca.gov/resources/documents/lcfs-data-dashboard. Accessed June 2023.

CARB. 2023b. *California Greenhouse Gas Emissions for 2000 to 2021: Trends of Emissions and Other Indicators (2023 Edition).* Available: https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends.pdf.

CEC. 2021. *Draft Environmental Impact Report for Amendments to the Building Energy Efficiency Standards (2022 Energy Code).* May 19. Available: https://ceqanet.opr.ca.gov/2021030504/2. Accessed June 2022.

CNRA (California Natural Resources Agency). 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*. December 2009.

CNRA. 2018. *California's Fourth Climate Change Assessment – San Joaquin Valley Region Report*. https://www.energy.ca.gov/sites/default/files/2019-11/Reg_Report-SUM-CCCA4-2018-003_SanJoaquinValley_Preview_ADA.pdf.

EPA. 2016. "Glossary of Climate Change Terms." August 9, 2016. Accessed August 2016. https://www3.epa.gov/climatechange/glossary.html.

EPA. 2017. "Climate Change." Last updated January 19, 2017. Accessed January 2017. https://www.epa.gov/climatechange.

EPA. 2022. Basics of Climate Change. February 23. Available: https://www.epa.gov/climatechange-science/basics-climate-change. Accessed March 2023.

EPA. 2023. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021 EPA 430-R-23-002. Accessed July 2023. https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf.

EPA and NHTSA (National Highway Traffic Safety Administration). 2016. Regulations and Standards: Heavy-Duty. EPA and DOT Finalize Greenhouse Gas and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. Last updated August 2016. https://www.epa.gov/newsreleases/epa-and-dot-finalize-greenhouse-gas-and-fuel-efficiency-standards-heavy-duty-trucks-0.

EPA and NHTSA. 2018. EPA and NHTSA MYs 2021-2026 CAFE Proposal – By the Numbers. August 2018. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100V26H.pdf.

IEEE (Institute of Electrical and Electronics Engineers). 2018. PC37.122 – Standard for High Voltage Gas-Insulated Substations Rated Above 52 kV. March 8, 2018. https://standards.ieee.org/project/C37_122.html.

IPCC (Intergovernmental Panel on Climate Change). 1995. Second Assessment Report. Accessed March 2026. https://www.ipcc.ch/report/ar2/wg1/

IPCC. 2007. IPCC Fourth Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the U.N. Framework Convention on Climate Change.

IPCC. 2013. Climate Change 2013: The Physical Science Basis—Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, edited by T.F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P.M. Midgley. Cambridge, United Kingdom and New York, New York: Cambridge University Press.

IPCC. 2018. "Summary for Policymakers." In Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Accessed July 2019. https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf.

MDAQMD. 2020. *California Environmental Quality Act and Federal Conformity Guidelines.* February. Available: https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000. Accessed March 2023.

OEHHA (Office of Environmental Health Hazard Assessment). 2018. Indicators of Climate Change in California. May 9, 2018. https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf.

PBL (PBL Netherlands Environmental Assessment Agency). 2020. Trends in Global CO2 and Total Greenhouse Gas Emissions, 2019 Report. Accessed May 2022. https://www.pbl.nl/sites/default/files/downloads/pbl-2020-trends-in-global-co2-and-total-greenhouse-gas-emissions-2019-report_4068.pdf.

San Bernardino County. 2021. San Bernardino County Regional Greenhouse Gas Reduction Plan. March 2021. https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf.

SCAG. 2024. *Connect SoCal*. Adopted April 4, 2024. https://scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1714175547

# 3.7 Hydrology, Water Quality, and Drainage

This section describes the existing conditions related to hydrology, water quality and storm drainage, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures, if required, for any significant or potentially significant impacts related to implementation of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

One public comment regarding hydrology and water quality was received during the scoping period for this environmental impact report, requesting information to be included in the environmental impact report with respect to how stormwater management will be addressed to prevent flooding or water pollution in nearby areas. All scoping comment letters received are provided in Appendix A.

This analysis is based, in part, on the following reports prepared for the project: a preliminary drainage report (Transect Engineers 2025; see Appendix H), preliminary geotechnical report (Moore Twinning Associates 2022; see Appendix E), and a water supply assessment (WSA) (Dudek 2024) (see Appendix K).

## 3.7.1 Environmental Setting

### Regional Watershed

The project site is located within the Mojave River Watershed, which covers approximately 4,500 square miles in San Bernardino County. The primary drainage of the watershed is the Mojave River, which originates in the San Bernardino Mountains, at elevations of approximately 8,500 feet above mean sea level (amsl) at Butler Peak, down to approximately 1,400 feet amsl near Afton Canyon. The San Bernardino Mountains annually receive greater than 40 inches of precipitation at its highest elevations. Much of the winter precipitation in the San Bernardino Mountains falls in the form of snow, which subsequently provides spring recharge to the Mojave River system due to snowmelt. The Mojave River channel transects the watershed for approximately 120 miles until it reaches Silver Dry Lake near the community of Baker. Some reaches of the Mojave River flow underground in the confined riverbed channel. The Mojave River channel is typically dry downstream of the Mojave Forks Dam except in select locations where groundwater is forced to the surface by geologic structures (Mojave River Watershed Group 2003). The Mojave River is located approximately 2,500 feet northwest of the project site. The Mojave River Watershed has been subdivided into a number of subwatersheds by the San Bernardino Flood Control District (District) and the California Regional Water Quality Control Board (RWQCB), Lahontan Region in the Water Quality Control Plan for the Lahontan Region, North and South Basins (Lahontan Basin Plan)(Lahontan Region RWQCB 2021) that include the Upper Mojave, Middle Mojave, Lower Mojave, and Mojave–Baker watersheds. The project site is located within the Lower Mojave subwatershed (or hydrologic area), which generally encompasses the City of Barstow and surrounding area.

### Regional Watershed Water Quality

The Mojave River was selected as a priority or "focus" watershed by the State Water Resource Control Board (SWRCB) because of numerous water quality and quantity issues. Historically known for its agriculture, industrial, and military uses, Victor Valley, located upstream of the project area, has significantly changed during the last several decades into a satellite of Southern California's urbanization. Urban growth has substantially modified the areas of waste discharges that could potentially affect water quality, including stormwater and wastewater treatment. There are also numerous water quality issues associated with past and current agricultural, industrial,

and military land uses throughout the watershed (Lahontan RWQCB 2002). Water quality problems in the Mojave River Watershed are primarily related to non-point sources, including erosion (from construction, timber harvesting, and livestock grazing), stormwater, acid drainage from inactive mines, and individual wastewater disposal systems. There are relatively few point-source discharges (Lahontan RWQCB 2019).

### Beneficial Uses and Total Maximum Daily Loads

Stormwater runoff is a significant contributor to local and regional pollution. Urban stormwater runoff is the largest source of unregulated pollution in the waterways of the United States. Federal, state, and regional regulations require San Bernardino County to control the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development.

In accordance with state policy for water quality control, the Lahontan RWQCB regulates water quality, among various other agencies, within the Mojave River region. Water quality objectives, plans, and policies for the surface waters within this region are established in the Mojave River Basin Plan (Lahontan RWQCB 2021), which were most recently amended in 2020 and 2021 following proposed amendments in 2019 (Lahontan RWQCB 2019). The Lahontan Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. The existing and proposed beneficial uses of the Mojave River of the Lower Mojave Hydrologic Area include the following (Lahontan RWQCB 2021):

- Municipal and Domestic Supply
- Agricultural Supply
- Groundwater Recharge
- Water Contact Recreation
- Noncontact Water Recreation
- Commercial and Sport Fishing
- Warm Freshwater Habitat
- Wildlife Habitat

Under the Clean Water Act (CWA) Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. The U.S. Environmental Protection Agency (EPA) approved 303(d) list of water quality impairments does not include the Lower Mojave River (SWRCB 2024), indicating that the Lower Mojave River is not an impaired water body. As a result, total maximum daily loads (TMDLs) have not been established for the Lower Mojave River. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standards. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL.

## Groundwater

The project overlies the boundary of two groundwater basins, including the Lower Mojave River Valley Basin (6-040) and the Middle Mojave River Valley Basin (6-041) (WSA Figure 3, Appendix K), as designated by the California Department of Water Resources (DWR 2025) and the Lahontan Basin Plan (Lahontan RWQCB 2021). These groundwater basins are part of the larger Mojave River Groundwater Basin, as defined by the U.S. Geological Survey

(USGS 2025), and which is also known as the Mojave Basin, with respect to basin adjudication (DWR 2026). In San Bernardino County, the Mojave Basin is also known as the Mojave Water Basin,

The Mojave Basin is an adjudicated groundwater basin and is exempt from the requirements of developing a groundwater sustainability plan, pursuant to the Sustainable Groundwater Management Act (SGMA), as it is designated as a very-low-priority basin by the DWR. The Mojave Basin is bounded on the north by basement rock outcrops near Helendale, which extend to the Shadow Mountains. The southern boundary is the contact between Quaternary sedimentary deposits and unconsolidated basement rocks of the San Bernardino Mountains. The Basin is bounded on the southeast by the Helendale Fault and on the east by basement exposures of the mountains surrounding Apple Valley. In the west, the boundary is marked by a surface drainage divide between the Mojave Basin and El Mirage Valley Basin, and a contact between alluvium and basement rocks that form the Shadow Mountains (DWR 2004). Unconsolidated basin fill deposits in the Mojave Basin have been delineated into two aquifer systems: the Floodplain Aquifer and Regional Aquifer (Mojave Water Agency 2021).

Based on borings drilled for a project-specific geotechnical investigation (Moore Twinning Associates 2022; see Appendix E), groundwater is not present to a maximum depth drilled of 35.5 feet below ground surface.

In addition, the project overlies the Centro subarea of the Mojave Basin Area, as designated by the Mojave Water Agency. The Mojave Basin Area is subdivided into five smaller areas (Oeste, Alto, Este, Centro, and Baja) and the project site is located within the Centro Subarea. Each subarea is composed of a unique set of hydrologic and hydrogeologic conditions and land and water demand profiles. The subareas are also hydraulically inter-related to varying degrees based on their respective locations relative to the Mojave River and the distribution of water use in the Mojave Basin Area (Mojave Water Agency 2021).

### Groundwater Quality

Within the Lower Mojave River Valley Basin, sodium bicarbonate character groundwater is primarily present. Sodium-calcium sulfate character is observed in the Daggett and Newberry Springs, located 13 miles east of the project site. Sodium chloride, sodium-calcium chloride, and sodium chloride-sulfate occur east of Troy Lake. Fluoride concentrations are elevated around Newberry Springs, with elevated boron and fluoride concentrations near Camp Cady. Numerous leaking underground storage tank sites are in the Barstow area, introducing various contaminants to groundwater such as benzene, toluene, ethylbenzene, xylene, and methyl-tertiary-butyl-ether. A Superfund site is present east of Barstow, in unincorporated San Bernardino County, at the Nebo and Yermo Marine Corps, located approximately 10 miles east of the project site. The site has impacted groundwater with trichloroethane and other contaminants (DWR 2004; USEPA 2026).

## Topography and Drainage

The project site is located at the southern edge of the Mojave Desert on alluvial plains derived from the Mojave River. The site consists of rolling terrain ranging from about 2,270 feet amsl near the southeast corner of the site to about 2,194 feet amsl near the northern portion of the site. The site is covered by loose, sandy soils with scattered, fine- to coarse-grained gravel fragments throughout the site (Appendix E and H).

Natural drainage from the site is northwesterly and northeasterly. The majority of the project site flows northwesterly towards Lenwood Road, which includes open channel drainage swales. Approximately 12 acres of the site flows northeasterly towards an unimproved street. There are no underground storm drain improvements in the immediate vicinity of the project site. Natural slopes across the site are approximately 2% to 6%. With the exception of several

small shallow washes, no natural drainage courses are present on the site. Stormwater flows tend to be sheet flow until reaching the adjacent streets along the west and north portions of the site (Appendix H).

### Flood Hazards

Floods are natural and recurring events that only become hazardous when human improvements encroach onto floodplains, modifying the landscape and building structures in the areas meant to convey excess water during floods. The construction of impervious surfaces such as asphalt, associated with increased development, decreases stormwater infiltration and potentially increases downstream runoff. Areas that have not flooded in the past may be subject to flooding in the future if drainage channels that convey storm waters are not designed or improved to carry these increased flows.

The project site is not located within a Special Flood Hazard Area subject to inundation by the 1% annual chance flood (i.e., 100-year floodplain). The site lies within Federal Emergency Management Agency (FEMA) Zone X, per FEMA Flood Insurance Rate Map panel 06071C3915J, dated September 2, 2016. Zone X are areas determined to be outside the 0.2% annual chance flood (i.e., 500-year floodplain) (FEMA 2016).

In addition, the project site is not located in a dam inundation area, based on possible failure of the upstream Lake Arrowhead, Mojave River, and Cedar Springs dams (City of Barstow 2025).

## 3.7.2 Regulatory Setting

### Federal

#### Clean Water Act

Increasing public awareness and concern for controlling water pollution led to the enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the CWA (33 USC 1251 et seq.). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

#### National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The National Flood Insurance Act also requires the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps that delineate the areas of known special flood hazards and their risk applicable to the community. The National Flood Insurance Program encourages the adoption and enforcement by local communities' floodplain management ordinances that reduce flood risks. In support of the National Flood Insurance Program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

### Federal Antidegradation Policy

The Federal Antidegradation Policy (40 CFR 131.12) requires states to develop and implement statewide antidegradation policies. Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods must, at a minimum, (1) protect and maintain existing in-stream water uses; (2) protect and maintain existing water quality, where the quality of the waters exceeds levels necessary to support existing beneficial uses (unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area); and (3) protect and maintain water quality in waters considered an outstanding national resource.

### National Pollutant Discharge Elimination System

Direct discharges of pollutants into waters of the United States are not allowed, except in accordance with the National Pollutant Discharge Elimination System (NPDES) program, established in Section 402 of the CWA. A Stormwater Pollution Prevention Plan (SWPPP) prepared in compliance with an NPDES permit describes erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity and to identify and implement controls, where necessary. NPDES Industrial General Permits, also established in Section 402 of the CWA, are required for industrial facility discharges directly to waters of the United States (surface water or groundwater with a hydrologic connection) or discharge via a pipe, ditch, outfall, or other point source. See State regulations below for additional information.

### Pretreatment Regulations

Code of Federal Regulations Part 403 – General Pretreatment Regulations for Existing and New Sources of Pollution establishes responsibilities of Federal, State, and local government, industry, and the public to implement National Pretreatment Standards to control pollutants which pass through or interfere with treatment processes in Publicly Owned Treatment Works (POTWs) or which may contaminate sewage sludge. This regulation applies 1) to pollutants from non-domestic sources covered by National Pretreatment Standards that are indirectly discharged into or transported by truck or rail or otherwise introduced into POTWs, 2) to POTWs which receive wastewater from sources subject to National Pretreatment Standards, 3) to States which have or are applying for NPDES programs approved in accordance with section 402 of the CWA, and 4) to any new or existing source subject to National Pretreatment Standards.

### Section 303 of the Clean Water Act (Beneficial Uses and Total Maximum Daily Loads)

Under CWA Section 303(d), California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The Lahontan RWQCB has developed TMDLs for select reaches of water bodies.

## State

### California Porter–Cologne Water Quality Control Act

Since 1973, the California SWRCB and its nine RWQCBs have been delegated the responsibility for administering permitted discharge into the waters of California. The project falls within the jurisdiction of the Lahontan RWQCB. The Porter-Cologne Water Quality Act (California Water Code Section 13000 et seq.; California Code of Regulations, Title 23, Chapter 3, Chapter 15) provides a comprehensive water quality management system for the protection of California waters. Under this Act, "any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state" must file a report of the discharge with the appropriate RWQCB. Pursuant to the Act, the RWQCB may then prescribe "waste discharge requirements" that add conditions related to control of the discharge. Porter–Cologne defines "waste" broadly, and the term has been applied to a diverse array of materials, including non-point-source pollution. When regulating discharges that are included in the federal CWA, the state essentially treats Waste Discharge Requirements and NPDES regulations as a single permitting vehicle. In April 1991, the SWRCB and other state environmental agencies were incorporated into the California Environmental Protection Agency.

The RWQCB regulates urban runoff discharges under the NPDES permit regulations. NPDES permitting requirements cover runoff discharged from point (e.g., industrial outfall discharges) and non-point (e.g., stormwater runoff) sources. The RWQCB implements the NPDES program by issuing construction and industrial discharge permits. Under the NPDES permit regulations, best management practices (BMPs) are required. The U.S. EPA defines BMPs as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States." BMPs include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage (40 CFR 122.2).

### Water Quality Control Plan for the Lahontan Region

The Porter–Cologne Water Quality Control Act sets forth the obligations of the SWRCB and RWQCBs to adopt and periodically update water quality control plans (Basin Plans), in which beneficial uses and water quality objectives are established, and which include implementation programs and policies to achieve those objectives (California Water Code Sections 13240 through 13247). The Basin Plan is the basis for the Regional Board's regulatory program and sets forth water quality standards for the surface and ground waters of the Region. The Plan includes both designated beneficial uses of water and the narrative and numerical objectives that must be maintained or attained to protect those uses. The Basin Plan also identifies required or recommended control measures for any known impairments and in some cases, prohibits certain types of discharges in particular areas.

The Basin Plan implements a number of state and federal laws, the most important of which are the federal CWA (P.L. 92-500, as amended), and the state Porter–Cologne Water Quality Control Act (California Water Code Section 13000 et seq.). Other pertinent federal laws include the Safe Drinking Water Act, Toxic Substances Control Act, Resource Conservation and Recovery Act, and Endangered Species Act, the Comprehensive Response, Compensation, and Liability Act ("Superfund"), and Superfund Amendment and Reauthorization Act.

### Construction General Permit (SWRCB Order No. 2022-0057-DWQ)

For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted and administers the NPDES General Permit for Stormwater Discharges Associated with Construction and Land

Disturbance Activities (Construction General Permit Order WQ 2022-0057-DWQ) to avoid and minimize water quality impacts attributable to such activities. The Order became effective September 1, 2023. The Construction General Permit applies to all projects in which construction activity disturbs 1 acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires development and implementation of a SWPPP, which would specify water quality BMPs designed to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB.

To receive coverage under the Construction General Permit, the project proponent must submit a Notice of Intent and permit registration documents to the SWRCB and applicable RWQCB. Permit registration documents include completing a construction site risk assessment to determine appropriate coverage level; detailed site maps showing disturbance area, drainage area, and BMP types/locations; the SWPPP; and, where applicable, post-construction water balance calculations and active treatment systems design documentation.

### NPDES Industrial General Permit

The Industrial General Permit regulates industrial stormwater discharges and authorized non-stormwater discharges from industrial facilities in California. The statewide General Permit for Discharges of Stormwater Associated with Industrial Activities (SWRCB Water Quality Order No. 2014-0057-DWQ, NPDES No. CAS000001, as amended in 2015 and 2018, effective July 1, 2020) requires qualifying industrial sites to comply with the following provisions, among others:

- Eliminate unauthorized non-stormwater discharges;
- Develop and implement SWPPPs that include BMPs;
- Implement minimum BMPs, and advanced BMPs as necessary, to achieve compliance with the effluent and receiving water limitations of this General Permit;
- Conduct monitoring, including visual observations and analytical stormwater monitoring for indicator parameters;
- Compare monitoring results for monitored parameters to applicable numeric action levels;
- Perform the appropriate Exceedance Response Actions when there are exceedances of the numeric action levels; and
- Certify and submit all permit-related compliance documents via the Stormwater Multi Application and Report Tracking System.

The NPDES Industrial General Permit establishes a number of action levels that reflect California Environmental Protection Agency benchmark values for selected parameters, minimum BMP requirements, a revised monitoring protocol, and exceedance response actions if a numeric action level is exceeded.

### California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High-Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state (e.g., includes isolated wetlands and groundwater), not just surface waters. The policy states that whenever the existing quality of

a water body is better than the quality established in individual Basin Plans, such high quality must be maintained, and discharges to that water body must not unreasonably affect present or anticipated beneficial uses of such water resources.

### CALGreen

Also known as the California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations, CALGreen is designed to improve public health, safety, and general welfare by utilizing design and construction methods that reduce the negative environmental impact of development and to encourage sustainable construction practices. CALGreen provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including, but not limited to, site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards designed to encourage developers and cities to aim for a higher standard of development.

### California Toxics Rule

The U.S. EPA has established water quality criteria for certain toxic substances via the California Toxics Rule. The California Toxics Rule established acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries, that are designated by each RWQCB as having beneficial uses protective of aquatic life or human health.

### California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater management. For example, a Water Replenishment District (Water Code Section 60000 et seq.) is authorized to establish groundwater replenishment programs and collect fees for that service, and a Water Conservation District (Water Code Section 75500 et seq.) can levy groundwater extraction fees. Through special acts of the Legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and control some in-basin extraction upon evidence of overdraft or the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

### Assembly Bill 3030 – Groundwater Management Act

In 1992, Assembly Bill 3030 was passed, which increased the number of local agencies authorized to develop a groundwater management plan and set forth a common framework for management by local agencies throughout California. These agencies could possess the same authority as a water replenishment district to “fix and collect fees and assessments for groundwater management” (Water Code Section 10754), provided they receive a majority of votes in favor of the proposal in a local election (Water Code Section 10754.3). Assembly Bill 3030 was largely superseded by the Sustainable Groundwater Management Act, as described below, but still applies to low- and very low-priority groundwater basins.

### Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—AB 1739 (Dickinson), Senate Bill (SB) 1168 (Pavley), and SB 1319 (Pavley)—collectively known as SGMA. This Act requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the DWR provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form groundwater sustainability agencies to manage basins sustainably and requires those groundwater sustainability agencies to adopt groundwater sustainability plans for crucial groundwater basins in California. Adjudicated basins are exempt from the requirements to adopt a groundwater sustainability plan.

### Urban Water Management Plans

Pursuant to the California Urban Water Management Act (California Water Code Sections 10610–10656), urban water purveyors are required to prepare and update an Urban Water Management Plan (UWMP) every 5 years. UWMPs are prepared by California's urban water suppliers to support long-term resource planning and ensure adequate water supplies. Every urban water supplier that either delivers more than 3,000 acre-feet per year of water annually or serves more than 3,000 connections are required to assess the reliability of its water sources over a 20-year period under normal-year, dry-year, and multiple-dry-year scenarios in a UWMP. UWMPs must be updated and submitted to DWR every 5 years for review and approval. The project site is covered by the 2020 Golden State Water Company – Barstow area (GSWCB) UWMP (Appendix K).

### Senate Bill 610 and Senate Bill 221: Water Supply Assessments

SB 610 and SB 221, amended into state law effective January 1, 2002, improve the linkage between certain land-use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding water availability and reliability with respect to certain developments to be included in the administrative record, to serve as the evidentiary basis for an approval action by the city or county on such projects. Under Water Code Section 10912(a), projects subject to the California Environmental Quality Act that require a WSA include (1) residential development of more than 500 dwelling units; (2) shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; (3) commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; (4) hotel, motel or both, having more than 500 rooms; (5) industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area; (6) mixed-use projects that include one or more of the projects specified; or (7) a project that would demand an amount of water equivalent to or greater than the amount required by a 500-dwelling-unit project. A fundamental source document for compliance with SB 610 is the UWMP, which can be used by the water supplier to meet the standard for SB 610. SB 221 applies to the Subdivision Map Act, conditioning a tentative map on the applicant to verify that the public water supplier has sufficient water available to serve the proposed development.

## Regional

### Mojave River Watershed Technical Guidance Document for Water Quality Management Plans

The 2013 Phase II Small MS4 Permit, adopted by the SWRCB, and issued statewide, requires all new development projects covered by this Order to incorporate low-impact development (LID) BMPs to the maximum extent practicable. In San Bernardino County, the Phase II MS4 Permit is applicable to urbanized areas within the Mojave River Watershed. In addition, the Order also requires the development of a standard design and post-development BMP guidance for incorporation of site design/LID, source control, treatment control BMPs (where feasible and applicable), and hydromodification mitigation measures to the maximum extent practicable to reduce the discharge of pollutants to receiving waters. The purpose of this technical guidance document for water quality management plans (Water Quality Order No. 2013-0001-DWQ; San Bernardino County 2016) is to provide direction to project proponents on the regulatory requirements applicable to a private or public development activity, from project conception to completion. This technical guidance document is intended to serve as a living document, which will be updated as needed to remain applicable beyond the current Phase II MS4 Permit term. Any non-substantive updates to the technical guidance document and associated water quality management plan template will be provided in an annual report. Future substantive updates shall be submitted to the Lahontan RWQCB for review and approval, prior to implementation.

This technical guidance document only applies to Phase II MS4s, which does not apply to the proposed project, which is located in an unincorporated area adjacent to the City of Barstow. The jurisdictions covered by this permit only include:

- San Bernardino County
  - Unincorporated areas of Phelan, Oak Hills, Spring Valley Lake and Victorville
- City of Hesperia
- City of Victorville
- Town of Apple Valley

### Mojave Storm Water Management Program

The NPDES General Permit No. CAS000004, Waste Discharge Requirements for stormwater discharges from Small MS4s, requires that Permittees develop a stormwater management program (SWMP). The Lahontan RWQCB assembled a stakeholder group (the Mojave River Watershed Group), including Apple Valley, the cities of Hesperia and Victorville, and San Bernardino County, which established the 2003 Storm Water Management Program for the Mojave River Watershed (Mojave River Watershed Group 2003). The purpose of this SWMP is to keep the Mojave River clean to the maximum extent practicable using BMPs. These practices would reduce stormwater runoff and non-storm water runoff flowing to the river. BMPs would also serve to keep contaminations, including sediment, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons, pesticides, herbicides, and trash from entering the storm drain system. In compliance with the SWMP, the Mojave River Watershed Technical Guidance Document for Water Quality Management Plans (San Bernardino County 2016), as described above, requires incorporation of site design/LID, source control, and treatment control BMPs (where feasible and applicable), and hydromodification mitigation measures to the maximum extent practicable, to reduce the discharge of pollutants to receiving waters.

Similar to that described above for the technical guidance document, the SWMP only applies to urbanized areas of the Mojave River Watershed within San Bernardino County and does not apply to the proposed project area.

## Local

### San Bernardino County Hydrology Manual

The 1986 San Bernardino County Hydrology Manual serves as a guide for hydrologic studies within San Bernardino County. The manual contains current standards and procedures, examples, and maps. The manual provides the computational techniques and criteria for the estimation of runoff, discharges, and volumes for use is hydrology/drainage report submittals to the County Public Works/Flood Control District. All drainage plans must demonstrate 100-year flood protection for habitable structures and other non-floodproof structures. In addition, protection levels for the 10- and 25-year floods may be required for major street travel-ways, catch basin sump designs, and other conditions. An April 2010 addendum to the Hydrology Manual incorporated updated rainfall records.

### San Bernardino Countywide Plan/Policy Plan

#### *Natural Resources Element (2020)*

Goal NR-2 Water Quality.

Policy NR-2.1. Coordination on Water Quality. We collaborate with the state, regional water quality control boards, watermasters, water purveyors, and government agencies at all levels to ensure a safe supply of drinking water and a healthy environment.

Policy NR-2.2. Water Management Plans. We support the development, update, and implementation of ground and surface water quality management plans emphasizing the protection of water quality from point and non-point source pollution.

Policy NR-2.3. Military Coordination on Water Quality. We collaborate with the military to avoid or minimize impacts on military training and operations from groundwater contamination and inadequate groundwater supply.

Policy NR-2.4. Wastewater Discharge. We apply federal and state water quality standards for wastewater discharge requirements in the review of development proposals that relate to type, location, and size of the proposed project in order to safeguard public health and shared water resources.

Policy NR-2.5. Stormwater Discharge. We ensure compliance with the County's Municipal Stormwater NPDES (National Pollutant Discharge Elimination System) Permit by requiring new development and significant redevelopment to protect the quality of water and drainage systems through site design, source controls, stormwater treatment, runoff reduction measures, best management practices, low impact development strategies, and technological advances. For existing development, we monitor businesses and coordinate with municipalities.

#### *Infrastructure and Utilities Element (2020)*

Goal IU-1 Water Supply.

Policy IU-1.8. Groundwater Management Coordination. We collaborate with watermasters, groundwater sustainability agencies, water purveyors, and other government agencies to ensure groundwater basins are being sustainably managed. We discourage new development when it would create or aggravate groundwater overdraft conditions, land subsidence, or other "undesirable results" as defined in the California Water Code. We require safe yields for groundwater sources covered by the Desert Groundwater Management Ordinance.

Goal IU-3 Stormwater Drainage.

Policy IU-3.1. Regional Flood Control. We maintain a regional flood control system and regularly evaluate the need for and implement upgrades based on changing land coverage and hydrologic conditions in order to manage and reduce flood risk. We require any public and private projects proposed anywhere in the county to address and mitigate any adverse impacts on the carrying capacity and stormwater velocity of regional stormwater drainage systems.

Policy IU-3.2. Local Flood Control. We require new development to install and maintain stormwater management facilities that maintain predevelopment hydrology and hydraulic conditions.

Policy IU-3.3. Recreational Use. We prefer that stormwater facilities be designed and maintained to allow for regional open space and safe recreation use without compromising the ability to provide flood risk reduction.

Policy IU-3.4. Natural Floodways. We retain existing natural floodways and watercourses on County-controlled floodways, including natural channel bottoms, unless hardening and channelization is the only feasible way to manage flood risk. On floodways not controlled by the County, we encourage the retention of natural floodways and watercourses. Our priority is to reduce flood risk, but we also strive to protect wildlife corridors, prevent loss of critical habitat, and improve the amount and quality of surface water and groundwater resources.

Policy IU-3.5. Fair Share Requirements. We require new development to pay its fair share of capital costs to maintain adequate capacity of the County's regional flood control systems.

*Hazards Element (2022)*

Goal HZ-1 Natural Environmental Hazards.

Policy HZ-1.2. New Development in Environmental Hazard Areas. We require all new development to be located outside of the environmental hazard areas listed below. For any lot or parcel that does not have sufficient buildable area outside of such hazard areas, we require adequate mitigation, including designs that allow occupants to shelter in place and to have sufficient time to evacuate during times of extreme weather and natural disasters.

- Flood: 100-year flood zone, dam/basin inundation area.

Policy HZ-1.3. Floodplain Mapping. We require any new lots or subdivisions partially in, and any new development partially or entirely in 100-year flood zones or 100-year flood awareness areas to provide detail floodplain mapping for 100- and 200-year storm events as part of the development approval process.

### Codified Ordinances of San Bernardino County

*County Code Title 8 Division 5 Chapter 85.07: Flood Hazard Development Reviews and Title 3 Division 5 Chapter 1: Pollutant Discharge Elimination System Regulations*

This chapter requires a Floodplain Development Standards Review before approval of a land use application or issuance of a development permit in specified flood areas or where required by the Director of Public Works or the Building Official. Additionally, County Code Title 3, Division 5, Chapter 1, Pollutant Discharge Elimination System Regulations requires any discharger associated with construction activity subject to any NPDES General Permit issued by the U.S. EPA, the SWRCB, or RWQCB, to comply with all requirements of such permit. Upon demand by County Director, such discharger must provide County proof of coverage under such permit. Proof of coverage under such permit may also be required prior to issuance of any County permit, including, but not limited to, grading, building, or occupancy permits. Proof of coverage must be in a form acceptable to the County Director. This ordinance ensures the protection of health and safety of, and promotes the welfare of, the County's inhabitants by controlling non-stormwater discharges to the stormwater conveyance system, and by reducing pollutants in stormwater discharges, including those pollutants taken up by stormwater as it flows over urban areas, to the maximum extent practicable to achieve applicable receiving water quality objective.

## 3.7.3 Environmental Impacts and Mitigation Measures

### Methodology

Potential impacts related to hydrology and water quality were identified based on consideration of the proposed project characteristics, the location and characteristics of the project site, and current applicable requirements and regulations. Specifically, the following analysis considers whether the project would directly or indirectly cause hydrologic and water quality impacts taking into account state-mandated construction requirements, as specified in the NPDES Construction General Permit, in addition to the other regulatory requirements. Impacts have been evaluated with respect to the thresholds of significance, as described below. In the event that adverse environmental impacts would occur even with consideration of applicable regulations and standard construction practices (see below), impacts would be potentially significant, and mitigation measures are provided to reduce impacts to less than significant.

### Thresholds of Significance

The significance criteria used to evaluate project impacts related to water quality, hydrology, drainage, and groundwater supply are based on the recommendations of Appendix G of the California Environmental Quality Act Guidelines and the professional judgment of the EIR preparers. A significant impact related to hydrology, water quality and drainage would occur if implementation of the project would do any of the following:

(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

(c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would:

    i. result in substantial erosion or siltation on or off site;

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows.

(d) In flood hazards, tsunami, or seiche zones, risk release of pollutants due to project inundation.

(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to hydrology and water quality.

## Impact Analysis

### Impact 3.7-1

The proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

### Short-Term Construction Impacts

Construction activities associated with preparation and development of the project site would involve earthwork activities that disturb site soils and also involve the use of various hazardous materials common in construction (e.g., fuels, oils, paint, and solvents). Earthwork activities can expose soils, making them susceptible to the effects of wind and water erosion, and potentially result in off-site transport of sediments that adversely affect water quality of receiving waters. Inadvertent release of hazardous materials or wastes could also adversely affect water quality, if not handled appropriately.

Construction of the project would disturb more than 1 acre and as a result the project would be subject to NPDES Construction General Permit requirements. The project Applicant must file a notice of intent with the SWRCB to comply with the State NPDES Construction General Permit. Implementation of this Permit would require the development of a site-specific SWPPP for construction activities. The SWPPP is required to identify BMPs that protect stormwater runoff and ensure avoidance of substantial degradation of water quality. Typical BMPs that could be incorporated into the SWPPP to protect water quality include the following:

- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment
- Using drop inlet protection (filters and sandbags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during construction
- Implementing specifications for construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto adjoining roadways
- Training, including for subcontractors, on general site housekeeping

Compliance with provisions of the Construction General Permit would ensure that the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface quality from construction activities. Therefore, short-term construction impacts associated with water quality standards and waste discharge requirements would be less than significant.

## Long-Term Operational Impacts

### *Charging Station, Commercial Building, and Logistics Facility*

As previously discussed, the project site currently consists of undeveloped land and following completion of construction would result in operation of a 20.72-acre electric vehicle charging station in the southern portion of the 99.85-acre site to serve light duty/passenger vehicles and medium and heavy-duty trucks. A 15,000-square foot commercial building and associated 65 parking spaces would be included on the western side of the electrical vehicle charging station portion of the site and a 1.3 million-square-foot logistics facility would be constructed on the northern 79.10 acre portion of the site. Access to the logistics facility would be provided via six driveways along Lenwood Road and truck courts with 98 loading docks for each building and trailer parking spaces would be provided. Automobile parking spaces would be distributed around the buildings.

With construction of these improvements, the introduction of new impervious surfaces could contribute pollutants (e.g., petroleum fuel, grease, oils, battery acids, antifreeze, metals, and trash) to stormwater runoff due to vehicle use in uncovered parking areas (through small fuel and/or fluid leaks, tire wear, brake wear), uncovered refuse storage/management areas, landscape/open space areas (if pesticides/herbicides and fertilizers are improperly applied), and general litter/debris (e.g., generated during facility operations). In addition, stormwater runoff from the roofs of the logistics facility could contribute concentrations of metals, nutrients, total suspended solids, petroleum hydrocarbons, organic chemicals, asphalt related compounds, microplastics, synthetic particles, pathogens, and organic matter.

During storm events, the first few hours of moderate to heavy rainfall could wash potential pollutants on site from the impervious surface areas where, without proper stormwater controls and BMPs, those pollutants could enter the storm drain system before eventually being discharged into existing drainages and eventually the Mojave River. Between periods of rainfall, surface pollutants tend to accumulate, and runoff from the first significant storm of the year (“first flush”) would likely have the largest concentration of pollutants. The project would include surface bioretention areas around the west, north, and east perimeters of the site (Figure 3.7-1, Drainage Plan), which would filter out some of the surface water contaminants. However, the majority of stormwater flow on the site would not flow off site through the bioretention areas. Rather, stormwater would flow to a combination of conventional open above ground detention basins and several hundred feet of 60-inch diameter underground detention chambers in the northwest and northeast portions of the site (Appendix H). According to the hydrologic analyses conducted for the site, the project will provide detention volume for stormwater flow attenuation such that the discharge from the post developed condition 100-year storm will not exceed the pre-developed condition 100-year storm peak flow rate. Detention of storm water flows will be provided prior to release off site to the public storm drain system, which is maintained by the County. However, no stormwater quality filtration system is included in the stormwater detention system. In the absence of a water quality management plan, polluted stormwater runoff from the 99.85-acre project site could adversely affect the water quality of the nearby Mojave River, resulting in a less than significant but mitigable impact with implementation of MM-HYD-1.

### *Truck Wash*

The project would include a two-lane truck wash and enclosed two-lane truck maintenance facility, with up to four bays, in the eastern portion of the EV charging station area.

The truck wash would recycle its wastewater using a standard closed-loop or semi-closed-loop water reclamation system, designed to remove solids, oils, and other contaminants generated during washing. The City would provide sewer service to the project site, pursuant to an extra-territorial service agreement to be approved by the City as well as the LAFCO for San Bernardino County. The truck wash would connect to the existing 8-inch-diameter sewer main located within Lenwood Road. The wastewater recycling system would be physically isolated from the sanitary sewer to prevent untreated discharge. In compliance with Barstow Municipal Code Section 13.12.305 and Code of Federal Regulations, Part 403, residual blowdown water from the truck wash would not be discharged to the Barstow Regional Wastewater Treatment Plant without pretreatment.

In a standard pretreatment system, a grit trap or settling sump would be installed such that sand, road grit, mud, and metal debris would settle by gravity. In addition, large debris would be screened to protect downstream equipment. These solids would be periodically removed and disposed of offsite as solid waste. In addition, the wastewater would flow through 1) an oil-water separator, in which the oily waste would be disposed as hazardous waste; 2) a clarifier or equalization tank, in which fine suspended solids are allowed to settle and the accumulated sludge is periodically removed for disposal; and 3) filtration and polishing, in which the clarified water passes through more filtration stages. Fresh makeup water would likely be added to the recycled water to replace losses from evaporation and sludge removal (which can achieve up to approximately 90% recycling efficiency). Based on this recycling and waste disposal process, and pretreatment requirements, water quality impacts associated with the truck wash would be less than significant.

In the event that extra-territorial sewer service is not provided by the City as proposed, the project would instead be served by on-site wastewater treatment facilities. Any on-site system would incorporate the pre-treatment components described above. These on-site wastewater facilities would be designed, reviewed and approved by the necessary regulatory agencies, i.e., San Bernardino County Building & Safety Department, Environmental Health Services Department, and Lahontan Regional Water Quality Control Board. In general, treatment systems would consist of above ground and subsurface components and would be located in proximity to the truck wash. Based on this recycling and waste disposal process, water quality impacts associated with the truck wash would be less than significant.

### *Truck Maintenance Facility*

Similar to the truck wash, in the absence of spill containment and treatment, the truck maintenance facility would potentially contribute pollutants such as oil/grease, metals, oil/grease, diesel fuel residues, and hydraulic fluids to the sanitary sewer. In compliance with Barstow Municipal Code Section 13.12.305 and Code of Federal Regulations, Part 403, incidental spills of petroleum products and hazards substances from the truck maintenance facility would not be discharged to the City of Barstow Wastewater Treatment Plant without pretreatment. Incidental spills during truck maintenance activities would be contained and treated in a standard pretreatment facility prior to discharge into the sanitary sewer. Truck maintenance, fueling, and fluid-handling activities would only occur in designated indoor bays where any releases would drain inward toward a controlled collection point, rather than a storm drain. Wastewater would enter a spill containment sump designed to hold the largest credible spill and then the fluids would pass through a gravity oil-water separator, which would remove petroleum oils, heavy solids, metal fines, grit, sand, and brake dust. The grit would settle to the bottom and the oil would be skimmed or pumped off

for proper disposal. Downstream of the interceptor, wastewater would enter an equalization tank, which would limit the discharge rate, allow mixing of variable strength wastewater, and prevent short-term exceedances of sewer limits. In addition, industrial discharge to the sewer would occur in compliance with an NPDES Industrial General Permit.

In the event that extra-territorial sewer service is not provided by the City as proposed, the project would instead be served by on-site wastewater treatment facilities, as described above for the truck wash. Based on this treatment and waste disposal process, water quality impacts associated with the truck maintenance facility would be less than significant.

#### *Domestic Waste*

As described for the truck wash and truck maintenance facility, the project would be connected to existing 8-inch-diameter sewer main located within Lenwood Road. The project may also construct an on-site lift station and a force main in Lenwood Road to connect to a future sewer main proposed in Jasper Road to accommodate flows from the Logistics Facility. The proposed wastewater connection is required to be designed and constructed in accordance with City standards.

In the event that sewer service is not provided by the City as proposed, the project would instead be served by on-site wastewater systems, which would be designed, reviewed and approved by the necessary regulatory agencies, i.e., San Bernardino County Building & Safety Department, Environmental Health Services Department, and Lahontan Regional Water Quality Control Board. Each of the proposed four parcels containing structures with discharges would be serviced by treatment systems to manage the anticipated flows, at an average 4,500 gallons per day each. In general, treatment systems would consist of above ground and subsurface components and located appropriately in accordance with design and regulatory agency requirements. Based on this treatment and waste disposal process, water quality impacts associated with domestic waste disposal would be less than significant.

### Mitigation Measures

MM-HYD-1 Water Quality Best Management Practices. Stormwater quality filtration shall be accomplished through 1) the proposed stormwater detention basins and/or 2) through installation of manufactured biotreatment units.

- Percolation tests shall be completed in the vicinity of proposed stormwater detention basins to determine the permeability of on-site soils and suitability for stormwater infiltration. In the event the soils are sufficiently permeable, the stormwater detention basins shall be constructed without a bottom liner and also function as infiltration basins. The detention/infiltration basin systems shall be sized and designed to prevent flooding from a 100-year storm while also providing stormwater infiltration for water quality purposes.
- In the event the soils are not sufficiently permeable for the stormwater detention basins to also be used as infiltration basins, proprietary biotreatment units (i.e., Modular Wetland Systems) shall be installed downstream of the proposed detention basins. Biotreatment units shall also be installed downstream of the proposed underground detention chambers/basins. The biotreatment units shall be designed to capture and treat stormwater pollutants, consistent with commercial/industrial developments and associated parking lots, and including oil,

grease, metals, trash, and debris. Treatment design shall be finalized upon completion of final project design.

- Source control Best Management Practices, such as secondary containment, regular inspections, and equipment maintenance, shall also be implemented throughout the project site whenever possible.

With implementation of mitigation measure MM-HYD-1, Water Quality Best Management Practices, potentially significant water quality impacts would be reduced to **less than significant with mitigation**.

Impact 3.7-2 The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

### Groundwater Recharge

The project site overlies the boundary of the Lower and Middle Mojave River Valley Groundwater Basins (or the Centro Subarea of the Mojave Basin Area). Currently, the project site is undeveloped and pervious, which allows for groundwater recharge. During construction activities and following completion of development of the project site, the project would result in a substantial increase in impermeable or impervious surfaces, which could impede groundwater recharge. However, stormwater would be infiltrated in detention/infiltration basins, pending the results of percolation testing (see MM-HYD-1), and/or would be diverted off site at the northwest and northeast portions of the site, at which point runoff would flow through existing street drainages toward the nearby Mojave River. Stormwater runoff would then percolate into Mojave River sediments and recharge the underlying groundwater basin. In the event the soils are sufficiently permeable for the detention basins to be used as infiltration basins, detained stormwater would infiltrate through the bottom of the infiltration basins and recharge the underlying groundwater basin. Therefore, impacts associated with groundwater recharge attributed to development of the site would be less than significant.

### Groundwater Supply

Less-than-Significant Impact. Water supply for construction and operation of the project would be provided by GSWCB, which has historically relied upon groundwater supplies as its primary source of supply to meet demands. GSWCB pumps groundwater from the Upper Mojave River Valley subbasin that is part of the groundwater basins covering the broader Mojave region. More specifically, GSWCB pumps groundwater from the Centro Subarea, which is a subarea of the Mojave Basin Area, as defined in the Mojave Basin Adjudication. GSWCB has also incorporated water supplies derived from the Mojave Water Agency's water management activities, as part of its groundwater development and use actions. The Mojave Water Agency is a regional wholesale water and groundwater management agency. GSWCB is a member agency of the Mojave Water Agency (Appendix K).

According to estimations made in the WSA for the proposed project, development of the site would result in an average water demand of approximately 59 acre-feet per year (Appendix K)[1]. In the 2020 UWMP developed by the Mojave Water Agency, the water system reliability assessment factored in increased development within its

[1] Water demand for construction activities, estimated to require 12 to 18 months, was not provided in the WSA and was determined to be an insubstantial amount due to the typical requirements of water required for construction as well as the temporary nature of construction activities.

jurisdiction and concluded that the future demands out to 2045 can be met under normal, single-dry-year, and multiple-dry-year scenarios (Mojave Water Agency 2021). See also Section 3.11, Utilities and Service Systems.

Therefore, the Project would not substantially decrease groundwater supplies and would not impede sustainable groundwater management of the Basin and impacts associated with groundwater supplies would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.7-3 The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

#### (i): result in substantial erosion or siltation on or off site;

As discussed above, the project site is undeveloped with no impervious surfaces. Construction of the project would result in a substantial increase in new impervious surfaces, including warehouse/logistics buildings, parking lots, electric vehicle charging areas, access roads, and walkways. As discussed under Impact 3.7-1, construction activities would be required to implement BMPs as part of a SWPPP that would include erosion control measures for all exposed soils. Once developed, the buildings, paved surfaces, other on-site improvements, and drainage control features would stabilize and help retain on-site soils. The remaining portions of the project site containing pervious surfaces would primarily consist of landscaped areas and bioretention areas that would help retain on-site soils while preventing wind and water erosion from occurring.

According to the hydrologic analyses conducted for the site (Appendix H), which was completed in accordance with the San Bernardino County Hydrology Manual (SBFCD 1986), the project will provide detention volume for stormwater flow attenuation such that the discharge from the post developed condition 100-year storm will not exceed the pre-developed condition 100-year storm peak flow rate. Detention of storm water flows will be provided prior to release off site to the public storm drain system, which is maintained by the County. As a result, project-related increased impervious surfaces would not result in off-site erosive scour and siltation of the downstream Mojave River. Impacts would be **less than significant.**

### Mitigation Measures

No mitigation measures are required.

#### (ii): substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

Construction of the project would alter the existing drainage patterns through the introduction of new impervious surfaces, which if not properly designed, could substantially increase the rate or amount of surface runoff, which could result in flooding on or off site. However, the project would maintain adequate stormwater conveyance through compliance with existing drainage control standards for peak runoff flows.

Project improvements would be designed to convey runoff as sheet flows away from buildings, allow on-site infiltration through landscaped pervious areas and bioretention areas, and detain peak flow runoff through

installation of detention basins. The project site would be designed and graded to mimic existing drainage patterns with gradients that remain towards the northwest and northeast corners of the site. According to the hydrologic analyses conducted for the site, the project will provide detention volume for stormwater flow attenuation such that the discharge from the post developed condition 100-year storm will not exceed the pre-developed condition 100-year storm peak flow rate. Detention of storm water flows will be provided prior to release off site to the public storm drain system, which is maintained by the County (See Impact 3.7-1 and MM-HYD-1 regarding feasibility of stormwater infiltration). The stormwater analysis consisted of dividing the site into 21 drainage areas and calculating the detention capacity required for each of the areas, using the Small Area Unit Hydrograph procedure discussed in Section J of the San Bernardino County Hydrology Manual (SBFCD 1986). The detention basins will consist of a combination of conventional open above ground detention basins and several hundred feet of 60-inch diameter underground detention chambers in the northwest and northeast portions of the site (Appendix H).

Approximately 17 acres lying east of the project (APN's 0497-142-13 and -16) produce approximately 36 cubic feet per second of run-on. These flows become concentrated at about mid site along the east property line. The off-site flows will be captured and transported across the project site via an underground storm drain system. The off-site flows will be discharged along with the attenuated developed project flows through the outlet structure located at the northwesterly corner of the project site (Appendix H).

The on-site storm drain system will collect runoff in curbs and gutters and flows will be conveyed to the detention basins. The storm drain discharge at the northwest portion of the site will be through a bubbler outlet since there are no underground storm drains in the vicinity and the relationship of the depth of the on-site stormdrain system to the existing street grades along the curb. The excess volume remaining in the storm drain following a storm event will be infiltrated into the underlying soils. The amount of excess volume will depend on the infiltration capacity of the detention basins. (See Impact 3.7-1 and MM-HYD-1 regarding feasibility of stormwater infiltration). With incorporation of the stormwater drainage plan into the project design (Appendix H), the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site. As a result, impacts associated with flooding on or off site would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

#### (iii): create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

As previously discussed under Impact 3.7-3(II), the project will provide detention volume for stormwater flow attenuation such that the discharge from the post developed condition 100-year storm will not exceed the pre-developed condition 100-year storm peak flow rate. As a result, the project would not create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems. In addition, as discussed under Impact 3.7-1, with implementation of mitigation measure MM-HYD-1, Water Quality Best Management Practices, potentially significant water quality impacts would be reduced to less than significant levels.

### Mitigation Measures

See MM-HYD-1, Water Quality Best Management Practices. With implementation of MM-HYD-1, impacts would be **less than significant with mitigation.**

#### (iv): impede or redirect flood flows.

The project site is not located within a Special Flood Hazard Area subject to inundation by the 1% annual chance flood (i.e., 100-year floodplain). The site lies within FEMA Zone X, which are areas determined to be outside the 0.2% annual chance flood (i.e., 500-year floodplain). As a result, project construction would not impede or redirect flood flows. Impacts would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.7-4 The proposed project would not risk release of pollutants In flood hazard, tsunami, or seiche zones due to project inundation.

As discussed above, the project site is located outside the 0.2% annual chance flood (i.e., 500-year floodplain). The project site is not located in proximity to the Pacific Ocean and would not be subject to tsunamis. In addition, the project site is not located adjacent to an enclosed body of water that might be subject to seiches. As a result, the project would not risk release of pollutants due to project inundation. Impacts would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.7-5 The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

As previously discussed, the project would comply with applicable water quality regulatory requirements, including implementation of a SWPPP and associated stormwater BMPs, which would minimize construction related impacts. In addition, as discussed under Impact 3.7-1, with implementation of mitigation measure MM-HYD-1, Water Quality Best Management Practices, potentially significant operational water quality impacts would be reduced to less than significant levels, which would contribute to a reduction in water quality impacts within the overall Mojave River Watershed. Compliance with the Construction General Permit and implementation of MM-HYD-1 with respect to project operations is consistent with Lahontan Basin Plan policies and water quality objectives, which would reduce potential water quality impairment of surface waters such that existing and potential beneficial uses of key surface water drainages throughout the Mojave River of the Lower Mojave Hydrologic Area would not be adversely impacted. As a result, the project would not conflict with or obstruct the Lahontan Basin Plan.

With respect to groundwater management, GSWC would supply water for the project. GSWC sources its water from the Centro Subarea of the Mojave River Groundwater Basin, also referred to as the Mojave Basin Area. The Basin is an adjudicated groundwater basin and is exempt from the requirements of developing a groundwater sustainability plan, pursuant to the SGMA, as it is designated as a very-low-priority basin by DWR. As a result, withdrawal of groundwater for the project would not conflict with or obstruct implementation of a sustainable groundwater management plan.

### Mitigation Measures

See MM-HYD-1, Water Quality Best Management Practices. With implementation of MM-HYD-1, impacts would be **less than significant with mitigation.**

## Cumulative Impacts

Impact 3.7-6 The proposed project would not result in cumulatively considerable impacts related to hydrology and water quality.

### Hydrology, Water Quality, and Stormwater Runoff

The only project relevant to the cumulative analysis is the Barstow International Gateway (BIG) Project, located immediately west of the project site, within the City of Barstow. Development of this 4,300-acre project would result in construction of 9 million square feet of transload warehousing and an associated increase in impervious surface area, which would add new sources of stormwater runoff that could adversely affect surface water or groundwater quality. Potential soil erosion from the proposed project site and the BIG Project site could combine to cause potentially significant cumulative water quality impacts due to sedimentation of downstream water bodies. Cumulative development could potentially result in short-term erosion related impacts during construction and long-term erosion related to denuded soil, improper drainage, and lack of erosion control features at each cumulative project site. Similarly, incidental spills of petroleum products and hazardous materials during construction of the proposed project site and the BIG Project site could result in potentially significant cumulative water quality impacts.

Short-term erosion BMPs and spill control BMPs would be employed at the project site and the BIG Project site, consistent with NPDES construction related stormwater quality regulations, including the Construction General Permit. With respect to long-term operational water quality impacts, the City of Barstow is a co-permittee under the Waste Discharge Requirements for Small MS4 Discharges within the Mohave River Watershed (Order No. 2013-0001 DWQ, NPDES Permit No. CAS000004, effective July 1, 2013), also known as the Municipal NPDES Permit. As a result, the City is required to implement and enforce the requirements contained in the Municipal NPDES Permit, to control discharges to and from those portions of the MS4 over which it has jurisdiction, and to hold dischargers to the MS4 accountable for their contributions of pollutants and flows (City Code Section 15.14.020(c)). The City of Barstow is individually responsible for complying with the County's SWMP requirements including, but not limited to, establishing a stormwater management plan, implementing BMPs, conducting regular inspections, ensuring compliance with TMDLs and local stormwater ordinances, and filing annual reports and monitoring data to the State Water Board. Development would be required to comply with Barstow Code Chapter 15.14, Stormwater and Urban Runoff Pollution Control, which is intended to ensure water quality of receiving waters are healthy by reducing pollutants in stormwater discharges to the maximum extent practicable, regulating illicit connections and discharges and thereby reducing the level of contamination of stormwater and dry weather runoff into the MS4s. Stormwater runoff at the BIG Project site would be completed in compliance with provisions of the statewide NPDES Industrial General Permit, which regulates industrial stormwater discharges and authorized non-stormwater discharges from industrial facilities in California. In addition, as discussed in Impact 3.7-1, with implementation of mitigation measure MM-HYD-1, Water Quality Best Management Practices, potentially significant long-term operational water quality impacts at the proposed project site would be reduced to less than significant levels.

Every 2 years, the Lahontan RWQCB must re-evaluate water quality within its geographic region and identify those water bodies not meeting water quality standards. For those impaired water bodies, a TMDL must be prepared and implemented to reduce pollutant loads to levels that would not contribute to a violation of water quality standards.

All developments within the Mojave River Watershed are subject to the water quality standards outlined in the Mojave River Basin Plan and must comply with any established TMDLs. Currently, the Lower Mojave River is not an impaired water body. As a result, TMDLs have not been established for this portion of the river. However, the continuing review process would ensure that cumulative development within the watershed would not substantially degrade water quality. As such, water quality impacts associated with the proposed project in combination with impacts from the BIG Project would be less than cumulatively considerable.

With respect to increased runoff associated with increased impervious surfaces, all cumulative development for the BIG Project would be subject to existing regulatory requirements to minimize increases in stormwater runoff, consistent with the San Bernardino County Detention Basin Design Criteria (San Bernardino County 1987). Permanent stormwater infrastructure that would be constructed and operated include curb and gutter in roadways, underground stormwater conveyance infrastructure, inlets, and on-site basins. The BIG Project would be responsible for the design of storm drain facilities in accordance with the San Bernardino County Flood Control District requirements and would be required to comply applicable regulations, such as Chapter 15.14, Stormwater and Urban Runoff Pollutant Control, of the Barstow Code. Standard flood control requirements, such as the implementation of on-site basins to control on-site and off-site flooding and debris, would minimize the impacts of increased flows and volumes on downstream receiving waters. Similarly, proposed stormwater detention facilities for the proposed project would result in 100-year stormwater runoff rates less than existing conditions. As a result, stormwater runoff rate-related impacts associated with the proposed project in combination with impacts from the BIG project would be less than cumulatively considerable.

### Groundwater Supplies

The geographic context for the analysis of cumulative impacts associated with groundwater resources encompasses the Mojave River Groundwater Basin. Cumulative development associated with the BIG Project, located west of the project site, would result in an increase in water demand, which could have potentially significant cumulative impacts on groundwater resources in the basin, including a reduction in the amount of potable groundwater in storage. Groundwater analysis for the proposed project and the BIG Project considers the Basin as a whole and GSWC and the Mojave Water Agency (as a wholesale provider to GSWC) are managing the basin based on cumulative growth projections. Similar to the proposed project, the BIG Project is required to comply with regulations regarding water supply, including preparation of a WSA, pursuant to SB 610, prior to being approved by the City. A WSA was completed for the BIG project, and the November 2025 Public Review Draft Environmental Impact Report (City of Barstow 2025) concluded less than significant water supply impacts. The City coordinated with the Mojave Water Agency to accurately estimate projected water demands associated with the proposed General Plan update, including the BIG project. At proposed buildout, GSWC is projected to have a surplus based on the worst dry year conditions that would occur in 2045 during year five of multiple dry years (City of Barstow 2025). As a result, groundwater supply-related impacts associated with the proposed project in combination with impacts from the BIG project would be less than cumulatively considerable.

### Mitigation Measures

See MM-HYD-1, Water Quality Best Management Practices. No new mitigation measures are required. With implementation of MM-HYD-1, cumulative impacts would be **less than significant with mitigation.**

## 3.7.4 References

City of Barstow. 2025. City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report. Prepared by Placeworks and Kimley Horn, November 2025. State Clearinghouse Number: 2024020501.

DWR (California Department of Water Resources). 2004. Lower Mojave Groundwater Basin. Bulletin118. Accessed December 2025. https://data.ca.gov/dataset/californias-groundwater-bulletin-118.

DWR. 2025. *California's Groundwater: Bulletin 118 – Update 2025*. Accessed April 23, 2026. https://s3.amazonaws.com/og-production-open-data-cnra-892364687672/resources/888cc330-a01c-4f5d-8a10-d1ffab86db36/final_b118_calgw_update2025_statewide_ch1-7_web.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAJJIENTAPKHZMIPXQ%2F20260423%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20260423T162519Z&X-Amz-Expires=86400&X-Amz-SignedHeaders=host&X-Amz-Signature=3330a10f4abff9c9cb6656ec2618285e720a9e4373bfe289a96e5ef61a7a3dbe.

DWR. 2026. "Adjudicated Basin Annual Reporting – Mojave Basin." Accessed April 22, 2026. https://sgma.water.ca.gov/webgis/index.jsp?jsonfile=https%3a%2f%2fsgma.water.ca.gov%2fportal%2fresources%2fjs%2fabars%2fAbarsMasterMapConfig.js.

FEMA (Federal Emergency Management Agency). 2016. FEMA Flood Insurance Rate Map (FIRM) panel 06071C3915J, dated September 2, 2016. Accessed December 2025. https://msc.fema.gov/portal/search#searchresultsanchor.

Lahontan RWQCB (Regional Water Quality Control Board). 2002. *Lahontan Regional Water Quality Control Board Watershed Management Initiative*. Accessed December 2025. https://www.waterboards.ca.gov/lahontan/water_issues/programs/watershed_management/docs/final_02_mr25.pdf.

Lahontan RWQCB. 2019. *Draft Technical Staff Report/Environmental Document for Proposed Amendments to the Water Quality Control Plan for the Lahontan Region*. California Regional Water Quality Control Board, Lahontan Region. February 2019. Accessed December 2025, at https://www.waterboards.ca.gov/rwqcb6/water_issues/programs/basin_plan/docs/mojave_river/drft_rpt_mjve.pdf.

Lahontan RWQCB. 2021. *Water Quality Control Plan for the Lahontan Region, North and South Basins*. Effective March 31, 1995, with amendments effective 2021. Accessed December 2025. https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/2025/preface-contents.pdf.

Mojave River Watershed Group. 2003. Storm Water Management Program (SWMP) - Mojave River Watershed. Prepared by the City of Apple Valley, City of Hesperia, City of Victorville, and County of San Bernardino. August 2003. Accessed December 2025. https://www.waterboards.ca.gov/water_issues/programs/stormwater/swmp/mojave_swmp.pdf.

Mojave Water Agency. 2021. 2020 Urban Water Management Plan. Prepared by Tully & Young, May 27, 2021. Accessed December 2025. https://www.mojavewater.org/wp-content/uploads/2022/06/MWA2020UWMPFinal061621.pdf.

San Bernardino County. 1987. Detention Basin Design Criteria for San Bernardino County. Accessed January 20, 2026. https://lus.sbcounty.gov/wp-content/uploads/sites/48/PW/DETENTIONBASINDESIGN.pdf.

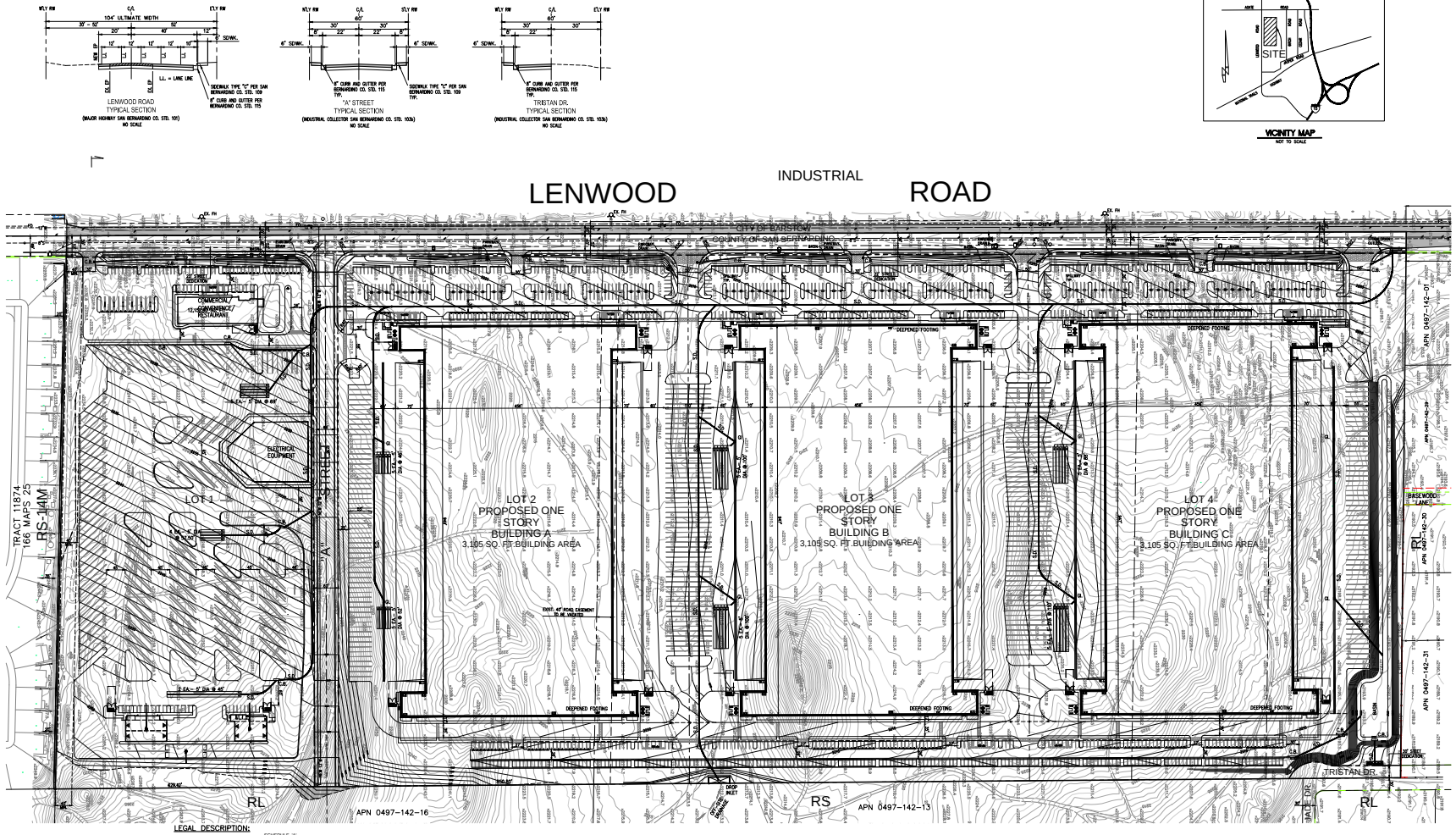
San Bernardino County. 2016. Mojave River Watershed Technical Guidance Document for Water Quality Management Plans. Water Quality Order No. 2013-0001-DWQ. April 4, 2016. Accessed December 2025. https://dpw.sbcounty.gov/wp-content/uploads/sites/87/docs/MojaveWatershedTechnicalGuidanceWaterQualityManagemenPlans.pdf.

SWRCB (State Water Resources Control Board). 2024. Final 2024 Integrated Report (CWA Section 303(d) List/305(b) Report) - Category 5, 2024 California 303(d) List of Water Quality Limited Segments. Accessed January 21, 2026. https://www.waterboards.ca.gov/water_issues/programs/tmdl/2023_2024state_ir_reports/apx-c-category-reports/category5_report.shtml.

USEPA (U.S. Environmental Protection Agency). 2026. Barstow Marine Corps Logistics Base, Barstow, CA, Cleanup Activities. Accessed April 23, 2026.

USGS (U.S. Geological Survey). 2025. “Mojave Groundwater Resources.” Accessed December 2025. https://ca.water.usgs.gov/mojave/detail_location.html.

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LEGAL DESCRIPTION:

SCHEDULE 'A'

THE LAND REFERRED TO IN THIS REPORT IS SITUATED IN AN UNINCORPORATED AREA KNOWN AS BARSTOW, THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL A:
THE SOUTHWEST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER OF SECTION 8, TOWNSHIP 9 NORTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE WEST 30 FEET FOR ROAD PURPOSES AS CONDEMNED TO THE COUNTY OF SAN BERNARDINO BY FINAL ORDER OF CONDEMNATION RECORDED NOVEMBER 24, 1986 AS INSTRUMENT NO. 86-355583, OFFICIAL RECORDS.

ALSO EXCEPT ALL URANIUM, THORIUM OR OTHER FISSIONABLE MATERIALS WITH THE RIGHT TO ENTER UPON SAID LAND TO PROSPECT FOR, MINE AND REMOVE THE SAME PURSUANT TO THE PROVISIONS OF THE ACT OF AUGUST 1, 1946 (60 STAT. 755) AS EXCEPTED AND RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA TO CHARLES RONALD ROUSE, RECORDED MARCH 28, 1955 IN BOOK 3653, PAGE 476, OFFICIAL RECORDS.

PARCEL B:
THE NORTHWEST ONE-QUARTER OF THE SOUTHWEST ONE-QUARTER OF SECTION 8, TOWNSHIP 9 NORTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THE WEST 30 FEET FOR ROAD PURPOSES AS CONDEMNED TO THE COUNTY OF SAN BERNARDINO BY FINAL ORDER OF CONDEMNATION RECORDED NOVEMBER 24, 1986 AS INSTRUMENT NO. 86-355583, OFFICIAL RECORDS.

ALSO EXCEPT ALL URANIUM, THORIUM OR OTHER FISSIONABLE MATERIALS WITH THE RIGHT TO ENTER UPON SAID LAND TO PROSPECT FOR, MINE AND REMOVE THE SAME PURSUANT TO THE PROVISIONS OF THE ACT OF AUGUST 1, 1946 (60 STAT. 755) AS EXCEPTED AND RESERVED IN THE PATENT FROM THE UNITED STATES OF AMERICA TO CHARLES RONALD ROUSE, RECORDED MARCH 28, 1955 IN BOOK 3653, PAGE 476, OFFICIAL RECORDS.

PARCEL C:
PARCELS 3 AND 4 OF PARCEL MAP NO. 8113, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 83, PAGES 51 AND 52 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

NOTES:
1. PROPOSED PROJECT IS DESIGNED FOR DEVELOPER BUILD OUT.
2. NO JOSHUA TREES LOCATED ON SITE.
3. PROJECT GROSS ACREAGE PER ALTA SURVEY PREPARED BY GEO LAND, JULY 2022 99.85 ACRES.

BUILDING SETBACKS / COMMUNITY INDUSTRIAL ZONE

| | |
|---|---|
| FRONT | 25 FT. |
| REAR | 10 FT. |
| SIDE-INTERIOR | 10 FT |
| SIDE - STREET | 25 FT |

PROPOSED LOT/PARCELS:

| | | |
|---|---|---|
| LOT NO. 1 | 790,566.99 S.F. / 18.15 ACRES | |
| LOT NO. 2 | 1,092,602.62 S.F. / 25.08 ACRES | |
| LOT NO. 3 | 1,057,666.57 S.F. / 24.28 ACRES | |
| LOT NO. 4 | 1,152,409.96 S.F. / 26.46 ACRESpa | |
| LENWOOD ROAD | 173,105.83 S.F. / 3.97 ACRES | |
| "A" STREET | 74,925.82 S.F. / 1.72 ACRES | |
| TRISTAN DRIVE | 8,299.42 S.F. / 0.19 ACRES | |

ENGINEER/REPRESENTATIVE:

TRANSTECH
413 MACKAY DRIVE
SAN BERNARDINO, CA. 92408
PH. (909) 384-7464

EXISTING ASSESSOR'S PARCEL NUMBERS:

| | |
|---|---|
| 0497-142-03-0-000 | 9.72 ACRES |
| 0497-142-04-0-000 | 9.54 ACRES |
| 0497-142-14-0-000 | 39.87 ACRES |
| 0497-142-15-0-000 | 40.13 ACRES |

ZONING:

RL: RURAL LIVING – EXISTING
IC2: COMMUNITY INDUSTRIAL – PROPOSED

OWNER/APPLICANT:

EVC PARTNERS, LLC
2410 FAIR OAKS BLVD, SUITE 110
SACRAMENTO, CA. 95825
PH. 916-320-3880

GRAPHIC SCALE 1" = 80'

Path: Z:\Projects\15054001\MAP\DOC\DOCUMENT.EIR

FIGURE 3.7-1
Drainage Plan
EV Charging Station and Logistics Facility

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# 3.8 Land Use and Planning

This section describes the existing conditions related to land use and planning, identifies associated regulatory requirements, evaluates potential project impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to project implementation of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project") in unincorporated San Bernardino County ("County"). Under the California Environmental Quality Act (CEQA), land use impacts relate to the environmental effects of physically dividing an established community or conflicting with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

CEQA Guidelines Section 15125(d) provides that the environmental setting of an environmental impact report (EIR) must discuss "any inconsistencies between the proposed project and applicable general plans and regional plans. Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or state Implementation Plan, area-wide waste treatment and water quality control plans, regional transportation plans, regional housing allocation plans…." Potential inconsistencies between the proposed project and planning documents specific to a particular environmental issue area, such as air quality or greenhouse gases, are addressed in the applicable section of this EIR. The reader is referred to the various technical sections in Chapter 3 for a discussion of any potential physical environmental effects and potential incompatibilities with applicable planning documents, depending on the type of environmental resource implicated by particular planning policies.

No comments specific to land use and planning were received during the scoping period for this EIR, although one commenter stated the Draft EIR should make a good faith effort to disclose the type and mix of light industrial uses that would likely occupy the proposed buildings. All scoping comment letters received are provided in Appendix A.

Primary sources referenced in this section include the following:

- Countywide Plan/Policy Plan (San Bernardino County 2020)
- County Development Code (Title 8 of the County Code)
- Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Plan (RTP/SCS; Connect SoCal) (SCAG 2024)

## 3.8.1 Environmental Setting

### Existing Land Uses, General Plan Designation, and Zoning

The 99.85-acre project site (Assessor Parcel Numbers 0497-142-03; 0497-142-04; 0497-142-14; and 0497-142-15) is located in San Bernardino County on Lenwood Road between California State Route 58 and Interstate 15. The project site is in the unincorporated County's North Desert Region within the City of Barstow ("City") Sphere of Influence. The site is undeveloped and evidence of dirt pathways/roadways and trash throughout the site indicates the informal or unauthorized use of the project site for overland vehicle travel for recreational purposes.

The project site is designated Rural Living in the Countywide Plan/Policy Plan (San Bernardino County 2020) and zoned Rural Living (RL). The project is requesting a Countywide Plan/Policy Plan Amendment from Rural Living to Limited Industrial and a Zoning Amendment from RL to Community Industrial (IC). See Chapter 2, Project Description, for Figures 2-2 and 2-3, which show the existing and proposed land use designation and zoning.

### Surrounding Land Uses

The area surrounding the project site to the west and east is characterized as undeveloped land, with a few rural residences located to the north. Across Lenwood Road to the west, land within the incorporated City is zoned Industrial (I) and designated General Industrial in the City's General Plan (City of Barstow 2015) and includes the planned Barstow International Gateway (BIG) project being undertaken by the BNSF Railway.[1] The project site abuts the High Desert Estates residential subdivision on the south, which is zoned Single Residential and designated Low Density Residential in the Countywide Plan/Policy Plan (San Bernardino County 2020). The closest school, Lenwood Elementary School, is located approximately 0.5 miles southeast of the project site in the unincorporated County. The closest public airport, Barstow-Daggett Airport, is located approximately 18 miles east of the project site in the unincorporated County.

## 3.8.2 Regulatory Setting

### Federal

There are no federal regulations pertaining to land use and planning that would apply to the project.

### State

#### California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is provided in the California Planning and Zoning Law, Government Code Sections 65000 et seq. Under state planning law, each city and county are required to adopt a general plan "for the physical development of the county or city, and any land outside its boundaries, which bears relation to its planning" (Government Code Section 65300). The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private. A general plan consists of several elements, including land use, circulation, housing, conservation, open space, noise, and safety; other elements may be included at the discretion of the jurisdiction that relate to the physical development of the county or city. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures. The San Bernardino Countywide Plan/Policy Plan (San Bernardino County 2020) serves as the general plan for the unincorporated County.

#### AB 98/SB 415

Assembly Bill (AB) 98 was signed into law in 2024, and subsequently revised by Senate Bill (SB) 415 in 2025 (CA Government Code Section 65098 et seq.). The statute enacted by these two measures establishes new requirements in the California Planning and Zoning Law (see above) with regards to warehousing and logistics developments. The requirements include land use buffers and design criteria for logistics developments over a certain size, and within a certain distance of sensitive receptors (such as residence, schools, and hospitals). The

[1] The BIG Specific Plan proposes an integrated rail facility and onsite transload warehouse center at the City's western extent.

law also requires cities and counties to amend the Circulation Element of their general plans to address truck routes within the jurisdiction. Section 65098.1.6 (a) of the Government Code states:

> Notwithstanding any other law, this chapter shall not apply to any logistics use development that was subject to a local entitlement process that began before September 30, 2024.

As the application for the proposed project was submitted on June 20, 2023 and deemed complete for processing on November 30, 2023 by the San Bernardino County Land Use Services Department/Planning, prior to the September 30, 2024 date included in Section 65098.1.6(a), it is noted that the requirements of AB 98/SB 415 do not apply to the proposed project.

## Regional

### Southern California Association of Government's Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated metropolitan planning organization for the Southern California region and is the largest metropolitan planning organization in the United States.

SCAG has developed Connect SoCal, the 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals (SCAG 2024). Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. Connect SoCal 2024 provides a policy framework for preparing local plans and handling issues of regional significance, such as land use and housing, open space and biological habitats, water, energy, air quality, solid waste, transportation, security and emergency preparedness, economy, and education. Connect SoCal 2024 also strives to achieve broader regional objectives such as leveraging new transportation technologies for efficient travel, and promoting conservation of natural lands. Connect SoCal 2024 advances regional planning by incorporating an integrated approach between SCAG, state and local governments, transportation commissions, resources agencies and conservation groups, the private sector, and the general public. SCAG's vision for the region in the year 2050 is "[a] healthy, prosperous, accessible and connected region for a more resilient and equitable future." Several goals are proposed to help the region achieve this vision. The following goals are applicable to the proposed project:

- **Mobility:** Build and maintain an integrated multimodal transportation network.
- **Communities:** Develop, connect and sustain livable and thriving communities.
- **Environment:** Create a healthy region for the people of today and tomorrow.
- **Economy:** Support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region.

## Local

### San Bernardino Countywide Plan/Policy Plan

The Countywide Plan/Policy Plan contains the long-term goals and policies that will guide County decisions, investments, and improvements toward achieving the Countywide Vision. It serves as the County's general plan for the unincorporated areas and includes policy direction for regional services the County administers in both incorporated and unincorporated areas.

The existing and proposed land use designations for the project are described in the Countywide Plan/Policy Plan as shown in Table 3.8-1 (San Bernardino County 2020):

**Table 3.8-1. Countywide Plan/Policy Plan Land Use Categories**

| Land Use Category | Density/Intensity Range | Primary Purpose | Description of Typical Uses |
|---|---|---|---|
| Rural Living (RL) | 1 unit per 2.5 acres max | ▪ Allow for rural residential development set in expansive areas of open space that reinforce the rural lifestyle while preserving the county's natural areas<br>▪ Minimize development footprint and maximize undeveloped areas<br>▪ Allow for cluster-type development to provide and preserve open space | ▪ Rural residential<br>▪ Small-scale, non-water-intensive, and incidental agricultural<br>▪ Public and quasi-public facilities such as parks, religious facilities, schools, sheriff's stations, and fire stations |
| Limited Industrial (LI) | 0.5 FAR max | ▪ Provide suitable locations for light or limited industrial activities where operations are totally enclosed in a structure and limited exterior storage is fully screened from public view<br>▪ Provide suitable locations for employee-intensive uses, such as research and development, technology centers, corporate offices, clean industry, and supporting retail uses<br>▪ Provide employment opportunities for residents in the surrounding area | ▪ Light industrial and manufacturing<br>▪ Wholesale, warehouse, and distribution<br>▪ Transportation services<br>▪ Agricultural support services<br>▪ Neighborhood-scale and community-scale energy facilities |

**Source:** San Bernardino County 2020, Table LU-1.
**Note:** FAR = Floor Area Ratio
The list of typical uses is not exhaustive and is intended to further clarify the purpose of each land use category. The exact uses permitted in each land use category is subject to the regulations of the underlying zoning district as described in the Development Code.

Relevant land use and planning policies adopted for the purpose of avoiding or mitigating an environmental effect from the Countywide Plan/Policy Plan are summarized below (San Bernardino County 2020). Policies that address environmental effects, but that do not guide land use decisions, are discussed in the applicable technical sections in Chapter 3 of this EIR.

Goal LU-2. Land Use Mix and Compatibility. An arrangement of land uses that balances the lifestyle of existing residents, the needs of future generations, opportunities for commercial and industrial development, and the value of the natural environment.

Policy LU-2.1. Compatibility with existing uses. We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.

Policy LU-2.3. Compatibility with natural environment. We require that new development is located, scaled, buffered, and designed for compatibility with the surrounding natural environment and biodiversity.

Policy LU-2.10. Unincorporated commercial development. We intend that new commercial development in the unincorporated areas serve unincorporated residential areas, tourists, and/or freeway travelers. We encourage new commercial development to be concentrated to enhance pedestrian circulation and reduce vehicular congestion and vehicle miles traveled, with new development directed into existing centralized areas when possible.

Goal LU-6. Amendments to the Policy Plan. Growth and development in the unincorporated county in a manner that requires few and infrequent amendments to the Policy Plan.

Policy LU-6.4. Industrial amendments near schools and parks. We approve Land Use Plan amendments for new industrial development only if they are at least one-half mile from an existing or planned public primary or secondary school or public park. We may waive this requirement for obsolete school or park sites or for industrial amendments submitted through a specific plan.

Goal TM-6. Airports. A network of local and regional airports that meet regional and local aviation needs.

Policy TM-6.4. Airport land use compatibility. We require proposed development in unincorporated areas to be consistent with applicable airport master plans, airport safety review areas, and military air installation compatible use zones. We may support proposed development in the influence area of County airports only when they are consistent with applicable airport master plans.

Goal NR-1. Air Quality. Air quality that promotes health and wellness of residents in San Bernardino County through improvements in locally-generated emissions.

Policy NR-1.1. Land use. We promote compact and transit-oriented development countywide and regulate the types and locations of development in unincorporated areas to minimize vehicle miles traveled and greenhouse gas emissions.

Goal NR-5. Biological Resources. An interconnected landscape of open spaces and habitat areas that promotes biodiversity and healthy ecosystems, both for their intrinsic value and for the value placed on them by residents and visitors.

Policy NR-5.1. Coordinated habitat planning. We participate in landscape-scale habitat conservation planning and coordinate with existing or proposed habitat conservation and natural resource

management plans for private and public lands to increase certainty for both the conservation of species, habitats, wildlife corridors, and other important biological resources and functions; and for land development and infrastructure permitting.

### San Bernardino County Development Code

The County Development Code implements the goals and policies of the General Plan by regulating land use within the unincorporated areas of the County. Each piece of property is within a "zone" or "land use zoning district," which describes the rules under which that land may be used. The existing and proposed zoning designations for the project are described in the County Development Code as follows:

- **Rural Living.** The RL land use zoning district provides sites for rural residential uses, incidental agricultural uses, and similar and compatible uses. Allowed uses, permit requirements, and planning and building standards are specified in Chapter 82.04 (Residential Land Use Zoning Districts).
- **Community Industrial.** The IC land use zoning district provides sites for light industrial uses such as light manufacturing uses, wholesale/warehouse services, contract/construction services, transportation services, agriculture support services, incidental commercial and accessory residential uses, and similar and compatible uses. Allowed uses, permit requirements, and planning and building standards are specified in Chapter 82.6 (Industrial and Special Purpose Land Use Zoning Districts).

## 3.8.3 Environmental Impacts and Mitigation Measures

### Methodology

The methodology applied to assess and evaluate impacts related to land use and planning is based on information obtained from review of existing and proposed land uses within the project vicinity and review of the project's potential for conflicts with the relevant portions of the following plans, policies, and regulations:

- SCAG's 2040–2050 RTP/SCS (Connect SoCal)
- San Bernardino Countywide Plan/Policy Plan
- San Bernardino County Development Code

Consistency with plans that are specific to a particular environmental issue area are discussed within the appropriate technical section(s) of this Draft EIR, including Mojave Desert Air Quality Management District air quality plans (Section 3.2, Air Quality) and the County's Greenhouse Gas Reduction Plan (Section 2.6, Greenhouse Gas Emissions) and Congestion Management Plan (Section 3.10, Transportation).

The CEQA Guidelines, Section 15125(d) (found in 14 California Code of Regulations 15000 et seq.), states that an EIR must discuss "any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans." An inconsistency with a general plan or policy would not necessarily create an environmental impact. For example, certain general plan policies are intended to address housing availability, socioeconomics, or employment; impacts related to these topics are not considered impacts to the environment under CEQA. Economic or social effects are not considered significant effects on the environment unless the social and/or economic changes are connected to physical environmental effects. Therefore, the significance determination for Impact 3.8-1 below is informed only by the project's potential to conflict with plans and policies adopted for the

purpose of avoiding or mitigating an environmental effect (plans and policies that are specific to a particular environmental issue area are discussed in the applicable technical sections in Chapter 3 of this EIR).

Ultimately, the determination of the project's consistency with the Countywide Plan/Policy Plan would be made by the County Board of Supervisors. The information provided in this section is meant to inform this decision. In addition, the Courts have recognized that, because general plans often contain numerous policies adopted to effect differing or competing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or arguably inconsistent with some specific policies within a given general plan (*Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 719). Furthermore, Courts strive to "reconcile" or "harmonize" seemingly disparate general plan policies to the extent reasonably possible (*No Oil*, *supra*, 196 Cal.App.3d at p. 244). The ultimate determination of general plan consistency for a proposed project often turns on whether the project is consistent with policies that are fundamental, mandatory, and specific. (*Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Supervisors* (1998) 62 Cal.App.4th 1332, 1341-1342.)

## Thresholds of Significance

The significance criteria used to evaluate project impacts to land use and planning are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to land use and planning would occur if implementation of the project would do any of the following:

(a) Physically divide an established community.

(b) Conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

## Issues Not Further Discussed

(a) The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying area. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community. The project site consists of undeveloped land that does not provide any means of access between communities or outlying areas. There are several rural residences to the north and the High Desert Estates residential subdivision to the south, but access between these communities via Lenwood Road would not be impacted or obstructed. Thus, no impact would occur, and this issue is not further discussed.

## Impact Analysis

### Impact 3.8-1. The project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

As previously discussed, the significance determination for this impact is informed only by the proposed project's consistency with plans and policies related to land use that were adopted for the purpose of avoiding or mitigating an environmental effect. Land use planning decisions can result in physical environmental impacts; for example, by designating existing agricultural lands for future urban development resulting in the loss of agricultural

resources, or by planning for urban development that would require new infrastructure, the construction of which could impact the environment.

Physical environmental impacts resulting from development of the project site are discussed in the applicable technical sections in Chapter 3 of this Draft EIR. The discussion in this section differs from the impact discussions in that only general land use plan or policy consistency issues are discussed, as opposed to a discussion of the physical impacts on the environment that could occur with implementation of the proposed project.

### Southern California Association of Government's Regional Transportation Plan/Sustainable Communities Strategy

Table 3.8-2 provides an analysis of the project's potential to conflict with applicable goals of the 2040–2050 RTP/SCS (Connect SoCal). As demonstrated in Table 3.8-2, the project is consistent with the RTP/SCS goals and is therefore supportive of SCAG's overall vision for the region. However, it should be noted that SCAG has no land use authority to adopt, approve, implement, or otherwise regulate local land use plans or projects identified in the region. Local governments reserve their land use authority and may incorporate, as appropriate, the recommended policies and strategies included in the RTP/SCS.

**Table 3.8-2. Project Consistency with 2040–2050 RTP/SCS Goals**

| Goal | Project Consistency |
|---|---|
| **Mobility:** Build and maintain an integrated multimodal transportation network. | **No conflict.** The project would support this goal by providing new infrastructure to accommodate emerging EV technologies and diversified mobility options. The project would serve a range of different electric vehicle charging needs, from light-duty vehicles to medium- and heavy-duty trucks. By providing a reliable and accessible energy source for EVs within the region, the project would support current and future EV demands and would promote the adoption of EV technologies, including in industries that typically rely on conventional sources of fuel (e.g., freight movement/distribution). The proposed logistics facility would also include EV charging spaces and would be located near key rail and transportation corridors including SR 58 and I-15. |
| **Communities:** Develop, connect and sustain livable and thriving communities. | **No conflict.** The project would increase connectivity within the community by adding sidewalks and bike racks along the Lenwood Road corridor, in accordance with County mobility policies. The project would develop a commercial building with ancillary uses including food service and other convenience options, allowing nearby residences to access these amenities with fewer/shorter trips. As stated in the project objectives, the project would also attract new businesses to the high desert portion of the County and thereby provide a more equal jobs-housing balance for the community. The project is located within a Priority Equity Community designated by SCAG but would not disproportionately burden the community with traffic, noise, or air quality impacts (as discussed in the appropriate technical sections in Chapter 3). |
| **Environment:** Create a healthy region for the people of today and tomorrow. | **No conflict.** The project would support the transition from conventional vehicles, which rely on nonrenewable sources of energy (i.e., fossil fuels), to EVs. By supporting technologies that reduce air pollutant emissions and greenhouse gas emissions, the project would further align the regional transportation network with sustainability goals and would contribute to the health and resiliency of local communities. The logistics facility would also include EV charging spaces, would be sited proximate to major |

**Table 3.8-2. Project Consistency with 2040–2050 RTP/SCS Goals**

| Goal | Project Consistency |
|---|---|
| | transportation corridors and other planned industrial and logistics uses, and would provide new employment opportunities adjacent to residential uses which would reduce vehicle miles traveled (VMT) per employee relative to existing conditions. |
| **Economy:** Support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region. | **No conflict.** The project would support economic development and facilitate job creation by establishing a new logistics development near existing or planned industrial and logistics uses. The project would strengthen the regional supply chain and would provide EV charging infrastructure to serve both existing and future demands within the region. |

### San Bernardino Countywide Plan/Policy Plan

This consistency analysis provides the reader with a general overview of whether the project is in harmony with the overall intent of the Countywide Plan/Policy Plan (general plan) goals and policies. The project would require a general plan amendment to change the land use classification from Rural Living to Light Industrial. As noted above, it is within the County Board of Supervisor's purview to ultimately decide if the proposed project, including the change in land use, is consistent or inconsistent with applicable general plan goals or policies. The discussion in this EIR regarding general plan consistency represents the best attempt of County staff to advise the County Board of Supervisors as to whether the proposed project is consistent overall with applicable general plan goals and policies. Based on the evaluations contained in this EIR, including Table 3.8-3 below, the proposed project is consistent with the Countywide Plan/Policy Plan. Absent any indication to the contrary, certification of the EIR will be indicative of agreement with the conclusions in the table.

**Table 3.8-3. Project Consistency with the Countywide Plan/Policy Plan**

| Policy Number | Policy | Consistency Determination |
|---|---|---|
| **Goal LU-2: Land Use Mix and Compatibility.** An arrangement of land uses that balances the lifestyle of existing residents, the needs of future generations, opportunities for commercial and industrial development, and the value of the natural environment. | | |
| LU-2.1 | **Compatibility with existing uses.** We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development. | **No conflict.** The project site is located across from land zoned and designated for industrial uses including the planned BIG project being undertaken by the BNSF Railway Company. The project would be screened from surrounding residential developments with a 6-foot-tall masonry wall along the north, east, and south sides of the project site (if the adjacent residential land uses on those sides are zoned at the time of project development with a zoning designation that would require such a wall be constructed, per the County's Development Code). A portion of 8-foot-tall masonry wall is proposed along the southern boundary of |

## Table 3.8-3. Project Consistency with the Countywide Plan/Policy Plan

| Policy Number | Policy | Consistency Determination |
|---|---|---|
| | | the project site adjacent to the High Desert Estates subdivision. |
| LU-2.3 | **Compatibility with natural environment**. We require that new development is located, scaled, buffered, and designed for compatibility with the surrounding natural environment and biodiversity. | **No conflict.** The project incorporates landscaping and architectural treatments intended to reduce visual massing and blend with the existing developed context. The project has been designed such that the buildings' colors and tones would be neutral and would not contrast with the natural desert landscape. The project's landscaping plan would include a mix of drought-tolerant ornamental trees, shrubs and groundcovers suited to the local environment planted along the project site boundary adjacent to Lenwood Road, along driveways, at the logistic building entrances, and around parking areas. |
| LU-2.10 | **Unincorporated commercial development.** We intend that new commercial development in the unincorporated areas serve unincorporated residential areas, tourists, and/or freeway travelers. We encourage new commercial development to be concentrated to enhance pedestrian circulation and reduce vehicular congestion and vehicle miles traveled, with new development directed into existing centralized areas when possible. | **No conflict.** The project is located in an area convenient for freeway travelers and would be located adjacent to other planned industrial development, including the BIG project. This proximity creates a regional cluster of logistics services, which aligns with the intent to direct development toward areas with existing or planned infrastructure rather than isolated locations. The EV chargers in the EV charging station and the food and retail uses contained within the commercial building in the EV charging station would also serve local residents. |
| **Goal LU-6: Amendments to the Policy Plan.** Growth and development in the unincorporated county in a manner that requires few and infrequent amendments to the Policy Plan. | | |
| LU-6.4 | **Industrial amendments near schools and parks.** We approve Land Use Plan amendments for new industrial development only if they are at least one-half mile from an existing or planned public primary or secondary school or public park. We may waive this requirement for obsolete school or park sites or for industrial amendments submitted through a specific plan. | **No conflict.** The closest school, Lenwood Elementary School, is located approximately 0.5 miles southeast of the project site in the unincorporated County. |
| **Goal TM-6: Airports.** A network of local and regional airports that meet regional and local aviation needs. | | |
| TM-6.4 | **Airport land use compatibility.** We require proposed development in unincorporated areas to be consistent with applicable airport master plans, airport safety review areas, and military air installation compatible use zones. | **No conflict.** The closest public airport, Barstow-Daggett Airport, is located approximately 18 miles east of the project site. The project would not conflict with the applicable airport master plan. |

**Table 3.8-3. Project Consistency with the Countywide Plan/Policy Plan**

| Policy Number | Policy | Consistency Determination |
|---|---|---|
| | We may support proposed development in the influence area of County airports only when they are consistent with applicable airport master plans. | |
| **Goal NR-1: Air Quality.** Air quality that promotes health and wellness of residents in San Bernardino County through improvements in locally-generated emissions. | | |
| NR-1.1 | **Land use.** We promote compact and transit-oriented development countywide and regulate the types and locations of development in unincorporated areas to minimize vehicle miles traveled and greenhouse gas emissions. | **No conflict.** The project would support the transition from conventional vehicles to EVs, which would further align the regional transportation network with sustainability goals related to greenhouse gas emissions. The project would include new pedestrian and bicycle infrastructure (e.g., a sidewalk, bike racks), thereby expanding non-motorized access to existing and future neighborhoods, commercial, and employment centers in the Lenwood area. The project would also provide new employment opportunities in the area, thereby reducing VMT per employee relative to existing conditions. The proposed commercial building, which would include food service and other convenience options, would allow nearby residences to access these amenities with shorter trips. |
| **Goal NR-5: Biological Resources.** An interconnected landscape of open spaces and habitat areas that promotes biodiversity and healthy ecosystems, both for their intrinsic value and for the value placed on them by residents and visitors. | | |
| NR-5.1 | **Coordinated habitat planning.** We participate in landscape-scale habitat conservation planning and coordinate with existing or proposed habitat conservation and natural resource management plans for private and public lands to increase certainty for both the conservation of species, habitats, wildlife corridors, and other important biological resources and functions; and for land development and infrastructure permitting. | **No conflict.** There are no adopted habitat conservation plans or natural communities conservation plans that include the project site or are near the project site. Potential impacts to wildlife from project construction would be avoided or substantially reduced by feasible mitigation measures. |

As discussed above, the proposed project would not conflict with plans or policies related to land use that were adopted for the purpose of avoiding or mitigating an environmental effect. The impact would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

### Cumulative Impacts

Impact 3.8-2 The proposed project would not contribute to a significant cumulative impact related to land use.

Past, present and reasonably foreseeable cumulative projects may conflict with established land use and planning documents and land use policies; however, such conflicts are typically project- or site-specific and are not additive effects. Furthermore, the BIG project is under the jurisdiction of the City of Barstow and therefore would not create conflicts with the County's General Plan. Therefore, the project would result in **no impact.**

### Mitigation Measures

No mitigation measures are required.

## 3.8.4 References

City of Barstow. 2015. 2015 - 2020 General Plan and Master Environmental Impact Report. https://www.barstowca.org/departments/community-development-department/planning/general-plan-and-master-environmental-impact-report/-fsiteid-1#!/

San Bernardino County. 2020. Countywide Plan Policy Plan. https://countywideplan.sbcounty.gov/policy-plan/.

SCAG (Southern California Association of Governments). 2024. Final Connect SoCal 2024. https://scag.ca.gov/sites/default/files/2024-05/23-2987-connect-socal-2024-final-complete-040424.pdf

# 3.9 Noise

This section describes the existing conditions related to noise and vibration, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to project implementation of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

Comments received in response to the Notice of Preparation (NOP) include concerns about noise in close proximity to residential areas and the need for adequate sound barriers and/or other noise reduction measures. All comments in response to the NOP are included in Appendix A.

The noise analysis is based on the Noise Technical Memorandum prepared for the proposed project, included as Appendix I.

## 3.9.1 Environmental Setting

### Noise and Vibration Characteristics

#### Noise

Although the terms may be used interchangeably in the right context, "sound" is defined as any gas or fluid pressure variation detected by the human ear, and "noise" is unwanted sound. The preferred unit for measuring sound is the decibel (dB), which expresses the ratio of sound pressures to a reference value logarithmically and enables a wide range of audible sounds to be evaluated and discussed conveniently. On the low end of this range, zero dB is not the absence of sound energy, but instead corresponds approximately to the threshold of average healthy human hearing; on the upper end, 120–140 dB corresponds to an average person's threshold of pain.

The human ear is not equally responsive to all frequencies of the audible sound spectrum. An electronic filter is normally used when taking noise measurements that de-emphasizes certain frequencies in a manner that mimics the human ear's response to sound; this method is referred to as A-weighting. Sound levels expressed under the A-weighted system are sometimes designated dBA. All sound levels discussed in this report are A-weighted.

The equivalent continuous sound level ($L_{eq}$) is a single dB value which, if held constant during the specified time period, would represent the same total acoustical energy of a fluctuating noise level over that same time period; this is also known as the "average" sound level. $L_{eq}$ values are commonly expressed for periods of 1 hour, but longer or shorter time periods may be specified. Another descriptor is maximum sound level ($L_{max}$), which is the greatest sound level measured during a designated time interval or event. The minimum sound level ($L_{min}$) is the lowest measured level and often called the floor of a measurement period. The statistical sound level ($L_{xx}$) is a statistical value corresponding with the decibel level exceeded for a cumulative percent (XX%) over a defined time period. The "L-fifty" value ($L_{50}$) is a decibel level exceeded 50% during a given measurement period (such as 30 minutes out for an hour).

Unlike the $L_{eq}$, $L_{max}$, and $L_{min}$ metrics, equivalent day–night sound level ($L_{dn}$) and community noise equivalent level (CNEL) descriptors always represent 24-hour periods; these metrics differ from a 24-hour $L_{eq}$ value because they apply a time-weighted factor designed to emphasize noise events that occur during the non-daytime hours (when speech and sleep disturbance is of more concern). "Time weighted" refers to the fact that $L_{dn}$ and CNEL penalize

noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m. to 7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m. to 10:00 p.m.) is penalized by adding 5 dB to the actual levels, and nighttime (10:00 p.m. to 7:00 a.m.) noise is penalized by adding 10 dB to the actual levels. $L_{dn}$ differs from CNEL in that the daytime period is longer (defined instead as 7:00 a.m. to 10:00 p.m.), thus eliminating the dB adjustment for the evening period. $L_{dn}$ and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5–1 dB and are considered equivalent by many jurisdictions.

### *Exterior Noise Attenuation*

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites (Caltrans 2020). Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling of distance, for hard and soft sites, respectively (Caltrans 2020). Sound levels can also be attenuated by human-made or natural barriers. For the purpose of a sound attenuation discussion, a hard or reflective site does not provide any excess ground-effect attenuation and is characteristic of paved ground surfaces, as well as very hard-packed soils. An acoustically soft or absorptive site is characteristic of unpaved loose soil or vegetated ground.

For example, in the case of a 65 dBA noise level measured at 25 feet from a roadway centerline (a line source) with hard-packed shoulder (a hard site), an attenuation rate of 3 dBA per doubling of distance would apply; the traffic noise would diminish to 62 dBA at 50 feet from the centerline and to 59 dBA at 100 feet from the centerline. On a construction site (point source) where there is open ground with or without vegetation between the construction equipment and receiver (soft site), an attenuation rate of 7.5 dBA per doubling of distance would apply; the construction equipment noise, measured as 85 dBA at 50 feet from the construction equipment, would diminish to 77.5 dBA at 100 feet from the source and to 70 dBA at 200 feet from the source.

## Vibration

Per the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual (Caltrans 2020), vibration is the periodic oscillation of a medium or object. Vibration can be described in terms of displacement, velocity, or acceleration. Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be experienced by building occupants as perceptible vibration. It is also common for groundborne vibration to cause windows, pictures on walls, or items on shelves to rattle; this transfer of vibration energy in the ground to structures resulting in audible sound is termed groundborne noise. The metric for groundborne noise is the vibration decibel, written VdB. Although groundborne noise in structures from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings.

Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal and is expressed in inches/second (in/sec). PPV is most frequently used to describe vibration impacts to buildings but can also be used to quantify vibration annoyance potential for humans. Caltrans has established a human annoyance vibration threshold of 0.24 in/sec PPV (distinctly perceptible level) for construction-related vibration levels (Caltrans 2020).

The Caltrans threshold for potential damage to commercial buildings and newer residential structures is 0.5 in/sec PPV (Caltrans 2020), and for older buildings (historic structures), the threshold is 0.2 in/sec PPV.

## Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, long-term assisted or skilled nursing facilities, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise.

Sensitive receptors in the general vicinity of the project site include suburban and rural residences adjoining the site to the south and located 250 and 1,700 feet to the north and east of the project boundary, respectively.

## Existing Noise Conditions

Four investigator-attended short-term (15-minute) sound pressure level (SPL) measurements and data collected from one unattended long-term (24-hour duration) SPL monitor were conducted as part of a field survey on May 30 and 31, 2024, to quantify and characterize outdoor background sound levels in the vicinity of the project site. The short-term SPL measurement position (ST-1) was conducted in front of residences to the south of the project and was selected to evaluate the sound environment at residences to the south and set back from Lenwood Road. Measurement ST-2 was set back 50 feet from Lenwood Road and was selected to evaluate the sound environment near Lenwood Road. Site ST-3 was located north of the project site, along Agate Road, and was selected to capture sound levels generated at residences to the north. Location ST-4 was situated to the east of the project site, along Birch Road, and was selected to characterize the sound environment at the residences to the east. Long-term SPL monitor LT-1 was located at the southeastern corner of the site and was selected to document the sound environment at the nearest residences over a full diurnal period and resulted in a CNEL of 57 dBA. The primary sound sources at all locations included local and distant vehicular traffic, biogenic sounds (birds), and residential sounds (air conditioning units, conversations, barking dogs). See Figure 3.9-1 for sound measurement locations. Table 3.9-1 summarizes the results of the short-term sound measurements. Detailed sound level measurement data are included in Appendix I.

**Table 3.9-1. Short-Term (15-minute) Sound Level Monitoring Results, May 30, 2024**

| | Measurement Location | Measurement Period (hh:mm) | Primary Noise Source(s) | $L_{eq}$ (dBA) |
|---|---|---|---|---|
| ST-1 | Front of 24958 Camino Del Norte | 8:32 a.m.– 8:47 a.m. | Occasional local traffic, distant residential, biogenic, and traffic | 50 |
| ST-2 | 50 feet from center of Lenwood Road | 9:00 a.m.–9:15 a.m. | Vehicular traffic, biogenic | 53 |
| ST-3 | 35 feet from center of Agate Road at 25043 Agate Road | 9:27 a.m.–9:42 a.m. | Vehicular traffic, distant mechanical and residential | 53 |
| ST-4 | 25 feet from center of Birch Road at 34906 Birch Road | 9:59 a.m.–10:14 a.m. | Occasional local traffic, distant residential, biogenic, and traffic | 49 |

## 3.9.2 Regulatory Setting

### Federal

There are no federal noise standards that would directly regulate noise during construction and operation of the project.

### State

#### Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a Noise Element in a General Plan, which shall identify and appraise the noise problems in the community. The Noise Element shall also recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for the following sources:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Aviation and airport-related operations
- Local industrial plants
- Other ground stationary noise sources contributing to the community noise environment

The topic of noise is addressed in the Hazards Element of the San Bernardino County Countywide Plan/Policy Plan.

#### California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. The guidelines are advisory in nature. Local jurisdictions, including the Town, have the responsibility to set specific noise standards based on local conditions.

#### California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual, the California Department of Transportation (Caltrans) recommends a vibration velocity threshold of 0.2 ips PPV (Caltrans 2020b) for assessing "annoying" vibration impacts to occupants of residential structures. Although this Caltrans guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the local jurisdictional level. Similarly, thresholds to assess building damage risk due to construction vibration vary with the type of structure and its fragility but tend to range between 0.3 ips and 0.4 ips PPV for typical residential structures (Caltrans 2020b).

## Local

### San Bernadino Countywide Plan/Policy Plan – Hazards Element

The County Plan includes the following policies under Goal HZ-2 "Human-generated Hazards" that pertain to noise considerations (San Bernardino County 2022) applicable to the project:

> Policy HZ-2.7 Truck delivery areas. We encourage truck delivery areas to be located away from residential properties and require associated noise impacts to be mitigated.

> Policy HZ-2.9 Control sound at the source. We prioritize noise mitigation measures that control sound at the source before buffers, soundwalls, and other perimeter measures.

### San Bernardino County Noise Ordinance

Chapter 7 of the San Bernardino County Code of Ordinances (County Code), Noise Control and Abatement, regulates noise in the unincorporated area of the County "to promote the public health, comfort, and convenience of its inhabitants and visitors" (San Bernardino County 2019). Section 24.0704 identifies that Section 83.01.080 of the County Code quantifies acceptable exterior noise levels, which appear below in Tables 3.9-2 and 3.9-3 for stationary and mobile sources, respectively. Additionally, section 24.0706(d) considers construction activity a "special sound source" for which, if occurring between the hours of 7:00 p.m. and 7:00 a.m., would constitute a violation.

**Table 3.9-2. San Bernardino County Exterior Noise Standards – Stationary Sources**

| Affected Land Uses (Receiving Noise) | Stationary Sources – Hourly $L_{eq}$ (dBA) | |
|---|---|---|
| | Day | Night |
| Residential | 55 | 45 |
| Professional Services | 55 | 55 |
| Other Commercial | 60 | 60 |
| Industrial | 70 | 70 |

**Source:** San Bernadino Code of Ordinances 83.01.080(c)(1), Table 83-2 (County of San Bernardino 2014).

**Table 3.9-3. San Bernardino County Exterior Noise Standards –Mobile Sources**

| Affected Land Uses (Receiving Noise) | Mobile Sources – $L_{dn}$ or CNEL (dBA) | |
|---|---|---|
| | Exterior | Interior |
| Residential (single and multi-family, duplex, mobile homes) | 60 | 45 |

**Source:** San Bernadino Code of Ordinances 83.01.080(d), Table 83-3 (County of San Bernardino 2014).
**Notes:** $L_{dn}$ = day-night sound level, CNEL = community noise equivalent level.

For purposes of this noise assessment, it is assumed that Section 83.01.080(d) noise standards for "adjacent mobile noise sources" relate to offsite roadway traffic and would not pertain to the intermittent occurrence of low-speed movements of trucks or passenger vehicles on the project site, such as those utilizing the proposed EV charging stations. Instead, noise from these sources are evaluated herein as part of the aggregate project operations sound emission to the offsite community and assessed for conformance with respect to the stationary noise source standards shown in Table 3.9-2. The exterior limit shown in Table 3.9-3 would apply to noise from project-attributed

newly added roadway traffic flows on Lenwood Road as received by the adjoining "noise impacted area", as defined by Section 83.01.080(b), comprising the nearest homes of the High Desert Estates residential community.

Sections 83.01.080(g) and 83.01.090(c) of the County Code exempt temporary construction, maintenance, repair, or demolition activities occurring between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays, from the County's noise and vibration limits.

## 3.9.3 Environmental Impacts and Mitigation Measures

### Methodology

#### Construction Noise

One of the most extensive and widely used databases for sound levels from motorized or powered construction equipment is the Noise Source Database developed under National Cooperative Highway Research Program 25-49 (NCHRP 25-49), Development of a Highway Construction Noise Prediction Model (NASEM 2022). While the focus of data compilation was for equipment that would typically be employed for the construction of transportation facilities, the list is comprehensive enough to be useful in assessing sound levels for nearly every activity for which powered equipment is used. Table 3.9-4 provides a list of the maximum sound levels generated by various powered equipment that could be associated with construction of the project.

**Table 3.9-4. Selected Powered Equipment Noise Emission Levels**

| Equipment | Average Sound Level (dBA $L_{eq}$) – 50 feet from Source | Maximum Sound Level (dBA $L_{max}$) – 50 feet from Source |
|---|---|---|
| Air Compressor | 66 | 67 |
| Aerial Lift (Man Lift) | 72 | 73 |
| Backhoe | 76 | 84 |
| Compactor (Plate) | — | 75 |
| Compactor (Roller) | 82 | 83 |
| Concrete Mixer | 81 | 82 |
| Concrete Saw | 85 | 88 |
| Crane, Mobile | 74 | 76 |
| Dozer | 80 | 86 |
| Forklift | — | 88 |
| Generator | 67 | 68 |
| Grader | — | 79 |
| Horizontal Bore Drill | 87 | 88 |
| Loader | 72 | 81 |
| Paving - Asphalt | — | 83 |
| Paving - Concrete | 85 | 88 |
| Pump | 73 | 74 |
| Scraper | — | 92 |
| Flatbed Truck | — | 74 |
| Welding Machine | 71 | 72 |

**Source:** NASEM 2022.

**Notes**: dBA = A-weighted decibel; $L_{eq}$ = average noise level equivalent; $L_{max}$ = maximum instantaneous noise level; — = Equipment without average ($L_{eq}$) noise levels are non-stationary and best represented only by maximum instantaneous noise level ($L_{max}$).

The equipment sound levels presented in Table 3.9-4 include both average ($L_{eq}$) and maximum ($L_{max}$) sound levels, measured at a distance of 50 feet using a "slow" response time constant (1 second). Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time. Noise emissions from the construction of the project were estimated based upon default construction scenario information provided by the California Air Resources Board (CARB) California Emissions Estimator Model (CalEEMod) (Version 2022.1.1) for the type and size of proposed development and included phasing, equipment mix, and vehicle trips. The construction equipment mixes used for estimating the project-generated construction noise emissions are shown in Appendix I.

### *Construction Equipment Inventory*

CalEEMod was used to identify the construction equipment anticipated for development of the project, including earthwork, utility trenching and equipment installation, and paving activities. The equipment list is based upon the detailed project description; CalEEMod identified the anticipated equipment shown in Table 3.9-5 for each phase of the project construction.

## Table 3.9-5. Construction Equipment Per Phase

| Construction Phase (Duration) | On Site Equipment Types (and Quantities) | Vehicle Type (One-way Trip Quantities per Day) |
|---|---|---|
| Site Preparation | Dozers (3), Backhoe (4) | Autos (18), Vendor Trucks (2) |
| Grading | Graders (1), Excavator (2), Scraper (2), Dozer (1), Backhoes (2) | Autos (20), Vendor Trucks (2) |
| Underground Utilities | Excavator (4), Trencher (1), Trucks (4), Plate Compactor (3), Loader (1), Skid Steer Loader (4) | Autos (30), Vendor Trucks (4) |
| Building Construction | Cranes (1), Generators (1), Forklifts (3), Backhoes (3), Welders (1) | Autos (150), Heavy Trucks (60) |
| Paving | Pavers (2), Paving equipment (2), Rollers (2) | Autos (16), Vendor Trucks (2) |
| Architectural Coating | Air Compressors (1) | Autos (30), Vendor Trucks (4) |
| Fine Grading | Graders (1), Excavator (2), Scraper (2), Dozer (1), Backhoes (2) | Autos (70), Vendor Trucks (8) |

**Note:** The construction vehicle trip estimates were provided by conversations with a local construction company with substantial experience with similar projects in the region. The trip estimates are lower than those used in the air quality analysis (Chapter 3.2, Air Quality) which used the more conservative CalEEMod default values.

With the project construction equipment identified in Table 3.9-5 above, an analysis was performed with a Microsoft Excel–based noise prediction model using the National Cooperative Highway Research Program reference data shown in Table 3.9-4. Input variables include the equipment type (backhoe, crane, truck, etc.), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of each hour the equipment typically works), and the distance from the sensitive receptor. Refer to Appendix I for the construction modeling inputs and results. Construction noise levels were predicted at the nearest sound-sensitive land uses (i.e., residences) in each direction from the project site, based on the distance between the closest project construction boundary and these residences. Aggregate sound emissions from project construction activities, broken down by sequential phase of

construction, were predicted for the worst-case construction activity occurring along the closest construction boundary to the off-site closest sensitive receptors.

Construction activities occurring between 7:00 a.m. and 7:00 p.m. are exempt from the County's noise limits per Section 83.01.080(g)(3) of its code. Noise-sensitive uses in the general vicinity of the project site include suburban and rural residences adjoining the site to the south and located 250 and 1,700 feet to the north and east of the project boundary, respectively. The distance from the center of the site to the nearest residences is about 1,600 feet. Using the provided construction information and the distance identified from the edge of a future construction zone boundary to the closest receivers, the construction noise model was used to predict sound levels from on-site construction activities.

## Operational Noise

### *On-site Operational Noise*

Sound modeling of project operations was conducted in accordance with relevant algorithms and reference data from International Organization of Standardization (ISO) 9613-2, Acoustics – Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation, implemented using Datakustik's CadnaA software application. The CadnaA model takes into account source sound power levels, surface reflection and absorption, atmospheric absorption, geometric divergence, meteorological conditions, walls, barriers, berms, and terrain. The project area was modeled with a ground acoustical absorption factor "G" equal to 0.8 to represent a desert floor with loose sand and some vegetation. A temperature of 10°C with 70% relative humidity was used. No attenuation due to foliage was included.

Sound sources modeled for the project were major producers of continuous-type noise generation, which include heating, ventilation, and air conditioning (HVAC) units for the three warehouse buildings (98 dBA sound power level each) and one commercial building (72 dBA), the truck wash (97 dBA), two transformers (72 dBA each), four battery storage units (85 dBA each), four prepackaged wastewater treatment plants[1] (71 dBA each), and 45 electric vehicle charging units at the truck hub, including fast charging units (80 dBA each) and 8 light duty (automobile) charging units at the commercial building. The project also proposes Level 2 EV chargers throughout the employee parking spaces at the logistics center. These are not anticipated to generate sound levels that would be perceptible off-site and are therefore not included in the modeling. The HVAC reference sound levels were calculated based on the building square footage and usage and manufacturer sound power level data (see Appendix I) and the other equipment levels were based on data from Dudek files with similar equipment that is anticipated to be installed for this project (Dudek 2026). Additionally, 35 trucks traveling on-site along the site's truck route to the warehouse and 132 truck trips along the truck service route were included, as this is the maximum on-site truck volume that is anticipated to occur. These truck volumes were assumed to occur for both daytime and nighttime hours, although it is likely that nighttime truck trips would be lower.

There is an existing 6-foot-high sound wall located at the southern project boundary. A 6-foot-tall masonry wall is proposed along the north and east sides of the project site and an additional 8-foot-tall masonry wall, approximately 200 feet long, is proposed along the western portion of the southern boundary of the project site. These walls were included in the sound propagation modeling for project operations.

[1] A sewer connection to the City of Barstow is the preferred method for addressing project wastewater. However, on-site treatment is considered as an option if City service is infeasible, and is therefore analyzed here.

Sound-sensitive uses in the general vicinity of the project site include suburban and rural residences adjoining the site to the south and located 250 and 1,700 feet to the north and east, respectively. Sound modeling included multiple discrete off-site receiver locations. In addition, a map of predicted iso-pleths, depicted as color-coded area regions representing 5-dB-wide decrements of sound propagation, was calculated across a surface, vertically parallel with and 1.5 meters (5 feet) above modeled topography and across an area spanning the project and its immediate surroundings.

#### *Off-site Operational Traffic Noise*

Using California Department of Transportation (Caltrans) guidance, the average daily traffic (ADT) associated with introduction of the project for the segment of Lenwood Drive adjacent to the High Desert Estates residential community and immediately south of Project Driveway 8 was estimated to be ten times the peak hour volumes as appearing in Figure 12 of the Local Traffic Assessment (LTA) (Dudek 2025, included as Appendix L of this EIR). Furthermore, and consistent with Caltrans guidance as a "typical case" (Caltrans 2013) and the LTA and for purposes of predicting CNEL at 50 feet perpendicular distance from the roadway, this analysis assumes 85% of the ADT occurs during daytime hours (7:00 a.m. to 10:00 p.m.) and 15% during the nighttime hours (10:00 p.m. to 7:00 a.m.). Worksheets accompanying this memorandum as Attachment C show these and other input parameters as part of traffic noise prediction for both the peak hour morning and peak hour afternoon cases.

### Vibration

Construction activity can result in varying degrees of ground vibration at local receptors, depending on the equipment and methods used, distance to the affected structures, and soil type. Caltrans has been assembling data for groundborne vibration levels generated by heavy construction equipment operation during the building of transportation projects for many years. The vibration levels from use of such equipment are representative for other types of construction efforts, not just transportation projects, and are therefore widely employed to assess vibration levels from heavy equipment use for any effort. According to Caltrans (2020), the most important equipment relative to generation of vibration, and the vibration levels produced by such equipment, is illustrated in Table 3.9-6.

**Table 3.9-6. Vibration Velocities for Typical Construction Equipment**

| Equipment | PPV at 25 Feet (Inches Per Second) |
|---|---|
| Vibratory Roller | 0.210 |
| Large Bulldozer | 0.089 |
| Loaded Trucks | 0.076 |
| Small Bulldozer | 0.003 |

**Source**: Caltrans 2020.
**Note**: PPV = peak particle velocity; VdB = vibration decibel.

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in Caltrans guidance (Caltrans 2020). The following equation is used to calculate PPV at any distance of interest from the operating construction equipment.

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.1}$$

In the above equation, $PPV_{rcvr}$ is the predicted vibration velocity at the receiver position, $PPV_{ref}$ is the reference value at 25 feet from the vibration source (as listed in Table 3.9-6), and D is the actual horizontal distance to the receiver.

## Thresholds of Significance

The significance criteria used to evaluate project impacts related to noise are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to noise would occur if implementation of the project would do any of the following:

(a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

(b) Result in generation of excessive groundborne vibration or groundborne noise levels.

(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to noise.

## Issues Not Further Discussed

(c) There are no private or public airports within 2 miles of the site and the project site would not expose construction workers or operations employees to substantial airport noise. Thus, there would be no impact and this issue is not further discussed.

## Impact Analysis

### Impact 3.9-1

The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

### Construction

#### *On-site Construction Noise Assessment*

The construction noise was modeled at distances representative of the closest noise-sensitive receptors to the project site. The results are summarized in Table 3.9-7.

**Table 3.9-7. Construction Noise Levels, Worst-Cases**

| Task/Activity | Sound Level When Adjacent to Residence (50 feet) | Sound Level from Center of Site to Closest Residence (1,600 feet) |
|---|---|---|
| | $L_{eq\ 8hr}$ | $L_{eq\ 8hr}$ |
| Site Preparation | 87 | 56 |
| Grading | 92 | 62 |
| Underground Utilities | 85 | 55 |

**Table 3.9-7. Construction Noise Levels, Worst-Cases**

| Task/Activity | Sound Level When Adjacent to Residence (50 feet) | Sound Level from Center of Site to Closest Residence (1,600 feet) |
|---|---|---|
| | $L_{eq\ 8hr}$ | $L_{eq\ 8hr}$ |
| Building Construction | 90 | 60 |
| Paving | 92 | 62 |
| Architectural Coating | 66 | 36 |
| Fine Grading | 92 | 62 |

**Note:** $L_{eq\ 8hr}$ = average noise level equivalent over an 8-hour period.

Table 3.9-7 presents the results of the construction noise prediction, assuming all equipment is simultaneously operating along the project site boundary closest to the identified receiver and assuming an average sound level with equipment operating at the center of the site. As indicated in Table 3.9-7, worst-case construction noise levels would range from 66 to 92 dBA $L_{eq\ 8hr}$. However, this scenario is highly unlikely as construction is unlikely to be co-located at the worst-case location for an entire 8-hour period. Sound levels at the closest residential receiver when construction is at the center of the site would range from 36 to 62 dBA $L_{eq\ 8hr}$. Additionally, there is an existing 6-foot-high sound wall located at the southern project boundary. This wall would reduce construction sound levels at homes to the south by up to 5 dB. With construction of an approximately 200-foot-long, 8-foot-high barrier proposed along the westerly end of the southern boundary as part of the project, construction sound levels at homes to the south would be reduced by up to 8 dB (see Figure 3.9-2).

Construction would occur during hours (7:00 a.m. and 7:00 p.m.) that are exempt from the County's noise limits. The average noise levels at exterior areas would not be harmful, nor would they present a deterrent to use of outdoor activity, yard, or patio areas. With typical outdoor to indoor attenuation of 15 dBA for standard construction residential structures with windows open, interior noise levels at the closest residences during average construction would be approximately 21 to 47 dBA $L_{eq}$, which should not interfere with conversation or other daytime activities indoors. Consequently, impacts resulting from temporary on-site construction noise levels would be less than significant.

### *Off-Site Construction Traffic Noise Assessment*

One-way vehicle trips per day during each phase of construction are provided in Table 3.9-5, based on conversations with a local construction company with substantial experience in the region. Construction traffic would utilize Lenwood Road to access the site. Based on existing traffic counts, Lenwood Road currently carries 209 vehicles per hour during the AM peak hour and 300 vehicles per hour during the PM peak hour (AimTD, 2023).

The analysis assumes that all light vehicle construction trips would utilize Lenwood Road, traveling south towards Jasper Road. Heavy trucks would be split, with 40% of trucks traveling south towards Jasper Road and the other 60% traveling north and away from residences. Assuming that all trips would occur during the AM and PM peak hours, the highest peak hour construction volume along the portion of Jasper Road with adjacent sensitive receptors would be 75 light vehicles (half of 150) and 12 heavy trucks (half of 24, which is 40% of 60), occurring during building construction. A typical heavy truck is approximately 10 dB louder than a light vehicle; therefore, one heavy truck would be acoustically equivalent to 10 passenger vehicles.[2] The equivalent construction traffic volume would therefore be equivalent to 195 light vehicles (accounting for 75 autos and 12 heavy trucks). An increase of 195

[2] Based on a 10 log scale. Note that a doubling of traffic volumes results in an approximately 3 dB increase.

vehicles per peak hour on a roadway with existing peak hour traffic volumes of 209 to 300 would result in a peak hour increase of about 2.2 to 2.9 dB.[1] This increase would be below the increase that would be considered barely perceptible (3 dB). This is a less than significant temporary noise impact.

## Operation

### *On-site Operational Noise*

The model results are presented graphically in Figure 3.9-2 Sound Modeling Results for Project Operations, and numerically in Table 3.9-8.

**Table 3.9-8. Modeled Project Operation Sound Levels Compared to County Code Limits**

| Model Receiver | Land Use | Modeled Project Operational Sound Level (dBA $L_{eq\ 1hr}$) | Day / Night County Code Limits (dBA $L_{eq\ 1hr}$) | In Compliance with Day and Night dBA Limits? |
|---|---|---|---|---|
| R1 | Residential | 43 | 55 / 45 | Yes / Yes |
| R2 | Residential | 43 | 55 / 45 | Yes / Yes |
| R3 | Residential | 41 | 55 / 45 | Yes / Yes |
| R4 | Residential | 36 | 55 / 45 | Yes / Yes |
| R5 | Residential | 34 | 55 / 45 | Yes / Yes |
| R6 | Residential | 30 | 55 / 45 | Yes / Yes |
| R7 | Residential | 31 | 55 / 45 | Yes / Yes |
| R8 | Residential | 31 | 55 / 45 | Yes / Yes |
| R9 | Residential | 30 | 55 / 45 | Yes / Yes |
| R10 | Residential | 37 | 55 / 45 | Yes / Yes |
| R11 | Residential | 38 | 55 / 45 | Yes / Yes |
| R12 | Residential | 39 | 55 / 45 | Yes / Yes |

**Notes**: dBA = A-weighted decibel; $L_{eq\ 1hr}$ = average noise level equivalent over a 1-hour period; $L_{eq}$ = average noise level equivalent.

Sound sensitive locations, in the form of suburban and rural residences, are located north, east, and south of the site. As indicated in Table 3.9-8, the highest sound level exposure at a residence would be 43 dBA $L_{eq}$. Operational sound levels would be well below the normally acceptable daytime and nighttime noise limits of 55 and 45 dBA, respectively, as established in the Countywide Plan/Policy Plan and County Code. As a result, the impact of project operational noise would be less than significant.

### *Off-site Operational Traffic Noise*

Using either the peak hour morning or peak hour afternoon volumes, predicted project traffic noise exposures to the nearest backyards (i.e., exterior use areas) of the High Desert Estates residential properties are expected to be less than 60 dBA CNEL and thus comply with the County's exterior noise threshold (per Table 3.9-3) and consequently this impact would be less than significant.

### Summary

The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be **less than significant.**

### Mitigation Measures

No mitigation measures are required.

Impact 3.9-2 The project would not result in generation of excessive groundborne vibration or groundborne noise levels.

The County exempts construction activities occurring during the County's allowable hours (7:00 a.m. to 7:00 p.m. on weekdays and Saturdays) from the County's vibration standards. However, to ensure that project construction does not result in structural damage to nearby buildings, it is appropriate to employ a numeric standard adopted by another agency. The California Department of Transportation (Caltrans 2020) establishes a construction-related damage limit of 0.25 in/sec PPV for historic and old buildings, 0.3 in/sec PPV for older residential structures, and 0.5 in/sec PPV for new residential and modern commercial/industrial structures. The applicable threshold for project-attributed construction vibration would be 0.3 in/sec PPV at the closest residences. Thresholds for annoyance are not typically used to identify impacts for short-term construction under CEQA. However, for informational purposes, Caltrans has established a human annoyance vibration threshold of 0.24 in/sec PPV (distinctly perceptible level) for construction-related vibration levels (Caltrans 2020).

The closest sensitive structures are residences that adjoin the site to the south, with the residential buildings located about 25 feet from the southern project boundary. Given the location of the southern boundary soundwall, it is assumed that heavy construction equipment would be located at least 5 feet from the southern boundary. At this distance (30 feet), construction vibration levels would be 0.17 in/sec PPV or less[3]. Project construction-related vibration levels could be perceptible at the nearest structures when construction is located adjacent to the southern project boundary but would be below the Caltrans threshold (0.3 in/sec PPV) and below the human annoyance level of 0.24 in/sec PPV.

Project construction would result in groundborne vibration levels that would meet the applicable significance thresholds at the closest sensitive structures (residences to the south). Groundborne vibration impacts of the project would therefore be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

Non-transportation noise sources and construction noise impacts are typically project-specific and highly localized (i.e., these do not generally affect the community noise level at distances beyond several hundred feet). Construction activities associated with proposed or future development within the area would contribute to

[3] Based on the use of one vibratory roller 5 feet from the property line.

cumulative noise levels, but in a geographically limited and temporary manner. For example, construction of warehousing or transload facilities in the BIG development may occur approximately 1200 feet from the residential receptors located directly south of the proposed project (City of Barstow 2026). At that distance construction noise would be about 28 dB lower than the construction noise occurring within 50 feet. In a worst case scenario, with the proposed project, and the nearest BIG structures under construction at the same time, overall sound levels would increase 0.5 dB above the project-only scenario, which is not perceptible to the human ear. Cumulative operations would be substantially less than the construction noise, and would have no cumulative impact.

The effect of cumulative traffic noise is included in the analysis for Impact 3.9-1. Operation of the project would result in additional traffic noise on roadways that could combine with traffic noise from existing and reasonably foreseeable future development. Therefore, the cumulative noise context for the project includes increased traffic volumes on roadways in the vicinity and potential noise from other local development projects within the region. The on-site operational noise assessment and summarized under Impact 3.9-1 considers future traffic volumes, including those resulting from the BIG project, and therefore the model results in Table 3.9-8 reflect a cumulative scenario. As shown in Table 3.9-8, operational noise from the proposed project in combination with noise from cumulative projects would not result in any exceedances of the County's daytime or nighttime noise limits established in the Countywide Plan/Policy Plan and County Code. Therefore, the project would not contribute to a significant cumulative noise impact. The cumulative impact would be **less than significant.**

## 3.9.4 References

AimTD. 2023. Electric Vehicle Charging Station and Logistics Facility Project Traffic Counts. May 11, 2023

Caltrans. 2020a. *Technical Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects*. California Department of Transportation Division of Environmental Analysis. April 2020.

Caltrans. 2020b. *Transportation and Construction Vibration Guidance Manual*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. Sacramento, California. April.

City of Barstow. 2015. Zoning Map (Ord. #93402015). Adopted July 20. https://www.barstowca.org/home/showpublisheddocument/3316/635844746903000000

City of Barstow. 2026. Barstow International Gateway Specific Plan. Public Hearing Draft. May 2026.

Dudek. 2026. Tidelands Avenue Electric Truck Hub Project Draft EIR, Appendix F: Noise and Vibration Technical Memorandum. April 2026.

FHWA (Federal Highway Administration). 2004. FHWA Traffic Noise Model, Version 2.5. Office of Environment and Planning. February 2004.

FHWA. 2008. Roadway Construction Noise Model (RCNM), Software Version 1.1. U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division. December 2008.

NASEM (National Academies of Sciences Engineering and Medicine). 2022. "NCHRP 25–49 [Final]." https://apps.trb.org/cmsfeed/trbnetprojectdisplay.asp?projectid=3889.

OPR (Governor's Office of Planning and Research). 2017. State of California General Plan Guidelines 2017: Appendix D, Noise Element Guidelines: Guidelines for the Preparation and Content of the Noise Element of the General Plan.

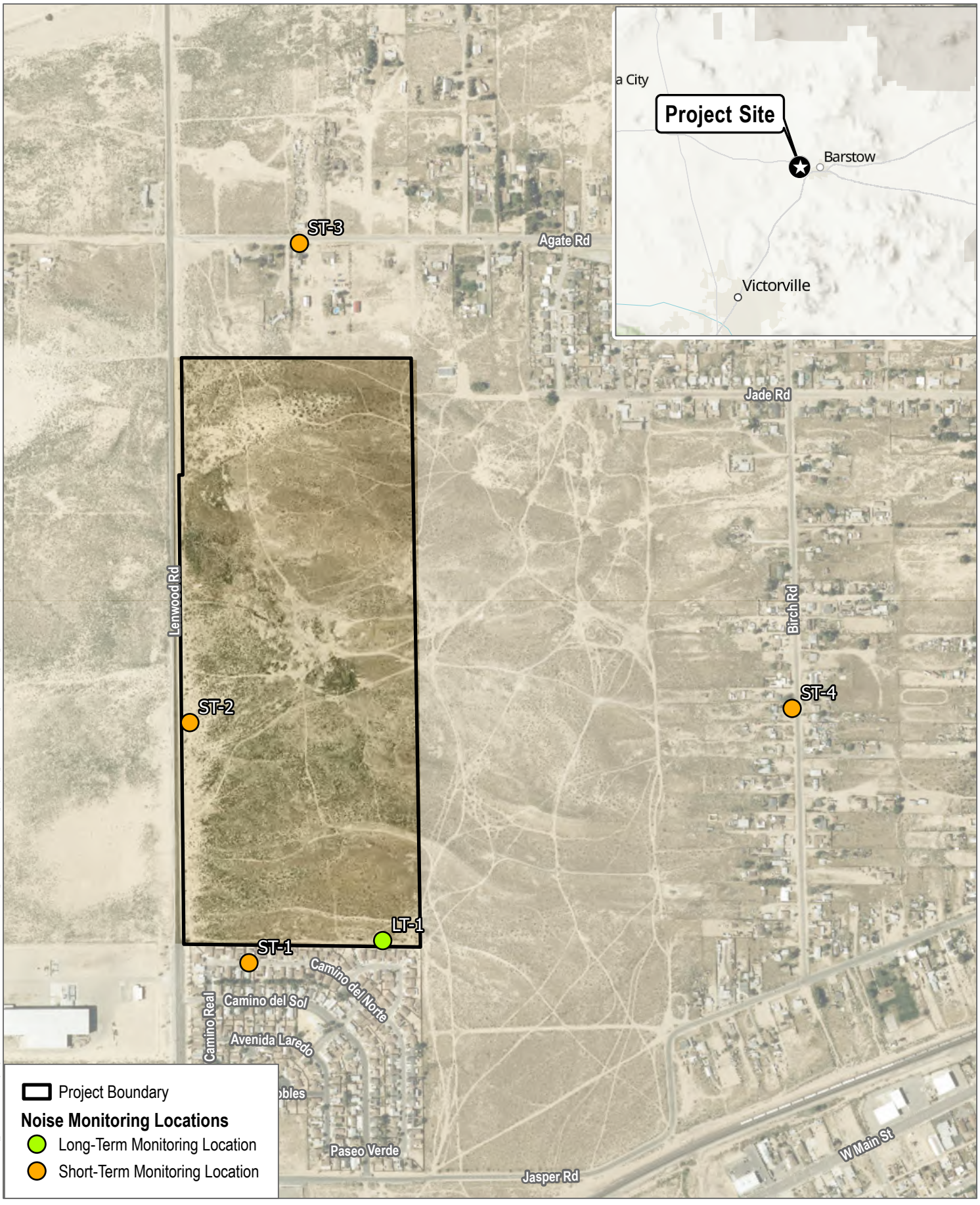
San Bernardino County. 2019. Code of Ordinances. Chapter 7. Noise Abatement and Control. https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-156002

San Bernardino County. 2022. Policy Plan – Hazards Element. September. https://countywideplan.sbcounty.gov/wp-content/uploads/sites/125/2021/01/CWP_PolicyPlan_HardCopy_MainText_Tables_2022_Sept_Adopted.pdf

San Bernardino County. 2007. Countywide Development Standards. Chapter 83. Performance Standards. Section 83.01.090 Vibration. https://lus.sbcounty.gov/wp-content/uploads/sites/48/Environmental/VCSPAppendixFNoiseModelingData.pdf

San Bernardino County. 2014. Countywide Development Standards. Chapter 83. Performance Standards. Section 83.01.080 Noise. https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-169200#JD_83.01.090

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SOURCE: ESRI Imagery Accessed 2024, OpenStreetMap 2019

DUDEK

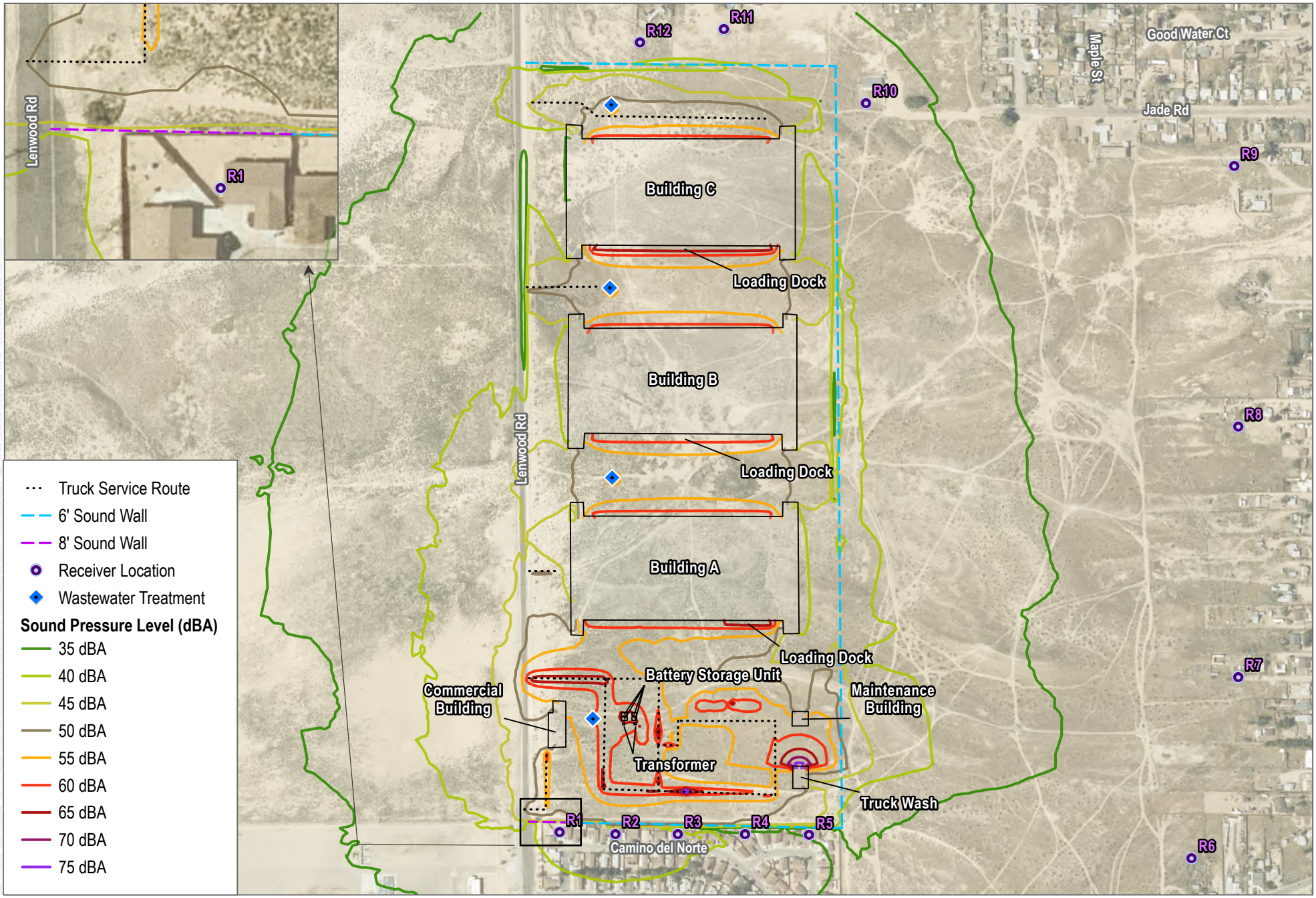
0 350 700 Feet

**FIGURE 3.9-1**

Sound Monitoring Location

EV Charging Station and Logistics Facility

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SOURCE: Esri Imagery Accessed 2025, OpenStreetMap 2019

DUDEK

0 270 540 Feet

**FIGURE 3.9-2**

On-site Operational Sound Levels

Lenwood EV Charging Station and Logistics Facility

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# 3.10 Transportation

This section describes the existing conditions related to transportation, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to project implementation of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

One comment letter was received during the Notice of Preparation public review period requesting information and analysis related to transportation. Specifically, the commenter asked about potential changes in traffic patterns and whether the project would include additional roadway improvements or infrastructure (e.g., traffic lights, widened roads) to address these changes. Additionally, the commenter requested roadway improvements as a form of community benefit.

As discussed in further detail below, level of service (LOS) or vehicle delay is no longer considered an environmental impact under the California Environmental Quality Act (CEQA). However, in accordance with CEQA requirements, the analysis provided in this section does consider potential impacts related to vehicle miles traveled (VMT) (which measures how many miles people drive over time), as well as whether queuing at project driveways would substantially increase roadway hazards (see Section 3.10.3, Environmental Impacts and Mitigation Measures, below). While not required to consider LOS as an environmental impact under CEQA, the County must still evaluate whether the project conflicts with local policies, including San Bernardino Countywide Plan/Policy Plan policies related to LOS and vehicle delay. That analysis is included in the Local Transportation Assessment prepared for the project and attached to the EIR as Appendix M.

Regarding roadway infrastructure improvements, the project would improve the east side of Lenwood Road to its ultimate half-width along the project site's frontage, including widening the paved portion of the roadway to accommodate additional lanes as well as construction of sidewalks, curb, and gutters. The half section would contain two northbound travel lanes and half of a 12-foot center lane. In addition, the project would add 6 feet of paving to the west half of Lenwood Road to accommodate the balance of the center striped median lane and would repave the existing southbound travel lane, to the extent such paving and re-paving have not already been completed by others. The project would also plant new trees and install streetlights along the project site boundary/Lenwood Road frontage. Please refer to Chapter 2 of this Draft Environmental Impact Report (EIR) for a complete project description, including proposed roadway and frontage improvements.

The information and analysis provided in the section is based, in part, on the Transportation Impact Study prepared by Dudek for the project (included as Appendix J of this Draft EIR). Other sources consulted are listed below in the References section.

## 3.10.1 Environmental Setting

### Existing Circulation Network and Truck Routes

Primary roadways and truck routes within the project-site vicinity are identified and described below. Refer to Figure 3.10-1, County Roadway Network, and Figure 3.10-2, City of Barstow Proposed Goods Movement.

- Interstate-15 is a north-south, divided, four to eight-lane freeway classified as a major interstate freeway that begins near the Mexico/U.S. Border and extends to Alberta, Canada, and serves as a critical connection

for many other regional roadways, freeways, and highways. The California Department of Transportation (Caltrans) classifies Interstate (I)-15 as a designated truck route (Caltrans 2023). The nearest interchange to the project site is provided at I-15 and Lenwood Road, approximately 3.25 miles south of the project site.

- State Route 58 is a four-lane east-west divided highway which currently has its eastern terminus at the I-15 freeway in south Barstow. State Route (SR)-58 provides regional access westerly to Bakersfield and northern California cities. The nearest interchange to the site is provided at SR-58 and Lenwood Road, approximately 1.5 miles north of the project site. Caltrans classifies SR-58 as a designated truck route (Caltrans 2023).
- Community Boulevard is an east-west two-lane roadway between Hinkley Road to the west and Old Highway 58 to the east. Community Boulevard is designated as a Collector in the City' of Barstow's (City's) Circulation Element (Appendix J).
- Lenwood Road is a north-south two to four-lane road designated as a Major Highway in the County's Roadway Network and a Primary Arterial in the City's Circulation Element. Lenwood Road serves the west end of Barstow; with an interchange at I-15 and intersects west Main Street in the unincorporated community of Lenwood. North of Main Street it crosses the Mojave River and the BNSF Railroad to link with SR-58. South of I-15, Lenwood Road was extended to the old Sidewinder Road interchange. This new roadway, named Outlet Center Drive, provides a secondary access to the Lenwood Road/I-15 interchange commercial area. Portions of Lenwood Road near the I-15 interchange and commercial areas and near Main Street have been fully improved with sidewalks, curb and gutter, and widened to four lanes, with left turn pockets at major intersections. Lenwood Road is a proposed truck route for the City and County (San Bernardino County 2025a; Mlynarski, pers. comm., 2025).[1]
- Agate Road is a two-lane local road between Lenwood Road to the west and Western Drive to the east. Agate Road serves the residential neighborhoods to the north and east of the project site (Appendix J).
- Jasper Road is a two-lane local road between Roadrunner Road to the west and Pettit Road to the east. East of Pettit Road, Jasper Road traverses north/south where it terminates at Agate Road to the north (Appendix J).
- Main Street (old U.S. Highway 66) is the key east-west arterial through the City of Barstow and is designated as a Major Highway in the County's Roadway Network and as a Primary Arterial in the City of Barstow Circulation Element. Main Street is also proposed as a truck route by the City and County (San Bernardino County 2025a; Mlynarski, pers. comm., 2025).[2] It currently has interchanges with I-15 and I-40. West of Lenwood Road, the roadway becomes National Trails Highway and provides local access to the Helendale/Oro Grande areas. This roadway also serves as an alternative route for I-15 south to Victorville.

## Rail Service and Transit

The City and unincorporated County areas are served by bus services provided by the Victor Valley Transit Authority (VVTA), which provides regional and local services throughout the Victor Valley. Regionally, the City and County are served by passenger rail services offered by the National Railroad Passenger Corporation (Amtrak). The rail and transit providers are described below.

[1] Lenwood Road will appear as a designated local truck route in the City's updated General Plan 2048 Circulation Element, as reflected in the City's draft truck route map (Mlynarski, pers. comm., 2025). Lenwood Road will also be identified as a City-designated truck route in the County's final truck route maps prepared in accordance with AB 98 (San Bernardino County 2025a).

[2] Main Street will appear as a designated local truck route in the City's updated General Plan 2048 Circulation Element, as currently reflected in the City's draft truck route map (Mlynarski, pers. comm., 2025). Main Street will also be identified as a City-designated truck route in the County's final truck route maps prepared in accordance with AB 98 (San Bernardino County 2025a).

### Victor Valley Transit Authority

VVTA provides local bus service for the cities of Adelanto, Apple Valley, Barstow, Helendale, Hesperia, Victorville, and unincorporated areas of the County. VVTA operates five local bus routes in the City, providing bus connections between City Hall, shopping centers, schools and colleges, and residential areas (see Figure 3.10-3, Existing Transit Facilities Map). Route 3 is the closest bus route to the project site, with bus stops near the corner of Lenwood Road and Camino Del Sol, approximately 315 feet south of the project site, and near the corner of Lenwood Road and Agate Road, approximately 675 feet north of the project site. The route operates weekdays, between 6:00 a.m. and 7:50 p.m., Saturday and Sunday between 8:00 a.m. and 4:50 p.m. (Appendix J).

VVTA also provides commuter service between cities of Barstow and Fort Irwin and regional service between the cities of Barstow, Victorville and unincorporated areas of County, as well as the cities of Barstow, Hinkley and Helendale.

VVTA also offers paratransit services for persons with special needs on any paved street within the City and unincorporated areas of the County as long as it is within their service boundaries. The VVTA paratransit services do not travel a fixed route and provide a flexible alternative to the fixed bus routes (Appendix J).

### Amtrak

Amtrak is a national rail operator, with 21,000 route miles in 46 states, the District of Columbia, and three Canadian Provinces. The closest passenger rail station is the Barstow Amtrak Station, located at 650 North First Avenue in the City approximately 6 miles east of the project site. The Barstow Amtrak Station is part of the Southwest Chief Route, an east-west rail line extending from Los Angeles, California, to Chicago, Illinois (Appendix J).

### Bicycle and Pedestrian Facilities

Where new development has occurred, sidewalks typically have been constructed along project site frontages and within residential developments. A sidewalk is provided on the west side of Lenwood Road, along the frontage of the Valmont Utility company, immediately southwest of the project site. As the adjacent areas surrounding the project site continue to develop, pedestrian access will be improved (Appendix J).

As shown in Figure 3.10-4, Bicycle and Pedestrian Planning Policy Map, Class II bicycle lanes (painted on-street lane) are proposed on Lenwood Road, between Agate Road to the north and Main Street to the south, and between High Point Parkway and Mercantile Way. This includes the segment of Lenwood Road along the project frontage. It should be noted that both the County and the City of Barstow have designated Lenwood Road for future Class II bicycle lanes. Class II bicycle lanes are also proposed on Main Street in the vicinity of the site.

## 3.10.2 Regulatory Setting

### Federal

There are no federal policies or regulations applicable to transportation with respect to the project.

## State

### California Department of Transportation

As the owner and operator of the State Highway System, Caltrans, implements established state planning priorities in all functional plans, programs, and activities. Caltrans has the responsibility to coordinate and consult with local jurisdictions when proposed local land use planning and development may impact state highway facilities. To comply with SB 743 implementation, the Caltrans Transportation Impact Study Guide (May 2020), replaced the Guide for the Preparation of Traffic Impact Studies (December 2002) (Caltrans 2002, 2020). Per the 2020 Transportation Impact Study Guide, Caltrans' primary review focus is VMT, replacing LOS as the metric used in CEQA transportation analyses. Caltrans recommends use of the Office of Land Use and Climate Innovation's (LCI; formerly the Governor's Office of Planning and Research) recommended thresholds and guidance on methods of VMT assessment found in LCI's Technical Advisory (LCI 2018). In addition to VMT, Caltrans has developed Local Development Review Safety Review Practitioners Guidance (February 2024), which 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 (Caltrans 2024).

### Senate Bill 743: Vehicle Miles Traveled

Passed on September 27, 2013, Senate Bill (SB) 743 became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under the CEQA process for several categories of development projects to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas (GHG) emissions. SB 743 added Chapter 2.7, Modernization of Transportation Analysis for Transit Oriented Infill Projects to the CEQA Statute (Public Resources Code Section 21099). SB 743 mandated that alternative metric(s) for determining impacts relative to transportation must be developed to replace the use of LOS in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity such as widening a roadway or the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation such as biking and walking. SB 743 directed the Governor's Office of Land Use and Climate Innovation (LCI) (formerly known as the Office of Planning and Research) to develop an alternative metric(s) for analyzing transportation impacts in CEQA documents. LCI released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, LCI released the updated Technical Advisory on Evaluating Transportation Impacts in CEQA to provide guidance on VMT analysis. In this Technical Advisory, LCI provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their jurisdictions (LCI 2018). While LCI's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance… recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]).

In December 2018, the CEQA Guidelines were updated to add Section 15064.3, Determining the Significance of Transportation Impacts, that describes specific considerations for evaluating a project's transportation impacts using the VMT methodology. This new methodology is required to be used for projects beginning on July 1, 2020.

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

1. **Land Use Projects.** VMT 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 VMT in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
2. **Transportation Projects.** Transportation projects that reduce, or have no impact on, VMT 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.
3. **Qualitative Analysis.** If existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may analyze the project's VMT 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.
4. **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT, 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 VMT and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate VMT and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

Since the project is a land use development, CEQA Guidelines Section 15064.3(b)(1) applies to the project. In accordance with SB 743, the San Bernardino County Transportation Impact Study Guidelines (County Guidelines) include guidance and thresholds for conducting a VMT analyses for determining significant impacts under CEQA (San Bernardino County 2019). A project-level VMT analysis has been completed for the project following the County Guidelines as further discussed in Section 3.10.3, Environmental Impacts and Mitigation Measures, below.

### Senate Bill 375: Sustainable Communities Strategies

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 GHG 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 sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, the California Air Resources Board established these targets for 2020 and 2035 for each region covered by one of the state's Metropolitan Planning Organizations (MPOs). The California Air Resources Board will periodically review and update 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 GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. California Air Resources Board must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO

must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP.

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).

### Assembly Bill 98: Truck Routes in Unincorporated San Bernardino County

Assembly Bill (AB) 98 is a California law, signed on September 29, 2024, designed to regulate truck traffic by designating safe and efficient truck routes. The goal of the truck routes is to minimize the impact of heavy vehicles on sensitive areas and maintain safe and efficient movement of goods. AB 98 provides a framework for identifying and enforcing approved truck routes.

AB 98 introduces specific requirements for assigning truck routes and adopting them into the Transportation and Mobility Element of the Countywide Plan/Policy Plan (CWP). Truck Routes must be adopted by January 1, 2026, in the Warehouse Concentration Region, which includes unincorporated San Bernardino County. Truck Routes must maximize the use of major highways and only utilize commercial roads when necessary and must be provided in a Geographic Information System format and will be made publicly accessible. Conspicuous signage must be installed to identify truck routes, truck parking, and appropriate idling locations. The County is currently in the process of conducting public outreach events to inform this process (San Bernardino County 2025a).

## Local

### Southern California Association of Governments

The Southern California Association of Governments (SCAG) develops the RTP, which presents the transportation vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura counties. SB 375 was enacted to reduce GHG emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, SCAG is tasked with developing the SCS, an element of the RTP that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board.

Every 4 years, SCAG updates the RTP/SCS, also known as Connect SoCal, as required by federal and state regulations. Connect SoCal was developed through a 4-year planning process involving rigorous technical analysis, extensive stakeholder engagement and robust policy discussions with local elected leaders. The most recent iteration of Connect SoCal (approved by SCAG's Regional Council in April 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. The Connect SoCal elements that are necessary to bring this vision to fruition are organized within the pillars of Mobility, Communities, Environment and Economy (SCAG 2025).

### San Bernardino Countywide Transportation Plan

San Bernardino County Transportation Authority (SBCTA) developed the San Bernadino Countywide Transportation Plan (CTP), which was released in September 2015 and updated most recently in 2021. The CTP has a horizon year of 2040 and serves as the County's input into SCAG's Connect SoCal (i.e., the RTP/SCS). The purpose of the CTP is to lay out strategy for long-term investment and management of the County's transportation system. Key issues

addressed by the CTP include transportation funding, congestion relief, economic competitiveness, system preservation and operations, transit system interconnectivity, air quality, sustainability, and GHG emission reductions. The CTP analyzes a 2040 baseline scenario with traditional revenue sources and an aggressive scenario that assumes added revenue sources defined in SCAG's RTP/SCS. The CTP has developed a set of strategies to address issues such as air quality, goods movement, sustainability, and active transportation.

The CTP is focused on several over-arching goals that build on the SBCTA Mission Statement. The goals of the CTP are as follows (San Bernardino County 2021):

Goal 1. Focus on our transportation "customers" by building an integrated, multimodal network and managing that network to improve safety, mobility, and accessibility for the residents and businesses within San Bernardino County and the region.

Goal 2. Plan and deliver transportation projects and services in a manner that promotes the County's economic competitiveness, affordable housing, environmental quality, overall sustainability, and access by the full spectrum of system users.

Goal 3. Promote stewardship of the public resources entrusted to SBCTA and other transportation agencies in the County through analysis and application of cost-effective, customer-focused, and technology-enabled approaches to the multimodal movement of people and goods.

Goal 4. Promote the funding of transportation needs and efficient operation of transportation systems through collaboration with local, regional, state, and federal transportation agencies, together with private stakeholders.

Goal 5. Support state, regional, and local environmental and sustainability goals

### San Bernardino County Non-Motorized Transportation Plan

The San Bernardino County Non-Motorized Transportation Plan (NMTP) envisions a safe, comprehensive interconnected cycling and walking system. It is a response, in part, to the initiatives to reduce vehicle travel and GHG emissions embedded in SB 375. The NMTP satisfies the state requirements of a Bicycle Transportation Plan for purposes of Caltrans Bicycle Transportation Account funding. Implementation of the NMTP will be a win-win on multiple fronts, and a strong partnership among local governments, transportation agencies, and the citizens of the County can make it happen. The NMTP serves as a vehicle for communicating the non-motorized vision for the County, which is represented by the collective visions of each jurisdiction. Although the jurisdictions will be responsible for implementation of the NMTP, it is important to have an NMTP that cuts across subareas and jurisdictions so that coordination can occur on a physical facility level as well as in scheduling and funding. The following represent the goals of the NMTP (San Bernardino County 2018):

Goal 1. Increased bicycle and pedestrian access. Expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites.

Goal 2. Increased travel by cycling and walking. Make the bicycle and walking an integral part of daily life in San Bernardino County, particularly (for bicycle) for trips of less than five miles, by implementing and maintaining a bikeway network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer and more convenient.

Goal 3. Routine accommodation in transportation and land use planning. Routinely consider bicyclists and pedestrians in the planning and design of land development, roadway, transit, and other transportation facilities, as appropriate to the context of each facility and its surroundings.

Goal 4. Improved bicycle and pedestrian safety. Encourage local and statewide policies and practices that improve bicycle and pedestrian safety

### San Bernardino County Congestion Management Program

The passage of Proposition 111 in June 1990 established a process for each metropolitan county in California that has an urbanized area with a population over 50,000 (which would include the San Bernardino County [County]) to prepare a Congestion Management Program (CMP). In 1990 the San Bernardino Associated Governments was designated the Congestion Management Agency for the County. In January 2017, San Bernardino Associated Governments split into SBCTA and the San Bernardino Council of Governments.

Although implementation of the CMP was made voluntary by the passage of AB 2419, the CMP requirement has been retained in all five urbanized counties within the SCAG region. In addition to their value as a transportation management tool, CMPs have been retained in these counties because of the federal Congestion Management System requirement that applies to all large, urban areas that are not in attainment of federal air quality standards. These counties recognize that the CMP provides a mechanism through which locally implemented programs can fulfill most aspects of a regional requirement that would otherwise have to be addressed by the regional agency (for the County, SCAG). The most recent CMP that was prepared by SANBAG in June 2016.

The LOS at each CMP location is monitored by local jurisdictions in order to implement the statutory requirements of the CMP. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to meet conformance standards outlined by the CWP. The local CWP requires that a transportation impact analysis report be prepared when a project's trip generation exceeds 250 two-way peak hour trips. For the CMP roadway system, the LOS standard shall be E for all segments and intersections except those designated LOS F (SANBAG 2016). However, per SB 743, LOS is no longer considered an environmental impact under CEQA. The significance thresholds provided in the County's Transportation Impact Study Guidelines have been used for this project, as described in further detail in Section 3.10.3, below.

The goals of the CMP are as follows (San Bernardino County 2016):

Goal 1. Maintain or enhance the performance of the multimodal transportation system and minimize travel delay.

Goal 2. Assist in focusing available transportation funding on cost-effective responses to subregional and regional transportation needs.

Goal 3. Provide for technical consistency in multimodal transportation system analysis.

Goal 4. Help to coordinate development and implementation of subregional transportation strategies across jurisdictional boundaries.

Goal 5. Anticipate the impacts of proposed new development on the multimodal transportation system, provide consistent procedures to identify and evaluate the effectiveness of mitigation measures and provide for adequate funding of mitigations.

Goal 6. Promote air quality and improve mobility through implementation of land use and transportation alternatives or incentives that reduce both vehicle trips and miles traveled and vehicle emissions.

Applicable objectives from the CMP's Transit Performance Element, Land Use/Transportation Analysis Program, Travel Demand Management Element, and Monitoring Program and Transportation Modeling section are provided below (objectives related solely to LOS/traffic delay are excluded):

*Transit Performance Element*

Objective 3.1. Provide those who live and work in San Bernardino County with timely access to essential destinations.

Objective 3.2. Provide for efficient and timely goods movement, as well as mobility for people, within and through San Bernardino County.

Objective 3.3. Consider relative cost-benefit and air quality benefits in selecting among transportation plan and improvement alternatives.

Objective 3.4. Provide those who live, work, or recreate in San Bernardino County with transportation mobility options in addition to the private automobile.

Objective 3.5. Peak period mobility - Provide transit services to help maintain peak period mobility.

Objective 3.6. Provide transit services to reduce total vehicle emissions in San Bernardino County.

*Land Use/Transportation Analysis Program*

Objective 4.1. Provide adequate mobility for people and goods by integrating consideration of land uses and the transportation system and promoting transportation-friendly development patterns.

Objective 4.2. Anticipation of needs - Forecast deficiencies and avoid breakdowns of the regional transportation system through a comprehensive, systematic program.

Objective 4.3. Equity - Apportion the cost of mitigating impacts on the transportation system equitably among all who contribute to the impacts.

Objective 4.4. Improve coordination among jurisdictions to ensure consistent consideration, analysis and mitigation of inter-jurisdictional impacts of development on the regional transportation system

Objective 4.5. Consistency - Provide a consistent, analytically sound approach to identification of impacts, evaluation of mitigations and fair apportionment of responsibility to mitigate impacts on the CMP system.

Objective 4.6. Opportunity - Identify opportunities to improve the performance of the multimodal transportation system concurrent with development, to minimize improvement costs and reliance on public financing.

*Travel Demand Management Element*

Objective 5.1. Trip Reduction - Reduce the number of vehicle trips while maintaining personal mobility.

Objective 5.2. Reduce the length of trips while maintaining personal mobility.

Objective 5.3. Improve air quality.

*Monitoring Program and Transportation Modeling*

Objective 6.3. Provide traffic and land use data to support comprehensive, systematic evaluations of land use changes, alternative highway improvements and alternative transportation policy options.

Objective 6.4. Establish conformance by local jurisdictions with the CMP.

## Regional Funding Mechanisms – Measure "I" Funds

In 2004, County voters approved the 30-year extension of Measure "I," a one-half of one percent sales tax on retail transactions, through the year 2040, for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. The Measure "I" extension requires that a regional traffic impact fee be created to ensure development is paying its fair share. A regional Nexus study was prepared by SBCTA and concluded that each jurisdiction should include a regional fee component in their local programs to meet the Measure "I" requirement. The regional component assigns specific facilities and cost sharing formulas to each jurisdiction and was most recently updated in September 2017. Revenues collected through these programs are used in tandem with Measure "I" funds to deliver projects identified in the Nexus Study.

While Measure "I" is a self-executing sales tax administered by SBCTA, as the funds raised through Measure "I" have funded in the past, and will continue to fund, new transportation facilities in the County.

## San Bernadino Countywide Plan/Policy Plan

The project site is an unincorporated area of the County. Thus, this analysis considers applicable transportation-related goals and policies from the San Bernadino CWP. The CWP includes the Policy Plan, an update and expansion of the County's General Plan. Applicable goals and policies from the Policy Plan's Transportation and Mobility Element are listed below (San Bernardino County 2020).[3]

Goal TM-1. Roadway Capacity. Unincorporated areas served by roads with capacity that is adequate for residents, businesses, tourists, and emergency services.

Policy TM-1.6. Paved roads. For any new development for which paved roads are required, we require the developer to construct the roads and we require the establishment of a special funding and financing mechanism to pay for roadway operation, maintenance, and set-aside reserves.

[3] In accordance with SB 743, LOS, or vehicle delay, is no longer considered an environmental impact under CEQA. Rather, VMT is considered the most appropriate measure to evaluate a project's transportation impacts. Thus, CWP policies related to LOS and vehicle delay are not listed below or discussed in detail in this analysis.

Policy TM-1.7. Fair share contributions. We require new development to pay its fair share contribution toward off-site transportation improvements.

Goal TM-2. Road Design Standards. Roads designed and built to standards in the unincorporated areas that reflect the rural, suburban, and urban context as well as the regional (valley, mountain, and desert) context

Policy TM-2.1. Context sensitive approach. We maintain and periodically update required roadway cross sections that prioritize multi-modal systems inside mobility focus areas (based on community context), and vehicular capacity on roadways outside of mobility focus areas (based on regional context).

Policy TM-2.2. Roadway improvements. We require roadway improvements that reinforce the character of the area, such as curbs and gutters, sidewalks, landscaping, street lighting, and pedestrian and bicycle facilities. We require fewer improvements in rural areas and more improvements in urbanized areas, consistent with the Development Code. Additional standards may be required in municipal spheres of influence.

Policy TM-2.3. Concurrent improvements. We require new development to mitigate project transportation impacts no later than prior to occupancy of the development to ensure transportation improvements are delivered concurrent with future development.

Policy TM-2.5. Context-based features. When making road improvements, we provide feasible, context-based transportation features such as:

- Chain installation and inspection areas in the Mountain Region
- Slow-vehicle turnouts on roadways with steep grades
- Limited on-street parking areas to serve snow-plow or emergency services
- Passing lanes in rural areas
- Vista areas along scenic routes

Policy TM-2.6. Access control. We promote shared/central access points for direct access to roads in unincorporated areas to minimize vehicle conflict points and improve safety, especially access points for commercial uses on adjacent properties.

Goal TM-3. Vehicle Miles Traveled. A pattern of development and transportation system that minimizes vehicle miles traveled.

Policy TM-3.1. VMT reduction. We promote new development that will reduce household and employment VMT relative to existing conditions.

Policy TM-3.2. Trip reduction strategies. We support the implementation of transportation demand management techniques, mixed use strategies, and the placement of development in proximity to job and activity centers to reduce the number and length of vehicular trips.

Policy TM-3.3. First mile/last mile connectivity. We support strategies that strengthen first/last mile connectivity to enhance the viability and expand the utility of public transit in unincorporated areas and countywide.

Goal TM-4. Complete Streets, Transit, and Active Transportation. On- and off-street improvements that provide functional alternatives to private car usage and promote active transportation in mobility focus areas

Policy TM-4.1. Complete streets network. We maintain a network of complete streets within mobility focus areas that provide for the mobility of all users of all ages and all abilities, while reflecting the local context.

Policy TM-4.2. Complete streets improvements. We evaluate the feasibility of installing elements of complete street improvements when planning roadway improvements in mobility focus areas, and we require new development to contribute to complete street improvements in mobility focus areas. In evaluating complete street improvements, we prioritize those in mobility focus areas that are within unincorporated environmental justice focus areas.

Policy TM-4.8. Local bicycle and pedestrian networks. We support local bike and pedestrian facilities that serve unincorporated areas, connect to facilities in adjacent incorporated areas, and connect to regional trails. We prioritize bicycle and pedestrian network improvements that provide safe and continuous pedestrian and bicycle access to mobility focus areas, schools, parks, and major transit stops.

Policy TM-4.11. Parking areas. We require publicly accessible parking areas to ensure that pedestrians and bicyclists can safely access the site and onsite businesses from the public right-of-way.

Goal TM-5. Goods Movement. A road, rail, and air transportation system that supports the logistics industry and minimizes congestion in unincorporated areas.

Policy TM-5.1. Efficient and sustainable goods movement network. We advocate for the maintenance of a goods movement system in southern California that is efficient and sustainable and that prioritizes public health through the use of zero-emission equipment and infrastructure.

Policy TM-5.6. Unincorporated truck routes. We establish local truck routes in unincorporated areas to efficiently funnel truck traffic to freeways while minimizing impacts on residents. We establish routes where trucks are prohibited in unincorporated environmental justice focus areas and to avoid overlaps or conflicts with safe routes to schools.

Policy TM-5.7. Trucking-intensive businesses. We require trucking-intensive businesses to pay their fair share of costs to build and maintain adequate roads.

## San Bernardino County Code

### *Title 8, Development Code, Chapter 83.12, Roadway System Design Standards.*

This chapter of the County's Development Code provides standards for the various types of roads within the County maintained road system, including Major Highways, such as Lenwood Road. Table 83-20 of the Development Code provides road system design standards. Diagrams and specific features on the County maintained road system are illustrated in the County Department of Public Works Transportation Design Standards roadway cross-sections (San Bernardino County 2025b).

## San Bernardino County Transportation Impact Study Guidelines

The County Guidelines provide a guide in assessing a proposed development project's potential transportation impact. As stated in the County Guidelines, a Traffic Impact Study is required if one or more of the following criteria are met:

- If a project generates 100 or more trips without consideration of pass-by trips during any peak hour.
- If a project is located within 300 feet of:
  - The intersection of two streets designated as Collector or higher in the County's General Plan or the Department's Master Plan, or
  - An impacted intersection as determined by the Traffic Division.
- If a project creates safety or operational concerns.
- If a project has the potential to generate VMT that could result in the transportation impacts as noted in the significance criteria presented in the County Guidelines.
- If a project generates less than 100 trips without consideration of pass-by trips during any peak hour, a study may be required if there are special concerns.

As it relates to VMT, according to the County Guidelines, land use projects that meet certain screening criteria are assumed to result in a less than significant transportation impact under CEQA and do not require a detailed quantitative VMT assessment. Consistent with LCI guidance, the County identifies the following project types as appropriate for screening. Projects need only meet one of the listed criteria to be screened from a VMT analysis:

- Local Community Projects. The following list of projects would be screened out:
  - K-12 Schools
  - Local-serving retail less than 50,000 square feet
  - Local parks
  - Day care centers
  - Local serving gas stations
  - Local serving banks
  - Student housing projects
  - Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Trip Generation Threshold. Projects generating less than 110 daily vehicle trips, which generally corresponds to the following "typical" development potentials:
  - 11 single-family housing units
  - 16 multi-family, condominiums, or townhouse units
  - 10,000 square feet of office
  - 15,000 square feet of light industrial
  - 63,000 square feet of warehouse
  - 79,000 square feet of high cube transload and short-term storage warehouse
  - 12 hotel rooms
- Transit Priority Area (TPA). Projects located within a TPA as determined in the most recent SCAG RTP/SCS.

- **Low VMT Area.** Projects located within a low VMT generating area as determined by the analyst based on the County's VMT efficient area maps

For a project that does not meet the screening criteria above, it should be considered to have a significant impact if the project VMT per person/employee is greater than 4% below the existing baseline VMT per person for the unincorporated County (San Bernardino County 2019).

### City of Barstow General Plan

Although located in an unincorporated area of the County, the Project is within the sphere of influence of the City. Thus, this analysis considers several transportation-related goals and policies from the City's General Plan Circulation Element, as listed below (City of Barstow 2015).[4]

Goal 1. The City shall maintain and expand a safe, efficient and convenient circulation system

Policy 1.C. Pursue expansion of the City's roadway network to accommodate planned residential, commercial and industrial growth and to address existing system deficiencies.

Goal 3. Foster improved traffic flow and air quality by encouraging the use of non-motorized transportation, alternative fuel vehicles and multi-occupant vehicles.

Policy 3.C. Encourage carpooling and the use of alternative fuel vehicles by city residents and employees.

Policy 3.D. Implement incentives outlined in Municipal Code Chapter 19.49 – Design Guidelines such as relaxation of parking requirements, density bonuses and exceptions to building height and lot coverage requirements in exchange for on- or off-site provision of bicycle racks and/or storage facilities, bikeways, electric vehicle charging facilities, designated pedestrian pathways or other design features designed to foster alternatives to single- occupancy, internal combustion engine driven vehicle use.

## 3.10.3 Environmental Impacts and Mitigation Measures

### Methodology

### Project Trip Generation

Trip generation estimates for the project's proposed commercial building and logistics facility are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers Trip Generation Handbook, 11th Edition (Appendix J). There are no industry standard rates for electric vehicle (EV) charging stations; therefore, trip rates for the EV charging station (by charging/fuel type) are based on assumptions regarding the maximum charging capacity, utilization rates, and other anticipated site operations. The assumptions are outlined in detail in the trip generation notes in Table 1 of Appendix J.

[4] In accordance with SB 743, LOS, or vehicle delay, is no longer considered an environmental impact under CEQA. Rather, VMT is considered the most appropriate measure to evaluate a project's transportation impacts. Thus, General Plan policies related to LOS and vehicle delay are not listed below or discussed in detail in this analysis.

Additionally, passenger car equivalent (PCE) factors were applied to the trip generation estimates to account for truck traffic. The San Bernardino County CMP indicates that projects with high truck percentages should convert project trips to PCE. A 1.5 PCE factor was applied to 2-axle trucks, 2.0 PCE for 3-axle trucks, and a 3.0 PCE factor was applied to 4-axle trucks, per the San Bernardino County CMP (Appendix J). As the Institute of Transportation Engineers Trip Generation Handbook does not provide a breakdown of truck traffic by axle classification, vehicle mix data and percentages are also applied to the project trip generation estimates from the Southern California Air Quality Management District Warehouse Truck Trip Study Data Results and Usage (Appendix J).

As shown in Table 1 of Appendix J, the project would generate 5,580 daily trips, 409 AM peak hour trips, and 447 PM peak hour trips. This is equivalent to 7,466 daily PCEs, 521 AM peak hour PCEs, and 569 PM peak hour PCEs.

## Vehicle Miles Traveled

As discussed above in Section 3.10.2, Regulatory Setting, SB 743 created a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required LCI to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, is no longer considered an environmental impact under CEQA. LCI recommended VMT as the most appropriate measure to evaluate a project's transportation impacts for land use projects and land use plans. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. As stated in CEQA Guidelines Section 15064.3(c), the provisions of Section 15064.3 shall apply statewide on July 1, 2020.

In accordance with SB 743, the County's Guidelines include guidance and thresholds for conducting a VMT analyses for determining significant impacts under CEQA. A project-level VMT analysis has been completed for the project following the County's Guidelines. Detailed calculations and model outputs are included in Appendix J of this Draft EIR.

### *Project Screening*

The County Guidelines identifies projects that can be screened from conducting a project-specific VMT analysis based on the following screening criteria:

- Local Serving Project Screening
- Projects Generating Less than 110 Daily Vehicle Trips
- TPA Screening
- Low VMT Area Screening

A land use project need only meet one of the above screening thresholds to result in a less-than-significant impact.

#### *Local Serving Project Screening*

The County Guidelines suggest Local-Serving Retail under 50,000 SF and Local Essential Services such as K-12 schools, day care centers, and community institutions shortens nondiscretionary trips by putting those goods and services closer to residents, resulting in an overall reduction in VMT.

The project includes amenities that cater to both local residents and motorists traveling along Lenwood Road, I-15, and SR-58. It includes EV charging facilities that would primarily serve vehicles already using the adjacent roadways

and freeways. This component, although not strictly local-serving in nature, does not generate additional trips that were not already occurring.

By offering dining, shopping, and EV charging opportunities, the project is expected to shorten vehicle trips for both local residents and passing motorists. This aligns with the County's objective to promote developments that contribute to reducing VMT. The retail component of the project is also less than 50,000 square feet and therefore meets the Local Serving Retail screening criterion. Thus, the project's EV charging and retail (commercial) components qualify for an exemption from conducting a VMT assessment under the County Guidelines. Therefore, the Local Serving Project screening criteria is partially met for the EV charging station and commercial building.

*Projects Generating Less Than 110 Daily Vehicle Trips*

The County Guidelines state projects generating less than 110 daily vehicles trips are presumed to have a less-than-significant impact on VMT. As shown in Table 1 of Appendix J, the project would generate 5,580 daily trips and therefore does not meet this screening criterion.

*TPA Screening*

The County Guidelines state that projects located within a TPA (i.e., within 0.5-miles of an existing "major transit stop" or an existing stop along a "high-quality transit corridor") may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Based on the Screening Tool results presented in Appendix J, the project site is not located within 0.5-miles of an existing major transit stop, or along a high-quality transit corridor. Therefore, the TPA screening criteria is not met.

*Low VMT Area Screening*

As noted in the County Guidelines, "development in efficient areas of the County will reduce VMT per person/employee and is beneficial to the region." The County Guidelines state that projects with VMT per person/employee lower than 4% below the existing VMT per person for the unincorporated County are considered to have a less-than-significant VMT impact.

It is general industry practice to perform a secondary evaluation to identify if a project is consistent with the existing land use within that traffic analysis zone and use professional judgement that there is nothing unique about the project that would otherwise be mis-represented using data from the travel demand model.

Existing land use information was examined in the San Bernardino County Transportation Analysis Model for the project's traffic analysis zone 53962201 and was found to contain land use information that would be inconsistent with the project. Therefore, the project does not qualify for this screening criteria.

The project's EV charging station and commercial component was found to meet the Local Serving Project screening criteria. However, the remaining industrial component of the project does not meet eligible screening criteria. Therefore, a project-level VMT analysis has been prepared. Although the project's EV charging station and commercial component is not subject to further VMT analysis; these local serving land uses were conservatively included in the VMT analysis to ensure a full accounting of all project generated VMT.

### *VMT Approach*

The County Guidelines state that the San Bernardino County Transportation Analysis Model is the preferred tool for conducting VMT analysis for land use projects in the County. SBCTA's most recent release of the San Bernardino County Transportation Analysis Model is version is 3.2, released in June of 2024. The San Bernardino County Transportation Analysis Model is a useful tool to estimate VMT as it considers interaction between different land uses based on socioeconomic data such as population, households, and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle type.

For purposes of this assessment, VMT was estimated using the Production/Attraction method and Boundary method. For the Production/Attraction method, VMT is presented as Home-Based Work (HBW) VMT per employee, while the Boundary method presents VMT as total VMT and total VMT per Service Population (VMT/SP). In addition, since the project is bordered by the City of Barstow, a 10-mile radius surrounding the project site has also been used for the boundary method to provide a more accurate and complete accounting of trips coming to and from the project.

### *VMT Thresholds*

As stated in the County Guidelines, the appropriate VMT metric for employment projects is VMT per employee. An employment project would result in a significant project-generated VMT impact if the following condition is met:

- Project-generated VMT per employee is greater than 4% below the existing VMT per employee for the unincorporated County.

Additionally, if the project is inconsistent with the RTP/SCS, the project's cumulative effect on VMT would be considered significant if it results in the following condition:

- Cumulative year VMT per service population (population plus employment) increases in the "with project" condition as compared to the no project condition.

The project proposes a General Plan amendment and zone change. Therefore, the project is determined to be inconsistent with the current RTP/SCS and a cumulative analysis was also performed.

#### *San Bernardino County Baseline VMT*

Table 3.10-1 below summarizes the County's baseline VMT and the project's VMT significance threshold in accordance with County Guidelines. As shown in the table, the County's baseline VMT per employee is 22.9, while the VMT threshold for the project (i.e., 4% below the baseline) is 22.0. The project VMT was compared to this threshold to determine whether the project would result in a significant VMT-related impact. The project-level VMT analysis is presented in the Impact Analysis, Threshold 3.10-2 discussion.

**Table 3.10-1. San Bernardino County Baseline VMT Summary**

| Metric | County of San Bernardino Baseline |
|---|---|
| Employment | 905,822 |
| VMT | 20,824,465 |
| VMT per Employee | 22.9 |
| County VMT Threshold (4% below) | 22.0 |

**Source:** Appendix J.
**Note:** VMT = vehicle miles traveled.

## Thresholds of Significance

The significance criteria used to evaluate project impacts related to transportation are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to transportation would occur if implementation of the project would:

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

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

(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

(d) Result in inadequate emergency access.

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to transportation.

## Impact Analysis

Impact 3.10-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The following plans, programs, and policies addressing the circulation system were determined to be relevant to the project and are discussed in further detail below: SCAG's RTP/SCS (i.e., Connect SoCal), the CTP, the County's NMTP, the CWP/Policy Plan, the County Guidelines, and the City's General Plan.

### Southern California Association of Government's Regional Transportation Plan/Sustainable Communities Strategy

Table 3.8-1 in Section 3.8, Land Use and Planning, of this Draft EIR, provides an analysis of the project's potential to conflict with applicable goals of the 2024–2050 RTP/SCS (i.e., Connect SoCal). As demonstrated in Section 3.8 of this Draft EIR, the project would not conflict with the RTP/SCS goals and is therefore supportive of SCAG's overall vision for the region.

### San Bernardino Countywide Transportation Plan

The conflict analysis provided in Table 3.10-2 below addresses whether the project would conflict with achievement of the CTP's stated goals. Based on the evaluations contained in this Draft EIR, including Table 3.10-2 below, the proposed project is consistent with the CTP's goals and is therefore supportive of the County's overall transportation vision for the region. Absent any indication to the contrary, certification of the EIR will be indicative of agreement with the conclusions in this table.

## Table 3.10-2. Conflict Analysis for the San Bernardino Countywide Transportation Plan

| Goal Number | Goal Description | Conflict Analysis |
|---|---|---|
| 1 | Focus on our transportation "customers" by building an integrated, multimodal network and managing that network to improve safety, mobility, and accessibility for the residents and businesses within San Bernardino County and the region. | **No Conflict.** The project would expand mobility for both goods movement and travelers by providing improved roadway access, driveways designed to safely accommodate both light-duty vehicles and trucks, and pedestrian facilities including sidewalks along the project's Lenwood Road frontage. The project also provides bicycle racks and supports transit access due to proximity to VVTA Route 3 stops located within approximately 700 feet of the site. Furthermore, the queuing analysis conducted for the project demonstrates that negligible queuing would occur at each of the proposed driveways. Given the proposed two-way left turn lane along the project frontage, and the low volume of through traffic on Lenwood Road, no safety issues related to off-site queuing are anticipated (Appendix J). |
| 2 | Plan and deliver transportation projects and services in a manner that promotes the County's economic competitiveness, affordable housing, environmental quality, overall sustainability, and access by the full spectrum of system users. | **No Conflict.** The project would directly support regional economic competitiveness by developing logistics facilities near major freight corridors (i.e., I-15 and SR-58) and other planned industrial and logistics uses (such as the Barstow International Gateway project across Lenwood Road to the west). The proposed EV charging hub would facilitate the transition to cleaner truck operations, reducing emissions and enhancing environmental quality. Furthermore, new pedestrian and bicycle infrastructure would improve access for all users, including employees of the logistics facility and visitors to the commercial building. The project would also support the transition to zero-emission vehicles through its EV charging facilities. The project therefore provides mobility benefits while aligning with sustainability and economic development objectives. The project would not obstruct or interfere with efforts to construct affordable housing in the region. |
| 3 | Promote stewardship of the public resources entrusted to SBCTA and other transportation agencies in the County through analysis and application of cost-effective, customer-focused, and technology-enabled approaches to the multimodal movement of people and goods. | **No Conflict.** The project incorporates technology-enabled freight movement, including electric-vehicle charging stations for both light-duty and heavy-duty vehicles, which supports cleaner travel and logistics efficiency. The project also includes frontage improvements to Lenwood Road (e.g., street trees, sidewalk, curb, gutter), a public roadway. |
| 4 | Promote the funding of transportation needs and efficient operation of transportation | **No Conflict.** The Transportation Impact Study was scoped and coordinated with both San |

## Table 3.10-2. Conflict Analysis for the San Bernardino Countywide Transportation Plan

| Goal Number | Goal Description | Conflict Analysis |
|---|---|---|
| | systems through collaboration with local, regional, state, and federal transportation agencies, together with private stakeholders. | Bernardino County Public Works and the City of Barstow, demonstrating interagency collaboration (Appendix J). The project would include frontage improvements to Lenwood Road and participate in fair-share contributions to off-site improvements, ensuring that costs are shared appropriately between public and private stakeholders. The project therefore aligns with the collaborative approach encouraged by Goal 4. |
| 5 | Support state, regional, and local environmental and sustainability goals | **No Conflict.** As the County continues to transition to VMT-based transportation evaluation under CEQA, the project's VMT analysis concludes that it does not exceed County significance thresholds and supports reductions in regional VMT through its co-location of logistics uses and goods-movement charging capacity. The project supports state clean-transportation policies by facilitating the electrification of medium- and heavy-duty trucks, expanding renewable-energy opportunities (e.g., solar canopies and on-site battery storage), and providing multimodal access that reduces reliance on single-occupancy fossil-fuel vehicles. |

**Source:** San Bernardino County 2021.

### San Bernardino County Non-Motorized Transportation Plan

The conflict analysis provided in Table 3.10-3 below addresses whether the project would conflict with achievement of the NMTP's stated goals. Based on the evaluations contained in this Draft EIR, including Table 3.10-3 below, the proposed project is consistent with the NMTP's goals and is therefore supportive of the County's overall non-motorized transportation vision for the region. Absent any indication to the contrary, certification of the EIR will be indicative of agreement with the conclusions in this table.

## Table 3.10-3. Conflict Analysis for the San Bernardino County Non-Motorized Transportation Plan

| Goal Number | Goal Description | Conflict Analysis |
|---|---|---|
| 1 | **Increased bicycle and pedestrian access.** Expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites. | **No Conflict.** The project would include new pedestrian and bicycle infrastructure (e.g., a sidewalk, bike racks), thereby expanding non-motorized access to existing and future neighborhoods, commercial, and employment centers in the Lenwood area. A sidewalk would be constructed along the project frontage to |

## Table 3.10-3. Conflict Analysis for the San Bernardino County Non-Motorized Transportation Plan

| Goal Number | Goal Description | Conflict Analysis |
|---|---|---|
| | | enhance safe pedestrian access between the site and nearby transit stops and surrounding development. Bicycle racks would be installed at the commercial building, truck wash, truck maintenance facility, and at each logistics building, supporting rider access from the surrounding neighborhoods and from transit connections along Lenwood Road. |
| 2 | **Increased travel by cycling and walking.** Make the bicycle and walking an integral part of daily life in San Bernardino County, particularly (for bicycle) for trips of less than five miles, by implementing and maintaining a bikeway network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer and more convenient. | **No Conflict.** While the project provides facilities for heavy trucks, it is also located near transit, and would complete a section of planned pedestrian and bicycle facilities (sidewalks and Class II bicycle lanes) in the County's planned system. The proximity to VVTA Route 3 bus stops, combined with pedestrian sidewalk connections along Lenwood Road, on-site bike racks, and end of trip facilities, would offer multimodal options for employees and visitors traveling shorter distances, aligning with the County's aim for trips under 5 miles to be completed via active transportation. |
| 3 | **Routine accommodation in transportation and land use planning.** Routinely consider bicyclists and pedestrians in the planning and design of land development, roadway, transit, and other transportation facilities, as appropriate to the context of each facility and its surroundings. | **No Conflict.** Non-motorized modes were incorporated into the project's land use and transportation design from early planning stages. The frontage improvements would include sidewalk construction, curb, gutter, and pedestrian-friendly lighting designed to support safe non-motorized travel consistent with County Development Code standards. In addition, the project would provide the dedicated right-of-way for implementation of a Class II bike lane as identified in the County's Circulation Master Plan. Bicycle facilities, including multiple racks and future-ready EV-capable parking spaces that may be adapted for micromobility charging, reflect integration of multimodal access in infrastructure planning. |
| 4 | **Improved bicycle and pedestrian safety.** Encourage local and statewide policies and practices that improve bicycle and pedestrian safety | **No Conflict.** The Project would implement design features that reduce conflicts between vehicles, pedestrians, and bicyclists. A proposed sidewalk on the project frontage of Lenwood Road would provide a separated, dedicated pedestrian zone, replacing the current unimproved shoulder area that exposes walkers to traffic. Safe circulation is also supported within the site through striping, separated walkways, ADA-compliant access routes, and lighting that meets County desert-region illumination standards to prevent glare |

## Table 3.10-3. Conflict Analysis for the San Bernardino County Non-Motorized Transportation Plan

| Goal Number | Goal Description | Conflict Analysis |
|---|---|---|
| | | and nighttime safety hazards. By creating more organized access points and reducing uncontrolled roadside travel, the project could potentially improve safety outcomes for non-motorized users. |

**Source:** San Bernadino County 2018.

### San Bernardino Countywide Plan/Policy Plan

The conflict analysis provided in Table 3.10-4 below addresses whether the project would conflict with implementation of applicable CWP/Policy Plan goals and policies addressing the circulation system. Based on the evaluations contained in this Draft EIR, including Table 3.10-4 below, the proposed project is consistent with the applicable CWP/Policy Plan goals and policies addressing the circulation system. Absent any indication to the contrary, certification of the EIR will be indicative of agreement with the conclusions in this table.

## Table 3.10-4. Conflict Analysis for Countywide Plan/Policy Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| **Goal TM-1. Roadway Capacity.** Unincorporated areas served by roads with capacity that is adequate for residents, businesses, tourists, and emergency services. | | |
| TM-1.6 | **Paved roads.** For any new development for which paved roads are required, we require the developer to construct the roads and we require the establishment of a special funding and financing mechanism to pay for roadway operation, maintenance, and set-aside reserves. | **No Conflict.** The project would construct fully paved internal roadways/driveways as well as improvements to the existing Lenwood Road frontage per County design standards (e.g. San Bernardino County Code requirements and Department of Public Works Transportation Design Standards). The project would improve the east side of Lenwood Road to its ultimate 52-foot half-width along the project site's frontage, including the construction of sidewalk, curb and gutter. This half section would contain two northbound travel lanes and half of a 12-foot center striped median lane. In addition, the project would add 6 feet of paving to the west half of Lenwood Road to accommodate the balance of the center striped median lane and would repave the existing southbound travel lane, to the extent such paving and re-paving have not already been completed by others. The project would provide the dedicated right-of-way for a Class II bike lane, a minimum of 5 feet wide, as identified in the County's Non-Motorized Transportation Plan. The on-site roadways/driveways would by privately funded |

## Table 3.10-4. Conflict Analysis for Countywide Plan/Policy Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| | | and maintained by the property owner, while funding for operation and maintenance of Lenwood Road (an existing paved roadway) would continue to be generated by state and local taxes.<br><br>There is also an existing 40-foot-wide interior roadway right-of-way located centrally within the project site that would be required to be removed or "vacated". The project would provide a new 60-foot-wide roadway dedication providing future access to the property to the east of the site. Please also refer to the discussion for Policy TM-1.7 below regarding fair-share contributions for off-site transportation improvements. |
| TM-1.7 | **Fair share contributions.** We require new development to pay its fair share contribution toward off-site transportation improvements. | **No Conflict.** Per the County Guidelines, prior to issuance of a building permit, fair share contributions for the project will be identified in a Local Transportation Assessment (LTA) and subsequently listed in the project's conditions of approval. |
| **Goal TM-2. Road Design Standards.** Roads designed and built to standards in the unincorporated areas that reflect the rural, suburban, and urban context as well as the regional (valley, mountain, and desert) context. | | |
| TM-2.1 | **Context sensitive approach.** We maintain and periodically update required roadway cross sections that prioritize multi-modal systems inside mobility focus areas (based on community context), and vehicular capacity on roadways outside of mobility focus areas (based on regional context). | **No Conflict.** The project site is not located within a mobility focus area. As discussed above under "Methodology," LOS, or vehicle delay, is no longer considered an environmental impact under CEQA. Nevertheless, as stated above for Policy TM-1.6, the project proposes half-width improvements to the east side of Lenwood Road in accordance with the applicable County design standards, including the construction of sidewalk, curb and gutter, as well as provide the dedicated right-of-way for implementation of a Class II bike lane as identified in the County's Circulation Master Plan. As stated in Chapter 2, Project Description, of this Draft EIR, the half section would contain two northbound travel lanes and half of a 12-foot center lane. In addition, the project would add 6 feet of paving to the west half of Lenwood Road to accommodate the balance of the center striped median lane and would repave the existing southbound travel lane, to the extent such paving and re-paving have not already been completed by others. The right-of-way |

## Table 3.10-4. Conflict Analysis for Countywide Plan/Policy Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| | | dedication for and construction of the ultimate width of the west side of Lenwood Road would be determined by a future agreement between the City of Barstow and the County.<br><br>Please also refer to the above discussion for Policy TM-1.7 regarding fair-share contributions for off-site transportation improvements. Together, the proposed improvements, right-of-way dedication, and fair-share contributions would help support vehicular capacity on roadways. |
| TM-2.2 | **Roadway improvements.** We require roadway improvements that reinforce the character of the area, such as curbs and gutters, sidewalks, landscaping, street lighting, and pedestrian and bicycle facilities. We require fewer improvements in rural areas and more improvements in urbanized areas, consistent with the Development Code. Additional standards may be required in municipal spheres of influence. | **No Conflict.** As stated above for Policy TM-2.1, the project proposes half-width improvements to the east side of Lenwood Road, including the construction of sidewalk, curb and gutter. The project would add 6 feet of paving to the west half of Lenwood Road to accommodate the balance of the center striped median lane and would repave the existing southbound travel lane (to the extent such paving has not already been completed by others). Further, the project would transition Lenwood Road back to existing width and provide striping north of the project boundary to Agate Road. The project would provide the dedicated right-of-way for implementation of a Class II bike lane as identified in the County's Circulation Master Plan. As discussed in Chapter 2, Project Description, of this Draft EIR, the project's landscaping plan would include a mix of drought-tolerant ornamental trees, shrubs and ground covers suited to the local environment. New trees would be planted along the project site boundary adjacent to Lenwood Road. The landscape plans are required to comply with the "Landscaping Standards" contained in Chapter 83.10 of the County's Development Code.<br><br>The project would also include streetlights installed along the Lenwood Road frontage. The project would be subject to Section 83.07.060 of the County's Development Code, which establishes standards for outdoor lighting in the County's Mountain and Desert Regions. In accordance with the standards presented therein, proposed outdoor lighting would be designed to preclude light pollution or light |

## Table 3.10-4. Conflict Analysis for Countywide Plan/Policy Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| | | trespass in excess of the maximum allowed foot-candles. |
| TM-2.3 | **Concurrent improvements.** We require new development to mitigate project transportation impacts no later than prior to occupancy of the development to ensure transportation improvements are delivered concurrent with future development. | **No Conflict.** The proposed half-width improvements to the east side of Lenwood Road would be completed prior to issuance of an occupancy permit. Please refer to the discussion provided above for Policy TM-1.7 regarding fair-share payments for off-site improvements. In addition, the applicant would repave the existing south travel lane on Lenwood (to the extent such paving has not already been completed by others) and construct a taper to transition from the two northbound lanes on the frontage property to the single lane north of the property. |
| TM-2.5 | **Context-based features.** When making road improvements, we provide feasible, context-based transportation features such as:<br>▪ Chain installation and inspection areas in the Mountain Region<br>▪ Slow-vehicle turnouts on roadways with steep grades<br>▪ Limited on-street parking areas to serve snow-plow or emergency services<br>▪ Passing lanes in rural areas<br>▪ Vista areas along scenic routes | **No Conflict.** The proposed half-width improvements to Lenwood Road (including two northbound travel lanes and half of a center turn lane) would provide additional capacity for emergency vehicles and passing. The project site and proposed Lenwood Road improvements are not located in the Mountain Region, on a steep grade, or in a vista area along a scenic route. |
| **Goal TM-3. Vehicle Miles Traveled.** A pattern of development and transportation system that minimizes vehicle miles traveled. | | |
| TM-3.1 | **VMT reduction.** We promote new development that will reduce household and employment VMT relative to existing conditions. | **No Conflict.** The project would provide new employment opportunities in the area, thereby reducing VMT per employee relative to existing conditions. |
| TM-3.2 | **Trip reduction strategies.** We support the implementation of transportation demand management techniques, mixed use strategies, and the placement of development in proximity to job and activity centers to reduce the number and length of vehicular trips. | **No Conflict.** The Project would provide new employment opportunities adjacent to residential uses and would generate VMT per employee below the County's adopted impact threshold (as discussed in further detail under Impact 3.10-2). |
| TM-3.3 | **First mile/last mile connectivity.** We support strategies that strengthen first/last mile connectivity to enhance the viability and expand the utility of public transit in unincorporated areas and countywide. | **No Conflict.** The project would include a new sidewalk along the Lenwood Road frontage as well as bike racks within the project site, which would support transit access and first/last-mile linkages to VVTA Route 3 stops north and south of the site. |

## Table 3.10-4. Conflict Analysis for Countywide Plan/Policy Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| **Goal TM-4. Complete Streets, Transit, and Active Transportation. On**- and off-street improvements that provide functional alternatives to private car usage and promote active transportation in mobility focus areas | | |
| TM-4.1 | **Complete streets network.** We maintain a network of complete streets within mobility focus areas that provide for the mobility of all users of all ages and all abilities, while reflecting the local context. | **No Conflict.** The project is not located within or near a mobility focus area. However, the project would contribute to the complete streets network by adding sidewalks and bike racks along the Lenwood Road corridor, in accordance with County mobility policies. |
| TM-4.2 | **Complete streets improvements.** We evaluate the feasibility of installing elements of complete street improvements when planning roadway improvements in mobility focus areas, and we require new development to contribute to complete street improvements in mobility focus areas. In evaluating complete street improvements, we prioritize those in mobility focus areas that are within unincorporated environmental justice focus areas. | **No Conflict.** The project is not located within or near a mobility focus area. However, the project includes frontage improvements along Lenwood Road, such as new trees, streetlights, curb, gutter, and sidewalk construction. |
| TM-4.8 | **Local bicycle and pedestrian networks.** We support local bike and pedestrian facilities that serve unincorporated areas, connect to facilities in adjacent incorporated areas, and connect to regional trails. We prioritize bicycle and pedestrian network improvements that provide safe and continuous pedestrian and bicycle access to mobility focus areas, schools, parks, and major transit stops. | **No Conflict.** The project is not located within or near a mobility focus area. However, as stated above in Section 3.10.1, Environmental Setting, Class II bicycle lanes are planned on Lenwood Road. The project also includes bicycle parking and pedestrian facilities (e.g., sidewalks). |
| 4.11 | **Parking areas.** We require publicly accessible parking areas to ensure that pedestrians and bicyclists can safely access the site and onsite businesses from the public right-of-way. | **No Conflict.** Parking areas would include striping, ADA compliance, and pedestrian paths between parking, charging, and building entrances, allowing safe pedestrian and bicyclist circulation from the public right-of-way. |
| **Goal TM-5. Goods Movement.** A road, rail, and air transportation system that supports the logistics industry and minimizes congestion in unincorporated areas. | | |
| TM-5.1 | **Efficient and sustainable goods movement network.** We advocate for the maintenance of a goods movement system in southern California that is efficient and sustainable and that prioritizes public health through the use of zero-emission equipment and infrastructure. | **No Conflict.** The proposed logistics facility directly supports the regional goods movement network, providing efficient truck access to I-15 and SR-58, both designated truck routes. Furthermore, by providing EV charging infrastructure for medium and heavy-duty trucks, the project would promote zero-emission freight operations. |
| TM-5.6 | **Unincorporated truck routes.** We establish local truck routes in unincorporated areas to | **No Conflict.** Truck routing in the vicinity of the project site would be limited to Lenwood Road, |

## Table 3.10-4. Conflict Analysis for Countywide Plan/Policy Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| | efficiently funnel truck traffic to freeways while minimizing impacts on residents. We establish routes where trucks are prohibited in unincorporated environmental justice focus areas and to avoid overlaps or conflicts with safe routes to schools. | Main Street, I-15, and SR-58. Portions of each of these routes pass through environmental justice focus areas (San Bernardino County 2022). However, each of these routes are also County-identified truck routes (as discussed above in Section 3.10.1). |
| TM-5.7 | **Trucking-intensive businesses.** We require trucking-intensive businesses to pay their fair share of costs to build and maintain adequate roads. | **No Conflict.** Please refer to the responses provided above for Policies TM-2.1. Together, the proposed Lenwood Road improvements, right-of-way dedication, and fair-share contributions would help build and maintain adequate roads. |

**Source:** San Bernardino County 2020.

### City of Barstow General Plan

The conflict analysis provided in Table 3.10-5 below addresses whether the project would conflict with implementation of applicable City General Plan goals and policies addressing the circulation system. Based on the evaluations contained in this Draft EIR, including Table 3.10-5 below, the proposed project is consistent with the applicable City General Plan goals and policies addressing the circulation system. Absent any indication to the contrary, certification of the EIR will be indicative of agreement with the conclusions in this table.

## Table 3.10-5. Conflict Analysis for City of Barstow General Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| **Goal 1.** The City shall maintain and expand a safe, efficient and convenient circulation system. | | |
| 1.C | Pursue expansion of the City's roadway network to accommodate planned residential, commercial and industrial growth and to address existing system deficiencies. | **No Conflict.** As discussed above in Table 3.10-4, the project includes dedication of an expanded 60-foot roadway right-of-way and half-width frontage improvements along Lenwood Road. The proposed improvements would help address deficiencies along the roadway, such as the lack of continuous sidewalk and standard-width lanes, while providing the structural base for future four-lane operation. In addition, the new 60-foot-wide roadway dedication would serve the development and provide future access to the property east of the site. The project would also be responsible for fair-share contributions, as needed, for off-site transportation system improvements (refer to the response provided above for County Policy TM-1.7 in Table 3.10-4). |

## Table 3.10-5. Conflict Analysis for City of Barstow General Plan Goals and Policies Addressing the Circulation System

| Policy Number | Policy | Conflict Analysis |
|---|---|---|
| **Goal 3.** Foster improved traffic flow and air quality by encouraging the use of non-motorized transportation, alternative fuel vehicles and multi-occupant vehicles. | | |
| 3.C | Encourage carpooling and the use of alternative fuel vehicles by city residents and employees. | **No Conflict.** The project would include both EV charging stalls and EV-capable parking spaces for employees and visitors in compliance with CALGreen requirements. These features would enable and incentivize the use of electric and low-emission vehicles by workers and fleet operators. The project's commercial component, which would include food service, convenience amenities, and rest facilities, may also support carpooling by providing a comfortable stopover location for drivers sharing long-distance trips. Additionally, the inclusion of electric-truck charging infrastructure may help incentivize freight carriers to convert portions of their fleets to zero-emission operations, thereby reducing greenhouse gas emissions and improving regional air quality. |
| 3.D | Implement incentives outlined in Municipal Code Chapter 19.49 – Design Guidelines such as relaxation of parking requirements, density bonuses and exceptions to building height and lot coverage requirements in exchange for on- or off-site provision of bicycle racks and/or storage facilities, bikeways, electric vehicle charging facilities, designated pedestrian pathways or other design features designed to foster alternatives to single-occupancy, internal combustion engine driven vehicle use. | **No Conflict.** The project incorporates several of the design features encouraged by this policy. Bicycle racks would be provided on-site, including at the logistics buildings, truck wash, maintenance facility, and commercial building, in accordance with CALGreen requirements. The project would also provide clearly defined pedestrian pathways connecting parking areas, building entrances, and EV charging facilities. EV charging infrastructure forms a central element of the project design, supporting both employee and public use. The parking areas would include ADA-compliant spaces and internal pedestrian connections, providing safe movement between buildings and the public right-of-way. |

**Source:** City of Barstow 2020.

### Conclusion

As demonstrated above, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system and impacts would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.10-2: The proposed project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

CEQA Guidelines Section 15064.3(b) establishes VMT as the most appropriate measure of transportation impacts, shifting away from the LOS metric that was previously used to evaluate a project's impacts on traffic conditions. In accordance with SB 743, the County Guidelines include guidance and thresholds for conducting VMT analyses for determining significant impacts under CEQA. A project-level VMT analysis has been completed for the project following the County Guidelines. Detailed calculations and model outputs are included in the Transportation Impact Study, included as Appendix J of this Draft EIR. The methodology used for the VMT analysis is provided above under the "Methodology" sub heading.

Table 3.10-6 summarizes the County baseline VMT and project-generated VMT and provides a comparison to the County's impact threshold. As shown in the table, the County's baseline VMT per employee is 22.9, while the County's VMT threshold for the project (i.e., 4% below the baseline) is 22.0.

**Table 3.10-6. Project VMT Summary**

| Metric | San Bernardino County Baseline | Project VMT |
|---|---|---|
| Employment | 905,822 | 1,244[1] |
| VMT | 20,824,465 | 15,961 |
| VMT per Employee | 22.9 | 12.8 |
| County VMT Threshold (4% below) | 22.0 | |
| **Potentially Significant?** | **No** | |

**Source:** Appendix J.
**Notes:** VMT = vehicle miles traveled.
1. The employment estimate for purposes of project VMT is conservative and is based on the SCAG Employment Density Study, Table II-B (2001). The actual number of employees would likely be lower, with a corresponding reduction in total VMT. It should be noted that the employment estimate in the project description (Chapter 2) is based on (a) SCAG factors and information from potential operators for the commercial building, truck amenities, and EV charging station; and (b) for the logistics center, more recent information from the U.S. Energy Information Administration (2022).

As shown in the table above, the project generated VMT per employee (12.8 VMT per employee), is below the County's adopted impact threshold (22.0 VMT per employee). As such, the VMT impact would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.10-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Roadway hazards may include sharp curves that are difficult to negotiate or intersections with poor lines of sight. In addition, there may be potential safety impacts related to queuing resulting in slow or stopped traffic on the mainline or speed differentials between adjacent lanes or if queuing exceeds turn pocket lengths that impedes through traffic. The project does not propose any incompatible uses, such as farm equipment, that could substantially increase roadway hazards. However, the Project would require improvements to Lenwood Road and

would add additional vehicle traffic to the roadway system as a result of the proposed commercial, logistics, and EV-charging station uses. The following discussion describes the potential for increased hazards as a result of these roadway design changes and queuing at proposed project driveways.

## Roadway Design Features

Access to the project site would be provided via seven full access driveways along Lenwood Road on the western boundary of the project site and a new 60-foot-wide roadway off Lenwood Road (see Figure 2-4, Site Plan, in Chapter 2, Project Description of this Draft EIR). All driveways are proposed as full access driveways (ingress and egress) and except for the southernmost driveway, would accommodate both passenger vehicles and trucks. The driveway at the south end of the project site would provide access to the commercial building and is intended for passenger vehicles only.

To facilitate adequate on-site circulation, sufficient site access for both passenger vehicles and trucks, and to ensure efficient off-site circulation on nearby roadway facilities, the project would include the following off-site street improvements, based on the County Department of Public Works Major Highway cross-section standards (see Figure 8, San Bernadino Highway Cross-Section, in Appendix J).

- The project would improve the east side of Lenwood Road to its ultimate 52-foot half-width along the project site's frontage including the construction of sidewalk, curb and gutter.
- The half section would contain a 10-foot shoulder, two 12-foot northbound travel lanes and half of a 12-foot center striped median lane. The 10-foot shoulder would provide the dedicated right-of-way for implementation of a Class II bike lane as identified in the County's Circulation Master Plan (timing to be determined in consultation with the County).
- In addition, the project would add 6 feet of paving to the west half of Lenwood Road to accommodate the balance of the center striped median lane and would repave the existing southbound travel lane, to the extent such paving and re-paving have not already been completed by others.

Lenwood Road in the vicinity of the Project site is a level roadway without any sharp curves or steep elevation changes. Proposed improvements to Lenwood Drive would not result in any sharp curves, poor line of sight, or steep grade changes and would thus not substantially increase hazards due to a geometric design feature. All roadway improvements required as part of the project, whether located on or off site, would be designed and constructed in accordance with all applicable local, state, and federal roadway standards and practices, such as the County Department of Public Works Transportation Design Standards and Chapter 83.12, Road System Design Standards of the County's Development Code.

## Queuing Analysis

A queuing analysis was prepared as part of the Transportation Impact Study for all project driveways to assess the adequacy of any off-site storage lanes into the project site, as well as the adequacy of driveway throat lengths and space on-site for vehicles to queue without effecting the internal circulation on the project site (Appendix J). The results of the analysis show negligible queuing would occur at each of the project driveways under all scenarios evaluated. Given the results of the analysis, the proposed two-way left turn lane along the project frontage, and the low volume of through traffic on Lenwood Road, no off-site queuing issues are anticipated (Appendix J). Furthermore, no operational impacts were identified at the I-15 or SR-58 ramps that would result in potential safety impacts (e.g., queuing onto the freeway mainlines).

### Conclusion

For the reasons discussed above, the Project would not substantially increase hazards due to a geometric design feature, or incompatible uses and impacts would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.10-4: The proposed project would not result in inadequate emergency access.

Regional access to the project site is provided via SR-58 and I-15. Direct access to the project site would be provided via eight driveways along Lenwood Road on the western boundary of the project site. The San Bernadino County Sheriff's Department provides law enforcement services to the project site. The nearest station is the Barstow Patrol Station, located 6.6 driving miles east of the project site. The San Bernardino County Fire Protection District currently provides fire protection services to the project site; however, the project is proposed to be served by the Barstow Fire Protection District (BFPD). The nearest BFPD station is the Main Street station (2600 West Main Street, Barstow, California) approximately 3.2 driving miles east of the project site. There is also one inactive fire station, currently used for storage purposes, located at 29780 Highway 58. BFPD is planning to re-establish the inactive fire station, and to build two new additional fire stations to meet the future needs upon full buildout of the proposed City of Barstow General Plan in 2048, including the proposed Barstow International Gateway (BIG) project (City of Barstow 2025). The locations of these future stations have not been identified; however, one station may be north of Highway 58.

### Construction

As discussed in Chapter 3, Project Description, construction of the project is anticipated to commence in Spring 2027 with an approximately 12- to 18-month construction schedule. On-site construction activities would not interfere with emergency access to adjacent properties. Improvements to Lenwood Road, including buildout of the easterly road section and frontage improvements would require temporary lane closures. Repaving and interim road taper from the project site to Agate Road may also require temporary travel lane restrictions. As part of the Encroachment Permit required to construct these improvements within the County right of way, a Traffic Control Plan would be required. The plan would require items such as advanced notice of road work and temporary closures or detours, maintaining access to adjoining properties, and proper traffic controls and signage. With implementation of these standard traffic control procedures, as reviewed and approved by the County, impacts of the project's short-term construction activities related to emergency access would be **less than significant**.

### Operation

The project would construct and maintain fire department access roadways in accordance with the current California Fire Code and BFPD standards. Specific fire and life safety requirements would be addressed at the building permit phase when plans are submitted to the BFPD for review and approval. Roadway and project access improvements would be overseen by the applicable lead agency and their qualified traffic engineers. This approach would ensure compliance with all applicable roadway design requirements. In the event of an emergency all the site access driveways would enable vehicles to enter/exit the project site. All street improvements would be designed with adequate width, turning radius, and grade to facilitate access by County and City firefighting apparatus, and to provide alternative emergency ingress and egress (see Figure 2-4). The site plan would be subject

to plan review by the County's Fire Department to ensure proper access for fire and emergency response is provided and required fire suppression features are included. Therefore, the Project would provide adequate emergency access.

Because the Project's driveways and Lenwood Road improvements would be designed in accordance with applicable Public Works Department standards, the project site would be accessible to emergency responders during operation. In general, the proposed widening and lane additions to Lenwood Road would provide additional room for vehicles and emergency responders to maneuver in the event of an emergency. Therefore, operational impacts associated with emergency access would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

Impact 3.2-5: The proposed project would not result in a cumulatively considerable impact to transportation.

This section provides an analysis of cumulative impacts from construction and operation of the project and other past, present, and reasonably foreseeable future projects, as required by Section 15130 of the CEQA Guidelines. The past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for the transportation analysis include the BIG project, generally located west of Lenwood Road and north of Main Street. The BIG project is a 4,500-acre new integrated rail facility on the west side of City, consisting of a rail yard, intermodal facility and warehouses for transloading freight from international containers to domestic containers.

### Conflicts With a Program, Plan, Ordinance, or Policy Addressing the Circulation System

The BIG project could have conflicts with established programs, plans, ordinances, or policies addressing the circulation system; however, the BIG project would be subject to review and approval by the City. During the review and approval process, the BIG project would be required to be designed or otherwise conditioned to avoid conflicts with programs, plans, ordinances, or policies addressing the circulation system. These are considered site-specific and not additive effects. Therefore, the project would not contribute to an existing or new cumulative impact and there would be no cumulative impact related to conflicts with programs, plans, ordinances, or policies addressing the circulation system.

### Vehicle Miles Traveled

Table 3.10-7 presents boundary VMT and boundary VMT per service population estimates for the cumulative conditions.

**Table 3.10-7. Cumulative Boundary VMT**

| Metric | San Bernardino County Boundary | | 10-Mile Boundary | |
|---|---|---|---|---|
| | No Project | With Project | No Project | With Project |
| Service Population | 3,769,986 | 3,771,230 | 65,178 | 66,422 |
| Boundary VMT | 94,940,109 | 95,006,263 | 2,403,846 | 2,414,533 |

**Table 3.10-7. Cumulative Boundary VMT**

| Metric | San Bernardino County Boundary | | 10-Mile Boundary | |
|---|---|---|---|---|
| | No Project | With Project | No Project | With Project |
| VMT per Service Population | 25.2 | 25.2 | 36.8 | 36.4 |
| Change in VMT per Service Population | 0.0 | | -0.4 | |

**Source:** Appendix J.
**Note:** VMT = vehicle miles traveled.

The boundary VMT per service population with the project was found to remain unchanged for the Countywide boundary evaluation and decreases slightly for the 10-mile boundary evaluation but does not exceed the County's adopted threshold. Thus, the cumulative VMT impact would be less than significant and would not be cumulatively considerable.

### Roadway Hazards

The BIG Project Level of Service Assessment- Transportation Analysis (Kimley Horn 2025) identifies various roadway and intersection improvements (referred to as Transportation Modifications) in the vicinity of the Project site that would reduce any potential BIG-related traffic operations and safety impacts to less than significant. Furthermore, the BIG Project Level of Service Assessment- Transportation Analysis concludes that the addition of BIG traffic would not result in safety hazards by backing up onto the I-15 freeway mainline or encroaching within the off-ramp deceleration areas under all future scenarios analyzed. Cumulative impacts related to roadway hazards would be less than significant and would not be cumulatively considerable.

### Emergency Access

The BIG project found impacts to emergency access to be less than significant and, similar to the proposed project, identifies the requirement for a traffic control plan should roadway or property access be temporarily impaired. Road construction on Lenwood Road is unlikely to overlap, but should that occur, coordination of required traffic controls during construction would avoid cumulative access impacts. As stated above under Impact 3.10-4, the project would construct and maintain fire department access roadways in accordance with the current California Fire Code and BFPD standards. All street improvements would be designed with adequate width, turning radius, and grade to facilitate access by County and City firefighting apparatus, and to provide alternative emergency ingress and egress. Thus, cumulative impacts would be less than significant and would not be cumulatively considerable.

### Conclusion

The proposed project would not result in a cumulatively considerable impact related to transportation. Cumulative impacts would be **less than significant.**

### Mitigation Measures

No mitigation measures are required.

## 3.10.4 References

Caltrans (California Department of Transportation). 2002. *Guide for the Preparation of Traffic Impact Studies*. December 2002. Accessed March 2026. https://sj-admin.s3-us-west-2.amazonaws.com/2002_0000_CalTrans_TrafficImpactGuide.pdf.

Caltrans. 2020. *Transportation Impact Study Guide*. May 20, 2020. Accessed March 2026. https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf.

Caltrans. 2023. "Truck Networks on California State Highways, District 8." Revised March 2, 2023. Accessed October 2025. https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/trucks/truckmap-d08-a11y.pdf.

Caltrans. 2024. Local Development Review Safety Review Practitioners Guidance. February. Accessed November 2025. https://dot.ca.gov/-/media/dot-media/programs/safety-programs/documents/202402-ldr-safety-review-practitioners-guidance-a11y.pdf.

City of Barstow. 2015. "Circulation Element." *City of Barstow 2015-2020 General Plan*. Accessed October 2025. https://www.barstowca.org/home/showpublisheddocument/5363/636607004817830000.

Kimley Horn. 2025. *Appendix 5.15 BIG-2: Level of Service Assessment – Transportation Analysis*. November 2025. https://files.ceqanet.lci.ca.gov/295844-2/attachment/A1EYH7QYlNv2GcGSaec4Ms3euFeXcpmm0tNRlRniFbfWC6xpqaY8GpYzuKu7npUSaQ-D-KdsDpG3cUzg0.

LCI (Governor's Office of Land Use and Climate Innovation). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. April 2018. Accessed October 2025. https://lci.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf.

Mlynarski, D. 2025. "RE FW: Truck Routes TT JN 230116." Email communication between D. Mlynarski. (Principal, Transtech) and P. Angelides (Riverview Capital Investments). September 9, 2025.

San Bernardino County. 2018. *San Bernadino County Non-Motorized Transportation Plan*. Revised June 2018. Accessed October 2025. https://www.gosbcta.com/wp-content/uploads/2019/10/Non-Motorized-Transportation-Plan-.pdf.

San Bernardino County. 2019. *Transportation Impact Study Guidelines*. July 9, 2019. Accessed October 2025. https://www.sbcounty.gov/uploads/DPW/docs/Traffic-Study-Guidelines.pdf.

San Bernardino County. 2020. "Transportation & Mobility Element." *Countywide Plan/County Policy Plan.* Updated September 27, 2020. Accessed October 2025. https://countywideplan.sbcounty.gov/policy-plan/transportation-mobility/.

San Bernardino County. 2021. *San Bernardino Countywide Transportation Plan: Interim 2021.* Accessed October 2025. https://www.gosbcta.com/wp-content/uploads/2019/10/SBCTA_CTP_2021Update_ExecutiveSumFinal.pdf.

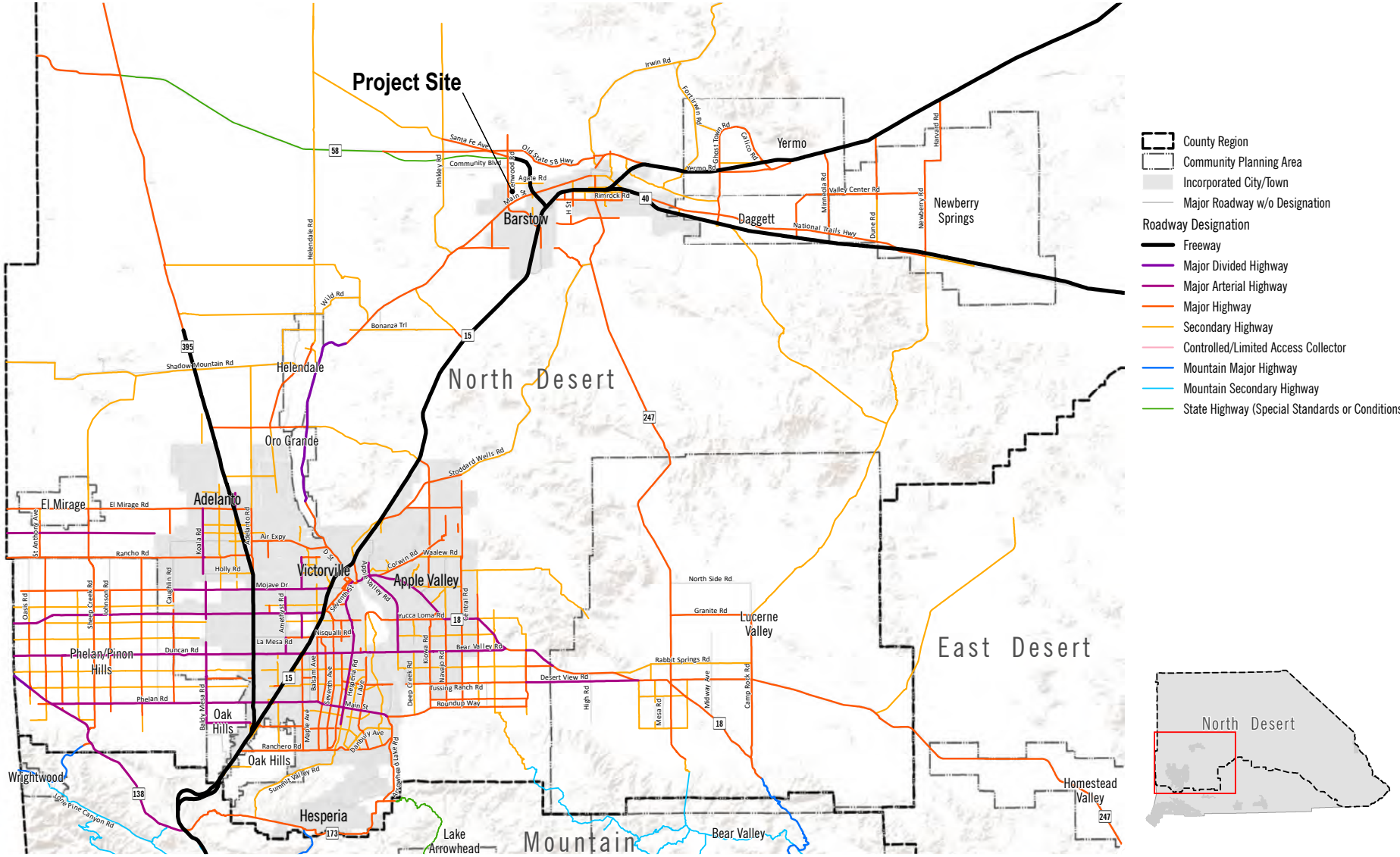
San Bernardino County. 2025a. “AB 98: Truck Routes in Unincorporated San Bernardino County.”. Accessed October 2025. https://lus.sbcounty.gov/ab-98-truck-routes-in-unincorporated-san-bernardino-county/.

San Bernardino County. 2025b. “County Standard Plans.” Accessed October 2025. https://lus.sbcounty.gov/land-development-home/county-standards/.

SANBAG (San Bernardino Associated Governments). 2016. *San Bernardino Congestion Management Program*. 2016 Update. Accessed October 2025. https://www.gosbcta.com/wp-content/uploads/2019/10/2016-Congestion-Management-Plan-.pdf.

SCAG (Southern California Association of Governments). 2025. “A Bright Plan for the Future.” Accessed October 2025. https://scag.ca.gov/connect-socal

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SOURCE: San Bernardino County 2020

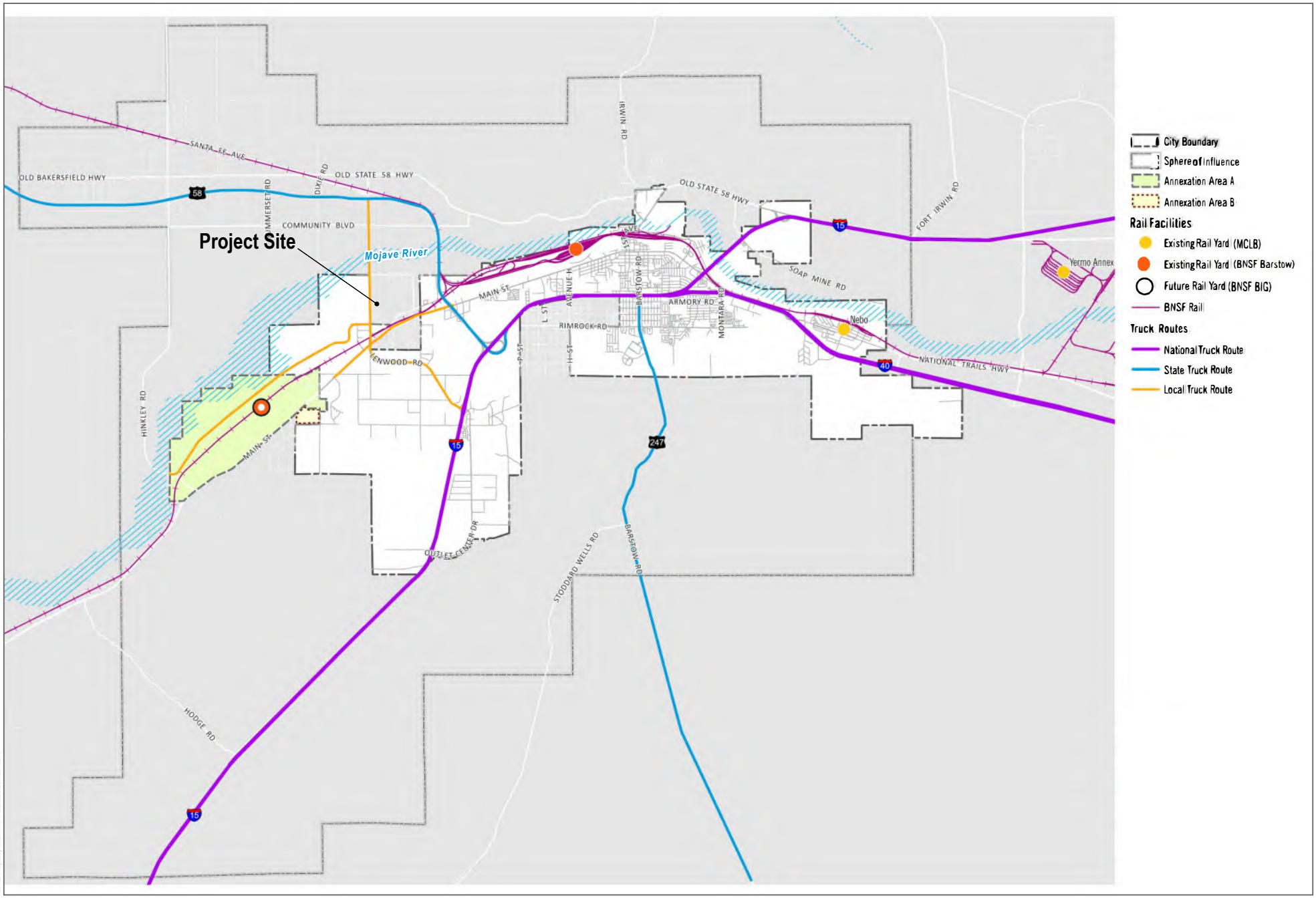
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**FIGURE 3.10-1**

County Roadway Network

EV Charging Station and Logistics Facility

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SOURCE: City of Barstow 2025

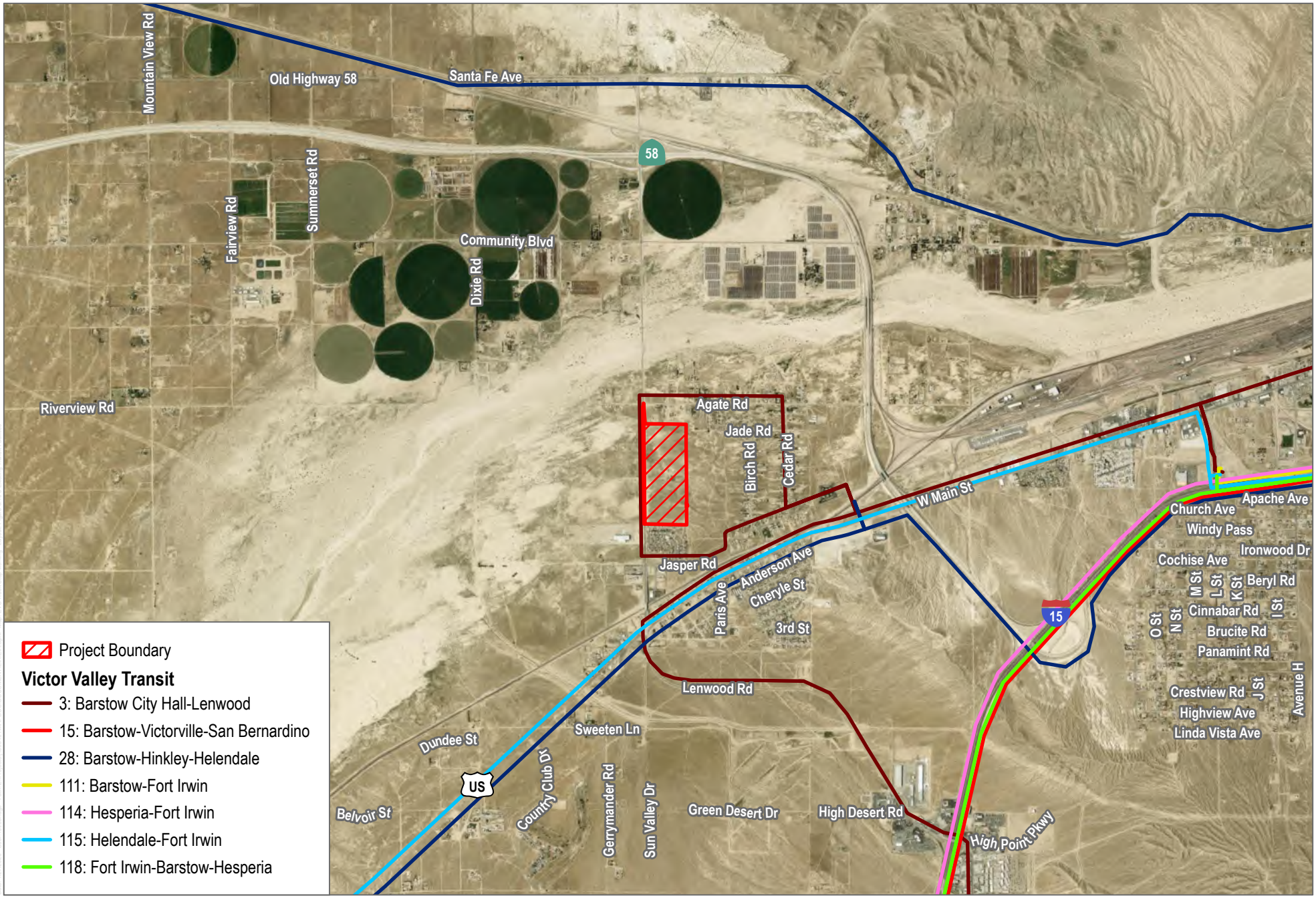
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**FIGURE 3.10-2**

City of Barstow Proposed Goods Movement

EV Charging Station and Logistics Facility

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SOURCE: Victor Valley Transit 2024; Open Street 2019; Maxar 2024

DUDEK

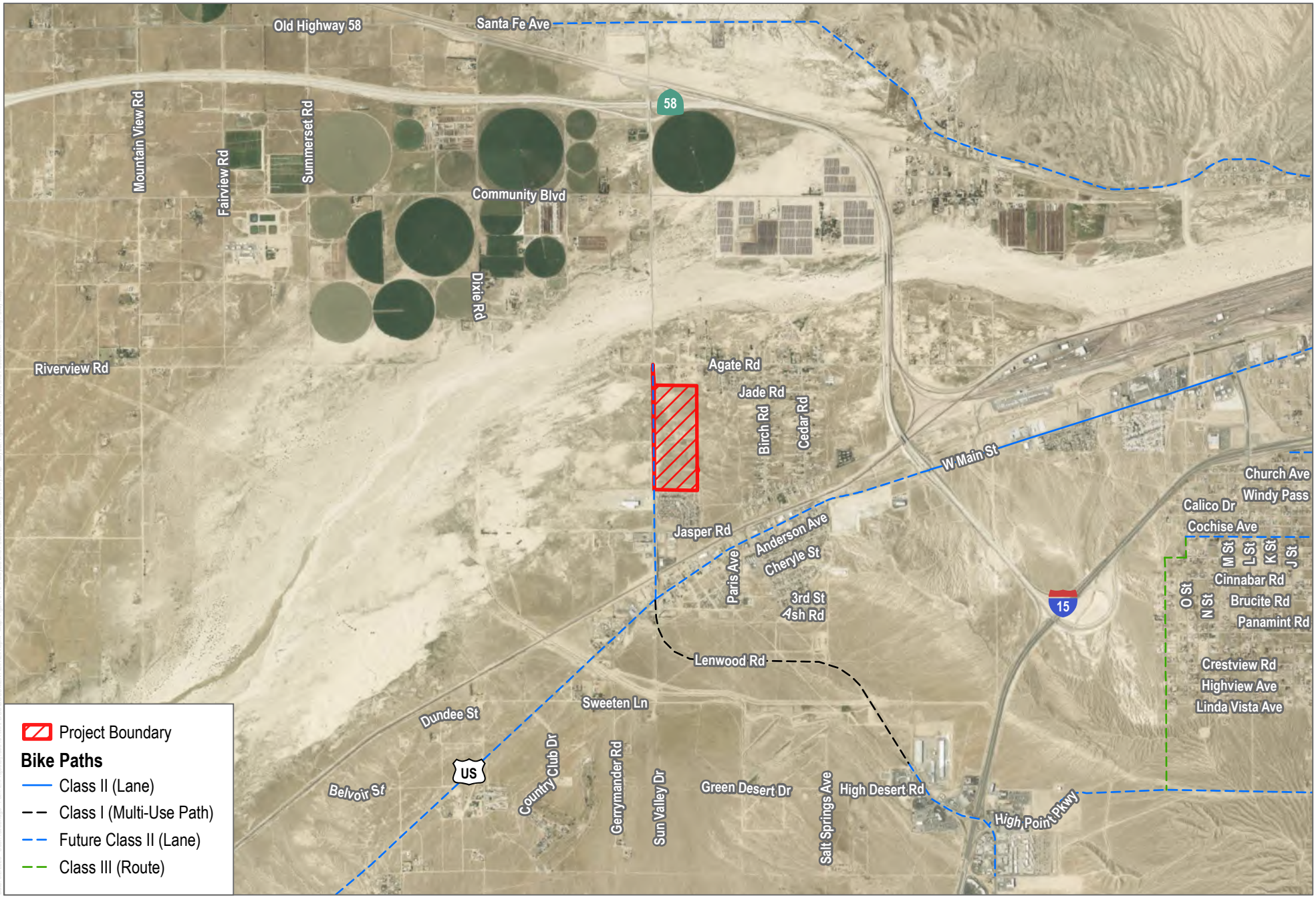
0 2,100 4,200 Feet

**FIGURE 3.10-3**

Existing Transit Facilities

EV Charging Station and Logistics Facility

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SOURCE: Esri Aerial Imagery, San Bernardino County 2024, SBCATP 2025

DUDEK

0 2,000 4,000 Feet

**FIGURE 3.10-4**

Bicycle and Pedestrian Planning Policy Map

EV Charging Station and Logistics Facility

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# 3.11 Utilities and Services

This section describes the existing conditions related to utilities and service systems, including water supply and conveyance, wastewater treatment and conveyance, electricity, and solid waste disposal, and identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures, if required for any significant or potentially significant impacts related to project implementation of the Lenwood Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project").

The topic of stormwater is addressed in Section 3.7, Hydrology and Water Quality.

No comments regarding utilities and service systems were received during the scoping period for this environmental impact report (EIR). All scoping comment letters received are provided in Appendix A.

Sources consulted include a water supply assessment (WSA) prepared by Dudek dated November 2023 (Appendix K), the San Bernardino County Countywide Plan/Policy Plan (San Bernardino County 2020), the Golden State Water Company 2020 Urban Water Management Plan (GWSC 2020), and CalRecycle SWIS Facility data.

## 3.11.1 Environmental Setting

### Water

#### Water Supply

The proposed project site is within the service area boundary of the Mojave Water Agency (MWA). MWA is a regional wholesale water and groundwater management agency. Within the MWA service area boundary, there are multiple retail water service agencies, including Golden State Water Company (GSWC). GSWC is an investor-owned public utility company that supplies water to more than one million people in over 80 communities throughout California. The project is located within the Barstow service area of GSWC. The GSWC – Barstow area (GSWCB) currently serves 8,800 customers in Barstow and has been the community's water service provider since 1929 (GSWC 2021). GSWCB has historically pumped groundwater directly from the Mojave Basin Area to meet water demands within its service area. GSWCB is a member agency of the Mojave Water Agency.

GSWCB pumps groundwater from the Upper Mojave River Valley Basin, and more specifically, from the Centro Subarea, which is a subarea of the Mojave Basin Area, as defined in the Mojave Basin adjudication (GSWC 2021). The project overlies two basins designated by DWR: the Lower Mojave River Valley Basin (LMRV Basin; 6-040) and the Middle Mojave River Valley Basin (MMRVB; 6-041). The project overlies the Centro subarea of the Mojave Basin Area. The Mojave Basin Area is further subdivided into five smaller areas (Oeste, Alto, Este, Centro, and Baja). The project would be located within the Centro Subarea, approximately 1 mile south of the Mojave River. The LMRV and MMRV Basin is an adjudicated basin and thus has a managed groundwater extraction rate, reducing the potential for over-extraction to occur. According to DWR, the LMRV and MMRV Basins are exempt from the requirements of developing a Groundwater Sustainability Plan as they are designated as a very-low priority basin in an adjudicated area.

Pursuant to the Urban Water Management Planning Act, GSWC prepares an Urban Water Management Plan (UWMP) for the GSWCB on a 5-year basis. The most recent GSWCB UWMP, prepared in 2020, describes existing and future supply reliability, forecasts future water uses, presents demand management progress, and identifies

local and regional efforts to meet projected water use. The UWMP projects future water use in 5-year increments based on the projected number of customer connections for each land use category and the average unit demand factors for each land use category between 2016 and 2020. GSWC comprehensively updates its GSWCB UWMP on a 5-year basis to refine population projections and include all new land use patterns and development.

According to the 2020 UWMP, GSWCB has reliable supplies to meet its retail customer demands in normal, single dry years, and five consecutive dry year conditions through 2045. Table 3.11-1 presents the supplies and demands, as estimated for the 2020 UWMP, for the various drought scenarios for the projected planning period of 2025-2045 in 5-year increments.

## Table 3.11-1. Water Supply and Demand Comparison (Acre-Feet per Year)

| Supply and Demand | | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---|---|---|---|---|---|
| **Normal Year** | | | | | | |
| Supply totals | | 15,128 | 14,408 | 14,408 | 14,408 | 14,408 |
| Demand totals | | 5,435 | 5,528 | 5,622 | 5,718 | 5,815 |
| Difference | | 9,693 | 8,880 | 8,768 | 8,690 | 8,593 |
| **Single-Dry Year** | | | | | | |
| Supply totals | | 15,128 | 14,408 | 14,408 | 14,408 | 14,408 |
| Demand totals | | 5,435 | 5,528 | 5,622 | 5,718 | 5,815 |
| Difference | | 9,693 | 8,880 | 8,768 | 8,690 | 8,593 |
| **Multiple-Dry-Years Supply and Demand Comparison** | | | | | | |
| First Year | Supply totals | 15,128 | 14,408 | 14,408 | 14,408 | 14,408 |
| | Demand totals | 5,435 | 5,528 | 5,622 | 5,718 | 5,815 |
| | Difference | 9,693 | 8,880 | 8,768 | 8,690 | 8,593 |
| Second Year | Supply totals | 14,408 | 14,408 | 14,408 | 14,408 | 14,408 |
| | Demand totals | 5,454 | 5,547 | 5,641 | 5,737 | 5,815 |
| | Difference | 8,954 | 8,861 | 8,767 | 8,671 | 8,593 |
| Third Year | Supply totals | 14,408 | 14,408 | 14,408 | 14,408 | 14,408 |
| | Demand totals | 5,472 | 5,565 | 5,660 | 5,757 | 5,815 |
| | Difference | 8,936 | 8,843 | 8,748 | 8,651 | 8,593 |
| Fourth Year | Supply totals | 14,408 | 14,408 | 14,408 | 14,408 | 14,408 |
| | Demand totals | 5,491 | 5,584 | 5,679 | 5,776 | 5,815 |
| | Difference | 8,917 | 8,824 | 8,729 | 8,632 | 8,593 |
| Fifth Year | Supply totals | 14,408 | 14,408 | 14,408 | 14,408 | 14,408 |
| | Demand totals | 5,509 | 5,603 | 5,699 | 5,796 | 5,815 |
| | Difference | 8,899 | 8,805 | 8,709 | 8,612 | 8,593 |

**Source:** GSWC 2021
**Notes:** AF = acre-feet
" Normal year" is represented by a year with normal hydrologic conditions.
" Single dry year" and "Multi-Year Drought" is defined as a condition that may require reduced water deliveries to customers caused by regulatory decrees. GSWCB assumes that because of the extremely arid conditions in the Mojave Desert even in wet years, the hydrology does not exert a strong influence on outdoor water use.

### Water Infrastructure

The existing GSWCB water distribution system consists of 14 active wells that extract water from the adjudicated LMRV basin, 11 facilities that provide stored water by gravity or through booster pumping stations, and 182 miles of distribution pipelines system. There is an existing 12-inch diameter water line located within Lenwood Road for fire service, domestic water, and for landscape irrigation. In addition, there are numerous groundwater wells surrounding the project site and two wells within the project site. The two wells located on the northern boundary of the project site are USGS wells (Site Numbers 345327117065301 and 345327117065401) and are categorized as inactive (Appendix K).

### Wastewater/Sewer

The project site is located in the City of Barstow's Sphere of Influence (SOI), which is served by the City of Barstow for wastewater treatment and conveyance (San Bernardino County 2018). The GSWCB service area is larger than the City of Barstow's municipal sewer system. Approximately 64 percent of the wastewater generated within the GSWCB service area is collected by 113 miles of gravity sewers and transported to the Barstow Regional Wastewater Treatment Plant (BWWTP), which are owned and operated by the City of Barstow. The remaining effluent generated in the GSWCB service area is treated by private septic systems (GSWC 2021). The BWWTP is located at 2200 Riverside Drive on the eastern side of the City, approximately 7.3 miles east of the project site. The BWWTP treats approximately 2.1 million gallons per day (mgd) and has a design flow rate capacity of 4.5 mgd (RWQCB 2019). No reclaimed water or tertiary-treated wastewater is currently available to the City of Barstow or its planning area.

The project site is served by an 8" gravity fed main located in Lenwood Road (Carollo 2025). This line flows north to Agate Road and turns east towards the BWWTP.

### Solid Waste

The collection, transport, and disposal of solid waste and recyclables from business and residential uses in the project area are provided by Burrtec. After waste is collected, it is hauled to the Barstow Sanitary Landfill, located approximately 6.2 miles southeast of the project site. The Barstow Sanitary Landfill is located at 32553 Barstow Road, within the City of Barstow's SOI. The landfill is owned and operated by the San Bernardino County Solid Waste Management Division and accepts waste generated by the unincorporated County. The landfill also accepts waste from the City of Barstow under a Waste Disposal Agreement. The Barstow Sanitary Landfill has a maximum permitted daily throughput of 1,500 tons, a maximum capacity of 80,354,500 cubic yards, and a remaining capacity of 68,361,526 cubic yards (i.e., approximately 85% remaining capacity). As of the most recent facility capacity evaluation in 2024, this landfill was expected to remain open until 2071 (CalRecycle 2025a).

Construction waste is typically disposed of at landfills that accept materials such as soil, concrete, asphalt, and other construction debris. San Bernardino County has two landfills that accept construction waste: the Victorville Sanitary Landfill and the Chino Valley Rock Landfill. The Chino Valley Rock Landfill is located at 13434 Ontario Avenue in Ontario, approximately 67 miles to the southwest of the project site. The Chino Valley Rock Landfill has a maximum daily throughput of 1,500 tons and a maximum capacity of 4,600,500 tons per year (CalRecycle 2025b). The Victorville Sanitary Landfill is located at 18600 Stoddard Wells Road in Victorville, approximately 22 miles south of the project site. The Victorville Sanitary Landfill has a maximum permitted daily throughput of 3,000 tons, a maximum capacity of 93,400,000 cubic yards, and a remaining capacity of 79,400,000 cubic yards (i.e.,

approximately 85% remaining capacity). As of the most recent facility capacity evaluation in 2020, this landfill was expected to remain open until 2047 (CalRecycle 2025c).

## Electricity

Electrical power for the County is provided by Southern California Edison (SCE). SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Energy Commission (CEC), approximately 106,552 gigawatt-hours of electricity were used in SCE's service area in 2022 (CEC 2023). Demand forecasts anticipate that approximately 111,670 gigawatt-hours of electricity will be used in SCE's service area in 2025 under a high demand forecast (CEC 2023). SCE receives electric power from a variety of sources.

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. To ensure projected supply meets demand, SCE tracks planned development and coordinates with the California Independent System Operator (ISO). The California ISO is a nonprofit public benefit corporation and is the impartial operator of the state's wholesale power grid, charged with maintaining grid reliability and directing uninterrupted electrical energy supplies to California's homes and communities. While utilities (such as SCE) still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every 5 minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (CAISO 2023).

The project site consists of vacant, undeveloped land that does not include underground or overhead electrical infrastructure. Electrical transmission lines are located along the west side along Lenwood road.

## Natural Gas

Natural gas service in the Barstow area, including the project site, is provided by Southwest Gas Corporation (Geoportal 2026). The Southwest Gas Company provides natural gas service to more than 21.1 million customers in Arizona, Nevada, and portions of California. According to the California Energy Commission, in 2022, non-residential natural gas demand in the County was 294,792,317 therms (CEC 2025).

The project site consist of vacant, undeveloped land, with no natural gas pipelines.

## Telecommunications

There are a number of telecommunications service providers in the project area including Verizon, Charter, and Charter Spectrum. These are private companies that provide connections to their communication systems on an as-needed basis and maintain existing infrastructure in the vicinity of the project site. Because the end user of the project has not yet been identified, it is unknown at this time which provider would provide telecommunications services.

## 3.11.2 Regulatory Setting

### Federal

#### National Pollutant Discharge Elimination System Permit Program

The National Pollution Discharge Elimination System (NPDES) permit program was established in the Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the United States. Discharge from any point source is unlawful unless the discharge is in compliance with an NPDES permit. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

#### Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (Code of Federal Regulations, Title 40, Section 268, Subpart D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs that include federal landfill criteria. The federal regulations address the location, operation, design, and closure of landfills, as well as groundwater monitoring requirements.

### State

#### California Code of Regulations, Titles 14 and 27

Title 14 (Natural Resources, Division 7) and Title 27 (Environmental Protection, Division 2 [Solid Waste]) of the California Code of Regulations governs the handling and disposal of solid waste and operation of landfills, transfer stations, and recycling facilities.

#### Assembly Bills 939 and 341: Solid Waste Reduction

The California Integrated Waste Management (CIWM) Act of 1989 (AB 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of a desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995 and 50% by 2000 and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element to demonstrate how the jurisdiction will meet the diversion goals. Other elements included encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions under the CIWM Board regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment from landfills operations and solid waste facilities.

In 2011, AB 341 was passed, making a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. AB-341 requires that

local agencies adopt strategies that will enable 75% diversion of all solid waste by 2020. This bill requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multifamily apartments with five or more units are also required to form a recycling program. Since 2020, there is no publicly available information (on-line) on how well the state has done collectively to meet the 75% diversion goal.

### Senate Bill 1374: Construction and Demolition Waste Reduction

Senate Bill (SB) 1374 requires that annual reports submitted by local jurisdictions to CIWM Board include a summary of the progress made in the diversion of construction and demolition waste materials. In addition, SB 1374 requires the CIWM Board to adopt a model ordinance suitable for adoption by any local agency that required 50% to 75% diversion of construction and demolition waste materials from landfills. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWM Board's model by default.

### Assembly Bill 1327: California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327, which was established in 1991, required CalRecycle to develop a model ordinance for the use of recyclable materials in development projects. Local agencies were then required to adopt the model ordinance, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

### Assembly Bill 1826: Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826 Chesbro (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. (Organic waste is defined as food waste, green waste, landscape, and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.) This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to recycle organic waste. Since 2020, Burrtec and the Town continued to implement the Apple Valley Mandatory Commercial Recycling Plan with the goal of promoting extensive commercial and multifamily recycling programs.

### Senate Bill X7-7

SB X7-7, which became effective on February 3, 2010, is the water conservation component to the Delta legislative package (SB 1, Delta Governance/Delta Plan). The bill implements water use reduction goals established in 2008 to have achieved a 20% statewide reduction in urban per capita water use by the end of 2020. The bill required each urban retail water supplier to develop urban water use targets to help meet the 20% goal by 2020 and an interim 10% goal by 2015. The bill established methods for urban retail water suppliers to determine targets to help achieve water reduction targets. The retail agency may choose to comply with SB X7-7 as an individual or as a region in collaboration with other water suppliers. Under the regional compliance option, the retail water supplier must report the water use target for its individual service area.

### Sustainable Groundwater Management Act

On September 16, 2014, Governor Brown signed into law a three-bill legislative package—AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known as SGMA. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the DWR provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt GSP for crucial groundwater basins in California. Applicable provisions of SGMA depend on basin prioritization as determined by DWR; SGMA requires GSPs to be developed for high- and medium-priority basins. As the DWR has classified the Lower Mojave River Valley Basin and the Middle Mojave River Valley Basin as a very-low-priority basin, a GSP is not required and has not been prepared.

### Urban Water Management Plans

Pursuant to the California Urban Water Management Act (California Water Code Sections 10610-10656), urban water purveyors are required to prepare and update a UWMP every 5 years. UWMPs are prepared by California's urban water suppliers to support long-term resource planning and ensure adequate water supplies. Every urban water supplier that either delivers more than 3,000 acre-feet per year (AFY) of water annually or serves more than 3,000 connections are required to assess the reliability of its water sources over a 20-year period under normal-year, single-dry-year, and multiple-dry-year scenarios in a UWMP. UWMPs must be updated and submitted to the DWR every 5 years for review and approval. The project site is within the area addressed by the GSWCB 2020 UWMP.

### Senate Bill 610 and Senate Bill 221: Water Supply Assessments

SB 610 and SB 221, which became effective January 1, 2002, improve the linkage between certain land-use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding water availability and reliability with respect to certain developments to be included in the administrative record, to serve as the evidentiary basis for an approval action by the city or county on such projects. Under Water Code Section 10912[a], projects subject to the California Environmental Quality Act (CEQA) requiring a WSA include: residential development of more than 500 dwelling units; shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; hotel, motel or both, having more than 500 rooms; industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area; mixed-use projects that include one or more of the projects specified; or a project that would demand an amount of water equivalent to or greater than the amount required by a 500 dwelling units. A fundamental source document for compliance with SB 610 is the UWMP. The UWMP can be used by the water supplier to meet the standard for SB 610. SB 221 applies to the Subdivision Map Act, conditioning a tentative map on a project applicant to verify that the public water supplier has sufficient water available to serve the proposed development.

Pursuant to the requirements of SB 610, a WSA was prepared for the project and includes a comprehensive assessment of historical water demands and a projection of future water demands based on forecasted development of the remaining developable lands within the GSWCB's water service area (Appendix K).

### Executive Order B-29-15

In response to the ongoing drought in California in 2015, Executive Order (EO) B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the DWR modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

### Sanitary Sewer General Waste Discharge Requirements

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1.0 mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system in order to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

### California Code of Regulations Title 24, Part 11

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code, Part 11 of Title 24, commonly referred to as CALGreen, establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all new construction of residential and non-residential buildings. CALGreen standards are typically updated every three years. The latest version (CALGreen 2019) became effective on January 1, 2023.

Mandatory CALGreen standards pertaining to water, wastewater, and solid waste include the following (Title 24 Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings.
- Mandatory reduction in outdoor water use through compliance with a local water-efficient landscaping ordinance or the DWR's Model Water Efficient Landscape Ordinance.
- Diversion of 65% of construction and demolition waste from landfills

## Local

### San Bernardino County Countywide Plan/Policy Plan

The San Bernardino County Countywide Plan/Policy Plan contains the goals and policies that guide future development within the County (San Bernardino County 2022). The Countywide Plan/Policy Plan contains the long-term goals and policies that will guide County decisions, investments, and improvements toward achieving the Countywide Vision and serves as the County's General Plan for the unincorporated areas. The Countywide Plan/Policy Plan's Infrastructure and Utilities Element describes the purpose and principles, as well as outlines the goals and

policies for the effective provision and management of water, wastewater, stormwater, solid waste, power, and communication systems. Relevant policies from the Countywide Plan/Policy Plan are summarized below.

*Infrastructure and Utilities Element*

Goal IU-1. Water Supply. Water supply and infrastructure are sufficient for the needs of residents and businesses and resilient to drought.

Policy IU-1.1. Water Supply. We require that new development be connected to a public water system or a County-approved well to ensure a clean and resilient supply of potable water, even during cases of prolonged drought.

Policy IU-1.3. Recycled Water. We promote the use of recycled water for landscaping, groundwater recharge, direct potable reuse, and other applicable uses in order to supplement groundwater supplies.

Policy IU-1.7. Areas Vital for Groundwater Recharge. We allow new development on areas vital for groundwater recharge when stormwater management facilities are installed onsite and maintained to infiltrate predevelopment levels of stormwater into the ground.

Policy IU-1.9. Water Conservation. We encourage water conserving site design and the use of water conserving fixtures, and advocate for the adoption and implementation of water conservation strategies by water service agencies. For existing County-owned facilities, we incorporate design elements, building materials, fixtures, and landscaping that reduce water consumption, as funding is available.

Policy IU-1.1. Connected Systems. We encourage local water distribution systems to interconnect with regional and other local systems, where feasible, to assist in the transfer of water resources during droughts and emergencies.

Goal IU-2. Wastewater Treatment and Disposal. Residents and businesses in unincorporated areas have safe and sanitary systems for wastewater collection, treatment, and disposal.

Policy IU-2.1. Minimum Parcel Size. We require new lots smaller than one-half acre to be served by a sewer system. We may require sewer service for larger lot sizes depending on local soil and groundwater conditions, and the County's Local Area Management Program.

Goal IU-3. Stormwater Drainage. A regional stormwater drainage backbone and local stormwater facilities in unincorporated areas that reduce the risk of flooding.

Policy IU-3.1. Regional Flooding Control. We maintain a regional flood control system and regularly evaluate the need for and implement upgrades based on changing land coverage and hydrologic conditions in order to manage and reduce flood risk. We require any public and private projects proposed anywhere in the county to address and mitigate any adverse impacts on the carrying capacity and stormwater velocity of regional stormwater drainage systems.

Policy IU-3.5. Fair Share Requirements. We require new development to pay its fair share of capital costs to maintain adequate capacity of the County's regional flood control systems.

Goal IU-4. Solid Waste. Adequate regional landfill capacity that provides for the safe disposal of solid waste, and efficient waste diversion and collection for unincorporated areas.

Policy IU-4.1. Landfill Capacity. We maintain a minimum ongoing landfill capacity of 15 years to serve unincorporated waste disposal needs.

Policy IU-4.4. Landfill Funding. We require sufficient fees for use of County landfills to cover capital costs; ongoing operation, maintenance, and closure costs of existing landfills; and the costs and liabilities associated with closed landfills.

Goal IU-5. Power and Communication. Unincorporated area residents and businesses have access to reliable power and communication systems.

Policy IU-5.1. Underground Facilities. We encourage new and relocated power and communication facilities to be located underground when feasible, particularly in the Mountain and Desert regions.

## 3.11.3 Environmental Impacts and Mitigation Measures

### Methodology

#### Water Supply

The analysis of water supply impacts is primarily based on the WSA that was prepared for the project by Dudek and approved by GSWC (Appendix K). In addition, the available and projected water supplies and regional demands is based on the 2020 UWMP that was prepared by GSWC as part of their long-term management planning and legal requirements (GSWC 2021).

The estimated water demands during the life of the project are summarized in Table 3.11-2.

**Table 3.11-2. Water Usage Estimate**

| Project Component | Size (SF) | Gallons per SF/year | Gallons per year | Acre feet per year |
|---|---|---|---|---|
| Warehouse/Distribution Facilities | 1,341,432 | 3.4 | 4,560,869 | 14 |
| Commercial Building | 15,000 | 304 | 4,560,000 | 14 |
| Truck Wash | N/A | N/A | 480,000 | 1.5 |
| Landscaped Areas | 627,041 | 15.3 | 9,565,573 | 29.4 |
| | | | **Total** | **58.9** |

**Source:** Appendix K.
**Notes:** sf=square foot; 1 acre-foot = 325,851 gallons.

#### Wastewater Generation

The wastewater analysis is based on the non-irrigation water usage estimates from the WSA (Appendix K). The project is anticipated to generate 9,600,869 gallons of wastewater per year, or approximately 29.5 acre-feet per year. It is noted that wastewater generation factors used by the City of Barstow for the planning of future sewer infrastructure may vary from those used by GSWC.

### Solid Waste Disposal

Anticipated solid waste generation attributable to the project is shown in Table 3.11-3 and based on estimations that were derived from the air quality modeling that was conducted for the project's air quality analysis. The solid waste generation rates assume compliance with the California Code of Regulations Title 24, Part 11.

**Table 3.11-3. Anticipated Solid Waste Generation**

| Project Components | Solid Waste Generation (tons per year) |
|---|---|
| Electric Vehicle Charging Station | 0.0 |
| Commercial Building | 100.7 |
| Truck Amenities | 0.0 |
| Logistics Facilities | 2,347.0 |
| **Total** | **3,437.7** |

**Source:** Appendix B.
**Notes**: Conservatively assumes that the project would achieve at least 50% diversion even though AB 341 requires 75% diversion.

The project may also generate residual waste from on-site wastewater treatment facilities that would be built if extra-territorial sewer service is not provided by the City as proposed. All residuals would be removed as sludge or concentrated liquid and disposed offsite via pump-and-haul or landfill disposal. The volume of residual waste is not quantifiable at this time, but it is assumed that all waste would be disposed of in compliance with federal, state, and local regulations related to solid waste.

### Thresholds of Significance

The significance criteria used to evaluate project impacts related to utilities and service systems are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact related to utilities and service systems would occur if implementation of the project would do any of the following:

(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

(c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

(d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

(e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to utilities and service systems.

## Impact Analysis

Impact 3.11-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

### Water Facilities

The project would involve the construction of on-site water distribution infrastructure (i.e., pipes, valves, meters, etc.) to provide domestic water, firewater, and irrigation to the project site. The project would be served by GSWC, and would connect to an existing 12-inch-diameter water main located within Lenwood Road.

Construction of the proposed water improvements described above has the potential to cause environmental effects associated with buildout of the project as a whole. However, construction of the project's on-site water infrastructure, and the water service connections in Lenwood Road, have been considered as part of the project, and has been accounted for in the other technical sections of Chapter 3 of this EIR. There are no unique impacts associated with the installation of water infrastructure to serve the project that have not been discussed and accounted for in this EIR and the project would not require the relocation of any existing water lines. Therefore, impacts associated with water facilities would be less than significant.

### Wastewater Conveyance Facilities

The City of Barstow would provide sewer service to the project site pursuant to an extra-territorial service agreement to be approved by the City as well as LAFCO. The EV Charging Station and retail component would connect to the existing 8-inch gravity fed sewer main located within Lenwood Road. The logistics facility may connect with the existing 8-inch line in Lenwood, or alternatively, may connect to a proposed 24-inch main in Jasper Road, constructed to serve the BIG development. The connection to Jasper Road would require construction of a lift station on the project site and construction of a 4-inch force main in Lenwood Road from the project site to Jasper Road (Carollo 2025). In the event that sewer service is not provided by the City as proposed, the project would instead be served by on-site wastewater treatment facilities.

The construction of the proposed sewer improvements has the potential to cause environmental effects associated with buildout of the project as a whole. However, the proposed on-site and off-site sewer improvements have been considered as part of the project and have been accounted for in the other technical sections of Chapter 3 of this EIR. There are no unique impacts associated with the installation of sewer infrastructure to serve the project that have not been discussed and accounted for in this EIR. Therefore, impacts associated with wastewater conveyance facilities would be less than significant.

### Wastewater Treatment Facilities

Upon build-out of the project, the project's wastewater would be conveyed to the BWWTP, which has a treatment capacity of 4.5 mgd and currently produces an average flow of 2.1 mgd, or approximately 47% of its total capacity. Projected wastewater from the project would represent approximately 1.08% of the remaining capacity of the treatment facility. Given the remaining capacity of the BWWTP, the BWWTP would be able to adequately accommodate the project's contribution of wastewater.

As described in Chapter 2, Project Description, should the extra-territorial service agreement with the City for wastewater treatment not occur, an on-site wastewater treatment system would be developed. This system is further discussed in Chapter 3.6, Hydrology, and no significant water quality impacts associated with such a system were identified. Construction of such a system on-site is considered in the analysis of this EIR.

Therefore, for connection to the BWWTP or construction of an on-site system, impacts associated with new wastewater treatment facilities would be less than significant.

### Electric Power, Natural Gas, and Telecommunications

Extension of utilities (e.g., electrical, telecommunications, fiber optic, natural gas, etc.) to the project site would be required to support operation of the proposed project.

As discussed in Section 3.11.1, Environmental Setting, electricity would be provided to the project site by SCE and natural gas would be provided by Southwest Gas Company. Development of the project would increase demand for electricity and would increase requirements for telecommunication technology infrastructure. Based on the most recent information from SCE (February 2024), initial electrical service to serve the project would be from the existing 33 kilovolt (kV) circuit that runs along the west side of Lenwood Road. As previously discussed, SCE tracks planned development and coordinates with the California ISO, which matches buyers and sellers of electricity to ensure that enough power is available to meet demands while ensuring adequate system transmission capacities and capabilities (CAISO 2023). The existing transmission line may be upgraded (replacing or adding transmission lines to the existing poles) in order to serve the project. Such work, if required, would be performed by SCE within the existing right of way on Lenwood Road.

The project would only use natural gas for food/restaurant purposes in the commercial building as noted in Chapter 2, Project Description. It is estimated that the project would consume approximately 3,429 therms of natural gas per year. The project would connect to the nearest existing natural gas infrastructure. The proposed project would be adequately served by the existing natural gas conveyance infrastructure and would not necessitate the expansion of existing infrastructure beyond what is needed to serve the proposed project.

There are a number of private telecommunications service providers that provide connections to their communication systems on an as-needed basis and maintain existing infrastructure in the vicinity of the project site. Project demand for telecommunications would be adequately served by existing and proposed infrastructure and capacity.

Connection to existing utilities would require limited construction, which would be temporary and limited to trenching to the depth of the underground lines. Further, the undergrounding of utilities would be performed in coordination with SCE. Project construction would occur in accordance with all applicable regulatory requirements. Construction of on-site and off-site electrical and telecommunication facilities have been considered as part of the project and have been accounted for in the other technical sections of Chapter 3 of this EIR. Therefore, impacts associated with electric, natural gas, and telecommunication connections would be less than significant.

### Conclusion

Based on the discussion above, the project impact related to the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, would be **less than significant**.

## Mitigation Measures

No mitigation measures are required.

Impact 3.11-2: The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

As noted above, the WSA prepared for the project estimates water demand for operation and maintenance of the project to be approximately 59 AFY, as shown in Table 3.11-2. Construction water demand is estimated to be short term and relatively insignificant compared to the operational use. The project site is undeveloped and thus has no existing water demand, so the net increase in water demand would be equivalent to the project's estimated water demand of approximately 59 AFY (see Table 3.11-2).

The GSWCB 2020 UWMP has planned for growth within its service area over the next 25 years and has made an allowance for future demand estimates. Future demand is based on the projected number of customer connections for each land use category and the average unit demand factors for each land use category between 2016 and 2020 (GSWC 2020). The GSWCB 2020 UWMP reported that the unit demand factor for industrial land uses between 2016 and 2020 was 10.22 acre-feet per connection. Based on the projected number of connections, water demand for industrial land uses is projected to increase from 98 AFY in 2025 to 105 AFY in 2045. It is assumed that the proposed project is not accounted for in this industrial demand. Total water demand for GSWCB, including water losses, for that period is 4,535 AFY in 2025, and 5,815 AFY in 2045. Projected total water supplies available to the GSWCB for both a normal year and a single dry year are 15,1128 AFY in 2025 and14,408. For a 5-year drought, supplies are steady at 14,408 AFY between 2025 and 2045. The projected demand in the 2020 UWMP, plus the proposed project, compared to projected supply, results in a surplus of 9,634 AFY in 2025, and 8,534 AFY in 2045 (normal year and single dry year). For a 5-year drought, the surplus is slightly reduced to 5,494 in 2025 and 5,874 in 2045. Therefore, as describe ed in the WSA (Appendix K) there are sufficient water supplies available to serve the proposed project.

Reasonably foreseeable development includes the demand projections in the 2020 UWMP. However, the 2020 GSWCB UWMP demand figures reflect the City's current 2015 General Plan and its associated growth forecast. The City is currently updating its General Plan, which includes the BIG project in its development assumptions. Accordingly, the City coordinated with MWA, the regional water provider, to more accurately estimate projected water demands associated with the proposed General Plan and the BIG project. The proposed General Plan water demand calculations were developed in conjunction with MWA using the 2020 MWA UWMP water demand projection methodology by integrating the proposed General Plan growth projections into the water demand forecast model for the GSWCB service area through 2048. As stated in the EIR prepared for the City's General Plan Update and BIG project (SCH #2024020501), at proposed General Plan buildout, GSWCB is projected to have a surplus of 6,650 AFY based on the worst dry year conditions that would occur in 2045 during year five of multiple dry years (City of Barstow 2025). Based on this projected surplus, the proposed project can be served by adequate water supplies in conjunction with the City's proposed General Plan Update and the BIG project.

The project-specific WSA (Appendix K) prepared for the project identifies a sufficient and reliable water supply. As discussed above, the proposed City General Plan Update and BIG project would not affect this finding. Therefore, , it can be determined that there will be a sufficient water supply for the project and reasonably foreseeable future development. Therefore, impacts associated with water supply would be **less than significant**.

## Mitigation Measures

No mitigation measures are required.

Impact 3.11-3: The project would 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.

Wastewater generated by the project would be conveyed to the BWWTP operated by the City of Barstow, which has a treatment capacity of 4.5 mgd and currently produces an average flow of 2.1 mgd, or approximately 47% of its total capacity (RWQB 2019). Assuming a conservative wastewater generation rate that is equal to the total water demand as estimated in the WSA (see Table 3.11-2), excluding demands for irrigation, the project would generate approximately 29.5 AFY or 0.026 mgd of wastewater. Projected wastewater from the project would represent approximately 1.08% of the 2.4 mgd remaining capacity of the treatment facility. Given the remaining capacity of the BWWTP, the BWWTP would have adequate capacity to accommodate the project's incremental contribution of wastewater.

In addition, the project would be subject to development impact fees, including sewer connection fees, to ensure that the project pays for its fair share for necessary sewer improvements. Alternatively, should connection to the City's system not occur, an on-site system of adequate capacity is a feasible option, as discussed in Chapter 2.0, Project Description, and Section 3.7, Hydrology, Water Quality, and Drainage. Therefore, impacts associated with wastewater treatment capacity would be **less than significant**.

## Mitigation Measures

No mitigation measures are required.

Impact 3.11-4: The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

## Short-Term Construction Impacts

Construction activities would result in generation of solid waste that would likely include scrap lumber, concrete, residual wastes, packing materials, plastics, and soils. Per CALGreen, at least 65% of all construction and demolition waste is required to be diverted from landfills. Any hazardous wastes that are generated during construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws. The remaining 35% of construction material that is not required to be recycled would either be disposed of or voluntarily recycled at a solid waste facility with available capacity.

As previously described, there are two existing landfills within San Bernardino County that accept construction waste, the Victorville Sanitary Landfill and the Chino Valley Rock Landfill. However, as the Victorville Sanitary Landfill is significantly closer to the project site, it is assumed that waste would be transported there. As of 2020, this landfill had an expected remaining capacity of 93,400,000 cubic yards and was expected to remain open until 2047.

The project is required to submit a Construction Waste Management Plan (CWMP) to the County for review and approval (San Bernardino County 2026). The purpose of this plan is to provide an estimation of how much

construction debris will be generated from project construction and describe how construction debris will be managed. The Project would be conditioned to submit a CWMP Part I prior to issuance of a building permit, which requires the applicant to list the types and weights of solid waste materials expected to be generated from construction. The CWMP shall include options to divert waste materials from landfill disposal, materials for reuse or recycling by a minimum of 65% of total weight or volume. The project will also be conditioned to submit a CWMP Part II prior to occupancy, requiring the applicant to provide evidence to the satisfaction of the County's Solid Waste Management Division that demonstrates that the project has diverted a minimum of 65% of total weight or volume of all construction waste.

For the reasons stated above, project construction would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (e.g., CALGreen standards). Therefore, short-term construction impacts associated with solid waste disposal would be less than significant.

### Long-Term Operational Impacts

Once operational, the project would produce solid waste on a regular basis in association with operation and maintenance activities. As shown in Table 3.11-3, project operation would result in the generation of an estimated 3,437.70 tons per year of solid waste. As previously discussed, Burrtec provides waste hauling services to the project area, and would serve the project site. After waste is collected, it is hauled to the Barstow Sanitary Landfill, located approximately 6.2 miles southeast of the project site. This landfill has a maximum daily permitted throughput of 1,500 tons per day, has approximately 85% remaining capacity, and is expected to remain open until 2071 (CalRecycle 2025a).

Prior to Barstow Sanitary Landfill reaching capacity, additional landfills and strategies would be identified so that disposal needs continue to be met. Additional strategies to accommodate solid waste generated by the project during its lifespan include the expansion of existing landfills, the construction of new landfills, and the selection of landfills outside of San Bernardino County. As such, in the event of closure of the Barstow Sanitary Landfill, other landfills in the larger region would be able to accommodate solid waste from the project, and regional planning efforts would ensure continued landfill capacity into the foreseeable future.

### Conclusion

For the reasons stated above, project operation would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and impacts associated with solid waste disposal would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

Impact 3.11-5: The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

As described above, solid waste collected from the project area is directed to the Barstow Sanitary Landfill. This facility is regulated under federal, state, and local laws. Additionally, the County is required to comply with the solid waste reduction and diversion requirements set forth in AB 939, AB 341, AB 132, and AB 1826. In addition, as

previously described, waste diversion and reduction during project construction and operation would be completed in accordance with CALGreen standards. As a result, the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, impacts associated with compliance with solid waste statutes and regulations would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

Impact 3.11-6: The project would not result in cumulatively considerable impacts related to utilities and service systems.

Per the analyses in the following subsections, the project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to utilities and service systems. The geographic context for the following cumulative impact analyses is the service area of each utility provider, further described below.

### Water Supply

As indicated above, the project site is within the GSWCB's water service area. The geographic context considered for cumulative impacts related to water supply is the GSWCB's service area. The service area is located in the County, in the center of the Mojave River Basin area of the Mojave Desert and serves mostly residential connections in the City of Barstow and surrounding unincorporated areas of the County, along with some commercial and industrial customers.

The GSWCB 2020 UWMP contains detailed information about the water supplier's available supply and demand projections out to 2045. The water demand projections in the UWMP account for cumulative growth over the planning period. The project-specific WSA (Appendix K), relying on the UWMP, finds that available water supplies can meet water demands during normal years, single-dry years, and a 5-consecutive-year drought period over the next 25 years (GSWC 2021) for the project and reasonably foreseeable development. As discussed in Impact 3.11-2, when the proposed City General Plan Update (including the BIG project) is considered, there is still an adequate water supply available. Therefore, the project, in combination with past, present, and reasonably foreseeable future development, would not contribute to a cumulative impact with regard to water supply.

### Wastewater Capacity

The geographic context considered for cumulative impacts related to wastewater treatment includes the City of Barstow's wastewater collection and treatment system, which includes 113 miles of gravity sewers within the City of Barstow and the City's SOI as well as the BWWTP. The project, in combination with past, present, and reasonably foreseeable future development, would result in an increase in the amount of wastewater that is being generated in the area and, hence, demand for wastewater treatment. As indicated above, the BWWTP has a treatment capacity of 4.5 mgd and currently produces an average flow of 2.1 mgd and therefore has approximately 47% of remaining capacity. There is remaining capacity to serve the proposed project in conjunction with cumulative projects, including the BIG project (City of Barstow 2025). As cumulative increases in wastewater treatment demand within the service area require facility upgrades, the City would charge service connection fees. Such fees would ensure

that capital improvements are completed sufficiently to accommodate increased wastewater inflows associated with the project area. As such, due to the City's long-term planning efforts, the City would have adequate capacity to serve the project and cumulative projects' projected demand in addition to the provider's existing commitments using existing entitlements and infrastructure.

Should the project not receive service from the City and the BWWTP, an on-site wastewater system would be constructed. This system would be confined to the project site and would meet all required water quality standards, described in Section 3.7. On-site wastewater treatment is not proposed for BIG and would not result in a cumulative impact.

Therefore, the project, in combination with past, present, and reasonably foreseeable future development, would not contribute to a cumulative related to wastewater treatment capacity.

### Solid Waste

The geographic area considered for the analysis of cumulative impacts related to solid waste generation and landfill capacity is the areas served by the Victorville Sanitary Landfill and Barstow Sanitary Landfill. Construction of the project and other cumulative development would result in construction waste such as concrete, scrab lumber, and other construction debris that would require disposal at the Victorville Sanitary Landfill. The Victorville Sanitary Landfill has approximately 85% remaining capacity and is expected to operate until 2047. The project and other cumulative projects would be required to adhere to applicable construction waste regulations. Per CALGreen, 65% of construction and debris waste must be diverted from landfills. As previously discussed, the project and other cumulative development in the County would be required to submit a CWMP for review and approval by the County's Solid Waste Management Division to demonstrate that a minimum of 65% of total weight or volume of construction waste is diverted from the landfill.

Once operational, the project and other cumulative development would generate solid waste requiring disposal at the Barstow Sanitary Landfill. As described above, the Barstow Sanitary Landfill has approximately 85% remaining capacity and is expected to operate until 2071.The project and other cumulative projects would be required to adhere to applicable solid waste regulations, including the CIWM Act and related regulations, which would serve to continue to require reduction, recycling, and reuse to reduce the amount of solid waste sent to landfills. This includes AB 939 which mandates that counties divert from landfills, at a minimum, 50% of the total solid waste generated to recycling facilities.

Therefore, given regulatory requirements related to reuse and recycling, as well as remaining landfill capacity, the Victorville Sanitary Landfill and Barstow Sanitary Landfill would be expected to have adequate capacity to serve the project and cumulative development, and cumulative impacts on landfill capacity would be less than significant.

### Electric Power, Natural Gas, and Telecommunications

The geographic study area for analysis of cumulative impacts related to electric power infrastructure is SCE's service area, and related to telecommunications infrastructure is the project area. Development of the project, as well as other cumulative projects, would increase demands for energy and would increase requirements for telecommunications infrastructure. As stated in Section 3.11.1, the ISO plans and coordinates grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission owners (investor-owned utilities such as SCE) file annual transmission expansion/modification plans to accommodate the state's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and

perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the state. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the state.

The project would be served by the existing 33 kV SCE line on Lenwood Road. As noted in Impact 3.11-1, improvements to the existing line may be required. Future upgrades to SCE's system may also be required to support future growth in the region. Typically, upgrades to utility networks fall under the jurisdiction of the California Public Utilities Commission and would be subject to environmental review as electrical projects are proposed.

As further discussed in Chapter 3.5, Energy, Southwest Gas Corporation, has natural gas supplies in exceedance of demand, and would be able to serve the proposed project in addition to current and future customers within its service area.

Telecommunication service would be extended to the project site from nearby existing locations within the vicinity of the project site. Should the applicable service provider determine that upgrades or extensions of infrastructure be required, any such upgrades would be subject to further environmental review.

Therefore, cumulative impacts associated with upgrades of electric and telecommunication facilities would be less than significant.

### Conclusion

For the reasons stated above, cumulative impacts from the project would be **less than significant.**

### Mitigation Measures

No mitigation measures are required.

## 3.11.4 References

CalRecycle. 2025a. SWIS Facility/Site Activity Details - Barstow Sanitary Landfill (36-AA-0046). https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1871?siteID=2653

CalRecycle. 2025b. SWIS Facility/Site Activity Details - Chino Valley Rock (36-AA-0447). https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/4666

CalRecycle. 2025c. SWIS Facility/Site Activity Details - Victorville Sanitary Landfill (36-AA-0045). https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652

CEC (California Energy Commission). 2025. Natural Gas Consumption. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1

Carollo. 2025. *Sewer Analysis Report for Lenwood Electric Vehicle Facility Development.* Memorandum. Prepared for the City of Barstow. December 18, 2025.

Geoportal (California State Geoportal). 2026. California Natural Gas Service Area. https://gis.data.ca.gov/datasets/CAEnergy::california-natural-gas-service-area/explore?location=34.631566%2C-116.646957%2C9 Accessed March 3, 2026.

RWQCB (California Regional Water Quality Control Board, Lahontan Region). 2019. Waste Discharge Requirements for Barstow Facility (Order No. R6V-2019-0252). https://www.waterboards.ca.gov/lahontan/board_decisions/adopted_orders/2019/docs/r6v_2019_0252_wdr_barstow.pd

City of Barstow. 2025. *City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report.* SCH #2024020501. https://ceqanet.lci.ca.gov/2024020501/2

San Bernardino County. 2020. Countywide Plan/Policy Plan. https://countywideplan.sbcounty.gov/policy-plan/.

San Bernardino County. 2026. "Construction Waste Management Plans". Accessed April 23, 2026. https://dpw.sbcounty.gov/solid-waste-management/construction-waste-management/

GWSC (Golden State Water Company). 2021. Barstow 2020 Urban Water Management Plan. https://wuedata.water.ca.gov/getfile?filename=/public%2Fuwmp_attachments%2F2035703361%2FGSWC-Barstow%202020%20UWMP%20Final.pdf

# 3.12 Tribal Cultural Resources

This section describes the existing conditions related to tribal cultural resources (TCRs), identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures while respecting the confidentiality of TCRs, if required for any significant or potentially significant impacts related to implementation of the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project"). TCRs are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that is listed or determined to be eligible for listing in the national or state register of historical resources or listed in a local register of historic resources.

During the Notice of Preparation comment period, two comment letters were received pertaining to tribal cultural resources. The Native American Heritage Commission (NAHC) sent a standard letter listing consultation requirements for lead agencies to follow. The Colorado River Indian Tribes' Tribal Historic Preservation Office sent a letter concerning the removal of artifacts from the project area and requested that all prehistoric cultural resources be avoided if feasible. All Notice of Preparation comment letters received are provided in Appendix A.

The primary sources used to assess the potential effects on TCRs are the record of tribal consultation and the Cultural Resources Inventory and Evaluation Report (Appendix D) prepared for the proposed project. A confidential report has also been prepared and is only available for review by individuals authorized to review confidential reports because the California Environmental Quality Act (CEQA) and CEQA Guidelines prohibit lead agencies from including any information from a California Native American tribe about TCRs (e.g., location) in the environmental document or otherwise disclosing it without prior consent from the tribe that provided the information (Public Resources Code [PRC] Section 21082.3[c] and CEQA Guidelines Section 15120[d]). The California Public Records Act authorizes agencies to exclude from public disclosure records of Native American graves, cemeteries, and sacred places; and records of Native American places, features, and objects (California Government Code Sections 7927.000 and 7927.005.). In addition, California's open meeting laws (the Brown Act, California Government Code Section 54950 et seq.) protect the confidentiality of Native American cultural place information. During the consultation process with Native American tribes described in more detail below, Native American tribal governments also requested the confidential treatment of TCRs.

## 3.12.1 Environmental Setting

A detailed overview of the precontact, ethnohistoric, and historic contexts are provided in Section 3.4, Cultural and Paleontological Resources of this draft environmental impact report starting on page 3.4-1. Therefore, this information is not repeated in this section.

While historic context is important, some archaeologists focus on past Native American culture while current Native American culture can often be overlooked. This approach is not sufficient to provide a context or set of values maintained by the current Native American community related to their history and the landscape. Tribes view themselves as contemporary stewards of their culture and the landscape, representing a continuum from the past to the present. They are resilient, vibrant, and active in the community. Tribes maintain their connection to their history and ongoing culture by practicing traditional ceremonies, engaging in traditional practices (e.g., basketry), and conducting public education and interpretation. The acknowledgment of Native American history and the persistence of tribes cannot be overlooked and should be recognized.

Defining TCRs thus involves the knowledge and expertise of living California Native Americans. As the embodiment of a continuous connection between tribal history and the landscape, they are uniquely qualified to act as the interpreters and stewards of their culture, including the ability to define the significance of the material remains and landscapes of their ancestor's lifeways.

The project site is located within Serrano ancestral territory on land traditionally culturally associated with the Serrano group or clan, which occupied the area along the Mojave River near Barstow. Several named Serrano settlements have been documented in the region and boundaries defining areas of indigenous use and tribal cultural value have varied over time and were often fluid and overlapping. Contemporary Californian Native American tribes with ancestral connections to the project area include the Serrano Nation of Mission Indians, Yuhaaviatam of San Manuel Nation and Morongo Band of Mission Indians.

## Project Region

The proposed project is located in the central portion of unincorporated San Bernardino County. As described above, the proposed project is located on land traditionally inhabited by or otherwise traditionally culturally associated with the Serrano clan.

## Project Site

The approximately 100-acre project site is located on Lenwood Road between California Highway 58 and Interstate 15, within unincorporated San Bernardino County in the community of Lenwood. The site is undeveloped and has not previously been developed. The project proposes to develop an electric vehicle charging station along with associated amenities to serve light duty/passenger vehicles and medium and heavy-duty trucks, and a state-of-the-art concrete tilt-up logistics facility.

## Resources Identified within the Project Study Area

In addition to the information about TCRs gained from tribal consultation summarized below, a confidential Cultural Resources Inventory and Evaluation report (Cultural Report) was prepared for the project in October 2024 and last updated in August 2025.

As discussed in detail in Section 3.4, Cultural and Paleontological Resources, a number of prehistoric and historic-period archaeological resources have been identified as part of numerous field surveys within the project area of potential effect, which includes the project site and the off-site improvement area. There are two previously recorded cultural resources (P-36-003677 and P-36-005076) that intersect the project site. Additionally, seven newly identified cultural resources were recorded within the project site during a pedestrian survey. These newly identified cultural resources include a prehistoric lithic scatter (LE-S-001), three prehistoric lithic isolates (LE-I-002, LE-I-004, and LE-I-005), and three historic-period isolates (LE-I-001, LE-I-003, and LE-I-006). Isolates are categorically ineligible for listing on the California Register of Historical Resources (CRHR) and not considered to be to be significant under CEQA. Both previously recorded cultural resources (P-36-003677 and P-36-005076) and LE-S-001 required formal evaluation for eligibility for listing on the CRHR and for significance under CEQA and local regulations. These three resources were formally evaluated and are recommended not eligible for listing on the CRHR and are not considered significant resources under CEQA and local regulations. No cultural resources were identified in the off-site area.

## Native American Coordination

### Sacred Lands File Search

Dudek requested a NAHC search of the sacred lands file (SLF) on January 24, 2023, for the project site and surrounding 1-mile radius. The SLF consists of a database of known Native American resources. These resources may not be included in the South-Central Coastal Information Center database. The NAHC results, received February 14, 2023, reported that no Native American cultural resources were reported to be on file with the NAHC for this search area. The NAHC additionally provided a list of Native American tribes and individuals/organizations with traditional geographic associations that might have knowledge of cultural resources in this area. To date, Dudek has not sent outreach letters to any of the entities identified by the NAHC. Complete documentation of NAHC correspondence and SLF results is included in the nonconfidential report (Appendix D).

### Native American Coordination

Senate Bill (SB) 18 Tribal Consultation (Government Code Section 65352.3) requires local governments to consult with California Native American Tribes identified by the California NAHC regarding proposed local land use planning decisions prior to the adoption or amendment of a general plan or specific plan. The project is requesting a Countywide Plan/Policy Plan Amendment; therefore, it is required to comply with SB 18.

Assembly Bill (AB) 52 established that TCRs must be considered under CEQA and also provides for additional Native American consultation requirements requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with a project area, including tribes that may not be federally recognized.

#### *Senate Bill 18 Tribal Consultation*

On March 13, 2024, the County requested a Tribal Consultation List from the NAHC and an SLF search in compliance with SB 18, as noted above. The County did not receive a response from the NAHC so reached out again on May 22, 2025. The County received a response from the NAHC with a Consultation List that included tribes with traditional lands or cultural places located within the county. The County sent formal consultation request letters via certified mail to the tribes listed below. The tribes had 90 days to respond to request consultation. The response window closed on June 13, 2024.

- Yuhaaviatam San Manual Nation (formerly the San Manuel Band of Mission Indians)
- Kern Valley Indian Community
- Twenty-Nine Palms Band of Mission Indians
- Morongo Band of Mission Indians
- Fort Yuma Quechan Tribe
- Serrano Nation of Mission Indians
- San Fernando Band of Mission Indians

### *Assembly Bill 52 Consultation*

On March 19 and April 19, 2024, the County sent formal consultation request letters as required under AB 52 to tribes traditionally and culturally affiliated with the project area, listed below. The tribes had 30 days to respond to request consultation.

- Twenty-Nine Palms Band of Mission Indians
- The Chemehuevi Indian Tribe
- Colorado River Indian Tribes (CRIT)
- Fort Mojave Indian Tribe
- Gabrieleeno Band of Mission Indians – Kizh Nation
- Kern Valley Indian Community
- Serrano Nation of Mission Indians
- Yuhaaviatam San Manual Nation (formerly the San Manuel Band of Mission Indians)
- Fort Yuma Quechan Tribe
- Morongo Band of Mission Indians

The Gabrieleeno Band of Mission Indians – Kizh Nation and the Twenty-Nine Palms Band of Mission Indians responded to the County and did not request consultation.

The Yuhaaviatam San Manual Nation responded to the County on March 13, 2024, and requested additional information be provided in order to determine if the Tribe wants to consult with the County under AB 52. The County subsequently entered into consultation and provided the Tribe with the requested documents. The Tribe provided recommended mitigation measures which were incorporated into the EIR.

The Morongo Band of Mission Indians responded to the County on May 31, 2024, requesting additional project information be provided and Tribal participation during any site disturbing work. The Tribe subsequently requested consultation in August 2025. The County agreed to consultation and provided the Tribe with the requested information.

The County continues to engage in good faith consultation with both tribes. Consultation has not been closed.

The Colorado River Indian Tribes (CRIT) Tribal Historic Preservation Office responded to the County on May 30, 2024, and expressed concerns regarding removal of artifacts and the potential for the project to remove the CRIT footprint on the landscape. The CRIT requested that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided if feasible. If avoidance is infeasible, the CRIT requested that the resources be left in-situ or reburied in the area and that this language be incorporated into enforceable mitigation measures. The CRIT did not request consultation.

## 3.12.2 Regulatory Setting

Please refer to Section 3.4, Cultural and Paleontological Resources for additional regulatory information.

## Federal

There are no federal regulations pertaining to TCRs that would apply to the project.

## State

### Tribal Consultation

#### *SB 18 Consultation*

SB 18 Tribal Consultation; Government Code Section 65352.3 requires local governments to consult with California Native American Tribes identified by the California NAHC regarding proposed local land use planning decisions and prior to the adoption or amendment of a general plan or specific plan. The purpose of this consultation process is to preserve or mitigate impacts to cultural sites and resources.

PRC Section 5097.9 and 5097.995 define cultural places as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9).
- 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, any archaeological or historic site (PRC Section 5097.995).

These definitions can be inclusive of a variety of places. Archaeological or historic sites may include places of tribal habitation and activity, in addition to burial grounds or cemeteries. Some examples are village sites and sites with evidence (artifacts) of economic, artistic, or other cultural activity. Religious or ceremonial sites and sacred shrines may include places associated with creation stories or other significant spiritual history, as well as modern day places of worship. Collection or gathering sites are specific places where California Native Americans access certain plants for food, medicine, clothing, ceremonial objects, basket making, and other crafts and uses important to on-going cultural traditions and identities; these places may qualify as religious or ceremonial sites as well as sites that are listed or eligible for listing in the CRHR (OPR 2005).

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government (OPR 2005).

#### *AB 52 Consultation*

AB 52 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 and established that TCRs must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe. A TCR is either:

- On the California Register of Historical Resources or a local historic register; Eligible for the California Register of Historical Resources or a local historic register; or

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

AB 52 formalizes the lead agencies tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project area, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

### Senate Bill 297

SB 297 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction; and establishes the NAHC to resolve disputes regarding the disposition of such remains. The provisions of SB 297 have been incorporated into Section 15064.5(e) of the CEQA Guidelines.

### California Health and Safety Code

Section 7050.5(b) of the California Health and Safety Code specifies protocols to address any human remains that may be discovered. The code states:

> In the event of discovery or recognition 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 remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in section 5097.98 of the Public Resources Code.

## Local

### San Bernardino County Countywide Plan/Policy Plan

San Bernardino County's Countywide Plan/Policy Plan, adopted in 2018, contains a Cultural Resources Element that establishes the County's purpose, principles, goals, and policies for the management of TCRs located in the

unincorporated portions of the County. Applicable goals and policies from the County's Cultural Resources Element are provided below (San Bernardino County 2020).

*Cultural Resources Element*

Goal CR-1. Tribal Cultural Resources. Tribal cultural resources that are preserved and celebrated out of respect for Native American beliefs and traditions.

Policy CR-1.1. Tribal Notification and Coordination. We notify and coordinate with tribal representatives in accordance with state and federal laws to strengthen our working relationship with area tribes, avoid inadvertent discoveries of Native American archaeological sites and burials, assist with the treatment and disposition of inadvertent discoveries, and explore options of avoidance of cultural resources early in the planning process.

Policy CR-1.2. Tribal Planning. We will collaborate with local tribes on countywide planning efforts and, as permitted or required, planning efforts initiated by local tribes.

Policy CR-1.3. Mitigation and Avoidance. We consult with local tribes to establish appropriate project-specific mitigation measures and resource-specific treatment of potential cultural resources. We require project applicants to design projects to avoid known tribal cultural resources, whenever possible. If avoidance is not possible, we require appropriate mitigation to minimize project impacts on tribal cultural resources.

Policy CR-1.4. Resource Monitoring. We encourage active participation by local tribes as monitors in surveys, testing, excavation, and grading phases of development projects with potential impacts on tribal resources.

## 3.12.3 Environmental Impacts and Mitigation Measures

### Methodology

Dudek archaeologists conducted an in-person records search of the project site and surrounding 1-mile radius at the South-Central Coastal Information Center on March 6, 2023. The search included a review of previously recorded cultural resources and previously conducted studies within the project site and including a 1-mile radius of the project site. The records search also included a review of the National Register of Historic Places, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list.

A review of the NAHC SLF was conducted as part of the cultural survey and the search failed to indicate the presence of Native American cultural resources in the immediate project area.

Follow up pedestrian surveys of the project site were conducted in April and July 2023. The intensive-level cultural resources pedestrian survey was conducted by a qualified archaeologist using standard archaeological procedures and techniques. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory. The land area was surveyed in pedestrian transects with no more than 15-meter spacing. The survey entailed inspecting the entirety of the project site and documenting the site with notes and photographs.

The Yuhaaviatam San Manual Nation requested sub-surface testing be completed in a portion of the site to gain a better understanding of subsurface conditions. Subsurface testing for buried cultural resources was conducted on March 4, 2025, in areas where wind-blown sands may have covered cultural resources that might otherwise be visible on the surface. A tribal representative was present during the testing and no TCRs or cultural resources were unearthed.

In July 2025, two exploratory fault trenches were extended across the trend of the mapped 'shallow linear swale' feature as projected within the southeastern portion of the site. The 42-inch wide trenches were approximately 300 feet and 100 feet long, and 10 feet to 5 feet deep. A geologist, archaeologist and tribal representative were present during the excavation work, and no cultural resources were unearthed.

The Yuhaaviatam San Manual Nation and the Morongo Band of Mission Indians responded to the County's request for consultation under AB 52 and requested a copy of the Cultural Resources Inventory and Evaluation Report, Geotechnical Report and site plans be provided for review. The County provided the requested information to the tribes on April 9, 2026. The Yuhaaviatam San Manual Nation requested certain mitigation measures be incorporated into the EIR (which were incorporated into mitigation measures CUL-1, -2, -3 and TCR-1). The Morongo Band of Mission Indians also requested tribal participation during any site disturbing activities.

As of the publication of this Draft EIR, no TCRs have been identified on the project site during the consultation process.

## Thresholds of Significance

The significance criteria used to evaluate project impacts related to TCRs are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. A significant impact would occur if implementation of the project would cause a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and is:

(a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020(k).

(b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The impact analysis also considers whether the project would result in cumulatively considerable impacts related to tribal cultural resources.

## Impact Analysis

Impact 3.12-1: The proposed project may cause an adverse change in the significance of a previously unidentified tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or determined to be a tribal cultural resource, as supported by substantial evidence.

No TCRs were identified during the research or site surveys conducted for the project site, as further described below. A review of the NAHC SLF was conducted as part of the cultural survey conducted for the project and the search failed to indicate the presence of Native American cultural resources in the immediate project area. Nevertheless, development of the proposed project could potentially cause substantial adverse changes in the significance of a previously unidentified TCR (site, feature, place, cultural landscape, sacred place, or object) with cultural value to a California Native American tribe that are either included or eligible for inclusion in the CRHR or included in a local register of historical resources, or if the County, acting as the lead agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. The project area, including the project site has been used both historically and during prehistoric times by Native American inhabitants. Therefore, it is possible that TCRs could be present and may be disturbed during construction activities.

On March 13, 2024, pursuant to SB 18 the County sent a letter to the NAHC requesting a list of tribes with traditional lands or cultural places that would include the project site. The County did not receive a response and followed up with the NAHC in May 2025. The NAHC provided a Consultation List, and the County sent letters notifying tribes of the project and the proposed General Plan Amendment. No tribes responded to the County's request for consultation pursuant to SB 18. Under SB 18, the only requirement is to provide tribes an opportunity to participate in projects requiring general or specific plan adoption or amendments to provide input in land use decisions at an early planning stage to ensure tribal perspectives are considered when making land use decisions, for the purpose of protecting, or mitigating impacts to tribal cultural places. Compliance with the notification and consultation required under SB 18 is complete.

The proposed project is also subject to compliance with AB 52 to ensure that consultation with tribes is conducted and tribes are allowed the opportunity to provide comments, monitor, and preserve TCRs if found during construction. On April 18, 2024, pursuant to AB 52, the County sent letters to 10 Tribes provided by the NAHC that are traditionally and culturally affiliated with the geographic area of the proposed project and may have been knowledge of TCRs on or near the project site. Responses received from the Tribes contacted did not identify that the project site includes known TCRs.

Two Tribes, the Yuhaaviatam San Manual Nation and the Morongo Band of Mission Indians submitted a request for the County to provide additional information about the project and technical studies completed. The Tribes also requested to have a Tribal monitor be present during all earth moving and grading activities to ensure that any potential TCRs found during project ground disturbance be protected.

A third tribal organization, the Colorado River Indian Tribes (CRIT) Tribal Historic Preservation Office, expressed concerns during the EIR scoping period regarding removal of artifacts and the potential for the project to remove the Tribes' footprint on the landscape. The CRIT requested that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided if feasible. If avoidance is infeasible, the CRIT requested that the resources be left in-situ or reburied in the area and that this language be incorporated into enforceable mitigation measures. The CRIT did not request consultation.

During the AB 52 consultation process, the Yuhaaviatam San Manual Nation requested subsurface testing be completed in a portion of the site to gain a better understanding of subsurface conditions and the potential for TCRs to be present. Subsurface testing for buried cultural resources was conducted on March 4, 2025, in areas where wind-blown sands may have covered cultural resources that might otherwise be visible on the surface. A tribal representative was present during the testing and no TCRs or cultural resources were unearthed.

In July 2025, two exploratory fault trenches were extended across the trend of the mapped 'shallow linear swale' feature as projected within the southeastern portion of the site. The 42-inch wide trenches were approximately 300 feet and 100 feet long, and 10 feet to 5 feet deep. A geologist, archaeologist and tribal representative were present during the excavation work and no cultural resources were unearthed.

The County's General Plan includes Policy CR-1.1 that requires coordination with tribal representatives in accordance with state and federal laws to avoid inadvertent discoveries of Native American archaeological sites and burials, assist with the treatment and disposition of inadvertent discoveries, and explore options of avoidance of cultural resources early in the planning process. Policy CR-1.3 includes consulting with local tribes to establish appropriate project-specific mitigation measures and resource-specific treatment of potential cultural resources and working with project applicants to design projects to avoid known TCRs, whenever possible. If avoidance is not possible, appropriate mitigation is required to minimize project impacts on TCRs. Lastly, Policy CR-1.4 encourages tribal monitoring during testing, excavation, and grading phases of development projects with potential impacts on TCRs.

Based on information gathered during preparation of the Cultural Resources Inventory and Evaluation Report, a search of the SLF, on-site testing and trenching, and information provided by the Tribes, no known TCRs listed or eligible for listing in the CRHR, or in the County's register of historical resources have been identified that would be impacted by the proposed project; although the area is considered to have the potential to contain unanticipated TCRs. In addition, the Tribes have not indicated there are any known TCRs on the site. Since ground-disturbing construction activities have the potential to potentially impact TCRs that may be eligible for listing, this impact would be considered potentially significant.

## Mitigation Measures

While no TCRs have been identified that may be affected by the project, the following mitigation measures are proposed to ensure there are no impacts to unanticipated TCRs. MM-CUL-1 would require preparation of a Cultural Resource Management Plan prior to construction that establishes the protocol to follow during construction, including worker training for the identification of and notification protocols for any unanticipated cultural resource discoveries and the stoppage of work within 60 feet of finds until their significance can be evaluated by a qualified archaeologist. It shall be subject to review and input from the Consulting Tribes (i.e., the Yuhaaviatam of San Manuel Nation and the Morongo Band of Mission Indians). MM-CUL-2 requires on-site monitoring by a qualified archaeologist during construction and identifies the responsibility of the on-site monitors in the event any resource is unearthed. MM-CUL-3 establishes the appropriate course of action and methods for respectful treatment in the event human remains unearthed are Native American. In addition to MM-CUL-1 through MM-CUL-3, MM-TCR-1 would require Tribal monitors to be present for ground-disturbing construction activities on the project site. With implementation of these mitigation measures, the potential for impacts to TCRs would be **less than significant with mitigation**.

MM-CUL-1 See Section 3.4, Cultural and Paleontological Resources.

MM-CUL-2 See Section 3.4, Cultural and Paleontological Resources.

MM-CUL-3 See Section 3.4, Cultural and Paleontological Resources.

MM-TCR-1 Tribal Monitoring**.** At the discretion of the Consulting Tribes, Tribal monitors shall be present for initial grading, subsurface disturbances, or other ground-disturbing activities on the Project site. At

the discretion of the Consulting Tribes, a sufficient number of Tribal Monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Any and all findings will be subject to the protocol detailed within the Cultural Resources Management Plan (CRMP). Consulting Tribes include the Yuhaaviatam of San Manuel Nation and the Morongo Band of Mission Indians.

## Cumulative Impacts

The cumulative context for TCRs includes San Bernardino County and the Central and Western Mojave Desert region as a whole. These resource types all represent locations of specific use of the environment and landscape. For TCRs, such locations represent a continuity of use that is assigned traditional value by tribes, both in the past and present. The cumulative impact to these non-renewable resources are generally considered in terms of their cultural and/or informational value based on their resource type, context and relationships to the surrounding landscape and/or tribal histories. TCRs, as well as human remains of Native American origin, while also variable in type, use, and location, are individually identified and assigned value by California Native American tribes.

Cumulative impacts on TCRs consider whether impacts of the proposed project together with other projects in the larger region, when taken as a whole, substantially diminish the number of such resources within the same or similar context or type.

Impact 3.12-2: The proposed project, in conjunction with, past, present, and reasonably foreseeable probable future projects in the County and the Central and Western Mojave Desert region would not have a cumulative impact on tribal cultural resources and human remains of Native American origin.

As discussed previously, no known TCRs, including Native American human remains have been identified on the project site. Given past, present and future development in the County and the larger region and because all significant TCRs are unique and non-renewable, all adverse effects or negative impacts contribute to a dwindling resource base, this is considered a significant cumulative impact.

As discussed in the regulatory setting, numerous laws, regulations, and statutes, on both the federal and state levels, seek to protect TCRs and the unanticipated discovery of Native American human remains. Future projects within the region would also be subject to the same requirements as the proposed project. Technical studies and consultation would be required as part of the due diligence process and would result in documentation and appropriate consideration of any TCR resources that may be present. Regulations in the region for management of TCRs would apply to development within the County. Cumulative projects may require extensive excavation in culturally sensitive areas and thus may result in adverse effects to known or previously unknown, inadvertently discovered TCRs or Native American human remains. There is the potential for accidental discovery of other TCRs by the proposed project as well as by cumulative projects.

## Mitigation Measures

Refer to MM-TCR-1 above; MM-CUL-1, MM-CUL-2, and MM-CUL-3 in Section 3.4, Cultural and Paleontological Resources. No additional mitigation measures are required. The project's incremental contribution to the cumulative loss of TCRs would be not be considerable, given the lack of any known sites, compliance with existing laws and implementation of project-level mitigation measures MM-CUL-1, MM-CUL-2, and TCR-1, which would require construction monitoring and handling of unknown resources in accordance with a Cultural Resource

Management Plan. In addition, MM-CUL-3 establishes the appropriate course of action and methods for respectful treatment in the event human remains unearthed are Native American, and would ensure the proper procedures are followed in the event the project site is considered a Native American Cultural Place**.** As the proposed project would not affect any known TCRs and would comply with mitigation measures that reduce the potential for significant impacts to unanticipated resources, the project's contribution to the cumulative impact would be less than cumulatively considerable. With implementation of these mitigation measures, the project's cumulative impact would be **less than significant with mitigation.**

## 3.12.4 References

OPR (Governor's Office of Planning and Research). 2005. Tribal Consultation Guidelines Supplement to General Plan Guidelines. November 14, 2005.

San Bernardino County. 2020. Countywide Plan/Policy Plan. https://countywideplan.sbcounty.gov/policy-plan/.

# 4.0 Effects Found Not to be Significant

Section 15128 of the CEQA Guidelines requires that an Environmental Impact Report (EIR) briefly describe potential environmental effects that were determined not to be significant and therefore not discussed in detail in the Environmental Impact Report. The significance criteria used to evaluate project impacts are based on the recommendations of Appendix G of the CEQA Guidelines and the professional judgment of the EIR preparers. The following identifies those environmental effects that are not considered significant for the project, and the reasons for these less-than-significant or no-impact significance determinations.

## 4.1 Agriculture and Forestry Resources

### Conversion of Farmland

The project site is designated as grazing land by the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (DOC 2024a). The Farmland Mapping and Monitoring Program is a non-regulatory program implemented by the DOC, Division of Land Resource Protection. The Farmland Mapping and Monitoring Program produces Important Farmland Maps, classified into eight categories. Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are considered "Important Farmland" for the purposes of CEQA. Grazing land does not include land designated or previously designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The site is zoned as Rural Living (RL) and does not include any land under an existing Williamson Act Contract. Therefore, the project would not convert Important Farmland or conflict with existing agricultural uses or land under a Williamson Act contract and no impact would occur.

### Conversion of Forest Land

The project site does not include forest land resources, which is defined as land that can support 10% native tree cover of any species and allows for management of forest resources (Public Resources Code Section 12220[g]). The project site is not located on or adjacent to forest land, timberland, or land zoned as forest land or for timberland production. Therefore, the project would not involve changes to the existing environment that would result in the loss or conversion of forest land and no impacts would occur.

## 4.2 Geology and Soils

An analysis of the project's potential impacts on paleontological resources is provided in Section 3.4, Cultural and Paleontological Resources, of this Environmental Impact Report.

### Fault Rupture

The project site is not located in an Alquist-Priolo Earthquake Fault Zone mapped by the California Geologic Survey (DOC 2024b; Appendix E). The nearest active fault with traditional surface rupture is a section of the Lenwood-Lockhart fault zone approximately 2.1 miles southeast of the project site. The geological reports prepared for the project (Appendix E) determined that the potential for surface fault rupture at the project site is considered low, as there are no active faults mapped within the site. Therefore, impacts would be less than significant.

## Seismic Ground Shaking

The County, including the project site, is located in a seismically active region within California that is susceptible to strong ground shaking during an earthquake. However, the project site is not located within an area that is subject to significant seismic hazards related to ground failure, including liquefaction, lateral spreading, seismically induced settlement, or landslides (Appendix E). While the project site is located in a region with inherent seismic hazards, the project would be constructed consistent with the California Building Code (CBC), the recommendations of the final geotechnical report, and all County requirements that address building seismic safety concerns. The project would not exacerbate the risk of seismic ground shaking or seismic-related ground failure, which already exist in the project area and impacts would be less than significant.

## Ground Failure

The project would conform to the recommendations of the site-specific geotechnical investigations to address seismic hazards in accordance with current seismic design standards of the CBC, thereby minimizing the potential for seismic-related damage and safety impacts. The final structural design would be subject to approval and follow-up inspection by the County Building and Safety Division. Final design requirements would be provided to the on-site construction supervisor and the County Building Inspector to ensure compliance. Therefore, impacts related to seismic hazards would be less than significant.

## Landslide, Soil Erosion and Loss of Topsoil

The project site is gently sloping and does not contain any steep slopes. There are no landslide maps or reports published by the California Geological Survey that intersect the project site (DOC 2026). As discussed in the Geologic/Seismic Hazards Report prepared for the project (Appendix E), the potential for landslide hazards at the site is low. Therefore, impacts related to landslides would be less than significant.

Project construction would disturb surface soils and temporarily leave exposed soil on the ground's surface, which could potentially result in short-term soil erosion and loss of topsoil. However, project construction activities would comply with all applicable federal, state, and local regulations for erosion control. Since project construction would disturb more than 1 acre, the project would be required to adhere to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which requires implementation of a stormwater pollution prevention plan (SWPPP) including best management practices (BMPs) to minimize erosion and sedimentation. Once developed, the project site would include buildings, paved surfaces, and other on-site improvements that would stabilize and help retain on-site soils. Therefore, impacts related to soil erosion would be less than significant. Soil erosion impacts are also discussed in Section 3.7 of this EIR (Hydrology, Water Quality and Drainage).

## Expansive/Unstable Soils

The result of laboratory testing indicates the near surface granular soils have very low expansion potential; however, clay soils with medium plasticity were encountered in one of the borings, and U.S. Department of Agriculture (USDA) soil survey data identified surface clays within a part of the site (Appendix E). The project is required to conform to the recommendations of the site-specific geotechnical investigations to address hazards related to expansive or unstable soils in accordance with design standards of the CBC. Where expansive clays are encountered, these soils would be capped with granular fill to reduce the potential for excessive heave of overlying slabs on grade and other surface improvements (Appendix E). Therefore, impacts related to expansive soils would be less than significant.

The project site is not mapped as a liquefaction zone by the California Geological Survey (DOC 2025). Due to the depth to groundwater at the site, liquefaction is not considered a potential impact to site development (Appendix E). Therefore, impacts related to liquefaction and liquefaction-induced lateral spreading would be less than significant. The project site is not in area of land subsidence mapped by the U.S. Geological Survey (USGS 2026). However, near-surface soils on the site may be susceptible to hydrocollapse, which refers to the collapse of soil due to wetting (Appendix E). The project would conform to the CBC and implement the recommendations of the site-specific geotechnical investigations to address collapsible soil hazards, thereby minimizing the potential for impacts. Therefore, impacts related to unstable soils including liquefaction, lateral spreading, subsidence, and collapse would be less than significant.

### Septic Tanks/Alternative Systems

The preferred wastewater treatment method is connection to the City of Barstow's sewer system and the Barstow Regional Wastewater Treatment Plant (BWWTP). Should the connection to the City's system not occur, an on-site wastewater treatment system would be constructed (see Chapter 2, Project Description). As discussed in Chapter 3.7, Hydrology, Water Quality, and Drainage, such a system would not result in significant environmental effects, Therefore, impacts related to septic tanks or alternative systems would be less than significant.

## 4.3 Hazards and Hazardous Materials

### Transport, Use, and Disposal of Hazardous Materials

During construction of the project, potentially hazardous materials would likely be handled on the project site. These materials would include gasoline, diesel fuel, lubricants, and other petroleum-based products required to operate and maintain construction equipment. Handling of these potentially hazardous materials would be temporary and would coincide with the short-term construction phase. Although these materials would likely be stored on the project site, storage would be required to comply with the guidelines set forth by each product's manufacturer and with all applicable federal, state, and local regulations pertaining to the storage of hazardous materials. Consistent with federal, state, and local requirements, the transport of hazardous materials to and from the project site would be conducted by a licensed contractor. Any handling, transport, use, or disposal of hazardous materials would comply with all relevant federal, state, and local agencies and regulations, including the U.S. Environmental Protection Agency, the California Department of Toxic Substances Control, the California Occupational Safety and Health Administration, the California Department of Transportation, the Resource Conservation and Recovery Act, the Mojave Desert Air Quality Management District, and the County's Environmental Health Department. Therefore, construction impacts related to the transport, use, or disposal of hazardous materials would be less than significant.

Upon completion of construction, hazardous materials associated with project operations would include materials used during typical cleaning and maintenance activities. Although these potentially hazardous materials would vary, they would generally include household cleaning products, paints, fertilizers, and herbicides and pesticides. Many of these materials are considered household hazardous wastes, common wastes, and/or universal wastes by the U.S. Environmental Protection Agency, which considers these types of wastes to be common to businesses and households and to pose a lower risk to people and the environment than other hazardous wastes when properly handled, transported, used, and disposed of (EPA 2025). Federal, state, and local regulations typically allow these types of wastes to be handled and disposed of with less stringent standards than other hazardous wastes, and many of these wastes do not have to be managed as hazardous waste.

In addition, any potentially hazardous material handled on the project site would be limited in both quantity and concentrations, consistent with other similar industrial uses located in the County, and any handling, transport, use, and disposal would comply with applicable federal, state, and local rules, regulations, and permit requirements. As mandated by the U.S. Occupational Safety and Health Administration (OSHA 2012), all hazardous materials stored on the project site would be required to include Material Safety Data Sheets, which would inform employees and first responders on the necessary remediation procedures in the case of accidental release. Furthermore, storage of hazardous materials above certain volumes requires the preparation of a Hazardous Materials Business Plan (HMBP). In San Bernardino County, the HMBP program is administered by the San Bernardino County Fire Protection District. Therefore, operational impacts related to the transport, use, or disposal of hazardous materials would be less than significant.

### Release of Hazardous Materials into the Environment

The project site does not contain any known recognized environmental conditions based on the Phase 1 Environmental Site Assessment (ESA) prepared for the project (Appendix G). The project site's existing conditions would not present a hazard to construction workers or future occupants/employees, and the handling of hazardous materials during construction and operation of the project would be conducted in accordance with applicable regulations so as to prevent the accidental release of hazardous materials into the environment. Therefore, impacts associated with the release of hazardous materials into the environment would be less than significant.

### Hazardous Materials Use Near Schools

The closest school, Lenwood Elementary School (34374 Ash Road, Barstow), is located approximately 0.5-miles southeast of the project site. Project operational activities would be limited to a small commercial use; EV charging stations; a small maintenance facility; and a logistics center. It is anticipated that these uses would not emit hazardous air emissions or handle acutely hazardous materials. Therefore, no impacts associated with emitting hazardous emissions or handling acutely hazardous materials within 0.25 miles of school would occur and there is no impact.

### Hazardous Materials Sites (Government Code Section 65962.5)

The Hazardous Waste and Substances Sites List (Cortese List) is a planning document providing information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the Cortese List.

A review of federal, state, County, and city environmental record sources was conducted as part of a Phase I Environmental Site Assessment (Appendix G). There are no active Cortese List sites located within or near the project site. There is one historical Cortese List site located at 24625 Main Street located approximately 0.5 miles southeast of the project site, but cleanup has been completed as of 2014 (GeoTracker 2014).

### Airport-Related Safety Hazards or Excessive Noise

The project site is not located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. The closest airport is Barstow-

Daggett Airport, located approximately 18 miles east of the project site. As such, no impacts associated with public or private airstrips would occur.

### Emergency Response and Evacuation Plans

The County's emergency preparedness approach is described in various plans. The County has prepared an Emergency Operation Plan (EOP) which details the County's approach to emergency management (San Bernardino County 2019). The EOP describes the methods for conducting emergency operations, the process for rendering mutual aid, the emergency services of governmental agencies, how resources are mobilized, how the public will be informed, and the process to ensure continuity of government during an emergency or disaster. The plan is consistent with the requirements of the Standardized Emergency Management System (SEMS) as defined in Government Code Section 8607(a) and the National Incident Management System (NIMS) as defined by Presidential Executive Orders for managing response to multi-agency and multi-jurisdictional emergencies. The EOP identifies the County Sheriff's Department as the lead agency responsible for evacuation planning. Specific evacuation routes would be designated during an emergency by the County Sheriff.

The County has also developed a Multi-jurisdictional Hazard Mitigation Plan (MJHMP) which identifies hazards and investigates the vulnerability of the community to different hazards. The MJHMP also presents tangible measures to help reduce consequences from hazards, and outreach/education efforts in the unincorporated area.

Access to the project site during construction is required to be maintained at all times for emergency response and emergency evacuation. The project does not propose any changes to the geometry of existing designated evacuation routes and roadways; therefore, such routes and any adopted emergency response or evacuation plans would not be compromised or impaired as a result of project implementation and there would be no impact.

### Exposure to Wildland Fires

The project site is not located within a Very High Fire Hazard Severity Zone (FHSZ) according to the Local Responsibility (LRA) and State Responsibility Area (SRA) maps by the California Department of Forestry and Fire Protection (CAL FIRE). According to CAL FIRE's adopted FHSZ maps, the project site is located in a LRA and is classified as a moderate FHSZ (CAL FIRE 2024). Furthermore, project design would be required to comply with state and local fire codes to ensure appropriate fire-safe regulations are implemented to not exacerbate wildfire risk. Therefore, impacts would be less than significant.

## 4.4 Mineral Resources

### Mineral Resources and Recovery Sites

According to the San Bernardino Countywide Plan/Policy Plan, the project site is not within an area that has been identified as potentially containing mineral resources of value to the region or state, and is not zoned for mineral resource extraction operations (San Bernardino County 2020). Therefore, the project would not contribute to the loss of mineral resources of value to the region and the state or an important mineral resource recovery site and there would be no impact.

# 4.5 Population and Housing

## Unplanned Population Growth

The project would require a temporary construction workforce and a permanent operational workforce of approximately 639 employees (see Chapter 2, Project Description for details regarding this estimate). Workforce requirements for construction and operation are anticipated to be met by the existing local labor force within the High Desert region. While the project is not anticipated to induce substantial population growth, the project would create demand for approximately 639 employees. The County has a population of approximately 2,181,654 persons (U.S. Census Bureau 2020). According to the Southern California Association of Governments (SCAG) growth projections, the County population is expected to grow to 2,623,000 persons in 2050 (SCAG 2024). Within the City of Barstow's sphere of influence (including the unincorporated community of Lenwood and the project site), the population is forecast to grow between 34,302 to 52,833 persons from 2023 to 2048. It is assumed that most of the employees, if not all, would come from the High Desert region including the County and City. This is consistent with the transportation analysis, which found that employee VMT (representing the average travel distance to and from work) would be reduced on a Countywide basis with the proposed project. Thus, the project would not stimulate population growth or result in an increase in population above what is assumed in the Countywide Plan/Policy Plan and regional land use plans, resulting in a less-than-significant impact related to unplanned population growth.

## Displacement of Existing Housing and People

The project site is undeveloped and does not contain housing or other residential uses; therefore, the project would have no impact related to displacement of people or housing.

# 4.6 Public Services

## Fire Protection

The San Bernardino County Fire Protection District (County Fire) currently provides fire protection services to the project site. The nearest County Fire Station is Hinkley Station #56, located at 37284 Flower Road, northwest of the project site. Travel distance is approximately 7 miles. The project is proposed to be served by the Barstow Fire Protection District (BFPD). Accordingly, the project site would be annexed to the BFPD; annexation must be initiated or approved by the BFPD and approved by the Local Agency Formation Commission of San Bernardino County (LAFCO). In order to meet LAFCO's policy objectives, additional parcels beyond those comprising the project site would be annexed to the BPFD as part of the proposed discretionary approvals, as shown on Figure 2-6 in Chapter 2, Project Description.

There are two active BFPD fire stations: BFPD Station 366, which is located at 2600 West Main Street; and the BFPD Headquarters Station 361, which is located at 861 Barstow Road. BFPD Station 366 is the closest station to the project, approximately 2 miles east of the project site. There is also one inactive fire station, currently used for storage purposes, located at 29780 Highway 58. BFPD is planning to re-establish the inactive fire station, and to build two new additional fire stations to meet the future needs upon full buildout of the proposed City of Barstow General Plan in 2048, including the proposed Barstow International Gateway (BIG) project (City of Barstow 2025). The locations of these future stations have not been identified; however, one station may be north of Highway 58.

Should an emergency occur related to the project that would require resources beyond what the BFPD can provide, there is a mutual aid agreement between BFPD, County Fire, and the California Department of Forestry and Fire Protection (CAL FIRE) to ensure that supplemental personnel and resources would be available (San Bernardino County 2014).

The project could result in an incremental increase in calls for service as compared to existing conditions, as a result of the increase in service population. For purposes of calculating service needs, the impact of an employee is considered to be half of an equivalent resident (per the fiscal analysis conducted by BFPD). The proposed project would be conditioned to provide a funding mechanism, such as the formation of a community services district, in order to address operational funding shortfalls related to the provision of fire protection services to the project. In addition, the proposed project would pay BFPD development impact fees to address the need for facility improvements related to serving the project.

Cumulatively, construction of the BIG project and buildout of the City of Barstow's general plan would require construction of two planned fire stations. The potential impacts of developing these stations are considered at a programmatic level in the City of Barstow's General Plan Update Draft Environmental Impact Report (City of Barstow 2025), and would be subject to site-level environmental review. An impact determination of future fire department facilities, which may not directly serve the proposed project, are speculative at this time. In the event that the annexation to the BFPD is not approved or does not proceed forward, then the project would continue to be served by County Fire.

Impacts related to the provision of new or expanded fire protection facilities would be less than significant.

### Police Protection

The project site is served by the San Bernardino County Sheriff's Barstow Patrol Station located at 225 E Mountain View Street in Barstow, approximately 5 miles east of the project site (San Bernardino County 2026). The Barstow Patrol Station has 40 sworn and 12 professional staff (City of Barstow 2025). The Sheriff's Department is also assisted by the California Highway Patrol and the Barstow Police Department. An increased demand for police protection services is typically associated with an increase in population. As previously discussed, the project is not expected to result in substantial population growth because it does not include housing for new residents. The demand for police services for small commercial centers and warehouse or logistics facilities is low, and the project is therefore not expected to result in a substantial increase in demand for police protection services such that new or expanded facilities would be required. Therefore, impacts related to the provision of new or expanded police protection facilities would be less than significant.

### Schools

The project does not include new housing that would generate a permanent increase in residents, including families with school-aged children. The project would require short-term construction workers and employees to operate the proposed commercial and logistic facilities; these short-term and long-term employees would likely already reside within the City of Barstow or the County. Furthermore, the project would be subject to Senate Bill (SB) 50, which requires payment of mandatory school impact fees to offset any impact to school services or facilities. Compliance with SB 50 is deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). In accordance with SB 50, the project applicant would be required to pay its fair share of impact fees based on the project's square footage (Government Code Section 65995(h)). The current fee for commercial/industrial

development is $0.54 per square foot (Barstow Unified School District 2025). Payment of the required impact fees would ensure that no impact to schools would occur.

### Parks and Other Public Facilities

The project would include construction of an EV charging station, commercial uses and a logistics facility and does not propose any residential uses that may require parks and other recreational facilities. It is anticipated that future employees would not increase the use of existing neighborhood parks or regional parks in the County or in the surrounding area. Given the industrial and commercial nature of the project, it is also unlikely that the project would increase the use of libraries and other public facilities in the County. Therefore, no impact would occur.

## 4.7 Recreation

### Increase in Demand on Existing Facilities Leading to Physical Deterioration

The project would not include new residential uses or construction of recreational facilities to support new residents. As noted above, the project would not result in an increase in unplanned population growth generally associated with new residential development that would lead to increased use of parks or recreational facilities potentially accelerating the physical deterioration. Therefore, no impact would occur.

### New or Expansion of Existing Facilities

Existing parks near the site include Jasper Park 0.5 miles east and Lenwood Park 0.6 miles southeast of the project site. It is anticipated these parks and recreation facilities would be adequate to serve the limited increase in demand attributed to future employees at the EV charging station, commercial building, and logistics facility. Therefore, the project does not include construction of new recreation facilities and would not require expansion of existing recreation facilities. Thus, no impact would occur.

## 4.8 Wildfire

### Impair Adopted Emergency Response Plan or Emergency Evacuation Plan

In accordance with state law, CAL FIRE has developed fire hazard severity zone (FHSZ) maps that identify relative wildfire hazard potential over the long term (i.e., 30 to 50 years) for all areas of the state within state responsibility areas (SRAs). According to CAL FIRE's adopted FHSZ maps, the project site is located in a Local Responsibility Area (LRA) and is classified as a moderate FHSZ. The project site is also not located near lands classified as very high FHSZ (CAL FIRE 2024). The closest very high FHSZ is located over 35 miles to the southwest.

Access to the project site during construction is required to be maintained at all times for emergency response and emergency evacuation, if needed. The project does not propose any changes to the geometry of existing designated evacuation routes and roadways; therefore, such routes and any adopted emergency response or evacuation plans would not be compromised or impaired as a result of project implementation and there would be no impact. See Section 3.10, Transportation, for further discussion of emergency access.

### Exacerbate Wildfire Risks

The project site consists of a gradually sloping plain, with elevation ranging from approximately 2,197 feet above mean sea level (amsl) at the northern end to 2,272 feet amsl in the southern portion. The site lacks steep slopes, and is generally comprised of scattered desert scrub vegetation. These factors are not typically associated with the uncontrolled spread of wildfire. Furthermore, project design would be required to comply with state and local fire codes to ensure appropriate fire-safe regulations are implemented to not exacerbate wildfire risk. The project does not propose any uses or activities that could contribute to the spread of wildfire and the impact is less than significant.

### Installation or Maintenance of Infrastructure

The project would include the installation of underground utility infrastructure, including water, wastewater, and storm drainage facilities, and the extension of overhead electrical lines, construction of such infrastructure would not exacerbate fire risk as the project site is not located in a wildfire-prone area. Therefore, project impacts related to exacerbating wildfire due to installation of infrastructure would be considered less than significant.

### Expose People/Structures to Risks

The project site is located in an area that is classified as a moderate FHSZ in the LRA on a site that lacks steep slopes, is comprised of scattered desert scrub vegetation, and does not contain any streams or waterways. The project would develop the site with impervious surfaces and buildings with on-site storm drain facilities. Due to the topography and on-site storm drain facilities, the project would not result in significant risks associated with flooding, landslides, runoff, or drainage changes, and the project does not propose the use of fire (such as for a controlled vegetation burn) that could expose employees to potential wildfire risks. Therefore, the project would not expose people or structures to post-wildfire impacts associated with runoff, post-fire slope instability, and drainage changes and impacts would be less than significant.

## 4.9 References

Barstow Unified School District. 2015. Certificate Of Compliance with Payment Requirements. Accessed January 29, 2026. https://resources.finalsite.net/images/v1707934691/barstowk12caus/qsuqgtn73bu3ja8qtt8g/DeveloperFeesFormandinfo_2.pdf

CAL FIRE (California Department of Forestry and Fire Protection). 2024. Fire Hazard Severity Zone Viewer. Accessed November 5, 2024. https://experience.arcgis.com/experience/5065c998b4b0462f9ec3c6c226c610a9

City of Barstow. 2025. General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025.

DOC (California Department of Conservation). 2024a. California Important Farmland Finder. Accessed October 29, 2024. https://maps.conservation.ca.gov/DLRP/CIFF/.

DOC. 2024b. CGS Information Warehouse: Regulatory Maps. Accessed November 5, 2024. https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/

DOC. 2025. CGS Seismic Hazards Program: Liquefaction Zones. Updated November 19, 2025. Accessed April 28, 2026. https://gis-cnra.hub.arcgis.com/datasets/cadoc::cgs-seismic-hazards-program-liquefaction-zones/explore?location=34.884268%2C-117.092877%2C14

DOC. 2026. CGS Information Warehouse: Landslides. Accessed April 28, 2026. https://maps.conservation.ca.gov/cgs/informationwarehouse/landslides/

EPA (Environmental Protection Agency). 2025. Household Hazardous Waste. https://www.epa.gov/hw/household-hazardous-waste-hhw Accessed May 15, 2025.

Geotracker. 2014. State Water Resources Control Board. Geo Tracker. Whiting Bros. Lenwood (T0607100647). Case https://geotracker.waterboards.ca.gov/profile_report?global_id= T0607100647&mytab=esidata&subcmd=edfsummarytable#esidata Case closed September 18, 2014.

OSHA (Occupational Safety and Health Administration). 2012. Material Safety Data Sheets. https://www.osha.gov/sites/default/files/publications/OSHA3514.pdf February 2012. Accessed May 15, 2025.

San Bernardino County. 2014. Fire and Rescue Mutual Aid Operational Plan. Accessed January 29, 2026. https://www.sbcounty.gov/Uploads/SBCFire/content/pdf/Mutual-Aid-Manual-with-Zone11.pdf

San Bernardino County. 2019. Emergency Operations Plan. https://oes.sbcounty.gov/wp-content/ uploads/sites/110/2024/06/Final-2019-EOP.pdf Reviewed January 2019.

San Bernardino County. 2020. Countywide Policy Plan. Natural Resources Element. October 2020.

San Bernardino County. 2026. Sheriff's Department. Barstow Patrol Station. https://wp.sbcounty.gov/ sheriff/patrol-stations/barstowtrona/ Accessed January 29, 2026.

SCAG (Southern California Association of Governments). 2024. Connect SoCal 2024 Demographics & Growth Forecast Technical Report. Adopted April 4, 2024. https://www.scag.ca.gov/sites/default/files/ 2024-05/23-2987-tr-demographics-growth-forecast-final-040424.pdf

U.S. Census Bureau. 2020. QuickFacts: San Bernardino County, California; United States. https://www.census.gov/quickfacts/fact/table/sanbernardinocountycalifornia,US/POP010220#POP010220

USGS (U.S. Geological Survey). 2026. "Areas of Land Subsidence in California". Accessed April 28, 2026. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html

# 5.0 Other CEQA Considerations

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. The environmental impact report (EIR) must discuss (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, (5) mitigation measures proposed to minimize the significant effects, and (6) alternatives to the proposed project.

This chapter summarizes the significant environmental effects that cannot be avoided if the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project") is implemented (i.e., significant and unavoidable impacts). It also addresses the significant irreversible environmental changes and growth-inducing impacts of the project. An evaluation of the significant environmental effects of the proposed project, applicable mitigation measures, the level of impact significance before and after mitigation, and evaluation of cumulative impacts, is provided in Chapter 3, Environmental Analysis. Alternatives to the proposed project are discussed in Chapter 6.

## 5.1 Significant and Unavoidable Impacts

Pursuant to CEQA Guidelines Section 15126.2(c), an EIR must address any significant environmental impacts, including those that can be mitigated but not reduced to less than significant as a result of implementation of a project. As discussed throughout Chapter 3, Environmental Analysis, of this EIR, at the project and cumulative levels, the project would result in two significant and unavoidable impacts: a significant cumulative change in visual character (Impact 3.1-4) and a significant cumulative change in the amount of night time lighting (Impact 3.1-5). Compliance with existing development standards and lighting regulations would substantially reduce the project's aesthetic impacts (less than significant). Nevertheless, the project would contribute to overall significant cumulative impacts related to change in the visual character of the area (from high desert to urban industrial uses) and the overall amount of night time lighting.

## 5.2 Significant Irreversible Environmental Changes

The CEQA Guidelines require that an EIR address any significant irreversible changes that would be caused by implementation of a project. According to CEQA Guidelines Section 15126.2(d), such a change would involve one or more of the scenarios discussed below.

### Change in Land Use that Commits Future Generations to Similar Uses

The project site is designated Rural Living (RL) in the Countywide Plan/Policy Plan (San Bernardino County 2020) and zoned RL. The project is requesting a Countywide Plan/Policy Plan Amendment from RL to Limited Industrial (LI) and a Zoning Amendment from RL to Community Industrial (IC). The area surrounding the project site to the west and east is characterized as undeveloped land, with a few rural residences located to the north. Directly south of the project site is the High Desert Estates residential subdivision containing one-story single-family tract homes.

Although the surrounding area is currently characterized by vacant and low density residential uses, the project site is located across from land zoned and designated for industrial uses, including the planned Barstow International Gateway (BIG) project being undertaken by BNSF Railway. The BIG project proposes an approximately 4,300-acre integrated rail facility including 9.0 million square feet of warehousing (City of Barstow 2025). The proposed project would not introduce industrial uses into a stable rural or residential environment in isolation, but instead would be situated in proximity to a planned warehousing and intermodal facility (the BIG Specific Plan area). The eastern boundary of the BIG Specific Plan area extends to the west side of Lenwood Road. The project would function as a transition from the extensive industrial operations associated with the BIG project from the west toward residential uses to the east. As such, while the project would introduce new industrial and commercial land uses to the site, it would do so in a manner that supports land use compatibility and reflects planned development trends. Furthermore, the project does not include any components that would be incapable of removal or nonuse after the end of its operational lifetime and would not preclude future proposals for land use or zoning changes, and thus would not commit future generations to similar uses.

## Irreversible Damage from Environmental Accidents

Potential environmental accidents of concern include those events that would adversely affect the environment or public due to the type or quantity of materials released and the receptors exposed to that release. Construction activities associated with the project would involve some risk of environmental accidents. However, these activities would be conducted in accordance with all applicable federal, state, and local regulations, and would follow professional industry standards for safety. Once operational, any materials handled with the potential to cause environmental accidents would be transported, used, stored, and disposed of in compliance with applicable federal, state, and local regulations. Use of any such materials would not adversely affect the environment or public due to the type or quantity of materials released and the receptors exposed to that release.

## Large Commitment of Nonrenewable Resources

Commitment of nonrenewable resources includes issues related to increased energy consumption, loss of agricultural lands, and lost access to mining reserves. There would be an irretrievable commitment of labor, capital, and materials used during the construction and operation of the project. Nonrenewable resources would primarily be committed in the form of fossil fuels such as fuel, oil, natural gas, and gasoline used by equipment associated with project construction. Consumption of other nonrenewable or slowly renewable resources would also occur. These resources could include lumber and other forest products, sand and gravel, asphalt, and metals such as steel, copper, and lead.

To ensure that energy consumption is considered in project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (PRC Section 21100[b][3]). Energy conservation implies that a project's cost-effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, cost-effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving a project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

Consistent with PRC Section 211009(b)(3), CEQA Guidelines Appendix G, and a ruling set forth by the court in *California Clean Energy Committee v. City of Woodland*, potentially significant energy implications of a project must be considered in an EIR to the extent relevant and appliable to that project. Accordingly, based on the energy consumption thresholds set forth in both Appendix F and Appendix G of the CEQA Guidelines, the project's estimated

energy demands (both short-term construction and long-term operational demands) were evaluated (see Section 3.5, Energy, of this EIR). The overall purpose of the analysis is to evaluate whether the project would result in the wasteful, inefficient, or unnecessary consumption of energy.

As documented in Section 3.5, Energy, new development, such as that proposed by the project, is required to comply with California Title 24 energy efficiency requirements which is considered demonstrable evidence of efficient use of energy. Furthermore, by providing an EV charging hub, the project would encourage the use of electric medium and heavy trucks and light duty vehicles to reduce reliance on fossil fuels. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy.

## 5.3 Growth-Inducing Impacts

As stated in Section 15126.2(e) of the CEQA Guidelines, an EIR is required to include a discussion of a project's growth-inducing effects. The CEQA Guidelines generally describe such effects as follows: (1) economic growth, population growth, or additional housing in the surrounding environment; (2) removal of obstacles to population growth (e.g., a major expansion of a wastewater treatment facility that allows for more construction in the service area); (3) increases in population that tax existing services requiring construction of new facilities that could cause significant environmental effects; and (4) characteristics of a project that would encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The project would require a temporary construction workforce, which would be served by workers in the High Desert region. The temporary workforce would be needed to construct the EV charging station, logistics facility and associated improvements. The number of construction workers needed during any given period would largely depend on the specific stage of construction but would likely range from a dozen to several dozen workers on a daily basis.

Because future project tenants are not known, the number of permanent jobs the project would generate cannot be precisely determined. Employment estimates for the proposed logistics buildings and commercial uses were calculated using information provided by potential commercial operators, and data from the Southern California Association of Governments and the U.S. Energy Information Administration. The number of employees assumed is 35 for the commercial building and ancillary truck amenities (truck wash, maintenance facility, etc.) and 604 for the logistics facility (see Section 2.3.2 of the Project Description).

As discussed in Section 4.5, Population and Housing, the County has a population of approximately 2,181,654 persons (U.S. Census Bureau 2020). According to the Southern California Association of Governments (SCAG) growth projections, the County population is expected to grow to 2,623,000 persons in 2050 (SCAG 2024). Within the City of Barstow's sphere of influence (SOI) (including Lenwood and the project site), the population is forecast to grow between 34,302 to 52,833 persons from 2023 to 2048. It is assumed that most of the employees, if not all, would come from this population. This is consistent with the transportation analysis, which found that employee VMT (representing the average travel distance to and from work) would be reduced on a Countywide basis with the proposed project. Thus, the Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans.

Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in the area. Water and sewer infrastructure is available in the

project vicinity. The project would involve connection to water and sewer service[1], and construction of on-site stormwater improvements. The purpose of these new utilities is solely to serve the needs of the project, and not to provide capacity for parcels other than the project site. In addition, since the area to the south is already served by existing wet and dry utilities, the project would not expand sanitary sewer or stormwater drainage infrastructure into areas not previously served by such utilities. The warehouse component of the project may connect to a proposed 24-inch sewer main in Jasper Road, which would be constructed to serve the planned BIG development. This proposed sewer main would be constructed regardless of the project; the anticipated contribution of wastewater from the project does not drive the need for this new line. Alternatively, the warehouse component may connect with the existing 8-inch line in Lenwood. As discussed in Section 3.11, Utilities and Service Systems, no expansion of water or wastewater treatment facilities would be required to serve the project.

Development of the project site will require circulation improvements to Lenwood Road along the project frontage consistent with County plans and policies. However, these improvements would not provide vehicular access to an area presently lacking such access, and thus would not be considered growth inducing.

As discussed in Chapter 4, Effects Found Not to be Significant, the project would be adequately served by existing and planned public facilities. For police services, the project site would continue to be served by the San Bernardino County Sheriff's Department. For fire protection, the project site is currently served by the San Bernardino County Fire Protection District (County Fire) but is proposed to be annexed to the Barstow Fire Protection District (BFPD). This annexation must be initiated or approved by the BFPD and the actual annexation must be approved by the Local Agency Formation Commission of San Bernardino County (LAFCO). In order to meet LAFCO policy objectives and avoid inconsistent service areas, additional parcels beyond those comprising the project site would be annexed to the BPFD as part of the required discretionary approvals (as shown on Figure 2-6 in Chapter 2, Project Description). These parcels are currently served by County Fire and are not constrained by a lack of public services.

The project would result in an increase in service population (in the form of project employees) and would be served by BFPD Station 366, which is approximately two miles away. BFPD is planning to re-establish an inactive fire station, and to build two new additional fire stations to meet the future needs upon full buildout of the proposed City of Barstow General Plan in 2048, including the BIG project (City of Barstow 2025). These new facilities are needed to meet the overall projected growth in the BFPD service area.

Since the project would not construct new housing in the County, an increase in school-age children requiring public education is not expected to occur as a result. For these reasons, the need for new or expanded school facilities would not be required. Consistent with requirements of Senate Bill (SB) 50, the project would pay non-residential development impact fees to the Barstow Unified School District.

In conclusion, the project would result in new employment opportunities. However, it is anticipated that the existing workforce in the County and in the City of Barstow would largely accommodate this need. The project would not remove obstacles to population growth and would not cause an increase in population such that new community facilities or infrastructure would be required to serve a new population outside of the project site. Lastly, the project is not expected to encourage or facilitate other activities that could significantly affect the environment, as explained above. For these reasons, the project is not considered to be significantly growth inducing.

[1] In the event that extra-territorial sewer service is not provided by the City as proposed, the project would instead be served by on-site wastewater treatment facilities.

# 5.4 References

City of Barstow. 2025. General Plan and Barstow International Gateway Project Draft Environmental Impact Report. November 2025.

County of San Bernardino. 2020. Countywide Plan Policy Plan. https://countywideplan.sbcounty.gov/policy-plan/.

SCAG (Southern California Association of Governments). 2024. Connect SoCal 2024 Demographics & Growth Forecast Technical Report. Adopted April 4, 2024. https://www.scag.ca.gov/sites/default/files/2024-05/23-2987-tr-demographics-growth-forecast-final-040424.pdf

U.S. Census Bureau. 2020. QuickFacts: San Bernardino County, California; United States. https://www.census.gov/quickfacts/fact/table/sanbernardinocountycalifornia,US/POP010220#POP010220

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# 6.0 Alternatives

This chapter describes alternatives to the Electric Vehicle Charging Station and Logistics Facility Project ("proposed project" or "project"), consistent with California Environmental Quality Act (CEQA) Guidelines Section 15126.6. This chapter presents the objectives of the project, a summary of its significant environmental impacts, a description of the alternatives that were considered but rejected from further consideration, and an analysis of the three alternatives evaluated, including the No Project Alternative. A comparison of the three alternatives to the project is provided within the analysis and the environmentally superior alternative is identified.

According to CEQA Guidelines Section 15126.6, an environmental impact report (EIR) shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. The guidelines further require that the discussion focus on alternatives capable of eliminating significant adverse impacts of the project or reducing them to a level of insignificance even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly. The alternatives analysis also identifies any significant effects that may result from a given alternative.

The lead agency is responsible for selecting a reasonable range of potentially feasible project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives is governed by a "rule of reason" that requires the EIR to set forth only those potentially feasible alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the project. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

An EIR is not required to consider alternatives which are infeasible. "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines Section 15364). Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or already owns the alternative site). None of these factors establishes a fixed limit on the scope of reasonable alternatives.

## 6.1 Project Objectives

Section 15124(b) of the CEQA Guidelines requires that an EIR include a statement of the project objectives that "include the underlying purpose of the project and may discuss the project benefits." The following objectives, identified in Chapter 2, Project Description, have been identified for the project:

1. To site an electric vehicle (EV) charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on SR 58, I-15, and I-40.

2. To contribute to the creation of a robust electric vehicle charging network in the region and strengthen the state and regional supply chain.
3. To develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors.
4. To expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses.
5. To attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment.

## 6.2 Alternatives Considered but Eliminated

This section discusses alternatives that were considered but eliminated from detailed consideration because they did not meet most of the basic project objectives; were found to be infeasible for technical, environmental, and site suitability reasons; or did not avoid or reduce the severity of the project's significant environmental impacts.

### Alternate Sites

CEQA does not require that an analysis of alternate sites always be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternate site, then a project alternative should be considered and analyzed in the EIR. Pursuant to CEQA Guidelines Section 15126.6(f)(2), in making the decision to include or exclude analysis of an alternate site, the "key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR."

Key site considerations for the project are size of approximately 100 acres, and a location between the major regional transportation routes, Interstate 15 and State Route 58, and served by a designated or proposed truck route. Lenwood Road is designated as a major highway by the County and is proposed as a truck route by both the County and the City of Barstow (see Chapter 3.10, Transportation). This location near major transportation routes would best serve the developing market of electric trucks and the logistics use. The project site was the only site identified as meeting the criteria which the project applicant could "reasonably acquire, control, or otherwise have access to (per Section 15126.6[f][1] of the CEQA Guidelines)."

The significant and unavoidable impacts associated with the project are cumulatively considerable impacts to visual resources (changes to visual character and contribution to light and glare). Development of the project in an alternate location would more than likely contribute to similar cumulatively considerable impacts unless it were located in an area surrounded by existing development. However, such a location (for example, within the City of Barstow) would likely bring the project into proximity with a greater number of sensitive receptors (residences, schools, health facilities, etc.), thereby increasing potential environmental impacts.

Therefore, an off-site alternative was considered as a potential project alternative, but was not selected for further consideration in the EIR due the factors discussed above.

# 6.3 Alternatives Selected for Further Analysis

This section provides an evaluation of the environmental effects of each alternative selected for further analysis relative to the environmental effects of the proposed project in accordance with CEQA Guidelines Section 51526.6(a) The following alternatives to the project are evaluated in detail, as described below:

- **Alternative 1: No Project/No Build.** This alternative would entail no development of the project site.
- **Alternative 2: No Project/Existing Zoning.** This alternative would entail developing the project site consistent with the existing zoning district.
- **Alternative 3: Revised Site Plan Alternative.** This alternative would entail developing the site with a revised site plan that moves the EV charging station, truck amenities, and commercial building to the northern portion of the project site, shifts the three logistics facility buildings to the southern portion of the site, and removes the loading docks on the southern side of the southern-most logistics facility building. The intent of this alternative is to reduce noise impacts, as well as light and glare, to the residential development to the south of the project.

These alternatives are summarized below and compared with the proposed project. In many cases, the project and a project alternative may share the same level of significance (i.e., both scenarios would result in a potentially significant impact). However, although they might share the same level of significance under CEQA, the actual degree of impact may be different for each scenario, and this difference is the basis for a conclusion of greater or lesser impacts as compared to the project. Each alternative is examined for its ability to reduce environmental impacts relative to the project, feasibility of implementation, and ability to meet project objectives.

## Alternative 1: No Project/No Build

### Description

The “No Project” Alternative is a required part of the EIR alternatives analysis. CEQA Guidelines Section 15126.6(e)(3)(B) describes the “No Project” Alternative as the circumstance under which the project does not proceed. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers the ability to compare the impacts of approving the proposed project with the impacts of not approving the proposed project (CEQA Guidelines Section 15126.6[e][1]). Discussion of a No Project Alternative will generally fall into two categories. The first is the continuation of the existing conditions of the project site (sometimes referred to as a “No Build” alternative). The second category is where changes to a land use or regulatory plan are proposed as part of the project, and, without the proposed project, development may occur under the existing regulatory scheme (with consideration of limitations on existing infrastructure and community services).

Alternative 1, discussed below, is the “No Build” Alternative, where construction of the proposed project would not occur. The project site would remain unchanged, and development activities related to construction and operation of the proposed charging station and logistics buildings, surface parking and loading areas, and all other proposed on- and off-site improvements would not occur. The second form of “No Project” is discussed in Alternative 2, which considers the potential for development under the existing land use classification and zoning of the project site.

Under Alternative 1, the project site would remain vacant and undeveloped. The site would likely continue to be subject to illegal dumping, trespassing, and unpermitted off-road vehicle use, similar to existing conditions.

## Impact Analysis

### Aesthetics

Under this alternative, the project site would remain vacant and undeveloped, resulting in no changes to visual conditions. As such, Alternative 1 would not have a substantial adverse effect on a scenic vista; substantially degrade the existing visual character or quality of public views; or create a new source of light or glare. As the site would remain undeveloped, it would not contribute to the cumulative impacts to visual character and nighttime lighting associated with the proposed project. Therefore, Alternative 1 would avoid the significant and unavoidable cumulative impacts related to the proposed project *(no impact; lesser impact)*.

### Air Quality

Under this alternative, the project site would remain vacant and undeveloped, resulting in no air pollutant emissions or odors associated with construction and operation activities. As such, this alternative would not potentially conflict with or obstruct implementation of applicable air quality plans; result in a cumulatively considerable net increase of any criteria pollutant; expose sensitive receptors to substantial pollutant concentrations; or result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Therefore, Alternative 1 would result in no project-level or cumulative impact related to air quality and all impacts that would occur from the project would be avoided under this alternative *(no impact; lesser impact)*.

### Biological Resources

Under this alternative, the project site would remain vacant and undeveloped and would not have a substantial adverse effect on special-status species; interfere with the movement of species; or conflict with policies or ordinance protecting biological resources. However, it should be noted that the project site is currently subject to trespassing by off-road vehicles (such as all-terrain vehicles), which may affect wildlife and habitat. While no new project-level or cumulative impacts would occur, continued damage to existing habitat may occur under Alternative 1. Therefore, while Alternative 1 would not result in new significant impacts, some environmental damage may continue to occur *(less than significant; lesser impact)*.

### Cultural and Paleontological Resources

Under this alternative, the project site would remain vacant and undeveloped, resulting in no changes to cultural and paleontological resources. As such, this alternative would not have the potential to cause a substantial adverse change in the significance of an archaeological resource; disturb human remains; or destroy a paleontological resource or unique geologic feature as a result of construction. However, as noted above in Biological Resources, continued unauthorized use of the site by off-road vehicles could potentially result in damaging any undiscovered cultural resources. Damage to paleontological resources is less likely due to the depths at which they are typically found. Therefore, Alternative 1 would avoid project-level and cumulative construction impacts to cultural and paleontological resources but would not avoid all environmental damage *(less than significant; lesser impact)*.

### Energy

Under this alternative, the project site would remain vacant and undeveloped, resulting in no energy consumption. As such, this alternative would not result in wasteful, inefficient, or unnecessary energy consumption or conflict with or obstruct a plan for renewable energy or energy efficiency. Therefore, Alternative 1 would result in no project-

level or cumulative impact related to energy and all impacts that would occur from the project would be avoided under this alternative *(no impact; lesser impact)*.

### Greenhouse Gas Emissions

Under this alternative, the project site would remain vacant and undeveloped, resulting in no greenhouse gas (GHG) emissions associated with construction and operation activities. As such, this alternative would not generate GHG emissions that may have a significant impact on the environment or conflict with applicable GHG reduction plans, policies, or regulations. Therefore, Alternative 1 would result in no project-level or cumulative impact related to GHG emissions and all impacts that would occur from the project would be avoided under this alternative *(no impact; lesser impact)*.

### Hydrology, Water Quality and Drainage

Under this alternative, the project site would remain vacant and undeveloped, resulting in no changes to hydrology, water quality, or drainage from construction and operational impacts. As such, this alternative would not violate water quality standards or waste discharge requirements or degrade surface or groundwater quality; decrease groundwater supplies or interfere with groundwater recharge; alter the existing drainage pattern; increase the rate of surface runoff; impede or redirect flood flows; risk release of pollutants due to inundation in a flood hazard zone; or conflict with or obstruct implementation of a water quality control plan or groundwater management plan. Therefore, Alternative 1 would result in no project-level or cumulative impact related to hydrology, water quality, and drainage and all impacts that would occur from the project would be avoided under this alternative *(no impact; lesser impact)*.

### Land Use and Planning

Under Alternative 1, the project site would remain vacant and undeveloped, resulting in no changes to the land use of the project site. As such, this alternative would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, Alternative 1 would result in no project-level or cumulative impact related to land use and planning and impacts that would occur from the project would be avoided under this alternative *(no impact; lesser impact)*.

### Noise

Under Alternative 1, the project site would remain vacant and undeveloped, resulting in no ambient noise or vibration associated with construction and operation activities. As noted above, unauthorized off-road vehicle use may result in some periodic noise on the project site. Therefore, Alternative 1 would not result in new project-level or cumulative construction or operational noise impacts, although some noise may occur at the site *(less than significant; lesser impact)*.

### Transportation

Under Alternative 1, the project site would remain vacant and undeveloped, resulting in no new vehicle trips or project driveways. As such, this alternative would not conflict with a program, plan, ordinance or policy addressing the circulation system; generate VMT; increase hazards due to a geometric design or incompatible uses; or result in inadequate emergency access. At the same time, it should be noted that the eastern half of Lenwood Road would not be built out to full width under the “no build” alternative (whereas under the proposed project, the project

applicant would complete these improvements). With future development in the area, including the BIG project, the lack of two northbound travel lanes could be inconsistent with the County transportation plans. Overall, Alternative 1 would not generate new vehicle trips, would have no effect on VMT, and on balance would result in less-than-significant project-level and cumulative impacts related to transportation *(less than significant; lesser impact)*.

### Tribal Cultural Resources

Under Alternative 1, the project site would remain vacant and undeveloped and project construction would not have the potential to cause a substantial adverse change in the significance of a tribal cultural resource. As noted under Cultural Resources, above, unauthorized activity on the project site could potentially damage previously unidentified tribal cultural resources. Therefore, Alternative 1 would not result in any new project-level or cumulative impacts related to construction of the project, but ongoing unauthorized activity could affect tribal cultural resources *(less than significant; lesser impact)*.

### Utilities and Service Systems

Under Alternative 1, the project site would remain vacant and undeveloped and no new utilities would be needed. As such, this alternative would not require or result in the relocation or construction of new or expanded utilities; require sufficient water supplies or wastewater treatment capacity; generate solid waste; or conflict with solid waste statutes and regulations. Therefore, Alternative 1 would result in no project-level or cumulative impacts related to utilities and service systems and all impacts that would occur from the project would be avoided under this alternative *(no impact; lesser impact)*.

### Public Services

Alternative 1 would have no impacts to Public Services.

### Ability to Meet Project Objectives

Under Alternative 1, the project site would remain as a vacant, undeveloped property. Therefore, Alternative 1 would fail to meet all of the project objectives because it would not: develop an EV charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on SR 58, I-15, and I-40 (Objective 1); contribute to the creation of a robust electric vehicle charging network in the region (Objective 2); develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors (Objective 3); expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses (Objective 4); or attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment (Objective 5).

## Alternative 2: No Project/Existing Zoning

### Description

Alternative 2 would not construct the project as described in Chapter 2.0, Project Description. Alternative 2 would allow for the development of the project site consistent with the existing zoning designation. As discussed above, this alternative is another approach to the “No Project” analysis, in that it considers what is reasonably expected to occur, based on current plans and available infrastructure. The project is requesting, among other entitlements, a

Countywide Plan/Policy Plan Amendment from Rural Living (RL) to Limited Industrial (LI) and a Zoning Amendment from RL to Community Industrial (IC). The project site is likely to develop residential uses consistent with the RL land use zoning district. The RL land use zoning district provides sites for rural residential uses, incidental agricultural uses, and similar and compatible uses. The maximum residential density in the RL zone is 1 unit per 2.5 acres. As such, under Alternative 2, the project site would be developed to accommodate up to 39 rural residential units instead of the proposed EV charging station, commercial building, truck amenities, and state-of-the-art logistics facility.

## Impact Analysis

### Aesthetics

Construction activities associated with the buildout of Alternative 2 would result in temporary, short-term visual impacts that would not be present following completion of construction. After completion of construction activities, the visual character of the project site would change from an undeveloped desert landscape to 39 rural residences. Therefore, visual changes would still occur with implementation of Alternative 2; however, the scale of development would be less in comparison to the project and consistent with the current land use designation. The change in views and character of the site would be of lesser magnitude compared to the project. Nevertheless, the change from undeveloped high desert to rural residential development would contribute to the cumulative change in character of the visual setting. Thus, the visual impacts would be reduced under Alternative 2, but this alternative would still contribute to a significant and unavoidable cumulative visual impact related to overall change in character *(cumulatively significant; lesser impact)*.

While the rural residences would increase nighttime lighting, such lighting would be in compliance with County standards and the individual fixtures would be of lower power compared to the project. Therefore, lighting impacts would be reduced under Alternative 2 compared to the proposed project. Nonetheless, this alternative would introduce new sources of light and glare in an area that is currently characterized by dark skies and minimal nighttime illumination. In combination with the BIG project, the cumulative increase in lighting would result in noticeable sky glow and significantly alter the nighttime character or the region. While the alternative's contribution of lighting would be relatively small compared to the BIG project, it would still be considerable because it adds additional lighting sources adjacent to the BIG project site in an area that is minimally illuminated. Thus, Alternative 2 would still contribute to a significant and unavoidable cumulative impact related to light and glare (*cumulatively significant; lesser impact).*

Development of the rural residences would not obstruct existing views or distant mountains or desert landscapes, and there are no officially designated scenic vistas in the area. Therefore, no project-level or cumulative impact would occur (*no impact; lesser impact)*

### Air Quality

Alternative 2 would result in less intense development than the project; thus, construction air pollutant emissions would be reduced under Alternative 2. As shown in Table 6-1, construction air pollutant emissions under Alternative 2 would not exceed thresholds of significance established by the Mojave Desert Air Quality Management District (MDAQMD) and mitigation measures to reduce construction air pollutant emissions for the project would not be needed.

Alternative 2 would generate fewer vehicle trips compared to the project and operational air pollutant emissions would be less than the project. As shown in Table 6-2, operational emissions under Alternative 2 would not exceed the MDAQMD thresholds of significance. As such, Alternative 2 would not conflict with a regional air quality plan.

### Table 6-1. Alternative 2 Estimated Construction Criteria Air Pollutant Emissions

| Year | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Daily (pounds per day) – Unmitigated** | | | | | | |
| 2027 | 3.13 | 28.04 | 29.53 | 0.06 | 9.07 | 5.07 |
| 2028 | 2.96 | 24.41 | 28.06 | 0.06 | 4.84 | 2.39 |
| 2029 | 1.03 | 8.75 | 13.82 | 0.02 | 0.50 | 0.31 |
| 2030 | 4.44 | 8.56 | 13.47 | 0.02 | 0.48 | 0.29 |
| Maximum | 4.44 | 28.04 | 29.53 | 0.06 | 9.07 | 5.07 |
| *MDAQMD Threshold* | *137* | *137* | *548* | *137* | *82* | *65* |
| **MDAQMD Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Source:** Dudek 2026
**Notes:** VOC = volatile organic compounds; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; MDAQMD = Mojave Desert Air Quality Management District.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect compliance with MDAQMD Rule 403 (Fugitive Dust).

### Table 6-2. Alternative 2 Estimated Operational Criteria Air Pollutant Emissions

| Emission Source | VOC | $NO_x$ | CO | $SO_x$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| **Daily (pounds per day) – Unmitigated** | | | | | | |
| **Summer** | | | | | | |
| Mobile | 1.35 | 1.09 | 10.55 | 0.03 | 2.57 | 0.66 |
| Area | 61.61 | 1.19 | 75.90 | 0.13 | 10.15 | 10.10 |
| Energy | 0.02 | 0.31 | 0.13 | 0.00 | 0.02 | 0.02 |
| **Total** | **62.98** | **2.59** | **86.58** | **0.16** | **12.74** | **10.79** |
| **Winter** | | | | | | |
| Mobile | 1.21 | 1.18 | 8.29 | 0.03 | 2.57 | 0.66 |
| Area | 61.42 | 1.17 | 73.68 | 0.13 | 10.15 | 10.10 |
| Energy | 0.02 | 0.31 | 0.13 | 0.00 | 0.02 | 0.02 |
| **Total** | **62.65** | **2.65** | **82.09** | **0.16** | **12.74** | **10.79** |
| *MDAQMD Threshold* | *137* | *137* | *548* | *137* | *82* | *65* |
| **MDAQMD Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Source:** Dudek 2026
**Notes:** VOC = volatile organic compounds; $NO_x$ = oxides of nitrogen; CO = carbon monoxide; $SO_x$ = sulfur oxides; $PM_{10}$ = coarse particulate matter; $PM_{2.5}$ = fine particulate matter
Totals may not sum due to rounding.

Similar to the project, impacts to nearby sensitive receptors would be less than significant. Similar to the project, potential odors generated from vehicles and equipment exhaust emissions during construction activities and/or operation of Alternative 2 would not be anticipated to create any significant new sources of odors. Therefore,

project-level and cumulative air quality impacts would be reduced under Alternative 2 and would be less than significant (*less than significant; lesser impact)*.

### Biological Resources

Under Alternative 2, the intensity of construction and operation activities would be less compared to the project (fewer building area, and one to two story homes compared with commercial buildings and concrete tilt-up); however, the potential to impact biological resources would still occur. Under Alternative 2, construction and operation activities may result in indirect impacts to special-status plants and direct and indirect impacts to special-status wildlife. However, compliance with the mitigation measures listed in Section 3.3, Biological Resources (MM BIO-1 through BIO-8) would reduce project-level and cumulative impacts to less than significant. Similar to the project, Alternative 2 would not interfere with movement of a wildlife species or established wildlife corridor or conflict with local policies or ordinances for protection of biological resources. Although the total square footage of structures would be reduced under Alternative 2, and therefore development less intense, the project site would be developed. Therefore, project-level and cumulative impacts to biological resources would be similar to the project under Alternative 2 and would be reduced to less than significant with implementation of mitigation (*less than significant with mitigation; same impact)*.

### Cultural and Paleontological Resources

Under Alternative 2, 39 rural residences would be developed and the project site would require ground disturbing activities during construction, although to a lesser extent compared to the project. As such, Alternative 2 would result in a potential to disturb undiscovered archaeological resources, paleontological resources, and/or human remains; however, the potential for disturbance would be reduced under Alternative 2 due to the large residential lots, which would likely require less grading and trenching activity compared to the project. Implementation of mitigation measures MM CUL-1 through MM CUL-4 would still be required. Therefore, the potential for project-level and cumulative impacts to cultural and paleontological resources would be reduced under Alternative 2 but would remain less than significant with implementation of mitigation similar to the project (*less than significant with mitigation; lesser impact)*.

### Energy

The level of construction activities would be reduced under Alternative 2 compared to the project. Thus, construction-related energy usage would be less than the project. Alternative 2 would not include electric charging infrastructure beyond what is required by the California Building Code for standard residential development, and would generate less vehicle trips per day compared to the project; thus, on-site and mobile energy consumption would be less than the project. Accordingly, energy usage associated with long-term operation of Alternative 2 would also be reduced compared to the project *(less than significant; lesser impact)*.

### Greenhouse Gas Emissions

Alternative 2 would require less development than the project; thus construction-related GHG emissions would be reduced under Alternative 2 (see Table 6-3 below). The land use associated with Alternative 2 (i.e., rural residences) would also generate less trips and would require less energy and water use than the project, resulting in reduced operational GHG emissions (see Table 6-4 below). It is reasonable to assume that Alternative 2 could be designed in a manner consistent with the requirements of the County GHGRP. Similar to the project, Alternative 2 would not conflict with the California Air Resources Board's (CARB) Scoping Plan or the Southern California Association of

Governments (SCAG) 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (2024-2050 RTP/SCS).

### Table 6-3. Alternative 2 Estimated Annual Construction Greenhouse Gas Emissions

| Year | $CO_2$ | $CH_4$ | $N_2O$ | R | $CO_2e$ |
|---|---|---|---|---|---|
| | Metric Tons Per Year | | | | |
| 2027 | 574.45 | 0.02 | 0.01 | 0.03 | 576.64 |
| 2028 | 345.50 | 0.01 | 0.01 | 0.04 | 347.42 |
| 2029 | 318.21 | 0.01 | <0.01 | 0.04 | 320.02 |
| 2030 | 141.52 | 0.01 | <0.01 | 0.02 | 142.22 |
| *Total* | *1,379.68* | *0.05* | *0.02* | *0.13* | *1,386.29* |
| | | | | **Total Annual Alternative 2 Construction Emissions** | **1,386.29** |
| | | | | *Amortized (30-year Project life)* | *46.21* |
| | | | | **Total Annual Project Emissions** | **22,062** |

**Source:** Dudek 2026
**Notes:** $CO_2$ = carbon dioxide; $CH_4$ = methane; $N_2O$ = nitrous oxide; R = refrigerants; $CO_2e$ = carbon dioxide equivalent; <0.01 = reported emissions less than 0.01.
Totals may not add due to rounding.

### Table 6-4. Alternative 2 Estimated Annual Operational Greenhouse Gas Emissions

| Emission Source | $CO_2$ | $CH_4$ | $N_2O$ | R | $CO_2e$ |
|---|---|---|---|---|---|
| | Metric Tons Per Year | | | | |
| Mobile | 423.27 | 0.02 | 0.02 | 0.41 | 429.94 |
| Area | 57.57 | 0.04 | <0.01 | — | 59.36 |
| Energy | 99.86 | 0.01 | <0.01 | — | 100.31 |
| Water | 7.82 | 0.05 | <0.01 | — | 9.57 |
| Waste | 3.36 | 0.34 | 0.00 | — | 11.76 |
| Refrig. | — | — | — | 0.09 | 0.09 |
| | | | | **Total Annual Alternative 2 Operational Emissions** | **611.02** |
| | | | | *Amortized 30-Year Construction* | *46.21* |
| | | | | **Total Annual Alternative 2 Emissions** | **657.23** |
| | | | | **Total Annual Project Emissions** | **33,932** |

**Source:** Dudek 2026.
**Notes:** $CO_2$ = carbon dioxide; $CH_4$ = methane; $N_2O$ = nitrous oxide; R = refrigerants; $CO_2e$ = carbon dioxide equivalent; <0.01 = reported emissions less than 0.01.
Totals may not add due to rounding.

Construction and operation-related GHG emission impacts under Alternative 2 would be reduced in comparison to the project. Similar to the proposed project, Alternative 2 would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, including the County GHGRP. Impacts would remain less than significant *(less than significant; lesser impact)*.

## Hydrology, Water Quality and Drainage

Under Alternative 2, construction activities would occur at the project site but to a lesser magnitude when compared to the project. Impervious surface area would be reduced with the development of large lot residential housing.

Similar to the project, Alternative 2 would be required to implement a stormwater pollution prevention plan (SWPPP) during construction to avoid or minimize erosion and sedimentation and release of hazardous materials from the project site by including water quality best management practices (BMPs) designed to prevent erosion and prevent sediments and pollutants from becoming mobilized by stormwater runoff. Similar to the project, Alternative 2 would develop undeveloped land, which would introduce new impervious surfaces that could contribute pollutants to stormwater runoff; however, less impervious surfaces would be introduced with the development of residences on 2.5-acre lots. Similar to the project, Alternative 2 would also be required to implement MM-HYD-1, which outlines water quality best management practices. As discussed below in Utilities, it is assumed that a rural residential development would be required to connect to existing water and sewer service in Lenwood Road. However, the City of Barstow is not obligated to extend sewer service to the project. Therefore, an onsite package wastewater treatment system may be required. As with the proposed project, such a system, properly designed and in compliance with local and state regulations, would not have a significant effect on water quality. It should be noted, however, that such a system may not be financially feasible with 39, or fewer, residences to support the construction and operations costs.

Similar to the project, Alternative 2 would not substantially decrease groundwater supplies and would not impede sustainable groundwater management of the Mojave Basin Area. Similar to the project, Alternative 2 would also not result in substantial erosion, increase the rate of runoff, create or contribute runoff water in excess of capacity, or impede or redirect flood flows. In addition, Alternative 2 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan with implementation of MM-HYD-1. Project-level and cumulative impacts under Alternative 2 would be less than significant with mitigation *(less than significant with mitigation; similar impact)*.

### Land Use and Planning

Unlike the project, Alternative 2 would develop the project site with uses consistent with its existing land use and zoning and would not require a Countywide Plan/Policy Plan Amendment or a Zoning Amendment. Alternative 2 would not conflict with any plans, policies, or ordinances adopted for the purposes of mitigating or avoiding environmental effects, nor would it require an amendment of the land use element or the zoning designation. As Alternative 2 would be consistent with the current land use classification and land use policies, it would have no impact related to land use planning *(no impact; lesser impact)*.

### Noise

Alternative 2 would require less development than the project; thus, construction noise would be reduced in comparison to the project. Operational noise at the nearest receptors would be reduced because rural residential uses would not generate the same level of noise as the project, such as noise from the loading docks, the truck wash, transformers, and battery storage units. Noise from normal residential occupancy is not considered a significant impact under CEQA (Public Resources Code Section 21085). Heating, ventilation, and air conditioning units would be the largest producer of on-site operational noise from Alternative 2. Off-site operational traffic noise would be less than the project since vehicle trips would be reduced under Alternative 2. Similar to the project, Alternative 2 would not result in excessive groundborne vibration. Therefore, project-level and cumulative noise impacts would be reduced under Alternative 2 in comparison to the project and impacts would remain less than significant *(less than significant; lesser impact)*.

### Transportation

Alternative 2 would develop 39 rural residences instead of the proposed EV charging station and logistics facility. While Alternative 2 would result in fewer overall trips, the per capita vehicle miles traveled (VMT) may increase compared to the proposed project. The proposed project results in a reduction in VMT by providing employment opportunities and improving the jobs-housing balance. Additional rural housing, by contrast, may result in longer commutes, and thereby increase VMT for the future residents. It is speculative to assume that Alternative 2 would result in a significant VMT impact, but the impact (per capita VMT) would likely be increased. Similar to the project, Alternative 2 would not conflict with a program, plan, ordinance, or policy addressing the circulation system; increase hazards due to a geometric design feature, or incompatible uses; or result in inadequate emergency access. Therefore, project-level and cumulative transportation impacts would remain less than significant but per capita VMT may increase under Alternative 2 *(less than significant; greater impact)*.

### Tribal Cultural Resources

Under Alternative 2, 39 rural residences would be developed and the project site would require ground disturbing activities during construction, although to a lesser extent compared to the project. As such, Alternative 2 would result in a potential to disturb undiscovered tribal cultural resources; however, the potential for disturbance would be reduced under this alternative. Compliance with mitigation measures MM TCR-1 would still be required. Therefore, project-level and cumulative tribal cultural resources impacts would be reduced under Alternative 2 and would remain less than significant with implementation of mitigation (*less than significant with mitigation; lesser impact)*.

### Utilities and Service Systems

Under Alternative 2, development of rural residences would occur on the undeveloped project site. While many rural residences are served by well and septic systems, County policy requires connection to water and sewer service when available. Both water and sewer lines are located in Lenwood Road which could serve the project. As with the project, it is expected that Golden State Water Company would have the capacity to serve the site under Alternative 2. While County standards require connection to central sewer if within 200 feet of the property, the City of Barstow is not obligated to serve the project (and service would also require the approval of LAFCO). Therefore, an on-site package wastewater treatment system may be required. Package wastewater treatment plants can meet high water quality standards for effluent, thus avoiding any additional impacts to water quality under this alternative. However, it should be noted that it is not certain that such a system is financially feasible for a small (39-unit) residential development. Regarding solid waste, Alternative 2 would generate less waste during construction and operation compared to the proposed project. The construction of 39 rural residences would generate less construction debris, and operation would generate solid waste typical of single-family residential uses, rather than more intense commercial and logistics uses under the proposed project. As with the proposed project, Alternative 2 would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, project-level and cumulative utilities and service systems impacts would be similar to or lesser than the proposed project (*less than significant; similar or lesser impact*).

### Public Services

Impacts related to public services were determined to be less than significant for the project and are discussed in Chapter 4, Effects Found Not to be Significant. Although public services impacts of the project are not discussed in

detail in the EIR, this analysis for Alternative 2 is included because public services impacts from Alternative 2 may be greater than the proposed project.

Rural residential development would require police and fire services. It is assumed that existing Sheriff stations could serve the site, similar to the proposed project. The project site is within the service area of the San Bernadino County Fire Protection District (County Fire). Annexation to the Barstow Fire Protection District (which is a component of the proposed project) would be desirable for rural residential development, but may not be feasible, given the revenue generated by a 39-unit residential development and the cost of service. While this may increase demand on County Fire services, the service population of Alternative 2 would be less than the proposed project.[1] In addition, Alternative 2 would generate additional student enrollment and demand for schools, which the proposed project would not. The project site is within the Barstow Unified School District service boundary. The nearest school to the site is Lenwood Elementary School. Additional student demand for school services may result in a significant impact to school facilities; therefore, Alternative 2 would result in a greater school facility impact than the proposed project. However, under CEQA, payment of approved school impact fees is considered full mitigation (*less than significant with mitigation; greater impact).*

### Ability to Meet Project Objectives

Alternative 2 would develop 39 rural residences at the project site instead of the proposed EV charging station, truck amenities, and a logistics facility. Thus, Alternative 2 would fail to meet the following project objectives: to site EV charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on SR-58, I-15, and I-40 (Objective 1); to contribute to the creation of a robust electric vehicle charging network in the region (Objective 2); to develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors (Objective 3); to expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses (Objective 4); and to attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment (Objective 5). Therefore, Alternative 2 would not meet any of the project objectives.

## Alternative 3: Revised Site Plan Alternative

### Description

Alternative 3 would revise the site plan such that the EV charging station, truck amenities, and commercial building in the southern portion of the site would be moved to the northern portion of the site. By moving these uses further from the residential subdivision south of the project site, noise impacts as well as light and glare from vehicles, would be reduced. The EV charging station, truck amenities, and commercial building would maintain the same configuration as designed, under the project but would be located in the northern portion of the project site (See Figure 6-1). The logistics facility consisting of three buildings would be shifted down to the southern portion of the site. The loading docks at the south end of the southern-most logistics facility building, adjacent to the existing residences to the south, would be removed to provide a buffer with the residential development to the south, which

[1] 39 residential units would generate approximately 114 residents, based on the County's estimated household size of 2.93 per unit in the unincorporated area (DOF 2026). By contrast, the proposed project would generate approximately 639 employees (also note that employees are considered to be 50% of a residential population for purposes of estimating service impacts by the City of Barstow).

may result in limitations on the type of uses that may be accommodated in the southernmost building and/or the economic and market feasibility of that building.

## Impact Analysis

### Aesthetics

Alternative 3 would be constructed and operated similar to what is planned by the project, introducing large-scale development on a currently undeveloped site. Alternative 3 would involve the same development components of the project in a different configuration on the project site. Similar to the project, construction activities associated with the buildout of Alternative 3 would result in temporary, short-term visual impacts. Similar to the project, the visual character of the project site under Alternative 3 would change from an undeveloped desert landscape to an industrial development that includes an EV charging station with solar canopies, a commercial building, truck wash and maintenance facilities, and a logistics facility consisting of three concrete tilt-up buildings. Therefore, visual changes would still occur with implementation of Alternative 3 and the change in views and character of the site would be of similar magnitude as the project because the same components as the project would be built under Alternative 3. Alternative 3 would include new lighting sources, similar to the proposed project. By moving the EV Charging Station to the north, and eliminating the parking spaces and loading docks south of Building, project lighting would be contained from spillover onto the adjacent residential subdivision to the south (although with County code-compliant lighting fixtures, direct lighting impacts of both the proposed project and Alternative 3 would be less than significant). Under Alternative 3, the change from undeveloped high desert to an EV charging station and logistics facility would still contribute to the cumulative changes in character of the visual setting, including cumulative nighttime lighting. Therefore, project-level and cumulative aesthetics impacts under Alternative 3 would be similar compared to the project (*cumulatively significant; similar impact)*.

### Air Quality

Under Alternative 3, the extent of construction activities would be similar compared to the project because the same project components would be constructed, but constructed in a different configuration within the project site. As such, air pollutant emissions from construction would be similar to the project under Alternative 3 and mitigation measures would be required due to exceedance of the thresholds of significance established by MDAQMD. MM-AQ-1 would require the use of California Air Resources Board (CARB)-certified Tier 4 Final engines for all diesel-powered equipment that are 100 horsepower or greater throughout all phases of project construction to reduce construction emissions and MM-AQ-2 would require the construction contractor to use super-compliant low volatile organic compound (VOC) paint for all interior and exterior paint applications for nonresidential land uses to reduce VOC emissions. Alternative 2 would generate slightly fewer vehicle trips than the proposed project, due to the elimination of the southernmost loading docks, which would slightly reduce operational emissions compared to the project. As such, operational emissions under Alternative 3 would not exceed the MDAQMD thresholds of significance. Similar to the project, Alternative 3 would conflict with a regional air quality plan due to construction emissions exceeding the MDAQMD thresholds of significance and would implement MM-AQ-1 and MM-AQ-2 to reduce those impacts to less than significant.

Impacts to nearby sensitive receptors would be less than significant with implementation of MM-AQ-1 and MM-AQ-2, same as the project. Similar to the project, odors potentially would be generated from vehicles and equipment exhaust emissions during construction activities associated with Alternative 3 and operation of Alternative 3 would not create any new sources of odors. Therefore, project-level and cumulative air quality impacts would be similar to

the project under Alternative 3 and would remain less than significant with implementation of mitigation (*less than significant with mitigation; similar impact)*.

### Biological Resources

Under Alternative 3, the extent of construction and operation activities would be similar compared to the project because the same project components would be constructed, but in a different configuration within the project site. Under Alternative 3, construction and operation activities may result in similar indirect impacts to special-status plants and direct and indirect impacts to special-status wildlife, but compliance with the mitigation measures listed in Section 3.3, Biological Resources (i.e., MM BIO-1 through BIO-8) would reduce impacts to less than significant. Similar to the project, Alternative 3 would not interfere with movement of a wildlife species or an established wildlife corridor and would not conflict with local policies or ordinances protecting biological resources. Project-level and cumulative biological resources impacts would be similar to the project under Alternative 3 and would remain less than significant with implementation of mitigation (*less than significant with mitigation; similar impact)*.

### Cultural and Paleontological Resources

Alternative 3 would involve the same development components of the project in a different configuration on the project site. Compared to the project, this alternative would result in a similar extent of ground disturbing activities during construction, which would result in similar potential to disturb undiscovered archaeological and/or paleontological resources and human remains. Under Alternative 3, implementation of mitigation measures MM CUL-1 through MM CUL-4 would still be required. Therefore, potential project-level and cumulative cultural and paleontological resource impacts would be similar to the project under Alternative 3 and would remain less than significant with implementation of mitigation (*less than significant with mitigation; similar impact)*.

### Energy

Compared to the project, the level of construction activities would be similar under Alternative 3, resulting in similar construction-related energy usage. Operation of Alternative 3 would also generate similar vehicle trips per day and square footage of building space compared the project; thus, on-site and mobile energy consumption would be similar to the project. Accordingly, energy usage associated with long-term operation of Alternative 3 would be similar compared to the project. Therefore, project-level and cumulative energy impacts under Alternative 3 would be similar to the project and would remain less than significant *(less than significant; similar impact)*.

### Greenhouse Gas Emissions

Under Alternative 3, the extent of construction activities would be similar compared to the project because the same project components would be constructed but in a different configuration within the project site. Thus, construction related GHG emissions under Alternative 3 would be similar to the project. Alternative 3 would generate slightly less vehicle trips per day, due to the reduction in loading docks but operational emissions would be similar to the proposed project. As the project components would similar (with a possible reduction in the logistics use), Alternative 3 would be consistent with the County GHGRP. Similar to the project, Alternative 3 would not conflict with CARB's Scoping Plan or the SCAG 2024-2050 RTP. Therefore, GHG impacts under Alternative 3 would be similar to the proposed project *(less than significant; similar impact)*.

### Hydrology, Water Quality and Drainage

Under Alternative 3, the extent of construction activities would be similar compared to the project. Similar to the project, Alternative 3 would be required to implement a SWPPP, which would avoid or minimize erosion and sedimentation and release of hazardous materials from the project site by including water quality BMPs designed to prevent erosion and prevent sediments and pollutants from becoming mobilized by stormwater runoff. Similar to the project, Alternative 3 would develop undeveloped land which would introduce new impervious surfaces that could contribute pollutants to stormwater runoff. Alternative 3 would also be required to implement MM-HYD-1, which outlines water quality best management practices. Similar to the project, Alternative 3 would not substantially decrease groundwater supplies and would not impede sustainable groundwater management of the Mojave Basin Area. Similar to the project, Alternative 3 would also not result in erosion, increase the rate of runoff, create or contribute runoff water in excess of capacity, or impede or redirect flood flows. In addition, Alternative 3 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan with implementation of MM-HYD-1. Therefore, project-level and cumulative hydrology, water quality, and drainage impacts would be similar to the project under Alternative 3 and would remain less than significant with implementation of MM-HYD-1 (*less than significant with mitigation; similar impact)*.

### Land Use and Planning

Given the substantial similarities in uses between Alternative 3 and the project, Alternative 3 would otherwise not conflict with any plans, policies, or ordinances adopted for the purposes of mitigating or avoiding environmental effects. Therefore, land use and planning impacts under Alternative 3 would remain less than significant and would be similar to the project *(less than significant; similar impact)*.

### Noise

Under Alternative 3, the extent of construction activities would be similar compared to the project because the same project components would be constructed. As such, overall construction noise would be similar to the project under Alternative 3. Due to the revised site configuration under Alternative 3, the EV charging station, truck amenities, and commercial building would be located in the northern portion of the project site rather than the southern, and the loading docks at the south end of the southern-most logistics facility building, adjacent to the existing residences to the south, would be removed to provide a buffer with the residential development to the south. Without proposed loading docks on the southern side of the warehouse closest to the southern project boundary, on-site operational noise at the residences south of the project site would be reduced under Alternative 3, thus avoiding the need to construct a section of the eight-foot wall for noise attenuation. Off-site operational traffic noise would be similar to the project, although vehicle trips would be slightly reduced. Similar to the project, Alternative 3 would not result in excessive groundborne vibration. Therefore, project-level and cumulative noise impacts would be reduced under Alternative 3 in comparison to the project and impacts would remain less than significant *(less than significant; lesser impact)*.

### Transportation

Given the substantial similarities in uses between Alternative 3 and the project, similar trip generation would occur at the project site, although truck trips may be slightly reduced with the elimination of the southernmost loading docks. VMT is largely dependent on the specific land use type of a particular project and the location of that project. Thus, the average trip length for passenger vehicle and truck trips associated with the project would remain the same. In addition, the VMT per employee would also stay the same under Alternative 3 as compared to the project.

Therefore, transportation impacts with regard to VMT would be the same under Alternative 3. Due to the same project components being developed, Alternative 3 would not conflict with a program, plan, ordinance, or policy addressing the circulation system; increase hazards due to a geometric design feature, or incompatible uses; or result in inadequate emergency access, similar to the proposed project. Therefore, project-level and cumulative transportation impacts would be similar to the project under Alternative 3 and impacts would remain less than significant *(less than significant; similar impact)*.

### Tribal Cultural Resources

Alternative 3 would involve the same development components of the project in a different configuration on the project site. Compared to the project, this alternative would result in a similar extent of ground disturbing activities during construction, which would result in a similar potential to disturb undiscovered tribal cultural resources. Under Alternative 3, compliance with mitigation measure MM TCR-1 would still be required. Therefore, the potential for project-level and cumulative tribal cultural resources impacts would be similar to the project under Alternative 3 and would remain less than significant with implementation of mitigation (*less than significant with mitigation; similar impact)*.

### Utilities and Service Systems

Alternative 3 would involve the same development components of the project in a different configuration on the project site and the same extent of water distribution infrastructure, sewer lines, and upgrades and extension of underground utilities would be required. Alternative 3 would result in similar water demand, wastewater generation, and solid waste generation compared to the project and would be required to comply with solid waste statutes and regulations. Therefore, project-level and cumulative utilities and service systems impacts would be similar to the project under Alternative 3 and would remain less than significant *(less than significant; similar impact)*.

### Public Services

Alternative 3 would include the proposed annexation to the Barstow Fire Protection District, as with the proposed project. Public Services impacts would be similar to the proposed project, less than significant.

## Ability to Meet Project Objectives

Alternative 3 would construct the same components as the project except the 8 foot wall on the southern property boundary, but in a different configuration on the project site, and without the southernmost row of loading docks. As such, Alternative 3 meets Objectives 1, 2, and 5 to the same extent as the proposed project: to site an EV charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on SR 58, I-15, and I-40 (Objective 1); to contribute to the creation of a robust electric vehicle charging network in the region (Objective 2); and to attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment (Objective 5). Objective 3 is to develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors; and Objective 4 is to expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses. The elimination of loading docks on the southern side of the southernmost logistics facility building may deter certain future users from occupying that logistics facility building or render the use of the third building less economically viable. The potential limitation in use of the third warehouse

would also reduce the number of job opportunities. Therefore, the alternative would not fully meet Objectives 3 and 4, as compared to the proposed project. The other two logistics facility buildings would maintain the same number of loading docks and would be able to accommodate a wide variety of users. Overall, Alternative 3 would partially meet Objectives 3 and 4, and would meet the remaining objectives.

## 6.4 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(a) requires that an EIR describe a range of reasonable alternatives to the project, which would attain most of the basic project objectives, but would avoid or substantially lessen any of the project's significant effects. In addition, Section 15126.6 [e][2] states that if the environmentally superior alternative is the No Project Alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. Furthermore, Sections 21002 and 21081 of the Public Resources Code require lead agencies to adopt feasible mitigation measures or feasible alternatives in order to substantially lessen or avoid otherwise significant adverse environmental effects, unless specific social or other conditions make such mitigation measures or alternatives infeasible.

Table 6-5 provides a comparison of the project with the project alternatives based on the environmental topic areas addressed in Chapter 3, Environmental Impact Analysis, of this EIR. Each project alternative is given an impact determination per threshold of no impact (NI), less than significant impact (LS), less than significant with mitigation (LSM), or significant and unavoidable (SU). Table 6-6 presents how the project and each of the project alternatives compare in terms of meeting the project objectives.

### Table 6-5. Comparison of Impacts of the Project and Alternatives

| Environmental Topic | Project | Alternative 1: No Project/No Build | Alternative 2: No Project/ Existing Zoning | Alternative 3: Revised Site Plan Alternative |
|---|---|---|---|---|
| **Aesthetics** | | | | |
| Would the project have a substantial adverse effect on a scenic vista? | LS | NI | NI | LS |
| In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | LS | NI | LS | LS |
| Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | LS | NI | LS | LS |
| Would the project result in cumulatively considerable impacts related to scenic vistas? | NI | NI | NI | NI |
| Would the project result in cumulatively considerable impacts related to visual character and quality of public views? | SU | NI | SU | SU |

## Table 6-5. Comparison of Impacts of the Project and Alternatives

| Environmental Topic | Project | Alternative 1: No Project/No Build | Alternative 2: No Project/ Existing Zoning | Alternative 3: Revised Site Plan Alternative |
|---|---|---|---|---|
| Would the project result in cumulatively considerable impacts related to light and glare? | SU | NI | SU | SU |
| **Air Quality** | | | | |
| Would the project conflict with or obstruct implementation of the applicable air quality plan? | LSM | NI | LS | LSM |
| Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | LSM | NI | LS | LSM |
| Would the project expose sensitive receptors to substantial pollutant concentrations? | LSM | NI | LS | LSM |
| Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | LS | NI | LS | LS |
| Would the project result in cumulatively considerable exposure by sensitive receptors to pollution concentrations or other emissions (such as those leading to odors)? | LS | NI | LS | LS |
| **Biological Resources** | | | | |
| Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | LSM | LS | LSM | LSM |
| Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | LS | NI | LS | LS |
| Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | LS | NI | LS | LS |
| Would the project result in cumulatively considerable impacts related to biological resources? | LSM | LS | LSM | LSM |

## Table 6-5. Comparison of Impacts of the Project and Alternatives

| Environmental Topic | Project | Alternative 1: No Project/No Build | Alternative 2: No Project/ Existing Zoning | Alternative 3: Revised Site Plan Alternative |
|---|---|---|---|---|
| **Cultural and Paleontological Resources** | | | | |
| Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | LSM | LS | LSM | LSM |
| Would the project disturb any human remains, including those interred outside of dedicated cemeteries? | LSM | NI | LSM | LSM |
| Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | LSM | NI | LSM | LSM |
| Would the project result in cumulatively considerable impacts related to cultural or paleontological resources? | LSM | LS | LSM | LSM |
| **Energy** | | | | |
| Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | LS | NI | LS | LS |
| Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | LS | NI | LS | LS |
| Would the project result in cumulatively considerable impacts related to energy? | LS | NI | LS | LS |
| **Greenhouse Gas Emissions** | | | | |
| Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | LS | NI | LS | LS |
| Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | LS | NI | LS | LS |
| **Hydrology, Water Quality and Drainage** | | | | |
| Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? | LSM | NI | LSM | LSM |
| Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | LS | NI | LS | LS |

## Table 6-5. Comparison of Impacts of the Project and Alternatives

| Environmental Topic | Project | Alternative 1: No Project/No Build | Alternative 2: No Project/ Existing Zoning | Alternative 3: Revised Site Plan Alternative |
|---|---|---|---|---|
| Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| (i) Result in substantial erosion or siltation on or off site? | LS | NI | LS | LS |
| (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site? | LS | NI | LS | LS |
| (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | LSM | NI | LSM | LSM |
| (iv) Impede or redirect flood flows? | LS | NI | LS | LS |
| In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? | LS | NI | LS | LS |
| Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | LSM | NI | LSM | LSM |
| Would the project result in cumulatively considerable impacts related to hydrology and water quality? | LSM | NI | LSM | LSM |
| **Land Use and Planning** | | | | |
| Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | LS | NI | LS | NI |
| Would the project result in cumulatively considerable impacts related to land use and planning? | NI | NI | NI | NI |
| **Noise** | | | | |
| Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | LS | LS | LS | LS |

## Table 6-5. Comparison of Impacts of the Project and Alternatives

| Environmental Topic | Project | Alternative 1: No Project/No Build | Alternative 2: No Project/ Existing Zoning | Alternative 3: Revised Site Plan Alternative |
|---|---|---|---|---|
| Would the project result in generation of excessive groundborne vibration or groundborne noise levels? | LS | NI | LS | LS |
| **Transportation** | | | | |
| Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? | LS | LS | LS | LS |
| Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | LS | NI | LS | LS |
| Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | LS | NI | LS | LS |
| Would the project result in inadequate emergency access? | LS | NI | LS | LS |
| Would the project result in cumulatively considerable impacts related to transportation? | LS | NI | LS | LS |
| **Tribal Cultural Resources** | | | | |
| Would the project cause an adverse change in the significance of a previously unidentified tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or determined to be a tribal cultural resource, as supported by evidence? | LSM | LS | LSM | LSM |
| Would the project result in cumulatively considerable impacts related to tribal cultural resources? | LSM | LS | LSM | LSM |
| **Utilities and Service Systems** | | | | |
| Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | LS | NI | LS | LS |
| Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? | LS | NI | LS | LS |

## Table 6-5. Comparison of Impacts of the Project and Alternatives

| Environmental Topic | Project | Alternative 1: No Project/No Build | Alternative 2: No Project/ Existing Zoning | Alternative 3: Revised Site Plan Alternative |
|---|---|---|---|---|
| Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | LS | NI | LS | LS |
| Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | LS | NI | LS | LS |
| Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | LS | NI | LS | LS |
| Would the project result in cumulatively considerable impacts related to utilities and service systems? | LS | NI | LS | LS |
| **Public Services** | | | | |
| 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: fire protection; police protection; schools; parks; other public facilities? | LS | NI | LSM | LS |

**Notes:** NI = no impact; LS = less than significant; LSM = less than significant with mitigation; SU = significant and unavoidable.

## Table 6-6. Project and Alternatives' Ability to Meet Project Objectives

| Project Objective | Would the Project or Alternative Meet the Project Objective? | | | |
|---|---|---|---|---|
| | Project | Alternative 1: No Project Alternative | Alternative 2: Existing Zoning | Alternative 3: Revised Site Plan Alternative |
| To site an electric vehicle (EV) charging station to serve the vehicle charging needs of future industrial uses and vehicles traveling locally and on SR 58, I-15, and I-40. | Yes | No | No | Yes |
| To contribute to the creation of a robust electric vehicle charging network in the | Yes | No | No | Yes |

**Table 6-6. Project and Alternatives' Ability to Meet Project Objectives**

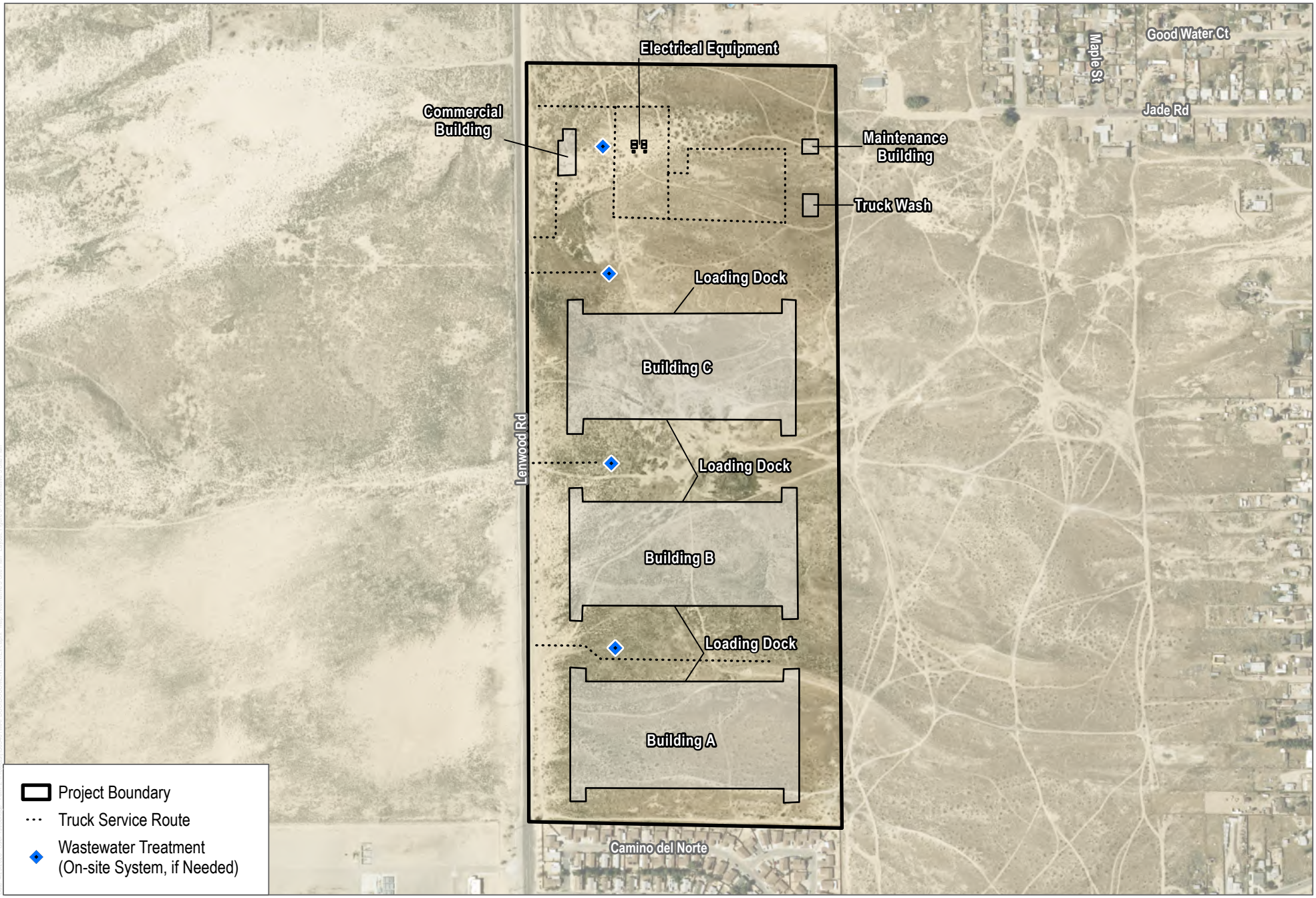
| Project Objective | Would the Project or Alternative Meet the Project Objective? | | | |
|---|---|---|---|---|
| | Project | Alternative 1: No Project Alternative | Alternative 2: Existing Zoning | Alternative 3: Revised Site Plan Alternative |
| region and strengthen the state and regional supply chain. | | | | |
| To develop a Class A logistics facility designed to meet contemporary industry standards, accommodate a wide variety of users, and meet the regional demands for logistics space located near key rail and transportation corridors. | Yes | No | No | Partial |
| To expand economic development and facilitate job creation in San Bernardino County by establishing new logistics development adjacent to or near already established or planned industrial and logistics uses. | Yes | No | No | Partial |
| To attract new businesses to the high desert portion of San Bernardino County and thereby provide a more equal jobs-housing balance to reduce the need for the local workforce to commute outside the area for employment. | Yes | No | No | Yes |

Each of the three project alternatives considered herein would lessen at least one environmental impact relative to the project. As required under CEQA, if the No Project Alternative is the environmentally superior alternative—which in the case of this analysis is both Alternative 1 and 2—the EIR must also identify another environmentally superior alternative among the remaining alternatives.

Alternative 3 would develop a revised site plan with the same components of the project and would meet most of the project objectives. Alternative 3 would not reduce potentially significant impacts, but would further reduce the less-than-significant noise impact on residential receptors, and may reduce light impacts (which would be less than significant under the proposed project with implementation of County lighting regulations). **Alternative 3 is therefore identified as the environmentally superior alternative.** Alternative 3 would achieve the basic project objectives, although not to the full extent of the proposed project.

## 6.5 References

DOF (California Department of Finance). 2026. Demographic Research Unit. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2026.* May 2026. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2026/




SOURCE: Esri Imagery Accessed 2025, OpenStreetMap 2019

DUDEK

0 270 540 Feet

**FIGURE 6-1**

Alternative 3 Site Plan

Lenwood EV Charging Station and Logistics Facility

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# 7.0 List of Preparers

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